

ATARI ST REVIEW

WHAT'S NEW, WHAT TO BUY, WHAT TO PAY

FABULOUS SOFTWARE WORTH

£50

PLEASE
CONSULT
YOUR
NEWSAGENT
IF DISK IS
MISSING

D I S K 1

PLEASE
CONSULT
YOUR
NEWSAGENT
IF DISK IS
MISSING

D I S K 2

PERFECT PUBLISHING

TESTS, TIPS AND TUTORIALS FOR THE TOP DTP PROGRAMS



POWER

PUNTER POWER

WORD PROCESSORS ON TEST
OUR READERS HAVE THEIR SAY...



ON DISK VIDEO TITLING FOR EVERYONE DISK CATALOGUER AND MUCH, MUCH MORE INSIDE LINK-UP GAMES HOW TO FIT A GENLOCK SEQUENCER ONE PLUS BOOST YOUR ST — PART ONE PD BUSINESS PROGRAMS EXTRA MEMORY FROM ONLY £15.50



ARE YOU READY FOR A

The Godfather™

A computer adventure which captures the very essence of the Godfather trilogy, where Domination, Power, Wealth and Justice are all part of the game plan.

- Digitised sound effects.
- Full colour bitmaps allowing stunning detail and realism.
- Unique graphic interaction sequences.

Available on: Atari ST, Amiga and PC (VGA only)

TM and © 1991 Paramount Pictures. All rights reserved. The GODFATHER is a trademark of Paramount Pictures. U.S. Gold authorised user.



G-LOC™

At the controls of an experimental super plane you plunge headfirst into the unknown fighting territory. Fast and frantic G-Loc takes you to the edge!

- 36 missions and three 'player selectable' modes.
- Armed with impressive lasers and a missile guidance system.

Available on: C64 & Amstrad cassette & disc, Spectrum cassette, Atari ST and Amiga

© 1990, 1991 SEGA™. All rights reserved. G-LOC™ is a trademark of SEGA ENTERPRISES LIMITED.



Indiana Jones™ and the Fate of Atlantis Action Game
Nazi Germany has rediscovered the Lost Kingdom of Atlantis, and with it the formula to produce the ultimate bomb. Only one obstacle stands in their way - Indy!

- 9 lavishly detailed action packed locations.
- Dazzling 3D isometric world - click from one camera angle to the next.
- Awesome animation, music and sound effects.

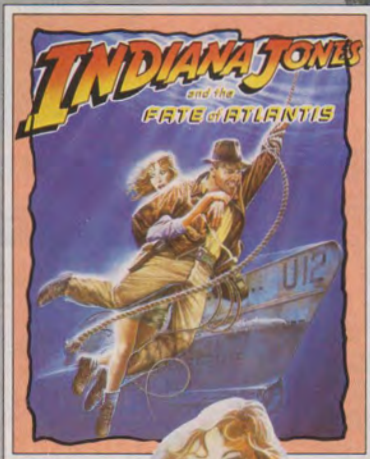
Indiana Jones™ and the Fate of Atlantis
© 1992 LucasArts Entertainment Company.
All rights reserved. Indiana Jones and Indy are registered trademarks of Lucasfilm Ltd.

... SERIOUS EXPERIENCE!

Software 2000's The Manager

The definitive football management simulation featuring all clubs in the 1991-1992 top 3 league divisions.

- Select your team and choose from a 1 year, 3 year or unlimited game.
- 3D animation sequences let you watch highlights of your team in action.
- Manage your money as well as a team.



Available on:
Amstrad & C64
cassette & disc,
Spectrum cassette,
Atari ST, Amiga &
PC and
compatibles.

ALL ACTION SPORTS 2

U.S. GOLD

MARCH 1992

GREAT NEW FOOTBALL
MANAGEMENT SIMULATION
SEE OVER

EXCLUSIVE!

U.S. GOLD SIGNS TOP FOOTBALL GAME

Software 2000's THE MANAGER was released in Germany (as Bundesliga Manager) part simultaneously, each taking turns to make top level

Available on:
Atari ST, Amiga
and PC (VGA only)

© 1992 Software
2000. All rights
reserved.



U.S. GOLD

A SERIOUS EXPERIENCE!

U.S. Gold Ltd., Units 2/3, Holford Way,
Holford, Birmingham B6 7AX.
Tel: 021-625 3366.



NEED HELP? CALL THE GOLD PHONE HINTS & TIPS LINE

LEGEND OF DARKMOON (EYE OF THE BEHOLDER II) • SHADOW SORCERER TEL: 0839 654 139
HILLSFAR • DRAGONS OF FLAME • HEROES OF THE LANCE TEL: 0891 442 025

CURSE OF THE AZURE BONDS • POOL OF RADIANCE
• CHAMPIONS OF KRYNN TEL: 0891 442 026

BUCK ROGERS • SECRET OF THE SILVER BLADES • EYE OF THE BEHOLDER TEL: 0891 442 030
OPERATION STEALTH • ANOTHER WORLD • CRUISE FOR A CORPSE TEL: 0839 654 284

LUCASFILM HELPLINE • LE CHUCKS REVENGE (MONKEY ISLAND 2) • INDIANA JONES
• ZAK MCKRACKEN • MANIAC MANSION • LOOM • SECRET OF MONKEY ISLAND
• BATTLE OF BRITAIN TEL: 0839 654 123

NEW RELEASES • COMPETITION TEL: 0839 654 124

COMPETITION - £200.00 WORTH OF U.S. GOLD GAMES
TO BE WON EACH MONTH. • At Retail Prices

If you are under 18 please get permission to use the telephone. Calls cost 36p per minute cheap rate,
48p per minute all other times.

C O N T E N T S



ON THIS MONTH'S COVERDISKS

TWO DISKS AND £50 WORTH OF SOFTWARE

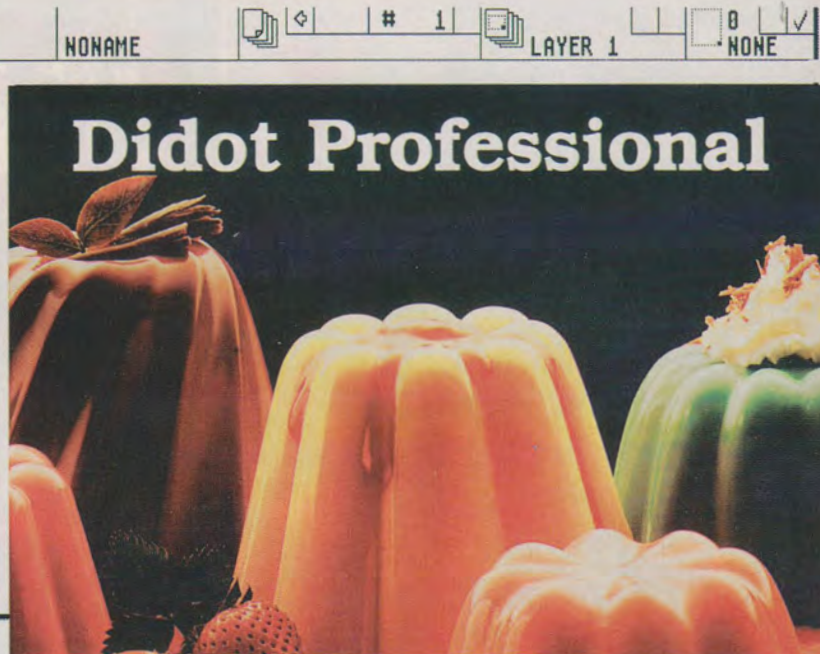
Our coverdisks are positively crammed with goodies this month, as ST Review presents for your delectation a full-price video titler, a personal database, a disk cataloguer, *Deluxe Paint*, a host of STOS utilities, a Quiz Construction Kit and a playable demo of Ocean's latest, *Pushover*. . . .

THERE'S GREAT GAME ACTION

There's fun to be had and brain cells to tax in our playable demo of Ocean Software's TV-advertised domino-toppling game. It's a mad, mad world and you and your pet ant(!?) have got your work cut out for you as you strive to finish the task within time. . . .

AND THERE'S A HOST OF BRILLIANT UTILITIES

ST Review's disks come choc-a-block with all manner of productive tools for your computer – and this month's are no exception! Turn to page 20 now to find out how to use your disks to turn your machine into everything from a games creator to a paint box. . . .



FEATURES

32 PERFECT PUBLISHING

You, too, can take on Fleet Street using the right DTP package. We test two of the best and give you the tips.

42 VIDEO VIEWED

And you, too, can also take on Hollywood – step-by-step, we show you how to fit a Genlock and use one.

50 READER TESTS

The first in an occasional series where you, the reader, get to decide what's worth buying. This month: word processors.

56 THE TOP 30 EDUCATION PROGRAMS

The second in a three-part series on learning guides for your children. This month it's maths programs. . . .

64 LINK-UP GAMES

It takes two to tango – and often to play a great game, too! ST Review takes a look at multi-machine gaming and shows you how to link your ST to a friend's. . . .

86 MAKE YOUR OWN STOS GAME

Super Squirrel leaps onto its second platform, but will it leap into production? Part two of a series of tutorials on how to write a best-selling, rodent-starring chew-'em-up.

112 TWO MACHINES FROM ONE

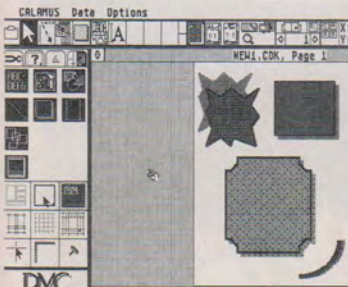
It may bring to mind a ring of criminals in a Bond film, but *Spectre*, in fact, will turn your ST into an Applemac.

SECOND GREAT MONTH!!

UPGRADE YOUR 520 BY UP TO TWO MEGS STARTING AT THE RIDICULOUSLY LOW PRICE OF £15.50, INCLUDING POSTAGE AND PACKAGING. YOU WON'T FIND A BETTER OFFER ANYWHERE! TURN TO PAGE 60 FOR DETAILS NOW!!



NTS



REGULARS

8 NEWS

Silica releases new laser printer, Protar plans A3 monitor and there's a full report on the recent MIDI Show in Hammersmith, London.

16 FIRST IMPRESSIONS

What's up 'n' coming in the games market? We've got more sneak previews than there's space to mention. . .

20 COVERDISKS

Produce professional-looking home movies with *Video Titr One*; get stuck into *Pushover*, *Ocean*'s new platform-cum-Domino extravaganza; learn how to use *Deluxe Paint* properly, plus there's fun to be had with a host of other utilities.

30 SUBSCRIBE TODAY

Get ST Review brought to your door and get a fantastic new game, an art package or a printing program.

63 SCREEN SCENE

What's hot and what's rot in the world of gaming? Expert mouse-men and joystick wagglers vent their opinions. . .

99 LYNX GAMES

If you've got to have a handheld, get one from Atari. This month's topic: the top ten Lynx games.

106 PD ZONE

Welcome to the PD Zone, where you'll find tests, tips and techniques that relate to the growing world of freeware, shareware, licenceware and public domain.

SCREENSCENE

What's hot and what's rot in the world of computer games?

| | |
|-----------------|----|
| Link Up Games | 64 |
| Alcatraz | 71 |
| Grand Prix | 82 |
| Elvira II | 76 |
| Video Kid | 79 |
| Special Forces | 82 |
| DIY STOS Games | 86 |
| Budget Games | 88 |
| Top Fifty Games | 92 |

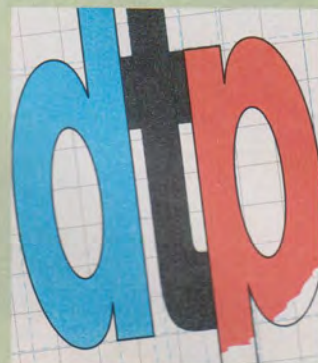


GET THE BLUES WITH ST BUYER

The mag within a mag that's brimming with information, hints and tips for the serious user. Thirty-two pages of blistering blue. . . .

| | |
|---------------------------------|-----|
| Joystick Round Up | 116 |
| Boot Up Utilities | 120 |
| Sequencer One Plus | 124 |
| Vivace | 126 |
| Art Master | 127 |
| PD Dealer Directory | 128 |
| Timeworks Two Test and Tutorial | 129 |
| PD Authors Wanted | 134 |
| Logging on to COMMs | 135 |
| Ask the Experts | 140 |
| Letters | 142 |
| Charts | 144 |

ST REVIEW
ISSUE 2
JUNE 1992



Editor Garth Sumpter
Production Editor Heather Turley
Art Editor Gordon Barrick
Designer Fiona Bourne
Scanning: Becky Willis
Contributors

Andrew Wright, Andre Willey, Pat Winstanley, Dave Burns, Jon Bates, Paul Presley, Frank O'Connor, Steve Merrett, Gordon Houghton, Tony Dillon, Edward Lawrence, Alan Dykes, Dan Slingsby, Terry Freedman.

Managing Editor Steve James
Advertising Manager Tom Glenister
Senior Sales Executive Michelle Gardiner
Sales Executive Karen Neill
Classified Production Manager Esther Rodd
Production Assistant Remzi Salih

Marketing Manager Marc Swallow
Marketing Executive Sarah Hillard
Publisher Garry Williams

Editorial and advertising
Tel: 071 972 6700
Fax: 071 972 6701

Atari ST Review,
EMAP Images,
Priory Court,
30-32 Farringdon Lane,
London EC1R 3AU.

Distribution
BBC Frontline Ltd,
Park House, Park Road,
Peterborough PE1 2TR.
Tel: 0733 555161.

Subscriptions
PO Box 500, Leicester LE99 0AA.
Tel: 0858 410510 or 0858 410510
(answerphone).

Back issues
PO Box 500 Leicester LE99 0AA.
Tel: 0858 410510

BONANZA BROS.™



WHO THE HELL ARE THEY?

JUST WHO ARE THESE GUYS?

Mobo and Robo (Mobo's the good looking one) are the coolest villains you'll ever meet. They rob banks, museums - and innocent computer gamers of their sanity. They're on a mission and they're coming soon. Ask them why they wear dark glasses and they'll tell you... "Our future's so bright we gotta wear shades!"

Available on: **Amstrad, CBM 64/128 Cassette & Disk, Spectrum Cassette, Atari ST & Amiga.**

© 1990, 1991 SEGA™. All rights reserved. BONANZA BROS.™ is a trademark of SEGA ENTERPRISES LIMITED. SEGA™ is a trademark of SEGA ENTERPRISES LIMITED.



SEGA
ARCADE HITS
MARKETED BY
U.S. GOLD

U.S. Gold Ltd, Units 2/3 Holford Way, Holford, Birmingham B6 7AX. Tel: 021 625 3366

LEGEND OF DARKMOON (EYE OF THE BEHOLDER III) • SHADOW SORCERER
TEL: 0839 654 139

HILLSFAR • DRAGONS OF FLAME • HEROES OF THE LANCE TEL: 0891 442 025

CURSE OF THE AZURE BONDS • POOL OF RADIANCE
• CHAMPIONS OF KRYNN TEL: 0891 442 026

BUCK ROGERS • SECRET OF THE SILVER BLADES
• EYE OF THE BEHOLDER TEL: 0891 442 030

OPERATION STEALTH • ANOTHER WORLD • CRUISE FOR A CORPSE TEL: 0839 654 284

**NEED HELP? CALL THE
GOLD PHONE
HINTS & TIPS LINE**

LUCASFILM HELPLINE • LE CHUCKS REVENGE (MONKEY ISLAND 2) • INDIANA JONES
• ZAK MCKRACKEN • MANIAC MANSION • LOOM • SECRET OF MONKEY ISLAND
• BATTLE OF BRITAIN TEL: 0839 654123

NEW RELEASES • COMPETITION TEL: 0839 654124

**COMPETITION - £200.00 WORTH*
OF U.S. GOLD GAMES TO BE WON
EACH MONTH.**

* At Retail Prices

Service provided by U.S. GOLD LTD., UNITS 2/3, HOLFORD WAY, HOLFORD, BIRMINGHAM B6 7AX

If you are under 18 please get permission to use the telephone. Calls cost 36p per minute cheap rate, 48p per minute all other times.



GUIDE TO ICONS



This icon denotes text-based adventures, that are played by entering commands in the form of an adventure parser. Examples include Wonderland and Operation Stealth



Games which are similar in content to adventures, but are graphics-based and rely on little or no keyboard input. Heimdall and Mercenary III are good examples.



A breed unto itself, racing games involve getting into some sort of speed machine and seeing how fast it can go. Classic racing games involve Lotus 2 and Stunt Car Racer.



Any game that lets you compete in a physical contest. The best of these are so realistic that after a game you are left exhausted and needing a shower. These include Kick Off 2, Microprose Golf etc.



Games that involve pure brain power and a planning to win, with little emphasis on physical reaction. Populous II and Sim City fit into this category.



The oldest concept for any game and the graphical grand-daddy of them all is still used as inspiration for products. Remember, the smash-hit Arkanoid...



For all those little brain busters and quick thinking, why not take a glance under this icon, where you'll find games like Lemmings and Tetris



This is where all the pure action games hang out, usually arcade licenses. An adrenalin pumpin' blast, would have this icon put with it. Turrican and Final Fight



Role Playing - Role Playing games differ from adventures as your character has the ability to grow with experience. True RPG's include Bard's Tale titles.



Anything that lets you climb into the cockpit of a plane, tank or boat, and take on real enemies. F-19 and M1 Tank Platoon are the sort of thing you'll find here.



Platform games are those horribly addictive scrolling games that have you leaping from level to ledge. Harlequin and Robocod explain what we mean.



For games that tax the brain cells as well as joystick reactions, look no further. Midwinter and Elite are arcade strategy games.



Not so much games, as full flight trainers. These games are highly sophisticated and include classics like F19



Everything you ever needed to know about Communications on your Atari. From Electronic mail, to sending faxes and networking



If a review has anything to do with music or your Atari's MIDI ports, whether we're reviewing a music package or a musical



Program - Articles on programming, different languages, operating systems in fact anything that pertains to programming.



Look out for this icon if you want to read a feature that lets you know which add-ons are worth buying and how to use them...



The icon to watch for. We mean to help the buyer in you so ST Review will be synonymous with the words value and fairness.



If a package covers clip art, photos, scanners or is anything to do with drawing/art packages, then you'll see this sign.



Utilities are not given a lot of space in other mags but we do. Well, without them, an ST is almost naked.



One of the most popular uses for Atari is as word processors and so printers are important buys for everyone.



Broad-based interest articles will carry this logo. Articles on software houses, products, groups or even repairing your machine.



Want something that will help you to title that family video? Any program that can be utilised for video gets this icon.



You'll see these in the Game Tips section - they are the STR rating of just how difficult we think the game is. one is easy, ten is hard.

Here is the list of icons that ST Review uses in order to introduce each of its topics - giving you a subject reference point that's easy to spot. We also colour code all our sections, News, First Impressions, Product Tests and so on... Keeping all aspects of the ST, easy to find...

When we review a game, we pride ourselves that we know enough about computer games to be able to make a balanced, informed and accurate assessment of the actual entertainment value of the package.

For every game that is reviewed we provide a series of easy-to-understand icons, symbols and scoring systems to provide you with an immediate and easily digestible method of rating the products.

GUIDE TO PRODUCTIVE SOFTWARE

At ST Review, we believe in giving readers choices. That's why when we review non-game programs, we never review them alone. We believe in comparative reviews - so that new products can be reviewed alongside established ones. Giving the reader every chance to draw a comparison between programs and products that they know and don't know.

NEWS

MAKING

The third MIDI Music Show took place at the Novotel in Hammersmith in April, and with more software on show for the ST than any other computer, it proved that the machine is still firmly in the lead as far as music is concerned. Jon Bates went to take a look at what was on offer. . .

TONING UP

New tone modules from Roland and Yamaha

Among the hardware on display at the show were new tone modules from Roland and Yamaha, specifically designed with the computer user in mind.

Yamaha's TG100, retailing at £349, has 192 preset instruments, 10 drum kits, a further 64 programmable sounds plus a built-in reverb unit. All the sounds are sampled. The module is one unit high and half a rack unit wide and will sit neatly on your work top. Sound Canvas SC-155 is Roland's updated version of last year's new model. It has 445 instruments plus 10

drum kits and sound effects; in addition it now has eight sliders that allow level and panning to be controlled "hands on". It comes with an infra-red remote control for stage use and costs £599.

Both instruments conform to the new GS MIDI standard of voices which means that they have the main voice families numbered in the same way, ensuring greater compatibility with other GS MIDI instruments. They will also accept stereo input from other instruments that can be mixed with their own sounds.

Yamaha also announced that it has made ST PD software available to program their RY30 drum machine and create random patterns. This is in addition to their ST software for the QY10 sequencer.

GETTING THRU

Unless you have extremely poor eyesight and are innumerate you will have noticed that there are only two MIDI sockets on your ST whereas most MIDI equipment has three, the one missing being a Thru socket. Atari, for some misguided reason, created a non-standard Out port, which can cause prob-

lems as they tried to combine both Out and Thru - a decision not welcomed by software developers. However, help is at hand in the shape of a lead from Innovations which was on display and is now available. £30 solves all problems like this and gives you instant In, Out and Thru ports.

JAM SESSION

Once again the MIDI song file market is growing and many stands were offering copious amounts of pre-programmed songs of all types, shapes and sizes.

Heavenly Music was no exception, and they also have a series of "killer" Ram-

Jam grooves, drum patterns and fills which they have released under the name of Dr Beat; while Beat 'n' Bass is a combination of drums and bass lines.

The prices for these start at £13.95, but for £3 you can get a demo disk.



Dr Beat convincing customers that his disks are the best.

MUSIC

PROFESSIONAL NOTES

A range of highly sophisticated mixers was on display

Professional studios should be taking notice of ST programs that work with mixers and other gear. MPI, in conjunction with ABC music, are importing a series of Yes Audio Products. These are highly sophisticated products that control audio signals from the ST. The MCA-16 automation rack will provide automated mixdown of 16 tracks controlled by any sequencer. The price of just

under £1000 reflects the high audio quality of the results; the Quasar-XL performs the same feat for an 8 track system. An innovative MIDI Noise Gate, the MPG-8, is a rack-mounted series of eight noise gates run automatically via MIDI. This prevents loss of attack, a common problem when noise gates are used on sounds with a fast attacking edge.

A similar prospect was offered by R-Technology with their Recital rack-mounted MIDI-controlled 8 and 16 track mixer units. These can have exclusive ST software controlling them

and can also be run from within a sequencer such as *Cubase* or *Notator*. It is theoretically feasible to run 112 channels of sound governed by one MIDI channel. The number crunching that occurs if you start thinking of up to 96 MIDI channels running audio and MIDI modules is decidedly silly. The 16-track mixer costs just under £1,400. Midimation has a similar system that costs £750 for 16 channels.

Intonation also has a handy set of 50 drum kit presets that load up into *Cubase*. Designed especially for the Alesis SR 16 drum machine, it will save owners hours programming the drum mapping screen and costs a mere £7.00

SAMPLE THIS

AVR, who are possibly the leading innovator in ST samplers, launched a new low-cost Replay 16 bit sampling system. AVR, whose products are distributed through Microdeal, is well-known for its Replay samplers in various formats. The software, apart from coping with all previous 8 and 12-bit formats, can also hold and play via MIDI up to 128 samples in memory, plus all the usual refined editing facilities and drum machine software – and all for only £129.95

TWO IN ONE

Music Pro Import, who brought you *Feeling Partner* free on issue one of ST Review, was showing the full and latest version of the program, together with a new multiple editing suite that runs with pretty well any synthesizer.

Lizard will program a wide variety of synths and acts as a library and data file for the sounds.

A very professional and visual program and it starts off at £149. For further details contact Music Pro Import on;
081 789 8641

Lizard – the multiple editor from MPI.



INTRINSIC INTEREST

Intrinsic Technology, showing for the first time, has a brace of ST programs. First is the *Slam Librarian* for the Akai series of samplers, complete with an audition feature. *Patchvision* is a program that selects sounds from any of your synths when you enter what sort of sound you want, while *Rhythm* is an

education program that teaches the key ingredients of rhythm in music. *Dr Tiricc* is a slightly eccentric drum, bass, melody and lyric creating package, and there were also several MIDI desk accessories plus a range of PD and Shareware ST software. Prices for these are between £10 and £30.

More information can be obtained directly on 081 761 0178



Intrinsic surrounded by posters and software

LIVE ON STAGE

Classical music lovers will soon be able to buy complete symphonies from Oscar Music, which is yet another newcomer to the market. Meanwhile, stalwarts such as Newtronic have an incredible number of up-to-the-minute songs on offer, while Hands On now markets *On Stage*, the only monitorless ST Midi File player. The

idea is that you can now take your ST on stage and playback songs using their hardware switch.

The running order of the songs can be preset and you can use the monitor live if you want to.

Costing around £100, *On Stage* is considerably cheaper than a dedicated file player.



On Stage - the monitorless ST controller from Hands On.

A MIXED BAG FOREIGN BODIES

A range of synth editors and librarians were on display

European imports from AMG

More synth editors were on show from Syntec Systems, this time for the Roland D series of synths and also the slightly rarer GR50 guitar synth. Protone Editors retail for £40 and £50 respectively.

Mississippi Software, imported by Four Minute Warning, also has editors and librarians for the Roland D series, the U220. Other more specialised editors include the Akai XE8 drum module organiser and the Filemaster series of sample editors designed to work with a wide range of dedicated samplers. These cost between £39.95 for the Roland and £176 for the samplers.

As well as having an immense CD sample library, AMG also imports two brands of European ST music software.

The first of these is the full selection of Einstein Music Synth Editors at extremely favourable prices, the most expensive of which only costing £75.

The second is the Zadok collection from Holland. As well as the Uni-Man universal synth programmer with updates for synths as they are launched (£219), Zadok is also set to launch a strangely titled yet compelling music improvising program called *STimpy*.

HYBRID COLLECTION

Hybrid Arts is one of the longest running ST music software companies. Now handled by Atlantic Audio, they chose the MIDI Music Show to launch several new programs. *GenEdit 2*, (*GenEdit* was the first multiple editor for any computer) is now back with a vengeance and the new version supports literally hundreds of synthesizers, drum machines, samplers and FX units. This company was also responsi-

ble for the first direct-to-disk recording system for the ST (called ADAP) and their brand new Digital Master system was having its first public outing too. It is designed for use in post production work, CD preparation and straight sampling, and has already been used in movies including *The Doors* and *JFK*. All programs will co-exist and work with their "old faithful" workmate sequencer, *SMPTetrack Gold*.

GOING FOR A SONG

Computing Resource is a new software company that is marketing an interesting extra for all C-Lab *Creator/Notator* users.

At a cost of £49, *SongRep* allows you to extract printed

reports from songs, helping to keep track of songs, instruments, drum maps and all those details which you previously had to copy out or screen dump.

PRIME SAMPLES

Although samplers have been used for a long time and play a central role in chart music, the demand for ready-made samples is taking an upswing and companies such as The Dangerous CD company, Zero G and AMG were showing many prime samples on CD.

The word is that some of these will be available in ST file format by the end of the year, but if you can't wait that long, Gajits has a set of five floppy disks with ST samples on them in a co-ordinated effort between them and AVR.

Gajits sequencers are the only ones at present that have the ability to play back ST samples as well as the more standard MIDI tracks.

Gajits can be contacted on: 061 236 2515

ORDER FROM CHAOS

The MIDI Line Driver gets over the problem of long cables

If you have ever tried to use long MIDI cables - above 15 metres - you will have almost certainly suffered with the sort of musical gibberish that makes the chaos theory seem like perfect order itself. Philip Rees, who also produces the MIDI merge boxes, is now marketing a device that will stretch MIDI up to one kilometre. His *Midi Line Driver* not only transmits the signal, but will clean it up after it has been distorted by weak leads. All for just under £90. He also has a new three into one MIDI merge unit.

PROTAR GETS SERIOUS

Protar Ltd, the leading manufacturer of hard drives for the ST, is currently extending their range with the new 19" rack mounted **ProGate II Professional** series.

These have been specifically designed with the music industry in mind.

There can't be a recording studio in the country that doesn't have an ST, and this range is designed to be an affordable alternative to the over-priced models currently on the market - with no compromise on quality or performance.

The range starts at £280.00 including VAT for a basic 20Mb drive, and extends to custom-designed models with anything

up to a gigabyte of memory. (That's a thousand Megabytes to you and me.)

All drives come with a full operating software system, are formatted and ready to work.

A SCI through-port comes as standard, and on the high-specification quantum drives, there's room to add a second hard drive by simply slotting a new unit inside the casing.

A DMA-to-SCI converter can also be fitted, allowing the hard drive to be located up to 20 feet from the ST: ideal in a recording studio situation.

For more information, and a full price list, contact Protar on 0923 254133.



The new ProGate II Professional Series was specifically designed with the music industry in mind.

LETTER FROM THE EDITOR



"I don't know about you, but I always read editorials. Properly written, they should tell a reader exactly what the content of a magazine is - its bias, direction and

editorial integrity. The editor's picture should be warm, caring and approachable to give the feeling that they really care about you, the reader.

It's all hogwash though really - or is it? Yes, there is a picture of me trying to look every inch the warm, welcoming editor but any decent photographer could make a convicted, multiple murderer look the part. You must judge consumer magazines by how much of their profit they are prepared to give back to you.

The response to our half Megabyte memory offer last issue was tremendous. This, perhaps, reflects our intention to not make any profit on the deal and run it purely as a reader service. We think that once you've bought the magazine, we owe it to you to give real value for money, which if we are to be successful, we will continue to do."

Garth Sumpter, Editor.

LIGHTPEN FOR ST

Trojan is currently beavering away on a new lightpen for the STE.

After the success of their pen for the Commodore Amiga, Trojan is developing the new accessory, which is really only in an experimental stage at the moment.

The company maintains that it will plug into the mouse port and run from a small desktop program, making it easily installable onto any package.

The pen is priced at around £35, and there will be more news as we get it.

DIARY DATES

your-at-a-glance-guide to forthcoming events.

ALL FORMATS COMPUTER FAIR

Date: 16 May.
Venue: Sandown Exhibition Centre, LONDON.
Organiser: Bruce Everiss.
Tel: 0225 868100.
Event: One in a line of regular small market-like gatherings. The car boot sale of computing. Lots of hardware and software bargains to be had.

SPRING COMPUTER SHOPPER SHOW

Dates: 28-31 May.
Venue: Olympia, Kensington, LONDON.
Organiser: Blenheim.
Tel: 081 742 2828.
Event: Large-scale gathering of hardware

manufacturers with a big market feel, but with seminars and product demonstrations.

THE COMPUTER SHOPPER SHOW

Dates: 28-31 MAY.
Venue: Olympia.
Organiser: Blenheim On-line.
Tel: 071 373 8141 (box office). Event: Everything for the 16-bit crowd under one roof - including an ST Review stand

Dates: 21-23 August.
Venue: Düsseldorf Messe.
Tel: 01049 211 350505.
Event: The huge Dusseldorf show acts as a magnet to French, German and Dutch Atari users.

FLASH ROM, FLASH PRINTER



Silica's new LP1200 is completely HP Laserjet III compatible.

Silica Systems are really quite proud of their new LP1200 laser printer. Who wouldn't want to own a £700 printer that can produce 400 dpi (dots per inch) at a fluid rate of six pages per minute and that's completely HP Laserjet III compatible?

That's what all the fuss is about. The LP1200 is also the only laser printer that features a Flash Rom. This handy unit allows you to upgrade the machine time and time again, by simply downloading software and firmware into the printer's internal memory, where it will stay until changed. This means you can use new printer drivers and fonts as they arrive, rather than having to upgrade to a more sophisticated printer. The marked retail price is £1195.00 but Silica can let you have it for a mere £699 plus VAT. To find out more, contact them on 081 309 5000.

NO MORE DAYS AT THE ZOO

Software publisher, European Electronic Zoo, has gone into liquidation. The company, led by Stuart J. Bell, ex-Microprose/Origin employee, traded for the last three years following Bell's split with Microprose. During their time they released an array of offbeat games, from *Germ Crazy* to the Goliath-Games-programmed *Subbuteo*, as well as *Eco Phantoms*, a reworking of one of the most famous games never to appear - *Terrarium*. Bell was unavailable for comment at time of going to press.

DTP GOES A3

Wales-based hardware experts Protar have unveiled the Pro-Screen TT, an A3 sized high resolution mono-monitor for Mega ST, STE and TT machines.

The 19" screen has a maximum resolution of 1280 x 1024, making it comparable to large Macintosh screens, perfect for desktop publishing and graphic design systems.

With a screen refresh rate of 72 Hertz against a standard TV rate of 50, the monitor promises to have a sharp, paperwhite image that's considerably less straining on the eyes than a normal TV.

It can be plugged directly into a TT for the sum of £732.00. Mega ST and Mega STE owners will have to cough up a little extra money for a graphic card, bringing the total cost up to £979.00. For more details, contact Protar on 0923 254133.

SPRING SAVINGS GALORE

Between 28th and 31st of May The Computer Shopper Show 92 will be open to the public in London's Olympia. The basis of the show are the dozens of dealers offering huge show discounts on hardware and software, as well as plenty of magazines on hand to dish out all the technical help and advice you could possibly need.

The highlight of the show, it is claimed, will be the launch of Digital Integration's fabulous new flight simulation, *Tornado*. Based on the aircraft that played a major part in the Gulf War, the game is played over combat areas of 100 square miles, each containing over 16,000 static and moving objects. The programmers claim it will have the highest visual density of its kind. "This will definitely be the most advanced low-level flight simulator ever seen", says



Digital Integration's *Tornado* is just one of the treats in store at the Computer Shopper Show.

Rod Cobain, DI's operations manager.

The show is open from 10am to

6pm each day, and entry costs £6 for adults and £4 for under 16s on the door.

ELECTRONIC ARTS PULL OUT ON ST

US giant Electronic Arts has revealed that it is no longer developing software for the ST. Although great things were expected of the Atari version of *John Madden's American Football*, EA has decided to abandon its development.

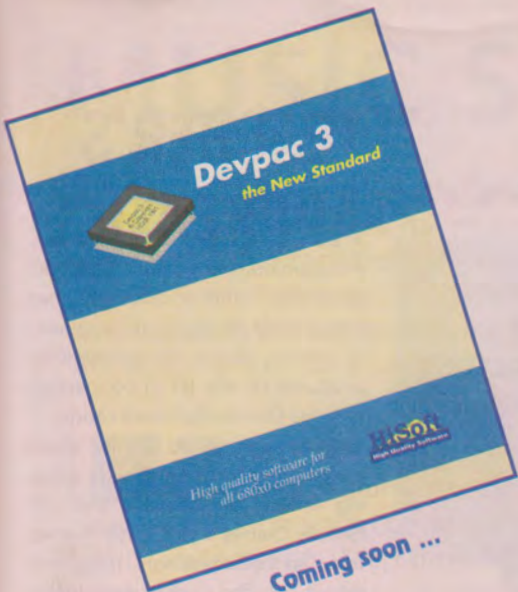
EA representative Clive Downie writes: "We as a publisher have

decided not to release the title (*John Madden's*) because we believe that it will not produce a high enough return compared to other formats the game has been made available on.

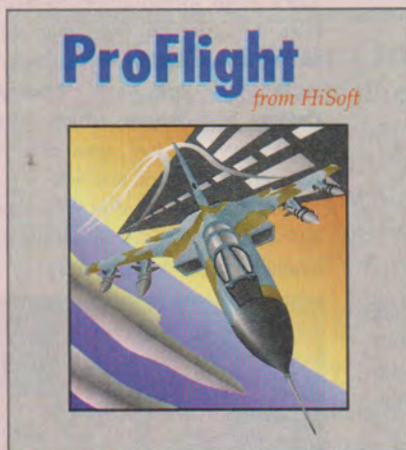
"This philosophy is a direct tie-in with our policy on the ST market: we are now not developing any new titles for the Atari ST."

Don't shed too many tears, though, as this means that only EA themselves are not developing. Affiliate companies who are distributed by EA, such as Millennium, are continuing to develop, so expect to see ST versions of *James Pond 4 - Splash Gordon* and *Steel Empire* in the not too distant future.

Some reasons to be cheerful



Coming soon ...

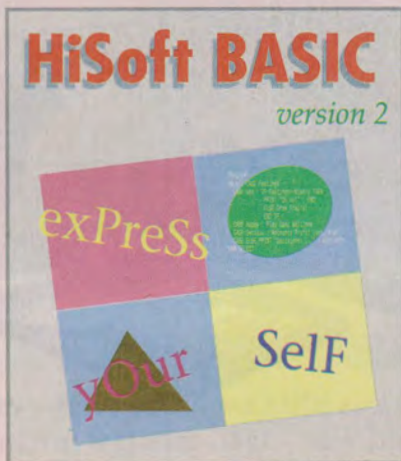


The most accurate flight sim yet ...

Stop Press ... Stop Press ...

We are delighted to announce that, following an exclusive agreement with Kuma Computers Ltd, we have taken over the distribution, support and development of their popular Atari ST/TT products. Existing Kuma customers should write to us or call us for details of our support schemes and information on our plans for the future of Kuma software.

At the moment we have the K-Spread 4 spreadsheet and K-Word word processor available (see our order form on the right).



The BASIC of the 90s

Stop Press ... Stop Press ...



Stop Press ... Stop Press ...

HiSoft is renowned for its range of language systems, utilities and entertainment programs on the Atari ST/STE/TT. We have been writing for the Atari 680x0 computers since they were first introduced into the UK and thus we know both the hardware and software intimately. Our company policy is always to offer the highest quality software at an affordable price with a complete range of backup support options - in these uncertain, difficult times, we'd like to put a smile on your face.



The premier C compiler

for more information on any of our products, please call HiSoft on 0525 718181, or fax us on 0525 713716 or write to us at: The Old School, Greenfield, Bedford MK45 5DE UK.

HiSoft
High Quality Software

Free gifts!
(subject to availability)

HiSoft Software is available from all good computer shops. If you should have difficulty in obtaining any HiSoft product, you can order directly from HiSoft using this order form. You can pay by post/box/telephone using Mastercard/Access/Visa/Switch/Connect etc. or simply send us a cheque/PO. Some free gifts are available for direct purchasers. Prices include P&F and VAT within the UK.

HiSoft BASIC 2
HighSpeed Pascal
HiSoft Devpac 2
Diamond Back II
HiSoft C Interpreter
FTL Module 2 Developer
Kuma K-Spread 4

£79.95
£99.95
£39.95
£39.95
£59.95
£99.95
£99.95

Lattice C 5.5. New!
HiSoft DimpactT
Harlekin 2
Tempus 2 editor
ProFlight Tomado sim
Your First BASIC book
Kuma K-Word 2

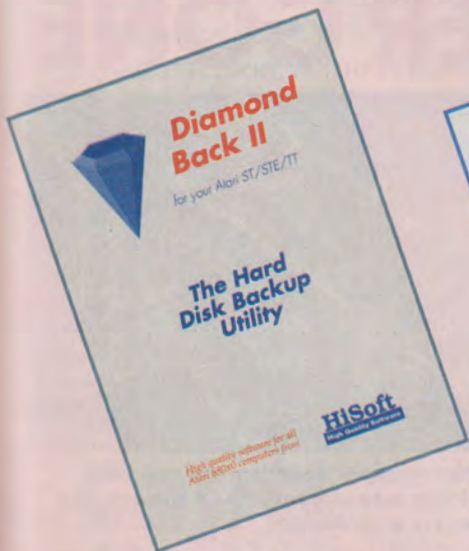
£149.00
£99.95
£99.95
£39.95
£39.95
£174.95
£34.95

Name: _____
Address: _____

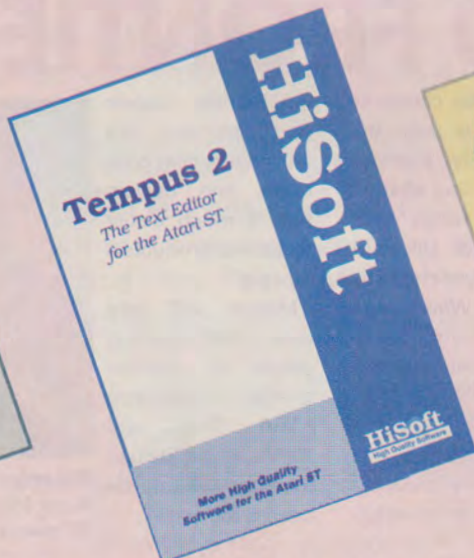
Please send me the software/books that I have selected, together with my free Manning with Fox book (worth £12.95) and disk wallet (worth £2). I wish to pay by:

Cheque/Postal Order Credit card Debit card

Card No _____
Signature _____
Expiry Date _____



The complete hard disk backup program ...



... the fastest editor ...



... the desk accessory to beat all the others

HiSoft
The Old School
Greenfield, Bedford
MK45 5DE

FOR THE BEGINNERS...

TecnoPlus is releasing a starter pack for ST owners. Although aimed squarely at the first-time owner, it's such good value that it should appeal to everyone.

For the all-in price of £34.99 you can get a Quickshot 131 digital joystick, a dust cover for your machine, a mouse mat, five blank disks, a disk cleaner, a File-A-Disk record system, a copy of *Prince Of Persia* and a copy of the award winning *STOS*.

These items, if bought separately, would be over £80, so this is a real bargain. For more details contact TecnoPlus on 0604 768711.



RADIO DAYS FOR COMPUTER GAMES

Computer games will get radio coverage towards the end of May during a 101 hour Radiothon to celebrate the 40th anniversary of Birmingham Hospital Broadcasting Network.

The BHBN radio shows will be broadcasting on FM 101 from 6pm on Friday 22nd of May to an audience of over three quarters of a million people.

Fraser Nash, the Radiothon's Co-Ordinator will be presenting computer-related topics including interviews with programmers, pop stars and software companies on his afternoon slot between 2.00pm and 4.00pm.



No, not a hospital patient but in fact BHBN's Co-Ordinator and game-playing DJ, Fraser Nash.

GOLDEN PERIPHERALS

Golden Image Distribution is a new UK-based hardware distributor carrying sole rights to Jintech products in this country. Already successful in Taiwan, Germany and the US, they can now offer their extensive range of low-priced, high quality units to the British public.

Their range includes the cheapest replacement mice on the market, with bubble switches for £12.99 or with micro switches for only £15.99. Should you want a new external drive, then their new double-sided drive is worth looking out for.

Currently the only drive with a

through-port and a digital track counter mounted to the front (ideal for virus hunting), the whole unit is priced for slightly less than £60.

The best thing has to be the Brush Mouse, however. Based loosely on the lightpen idea, the brush mouse is shaped like a brush with a small ball at the base. This is used like a mouse, but will hopefully create a far more comfortable feel for users. If a price tag of £19.99 for the Brush doesn't entice you, then how about £24.99 for the Brush Mouse with a full copy of Deluxe Paint ST? It almost sounds too good to be true...

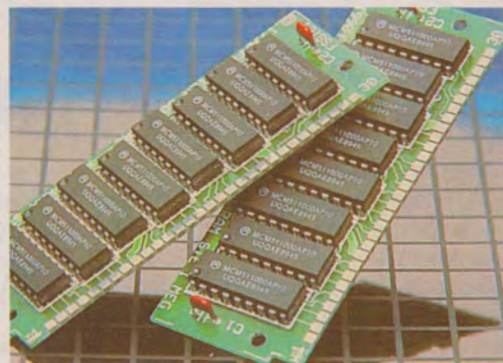
WILD FRONTIER GONE

Frontier, the mail order company that was synonymous with the supply of top quality memory chips, has ceased trading after all rights to its product range were taken over by Marpet Developments. The new business is headed by Martin Walsh and Peter Franklin, both of whom have a long history of involvement with Frontier products.

"We're very excited about the deal", Martin Walsh commented and pledged to continue to supply products and service to all exist-

ing Frontier dealers and customers. "We will ensure that both users and dealers find it much easier to get our products," he said.

Marpet will take over the existing range of Frontier goods including XTRA RAM and XTRA RAM Deluxe memory expansion boards for the ST.



Frontier memory boards - over 15,000 have been manufactured and supplied to ST owners worldwide.

TEACHER'S APPRENTICE

Infogrames, the French software developer and publisher, has announced its intention to release a whole range of educational products on the ST in connection with its Disney Software range.

In the year of Euro Disney, these packs will add to an already existing line-up of software and will feature Disney's favourite characters in educational programs aimed at the pre and infant school age ranges.

New titles will include; *Mickey's 123's* - an introduction to numbers for two to five year-olds, *Mickey's Jigsaw Puzzles* for five to eight year-olds, and *Mickey's Colours and Shapes* which introduces two - five year-olds to different geometric articles.

The packages are due for release in the summer. Further details are available on 071 738 8199.



Shapes, colours and numbers - Mickey Mouse or not?



MUSIC SOFTWARE OFFERS

When you make music with Gajits Music Software, you have the full support of the UK's leading music software developer. Gajits' music software has a reputation for ease-of-use combined with comprehensive facilities, professional quality at an affordable price, and a friendly support service to match. Tens of thousands have been introduced to computer music by Gajits' Sequencer One. And because we can guarantee a high demand for Gajits' products, we can offer you some very attractive prices on a range of software that builds into a complete music system . . .

Sequencer One – Almost certainly the most widely used music sequencer in the UK. For beginner to semi-professional. Full MIDI capabilities with support for four channel sample replay through your computer's own sound output (stereo on Amiga and STE). Real time recording of MIDI instruments. Step time entry over MIDI or from computer. 32 tracks. Track and Cue Sheet Screen. Individual Note Editing Screen. Music Arrangement Page. Powerful global editing options (eg. quantize). Latest version with new user guide. **ONLY £19.95**

Sequencer One Plus – New advanced MIDI and sample sequencer. All the features of Sequencer One, plus many more! Includes Gajits' new Diamond Drag note editing system, perhaps the fastest on any sequencer. Unique Juke Box Page allows up to 32 songs to be chained together into an "album" or "live" performance. Also offers new Temp Map Screen, MIDI controller editing, extra sample replay facilities (eg. external replay cartridge support), MIDI sysex handling, and much, much more! Available now for a limited time as an upgrade kit for Sequencer One owners (rrp £49.95). **ONLY £39.95**

The Hit Kit – Music composition system to use with Sequencer One and Sequencer One Plus. Create professional rhythm tracks, bass lines, chord progressions, and other accompaniments in a wide range of popular styles. An ideal way to learn. Full MIDI and sample support. Latest version (rrp £29.95). **ONLY £24.95**

The Sample Series – A collection of high quality digital sound samples (IFF format) for use with Sequencer One, Sequencer One Plus, and other music programs. Sampled by experts from the best sound sources available today. There are five volumes in the series, each with its own demo tune: **Percussion & Effects, Guitars & Strings, Brass & Woodwind, Synth & Vocals, Piano & Keyboards.** Available separately (rrp £12.95) or as a full set. **EACH VOLUME £9.95 FULL SET ONLY £39.95**

Companion Editor Librarians – Top quality professional programs to edit, organize, and back up your instrument. **4D Companion** for D-5, D-10, D-20, and D-110. **CMpanion** for CM-32L, CM-32P, CM-64, and MT-32. Supported by the instrument manufacturer. A full explanation of synthesis techniques is included in the user guide. **ONLY £99.95**

Amiga MIDI Interface – Allows connection of Amiga to MIDI instruments. Plugs into Amiga serial port. Top quality design and sturdy build. MIDI In, Out, and Thru. Pair of MIDI cables included. **ONLY £34.95**



ORDER LINE 061-236 2515
newstar technology ltd
 40 Princess Street
 Manchester M1 6DE

**OFFICIAL
 GAJITS
 STOCKISTS.**

Prices include VAT & UK postage. All trademarks acknowledged.
 Goods normally despatched within 3 working days.



TO ORDER, SEND COUPON OR LETTER WITH CHEQUE, PO, OR CARD DETAILS
 TO: NEWSTAR TECHNOLOGY, 40 PRINCESS STREET, MANCHESTER, M1 6DE.

NAME _____
 ADDRESS _____
 POSTCODE _____
 COMPUTER _____
 CARD No. AMIGA ST/STE
 EXP. DATE _____ TEL _____
 PLEASE RUSH ME

FIRST IMPRESSIONS

As the ST games scene hots up, it seems that once again we won't be experiencing the usual "summer slump" in releases

STRIKER

Soccer's all the Rage...

GAMEPLAY

With Anco's Kick Off II well and truly situated at the pinnacle of football games, can there ever be an alternative? Newcomer Rage certainly thinks so and has come up with Striker as an alternative to Anco's classic. Featuring all the usual rules and features we have come to expect, Striker breaks away from the likes of Sensible Soccer by opting for a stunning 3D perspective. Thus, as the players whizz around the scrolling pitch, the screen "camera" follows them, moving with ease from player to player.

Striker is best described as a 3D version of Kick Off and is equally as playable as the Anco game. A full range of international sides are at your disposal, ranging from the Arab Emirates to Brazil and Germany. Each team has its particular attributes and skills, and these act as the game's difficulty levels - for instance, taking the Striker

Cup whilst commanding Malta will prove more challenging than using, say, England. These differences are noticeable on field, with players who lack aggression losing out on tackles, but making up for it in power - as a result, such a side should master the rules of a passing game.

A full quota of options allows the player to determine weather conditions, the length of the match and whether a match will run into extra time or into a penalty shoot-out. These can then be tailored to add difficult elements to what is already a challenging kickabout.

PLUS POINTS

Striker's 3D perspective is a massive risk, and has proved unwieldy in the likes of I Play 3D Soccer and Microprose's International 3D Soccer. However, even with dozens of sprites on-screen, Striker zooms around at a stunning pace and is incredible to look

at. With the 3D problem solved, all that Rage needed was to make the game playable, and they've succeeded here, too. It is every bit as playable as Kick Off and is extremely controllable. Your versatile team members can perform acrobatic diving headers and bicycle kicks, and are also adept at more conventional tackles and chips. Together, these offer more than a worthwhile challenge to the Anco game.

BEHIND THE SCENES

Although the name is new, Rage is actually the new title for ex-Ocean development team, Special FX. With such games as Midnight Resistance, The Untouchables and Batman: The Caped Crusader behind them, the decision to follow companies such as Core and go it alone was made three months ago. Striker had already been started before that, with the scrolling system the first thing to be implemented.

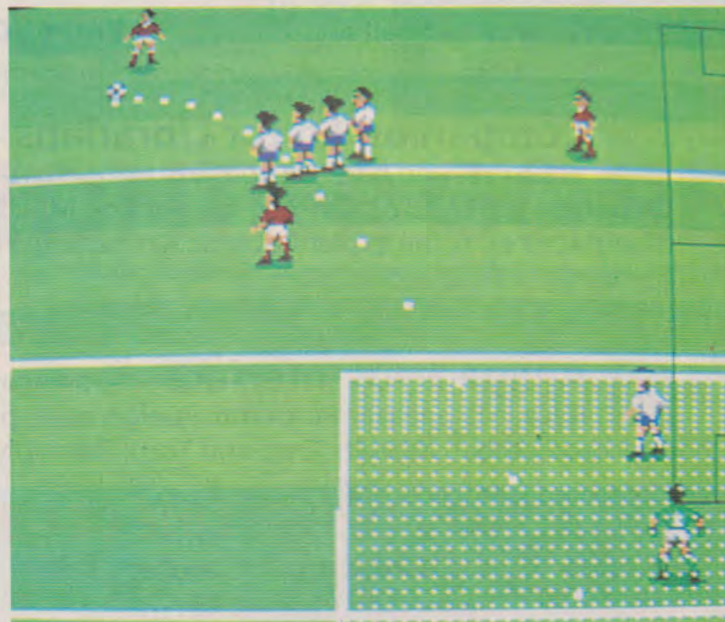
Once this was effected, it was a matter of adding the sprites whilst retaining the speed. As a consequence, the game does slow down by roughly 10 per cent if the player opts for full pitch details (centre circles, etc) but the drop is barely noticeable and the game still cracks along.

FIRST IMPRESSIONS

Quite simply, Striker is a game to watch out for. Imagine Kick Off II with a 3D perspective and you'll get a good idea of what to expect. It's extremely playable and stunning to look at, and the way the "camera" sweeps across the pitch is breathtaking. The perspective also allows the use of more detailed sprites and, as a result, the animation adds to the realism. As a debut, Striker is a definite home win for Rage, but of course, we still await news on Kick Off III.



Whereas Microprose found themselves struggling when they attempted to cross a Football game with a 3D environment, Striker cracks along at a blinding pace - with no loss of accuracy, either.



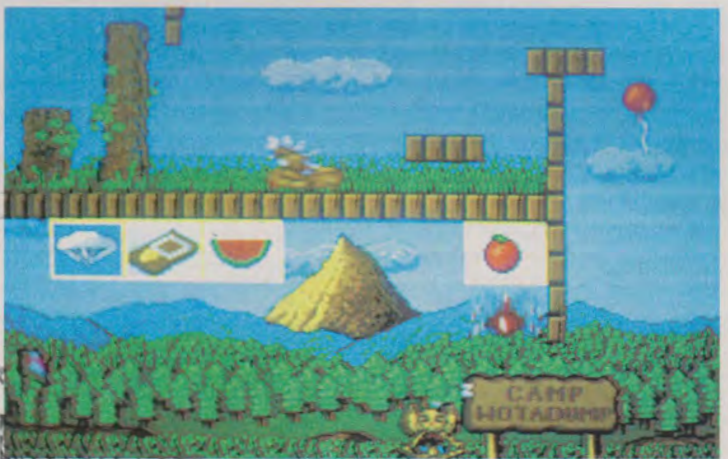
Your players act remarkably intelligently, and whenever a ball is passed or crossed, they will make a concerted effort to dive for it or tap it back into play.



Our rodent hero can move around the screens using a variety of ladders and steps, and there are also balloons which allow him to fly.



The ST version of Summer Camp features vastly-improved sprites and backdrops over its 8-bit cousin. These in turn give the game a Rodland-style appearance - which is no bad thing.



At most, each screen features up to five moving nasties - all of which should be avoided as they are fatal to touch. And with only three lives in tow, pixel-perfect precision is the order of the day.

SUMMER CAMP

Thalamus join the cute brigade

THE GAMEPLAY

A conversion of Thalamus' popular C64 platformer, Summer Camp stars a cute little mouse whose only goal in life is to scour the resort of the title for scraps of food and assorted goodies. Unfortunately, the camp leaders aren't too keen on promoting the camp as a haven for hungry rodents, and have unleashed a series of nasties to capture him. As the player guides the mouse through the many flick-screens, the game adopts an almost Rodland-style of "collect and avoid" strategies. However, the new wave of creatures are also keeping the camp's guests away, so getting rid of a few using whatever comes to hand may also solve some problems. The levels are a

strange mishmash of areas associated with such camps, with loads of chalets and fields to explore. However, as the mouse progresses, the creature content rapidly grows, and his task gets steadily harder. With only three lives at his disposal, the scurrying rodent certainly has his work cut out.

PLUS POINTS

Although there are no significant improvements over the original 8-bit version, the usual ST enhancements of more detailed and colourful graphics add to the already cutesy atmosphere. The levels are well designed, with the earlier stages kept fairly simple to ease the player into the game's many intricacies, with new ideas, such as bal-

loons to ascend to the higher stages, gently introduced.

BEHIND THE SCENES

Fresh from their work on The Godfather for U.S. Gold, Creative Materials is the team currently putting the finishing touches to Summer Camp. The game has been in steady development for nearly nine months, and Creative is also converting Thalamus' equally successful Creatures over to the ST. At the time of writing, all of the game's graphics have been created on the Amiga using DPaint and have been subsequently converted into a similar 16-colour palette for the ST - however, as both versions are being written side by side, it is believed that they will be identical. Originally scheduled for a July 1991 release, Summer Camp is now virtually complete and should be

released within the next two months, while a sequel, Winter Camp, is also on the cards.

FIRST IMPRESSIONS

If ever a genre was stretched to bursting point, it's cutesy games. With high-profile releases such as Robocod and Ocean's The Addams Family currently dominating the area, new, relatively unknown, games such as Summer Camp, may be overlooked. Although it doesn't offer anything new or original, the gameplay offers a logical progression over the Rodland theme, and the collection of objects when coupled with the game's complex screens, offers a long-lasting challenge. It's a solid little game and one that may prove to be a surprise little sleeper.

FLAG

Gremlin opt for a simple strategy...

THE GAMEPLAY

From the depths of Lost Patrol veteran, Ian Harling's, mind comes a novel slant on the popular wargaming theme. Whilst Flag retains the customary "buy more men than your opponent before attacking" concept, Ian has attempted to make the game as simple to play and oversee as possible, whilst adding neat little innovations, such as spies and assassins. Playing against a series of computer-controlled characters, you are given a limited supply of money with which to start piecing together your army. These troops start off with the relatively useless grunts, but at the higher end of the market you'll find battering rams and better-equipped soldiers. As

the game progresses and your funds grow, magic also plays an important part in the proceedings, with magicians offering their services and a good brew of spells.

The game is played over a stunning isometric play area, which is dotted with all manner of villages and places to explore. To manipulate your armies across all you survey, a series of icons are located to the side of the screen and are used to effect your orders. This is where Harling has tried to make things simple, and sending an army to your required destination is simply a matter of two mouse clicks.

PLUS POINTS

By avoiding over-complex icon panels and cluttered

gameplay, Flag is sure to be a hit with newcomers to the confusing "God sim" genre. But whereas simplicity usually results in a bland and shallow game, by adding a huge play area and a virtually free game task, Ian is hoping this won't plague Flag. Another massive advantage is the graphics. Anyone who was impressed by The Lost Patrol will be blown away by what Flag has to offer. As you send your armies on missions, the screen switches to a series of animations depicting the agents at work. Ordinarily this wouldn't be so impressive, but with so many on offer it's a real treat.

BEHIND THE SCENES

Ian is working on Flag with Lost Patrol partner Simon Cooke, with Ian concentrating primarily on the graphics. The idea of Flag was originated two years ago, but after messing around with a few more arcade-based ideas, Ian gradually drifted towards the God sim slant. The game is being pieced together using a specially-written map editor, and Simon then implements

the completed map one-by-one into the code. From here he can then place together the game's complex logistics - keeping an eye on the many missions, for instance.

FIRST IMPRESSIONS

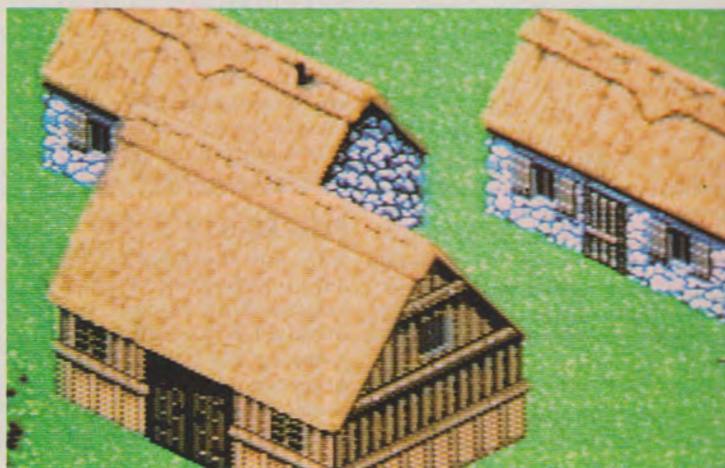
If you've shied away from the likes of Populous II and Utopia for fear of getting lost in a myriad of options, then Flag will probably suit you. Ian's claim of combining a simple game control method with deep gameplay certainly seems to have been borne out, and Flag offers a massive task with very little effort required by the player to get going. Another mention must go to the graphics, too, which are quite simply the best this sub-genre has seen. Not only do they set the scene perfectly, but their detail brings the small armies and characters to life. Expected for an Autumn release, Flag is certainly one of the brighter fillies in the Gremlin stable.



Flag's graphics are nothing short of stunning, and graphic artists, Ian Harling, has come up with a series of excellent intermission screens.



Your army can be sent off on individual missions or on massive campaigns. Meanwhile, though, your magicians are busy preparing spells.



The 3D perspective is easy to scroll around, and reflects Flag's overall ease of play - exactly what Ian was hoping for. However, don't think that this simplicity means that the game lacks content.

A320

A·I·R·B·U·S



...has landed.

developed in cooperation with



Lufthansa and Deutsche Airbus

COVER DISKS

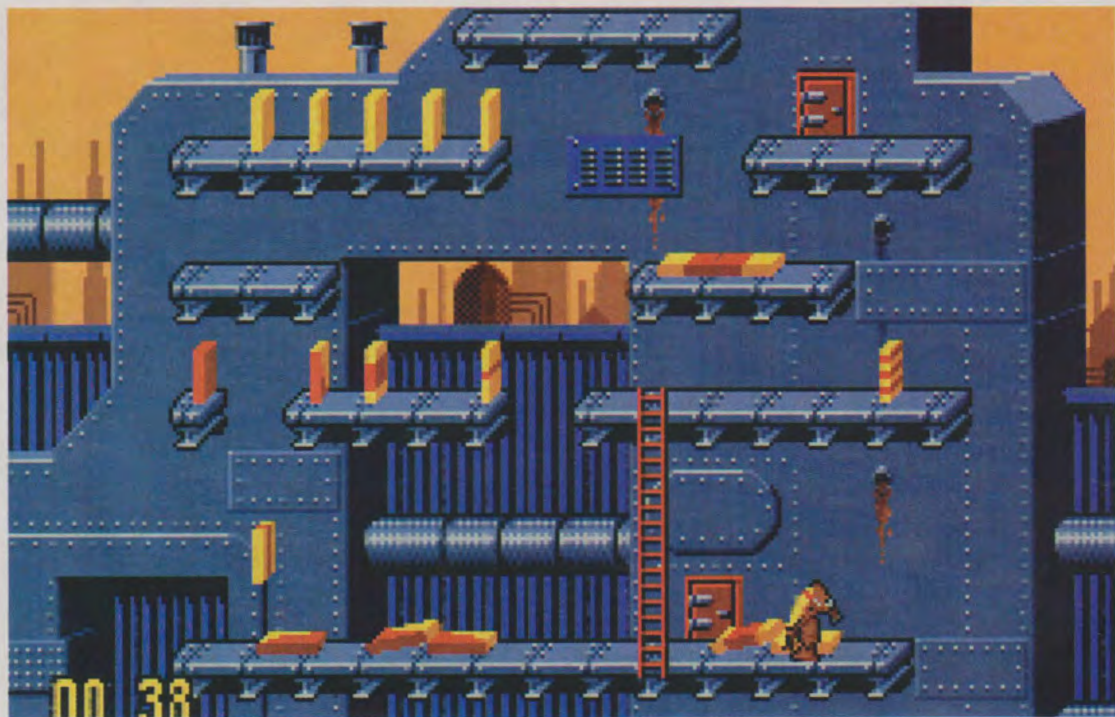
Our coverdisks are positively crammed with goodies this month, as ST Review presents for your delectation a full-price video titler, a personal database, a disk cataloguer, Deluxe Paint self-running demo, a host of STOS utilities, a Quiz Construction Kit and a playable three level demo of Ocean's latest, *Pushover*. . . .

PUSHOVER

PUSHOVER • RED RAT/OCEAN SOFTWARE • MIN MEMORY 0.5MB • COLOUR ONLY • JOYSTICK

Ever played with dominoes? No, not the game of fives and sevens played by old men in flat 'ats. We mean the lining them up and toppling them over kind of dominoes!

Enlist the help of an ant to shove those dominoes over in Ocean's *Pushover*.



Pushover: a whole host of special dominoes are included in this demo of Ocean's latest game.

Here's a playable preview of an excellent domino toppling game from RedRat/Ocean. The object is to line up the dominoes so that the "trigger" domino is the last to fall. (The trigger domino is the one with three stripes).

To help you do this you employ the help of an ant, which you can guide round the screen. The role of the ant is to carry dominoes from one point to another (hardy things, ants!) and make sure that the dominoes fall in the right order. Watch that you don't fall off the screen, though. And make sure that you can get to the exit!

There's a whole host of special dominoes to use, including exploding and

bridging ones, which are activated when they fall over.

To start the demo from the desktop, open the PUSHOVER folder and double click on PUSHOVER.PRG. After a short introduction, you can select any of the three levels with the joystick, then press fire to play. Alternatively press D for an automated demonstration.

Left and right control movements work as usual. Up and down work as you would expect on ladders. You can also use "up" to move your ant into a position ready for pushing over a domino (but you often have only a limited number of pushes); once your ant is in position, use right and left to select which way to push and press fire.

PERSONAL DATABASE PLUS

PERSONAL DATABASE PLUS • BAY COMPUTERS • MIN MEMORY 512K • MOUSE OR KEYBOARD

Here's a quick and easy way to keep all your names and addresses up to date. And when it's time to send a letter, Personal Database Plus can prepare all the necessary address labels - no problem.

Personal Database Plus is more than just a database. It is also a text editor and label maker. Using the mailmerge facility, you will be able to print the same letter to all entries that you select, ready marked for folding into window envelopes. Labels for all your entries can be printed to your specifications. This demo version will only hold 20 entries. Aside from this limitation the demo is exactly the same as the full version.

MAIN MENU SCREEN

The main menu screen has not only the menu commands, but all the information you will require.

At the top is the version number. Below the main box you will find more useful information: how many records there are on file and how many records your system can hold, (on a 520 this is 1,500 records, a 1040 3,000 records and 2meg+ 4,500 records). Bottom right will tell you how much memory you have left and either how much disk space remains or what hard drive partition you are using. All the menu commands are accessible by keypress or mouse operation.

ADD NEW DATA

This is where you build your database. The numeric field can be for whatever you wish it to be (for example, all those you intend to send Christmas cards to could be number 1). Likewise the date field can be used for whatever you decide. When you are on this field pressing F1 will fill it with the system date.

SEARCH UTILITIES

There are two main sorting options, SPEED FIND and START FILTER. By selecting START FILTER you will be presented with all records starting at the first. SPEED FIND is very fast but will require you to enter some search criteria.

To select your search field, first highlight the arrow

beside the field, enter your string to search for, and decide if the selected file is to have the string, = (Equal to) or <> (Not equal to). In the case of numeric field or date field you may select =< (less than) >= (Greater than) or = (Equal to). Next move down to the sort field and select the field from there.

TEXT PROCESSOR

This text processor is a very basic yet easy to use processor, with all the commands visible at the touch of the help key.

There is no automatic insert, so to insert words and letters you must first insert the spaces for them to go in, or you will simply overwrite what you already have.

There is automatic word wrap, and you can set the tabulation by using the Tab key. Other commands are as follows:

LOAD DATAFILE. When the personal Database Plus is first loaded it has no datafile in it. This option will allow you to load a database from Personal Database Plus (.PDP) Personal Database (.PDB) or Labelmaker (.LAB)

MERGE DATAFILE. Loading options are the same as above, but this will merge your selected file with the

one already in memory.

SAVE DATAFILE. When you have built up your database you will need to save it. This option will present you with the Gem selector to name the file. Use whatever name for the file that you wish, but make the extension .PDP. Using the DISC option from SCROLL\EDIT you can build up a selection of datafiles for different things.

BYE BYE

Exit Program [F10]. When all is done, this is the way to close down. Always use this option to end a session on **Personal Database Plus** as it will remind you if you have adjusted your datafile and need to save the adjusted version.

SET DEFAULTS. This is where you set up your system according to printer type, label size and the address you wish to appear on your mailmerged documents. When you have made your selections you have the choice of either saving your defaults so they are always there as set when you load the program, or using the current defaults without saving them.

The abort function will simply ignore all changes you have made.

QUIZ CONSTRUCTION KIT

QUIZ CONSTRUCTION KIT • SHAREWARE • MIN MEMORY 0.5MB • MOUSE

Fancy yourself as a bit of a trivia king or queen? Here's a package that lets you set both the questions and the answers for your very own ST quiz game...

You don't have to be Brain of Britain to use **The Quiz Construction Kit**. The kit was written using Mandarin Software's **STOS Games Creator Basic**, and will run using any Atari ST linked to a TV set, colour or monochrome monitor. It can handle up to 1,000 multiple choice questions with between two and five answers to each question. You can keep records of high-scores, plus individual scores for every person playing the quiz. You can even print out the quizzes in a ready to use form.

I'LL HAVE A 'P' PLEASE, BOB

Simply turn on your ST and insert the disk. When the

desktop appears, double-click on QUIZ.PRG. When the program has loaded it will attempt to load the default set of questions from the disk - a pack of trivia questions. With the default questions loaded, you can start playing straight away. A question will be displayed, along with between two to five possible answers, plus your score, the current question number and the number of questions in a

round (e.g. Question Number 1 of 5). You'll also get some music to help you concentrate!

WHAT'S ON THE MENU?

Simply point to the heading you require, select the option you want and click the left mouse button.

Throughout many of the menu options, you may be asked some yes or no questions. You can either type Y or

ENTER FILE DATADISK NAME RECORDS

```
Score 8. Question Number 1 of 5. New Game
Who was getting very tired of sitting by her sister on the bank, and of
having nothing to do?
    Emily
    Elizabeth
    Alice
    Anne
    Margaret
Your answer:
```

N, or point at the Y or N displayed next to the question and press the left mouse button.

DATABANK

A databank is a file containing a set of questions plus various details about the quiz settings. This option simply displays information about the current databank and quiz settings.

THE FILE MENU

Load. This loads in new databanks of questions that you have prepared yourself.

Merge. This is very similar to load except that it does not erase the current questions or settings but simply adds new questions to memory.

Delete. Again similar to load but this deletes a databank file from disk.

THE DATABANK MENU

Add Question. This option to creates new questions. You can have up to 1,000 questions in memory, each with a minimum of two answers.

Edit Question. This allows you to alter questions already in memory. The computer asks what to search for and you enter a few words contained in the question you wish to edit. All the questions which have those words in them will be found.

Delete Use. This option lets you delete unwanted questions by identifying them as for editing.

Print. You can print out your quizzes using this option. If the SHOW ANSWER option is on then the answers will be printed too. Restricting your questions to one line will fit them onto standard 66 line continuous stationery (or "tractor paper") without splitting them over page folds.

Erase. Calling this option erases all the questions in memory, giving you a clear databank to make your own quizzes from scratch.

THE GAME MENU

Questions per round. This lets you specify how many questions to have in a round. You can choose to have the questions never repeated, repeated or not repeated in the same round.

Show/Don't Show Answer.

Clicking on this selects whether the computer will display the correct answer should the user get it wrong.

Music On/Off. This turns the music on or off.

White on Black/Black on White. Allows you to select the colour scheme.

Highscore On/Off. Regardless of whether it is on or off, it is still displayed under the Records menu. When you switch it off it resets the highscore, so switching it off and then back on will have the effect of clearing the highscore.

THE RECORDS MENU

Open/Close Records. This allows you to keep a record of all the participants in a quiz, along with their scores. To open a record, enter in a filename just as you would to load a databank but this time it must end with .REC or you may lose it!

Print Records. This prints an entire records file on the printer—yes, it does help if you've got one all ready and connected! The computer will not leave any spaces between records so if you're using continuous stationery it's up to you to set the printer not to print on the folds.

CHANGING THE DEFAULT DATABANK

You can instruct the *Quiz Construction Kit* to load up one of your databank files as a default rather than the supplied trivia pack. Simply save your databank under the filename DEFAULT.QUZ onto a copy of the disk (if you use the original you may lose the trivia pack for good).

DISK BASE

DISK BASE • SHAREWARE • MIN MEMORY 0.5MB • COLOUR ONLY • MOUSE-CONTROLLED

This is a database specially written for Atari ST Review to help you keep your disks catalogued. It stores the names of programs, the names and reference numbers of the disks they were stored on, plus a brief program description.

To run the program, open the diskbase folder from the desktop and double click on DISKBASE.PRG

The program is operated by a series of simple to use menus; just select the number you require by pressing a

numeric key. Press Return to conform your typed selections.



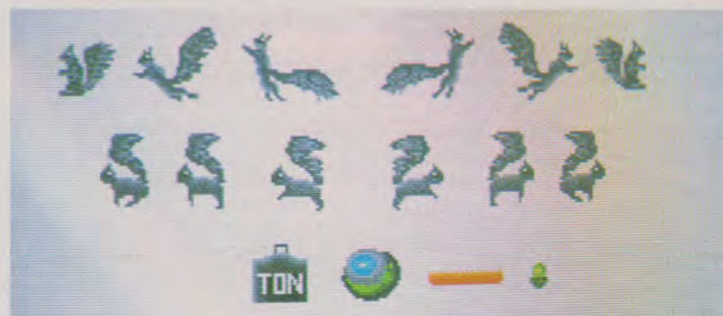
STOS GRAPHICS FILES

STOS GRAPHICS FILES • MIN MEMORY 0.5MB • COLOUR ONLY • STOS OR DEGAS COMPATIBLE ART PROGRAM

Look for the files labelled STOSPICS\BACKONE.PI1 and STOSPICS\SQUIRREL.PI1. These are picture graphics files for use by STOS pro-

grammers.

You can also display them using any art program or slideshow capable of displaying .PI1 files.



STOS TRACKER MODULES

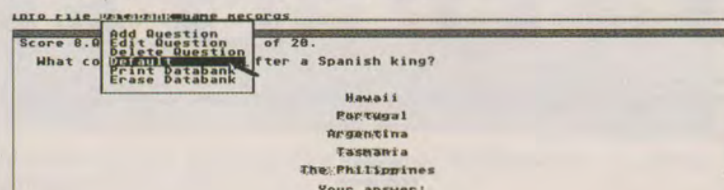
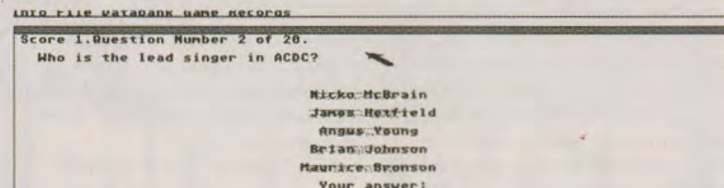
STOS TRACKER MODULES • SHAREWARE • MIN MEMORY 0.5MB • COLOUR ONLY • ST-ZINE MAGAZINE SHELL

The files to look for are STOSTRAK\BALLPARK.ABK, STOSTRAK\COMPLICA.ABK, STOSTRAK\RAVE.ABK, STOSTRAK\STUNNING.ABK, ST_ZINE.SZO\FEAHH.ABK. These are some of the *STOS Tracker* music files for use with either the *ST-ZINE* disk magazine shell given away on last month's cover disk, or with the *STOS Tracker* extension (available from most

good public domain libraries).

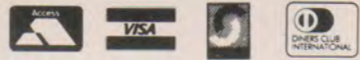
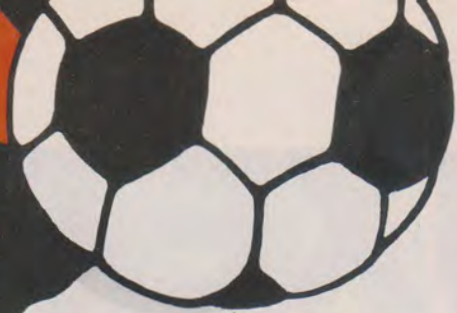
All the tracker files have been donated to the public domain, which means they have no copyright and you can use them in any way that you wish.

● Problems with the *Feeling Partner* demo from last month? Return the disk along with an sae to: MPI, 19, Henley Close, Rainham Kent ME8 0ER.



SEE BELOW FOR COMPETITION

WIN



Tel 0257 276800
Main office & 24 hour order line
Fax 0257 274753
Help desk 0490 3284
Weekdays 3-4pm
Overseas orders please add £5.00.
All prices include P+P and VAT.

WITH *Intraset Ltd*

Our compendium of gaming software uses your computer's intelligence and logic to predict winners and advise you on strategy. Whether you're an experienced punter or a novice, with a little time and our range of software, you can maximise your winning potential.

COURSEMASTER

Our proven horse racing program for both **FLATS** or **JUMPS** £24.95

***NEW**

TRACKMASTER

The Greyhound Racing Tipster £19.95
Coursemaster & Trackmaster Twin Pack £39.95
(Saving £4.95)

Using simple information from the racing card in daily papers or the racing papers, COURSEMASTER and TRACKMASTER will predict with consistent accuracy.

The winner is predicted as well as second and third places for tricasts. The programs also mention attractive long shots, recommend types of bets and most importantly warn when not to bet.

Successful betting extends beyond merely picking the winners and COURSEMASTER and TRACKMASTER will assist in managing your bets. They work out your winnings on the most popular types of bet including SINGLES, DOUBLES, PATENT, YANKEE, CANADIAN, print out your betting slips, and even maintain your betting bank account. SYSTEM BETS will regularly provide a system for MAJOR WINS with small stakes - try it and surprise yourself.

COMPETITION

Details and rules

Our company likes to see people winning, which is why we're running our fabulous 'Win a pc competition'. With every purchase you make, you will automatically be entered into the draw. You can also enter for free by sending a postcard to INTRASET.

1st prize - PC NT286 Colour

2nd prize - Complete set of Intraset Business and Gaming Software
3rd prize - Complete set of Intraset Gaming Software
5 runners up will each win their choice of one Intraset title.

Intraset's decision will be final on all matters.
Send an SAE for list of winners.
Draw dates 28/2/92 and 28/9/92

SPECIAL OFFER

POOLSMASTER and COURSEMASTER together for £44.95 (Saving £4.95.)

Our complete gaming suite: £110.00
POOLSMASTER (British & Australian),
PERM-MASTER, **SPOT-THE-BALL**,
COURSEMASTER, **TRACKMASTER**
Saving £22.70



Intraset Ltd

Send an SAE for full catalogue

'A licence to print money' Mr FC Hammond of Essex who won nearly £10,000 in 16 weeks
'We have won many thousands' Mr PE Roberts of Dorset who so far has won more than £46,000
*Copies of these and other endorsements from actual customers are available on request.

POOLSMASTER British or Australian £24.95 each.
Poolsmaster British and Australian £44.95 (Saving £4.95)

The Football Pools Predictors

Developed after years of detailed study, POOLSMASTER uses a unique scientific formula to predict Home, Always and Draws. The FORM PREDICTION option analyzes result possibilities with amazing accuracy. The unique indexing system allows for quick entry of fixtures and results, and updates itself season after season so there is no need to buy a new copy each year. Poolsmaster also contains a unique coupon number sequence predictor.

Together, both Poolsmaster editions cover all British league and cup matches and the Australian league.

PERM-MASTER £19.95
The perfect companion for Poolsmaster

Designed for users of PERM systems, PERM-MASTER ends the agony of checking by doing it for you. It comes complete with several of the top perms built in but you can also create your own with the unique PERM EDITOR and PERM CALCULATOR features. PERM-MASTER is fast and easy to use and can be used for most block and single line perms. Additional discs of top perms are available at £14.95 each.

All programs available for IBM/PC & compatibles, all Amstrad PC's, Amstrad PCWs, Atari, Amiga and CPC 6128. Coursemaster, Poolsmaster British and Trackmaster are also available for all Amstrad CPC's, all Spectrums and C64 & 128.

SPOT-THE-BALL £17.95

There is no more need for counting 'x's or using messy rubber stamps. Simply tell your computer where you think the ball is using the screen template provided. It will give you a print-out of up to 540 micro-fine crosses in your chosen shape or it can chose at random for you. SPOT-THE-BALL learns week after week and builds up a database of results for the SEQUENCE PREDICTOR OPTION.

GUIDE TO POOLS AND PERMS £14.95

The definitive guide to Pools permutations and betting systems

Written by the experts responsible for our successful software range. Master the fine art of prediction by reading this fascinating in-depth explanation of betting systems and perms. Plan a campaign for that elusive big win and use this books' tips on selecting the best matches and races and how to use perms to maximum effect on Pools, Horses and Dogs.

INTEREST-FREE CREDIT

Spend over £80 and spread the cost at no extra charge! (Cheque purchases only.) Simply divide your order by 4 and send us 4 cheques each with your name and address and cheque guarantee number: Date the first cheque with today's date and post-date each of the other cheques by one month ie. 1/5/91, 1/6/91 etc. We will then hold each cheque until it is due.

Send cheques or postal orders to INTRASET LTD Dept:STREV FREEPOST, 10 Woodside Avenue, Clayton-Le-Woods, Chorley, Lancs. PR6 7BR.
Phone or Fax for lightning service. All major credit cards accepted.

DELUXE PAINT

DELUXE PAINT ● ELECTRONIC ARTS ● MIN MEMORY 0.5MB ● MOUSE CONTROLLED

You don't need an expensive paint package to start producing great pictures. Our Deluxe Paint demo shows what results you can get – coupled with our handy step by step guide everyone with an art package can be a budding Picaso...



Amiga owners have been sniggering for years at basic packages like **Neochrome** and even the mighty **Degas**, as they tinkered with the enormously successful **Deluxe Paint** series.

Now ST owners have their day, and over the next few months, we'll be showing you how to get the best out of this outstanding package, starting this month with full instructions on how to get excellent results from one of the best ST graphics programs available.

COMPUTER GRAPHICS

The bonuses and benefits of a computer art package are obvious. With traditional painting methods, a mistake was difficult to remove, changing a colour meant repainting whole sections

again, and as for making multiple copies of a picture – forget it!

Computer art has never been intended as a replacement to more standard methods, more a parallel, and in recent years has become a form in its own right. With the ST's 512 colour palette, and over 4,000 colours on the STE, there's no reason at all why you can't create works of art on your machine.

TOOLS OF THE TRADE

Before you really begin to enjoy **Deluxe Paint**, you'll need to familiarise yourself with some of the tools and functions it has to offer.

Load up the demo now, and you'll notice the screen is broken up into four basic components:

SCRIBBLING

Now we'll attempt a bit of

freehand drawing. Click with the left mouse button on the first tool on the left hand side, the one that looks like a broken cross. This is the free-hand draw tool.

Set your foreground colour to white and your background colour to black and move the mouse pointer to the large canvas area at the top of the screen. Now move it around a bit. See what happens? Nothing. Now move it about with the left button held down. You have just started drawing with **Deluxe Paint**.

With the left button held down, the mouse will paint with the current foreground colour. Similarly, with the right button held down you paint with the background colour, effectively erasing. Try it now, painting over your scribbles with the right button held down. See, easy isn't it?

A ROUGH GUIDE TO TOOLS

This month we'll look at all the tools and some of the more powerful options in a little more detail, and show you how the get the best from DPST.

FREEHAND DRAW

This allows you to draw freely on screen using the left or right mouse buttons. The sub menu lets you choose from a selection of built-in brushes as well as choose three different types of free-hand draw.

The first draws a continuous line that follows the mouse pointer, no matter how fast you move the mouse. The second draws a broken line. The faster the mouse moves, the more bro-

ken the line is. The third allows you to draw a filled shape. Click on this with the left button, and then draw a shape on screen. When you release the button, the two ends of the shape are joined and the enclosed area is filled with whichever colour you drew the line in.

DEFINE BRUSH

This option lets you pick up a part of the screen and use that as a brush image, instead of using the preset brush patterns. Think of it like potato painting. When you pick up an image with this option, the currently selected area is 'etched' into the brush. From now on, rather than drawing with a

small dot, you'll draw with the image you lifted from the page.

When selected with the left button, a crosshair will appear connected to the mouse pointer. Move this to the top-left corner of the area you want to pick up, and hold down either the left or the right button. Then drag the mouse pointer to the bottom right of the area (a rubber band box will appear to indicate the area you're going to pick up). Releasing the button sticks the image onto the mouse pointer, and it is now your brush. If you selected with the left button, a copy of the image will affix to your brush and the original will stay intact. If you used the right button, the image will be lifted, leaving a blank space in the background

colour where the original was. This is a way of moving images around the screen.

THE LINE TOOL

This is a way of drawing completely straight lines. When selected, clicking and holding with the left button will position the start of the line. Now a rubber band line will connect the spot you clicked on and the mouse pointer. Release the button when the cursor is on the spot where you want the line to end, and a straight line will be drawn automatically.

THE CURVE TOOL

Like the line tool, the functionality of the option lies in the ability to allow you to draw smooth curves by clicking with the left button in four places. First click where



Squidley, freehand lines are easy



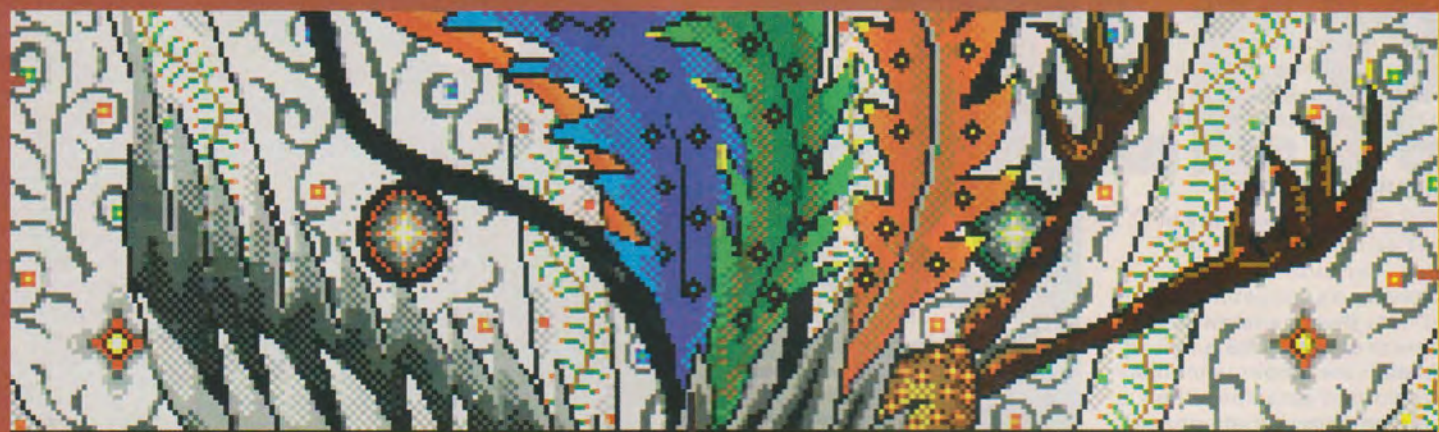
Eye, eye! How to define brushes...



Straight lines – down the middle.



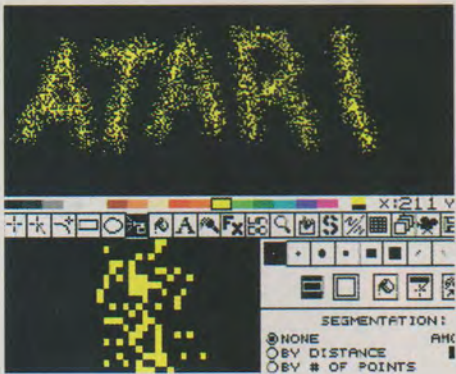
Pull curves into shape...



you want the line to begin, and then click where you would like the curve to be a third along its length, two thirds along its length and finally where the curve should end. Once you have marked the four points, a curve will appear. You can now move either of the four points by clicking on them with the left button and dragging them to a new position. When you're happy with the curve, click the right button to place it.

THE RECTANGLE TOOL

This draws a rectangle in much the same way that you pick up a brush. Clicking and holding at the top-left of where you want the rectangle to be and then dragging to where you want the bottom right and releasing places a perfect rectangle on screen. Using the sub-menu, you can select whether you want it to be hollow (just an outline) or filled to the current foreground colour.



The image above was created using the airbrush tool, which has a variety of nozzles as shown in the sub-menu. Like a real airbrush, the slower you move it, the more solid the colour

THE CANVAS. Here is where your painting is displayed in all its glory. Most of your painting functions will go on here, unless you are doing really fiddly work, in which case you will work in...

THE ZOOM WINDOW. This is a small section of the screen enlarged to allow you to work on individual pixels. This is perfect for small details, or tiny objects: sprites for example, or lettering.

THE TOOLS. Finally, there's that rather strange looking strip of icons. These contain all the options, features and tools you'll need. Try clicking on some with the left mouse button. You'll notice that nothing really seems to happen, except in some cases where the mouse cursor changes appearance.

Now click on them with the right button. You'll notice that the box next to the zoom window changes to display different menus. These are called sub-menus, and all the icons have one. This is how you choose different options, such as brush sizes, colour changes and animation. To recap, left mouse button selects an option and the right button opens the sub-menu for that option.

THE PALETTE. The strip of colours is your current palette. These can all be altered to suit your own tastes, but for the moment leave them as they are. To the right of the palette is a small box split across the middle. This is your colour indicator, which tells you which two colours you are currently using. The top colour is your foreground colour, which is the one you paint with. The bottom colour is your background colour.

At the moment the background colour should be black. This is usually used for erasing images, by painting over them in the background colour. Try clicking on any of the colours with the left button. You'll notice the top colour changes to the last you clicked on. This is how you change your foreground colour, just like dipping a paintbrush in another paint pot. Now click on a colour with the right button and the bottom colour will change in kind.

REMEMBER. Left button changes foreground and right button changes background.

THE ELLIPSE TOOL

This draws a perfect ellipse (oval). Use as the rectangle tool, remembering that the ellipse will be as wide and as high as the rectangle you draw.

THE AIRBRUSH TOOL

This simulates the spray of paint generated by an airbrush. The sub-menu contains a variety of nozzles and tips, giving a number of different effects. Like a real airbrush, the longer you hold the pointer over a spot, the more the colour builds up.

THE FILL TOOL

This fills an enclosed area with a solid wash of foreground or background colour. To use, select and then click where you want the colour to wash. The tool will then fill outwards until it reaches a different colour pixel. Make sure you have no gaps in the shape you're filling, or the colour will wash out.

A CLOSER LOOK

The zoom window in the corner of the screen is invaluable when it comes to close up work, but before you can take advantage of its power, you'll need to know how to use it.

If you bring up the zoom sub-menu (left click on the zoom option), you'll notice there are four arrows, four buttons and a slider on the right of the screen.

The four arrows scroll the zoom window around your image, to enable you to look at different parts of your image. The four buttons change the magnification of the zoom, and the slider slides the image in the main window up and down, allowing you to see more than the top half.

CHANGING MISTAKES

One of the most important options to know is the Undo tool. This erases your last action.

For example, if you placed a line and then decided that you didn't like it there for some reason, then clicking on this will erase the offending line. Clicking on it again replaces the line.

Thus, the Undo tool acts as a toggle between the two states.

IMPORTANT. If you do make a mistake, make sure that the Undo button is the first thing you click on, as clicking anywhere else first will set your mistake, and you'll have to correct it by hand.

STEP BY STEP



To begin with, we'll begin by creating a simple image. How about the Atari ST Review logo? The simplest images always look best.



- 1 The first thing to do is create the lettering. Draw one copy of each of these letters using the line tool: A, T and I. Draw them quite large, between 60 and 80 pixels high, but not so large as so the lettering won't fit the width of the screen. Don't worry if you can't get them to look exactly like the ones on the cover of this issue.



- 2 For the R and S, use the curve tool (The S will take two curves). Make sure all the letters are the same height and width, and then move them all to the bottom of the screen using the brush tool to reposition them, to make room for your logo at the top.



- 3 Using the brush tool again, make the word ATARI with the letters you've already created. You might find it a help if you draw a horizontal line in red to make sure all the letters are positioned correctly.



- 4 Now lift the letters S and T, and place them side by side. Pick up both letters together as a brush. Then bring up the brush sub-menu, and click on the button marked DISTORT. This will bring up another sub-menu. Click on the small circle marked HORIZ and then click on SKEW. Your brush will appear in the middle of the screen, and holding down the left button while moving the mouse slowly to the right will italicise the lettering. When the letters look sloped enough, click with the right button, and there you'll have your ST lettering. Stamp them down next to the word "ATARI".



- 5 Now, using the rectangle menu, draw two boxes, one to surround the word "ATARI" and one to encompass the word ST, leaving enough space on the right to fill in the word ç. Using the fill option, fill the first box in red, remembering to also fill in the holes in the two As and the R.



- 6 All that needs to be done now is to add the word "ATARI", and this can be done using a combination of freehand and line tools. Work inside the zoom box. If the lettering is too wide, then simply erase it by painting over in the background colour.

VIDEO TITLER

VIDEO TITLER • REDMOOR • MIN MEMORY 0.5MB • COLOUR ONLY • JOYSTICK

What's the easiest way to make sure the rest of the family will actually sit through all your home videos? Add a professional looking title sequence with Video Titler, of course...

You can connect your ST to your video machine using the aerial lead. But to get the best results from this program you will need a composite video lead. You can obtain this from Laser Distribution Ltd or your local dealer or make your own.

If you have the STF model of the ST with no modulator you will need to obtain an external modulator. These are available from your local dealer.

If you have a genlock you will be able to overlay your sequences onto a video picture producing a very professional effect. The instructions with the genlock will explain how to connect it.

LOADING THE SOFTWARE

We recommend that you copy the entire **Video Titler** folder onto a blank disk. You will then be able to save your sequences onto the same disk. You should save your picture files on the same disk as the titler program.

To load **Video Titler**, simply double click on VT2.PRG. After a few seconds the work screen will appear.

THE WORK SCREEN

The work screen is divided into a number of areas, the first and most important of which are the sequence windows.

These allow you to review the current sequence. Clicking on the arrows at the ends of these windows

allows you to move backwards and forwards through the sequence.

CREATING A SEQUENCE

In order to create a sequence you need to design some pictures for it using an art package of your choice, such as **Art Master**, **Degas** or **Neochrome**. These pictures should be saved as either .NEO or .PI1.

When you have done this load up the video titler and load in the pictures. This uses the standard Atari file selector and you should be familiar with it.

Once you have loaded the pictures you can create your sequence. To do this select the first picture you want in the sequence, select the effect you want to use by clicking on it with the left mouse button, move the mouse to the first sequence window and press the RIGHT-hand mouse button. The picture will then appear in the window with the selected effect written below it.

Selecting the WAIT effect will cause the sequence to pause during playback - until you press a key on the keyboard.

When you have completed your sequence you can play it by clicking on the play button. If you want to change any part of your sequence click on the sequence window with the left button; the settings for that part of the sequence will be recalled. You can then change any of the parameters (Picture, Effect or Direction) and then store those by right-clicking on the window again.

SAVING A SEQUENCE

When you have completed your masterpiece you may want to save it to disk. To do this click on the SAVE SEQ button and enter a filename into the file selector which appears. The filename should end in .VTS so that you can easily identify it as a Video Titler sequence.

N.B. As the VTS file is just a script file which tells the pro-

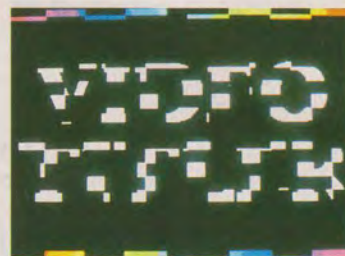
gram what to do it requires the picture files to be in the same directories that they were originally loaded from.

If you wish to change a picture without altering the sequence this may be achieved by simply altering the original or substituting a new picture with the same name.

This feature is especially useful if you are making regular videos where only small changes are required in title sequences, e.g. Names on wedding videos.

In addition to pictures that you load in, there is always a picture called "black", which has been loaded into the pro-

gram. This is simply a blank screen which is useful for inserting between parts of a sequence - for example when a sequence fades out to black and then fades up to another picture.



Video Titler guarantees a better response to your home videos.



Text can be run across from two directions for a really professional look.



The package's work screen. Video Titler's front end has an incredibly easy to use point and click interface.

CALAMUS DTP - SIMPLY THE BEST

CALAMUS 1.09N £139.99

CALAMUS S £499.38

CALAMUS SL £587.50

Outline Art £176.25

all prices inclusive of VAT.

Upgrades from 1.09N to S & SL P.O.A.

Full font catalogues available on request

halco[®]

Unit 4, Headley Park 9 - Woodley - Reading - RG5 4SQ

Tel. (0734) 441 525

MUSIC MUSIC MUSIC

We are THE specialists in Public Domain for the Atari ST/STE.

And that's not all.....

- * Books on every aspect of making music on your computer.
- * Competitively priced commercial software
 - * Books full of sheet music
- * PD Library dedicated to music software

"STUDIO" CASSETTES

These C40 chrome cassettes have been specially commissioned by us with low noise and high quality in mind and are ideal for the musician who wants to record his work. Only **£6.50** for 5.

MUSIC SEQUENCES

Following the unprecedented demand for our recently advertised "Sequence Sampler" we are now repeating this unbeatable offer.

Look!!!!

SEQUENCE SAMPLER VOL 1 £14.95

SEQUENCE SAMPLER 2 £10.95

Or the set of two for only **£19.95**

Sample cassette £2.25

Catalogue Disk 95p

Please make cheques and postal orders payable to MELVILLE MARRIOTT.

MELVILLE MARRIOTT

Music Media Dept (STREV)

46 Market Square, WITNEY, Oxon

OX8 6AL - Tel: (0993) 779500

Mail Order Only No Callers



ANALOGIC ANALOGIC ANALOGIC

Analogic Computers (UK) Ltd
152 Latchmere Road
Kingston-Upon-Thames
Surrey KT2 5TU

Tel Mon-Sat 9am-7pm
Telephone 081 546 9575
Tel/Fax 081 541 4671

COMPUTERS

520 STE Discovery EXTRA PACK with 1 meg£299.00
1040 STE FAMILY CURRICULUM PACK£349.00

MONITORS

ATARI SM144 High Resolution Monochrome Monitor£149.95
PROTAR Visto C14M Colour Monitor + Cable£220.00
PHILIPS 15" TV/Monitor, Remote Control + Teletext + Scart Cable£269.00
PHILIPS 15" TV/Monitor, Remote Control + Scart Cable.....£239.00

DISK DRIVES

1 Meg 3.5" Internal Disk Drive£49.95
1 Meg 3.5" External Disk Drive with its own Power Supply.....£59.95

REPAIRS WITHOUT DIAGNOSTIC FEES

520/1040 (STFM/STE) • FIXED CHARGES • FAST TURNAROUND£59.95

STFM/STE POWER SUPPLIES (NEW WITH 1 YR GUARANTEE)

STFM / STE POWER SUPPLIES (SERVICE EXCHANGE).....£39.95

MEMORY UPGRADES

* 520 ST/STM/STF/STFM to 1 Meg£59.95
* 520 ST/STM/STF/STFM to 2.5 Meg.....£124.95
* 520 ST/STM/STF/STFM to 4 Meg.....£199.95
520 STE to 1 Meg£29.95
520 STE to 2 Meg£79.95
520 STE to 4 Meg£149.95
* We specialise in surface mount chips

EMULATORS

PC Speed.....£99.95
At speed C16.....£249.95

PROGATE HARD DRIVES

Progate 40MB£339.00
Progate 50 DC£419.00
Progate 80 MB£429.00
Progate 100 DC£559.00



We provide pickup service for repair/memory upgrade for only £5.00 + VAT



All prices include VAT and NEXT DAY DELIVERY
Please call for other Atari products

FREE FITTING WHILE YOU WAIT!!

NEXT MONTH

IT'S TIME TO TUNE UP YOUR ST FOR THE SUMMER

In the next ST Review we'll be reviewing the smallest, most portable printer available. We'll also be finding out just how to speed up your ST, using both hardware and software...



We'll be continuing our (short) tradition of reviewing products against their competition with a look at one of the most under used printers on the market - the 18 pin dot-matrix. What are the advantages, the disadvantages and are they really worth the money? ST Review will be finding out...

We'll also be reviewing the smallest, most portable printer on the market. It's small enough to fit into a briefcase or even a large pocket. You can see how small it is but the question that our reviewers will address is "Can it print?" We'll be popping the Citizen PN48 under the ST Review microscope (as soon as we can find it!) and telling you how it measures up against its big brothers.

And don't forget to tune into the next parts of all our Step-by-Step tutorials including getting the most from DTP, **DPaint**, **STOS** and many, many more!!

ST Review - it's an education!

PLUS SO MUCH MORE!

- Accelerator boards. In next month's issue - What's new, what to buy and what to pay. There are numerous boards but who gives the best service? We've found out!
- We'll also be doing a Step-by-Step guide to show you how to fit an ST Review recommended accelerator board by yourself.

LET THE MUSIC PLAY ON!

- With the appointment of Vic

Lennard as ST Review's very own technical editor we know that ST Review will have the very, very best of music and MIDI coverage next month starting with a comparative review of six of the latest, popular packages.

AND PLAYING GAMES

- When you've finally finished working on your ST, why not relax with a game? Next month we'll giving you

the definitive reviews of Virgin's *Lure of the Temptress*, the 'seven years in the making' *European Football Champ* and *Championship Manager* both of whom are playing for Domark.

ON DISK

A veritable feast of goodies including games, utilities and the full set of STOS extensions - too much to mention here.

WE NOT ONLY **GUARANTEE** VALUE FOR MONEY -
WE DELIVER IT!!

SO DON'T MISS NEXT MONTH'S PACKED **ST REVIEW**

SUBSCRIBE TO

ATARI ST REVIEW

ATARI ST Review is the biggest and best ST magazine available. With sharp, incisive writing by dedicated ST journalists, ATARI ST Review carries massive, Which-style comparison tests, step-by-step hardware and software tutorials, and exclusive reviews of hardware, games and productivity software.

We'll tell our readers which ST products give value-for-money — and we'll be taking the lead among ST magazines by offering massive VFM ourselves. The products that do well in our tests will carry our seal of approval — and our Essential Buy badge. . . .

★ ★ ★ *Subscribing to Atari ST Review for only £50.00 guarantees delivery to your door of the next 12 issues of Europe's essential ST magazine.*

★ ★ ★ *By subscribing to Atari ST Review you can be sure of priority access to the essential reviews, previews, features and news stories each month.*

★ ★ ★ *Over your next 12 issues we'll be working hard to deliver you the very best in playable demos and shareware.*

★ ★ ★ *Subscribe to Atari ST Review and be confident of receiving the ONLY authoritative guide to ST entertainment and much more.*

Choose from one of the following classic Gremlin Graphics games, the Degas graphics program or the IMPrint guide.

- ★ *Pegasus* ★ *Suspicious Cargo* ★ *Hero Quest*
- ★ *Video Kid* ★ *Lotus Esprit Turbo Challenge 2*
- ★ *Degas Elite* ★ *Imprint*

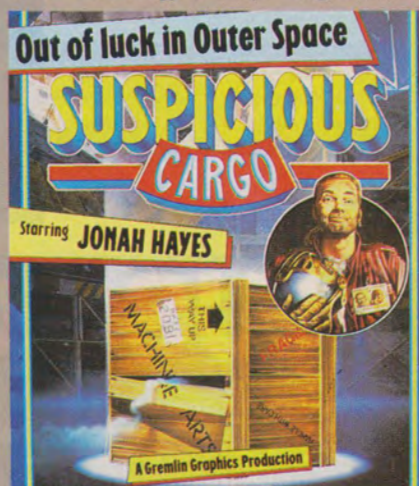
PEGASUS



Battle Satan on your winged companion, Pegasus, as the Dark Lord of the underworld wealds ultimate rule over the entire mortal world.

SUSPICIOUS CARGO

An interactive adventure game, where our hero Jonah Hayes and his dodgy tramp freighter,



travel through space with a valuable cargo - but one that's alive!

HERO QUEST

Take up the challenge to become a hero and enter the under-ground realm of the evil



AND GET FREE SOFTWARE!!

wizard Morcar. 'But beware, the unlit tunnels hold many dangers!

VIDEO KID



Travel through 5 time spheres and 20 battleplanes via your video. Confront evil wizards in far off worlds.

LOTUS ESPRIT TURBO CHALLENGE 2

Acclaimed as one of the the best driving games ever. Experience hair raising hazards - rain, lightning, fog, snow etc! There's

TURBO CHALLENGE 2



a chance to race across the USA - with 8 death defying stages and over 60 check points!

DEGAS ELITE



The first and greatest graphics program for the ST manipulates

several graphic file formats and lets you create your own works of art thanks to its comprehensive list of professional design functions.

IMPRINT

IMPrint for the Atari Mega and ST series is a gem of a program that let's you edit and print out high quality pictures in black and white or colour - plus it can convert, view, edit and print high resolution monochrome pictures so they run on a colour monitor.



NB : The free software is ONLY available to UK residents.

Place your order by completing the coupon (photo-copies acceptable), or send your details on a post card, or ring our special 24 hour orderline service on 0858 410 888 and quote your credit card number.

SUBS GUARANTEE

If you aren't completely satisfied with your subscription, you may cancel at any time and receive a prompt refund for all unmailed copies.

Your software choice is mailed seperately to your first magazine. Please allow 28 days for delivery.

SUBS SUMMARY

- 12 issues UK £50.00
- 12 issues Europe - Air Mail £65.50
- 12 issues Rest Of World Air Mail £94.99
- 12 issues Rest Of World Surface £60.00

We suggest that overseas readers pay by International Money Order.

Please send to Atari ST Review Subscriptions department, PO Box 500, Leicester, LE99 0AA (please make all cheques payable to EMAP Images Ltd)

Name.....
Address.....
Post Code.....

I would like a subscription for 12 issues to Atari ST Review.
Please start my subscription from the issue of Atari ST Review (please enter month).

I would like the following FREE game:

- Pegasus source code: 13Q
- Suspicious Cargo source code: 10C
- Hero Quest source code: 14U
- Video Kid source code: 12L
- Lotus Esprit II source code: 11G
- Degas Elite source code: 22P
- IMPrint source code: 23P

I enclose a cheque/postal order (payable to EMAP Images Ltd) for £.....

Please charge £..... to my Access/VISA/Diners Club/AMEX

Card Number.....

Expiry Date.....

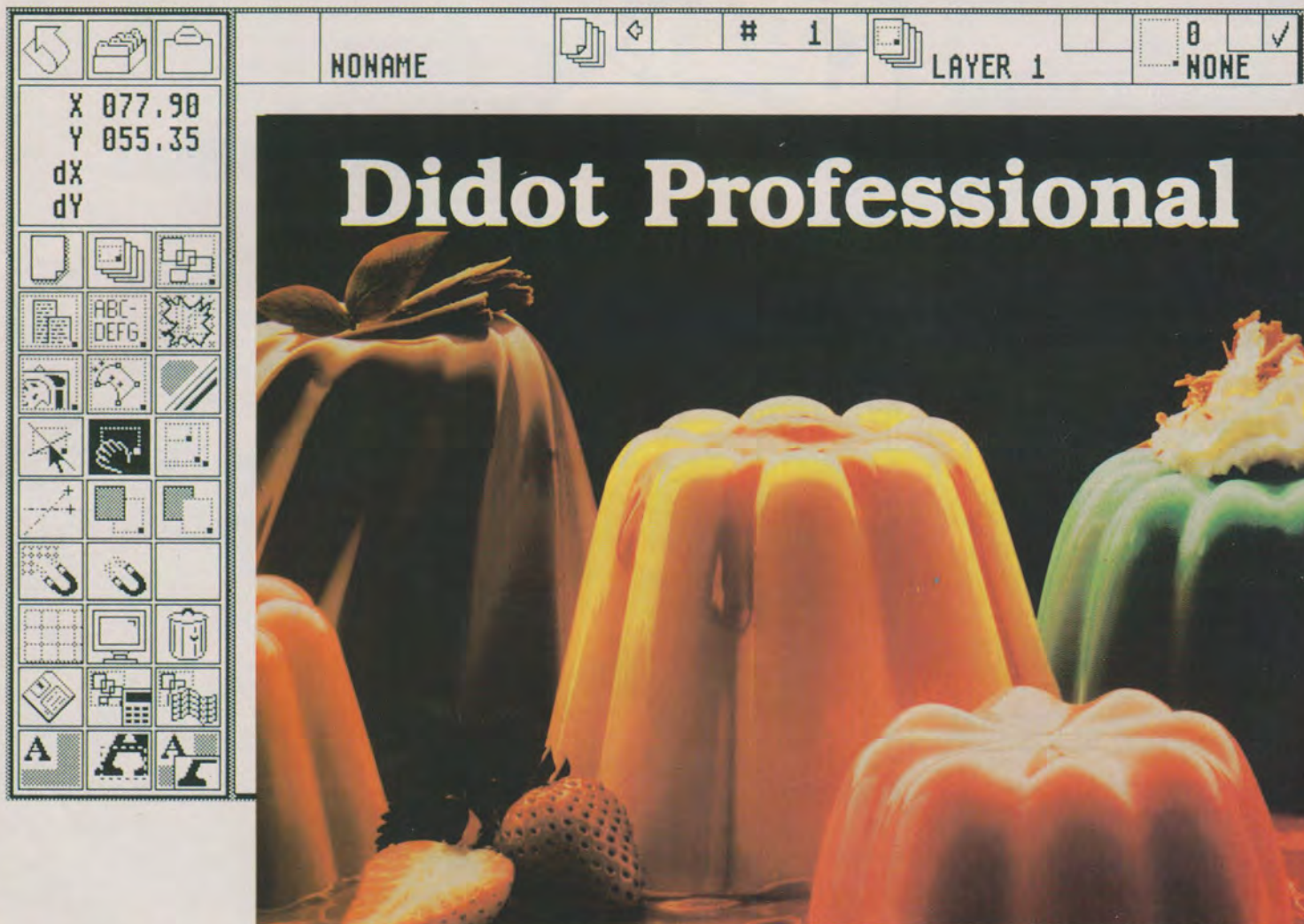
Signature.....

Fulfilment : Alan Wells International, Memberline House, Farndon Road, Market Harborough, Leicester LE16 9NR

ATARI ST REVIEW
ORDER FORM

PERFECT PUBLISHING

THE BATTLE FO



Calamus has long been king of DTP on the ST, but with a feature-packed rival starting to make its mark, can it hold its position? Andrew Wright takes a look at the two systems and their different approaches to page make-up

The successor to the ST's DTP king, **Calamus**, has finally appeared in the UK. Not only does **Calamus SL** bring full-colour publishing to the desktop, but it boasts a whole range of improvements in text handling and page layout. Hot on its heels, however, comes **Didot Professional**, another German program that is starting to make ST-based designers and publishers sit up and take notice. The two systems are markedly similar in some ways – for example, many of the icons and file formats are identical – but very different in others. These differences are as much a reflection of the individual approaches taken by the designers of the software as the inherent capabilities of either system.

Users of **Ventura** or **Quark Xpress** are likely to jeer very loudly on hearing that **Didot Professional** can't number pages automatically. But when they take a close look at the facilities for creating gradient fills and halftone screens the smile will soon be wiped off their faces.

Didot's strengths are its graphic and page design capabilities – it can do things with text and graphics that many designers have yet to even think about! **Calamus'** greatest advantage, on the other hand, is a comprehensive list of true DTP features which is probably unsurpassed by any other single-user system.

Both programs use a lot of icons, far more than any other comparable DTP system. Neither uses the

drop or pull-down menus that are so common on Apple Macintosh or PC systems and used in other ST programs.

The advantage of icons is basically the increased learning speed, as new users can more easily identify icons with specific functions than they can abbreviated words. There is, however, a disadvantage in using icons: the sheer number of them in **Calamus** can make the whole prospect daunting, with several mouse clicks often necessary to get from one menu to another.

Having said that, though icons are more easily accepted by those without lengthy computer experience. And anyway, keyboard commands can be substituted as time goes by and the user becomes more used to the system.



R THE CROWN

THE KING OF COLOUR? Didot Professional on test

The Didot range has undergone a complete metamorphosis, re-emerging as a fully-fledged DTP program that now offers true, four-colour output. . .

Didot Professional started life as a font editor, graduated up to a line-art package and has finally come of age as a comprehensive page layout system. Its approach to design is to simulate a designer's pasteboard by offering a huge space to collect the various items needed to make up the page. For example, columns of text, text objects such as logos, images and even halftones can be laid out on the "board" with the page in the centre. All the objects can be worked on and edited before being placed on the page.

Didot uses a combination of icons and comprehensive dialogue boxes for most functions, although there are also user-definable keyboard shortcuts and macros for text and paragraph styles. Measurements are restricted to millimetres and centimetres in the current release, but text can also be specified in points. The next release version, 140, will add function key commands and more units of measurement including picas, ciceros and inches.

GRAPHICS

Didot is particularly strong on vector graphics, but rather more limited in its approach to bitmapped images. It is designed primarily to interface with *Retouche Professional CD*, a very expensive and fully-featured digital lithography program that can create halftone screens and manipulate images with some astonishing tools. *Retouche* format images can be imported easily, as can standard TIFF files, but the ST's standard formats, IMG and PI3, have been overlooked.

Two conversion utilities are supplied which allow IMG files to be imported, but the process is

rather long-winded. Both IMG and PI3 files can be imported as templates - background images for the vector conversion module - but not imported and used directly.

The autotracing module is a useful tool which transforms bitmap images into vector graphics, allowing them to be resized and distorted without loss of resolution. The Level 1 Autotracer is fast, but it works only with straight lines whereas the Level 2 Autotracer (standard in the colour version) uses Bezier curves for a slower, more accurate trace. It is limited to 12,000 segments, which means that some graphics have to be cut into sections.

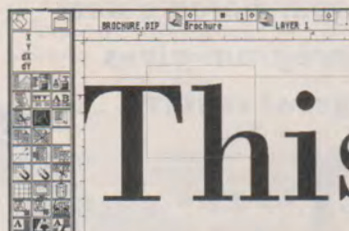
Vector graphics are also useful when creating graphics within the program itself - a full set of tools is provided for creating paths, lines or curves joined by individual con-

trol points. These can be turned into logos or symbols or used to force text along marked routes. *Didot* has another advantage over *Calamus* here - its built-in projection facilities allow any graphic or text object to be projected on an imaginary 3D grid. *Calamus* users would have to purchase *Outline Art* to get the same functionality.

These vector paths are also used to create ordinary boxes and rules, which can be time-consuming if you only want to add a border to a text frame. On the other hand, there is a library facility which lets you save each line or path once created and retrieve it in the future.

TEXT

Having made the grade from vector line-art package to page design system, *Didot* contains a wide range of text manipulation



Moving around could be made easier - but some manoeuvres such as zooming in are quicker than in Calamus.



Importing a greyscale TIFF file into Didot.



Font editing on the sly: Didot's own font editor allows you to create or edit unusual characters.



Autotracing at Level 2 - an IMG template is turned into a vector graphic.

Lack of screen redraws makes the package quick to use

Text can be routed around irregular paths

Excellent colour editing and output

PROS AND CONS

Has no spellchecking facility

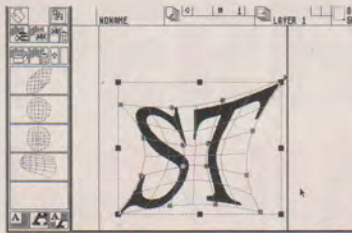
Interface needs some improvement

Full colour separation only available on TT versions

GREY AREAS

Some of *Didot*'s icons are shaded, indicating that there is a closely related sub-menu available by double-clicking on it. There is room for improvement in the interface - for example some of the dialogue boxes can't be exited using the standard method of hitting the Return key.

Didot has its own system of moving and magnifying. Three icons are available at the base of the menu bar. The left-hand one is for full-page view and when combined with the Alternate key, it provides a view of the whole work area. With the Control key, it displays part or all of the page in actual size. The middle icon lets the user select an area to zoom, so increasing magnification and moving around can be done at the same time. The third button accesses the previous zoom level. The main advantage of *Didot*'s method, especially on standard 68000-based machines, is the lack of screen redraws when moving around a document. *Didot*'s screen displays are also noticeably faster than *Calamus*, giving it a significant edge, especially on a standard ST.



Projecting a text graphic on to a 3D grid – it can then be manipulated and altered in any direction.

commands. Text can be placed as a graphic, which is useful for creating logos and odd headings, or as a column. With columns, all the standard parameters needed for professional page layout are available. Text can range from 0.1 (or 0.01 mm) of a point to 900 points and the leading can be altered to the same accuracy. Variable character spacing, compressed and expanded text, multiple columns and paragraph indents are all available. There are also features to control widows and orphans and character kerning plus a basic text editor with search and replace and block move commands. There is, however, no spell-checker.

One of *Didot's* strengths is its ability to route text along circular or irregular paths, altering both

the character angle and the width automatically if desired. Text can be rotated to any angle, as can whole columns. It can also be wrapped around graphics and other objects with a high degree of accuracy, and freeform columns can be devised to allow text to flow down a page in zigzags or appear as circular columns.

Font handling is excellent in *Didot* – not only does it have a well thought-out library system but it can import fonts in three different formats. PostScript Type 1 fonts and CFN *Calamus* fonts can both be imported, as can fonts supplied by 3K-Computerbild in *Didot's* own internal DFN format. This ability to use PostScript fonts gives it another advantage over the competition. And if all that isn't enough, there's also an in-built font editor to create or edit unusual characters.

Output quality is excellent whatever the printer, although there are some bugs present in the current version (the new release claims to have exterminated most of them). Printer drivers include NEC P6/7, Star 10, HP Laserjet 2 and PostScript, as well as those for TIFF output and 3K-Computerbild's own Imagespeeder system. Drivers for the colour Deskjet and Qfax modem will be available

soon.

The PostScript driver allows full use to be made of Apple Macintosh and PC-based DTP bureaux which are geared entirely for PostScript output to bromide and film.

COLOUR HANDLING

Didot offers three different methods of colour separation as well as straightforward mechanical separation of spot colours. Libraries of colours can be created and saved for future use.

More comprehensive image editing and processing facilities need to be carried out in its sister packages, *Retouche* and *Retouche Professional CD*, although *Didot* itself has a number of hand-crafted halftone screens which were originated in *Retouche*. They can be applied to images for optimum reproduction – for documents which will ultimately be photocopied, for example, halftone screens of around 30 to 50 lines per inch seem to work best. There are hundreds to choose from and experiment with.

"Excellent colour DTP program with PostScript compatibility – Computerbild has triumphed"

NAME: DIDOT PROFESSIONAL
COMPANY: CGS, 3K-COM-PUTERBILD
CONTACT: 081 686 8121

PRICE: £499 inc VAT
RELEASE DATE: OUT NOW
MIN MEMORY : 2 Mb/HARD DRIVE

EASE OF USE ★★★★★
DOCUMENTATION ★★★★★
EFFECTIVENESS ★★★★★
VALUE FOR MONEY ★★★★★

OVERALL **80%**

THE PRINCE OF PAGE MAKING

Calamus SL on test



For a fraction of the price of an Apple Mac package, Halco's new program gives great results...

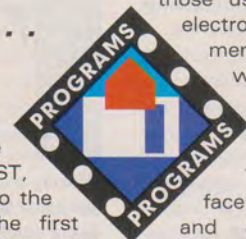
The first version of *Calamus* changed the face of publishing on the ST, taking the machine into the serious market for the first time. The new version, *SL*, which is being sold alongside the old one for the time being, offers many improvements and additions as well as a unique modular approach. This means that more and more enhancements can be purchased, as they are released, to further enhance the program's capabilities. Future modules will include ones for MIDI and multimedia, as well as for data transfer.

In contrast to its new rival, *Cala-*

mus uses the more traditional frame-and-page approach to document design. The page comes first and the various frames are added as they are required. The approach hasn't changed since the earlier version, *Calamus 1.09n*, so existing users will have little difficulty in adapting. It also suits those used to working in an

electronic publishing environment – especially those with experience of DTP on other platforms such as *PageMaker* and *Ventura*.

The icon-based interface is very easy to use – and *SL* contains several enhancements to improve its ease of use even more. Icon bars can be detached and moved around the page. It is possible to view several of them at once, although this feature really requires a large-screen monitor for full effect. *SL* is much more than an upgrade – it's a completely rewritten program with a better, faster interface than before. Although many icons are the same, there are also many new ones, while most of the dia-



logue boxes have also been improved and new ones added.

Calamus SL features user-definable shortcut commands and macro sequences for those who prefer keyboard input to the mouse. Automatic gap generation facilities are available, as well as extensive copying commands which allow single items to be duplicated many times at the press of a button.

You move around the page using the familiar GEM scroll bar technique: this requires no effort in terms of learning, but it does entail some work when you are simultaneously changing the magnification and moving to another part of the page.

Magnification is better implemented than in **Didot**, with several set sizes plus user-definable magnification from 0.001% to 999,999.999%

It is even possible to define a page 1 Km square - with text at nearly a million points in size. A unique option is the printer resolution setting in which **Calamus** displays a pixel on screen for every printer dot on your chosen printer. Other advantages are the range of measuring systems, which can even include user-defined units.

TEXT

The **Calamus** font format, CFN, has gained reluctant acceptance from a number of typeface suppliers, and there are now over 1500 fonts from sources such as Linotype/Hell, URW, ITC and Agfa Compugraphic. There are also PD fonts available, although the quality is much lower.

In terms of text control, **Calamus** is virtually a typesetting system in its own right, providing precise control over character size, spacing and leading. Point size precision is possible down to a thousandth of a point and leading/kerning to a hundredth of a point. This precise control, coupled with the truly WYSIWIG

output capabilities that bypass the traditional PostScript system, make **Calamus** one of the most accurate DTP/typesetting system on any platform, including the Apple Mac.

All the expected functions are available, such as angled text, coloured or tinted text, orphan and widow control, margins, indents and a very neat tab setting system. Typefaces can even be compressed or expanded by any amount as well as shadowed, underlined, outlined, skewed or otherwise styled.

Hyphenation parameters can be defined by the user and a large exception dictionary is available, as well as a spell-checker. The standard text editor module, **PKS Write**, is almost a complete word processor, with full search/replace, block move and text-style control functions. Vertical text alignment ensures that the text still fills the length of a column whenever it is resized or narrowed, by automatically altering the leading in fine increments.

Text can also be flowed around irregular graphics with the minimum of effort and between frames with full user-control. It also features footnotes and index management, and it is ideal for long documents, as it can add page numbers, headers and footers as well as recurring features through the use of an unlimited number of master pages.

COLOUR

Calamus offers true colour capabilities and can import and manipulate 24-bit colour pictures with a palette of over 16 million colours. It can also generate colour separations both for process colour and for spot colours.

Text and graphics can be defined in any colour from several different colour systems including HKS, Focoltone and Pantone.

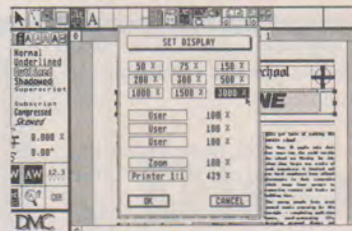
Output from **Calamus** is relatively painless, with over 40 printer drivers - many more than **Didot** -

including many dot matrix, inkjet and laser types.

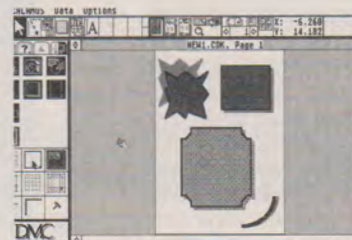
A printer driver configuration program is also supplied. **Dataformer**, a forthcoming module, is likely to add the capability to output PostScript files as well as TIFF and IMG files. Output quality is superb, even on low-resolution devices such as dot matrix printers. Tests on a laser showed output quality to be the best available on the ST. Even at small point sizes, without the hinting available to PostScript font users, the quality is remarkable.



The precise control and true WYSIWYG capabilities make Calamus SL one of the most accurate DTP/typesetting packages available on any machine.



Calamus' powerful magnification features: you can choose any setting from 0.0001% to 999,999.999%.



These frames and lines were drawn in seconds using Calamus SL.

Highly suited to those familiar with DTP
Has extraordinary magnification
Superb output - even on a dot matrix

PROS AND CONS

Traditional configurations may not suit everyone
Full colour separation only available on TT versions

GRAPHICS

Calamus offers far more control over bitmap images than **Didot**, but it still has good vector graphics capabilities. It can import bitmap files from a variety of formats, including IMG, Degas, TIFF, AIM (AIM image processing system; CRG (**Calamus** raster graphics format), IFF, NEO, GIF, STAD and Targa (24 bit colour). Once imported, brightness and contrast can be altered and the images optimised for either printer or screen. They can also be resized and cropped as in the earlier version.

A vector graphic module also comes as standard with SL, which allows vector objects to be created and edited, including logos and special symbols. Vector graphics can be filled and coloured, rotated and resized.

Calamus uses a frame-based approach to rules and boxes which can be difficult to get used to, especially if a line is all you need. On the other hand, it is much quicker and easier to generate a tinted, bordered box with a shadow effect than it is in its rival, **Didot**.

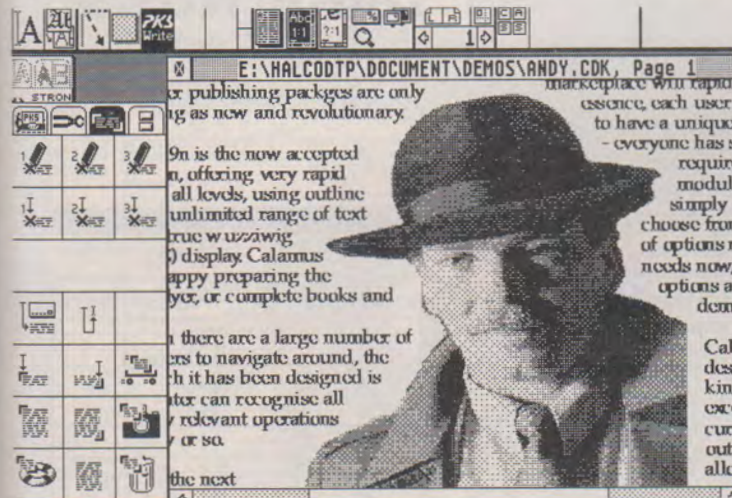
"High cost, high quality DTP package offering remarkable control"

NAME: CALAMUS SL
COMPANY: HALCO
CONTACT: 0753 441 525

PRICE: £586 32 inc VAT
RELEASE DATE: OUT NOW
MIN MEMORY: 1 Mb (2 Mb recommended)

EASE OF USE ★★★★★
DOCUMENTATION ★★★★★
EFFECTIVENESS ★★★★★
VALUE FOR MONEY ★★★★★

OVERALL 80%



A text column flowed around a greyscale graphic.

Here we look at DTP in action by putting together the front page of an imaginary one-page newsletter using *Didot Professional*

MAKING PER A STEP-BY-STEP GUIDE

1 Having loaded the program, the first stage is to select the page size required, standard A4 in this case, and then add a grid to help in laying out the columns and graphic objects.

Next add some guide lines to mark the margins (*Didot* doesn't directly handle margins as some programs do) and again help in laying out the various elements. As this is a single-page publication, the left and right margins are placed an equal distance from the edge of the paper, while the bottom margin is slightly wider than the top, to provide a balanced appearance.

After this, the snap functions are turned on so that objects will snap to (automatically reposition themselves close to) the guide-lines we have just laid down.

2 The most eye-catching part of a newsletter is usually the headline, so we will choose a bold easily-read typeface for the headline, in this case an imported PostScript Type 1 face, Franklin Gothic Heavy.

3 The headline is then placed at the top of the page. If it doesn't quite fit, double-click on the resize object icon and stretch the headline until it snaps to both the right and left margin guides.

This gives the page a more even look, although had the headline been shorter, stretching would have distorted the text far too much. A better option would have been to centre it by returning to the text object dialogue box and changing the left justification to centred text.

4 The next stage is to select a suitable typeface for the main body of the text. A standard serif face is usually preferred as they're the easiest to read - Times Roman, Palatino and Garamond are three popular choices.

This is achieved by clicking on the text column icon and then selecting the options in the

dialogue boxes. Once done, *Didot* places the text columns for you and even inserts placeholder (dummy) text.

5 Next, you need to cut the second column at the appropriate point.

6 The automatic placement of dummy text is a useful tool that enables you to visualise your design.

If necessary, you can enter the text editor (by, simply clicking on the icon) and importing your own prepared ASCII text. Alternatively, the editor is flexible and fast enough to allow direct text input.

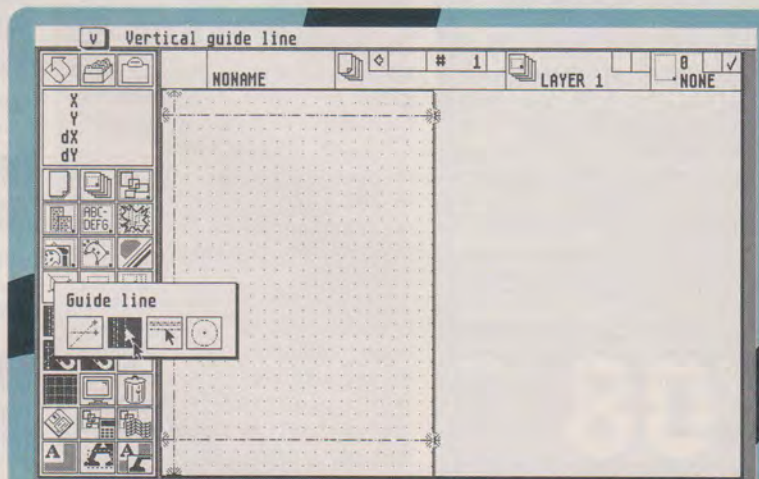
7 The next step is to import an emotive graphic to liven the page up.

8 By turning the two text columns into freeform text columns, a unique facility in *Didot*, the edges can be wrapped around the graphic by clicking on the border with the mouse and dragging the border into the required shape. *Calamus'* approach is more traditional, involving a set of text runaround options but the principle is the same.

9 The final stage is to add a thick rule underneath the headline, to make an attractive design feature and split up the body text from the headline.

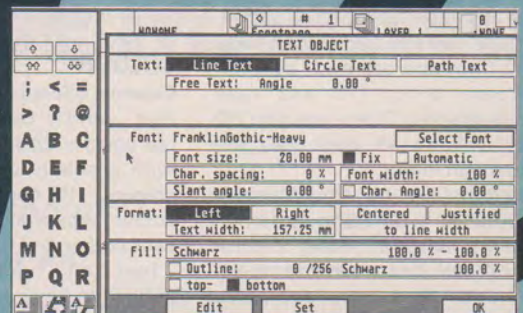
This is achieved in *Didot* by clicking on the vector path icon and positioning the appropriate number of points. Using the snap to the grid option is advisable when drawing regular shapes but there is also a built-in library of existing shapes including a square and a circle.

10 Having positioned the vector path describing an elongated box, clicking on the attributes icon allows the percentage of grey tint to be specified for the fill. The line colour can also be set to transparent.

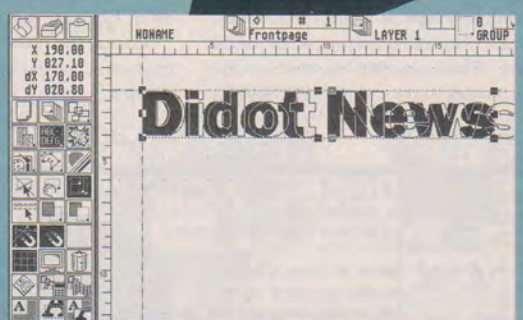


1 Placing the initial guidelines is an important part in planning a document.

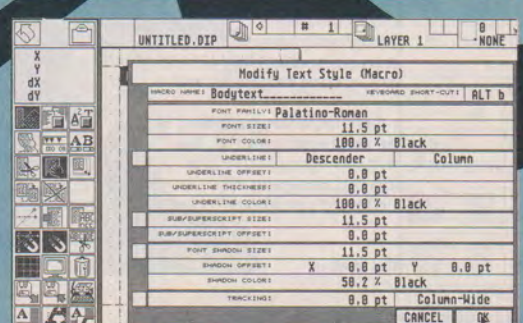
2 Selecting the font for headline. Getting to this dialogue box is simply a matter of clicking on the text object icon and then selecting the appropriate text parameters.



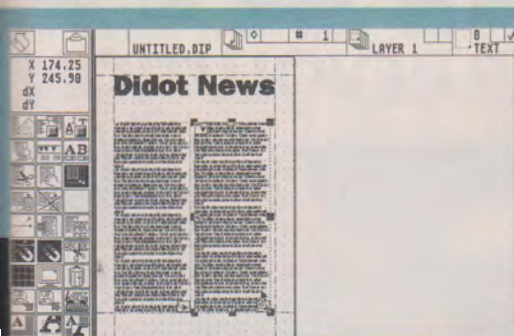
3 Stretching the headline across.



4 Palatino Roman for the body text - a widely-used, highly legible typeface.



PERFECT PAGES TO SUCCESSFUL DTP



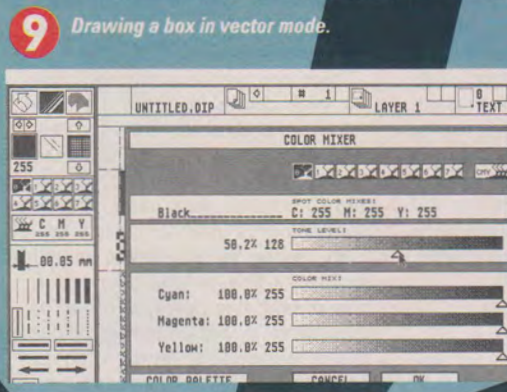
5 Cutting the second column.



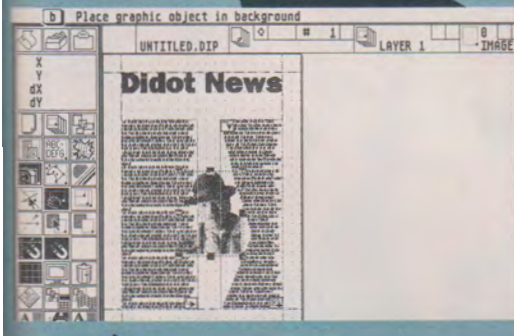
6 Viewing text.



7 Importing a graphic.



10 Selecting a 50 per cent grey tint.



8 Making text run around the edges of an irregular graphic.



11 The filled vector path makes a heavy, grey tinted rule.



12 The finished page - provided your own text, the page is ready to print out. The guide lines, grid and frame borders can be turned off for an overall impression of the finished design.

Colour desktop publishing is finally gaining a foothold. But how does it all work?

IN PLAIN ENGLISH

COLOUR – A DESKTOP REVOLUTION

The production of colour separations takes an enormous amount of computer processing power, which is one reason why colour desktop publishing is still only just emerging as a viable proposition for most magazine publishing houses.

In fact, many colour magazines and brochures are still produced in the time-honoured methods, where typeset text is laid out on the page by layout artists and the colour separated films added later. The Apple Macintosh is currently the predominant desktop publishing and pre-press platform, at least in the UK, although the ST and its more powerful brother the TT seem increasingly capable of capturing at least a share in the market, thanks to the availability of DTP software such as *Calamus SL* and *Didot Professional*.

WHAT IS COLOUR?

Colour is a sensation – it is perceived by the human eye when light is transmitted and reflected off objects. Transmitted light, such as that from the sun, is absolute white, made up of three primary components, red, blue and green. Mixed together, they produce white – by the process of additive colour mixing.

Reflected light, such as that bounced off an object, is made up of cyan, magenta and yellow components. Mixed together they produce black. To obtain white, colour has to be subtracted – by a process known as subtractive colour mixing.

The significance of the difference between the two is that computer monitors use red, green and blue light guns to create colours on the screen, whereas printers use black, cyan, magenta and yellow inks to create the same pictures on paper.

There are two methods of dealing with colour in printing – spot colour and process colour. Process colour, which is mainly used for colour photographs, is far more complex than spot colour. Spot colour is used to apply a uniform colour to a graphic object such as a line, a logo or even an area of text. It is purely a matter of specifying a particular ink from one of a standard range such as Pantone.

CONVERSION PROCESS

To reproduce a colour picture, however, it has to be scanned using red, blue and green light sources to build up a digital image made up of three "layers", one for each primary colour. To convert



The picture above is a composite of the four process colours yellow, cyan, magenta and black.



this image into one made up of black, cyan, magenta and yellow components is no easy task but it lies at the heart of colour reproduction.

It is achieved by reversing the input process and producing what are known as colour separations – one plate for each of the four process colours, indicating where that ink should go and in what strength.

Both **Calamus** and **Didot** offer advanced facilities for correcting the colour and ensuring that it matches the original as closely as possible. Black is used to produce contrast and this method of reproducing colour is known as the CMYK system. There are others –

Pantone, HSV and HSB, for example, but both **Didot** and **Calamus** have taken the CMYK route.

Colour is a very complex subject and one which should really be left to professionals. It takes years of experience to use colour correctly and the science of using colour on the desktop is still in its infancy.

Realistically, only TTs with their fast RAM chips are suitable for using full-colour images and separating process colours. Even a four Megabyte ST can't store all the colour information in memory at once. Although **Calamus SL** does support virtual memory on a hard disk drive, the process is still very slow.

POSTSCRIPT EXPLAINED

What exactly is PostScript and what does it do?

PostScript is a page description language first introduced by Adobe to control laser printers. It is a computer program which consists of plain text commands instructing the output device how to print the text and graphics in the file. Output is at the full resolution of the printer, whether it is a 300 dpi laser or a

4,000 dpi imagesetter.

It does have a few drawbacks. Even on a powerful processor, interpreting **PostScript** is very slow. It is also expensive, mainly due to the licensing cost but also partly to the extra processor needed in the printer to translate the commands. This the "raster image processor" or RIP. **Calamus** and **Didot** have bypassed the **PostScript** approach and carry out the interpretation of print commands within the ST rather than the printer, using a technique known as "software RIPping". Printing can be up to 10 times faster – which is highly desirable for commercial use.

SAY WHAT?

YOUR AT-A-GLANCE GUIDE TO DTP JARGON

Our checklist tells you all you need to know about the basic terminology of DTP

ARTWORK

Finished original ready for reproduction.

BITMAPMED GRAPHIC

A graphic composed of a series of dots with a specific number of dots per inch. Files with .IMG, .PI3 and .TIF extenders are bitmap files. Often called paint type graphics.

BROMIDE

The type of paper used in phototypesetting. Finished output is often referred to as "a bromide".

CROP

Cut an illustration or photograph to fit a given area.

FONT

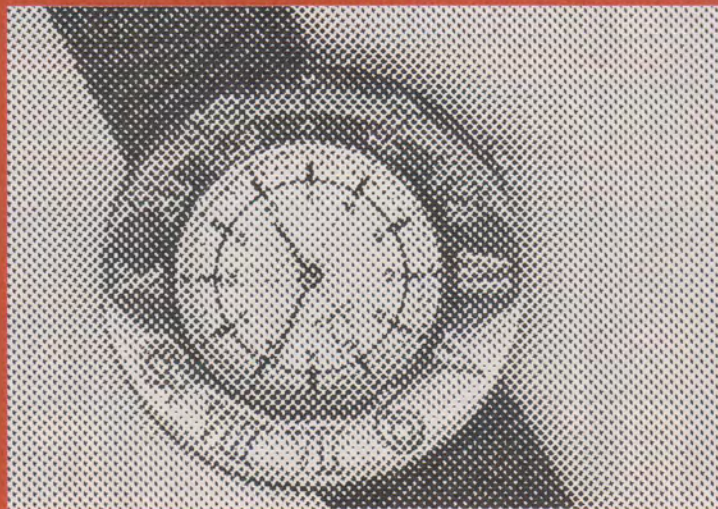
A particular size and weight of a typeface. Times Roman 36 point bold is a font; Times is a typeface.

FOOTER

A design element at the bottom of a page, often including a page number.

GREYSCALE

A bitmap image where each dot is one of a number of shades of grey. A standard black and white image is actually a greyscale made up of two greys. Most good scanners will handle up to 256



An image with a coarse halftone screen created in Didot's sister program, Retouche.

greys. Greyscales are much easier to resize and manipulate as there is more hard information about the actual image allowing the output software to create more realistic halftones (greyscales can't be output as greyscales – printers print either black on the page or nothing at all).

HALFTONE SCREEN

A method of representing a bitmap or greyscale image by converting each area in the image into fixed patterns of dots that vary in size.

HEADER

A design element at the top of a page.

HLS, HKS, HSB

Colour systems defining colours in terms of various parameters.

ITALIC

In most ST DTP programs such as **Timeworks**, italic refers to text slanted to the right. True italic is a separate typeface with enhanced serifs and different character stresses.

JUSTIFICATION

Spacing out words on a line of text so that all the lines in a column are the same length.

KERNING

Altering the space between characters to make them more aesthetically pleasing.

LEADING

The space between two lines of text.

ORPHAN

One or more initial lines of a para-

graph falling at the base of a column or page and separated from the rest of the paragraph. This is unsightly, and good designers won't let it through.

PANTONE

The Pantone matching system or PMS allows colours of a particular shade to be referred to by a single identifying number.

PHOTOTYPESETTING

Projecting type images onto photographic film for high resolution type.

PICA

Typographical measurement equal to 12 points.

POINT

Typographical measurement equal to 1/72 inch.

SERIF

Small "tails" on the ends of characters in some typefaces. The typefaces are known as serif typefaces and include the popular Times Roman. Sans serif typefaces have no such adornments – this article is set in a sans serif typeface.

TIFF

Tagged Image File Format, developed by Aldus, is the de facto standard bitmap graphic format.

VECTOR GRAPHIC

A vector graphic consists of a set of commands defining lines, circles and Bezier curves. Vector graphics can be printed at the full resolution of the output device and can be resized or stretched without losing resolution, unlike a bitmap image. Sometimes called object-oriented or draw type graphics.

WIDOWS

Similar to orphans, but these are the last lines of a paragraph split from the rest by a page or column break.

BUYERS GUIDE

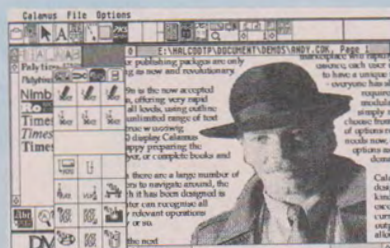
How the two DTP giants compare. . .

| | | CALAMUS SL | DIDOT PROFESSIONAL |
|-------------------|-----------------------|---|---|
| Interface: | Zoom | 0.001 to 999,999.999% | X 10 to 1600% in steps |
| | Units of measurement | Points, millimetres, inches, picas and user defined | Points, millimetres (more in next release) |
| | Hot keys/macros | Default and freely definable | Default and freely definable |
| | Guidelines | Up, down | Up, down, circular and angled |
| | Multiple windows | Yes | No |
| Import | Text import | ASCII, Calamus text, Word Perfect, First Word Plus | ASCII only |
| | Bitmap graphic import | TIFF, IMG, PI?, AIM, NEO, TARGA, GIF, IFF, STAD | TIFF mono, colour and greyscale |
| | Vector graphic import | CVG, Outline Art and GEM | Vector graphic import*CVG, Retouche and GMA plotter |
| Output | Output files | CVG | PostScript, CVG, self-contained Didot (DEX) |
| | Printer drivers | Over 40 from dot matrix upwards. | Star-10, NEC P6/7, HP Laser, PostScript, TIFF, IMG |
| | Colour separations | Yes | Yes, three types |
| | Halftone screens | Yes, variable dot size, line angle and dot shape | Yes, variable dot size, line angle and dot shape |
| Object attributes | Colours | 16.7 million | 16.7 million |
| | Grey tints | 256 | 256 |
| | Patterned fills | 36 | 36 |
| | Line thickness | Freely definable to within 0.001 mm | Freely definable to within 0.05mm |
| Text | Fonts used | CFN | CFN, PostScript Type 1, DFN |
| | Point sizes | 0.001 to 9999,999.999 points | 0.1 to 900 points in 0.1 point increments |
| | Circular text | No, needs Outline Art | Yes |
| | Angled text | Yes | Yes |
| | Leading | In 0.01 point increments | In 0.1 point increments |
| | Kerning | Manual and automatic | Three types, automatic |
| | Hyphenation | Yes, automatic and user configured | Yes, automatic |
| | Text wrap | Irregular | Irregular |
| Other features | Projected graphics | No, needs Outline Art at £176.25 | Built-in |
| | Autotracing | Bezier module standard | Bezier module standard (colour version) |
| | Spell checker | Yes, various languages available | No |
| | Text editor | PKS Write module included | Built-in |
| | Font editor | No, costs £35.25 extra. | Built-in |

Note

It is very important to realise that both products are still under development and still have bugs, though if SL crashes, it does at least save the document. The information in this review was provided by limited hands-on experience of the products as well as two separate comprehensive demonstrations from each supplier. The features are those to be found in the current release version of each product (x.138 for Didot and 4.2.92 for SL) although both are being upgraded continuously as bugs are fixed and user feedback is taken into account. Halco has pointed out that the slow screen redraws in the current version are due to the presence of error trapping code which is not expected to be present in later versions. CGS points out that the poor documentation (a photocopied manual) is temporary and a more helpful, printed version will soon be made available.

Calamus SL is a complete typesetting/desktop publishing system with the most comprehensive range of features available on any single user platform. For long documents and text-intensive work, it is quite simply, the best.



Didot Professional is ideal for short, design intensive documents such as adverts, posters and brief newsletters. Its main strengths are the ability to use PostScript fonts, comprehensive text and graphic manipulation features plus output to PostScript. The high speed of screen redraws is also a major consideration.





There isn't the space in this half page advertisement to do justice to the CGS-ComputerBild suite of Graphics programs.

So call now for details of all our products and we think you'll agree;
THE PROOF IS IN THE PUDDING

Other products include:

- * Retouche
- * Retouche Professional Black & White
- * Retouche Professional Colour Design
- * Didot LineArt
- * Didot Professional Black & White
- * Didot Professional Colour Design
- * GT JetScan 3i
- * Epson A4 Colour Scanners



CGS ComputerBild

19 Ledbury Place
South Croydon
Surrey CRO 1ET
Tel: 081-686 8121

CGS ComputerBild Fax: 081-666 0405

Advertisement created in and output from Didot Professional using Retouche Professional Colour Design.

Caledonia PDL

250 Oldtown Road, Hilton, Inverness IV2 4PT

Dept:STREV (0463) 225736

Hundreds of titles for the ST / STE incl. 120 demo compilation disks by "Ripped-Off" (£2.00 each).
1-9 disks - £2.50 each, 10 or more - £1.90 each

SOFTWARE

Latest titles:

- GM-74 **HacMan II** - Brilliant Pacman (1mb)
- GM-75 **Revenge of the Mutant Camels**
- GM-78 **Ozone** - Excellent platform Game
- GM-81 **Red Alert / Blockade / Plax Attack**
- GM-84 **Penguins** - Save the penguins!

Demos

- D-131 **Genius demo** by Oxygene
- D-133 **Transbauce II disk 2**
- D-142 **The Pixel Twins Xmas Demo**
- D-147 **Massive attack!** by Mad Vision
- D-150 **Transbauce II disk 1**
- D-151 **The Supreme Demo** by U-TOS

Music / MIDI

- MU-47 **Accompanist 2.4** by Henry Cosh
- MU-48 **Soundmachine ST The PD 'Quartet'**

- MU-49 **Sound Merlin sample-sequencer**
- MU-50 **Samples,Sequences etc. for above**
- MU-51 **Pixel Twins MOD's 2 plus player**
- MU-52 **Pixel Twins MOD's 3 plus player**
- MU-53 **Pixel Twins MOD's 4 plus player**

STE only

- STE-32 **Kulturmelk demo** by Imagina
- STE-33 **Songs of the unexpected** by OUCH
- STE-34 **Backtrack** (MOD-music while you work)
- STE-35 **Asteroid Attack** (smooth mono game)
- STE-36 **Labotomy Invaders** (Best game yet for the STE. 50 frames per sec!) 1mb.

This is just a small selection of the hundreds of titles available from our constantly expanding library.

We also stock the full range of Budgie & Shoestring Licenceware.

HARDWARE:

Hard Drives

- Progate 20 mb Hard drive £277.99
- Progate 30 mb Hard drive £325.99
- Progate 40 mb Hard drive £339.99
- Progate 50 mb (64k Disk Cache) £421.99
- Progate 80 mb Hard drive £435.99
- Progate 100 mb (64k Disk Cache) £563.99
- Progate 160 mb (64k Disk Cache) £920.29

British Made Frontier Ram Upgrades

- Xtra-RAM (Unpopulated) £29.99
 - Xtra-RAM Populated to Half Mb £49.99
 - Xtra-RAM Populated to 2 Mb £99.99
- Unpopulated & Half Mb can both be upgraded to 2 Mb boards without soldering on most FM's

- Xtra-RAM Deluxe (Unpopulated) £34.99
- Xtra-RAM Deluxe Half Mb £64.99

- Xtra-RAM Deluxe 2 Mb £104.99
- Xtra-RAM Deluxe 4 Mb £179.99

- Xtra-RAM STE Half Mb £29.99
 - Xtra-RAM STE 2 Mb £79.99
 - Xtra-RAM STE 4 Mb £149.99
- Works as either SIMM or SIP boards

Please add £2.50 for hardware orders under £50.00. (Only UK mainland hardware orders accepted!)

Free Catalogue with every £1000 spent or send £1.00 or a blank disk.
Cheques & Postal Orders payable to Caledonia PDL at the above address.
Guaranteed despatch within 24 hrs on all PD/Shareware/Licenceware titles.



VIDEO VIEWED

A STEP-BY-STEP GUIDE TO FITTING A GENLOCK

You're going to need a genlock for Desktop Video work . . . and there's only one place to find out everything you need to know about them — here! Dave Burns reports. . . .

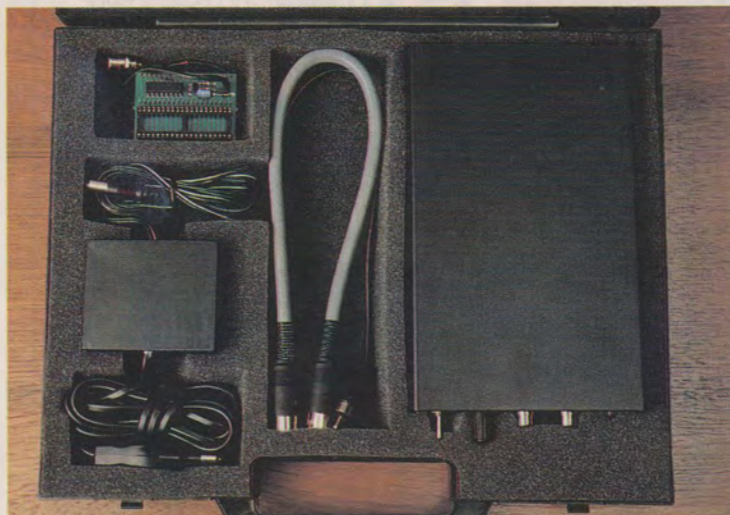
ST PAL from Satellite & Television is a Genlock device. Packaged in a smart plastic carrying box, it consists of two main components: a small circuit board that fits onto the video shifter and a black box sized 190 X 120 X 35 millimeters.

It's simple to fit, provided you use common sense and care. Set aside some space, time and

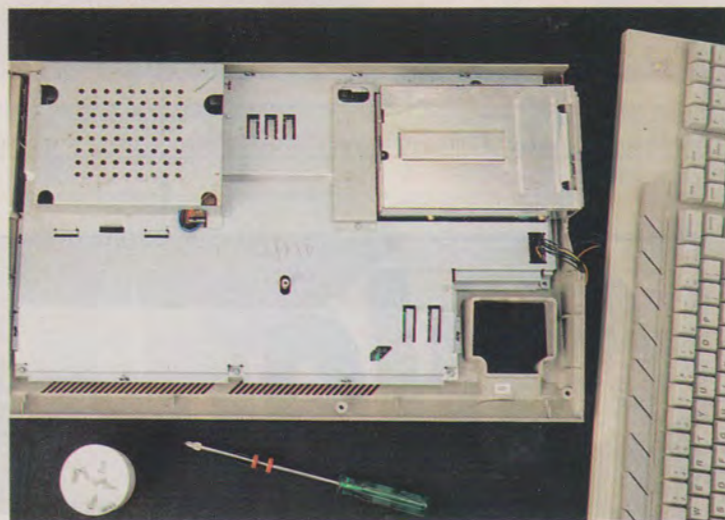
equipment, clearing your table and assembling the following: a Phillips, cross head screwdriver, a pair of long-nosed pliers, a small, straight-edged screwdriver, a sheet of A4 Paper, a low-wattage soldering iron and your ST.

The entire operation could take up to two hours, so make sure that you won't be disturbed. Now let's get to work, remem-

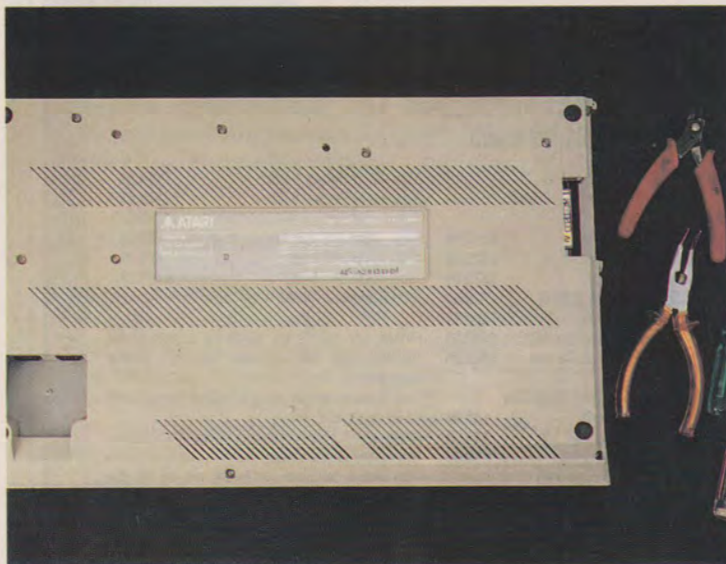
bering that by opening your machine you'll immediately invalidate its warranty. Place the A4 paper beside the ST and turn your computer over (we're working with an STFM). There are 10 screws on the base in round and square holes, and one of these may be behind a warranty seal. Now place these on the paper in the same positions as they were in the ST. Turn the ST back over and remove the top.



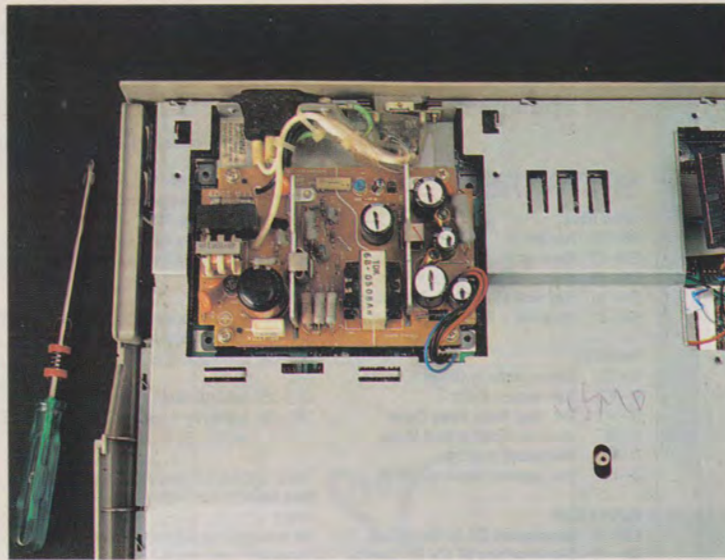
This is the package ready for installation in your ST, very neatly packaged and protected with foam.



Gently lift the keyboard and carefully disconnect the connecting wires.



The underside of your machine reveals the screws that hold the whole thing together.



This is the power supply. Be careful how you handle it, as it's very expensive. The relevant screws have been removed so you can lift out the unit.

TAKING IT APART

Gently lift the keyboard and, remembering which way it plugs in, remove the cable from the base.

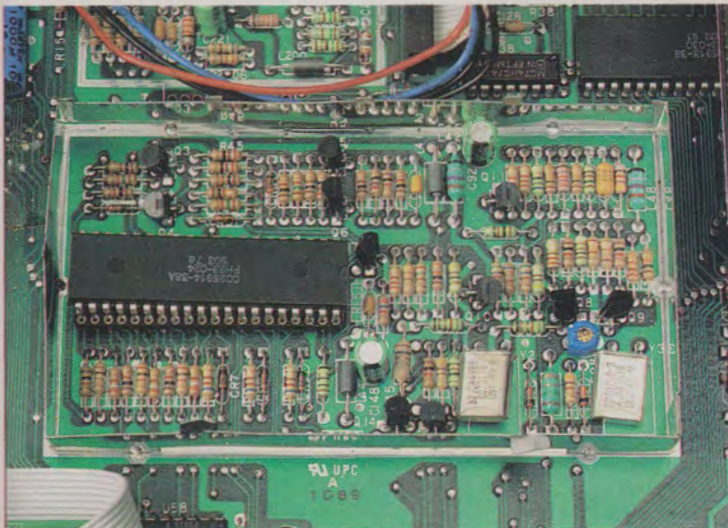
The next step is to remove the disk drive and power supply. Unscrew the shielding plate on the drive and disconnect the two cables, gently lifting out the drive and placing it to one side. If you have the ST in its usual position, ie with the keyboard facing you, the power supply is at the back on the left. Undo the screws, and using the pliers, straighten the twists and remove the casing. You will now see the power supply board held onto the main circuit board with four screws. Leave these alone, but look at the front, below the power board, where you will see two more screws. Remove them, unplug the cable, and gently lift out the power supply. This is very expensive, so be careful. Remove the remaining screws at the front of the main cover plate, straighten

INSIDE INFO

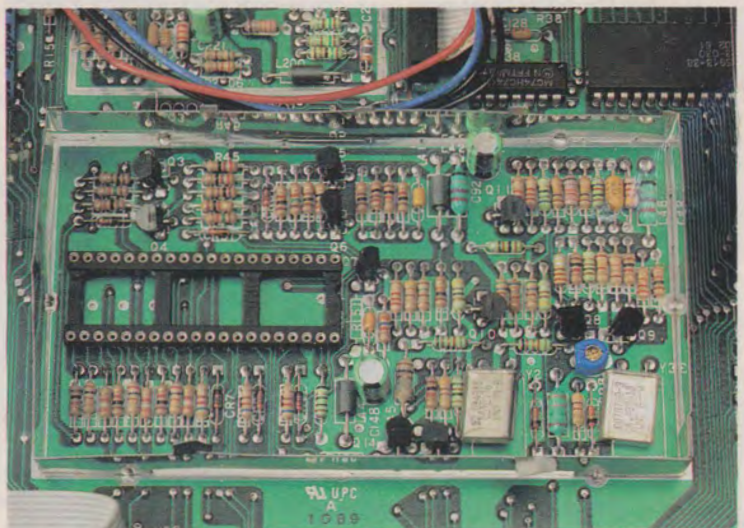
Chromakeying is similar to genlocking but works in the opposite way. Instead of placing the output from the ST over the video image, it makes the video image overlay the computer one. This is the means by which TV weathermen can show you a satellite map predicting calm conditions just before the roof blows off the Post Office Tower.

The disadvantage is that one colour of the video source must be designated colour 0, and because video images are made from Red, Green and Blue, (RGB) this particular means of superimposition won't be of use in a lot of situations.

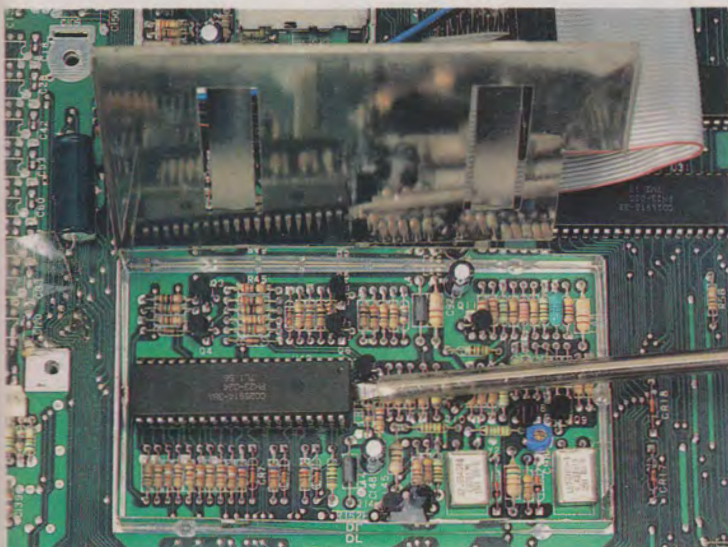
the twists, and remove the cover. Grant yourself a moment to gasp in wonder at all the chips and components on display.



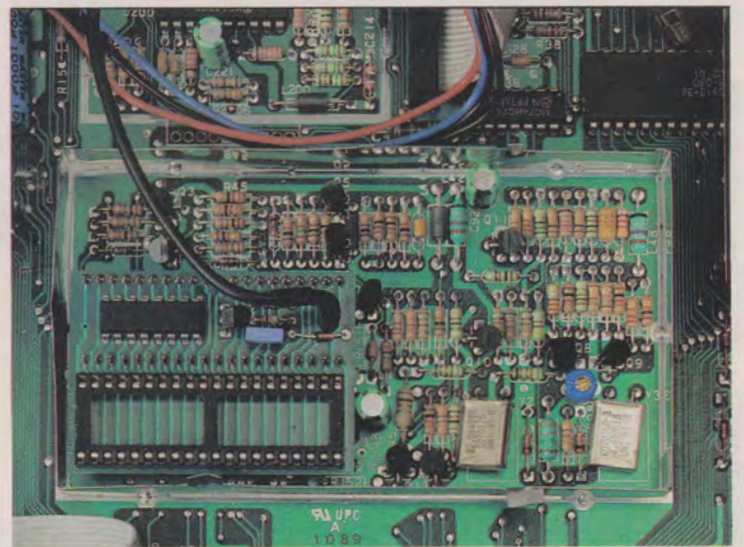
The video shifter chip in its own box. The chip translates the computer's output into a visual display.



The now-empty socket is where you are going to fit the ST PAL genlock PCB.



Using a lot of care and a flat-headed screwdriver, gently ease the chip out, all of the time being careful not to bend the legs or to damage the chip



After ensuring that the PCB is the right way round, gently press its legs into the vacant video shifter socket.

FITTING THE SOCKET

Those on the left are your TOS. See how easy it would be to upgrade them? In the middle of the board there is a silver box. Undo the twists and raise the cover. The long chip with 40 legs is your video shifter chip. Have a

INSIDE INFO

Hardware is anything that is actually physically connected to your ST, either internally or externally. External hardware won't cause any problems if connected and used according to the manufacturer's instructions, but internally-fitted hardware is a completely different matter: microchips and circuitry are highly susceptible to static electricity, so make sure you are well "earthed" before handling these items. And, once again, opening up your ST will invalidate its warranty. Seek out a qualified computer engineer, if you have any doubts about your ability to install the equipment.

look and see if it is soldered to the board or in a socket. If the shifter is soldered to the board, you have a slight, but not too difficult problem. Just obtain a 40-pin socket from your supplier. You now need to remove the chip, CAREFULLY, and solder the socket in its place, making sure you do not "bridge" any of the legs or tracks leading from them. This is all the soldering that's needed. Carefully place the circuit board into the video shifter socket, making sure you are inserting it the correct way, and then put the video shifter chip in the space on the circuit board.

All that's required now is to fit the socket by drilling a 6.5 mm hole in the rear of your machine. Gently pull the socket off the wire and screw it into the hole. Replace the cable carefully and put your machine back together.

ST PAL seems to work even if there's an extra memory board attached to the video shifter chip. I installed the genlock unit first, and then the extra memory unit was fitted into it.

From here on everything is plain sailing — using the leads supplied, just connect the genlock to the colour card and the ST.

WHAT IS A GENLOCK??

Read on, if you want to know more about them...



An interesting effect using a genlock. A digitised picture of John Wayne is cut out against a black background (colour zero). He is then superimposed onto the command deck of the Enterprise.

A genlock normally costs between £100-£150 and is a small piece of hardware that will allow your ST to talk to your video input device to create overlays and titles for your video recordings.

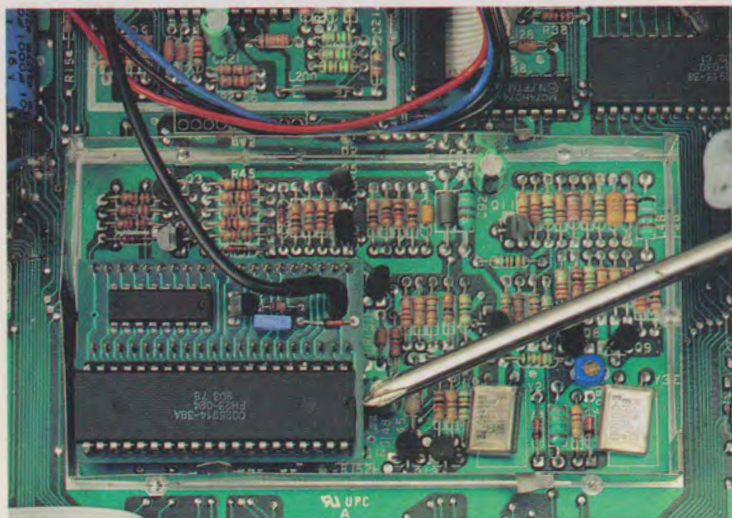
What it does is to combine the images from your camera and from your ST. As each pixel of your ST output goes into the genlock, it checks to see if it is colour zero, (generally black). If they are, then images from your camera will be put in their place. For example, if you have a black screen from the ST, the whole of the image from your camera will be displayed.

If, however, you have a yellow box in the top-left corner, then the camera image won't be displayed in that area. This is very similar to the way in which the background behind a newsreader's head is produced.

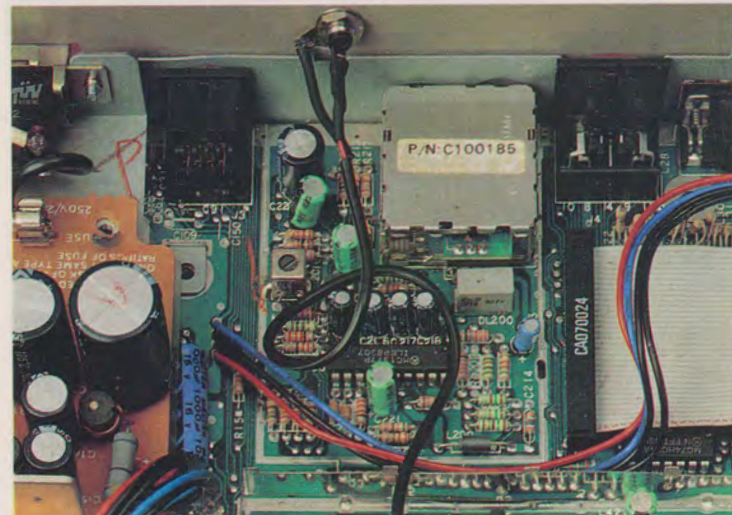
At the very least you can use a genlock to create credits for a home movie, but you can take a digitised Mr Spock and superimpose him onto the bridge of The Next Generation's Enterprise, or even put Robocop into *Eastenders'* Albert Square — the possibilities are endless...

Genlocks are widely used by the Hollywood film industry, a classic example is Roger Rabbit. In the early days of cinema special effects were superimposed onto sheets of glass called mattes — now it is far cheaper and simpler to do using a computer and a genlock.

You don't have to be a great artist to use a genlock, any standard art package will do the trick...



Replace the shifter chip, making sure that it faces the right way. The dip on the chip pointing out goes over the dip in the socket.



Make a 6.5 mm hole in the back of your ST and fit the phono socket supplied, making sure that all of the connections are tight.



Connect the external unit and the job is done. You are now ready to start making great video films.

MEMORY UPGRADES

HCS STE and MEGA STE UPGRADES

HCS STE memory upgrade kits come complete with full instructions designed for the novice. The complete job should take no longer than 15 minutes. 2 and 4 megabyte kits come with free utilities disk and multitasking software.

Upgrade from 520 to 1040£18.00
To 2 Megabytes£60.00
To 4 Megabytes£115.00

STF (M) and Mega ST upgrade kits

Xtroram Deluxe plug in upgrading system fits inside the computer. It can upgrade your computer in stages to 1Mb, 2.5Mb* and 4Mb. The kit comes with comprehensive instructions designed for novices. The kit uses SIMMS, so is easily upgradeable.

Frontier Xtroram *Deluxe*
Quality SIMM upgrading system
Upgrade from 520 to 1040£50.00
To 2.5 Megabytes£90.00
To 4 Megabytes£140.00

Solder in Kit

The solder in kit is designed for people with more electronics experience. There are four types of chips used in the ST: 16 DIL chips, 4 DIL chips, 4 Surface mount chips and 16 surface mount chips. All types are normally stocked, check your configuration before ordering.

Solder in kit (all versions)£25.00

REPLACEMENTS

The HCS power supply and disk drive upgrades come complete with fitting instructions and plug straight into the ST without soldering. The Power supply produces less heat than the original so is more reliable.

Replacement power supply£39.95
Double sided disk drive kit£47.00

ACCELERATORS

The AD Speed made by the famous ICD corporation fits in as the PC emulators. It is hardware and software switchable between 16 Megahertz and 8 Megahertz. The new SST 68030 accelerator is only available presently for the Mega ST. It gives a phenomenal speed increase by using the super fast 68030 processor running at 50 Megahertz and comes with TOS 2.5! The SST accelerator allows 8Mb of ram on board and has a position for a co-processor.

AD Speed ST£145.00
AD Speed STE£165.00
68030 SST - 50£550.00

PC EMULATORS

PC emulators allow the ST to use PC compatible programs without affecting the ST in normal operation. PC Emulators for the ST/F/M computers require the user to solder a 68 pin socket on top of the microprocessor in the ST. Installation in the STE simply plugs on top of the microprocessor using an adapter board, into the expansion slot of the Mega ST, at extra cost.

AT Speed C16£205.00
AT Speed 8£135.00
PC Speed£90.00
Fitting for above£30.00

The Vortex 386 emulator allows a high degree of compatibility and speed for PC compatible programs on the ST. True multitasking through the advanced features of the 386 allows windows to be used in enhanced mode. The AT Once 386 can accept a 387 Co-processor, this will speed many programs up to a factor of 5 times! The 386 sx emulator also has the capability for Fastram cache on board to allow a norton factor (speed comparison) of 15!

VORTEX 386 SX-16£330.00
387 CO-PROCESSOR£117.00
FASTRAM CACHE£30.00

SPECTRE GCR MAC EMULATOR

The Spectre GCR cartridge allows the ST to emulate the Mac giving 20% more speed than the Mac plus with 30% bigger screen area! It is fully compatible with ST hard drives. When used in conjunction with the SST it can beat the fastest macs. The megatalk board fits the Mega ST to allow connection to Mac specific peripherals, LAN network and Mac SCSI.

SPECTRE GCR (Inc. 128K Roms)£300.00
Megatalk Board£250.00

SCSI ADAPTERS

ICD host adapters to connect SCSI devices to the ST via the DMA port complete with DMA lead, software manual. AD SCSI Plus comes complete with built in clock.

AD SCSI£70.00
AD SCSI Plus£80.00

HOW TO ORDER

Enquiries and credit card orders please
 Fax/Call on (081) 777 0751

Please phone with enquiries between
 10.00am and 6.00pm Mon to Fri.
 Enquiries cannot be taken by post.



For mail order please send description of goods and cheque/PO to:

HCS
35 Hartland Way, Shirley,
Croydon CR0 8RJ

Prices include VAT and P & P
 Goods normally dispatched within 2 working days.

E & OE

**5
YEAR
GUARANTEE
ON
MEMORY**

**14
DAY
NO QUIBBLE
MONEY BACK
GUARANTEE**

VIDEO TITLER ST/STe V.2 £34.95

PROFESSIONAL TITLES FOR ALL VIDEO FORMATS

SMOOTH TEXT/FONTS, FLIPS, COLOUR-CYCLE, VENETIAN, WIPES, FADES, DISSOLVES, INTERLOCK, SCROLLS, SPEED CONTROL. SUPPORTS G.DOS & FSMG. DOS. NEO, DEGAS, & P11. THE MOST ADVANCED TITLER

Complete with GDOS fonts system.

*

ART MASTER ST/STe £29.95

Superb new art package for the ST

3D GRAPHICS ADVANCED BLOCK MANIPULATION, DISTORTION & MORE. NEO, DEGAS, AMIGA IFF COMPATIBLE, 9 WORKSCREENS, 4096 COLOURS, RAY, GRADIENT, 3D CONES, SPHERES, SHAPES & IT'S USER FRIENDLY.

Complete with colour print driver.

VIDEO TITLER & ART MASTER Combined price £54.95

*

PRINT MASTER ST/STe £19.95

ULTIMATE COLOUR DRIVER

FOR COLOUR & MONO PRINTERS.

PRODUCE COLOUR ON A MONOCHROME PRINTER. FULL COLOUR SHADING SUPPORTS MOST PRINTERS, TRI-COLOUR AND PROFESSIONAL COLOUR SEPARATION, LABEL ROUTINES, SUPPORTS EPSON, CANON BUBBLEJET, STAR, CITIZEN, 9/24PIN, HP DESKJET, IBM, NEC ETC.

SUPERB FULL COLOUR SCREEN DUMPS MADE EASY.

*

PRICE BUSTER DEALS ON HARDWARE

WE HAVE THE LOWEST EVER PRICES

520 STE 1/2MEG £329.99 NOW £274.99 Discovery pack

520 STE 1 MEG £359.99 NOW £294.99 Discovery pack

10 Star games pack £20 extra (only when ordered with STE).

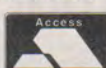
1040STE FAMILY CURRICULUM £399.99

RING FOR LATEST PRICES Prices include Carriage. £5 extra for next day delivery.

ACCESS & VISA WELCOME, SWITCH NOW AVAILABLE



LASER DISTRIBUTION LTD, Dept. SR
PO BOX 1, CALLINGTON PL17 7YZ



☎ 0579 82426 ☎

ADVERTISING?

ATARI ST REVIEW COVERS ALL ASPECTS OF ATARI COMPUTERS IN A SIMPLE, INFORMATIVE AND CLEAR WAY, REVIEWING SERIOUS APPLICATION PROGRAMS, HARDWARE AND GAMES, ST REVIEW WILL BE THE CONSUMERS' BIBLE FOR ANYTHING ATARI, IT WILL BE THE PLACE TO BE SEEN.

SO, TO ADVERTISE CALL MICHELLE GARDINER ON.....
TEL 071 972 6700 FAX 071 972 6701

.....SHE CAN HELP!

BUILD YOUR OWN ROBOT

with the NEW ST INPUT/OUTPUT PORT £26.95

Have you ever wanted to design and construct your own robotic arm or vehicle?

With the I/O Port you can harness the power of your ST to control robots, electric motors, sensors, even the mains. Revolutionary design allows the Port to be plugged into the ST Parallel Port & Joystick Port hence low price.

* Comprehensive instruction manual.

* LATEST MODEL provides 8 outputs and 5 inputs or 13 inputs.

* FREE Technical support to customers.

* Custom programming service.

* Listings in GFA, Hisoft, STOS, ST Basic



Current projects by Switchsoft 10 Port Owners: Burglar alarm, Control of a Telescope, Time-lapse Cine Camera, Robotic Arm. Your own imagination and creativity are the only bounds.

Amazing Sensor & Control Experimenters Kits

Plug into the I/O Port above (No soldering required). Can be used in your own projects.

KIT ONE £27.95 (New Design) £1 OFF if purchased with I/O Port above.

6 Electronic projects including 1 Relay Module, Electric motor, Light Bulb, Tilt sensor, 4 LEDs, Reed Switch, Push Switch, Software and FREE "Guide to ST Interfacing" (21 pages). Additional relay modules £11.95 each (plug into the Port and provide a 'Software Controlled Switch')

KIT TWO Light Level Switch. Adjustable threshold. Ideal as optical sensor for robots. £19.95

KIT THREE Mains controller Module. Mains appliances just plug in. Handles 15amps. £25.95

KIT FOUR BUGGY KIT. Amazing new product. Requires Kit 1 + 2 double pole play relay modules (14.70 each). No soldering required. Assembled in 20 mins. Powered by 2 slow speed reversersable gearbox motors. 5 metres of umbilical cable. £39.90

Phone for big range of Robotics Construction Supplies

ST to HIFI CONNECTOR

(High quality). Plugs into the monitor socket. You can still use a monitor. 4 Metres long with 2 phono plugs to connect with hifi. £10.95 (ST) £7.95 (STE)

ST TO HEADPHONE CONNECTOR

Price £10.95 (ST) £7.95 (STE)

PAINTPOT The Alternative Graphics Package. Trial Price £9.95

Computer Art made easy. Create GIANT POSTERS with your printer. Use the graphics in your WP or DTP. Hundreds of users swear by it because it is so nice to use yet all the powerful features. Paintpot runs in mono & colour. Including manual.

UNCONDITIONAL GUARANTEE

If not completely satisfied, you may return any product within 14 days for a full refund.



SWITCHSOFT, Dept. STR792,
26 Ridgeway,
Darlington, Co. Durham
DL3 0SF.



NOW OPEN IN RICHMOND

ATARI ST 'E' * Computers * Software * Peripherals

LOTS of Game packs ALL software can be supplied installed and ready to run
WP DTP CAD Video etc

SPECIAL OFFERS

520 ST'E' Discovery Xtra pack
with 14 Games and graphics and basic programs
WITH 1 Meg RAM £ 299 inc VAT

520 ST'E' Art pack £ 259 inc VAT
with 4 Games & WP & ANI-ST & Graphic program
Offers subject to availability

Upgrades repairs & help with all things ATARI



NEWDATA SYSTEMS Ltd

9 Clarence Street (near THE ORANGE TREE)
RICHMOND Surrey 081 332 6840

Ref: STREV 2

FAST FORWARD

ATARI ST REVIEW
ESSENTIAL BUY

You've loaded up the coverdisk and used the full-price utility, Video Titler Version One, now read about the update.



or, if GDOS is loaded, GDOS fonts from *Timeworks 1* or *Timeworks 2*.

ADDING TEXT

Function selection is done with the mouse. The only time you need the keyboard is for adding text. Select the font you require (samples of each are shown on the left-hand side of the screen). Select the size and add colour by using the colour bar at the top of the screen. When ready, press the right mouse button and type in your text as you would in a word processor. Position the text using the mouse and fix with the left mouse button.

The command called Venetian gives a venetian blind effect, building up a picture in strips; Wipe wipes a picture off the screen in the direction of your choice. Speed is user definable as



Captions running in from left and right – just like the pros.

in all options. Scrolling the screen into or out of view, and the direction is chosen with the Direction Selector. Fade removes a screen

pixel by pixel and is useful for fading into another screen. Widely used in TV is the effect of turning a graphic on a central axis to make it vanish or to bring in another picture – the Flip command facilitates this, whilst Interlock brings alternate lines of the same picture into view from opposite sides of the screen.

Building up a sequence is simplicity itself. Select pictures individually, set the effect and timings you want, then move the pointer to the desired frame at the top of the screen and click the right mouse button.

Using the Play command, view any part of the sequence to see where any final adjustments need to be made. When the job is complete, select Save Sequence and save to disk. You do need to save the screens out separately, however.

All that is left to do is to connect your ST to a video recorder and play the sequence onto the videotape whilst recording.

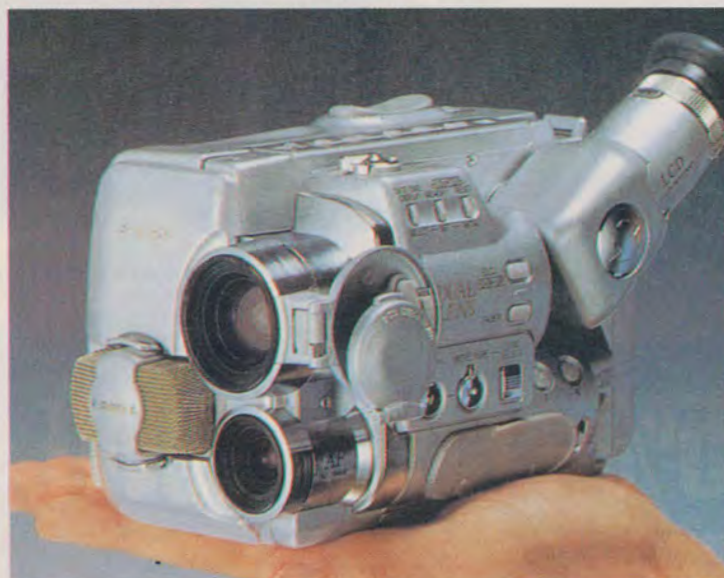
A very simple-to-use package that produces professional results quickly and simply.

Home videos, whether recorded straight from the T.V. or shot by Uncle Gordon with his camcorder can now have professional looking titles and special effects using Laser Distribution's latest video titling package.

The program has a very simple to use and self-explanatory menu screen. Along the top are four small windows which are scrolled to reveal 50 frames which can all be used for picture editing and each one acts independently of the others. The column to the left is for doing the actual editing. First select either Degas (P11) or Neochrome (Neo), and then add text using either the system font



The main menu screen – simple to use but effective in use.



Making the most of your home videos.

"User friendly package that will produce great results quickly."

NAME: VIDEO TITLER 2.00
COMPANY: LASER DISTRIBUTION LTD.
CONTACT: 0579 82426

PRICE: £34.95
RELEASE DATE: OUT NOW
MIN MEMORY : 0.5Mb

EASE OF USE ☆☆☆☆
DOCUMENTATION ☆☆☆☆
EFFECTIVENESS ☆☆☆☆
VALUE FOR MONEY ☆☆☆☆

OVERALL **92%**

The manual is excellent
Very effective results

PROS AND CONS

Diagonal control takes some getting used to

A tad too easy to finish

come and play



THE SPRING
COMPUTER
SHOPPER
SHOW
'92

28-31 MAY • OLYMPIA

EXHIBITORS INCLUDE:

Save 25% - BOOK NOW!

before you pay

Try it before you buy it! That's what the Computer Shopper Show is all about. It's the only exhibition that covers all you've ever wanted for your computer and more, so whether you're into consoles, Amigas, STs or PCs, don't miss it!

As well as offering you the best deals around from major hardware and software suppliers, you can have a crazy time making your mind up what to buy.

CHECK OUT

the games arena experience and be the first to put the very latest software to the test.

TAKE

a stroll down Console Alley and get the feel of the latest consoles on the games market.

GET SMART

and take advantage of FREE technical and buying advice from Computer Shopper

Magazine's team of experts and the CU Amiga clinic.

Don't wait for the Zero hour before checking into the Games Zone, book NOW and save yourself some cash!

save 25%
beat the queues
book early

Adults £4.50
Under 16's £3.00
(£6 & £4 on the door)

Ticket Hotline

071 373 8141

Spring Computer Shopper Show
28-31 May, Olympia
Show opening times: 10am to 6pm each day

The show is taking place at Olympia Exhibition Centre, Hammersmith Road, Kensington, London W14 and can be easily reached by TUBE: Olympia - District line, Circle line, Picadilly line and Metropolitan line. Or by BUS: No's 9, 10, 27, 29, 91.

BOOK NOW: Complete and return the following coupon to: Spring Computer Shopper Show, Earls Court and Olympia Ltd, Earls Court Exhibition Centre, Warwick Road, London SW15 9TA.

Closing date for ticket applications 22 May 1992.

Spring Computer Shopper Show
28-31 May, National Hall, Olympia

Pre-registration form

Name _____

Address _____

Postcode _____

Please send me _____ adult tickets @£4.50 and _____ child tickets @£3.00

I enclose a cheque made payable to Computer Shopper Show for £ _____

Please debit my ACCESS/VISA account

No. | | | | | | | | | | | | | | | | | | | | | |

Expiry date ____/____/____ Signature _____

Which of the following are you interested in at the show?

- Amiga ST Printers/Other Peripherals
 PC Games Software Other Software

Welcome to the slot that you write. This month our panel tests word processing packages...

PUNTER POWER



PROCESSING SOFTWARE FOR ATARI STE, MEGA STE, AND TT COLOUR MONITOR.

"The customer is always right", as the saying goes - but, of course, that all depends on what they want in the first place. Our reader tests give you, the consumer, a chance to have your say about certain products.

This month we take a look at word processors, and to make sure we cover all the angles, we've taken three people from very different backgrounds, who use their STs in different ways.

We selected three packages for our readers to test, two of which are relatively new, while the third is a well-known product that is already popular on PCs.



quick reference card to avoid the need to keep referring to the manual. Supplied on six disks, one of which is a learning disk, this package can be used immediately by someone that is used to the PC version, and very quickly by a beginner. It can be used on any ST with a minimum of half a Megabyte of memory.

● **REDACTEUR 3** is France's leading word processor. Used widely by the country's journalists, it combines speed with flexibility and is feature-packed.

The main advantage of *Redacteur* is its ability to save to many formats, such as *Microsoft Word*, *First Word*, *Word Perfect* and ASCII. Other features include mailmerge and spellchecker as well as the facility to import graphics in many formats. It can automatically create tables, add footnotes and endnotes, toggle between programs, and there's a built-in font editor.

This particular package has everything you are likely to need from a word processor and will run on any Atari with at least one Megabyte of memory.

● **THAT'S WRITE** from Compo Software is the "big brother" of the popular *Write-on* by the same company. This package is slightly more than a basic word processor, allowing you to import .IMG files.

There are at least 10 fonts provided, and there can be more available, depending on the printer used.

Features include multi-column text with user-definable gutters, support for a wide selection of printers, mailmerge, and automatic generation of a table of contents and index.

Supplied on three disks, installation is very straightforward, and the manual is again a ring-binder containing 192 pages. Requirements for this program are a minimum of one Megabyte of memory.

WHAT DID THE READERS TEST?

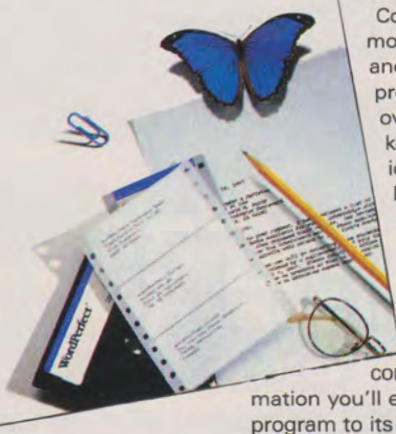
● **WORD PERFECT V4.1.** This is the ST version of the popular PC program. Very faithful to the original, its features include automatic page numbering, auto save, merge, spellcheck (115,000 word dictionary supplied), thesaurus containing 10,000 headwords and the ability to display up to five columns on the page, with different options for text flow. Footnotes and endnotes are also catered for, with the option of automatically numbering and renumbering them.

Control is either by mouse or keyboard, and the package also provides an F key overlay and some keyboard stickers to identify the relevant keys quickly and easily.

Instructions for use come in the form of a 600-page ring-bound manual which

contains all the information you'll ever need to use the program to its full capacity, plus a

WordPerfect
for the Atari ST





GREG RUSSELL

AGE: 24 ● **OCCUPATION: PC programmer and support technician** ● **USES OF ST: Relaxation; runs free PD service; writes documents for programs** ● **NEEDS: Good spellchecker; ability to save files as true ASCII.**

ORDER OF PREFERENCE: REDACTEUR (1) WORD PERFECT V4.1 (2) THAT'S WRITE (3)

REDACTEUR 3.15

GREG: "Installation was good, mainly because of the good dialogue, although too many files were compressed and this slowed things down a lot. Although the manual says you need a minimum of one Megabyte, I found that even with 2.5 Megabytes I was still unable to load all the extensions. I would strongly recommend a hard drive for using and installing this program.

"The manual is a massive document in paperback book form. It would have been better as a ring binder to enable faster location of sections. It also contained far more information than was really needed.

"When using this program there is a very good file selector (you need to create a folder for it). There are seven fonts, which are adequate if nothing special, and scrolling through a document is very fast considering that it is GEM-based. Page preview is very good and I liked the fact that there are many save options. Extra programs, such as a font editor and edit dictionary, can be loaded, and I liked the shortcut text and paragraph formatting.

"There are a lot of extras not usually found in a word processing package and overall this is a very good package. Acting against it are the facts that it doesn't give a very good image in low resolution and that it seems impossible to load the thesaurus."

THAT'S WRITE

GREG: "This is claimed to be 'the perfect word processor'. I beg to differ. The best that can be said of it is that installation is very easy. Although slow, it will work from either a hard drive or one floppy.

"Page layout only works in whole numbers, with the margins measured in lines and picas rather than the more traditional (and easier) inches and centimetres. I could only access 10 of the 20 fonts listed, and when they were shown on screen they were not a true reflection of the finished page. Although this program supports .IMG files and does so very well it is very slow in formatting the page — formatting a 60K document took forever.

"Font sizes are set and you can't resize them, which would have been very useful. There is a spellchecker, but it's not very good. The ruler layout, again in picas, is very confusing. The manual does give a formula for converting picas to inches/cm but it's more trouble than it's worth.

"Block movement, cut and paste are there, as is the option to build an index and table of contents. Overall, this package is good for a beginner, but I wouldn't recommend it for experienced users."

WORD PERFECT

GREG: "The first thing that struck me about this one was its professional manual: the quick index and keyboard overlays are very useful. There is, however, no install program — installation requires copying the contents of the disks to the hard drive. **Word Perfect** supports 190 printers, not including the new laserjets and postscript printers.

"For a program that uses GEM this isn't particularly quick, and blocks appear to reset. Most menu options are disabled when you have a block highlighted. There was a distinct lack of fonts and item selector, although the autobackup option was very useful. This one supports a maths calculator and has a very good thesaurus and spellchecker.

"Selecting fonts is awful and there is no WYSIWYG supported on this package. It looks like it has been ported over from the PC with no consideration whatsoever for the capabilities of the ST. It's not unlike First Word with a few more features. I don't like it at all."

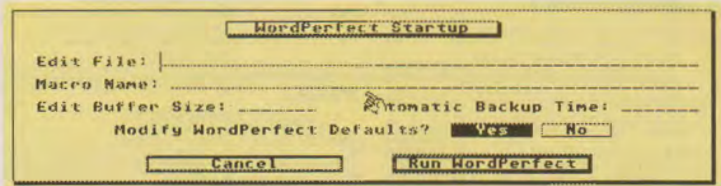
SUMMARY

● It's quite obvious Greg prefers **Redacteur 3**, with its extra features and the ability to save to a variety of formats. It is now a permanent resident on his hard drive.

KIT WATSON

● **AGE: 34** ● **USES OF ST: Runs a bulletin board system** ● **NEEDS: A program that will work from within the shell that runs his BBS system.**

ORDER OF PREFERENCE: REDACTEUR (1) WORD PERFECT V4.1 (2) THAT'S WRITE (3)



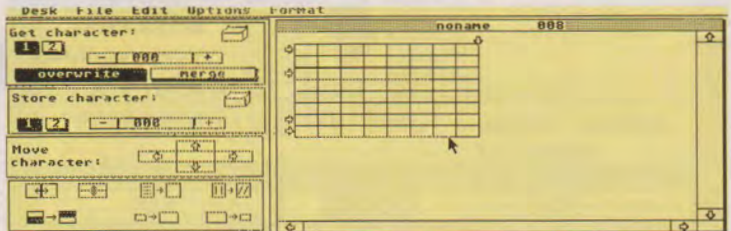
The conversion screen for Word Perfect documents.



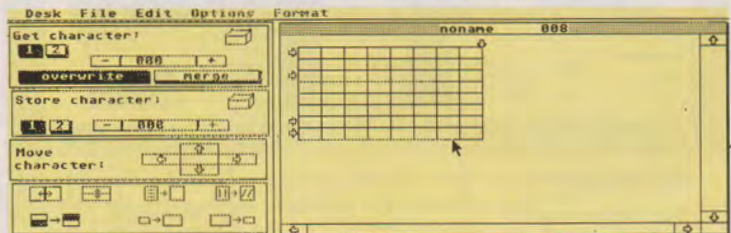
Word Perfect — start up with documents loaded and macro defined.



Printers can be selected or configured individually in That's Write.



The built-in That's Write font editor makes font design very easy.



In That's Write, full information on each font is provided at the click of the mouse.



WORD PERFECT

KIT: "This package is well presented, with a very good manual featuring a learning section that allows the user to get into it straight away. Although this is slightly harder to get to grips with than **That's Write**, I found it easier to use than **Redacteur**. The mailmerge section was very simple to set up and use, with no need for a database.

"I did have trouble printing out, but that may have been something I did rather than the program itself. Installation was relatively simple and the overlay and quick reference card were very useful. Good for the new user or someone using **Word Perfect** in the office, I found this works quite happily from the batch file running the bulletin board and is compatible with the board."

THAT'S WRITE

KIT: "Once again, the presentation was very nice, with pockets for the three disks — it's just a pity they are so prone to falling out of them! The manual is very simple and easy to use and the folder format means that you don't keep losing your page. It's clearly written and I had no great problems with it.

"Installation was very simple and it's great for the beginner, as you can start work with it as soon



Calligrapher

Atari Computer Wordprocessing takes a giant leap forward.

Calligrapher Professional - Now only £99 inclusive - requires 1Mb and a Floppy Disk.

Calligrapher GOLD - Contains all the features of Professional plus a Grammar Checker, Label Printer, Barcode Production, Indexer, Automatic Save, Equation Editor, Text Effects - £139 inclusive - requires 1Mb minimum and a hard disk.

GOLD Extension to Calligrapher Professional - Thesaurus, Grammar Checker, Label Printer, Barcodes, Indexer, Automatic Save, Equation Editor, Postscript Driver and Flextext Text Effects - requires 1Mb and a hard disk - £59 inclusive.

WorkingTitle, PO BOX 4, Eynsham, Oxford, OX8 1UD
Tel: 0865 88 35 92.

OPTIONAL FRENCH DICTIONARY
Handles French accents correctly • Mix Languages in the same document • Phonetic Error Guessing

Proportional Fonts on Screen and Printer
Wobeglin Light Vog Runschrift Britanic Extra Light Miran Bold I Chelmsford Light Eurostile Eurostyle expanded Franklin Gothic Gill Sans Britanic Medium Chelmsford Medium Miran Gothic 2 Clearface Gothic Castle Book

Barcodes
Video Barcode Barcodes • EAN and UPC Barcodes • Industrial Two of Five • Code 39 Barcodes

Tables

Text Utilities
BEND TEXT ADDING ARCS AND LINES TO CREATE A WIDE RANGE OF SPECIAL TEXT EFFECTS

FlexText Text Effects
Calligrapher

Spelling Checker
With Phonetic Alphabetics Codes (40,000 word UK English dictionary) Check as-you-type and inspect the dictionary

Grammar Checker
Does a Check for Typos, Use and Grammar Problems • Finds and corrects the errors themselves from within Calligrapher • Shows reasons • Handles misspelled words • Shows why • Shows why the wrong word was used • Shows why the wrong word was used • Shows why the wrong word was used

Chapter Handler

Automatic Save
Timed saving of documents • Save after fixed periods • Save after periods of inactivity • Integrated into Calligrapher • Smooth operation • Options saved with Calligrapher

Barcodes
Video Barcode Barcodes • EAN and UPC Barcodes • Industrial Two of Five • Code 39 Barcodes

Overlaid Art

Vector Graphics

LABEL PRINTER
Prints short labels • Serial Numbers on Labels • Mail Merge to print many labels • Integrated into Calligrapher • Post graphics, bar, serial focus on labels

Boxes, Vertical and Horizontal Lines

optional catalan dictionary
Handles the Catalan characters correctly • Smooth Operation • Large Vocabulary

Graphics (.img)
Calligrapher

Multiple Columns

Wysiwyg Wysiwyg
WYSIWYG Wysiwyg
WYSIWYG Wysiwyg
Wysiwyg Wysiwyg

Multiple Documents

OPTIONAL SPANISH DICTIONARY
Handles Spanish accents correctly • Mix Languages in the same document • Phonetic Error Guessing • Large Dictionary of Words

Indexer
Indexer • Links text document with cross heading and system • Automatically update index after changes • Built into software • Integrated into Calligrapher

Character Selector

Thesaurus
• Intrinsic
• Verbs absorb attract fascinate interest pique
• Nouns affair amour artifice conspiracy liaison plot scheme trust
• Antonym Bore
• Synonym

BIG Headline Fonts User Friendly

Escape from Monospace

LaserQuick Page Printers
Annual Sales Forecast 1992

Direct Support for GEM vector Graphics
No need to take the resolution snapshots from GEM applications

Script Typefaces Available
Parade Script Typeface Vladimir Script Typeface Brush Script vector typeface Commercial Script
Typefaces are vector outline, sold 1 penny per dot weight from Calligrapher

Document Statistics
List and other file statistics from within Calligrapher • Can also collect file statistics from other applications • Includes: • Length • Creation date • Location

Optional German Dictionary
190,000 Word German dictionary • Mix languages within the same document • Handles the German ß character correctly

WT
Far Message
Thank you for buying Calligrapher, you have made a great choice. Calligrapher is the best document processor for the Atari ST range of Computers.

Anagrams, Knymes and Puzzle Solver in public domain

★ GOLD ★
★ GOLD ★
★ GOLD ★

PLAGE TEXT BESIDE GRAPHICS USING THE 2 COLUMN FACILITY

Optional Serif Typefaces
Windsor Baskerville Bodoni Black Bodoni Antiqua Bodoni Medium Bering Century Schoolbook Cheltenham Congress Egyptian Black Bodoni Itra Congress Bold Spas Caslon Century Old Style Egyptian 505 Garamond

Drive Zebra Label Pr.

Proportional Fonts WIMI
in Table
Multiple Lines in Tables
Graphics
Formulae

HardWare Support
• Big Screens • TT Support • SLM804 Support • Deskjet • Deskjet 500 • PaintJet • HP Laser • 9 Pin Printers • 24 Pin Printers • BJT • Canon LBP • SLM604

Optional Italian Dictionary
Mix Italian Sections of Text into Your Document • Smooth Operation • Large Vocabulary

HYPHENATOR
FROM PUBLIC DOMAIN LIBRARIES

Now with Postscript Support

as it is installed. Importing .IMG Files is easy to do and resizing the images requires a quick drag of the mouse. This has more features than **First Word**, but it won't run from my batch file for the bulletin board.

"This is a good program for beginners but may not suit the more experienced user."

REDACTEUR

KIT: "This package comes in a sturdy box which includes a good, detailed manual that must be read to get the most out of the program. Installation is fairly easy, but it is a lengthy process.

"Features include a virus killer, which is useful every now and then, especially on the bulletin board since it needs frequent checking.

"This program can't be explored fully in a short time: the more you use it the more there is to discover. It's one of the more complex programs I have used, but with all it has to offer this is not surprising.

This is a package that is designed more for the serious or experienced user.

SUMMARY

● Kit liked **Word Perfect** for its simplicity and manual — but he also feels that **Redacteur** is a program that he will keep coming back to as there are so many different features to it.



MARK BRYANT

AGE: 31 ● **OCCUPATION:** Radiologist ● **USES OF ST:** Writes letters and posters for wife's playgroup ● **NEEDS:** To be able to use files saved from his ST on a PC.

ORDER OF PREFERENCE: REDACTEUR (1) WORD PERFECT V4.1 (2) THAT'S WRITE (3)

THAT'S WRITE

MARK: "This package is very easy to use with large screen text and a file format manual. The manual is OK, but not the best. For example, it tells you to prepare a single formatted disk, then on screen you're told that you need two. The manual is correct,

but it causes a few panics as you are halfway through the installation by the time you discover what's true.

"The IMG and mailmerge facilities are rather good, but the advertised WYSIWYG doesn't seem to work and the printout is not what you see. This makes planning a document rather a strain. This is a word processor with delusions of DTP."

REDACTEUR 3

MARK: "Another word processor that tries to be a DTP package, this is very good all-round. Although easy, installation requires a lot of disk changes. You really need two floppies or a hard drive for this.

"In its favour, this program has the ability to load and save most text files, including **First Word Plus**, **Protext** and **Word Perfect**. You can load and print .IMG files, and the sheer volume of available options is amazing. There is a large, comprehensive (perhaps too comprehensive) manual in book form, which can provide a bit of a challenge, although it is very clear and well laid out.

"This is not a very user-friendly package, so not one to be attempted by the new user, but as you gain in experience this will become a very useful item to have in your collection."

WORDPERFECT

MARK: "Installation is very easy, and the package contains a good dictionary and thesaurus. The manual is of the file type and very easy to understand with each section being clearly marked. It is a very comprehensive document. Once again you are better off with two drives or a hard drive.

Word Perfect is the only one to include a keyboard overlay and can handle newspaper-style layouts with five columns of text to a page. The printout was very good and the mailmerge is very useful to me when sending out lots of letters.

Word Perfect is a professional package that is good for serious work, especially useful to those that use it at work and don't want to learn a new package for use on the ST.

SUMMARY

● Mark has agreed with Greg and Kit about **Redacteur**. He will be using **Word Perfect** for word processing and **Redacteur 3** for the occasional job that requires pictures as well as text.

THE OVERALL RESULTS

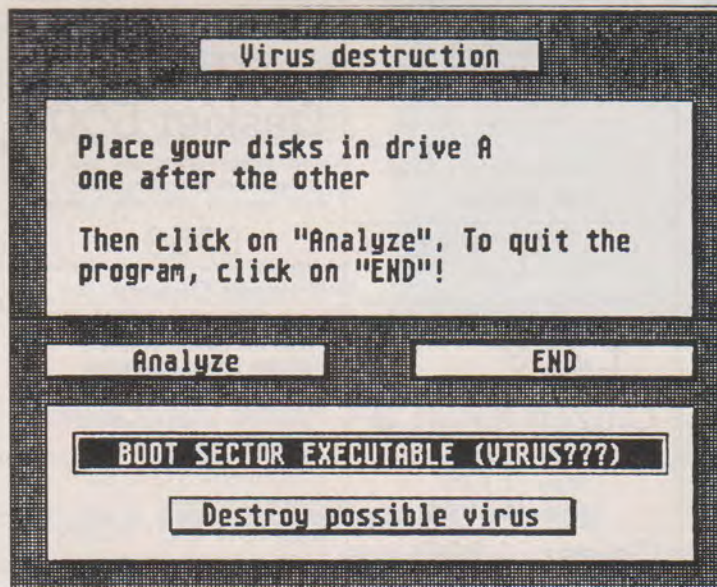
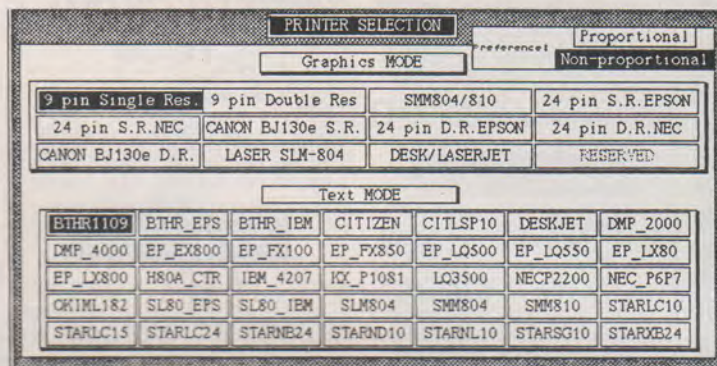
Although our three testers have different requirements from a word processor, they all agree that **Redacteur 3** is the best package tested. Key points in its

favour are its flexibility, comprehensive manual and suitability for experienced users.

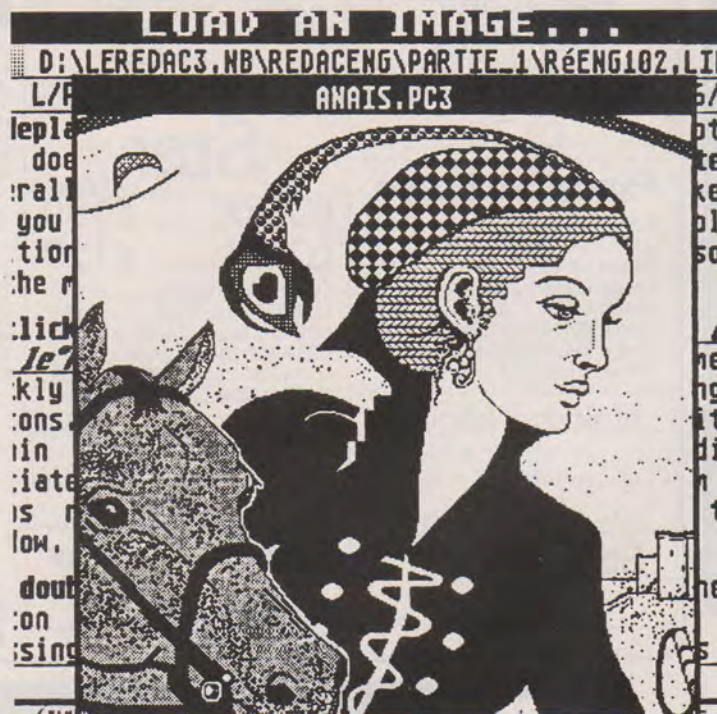
All three testers were unanimous that **Word Perfect** would be their next choice with, **That's Write** at the bottom of the pile, although Kit Watson found it more difficult

than the others to decide whether it or **Word Perfect** should come second.

All of the readers agree that installing Redacteur 3 is an easy, if somewhat lengthy process, thanks largely to the simplicity of the dialogue boxes.



Redacteur contains a number of useful extras. Kit Watson, who used the package on his bulletin board, in particular, found the virus checker a help.



The graphic previewer in Redacteur 3 allows you to check that the picture file is the one you want to load.

WeServe of Hampshire Established 7 years

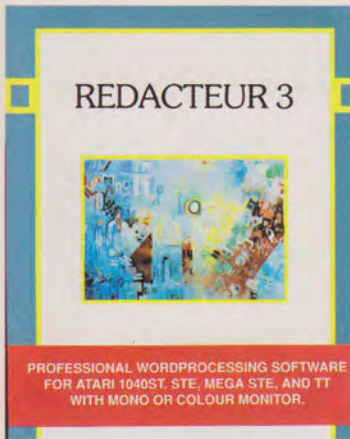
High quality products. Full technical support.

High quality products. Full technical support.

Visit our Showrooms. See before you buy.

Visit our Showrooms. See before you buy.

| | | | | | | | | | | | | | | | | | | | |
|--|--|--|--|------|-----------------------------|------|--------------------------------|------|----------------------------------|-------|---------------------------|-------|--------------------------------|------|-------------------|-------|---|------|---|
| <p>NEW Atari Workstation /Expansion System Monitor stand with shelf for drives etc. Strong metal construction made from 14SWG steel epoxy coated Amiga colour. Special price £27.50</p> | <p>Special Offer 1/2M Simm £15.00 0.5M Simm ram upgrade 15.00 2M Simm ram upgrade 59.00 4M Simm ram upgrade 117.50 0.5M Xtra ram Deluxe 54.00 2M Xtra ram Deluxe 94.00 4M Xtra ram Deluxe 154.00</p> | <p>Hard Disks</p> | <p>Floppy Drives</p> | | | | | | | | | | | | | | | | |
| <p>New Price Citizen 224 24pin Colour* Enhanced 24pin printer, *optional colour with easy to use control panel 2 year warranty. Price with cable & paper Mono £215 Colour £234 Amiga printer driver £5.00</p> | <p>New Price HP Deskjet Colour 300dpi colour inkjet printer. Colour laser quality at 1/10 of the cost. 3 year warranty. Price with cable & paper £559</p> | <p>MegaFile 30 Atari Corp. 30Mb Hard Disk fully compatible with all ST's £279</p> | <p>Exclusive Scoop Cumana CAS354 1M external floppy. High quality build. The most reliable drive you can buy. 84 tracks. STF rating 90% £69 While stocks last</p> | | | | | | | | | | | | | | | | |
| <p>All Citizen printers have 2 year warranty</p> | <p>Deskjet 500 HP 300dpi Inkjet printer. Laser quality at dot matrix price. 3 year warranty. With cable & paper £359</p> | <p>Protar Progate 50DC 50M Hard Disk 1yr. exchange £409</p> | <p>Zydec 1M 1M external drive for ST's £52.90</p> | | | | | | | | | | | | | | | | |
| <p>Swift 24E Enhanced 24pin. Colour printer with cable & paper £269</p> | <p>Printer Drivers Citizen Swift Colour 5.00 Various others available please phone for details</p> | <p>Protar Progate 100DC 100M Hard Disk 1yr. exchange £545</p> | <p>Internal 1M Drive £47.00</p> | | | | | | | | | | | | | | | | |
| <p>Citizen Swift 9 with cable & paper Mono £175 Colour £194</p> | <p>Printer Dust Covers most types in stock from £4.70 inc VAT</p> | <p>Protar Visto 14CM 14" Colour Monitor with cable 1 year replacement warranty £199</p> | <p>Atari STE's with STARTER PACK software from £249 520STE 512k ram £249 520STE 1M ram £269 520STE 2M ram £319 520STE 4M ram £379</p> | | | | | | | | | | | | | | | | |
| <p>Citizen 120D+ with cable & paper £119</p> | <p>Canon BJ-10ex 360dpi Inkjet printer with cable & paper £235</p> | <p>Philips CM8833 MK2 Colour monitor with cable £219 UK. 240V with 13A mains lead</p> | <p>Above ST's are supplied with STARTER PACK Software: 1stWord, NEOchrome, Ani ST, + 4 GAMES: Missile Command, Crystal Castles, Battlezone & Super Breakout.</p> | | | | | | | | | | | | | | | | |
| <p>Panasonic KXP1123 Probably the best 24pin mono printer available. With cable & paper £179</p> | <p>Star SJ-48 360dpi Inkjet printer with cable & paper £229</p> | <p>Atari SC1435 14" Colour Monitor with cable £219</p> | <p>SONY DISKETTES SONY branded (lifetime warranty) (100% certified error free)</p> | | | | | | | | | | | | | | | | |
| <p>Panasonic/Epson KXP1170 9pin 134 KXP1124i 24pin 227 Epson LX400 9pin 135 Epson LQ450 24pin 222 Epson LQ570 24pin 265 Epson EPL-4100 Laser.. 680 Epson EPL-8100 Laser.. 1115 Prices include VAT cable & paper</p> | <p>Star LC-200 £189 LC-20 £129 LC20 Mono 9pin 129 LC200 Colour 9pin 189 LC2420 Mono 24pin 195 LC24200 Mono 24pin ... 219 LC24200 Colour 24pin .. 269 Prices include VAT cable & paper</p> | <p>Atari SM124 Hi Res. 12" Mono monitor & cable £129</p> | <p>DISKETTES SONY / DYSAN bulk (lifetime warranty) (100% certified error free)</p> | | | | | | | | | | | | | | | | |
| <p>Naksha Mouse for Atari ST & Amiga with house & mat £21.50</p> | <p>True Mouse for Atari ST & Amiga £15.90</p> | <p>Atari SM144 Hi Res. 14" Mono monitor & cable £139</p> | <p>Carriage on 50+ disks £3.53</p> | | | | | | | | | | | | | | | | |
| <p>Squik Mouse for Atari ST & Amiga £13.90</p> | <p>Naksha Scanner 200 to 400dpi. 105mm width with express-IT software New Price £99</p> | <p>Special Offers</p> <table border="0"> <tr><td>Hyper Paint</td><td>9.90</td></tr> <tr><td>FirST Basic - HiSoft</td><td>9.95</td></tr> <tr><td>Atari Basic Source book & Tut.</td><td>4.50</td></tr> <tr><td>TimeWorks Pub. 2</td><td>69.00</td></tr> <tr><td>NeoDesk 3</td><td>28.70</td></tr> <tr><td>Organiser - Triangle</td><td>9.90</td></tr> <tr><td>Protex V4.3</td><td>49.00</td></tr> <tr><td>Borodino game</td><td>4.00</td></tr> </table> <p>All items subject to availability</p> | Hyper Paint | 9.90 | FirST Basic - HiSoft | 9.95 | Atari Basic Source book & Tut. | 4.50 | TimeWorks Pub. 2 | 69.00 | NeoDesk 3 | 28.70 | Organiser - Triangle | 9.90 | Protex V4.3 | 49.00 | Borodino game | 4.00 | <p>Phone for our 60 page catalogue EDUCATIONAL AND GOVERNMENT ORDERS WELCOME All products have a 30 day money back & 12 month warranty. Prices are subject to variation without prior notification. Established 7 years. 3 minutes from M27 Junction 11. Free parking. Open 9 to 5.30 Monday to Friday & 9 to 5 Saturday Postage 94p or £3.53 Securicor £6.46 (£5.50 + VAT)</p> |
| Hyper Paint | 9.90 | | | | | | | | | | | | | | | | | | |
| FirST Basic - HiSoft | 9.95 | | | | | | | | | | | | | | | | | | |
| Atari Basic Source book & Tut. | 4.50 | | | | | | | | | | | | | | | | | | |
| TimeWorks Pub. 2 | 69.00 | | | | | | | | | | | | | | | | | | |
| NeoDesk 3 | 28.70 | | | | | | | | | | | | | | | | | | |
| Organiser - Triangle | 9.90 | | | | | | | | | | | | | | | | | | |
| Protex V4.3 | 49.00 | | | | | | | | | | | | | | | | | | |
| Borodino game | 4.00 | | | | | | | | | | | | | | | | | | |
| | | <p>Accessories</p> <table border="0"> <tr><td>Joystick/Mouse twin extension</td><td>4.70</td></tr> <tr><td>4 Player adaptor lead</td><td>5.88</td></tr> <tr><td>Atari ST Printer cable</td><td>6.99</td></tr> <tr><td>Atari ST to ST serial lead</td><td>10.95</td></tr> <tr><td>Atari ST Dust Cover</td><td>4.70</td></tr> <tr><td>Mouse Mat (thick soft type) ..</td><td>4.95</td></tr> <tr><td>Mouse House</td><td>2.95</td></tr> </table> | Joystick/Mouse twin extension | 4.70 | 4 Player adaptor lead | 5.88 | Atari ST Printer cable | 6.99 | Atari ST to ST serial lead | 10.95 | Atari ST Dust Cover | 4.70 | Mouse Mat (thick soft type) .. | 4.95 | Mouse House | 2.95 | <p>WeServe Larger items delivered by Securicor</p> <p>ST/Review Dept. 40-42 West Street Portchester Hants PO16 9UW Tel: 0705 325354</p> | | |
| Joystick/Mouse twin extension | 4.70 | | | | | | | | | | | | | | | | | | |
| 4 Player adaptor lead | 5.88 | | | | | | | | | | | | | | | | | | |
| Atari ST Printer cable | 6.99 | | | | | | | | | | | | | | | | | | |
| Atari ST to ST serial lead | 10.95 | | | | | | | | | | | | | | | | | | |
| Atari ST Dust Cover | 4.70 | | | | | | | | | | | | | | | | | | |
| Mouse Mat (thick soft type) .. | 4.95 | | | | | | | | | | | | | | | | | | |
| Mouse House | 2.95 | | | | | | | | | | | | | | | | | | |



CHECK LIST

Follow our top ten tips if you're thinking about buying a word processor. . .

- Make sure that it's compatible with as wide a range of other programs as possible.
- Any decent word processor will save out ASCII files.
- Does it offer a wide range of fonts?
- Is its dictionary large enough?
- How many dictionaries does it have?
- Does it include specialist fonts?
- Does it have a thesaurus?
- Does it have a lot of printer drivers (and, more importantly, one that you can use on your printer)?
- Make sure that it has a good range of typographical and formatting commands.
- Can it import graphics/Neo/Degas/.IMG/TIFFs?

According to their makers, here are some of the features that the packages we've reviewed have to offer. Please note that these lists are not exhaustive. . .

REDACTEUR 3

- Multiple rulers, paragraph styles and page layouts
- Choice of character height/width and line spacing
- Footnotes and endnotes
- Automatic creation of tables
- Graphics handling (16 formats recognised)
- Programmable macros; text strings and Control key combinations
- Built-in switcher for toggling between programs
- Font Editor
- Editor for mathematical formulae
- English and French spell checking
- Verb conjugation
- Option to save files in compressed format
- Saves in ASCII with or without end of line carriage returns, **First Word (plus)**, **Word Perfect** and **Microsoft Word** formats
- Mail merge with sophisticated database program
- Built-in virus detector and killer.

WORD PERFECT

- Accesses from mouse or keyboard
- Up to five column display, with text running in columns, newspaper-style, or across columns, inventory-style
- Automatic numbering and renumbering of footnotes and endnotes
- Free support service
- Supports over 190 printers

- 115,000-word spell-checker
- 10,000 word thesaurus
- Merge facilities
- Widow/orphan protection
- Overstrike facility available
- Colour selection available
- Automatic page numbering
- Automatic hyphenation
- Automatic Formatting.

THAT'S WRITE

- Comes with at least 10 fonts, including a special symbols font. More are available
- 110,000 word English dictionary
- Optional capitalization of proper nouns
- Additional dictionaries available for French, German, Swiss German, American, Swedish, Italian and Spanish. More are being added
- Prints multi-column text with user-defined gutters
- Automatic generation of Table of Contents and Index
- Imports .IMG files and scale them to any resolution
- Mail-merge built-in with the option to print All or only Selected records
- Full WYSIWYG on-screen display
- Uses GEM interface
- Free helpline available to registered users

- Full access to all commands from keyboard; mouse options available
- supports most common printers allowing use of both the printers' resident fonts and bitmap fonts. Printers supported include: Citizen LSP120, Epson RX, FX, LX, EX series, LQ 500, 800, 850, 1050, 1500, HP Laserjet +, HP Deskjet, HP Deskjet/+500, NEC P5/6/7/9 (180 and 360 dpi), Panasonic KX-P1124, Atari SLM804, Star LC10, NL10, SG10, LC24, NB24.
- COMING SOON: Watch out for our reader comparisons of **Fleet Street Editor**, **Pagestream** and **Timeworks 2**. . . .

CONTACT LIST

You can order the packages you've read about from the stockists listed below.

- REDACTEUR 3**
THE ST CLUB, 2 BROADWAY, NOTTINGHAM NG1 1PS.
TEL: 0602 410241.
PRICE £119, INCLUDING VAT
- THAT'S WRITE**
COMPO SOFTWARE, 7 VINEGAR HILL, ALCONBURY WESTON, HUNTINGDON PE17 5JA.
TEL: 0480 891819
PRICE £99, INCLUDING VAT
- WORD PERFECT V 4.1**
SDL, 10 RUXLEY CORNER INDUSTRIAL ESTATE, EDGINGTON WAY, SIDCUP, KENT DA14 5SS.
TEL: 081 309 5501
PRICE £185, EXCLUDING VAT

HAVE YOUR SAY

If you would like to take part in a reader test, fill in the form below and return it to us at: Reader Test, Atari ST Review, Priory Court, 30-32 Farringdon Lane, London EC1R 3AU.

NAME.....

ADDRESS.....

AGE.....

DAYTIME TELEPHONE

I WOULD BE INTERESTED IN TESTING

THE TOP 30 EDUCATION PROGRAMS

PART TWO: MATHS

In the second part of her round-up of the best in educational software, Pat Winstanley looks at the world of mathematics

COUNT AND ADD

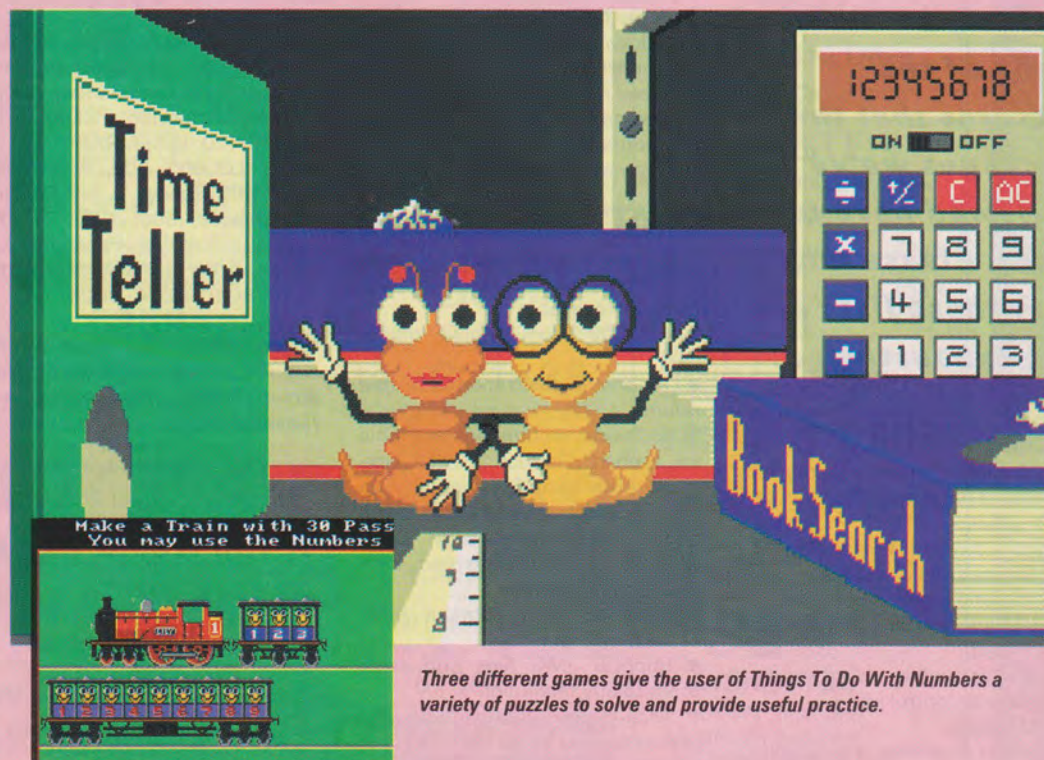
AGES: 4 - 7 ● £24.99 ● LANDER SOFTWARE ● 74 VICTORIA CRESCENT ROAD, GLASGOW, G12 9JN.

IN BRIEF: As its name suggests, this program is aimed at younger children who are just beginning to grasp the basic elements of number work.

Several games are available, covering matching and counting objects and both simple and more advanced addition. All the games are colourful and fun to play with a slightly Scottish voice-over throughout.

Although it is aimed mainly at pre-school and infant children, the program is also suitable for older children who have difficulties with numbers.

As with most Lander products, the child's progress can be recorded on disk or printed out. All the children who have tested this program with me (even the older ones) are enthusiastic about the games. Just enough variety is offered to keep plenty of interest going, but there aren't too many distracting details.



Three different games give the user of Things To Do With Numbers a variety of puzzles to solve and provide useful practice.

ST REVIEW COMMENT: "With user-definable parameters for the type of and number of questions, this program offers lasting fun. Unusually, it also offers some teaching rather than simply practice and repetition. It has a cute doggy character, who lives up to his name of Shades, continuity, and a badge for the kids to fight over. Count and Add is a definite winner."

★★★★

MATH BLASTER PLUS

AGES: 6 - 12 ● £39.95 ● DAVIDSON ● ABLAC COMPUTEC LTD., SOUTH DEVON HOUSE, NEWTON ABBOT, DEVON, TQ12 2BP.

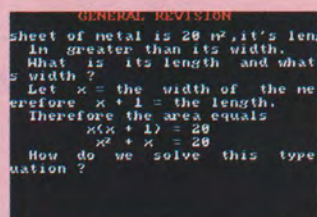
IN BRIEF: This is an American program aimed at the equivalent of our primary ages and is extremely comprehensive. As well as basic arithmetic, it offers practice in fractions, decimals and percentages.

Five sections are available, each

of which offers different ways of presenting simple sums on screen. In addition to the standard $1 + 2 = ?$ format there is also the choice of the $6 + ? = 8$ style. Records can be kept for each child and an editor is available to insert customised questions for specific practice.

Overall the approach is one of plain drilling in four of the five activities, with one game-style section for added interest.

Count and Add



The cute main character of Count and Add provides a focal point for its young users. Colour and fun are the name of the game.



An American program, Math Blaster Plus fails to hold the user's attention. Even the inclusion of a game-style section does little to inspire.



Crude, basic graphics don't detract from the hours of fun to be had from *Hooray for Henrietta*, and not all of them revolve around baths of custard.



Plenty of comic relief and a mixture of innovative puzzles and more traditional games are the highlights of *Maths Mania*.

ST REVIEW COMMENT: "This is a good example of the type of program which goes down well in schools, but doesn't capture a child's imagination at home. The four basic drills are very bland and uninspiring and children rapidly become bored. They are a little more interested in the rocket game, but even that palls after a while. On the whole, this package is most suitable for children who are easily distracted, but like much imported software it is relatively expensive and poor value for money."

☆☆

HOORAY FOR HENRIETTA

AGES: 5 - 12 ● £24.99 ● LANDER SOFTWARE ● 74 VICTORIA CRESCENT ROAD, GLASGOW, G12 9JN.

Henrietta is a not-so-blushing bride whose prospective groom, Henry, has lost his wedding clothes. This program sees the child helping Henrietta's search for the missing garments by answering arithmetic questions at a variety of levels. Several different scenes are used, ranging from climbing a building to rowing in a boat race. In each scene a correct answer moves Henrietta forward - the child's task is to move her fast enough to rescue Henry and his clothes. Failure sees Henry unceremoniously drenched in custard. Although the tasks are timed, it is simple to set difficulty levels to suit any child, and eight are available. Progress can also be recorded and a parent/teacher section allows full customisation.

ST REVIEW COMMENT: "The graphics may be crude, but children love the storyline - especially seeing Henry with the custard. This is the only reservation I have about the program. There is something a little uncertain about making the reward for failure better visually than that for success. Initially children are tempted to fail deliberately, simply to see the fun, but most grow tired of this after a while and use the program as it is intended."

☆☆☆☆

THINGS TO DO WITH NUMBERS

AGES: 5 - 10 ● £11.99 ● SOFT STUFF ● 19 QUARRY HILL ROAD, TONBRIDGE, KENT, TN9 2RN.

IN BRIEF: Unlike many maths programs which concentrate on drilling the basics of arithmetic into a child, this package focuses much more on learning through fun. Three games are included. The first is an interesting variation on addition where the child has to pick the right number and sizes of railway carriage to create the correct number of passengers on a specified train. The second has the child involved in co-ordinates in an attempt to find the hidden square on a grid. The third is a simple time tutor covering both digital and analogue presentation. All the games are basic, but presentation is clear and the character of the series, Buddy the bookworm, helps personalise things for the kids. Although there are four levels of difficulty, the

easiest is perhaps too hard for many younger children. This package demands quite a bit of effort from the parents to make it valuable to infant children. Although such children thoroughly enjoy the games, older ones will gain much greater benefit from the activities.

ST REVIEW COMMENT: "This is the type of package which offers useful practice and reinforcement of skills while disguising the fact from the users. Well recommended for children who can't be bothered with more formal presentations."

☆☆☆☆

EARLY MATHS

AGES: 4 - 9 ● £19.95 ● ESP ● 32A SOUTHCHURCH ROAD, SOUTHEND ON SEA, ESSEX, SS1 2ND.

IN BRIEF: Another package of different programs, *Early Maths* has proved a great hit with all the testers. Twelve different pro-

grams are included, covering a wide range of mathematical concepts. These range from simple counting, matching and sorting, through multiplication and division to a *Tetris*-style geometrical game. Each of the programs is good fun to play, the work side of things being an extra rather than the central point of the activity and the central character, Lizzy, gives continuity. Another character, Meanie, adds to the spice as the child helps Lizzy beat the enemy.

ST REVIEW COMMENT: "This is a well thought-out series of games with simple controls and very good graphics. Children need very little help and quickly become absorbed. Due to the large number of activities, boredom is rarely a problem, particularly for older children who can handle most of the concepts involved. Three skill levels are available, making the package even more flexible. The

Parents often see games as being "anti-educational", but are they right?

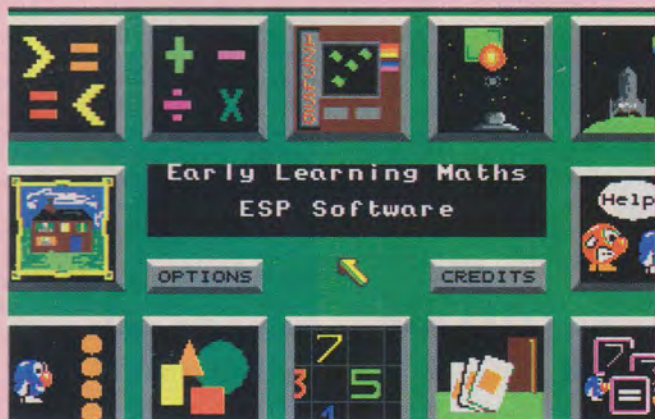
- Should educational programs be like video games? Until recently, almost all educational programs for home use resembled those in schools - simple drilling exercises with no frills and generally little in the way of graphics. The educational aspect was the be-all and end-all, and woe betide the programmer who tried to jazz things up a little for the kids. Now more and more programs are being released where the educational aspects are hidden away behind an ostensible arcade game.
- Does it matter? When you are considering programs aimed for home use, yes it does. Children have had enough of "boring school" when they come home. The last thing they want is to be plonked in front of a screen full of more work. If they want to use

the computer at all they would rather have the latest shoot-em-up than a list of sums or spellings.

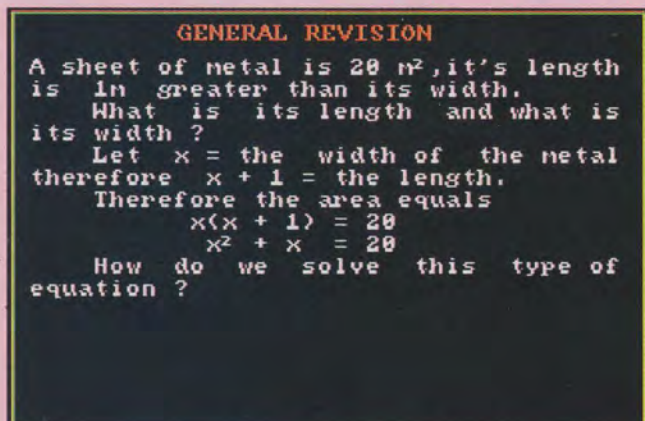
● Designers and programmers are beginning to recognise this with the result that the front-end of educational games are nowadays starting to resemble the latest chart-toppers. This, in turn, is encouraging children to practise their basic skills without even realising it. At the same time, the power of machines like the ST means that mainstream games are beginning to include a great deal of strategy instead of the mindless and unstimulating beat-em-ups of the past few years. Games such as *Populous*, *Captive* and *Dungeon Master* have become classics, partly because of their hidden educational value - they teach calculation, strategy

and logic problems rather than sheer joystick reflex.

- Is academic software boring? Some of the older games are, but newer ones needn't be. However, some children suffer from distraction and those with short attention spans are often better off with a simple program than one which flashes fancy animation at them while waiting for an answer. In the long run, each child is different but none will persevere with a program that doesn't interest them. Choose wisely, perhaps with a taster from the PD market or one of the group packages, and you'll soon find what interests your child.
- The most academically sound program in the world is worse than useless if your child doesn't enjoy it!



Early Maths includes 12 different programs, all featuring the central character, Lizzy. Fun to play, children will become quickly absorbed.



Simply presented, Better Maths is aimed at senior school children preparing for their GCSEs.

one flaw that annoyed the testers was in design. After each game is completed, the player is dumped straight back to the main menu and must reload the required game again for another go."

★★★★

MAGIC MATHS

AGES: 4 - 8 ● PRICE: £22.95 ● SCHOOL SOFTWARE LTD. ● TAIT BUSINESS CENTRE, DOMINIC ST, LIMERICK, IRELAND.

IN BRIEF: Younger children who are just beginning to understand the concept of numbers need lots of practice, which is what this package of five programs provides. Instructions are sparse, but plenty of on-screen help is available, and the games themselves are simple to control. Although the main emphasis is on addition and subtraction, the games also cover counting, number skills and mathematical concept. The games themselves are very simple and non-distracting. For example, one shows a bus which progressively fills with children as questions are correctly answered. Once the bus is full the child is rewarded by the bus driving off.

ST REVIEW COMMENT: "The games are very simple, but they provide a good grounding in the number skills required by this age group, and they also present the necessary concepts from a variety of angles. For a child struggling with a particular aspect this helps to both reinforce the drill involved in early sums and also help when learning from the first principles of a mathematical approach. While not as jazzy as some modern packages (animation is basic to say the least) the individual programs present maths puzzle-style, which will have the kids coming back for more."

★★★★

MATHS MANIA

AGES: 8 - 12 ● £22.95 ● SCHOOL SOFTWARE LTD. ● TAIT BUSINESS CENTRE, DOMINIC ST, LIMERICK, IRELAND.

IN BRIEF: Second in the series and aimed at juniors, *Maths Mania* follows a similar format to *Magic Maths*, but with the addition of multiplication, division and logic. The puzzle element is much more evident at this level, with a *Mas-termind*-style game to start things off. This particular game will have adults scratching their heads too! Also on the puzzle theme is a memory and matching game where shapes shown on a grid must be memorised and replicated.

The three remaining games are more traditional and involve simply doing sums. However, there is plenty of simple action in the background to add spice.

ST REVIEW COMMENT: "This is a well-presented package and an ideal follow on to *Magic Maths*. All the games are simple to operate and fun to play without the graphics being too distracting. A particular favourite is the submarine game where sailors are so disgusted at a wrong answer that they jump overboard. This age group appreciates the touch of urgency and comic relief which tends to put younger children off and the package is well-balanced to cope with this. It is also good to see logical skills well covered in addition to games which demand fairly sustained concentration."

★★★★

BETTER MATHS

AGES: 12 - 16 ● £22.95 ● SCHOOL SOFTWARE LTD. ● TAIT BUSINESS CENTRE, DOMINIC ST, LIMERICK, IRELAND.

IN BRIEF: For senior school children, aiming at GCSE and similar exams, this package is very comprehensive. It combines both tuition and practice in an attractive way, and is much more business-like than the programs for younger children. In essence, it is an interactive text book and works extremely well. The first section is a tutorial which goes through the basics of a topic, then begins to ask questions based on the material just covered. The student can continue even if the question is answered wrongly, but the approach tends to highlight areas of difficulty. Other sections consist of multiple choice questions on the topics covered in the tutorial.

ST REVIEW COMMENT: "One drawback with the tutorials is that there are many methods of performing essentially the same operations, and if the method used by the student at school is different from that in the program, some confusion may result. On the other hand, being able to look at a topic from a different angle is often the key needed to understanding rather than rote learning. Many different topics are covered including factors, series, linear equations and ratios to name just a few. Many adults will find this package useful to brush up their half-remembered lessons too and simple presentation and control make the program a joy to use."

★★★★

MATHS DRAGONS

AGES: 6 - 12 ● £14.99 ● COOMBE VALLEY SOFTWARE ● 18 NELSON CLOSE, TEIGNMOUTH, DEVON, TQ14 9NH.

IN BRIEF: Although the text adventure format is used extensively in schools, very few educational programs aimed at home machines use it. One

exception is **Maths Dragons**, which is written with STAC and combines the logic required for such games with reading and typing exercises. The core of the game, however, is the maths element. The plot places the child in the lair of a set of friendly dragons. The baby dragon has scattered pieces of a train set around and the task is to collect them all. In the course of moving round the lair, various adult dragons appear and ask maths questions. A wrong answer results in a hard-won piece of loot being confiscated. Various difficulty levels can be set, as can the type of question to be asked, such as addition-only, or multiplication and division. This makes tailoring the game very simple.

ST REVIEW COMMENT: "The basic framework of the adventure can't be changed, but this doesn't matter as it's easy for younger children to use, but still fun for older ones. Most children will need some help at first, particularly with the mapping side of things, but they'll quickly get the idea, so that they can be left to get on with things themselves. Well recommended for all ages."



MICKEY'S RUNAWAY ZOO

AGES: 2 - 5 ● £25.99 ● INFOGRAMES
● 18A OLD TOWN, CLAPHAM, LONDON, SW4 0LB.

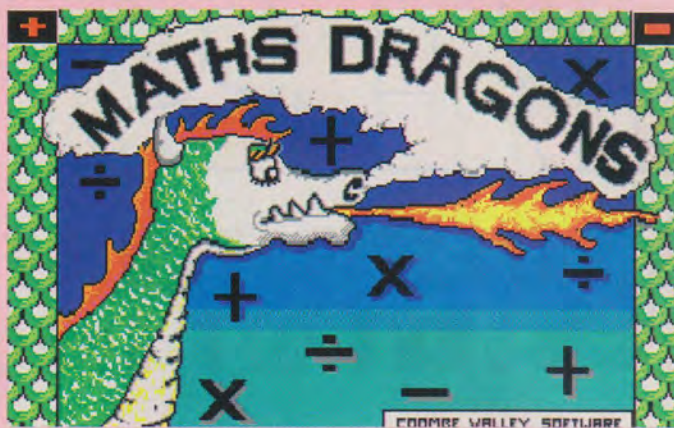
IN BRIEF: Matching a numeral to the quantity it represents is quite a hurdle for young children, but this fun Disney game helps to teach the concept through repetition.

All the animals have escaped from the zoo and are hiding around various screens. Each different animal is represented by a number which flashes on the screen. The child's task is to find that number on the keyboard, and the reward is to watch an animation of that number of animals dutifully trooping into a holding cage. Regular repetition is the key to the game — and it works well, as children come back for more each time.

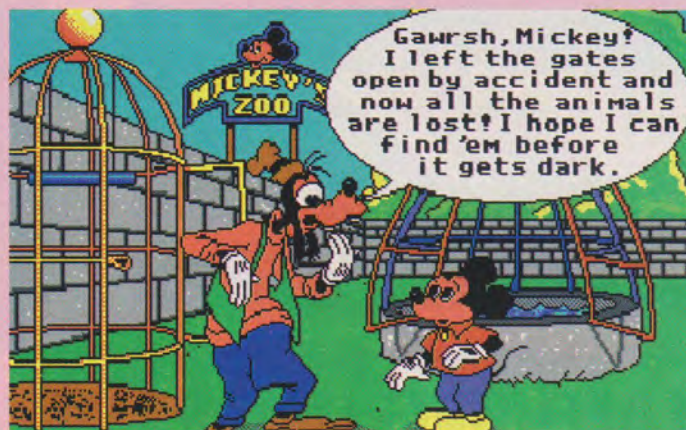
The graphics are of almost cartoon standard, as you might expect, and the game itself is simple enough for the youngest child to play.

While not particularly valuable educationally, in a formal sense the game offers reinforcement in a way that books can't.

ST REVIEW COMMENT: "Children of all ages will love watching the animations — and so will most adults. This fact removes the boredom factor — indeed, using an educational package with your child can be great fun."



Using STAC, *Maths Dragons* combines mathematical exercises, adventure games, and reading and typing tutorials.



Mickey's Runaway Zoo features some excellent cartoon-style graphics which will hold the adult's attention as well as the child's.

TEN DOS AND DON'TS

Following our top ten golden rules means that you'll always spend wisely when purchasing for your child...

DOS

DO choose programs that children will enjoy as well as learn from. This is playtime, not homework.

DO try the program with your child in the shop if possible.

DO take recommended ages with a pinch of salt. Those suggested by publishers can be wildly inaccurate.

DO look for programs which can be backed up. Disks and children are not a happy combination.

DO aim for a program the child can operate independently. This means that you will need to look for mouse and icon control options for younger children.

DON'TS

DON'T worry if your child seems happiest with a program aimed at a younger age group. It will still be having useful practice.

DON'T ignore arcade games — many have useful educational elements like mapping, buying objects and memory aspects — and don't forget physical co-ordination and reflex formation.

DON'T assume that programs cover all of the National Curriculum, although most educational programs cover at least some elements.

DON'T assume that any program will teach. Some will, but they are few and far between. Most offer only practice at the skills the child has already acquired.

DON'T assume that your child can be left alone. Disk swapping and on-screen instructions beyond the child's reading abilities are very common.

POWER TO

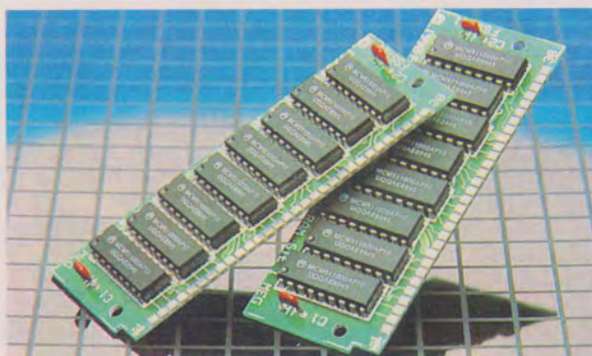
ST REVIEW'S LATEST BATCH OF CONSUMER GOODIES AND MONEY OFF SPECIALS...

CHEAP MEMORIES...

MEMORY UPGRADES FROM ONLY £15.50 PER HALF MEG

Last month's memory offer saw hundreds of you upgrade your STs to the minimum requirement for many current games and programs. This could be the last chance for you to take advantage of ST Review's offer of the CHEAPEST HALF MEGABYTE UPGRADES available in the UK and possibly the world...

Yes, if you're a little worried that there are more and more games coming out that are 1 Mb only, or want to run a higher legal word processor or other serious utility then you need a memory upgrade.



ST REVIEW HALF-MEG UPGRADE

I've searched high and low and have to admit that ST Review really has the lowest priced half Megabyte ST memory upgrades anywhere. What's more, unlike some other boards, your STFM upgrade boards can be upgraded further to 2 Megs. So please supply me with the following upgrades for the following machines...

- 520 STE £15.50
- 520 ST £40.99
- 520 STF £40.99
- 520 STFM £40.99

All prices include VAT and postage and packing. Please allow 21 days for delivery

I enclose a cheque/postal order made payable to: EMAP IMAGES for

£.....
Name:.....
Address:.....

Please debit my Access / Visa Card

£.....
Card Number:.....

Expiry Date:.....

Signature:.....

Send all orders to: ST Review Memory Offer, Priory Court, 30-32 Farringdon Lane, London EC12R 3AU.

THE PUNTER!

VIDEO TITLER ST/STE VERSION 2.00

You've no doubt tried the amazing version 1.00 of this amazing package from the ST review cover disk and have now titled every video that you own in your house. But still you want more? You've read the review on page 47 of the latest version of Video Titler (the all-singing and vastly improved Version 2.0) and you now slaver for a copy but don't want to spend a whole £34.95

Slaver ye not - ST Review can now bring you a crisp fiver off the price of **Video Titler 2.0**, and another £10 off the price

of **Art Master**, the art program that complements it, for anyone that buys the package through these pages...



VIDEO TITLER V2.0

I want to give all my videos that professional look (even the ones that I record straight from the TV) by putting in my own titles, fades, wipes, flips, scrolls and such. So please send me the following package...

Product
Video Titler v 2.0
Video Titler + Art Master

| | |
|---------------|------------------|
| RRP | Our Price |
| £34.95 | £29.95 |
| £64.90 | £49.95 |

All prices include VAT and postage and packing. Please allow 21 days for delivery

Please debit my Access / Visa Card

I enclose a cheque/postal order made payable to:
LASER SOFTWARE
PUBLISHING for

£.....
Card Number:

Expiry Date:

£.....
Name:.....
Address:.....

Signature:

Send all orders to: ST Review Video Offer, Laser Distribution, PO Box 1, Callington, PL17 7YZ.

You don't have to be Einstein to get the most out of your Amiga with...

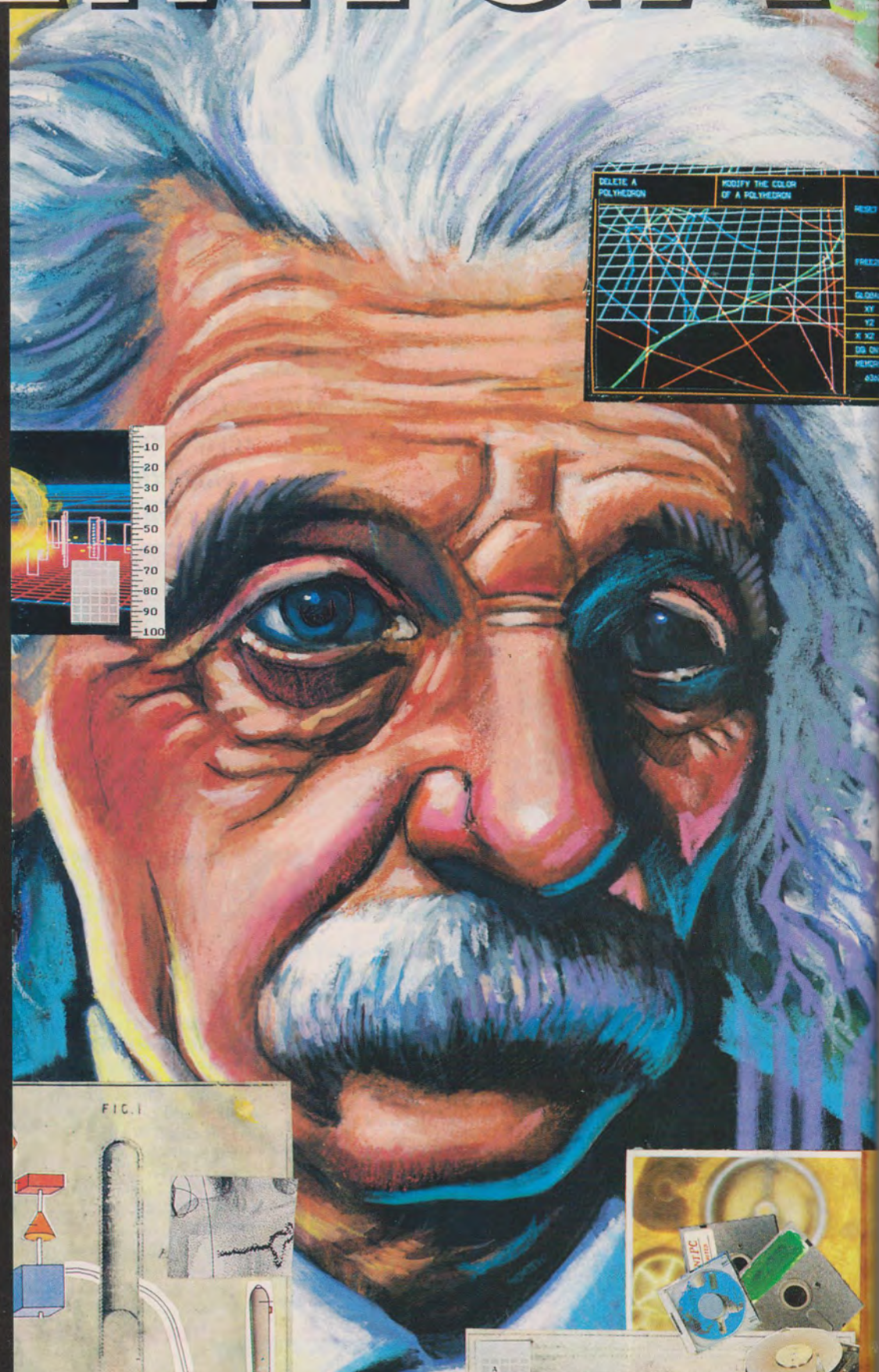


AMIGA

CU Amiga offers you easy access to all the possibilities that your Amiga holds. Packed with a breadth of coverage beyond games, CU Amiga delivers -

- **The ultimate peripheral coverage.** Extensive, clear guidelines on what's available, how you can use it and what's best to buy
- **Unsurpassed hardware coverage.** CU Amiga was the first magazine to regularly feature CDTV.
- **The best buyers guide.** At least 33 pages packed each month with all the information about what's best
- **60 non entertainment products** put under the microscope each month
- **100+** games reviewed every month.

Beyond games with...
CU AMIGA



SCREEN SCENE

LINK UP GAMES

64

Linking your ST to another means double the fun. Learn how to prepare your machine for head-to-head gamesmanship with one or even up to three more players. All of this plus a look at some of the best link-up games.

ALCATRAZ

71

Escape from the hell-hole island that lies off San Francisco in Infogrames' shoot-'em-up.

GRAND PRIX

72

Microprose's super realistic race game wins an Essential Buy award. . . .

ELVIRA 2

79

The heavy metal harpie is back with a vengeance. . . .

VIDEO KID

76

Gremlin's latest foray is an escape into the world of video.

SPECIAL FORCES

82

Microprose's elaborate action epic blasts a hole through the opposition.

DIY STOS GAMES (PART TWO)

86

Super Squirrel leaps off the drawing board.

ALL-TIME TOP FIFTY GAMES (PART TWO)

92

Six whole pages devoted to what we at ST Review consider to be the very best in ST software to date.

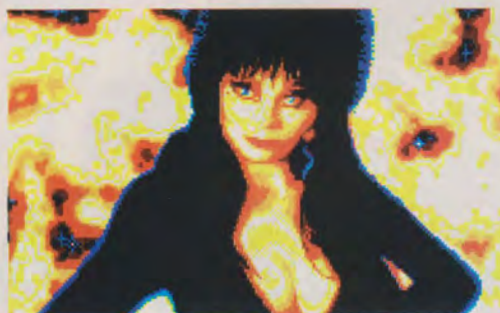
LYNX

99

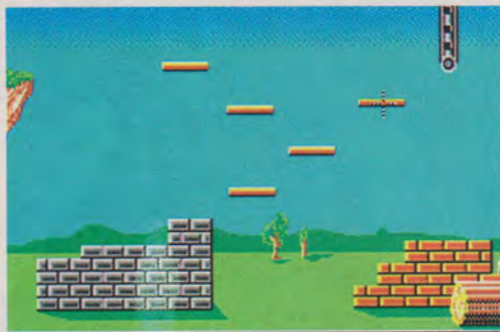
The top ten all-time greatest Lynx games.



Link-up to a friend and then destroy. . . .



She's back in a big, bad way. . . Elvira 2.



Learn how easy STOS games are to program.



VFM: ST Dragon scorches its way onto budget.



Hot rubber, hot gaming with Grand Prix. . . .

Welcome to *Screen Scene*, where each month we'll be looking at the very best in entertainment on the ST. The hottest games in each issue will get the full *ST Review* treatment – up to four pages of lively and informed comment from some of the most respected games reviewers in the business.

We also reckon that we've got one of the best ratings systems, with all the information that you need in one at-a-glance box. And the *Step-By-Step* guides will run you through game sequences, giving you a real feel for the action. Add to this the easily digested *Pros and Cons* box and the coveted *ST Review Essential Buy* award and you're left with all the ingredients to make the right game purchase, first time, every time.

VFM

Before you pay out why not check out what's the best Value For Money?

RAINBOW ISLANDS

88

The must for everyone's software collection now costs only £7.99. . . .

SHADOW WARRIORS

88

A few levels of whack 'n' smack now cost less.

DIZZY'S EXCELLENT ADVENTURES

89

It sounds like the fabulous Bill and Ted film – but is it as entertaining?

ST DRAGON

89

Snuff the magic dragon. . . .

NAVY MOVES

90

Man overboard! Dinamic does another duck

QUATTRO FIGHTERS

90

Four blasters from the Codemasters.

One computer, two computers, three computers, four... Paul Presley takes a look at how a simple cable can completely transform a standard game into something much, much better

MAKING THE CONNECTION



Thrashing a computer-generated player on a particularly tough level of *Populous II* is one thing, but it can't beat thrashing a friend on the same level. You can't crow over a computer, but seeing the look of humiliation in your best bud's eyes is definitely one of those

Kodak moments.

Multi-player games have always had an edge over their single counterparts (just ask anyone who's ever played *Kick Off 2* - which is probably most of us). Having

two joysticks sticking out of your machine instead of a 'stick and a mouse is nothing new. Having two STs joined at the hip by an RS232 cable isn't that

unusual either: it's just not as commonplace.

There are quite a number of games available that allow for linked-up challenges, either through cables or modems. While the majority of these

are modem only, not everyone can afford the huge telephone bills that are incurred by killing your friends over a telephone line. A much cheaper and easier method (providing you can easily transport your ST from one place to another) is to use a null modem cable to link two machines together. It's a simple case of plugging it into the correct sockets, loading up the game(s) and selecting the correct options.

Most link-up games work with the null modem cables but it's best to check with your dealer or the software house before committing yourself.

WHAT LIES AHEAD?

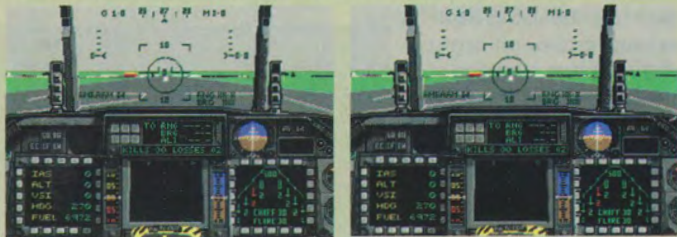
Unfortunately, there's not a vast amount currently happening in the world of linked STs. Although firms such as Bullfrog are ensuring that all of their future games will allow for two players, the whole area is still untapped. The most likely explanation is that the vast majority of ST owners don't want to lug their machines from one place to another and the software companies know this.

The future, however, does look like being a networked one. Already in the States, most major software houses have network setups and although they obviously concentrate more on IBM PC users, anyone with a modem can generally join in the fun.

Networks open up whole worlds of multi-user entertainment, such as flight sims, with everyone in their own planes all battling against each other. It's very much a basic version of the Cyberpunk future where people

LINK-UP ACTION

Here's a quick example of a two-player game in action and what to expect in two-player mode. The game we've chosen is *F-16 Combat Pilot* and the task is simply to find and kill each other. Nice game, really. . .



To start the fight, each player has to locate the other using the target co-ordinates supplied at the start. These are constantly updated as each player is flying to give you an accurate read-out of your opponent's position.



After a spot of nifty aerodynamics, Player A is in a position to fire. Player B can see him approaching from the rear and realises the game is almost over.



A quick Sidewinder up the tailpipe and it's all over for Player B. Better luck next time.

access virtual worlds through their computers: while that kind of thing may be a long way off, networks have been around for a long time in the shape of bulletin boards and CompuNet.

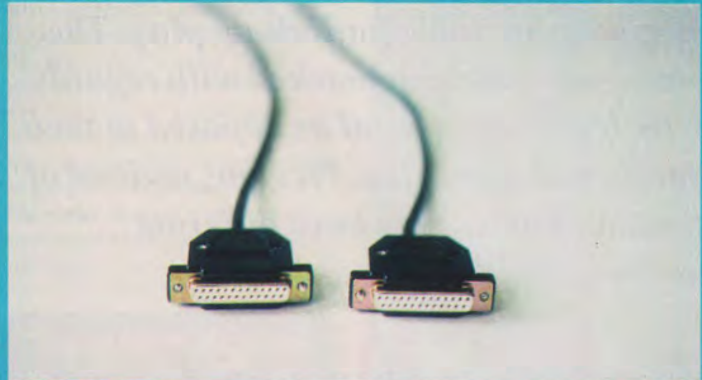
For the time being, null modem cables offer a breath of new life for plenty of old and new games, you just have to look for them.

If you want the thrill of playing against a large bunch of strangers, there are several good multi-user modem games available. *Federation* and *Air Warrior* are the two biggest in Europe.

Federation is a text adventure that's been running for years and shows that, no

matter how clever parsers become, you can't interact with computerised characters like you can with the real thing. The same can be said of *Air Warrior*, Europe's first and only graphical multi-user modem game. It's a fast-paced flight sim, where you become part of a human campaign fighting enormous battles. Recently On-Line, the company responsible for both games, made a satellite link with the US, and the battle that followed will go down in history as one of the bloodiest ever. Having the option to take party in such an event is a dream come true to a lot of people, and there lies the beauty of modem games.

STEP BY STEP



1 The process of joining two STs together isn't as complicated as you might think. All you need is a null modem cables with a female 25-way D socket at either end.



2 To join the computers together, make sure they're set up in suitable positions and the cable will reach between the two. Then plug each end of the null modem cables into the modem ports on the back of the STs.



3 And that's it. Both computers are now linked together and you're ready to race, fly or shoot head-to-head with your friends. All you have to do is turn on the computers, load the games in the normal way and select the two-player option from the menu. The games' manuals normally have full instructions on how to set up the options to get linked play, but if you are confused, you should give the game's producers a ring and talk to their technical support departments.



To give you an idea of what's available in the world of link-up games, we've taken a look at four of the best (and worst) titles currently available for link-up play. The games have all been marked with regards to their link-up appeal as opposed to their standalone gameplay. Previous reviews of the same games may have differing opinions and scores

F-16 COMBAT PILOT



Digital Integration really made its name on 16-bit machines with this simulation of everyone's favourite Falcon. Despite looking positively wimpish by today's standards, F-16 is still one of the most technically accurate simulations going. Having just been released on DI's budget label (Action 16), it's well worth considering if you're looking for some good, solid two-player action.

The dogfight starts with both players sitting on runways at opposite ends of the map, being given range, direction and altitude information about each other. From there it's just a case of getting up into the air, finding each other and pressing fire. One problem with modern-day dogfights is that if one person is particularly quick off the mark with a missile, it's curtains for the other. On top of that, F-16s tend to fly pretty fast, so you really only ever see each other for very short bursts.

If you can resist the temptation to play with missiles and just stick to the cannons,



you're going to get a lot out of it. Otherwise, only the really experienced pilots that know the secrets of dodging Sidewinders will be able to get a decent fight out of each other.

"A case of blink and you'll miss it"

NAME: F-16 COMBAT PILOT
COMPANY: DIGITAL INTEGRATION/ACTION 16
CONTACT: 0276 684959

PRICE: £9.99
RELEASE DATE: NOW
MIN MEMORY: 0.5Mb

GRAPHICS ○○○☆☆☆
SOUND ○○○☆☆☆
VALUE FOR MONEY ○○○☆☆☆
PLAYABILITY ○○○☆☆☆

OVERALL **80%**

LOTUS TURBO CHALLENGE 2

Lotus 2 has an automatic advantage over other link-up games in that it allows for four players to join in the fun.

Thanks to the split-screen view on each machine, you can have a quartet of cars smashing, bashing and crashing into each other. The game has had a mixed reception from the public. Some have said that the original was infinitely better, others have said this sequel leaves the other on the starting grid. Whatever your views, any game that can cram four people



would have had plenty of incentive to keep going. It's still plenty of fun, though, and even if you're not too experienced at it you can have a good time knowing that "Player 1 is just ahead" throughout the entire race.



round a monitor at once is going to be enjoyable.

Even if you hated it originally, Lotus 2 can hardly fail to excite you with three other human-controlled cars to contend with. Unfortunately, it's not quite as well done as it could be. With four players, there's a high chance that at least one of them isn't going to be very good at the game and won't make it past the first checkpoint, while another will be a Lotus 2 expert and will be able to carry on long after the others have been eliminated. For the link-up version, Gremlin could quite easily have changed the style of the game, got rid of the checkpoints and just made it an out-and-out race to the end between the four players and a number of computer-controlled drones. Playability would have been much higher as people wouldn't keep being eliminated 40 seconds after they start and everyone

"An excellent racing game that could have been better designed"

NAME: LOTUS TURBO CHALLENGE 2
COMPANY: GREMLIN
CONTACT: 0742 753423

PRICE: £25.99
RELEASE DATE: NOW
MIN MEMORY: 0.5Mb

GRAPHICS ○○○☆☆☆
SOUND ○○○☆☆☆
VALUE FOR MONEY ○○○☆☆☆
PLAYABILITY ○○○☆☆☆

OVERALL **79%**

POPULOUS & POPULOUS II

ATARI ST
ESSENTIAL BUY

When first released, *Populous* took the games playing world by storm. Even die-hard arcade fanatics stopped to take a look at the most user-friendly strategy game to date. The challenge of being a God, coupled with the simple control system and excellent presentation, shot it straight to the number one slot where it seemed to stay for a well-deserved eternity.

The idea was simply to guide your populace, through acts of divine interference, into a strong enough position to take over the land occupied by your opposing deity and his mob of citizens. Acts could include conjuring up huge mountains in the middle of a sprawling city, turning your tribe's leader into a fierce killing machine, ploughing your way through



the opposition or even summoning up every one of your people and marching them all off to a final, cataclysmic battle with their neighbours. *Populous II* (released late last year) took the basic idea of the first game and improved on it by adding new powers to your godly arsenal and creating plenty of new obstacles for you and your masses to overcome.

As standalone games, both titles are immensely enjoyable, but when you link them up to another ST, they enter completely new dimensions. For a start, everyone has had plenty of time to create winning strategies for the computer opponents, magazines have printed all manner of hints and tips for aspiring godlets to follow and everyone considers themselves a bit of a master. Beating computer opponents that can't alter their plans is pretty straightforward, but when you go up against a human mind with the same thoughts and unpredictability as your own, you might as well scrape the board clean and start all over again. The battles become

emotional roller coaster rides. Swamping your opponent's land is more than just a strategic ploy, it's an act of sheer spitefulness that warrants untold amounts of bitter revenge. When one stands victorious at the end of it all, you really feel as though you've achieved something worthwhile. There isn't an experience quite like two-player *Populous* (and *Populous II*) and purchasing both games is highly recommended.

"Excellent strategy fare thanks to completely 'human' opposition"

NAME: POPULOUS I+II
COMPANY: ELECTRONIC ARTS
CONTACT: 0753 549442

PRICE: £25.99
RELEASE DATE: NOW
MIN MEMORY: 0.5Mb, 1Mb

GRAPHICS ○○○○○☆
SOUND ○○○○○☆
VALUE FOR MONEY ○○○○○☆
PLAYABILITY ○○○○○○

OVERALL **94%**



POWERDROME

Before its release, this "simulation" of futuristic spaceship racing looked and sounded like it was to be the racing game to end all racing games. It still looks and sounds extremely nice on budget, but it still has the one serious flaw that stopped it being a huge hit all those years ago.

Powerdrome is completely uncontrollable, whether it's with a mouse, a joystick or with keys. No amount of fine-tuning the engine parts or adjusting the control sensitivity can make it playable enough to keep your ship in the air while you take a corner (if



it was a simple race from one end of a straight corridor to the other, *Powerdrome* would have it made. As it is, the merest flick of a left or right turn sends you careering into a wall from which there is no escape).

A link-up version of *Power-*

drome is an amusing sight. Everyone's lined up at the start, engines revving, waiting for the off. The lights change to green and everyone zooms off into tunnels except for two ships that sail straight into the walls on either side, then straight into each other. It is possible to crawl around the track and as you do (while all of the computer controlled ships are

whizzing by) you can get to see how nice the graphics are and how smooth everything is. It's such a shame that EA didn't decide to update the game and bring out *Powerdrome 2*. I'm sure it would have been excellent if the controls had been right.



WHERE TO GET LINK-UP LEADS

These are available from almost anywhere that sells computers and computer hardware, but most of the companies that produce link-up games also have stocks of cables. The prices vary depending on where you shop, but it's possible to buy them for as little as £9.99 or as much as £25.99.

There are also some games that use the MIDI ports to link machines together but it's always wise to find out first.

These are just a few places where you can buy Null Modem Cables:

Digital Integration
Watchmoor Trade Centre
Watchmoor Road
Camberley
Surrey GU15 3AJ
Tel: 0276 684959

Centresoft
Units 2/3
Holford Way
Holford
Birmingham B6 7AX
Tel: 021 625 3366

Gremlin Graphics
Carver House
2-4 Carver Street
Sheffield S1 4FS
Tel: 0742 753423

Silica Shop
1-4 The Mews
Hatherley Road
Sidcup
Kent DA14 4DX
Tel: 081 309 1111

"A novel idea that is simply uncontrollable"

NAME: POWERDROME
COMPANY: ELECTRONIC ARTS
CONTACT: 0753 549442

PRICE: £VARIES
RELEASE DATE: NOW
MIN MEMORY: 0.5Mb

GRAPHICS ○○○○○☆
SOUND ○○○○○☆
VALUE FOR MONEY ○○○○○☆
PLAYABILITY ☆☆☆☆☆

OVERALL **38%**

NEW



DIVISION ONE 92 REVISION ONE

NEW



DIVISION ONE 92 REV 1

"(The Midnight Oil) treat soccer in the sophisticated way Americans treat their national games." -The Guardian

THE GAME Everyone has their own ideas on what makes a soccer team "tick". Here is the opportunity to put into practice your own ideas. Operating from the English 1st division you must build a squad to challenge for the league title, the FA and League Cups and the 3 European trophies. And as players age, rebuild the team while holding off relegation.

SQUADS/TRANSFER MARKET In a 3 squad system (1st team squad, reserve squad and youth squad), use the continuous intake of youth players and training program to create a squad whose skills reflect your ideas. Supplement these skills with carefully selected transfer market acquisitions. As they age, veterans fade and youngsters develop, keep an eye on the changing skills of your team

SKILLS All players have a balance of 5 skills (no "skill levels") which you must develop by experimenting with your team. Even more important will be your judgement about the effect of the particular team balance or skill combination on the outcome of the match, and subsequently a season of football. Suitable training can develop/enhance skills.

WHAT IS DIFFERENT ABOUT THIS GAME?

Division One 92 transforms the soccer management game. You can concentrate on the football. Experiment with players, formations, team styles. Build your dream squad and check it out in accurately simulated league/cup football. Match results are from a unique soccer match. Every pass, tackle, shot etc. is determined by the players involved. Your choice of skills thus influences match results. Mental arithmetic has been dumped. Football knowledge is the name of the game.

MATCH/STATS Your judgement will be put to the test in this unique 4 minute match/stats simulation against accurately simulated opposition. This is the measure of your team and your most reliable source of information. There are displays of: match flow, two teams, player-with-the-ball, injuries, discipline, substitutions, in-match tactics, goal scorers, possession breakdown and performance assessment.

REVISION ONE

The best just got better! All updates that have been made to Division One 92 over the last six months. In addition the match screen has improved, opposition team info expanded, a European transfer market added and a few more minor changes. An edit program and a customisation program have also been added. The manual has been expanded and the packaging improved.

EDIT PROGRAM. Edit the team and players that make up Division One. Produce your own Division One, or Scottish League, British League, European League, German/Spanish/French/Italian...etc...etc. Or even make up a league of all the best teams you've ever seen.

CUSTOMISATION PROGRAM Customise the 45 man starting squad. Use your own favourite players, or your local side. How about as squad with Pele, Beckenbauer, Best, Cruyff, Maradonna?

THE MIDNIGHT OIL

Tel Sales:
0438 721936

FOR
NEXT DAY DELIVERY

POSTAL SALES

The Midnight Oil
Dept STREV
18, Hazelmere Road,
Stevenage SG2 8RX

2/3 days delivery

Please supply:

| | HC | D1rev1 |
|--|--------------------------|--------------------------|
| Amiga | <input type="checkbox"/> | <input type="checkbox"/> |
| Amiga 1 Meg | <input type="checkbox"/> | <input type="checkbox"/> |
| Atari ST | <input type="checkbox"/> | <input type="checkbox"/> |
| | £19.95 | £19.95 |
| Current owners: replacement disk £1.50 | | |



HEAD COACH V3

"When it comes to the 4th down Headcoach has it". "Headcoach", "TV Sports Football" head to head.

(Pop Comp.)

Headcoach V3 has been described as "the best game ever put onto a computer". It is the complete American Football game, a multi season epic with the very best strategic elements of the real thing. You will call the plays, devise the gameplans and develop the team.

Use the first season (2 pre-season games, 16 regular season games, and the play-offs) to discover your 45 man squad of players. Then exploit the college draft to improve the team and expand your game play to beat the very best the NFL can throw at you.

Players will age and teams will fade (a player will last about 6 seasons), but you will stay and rebuild



For the best in
Educational Software

SUBJECTS

French, Spanish
German, Italian
Science, History
Geography
English Words
Spelling
Arithmetic
Football, Sport
First Aid
General Knowledge
England, Scotland
Natural History

Kosmos are specialist producers of Educational Software designed to help you enjoy learning from your computer. Versions are available for most popular home & business computers. Many of our programs even allow you to add your own lesson material.



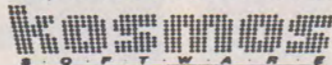
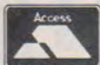
Write or telephone for our
NEW FREE 16-page COLOUR BROCHURE
of Educational & Leisure software

LET YOUR COMPUTER HELP WITH THE NATIONAL CURRICULUM

Kosmos Software Ltd, FREEPOST (no stamp needed in UK)

Dept:STREV DUNSTABLE, Beds. LU5 6BR

Telephone 0525 873942 or 875406



Stretch your screen!

If you haven't got a high resolution monitor, you may be missing out on some of the best software ever written for your Atari ST.

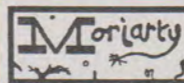
Many essential utilities, lusted-after programs, even games, require the special display of a high resolution monitor, costing upwards of £120. But who needs another monitor when you can use the **Monulator**, a utility that actually *doubles* the resolution of your *existing* TV or monitor, giving you a high resolution display at a fraction of the cost!

Run all those amazing high res programs!

With its unique 640x400 pixel Hi-Def screen, mouse-controlled hardware scrolling, super-fast display algorithms and full Desk Accessory control, the Monulator brings true high res quality to your screen!

The complete Monulator package costs just £20. Credit card orders to Goodman's on (0782) 335650. For more details and screenshots, just send an SAE.

And watch out for Prism, our TT screen emulator - out soon!



MORIARTY SOFTWARE
Dept RV • PO BOX 262 • CRAWLEY
• WEST SUSSEX • RH11 7FJ • UK

CITIZEN

ALWAYS A GOOD IDEA

Silica presents some great offers on the award winning range of high quality matrix printers from Citizen. Each Citizen printer is built in the UK to exacting standards, ensuring superb reliability and output. Our confidence in Citizen's quality is such that we are pleased to include a 2 year guarantee with every printer. Plus, if you buy a Citizen printer (not inkjet) from us, we will give you the Silica Printer Starter Kit (worth £29.38), **FREE OF CHARGE!**

FREE DELIVERY
Next Day - Anywhere in the UK mainland

FREE STARTER KIT
Worth £29.38 - With every Citizen printer (excluding inkjet) from Silica

2 YEAR WARRANTY
Silica offer a 2 year warranty (including the printer head) with every Citizen printer from Silica.

WINDOWS 3.0
Free Windows 3.0 driver. Included with the Silica Starter Kit.

FREE COLOUR KIT
With every Prodott 9 and Swift 24e printer.

FREE HELPLINE
Technical support helpline open during office hours.

MADE IN THE UK
Citizen printers are manufactured to high standards.

DOT MATRIX INK JET AND NOTEBOOK PRINTERS

LOW PRICE 9 PIN PRINTER



144 CPS **80 COLUMN**

- Citizen 120D+ - 9 pin - 80 column
- 144cps Draft, 30cps NLO
- 4K Printer Buffer + 2 Fonts
- Parallel or Serial Interface
- Graphics Resolution: 240 x 240dpi
- Epson and IBM Emulation
- Pull tractor & bottom feed
- **FREE Silica Printer Starter Kit**

RRP £199
SILICA STARTER KIT £25
TOTAL VALUE: £224
SAVING: £109
SILICA PRICE: £115

+VAT= £135.13 ref: PRI 2120

The Citizen 120D printer comes supplied with a parallel interface as standard. If you require a serial interface instead, please state ref: PRI 2125 when placing your order with Silica.

9 PIN PRINTERS



FREE COLOUR KIT

300 CPS **80 COLUMN**

- Citizen Prodott 9 - 9 pin - 80 column
- 300cps Draft, 60cps NLO
- 8K Printer Buffer + 3 Fonts
- Parallel Interface
- Graphics Resolution: 240 x 240dpi
- Epson and IBM Emulation
- Colour Option Available
- **FREE Silica Printer Starter Kit**

RRP £189
COLOUR KIT £169
SILICA STARTER KIT £25
TOTAL VALUE: £255
SAVING: £56
SILICA PRICE: £189

+VAT= £222.08 ref: PRI 2319



192 CPS **80 COLUMN**

- Citizen Swift 9x - 9 pin - 80 column
- 192cps Draft, 48cps NLO
- 8K Printer Buffer + 3 Fonts
- Parallel Interface
- Graphics Resolution: 240 x 240dpi
- Epson and IBM Emulation
- Colour Option Available
- **FREE Silica Printer Starter Kit**

RRP £239
SILICA STARTER KIT £25
TOTAL VALUE: £264
SAVING: £75
SILICA PRICE: £189

+VAT= £222.08 ref: PRI 2209



192 CPS **136 COLUMN**

- Citizen Swift 9x - 9 pin - 136 column
- 192cps Draft, 48cps NLO
- 8K Printer Buffer + 3 Fonts
- Parallel Interface
- Graphics Resolution: 240 x 240dpi
- Epson and IBM Emulation
- Colour Option Available
- **FREE Silica Printer Starter Kit**

RRP £329
SILICA STARTER KIT £25
TOTAL VALUE: £354
SAVING: £105
SILICA PRICE: £249

+VAT= £292.58 ref: PRI 2309

24 PIN PRINTER



NEW! LIMITED OFFER

- Citizen Swift 24e - 24 pin - 80 column
- 216cps Draft, 72cps LQ
- 8K Printer Buffer + 6 Fonts
- Parallel Interface
- Graphics Resolution: 360 x 360dpi
- Epson, IBM & NEC P6 Emulation
- **FREE Colour Kit**
- **FREE Silica Printer Starter Kit**
- **FREE Lotus Ami 1.2 Word Processor and DTP package**
- **FREE Adobe Type Manager V1.15**

RRP £269
COLOUR KIT £38
SILICA STARTER KIT £25
LOTUS AMI 1.2 WP/DTP PACKAGE £95
ADOBE TYPE MANAGER V1.15 (Font) £78
TOTAL VALUE: £506
SAVING: £337
SILICA PRICE: £269

+VAT= £316.08 ref: PRI 2544



FREE PC SOFTWARE

PRINTER + SOFTWARE + COLOUR

Lotus + Adobe software is for PC only on 31" disk

24 PIN PRINTERS



NEW!

192 CPS **80 COLUMN**

- Citizen 224 - 24 pin - 80 column
- 192cps Draft, 64cps LQ
- 8K Printer Buffer + 4 Fonts
- Parallel Interface
- Graphics Resolution: 360 x 360dpi
- Epson and IBM Emulation
- Colour Option Available
- **FREE Silica Printer Starter Kit**

RRP £299
SILICA STARTER KIT £25
TOTAL VALUE: £324
SAVING: £35
SILICA PRICE: £199

+VAT= £233.83 ref: PRI 2484



192 CPS **136 COLUMN**

- Citizen Swift 24x - 24 pin - 136 column
- 192cps Draft, 64cps NLO
- 8K Printer Buffer + 4 Fonts
- Parallel Interface
- Graphics Resolution: 360 x 360dpi
- Epson, IBM and NEC P6 Emulation
- Colour Option Available
- **FREE Silica Printer Starter Kit**

RRP £499
SILICA STARTER KIT £25
TOTAL VALUE: £524
SAVING: £165
SILICA PRICE: £349

+VAT= £411.08 ref: PRI 2574

INKJET PRINTER



NEW!

360 CPS **80 COLUMN**

- Citizen Projel - inkjet - 80 column
- 360cps Draft, 120cps NLO
- 50 Nozzle Head - Whisper Quiet 47dB(A)
- 8K Printer Buffer + 3 Fonts
- Optional HP Compatible Font cards
- Parallel Interface
- Graphics Resolution: 300x300dpi
- HP Deskjet plus emulation

RRP £495
TOTAL VALUE: £495
SAVING: £132
SILICA PRICE: £359

+VAT= £421.83 ref: PRI 2090

NOTEBOOK PRINTER



64 CPS **80 COLUMN**

- Citizen PN48 Notebook Printer
- Non-impact Printing on Plain Paper
- 53cps LQ - 4K Buffer + 2 Fonts
- Rear and Bottom Paper Loading
- Parallel Interface
- Graphics Resolution: 360 x 360dpi
- Epson, IBM, NEC P6 & Citizen Emulation
- Powered From Mains, Battery or Car Adaptor
- **FREE Silica Printer Starter Kit**

RRP £325
SILICA STARTER KIT £25
TOTAL VALUE: £350
SAVING: £101
SILICA PRICE: £249

+VAT= £292.58 ref: PRI 2100

FREE! STARTER KIT WORTH £29.38

This starter kit will help you to get you up and running with your new Citizen dot matrix or notebook printer when you buy it from Silica Systems.

- 3 1/2" Disk - Amiga & ST Drivers
- 3 1/2" Disk - Driver for Windows 3
- 2 Metre Parallel Printer Cable
- 200 Sheets of Continuous Paper
- 100 Continuous Address Labels
- 5 Continuous Envelopes

FREE! CITIZEN AMIGA PRINT MANAGER WORTH £14.95

(LIMITED PERIOD ONLY)

The ultimate printer driver program for your Amiga, which dramatically enhances printed output. Provides drivers for all Citizen printers and replaces Amiga's normal printer preference system - printing is quicker, colours more vibrant, graphics less fuzzy. Easy to use. Print Manager is supplied with its own instruction manual. Main features include:

- Improved Image Smoothing
- Gamma/Colour Correction
- Image Scaling
- Colour Separation
- Reduces/Minimises Banding

ACCESSORIES

- SHEET FEEDERS**
- PRA 1200 1200 £71.38
 - PRA 1210 1240/244/Swift 9/24 £86.79
 - PRA 1220 1240/224/Swift 9/24 £12.20
- SERIAL INTERFACES**
- PRA 1189 1200+ £39.45
 - PRA 1209 Swift 9/9x/1240/224 £32.25
 - PRA 1709 Swift 24/24x/24 £36.59
- 32K MEMORY EXPN**
- PRA 1763 1240/224/Swift 9/24 £15.19
- PRINTER STAND**
- PRA 1242 1240/224/Swift 9/24 £24.03
 - PRA 1274 Swift 9x/24x £39.86
- ORIGINAL RIBBONS**
- RIB 9520 1200/Swift 9 Black £2.91
 - RIB 9540 Swift 9/9x Black £7.15
 - RIB 3804 1240/Swift 24 Black £4.70
 - RIB 3805 224/Swift 9/24 Colour £15.63
 - RIB 3248 PNA8 Multi Strike £3.61
- COLOUR KITS**
- PRA 1226 224/Swift 9/24/24 £35.25
 - PRA 1240 Swift 9x/24x £35.25
- PN48 ACCESSORIES**
- PRA 1148 PNA8 Battery £31.70
 - PRA 1155 PNA8 Cable Exp £2.79
 - PRA 1162 PNA8 Car Adaptor £ 1.90
- Accessories prices inc. VAT & delivery

SILICA SYSTEMS OFFER YOU

- **FREE OVERNIGHT DELIVERY:** On all hardware orders shipped in the UK mainland.
- **TECHNICAL SUPPORT HELPLINE:** Team of technical experts at your service.
- **PRICE MATCH:** We normally match competitors on a "Same product - Same price" basis.
- **ESTABLISHED 12 YEARS:** Proven track record in professional computer sales.
- **BUSINESS + EDUCATION + GOVERNMENT:** Volume discounts available for large orders.
- **SHOWROOMS:** Demonstration and training facilities at our London & Sidcup branches.
- **THE FULL STOCK RANGE:** All of your requirements from one supplier.
- **FREE CATALOGUES:** Will be mailed to you with offers and software/peripheral details.
- **PAYMENT:** By cash, cheque and all major credit cards.

Before you decide when to buy your new printer, we suggest you think very carefully about WHERE you buy it. Consider what it will be like a few months after you have made your purchase, when you may require additional peripherals or software, or help and advice. And, will the company you buy from contact you with details of new developments and products? At Silica Systems, we ensure that you will have nothing to worry about. We have been established for over 12 years and, with our unrivalled experience and expertise, we can now claim to meet our customers' requirements with an understanding which is second to none. But don't just take our word for it. Complete and return the coupon now for our latest Free literature and begin to experience the "Silica Systems Service".

MAIL ORDER HOTLINE
071-309 1111

SILICA SYSTEMS

MAIL ORDER: 1-4 The Mews, Hatherley Rd, Sidcup, Kent, DA14 4DX Tel: 081-309 1111
Order Lines Open: Mon-Sat 9.00am-6.00pm No late Night Opening Fax No: 081-309 0608

LONDON SHOP: 52 Tottenham Court Road, London, W1P 0BA Tel: 081-580 4000
Opening Hours: Mon-Sat 9.30am-6.00pm No late Night Opening Fax No: 071-323 4737

LONDON SHOP: Selfridges (1st Floor), Oxford Street, London, W1A 1AB Tel: 071-629 1234
Opening Hours: Mon-Sat 9.30am-6.00pm Late Night: Thursday until 8pm Extension: 3914

SIDCUP SHOP: 1-4 The Mews, Hatherley Rd, Sidcup, Kent, DA14 4DX Tel: 081-302 8811
Opening Hours: Mon-Sat 9.00am-5.30pm Late Night: Friday until 7pm Fax No: 081-309 0017

To: Silica Systems, Dept STREV-0692-55, 1-4 The Mews, Hatherley Rd, Sidcup, Kent, DA14 4DX

PLEASE SEND INFORMATION ON THE CITIZEN RANGE

Mr/Mrs/Miss/Ms: Initials: Surname:

Address:

..... Postcode

Tel (Home): Tel (Work):

Company Name (if applicable):

Which computer(s), if any, do you own?

Ladbroke Computing International

33 Ormskirk Rd,
Preston, Lancs,
PR1 2QP

Special Offers

520STE Discovery Xtra plus
£259

1Mb 520STE
Disc Xtra plus
£269

1Mb 520STE Disc Xtra plus
with PC Speed emulator
fitted £365

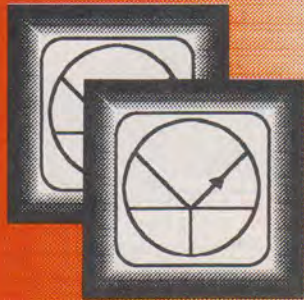
Phone for details of Mega
STE's

Mega 1 STE with 52Mb
Quantum hard drive fitted £859

Mega 1 STE with 4Mb RAM,
105Mb Quantum hard drive
fitted £1139

Phone for details of DTP packs
520 STE with 2Mb RAM, SJ48
Bubblejet, Calamus DTP
software £739

Tel: (0772) 203166
Fax: (0772) 561071



Ladbroke Computing are the longest established Atari dealer in the UK. We have developed an extensive customer service policy which means that we test all Hardware prior to despatch to ensure that goods arrive in working order. Although our prices are not always the cheapest we do endeavour to offer consistently good service and backup. This isn't just our opinion, we were voted 'Best Dealer 1989' by the readers of ST World magazine, not for 'the number of boxes shifted', but for quality service.

All prices are correct at copy date 29/04/92 (while stocks last), and are subject to change without prior notice. Please phone for up to date prices. All prices include VAT & delivery (in mainland UK), there are no hidden extras (WYSIWYG). Next day courier delivery is available for an extra £7 (Mainland UK). All prices available on Mail Order. Shop prices may differ. Shop & Mail order premises: 33 Ormskirk Road, Preston, Lancashire, PR1 2QP. Open Monday to Saturday 9:30am to 5:00pm. Phones answered from 9:00am. Dealer enquiries welcome. Ladbroke Computing International is a trading name of Ladbroke Computing Ltd. All trade marks recognised.

Midistudio Master

Specifications

Timing:
240 pulses per quarter note (ppq) timing resolution. Internal clock-synchronisation-to-hardware of 1/3200 sec (less than 1/3rd millisecond).

Structure:
100 tracks storage - output any 20 simultaneously. Up to 100 phrases may be placed on each track.

Mixdown (per output):
On/Solo/Mute, Volume, Program, Stereo Pan, Transpose, output Channel, Midi-Delay.

Controls:
Play, Pause/Continue, Record, Stop/Clear, Fast Forward (with playback), Fast Rewind, Go To Start, Go To End.

Loop Record (Off/New/Add), Multi Channel/One Channel Record, Multi Channel/One Channel Output Per Track, Tempo 40 to 240 bpm, Half Mode, and Recordable, PSG Metronome, Midi Metronome (tunable, two tones), Phrase Size (from 1 beat, to 68 bars of 4 beats per bar), Five Sync Modes, 240/24 ppq Mode Switch, Bar/Beat Position

Counter, Realtime Stopwatch, Fit-Time Function, Midi Thru (1 to 16, Off, Multi-Channel), Intro (1 to 16, Off, First Note Trigger), Playback Cue Points (8, nameable, displayed in Scroll).

Edit Functions:
Direct insert/change of any Midi event via Midi or mouse.
Local Phrase Playback - Play and Edit only the Current Phrase.

Step Time Input - via Midi or Mouse, user defined step-jumps, note-pitches, note-lengths.
Copy, Split Merge, Append, Rename.

Quantize - 11 levels, Auto, Humanise, Slaccato, Legato

Transpose - To + or - 24 semitones.

Velocity - Level-all, Increment/Decrement All, Auto, Humanise, Rescale.

Filters - Immediate Filters, plus Input Filters for Note On/Off, Program, Bend, After Touch, Controllers (individual and multi).

Insert Continuous, Scaled Controller - Add Pan, Volume, etc., across a phrase.

Delimiters - Transpose/Velocity/Filter delimiters -

91% ST Format 30

All Notes/One Pitch, All Channels/One Channel. Buffer - 'Undo' the last edit/record. File.

Midi standard file compatible. Load Song, Save Song, Load Phrase, Save Phrase, Delete File, Change Drive, Disk Space.

And More...
GEM Interface/Menu/Accessories support. Run 'slave' programs off disk from within Midistudio. TLA Data Systems Pipeline/Modules Facility. Memory-linked modules are called as extra windows.

System Exclusive module built in. System Exclusive Immediate/Auto Load+Send, Midi Song Number Set, and Transmit Midi Song Position Transmt. Remote Midi-Keys Control. Continuous Load+Play (Performance) Mode. Mouse Left/Right Button Exchange. Text Notes Window. Hardcopy Facilities, telephone Help-Line, and Customisation Service.

£99



Data/Pulse

Quantum

Quantum Mechanics

The 3.5" Auto-parking Quantum Mechanisms used in the Data-Pulse range of Hard Drives are made to very high American Military standard and are covered by a 2 year manufacturers warranty (from date of manufacture). They have a typical, effective access time of 9ms utilising a 64K look ahead disk cache. The mechanisms used are also very low power which means they can operate without a fan, reducing noise.

Data-Pulse Hard drives

- All drives are formatted/partitioned and tested.
- DMA device selector & On/Off switch on front of case.
- DMA Out port for daisy chaining extra drives/Laser printer.
- Full metal case measuring 300mm x 285mm x 51mm (wdth), providing good shielding, and monitor stand.
- Choice of controller boards (prices differ) IC board with battery backed clock or GEsoft. Both boards have a data transfer rate in excess of 1Mb per second and are supplied with formatting/partitioning software.
- All drives include backup software, MCP shell programme, Midistudio & Midistudio Master demo's.

Special Offer

We can now offer the excellent Hard Drive Turbo Kit hard drive utilities to all existing and future owners of Data-Pulse hard drives for just £1499.

Phone for details

Data-Pulse Drives

Data-Pulse 52Mb GE £369.99
Data-Pulse 52Mb ICD £389.99

New Prices
Data-Pulse 105Mb GE £464
Data-Pulse 105Mb ICD £484

Aries

84% ST Format 25

Ladbroke Computing have been active in the field of ST Memory upgrades for a number of years and can offer upgrade advice and solutions for the entire range of ST's.

We have developed our own 5/2/4Mb upgrade board using an in house designed, Multi layer circuit board which measures just 52mm x 62mm, smaller than a credit card. We have achieved this miniaturisation by utilising 4 Megabit memory chip technology. The result of this reduction in size is a reduction in cost and more reliable operation, due to the fact that the board resides under the ST's shielding protecting it from interference and reducing Electromagnetic emissions.

The board is manufactured in the UK and hand assembled in our workshops by skilled technicians.

Memory Upgrades

The boards are then thoroughly tested before despatch.

The board now comes in three configurations, 5Mb, 2Mb and 4Mb. It is possible to start with a 5Mb board and to upgrade it to 2Mb and then 4Mb at a later date.

The boards require some soldering, due to the instability of some plug in devices, but are very easy to fit and come complete with full instructions to fit ANY ST including Mega's (except STE's which use SIMM boards). If your shifter chip is not socketed, you will have to desolder it and install a socket which is supplied.

A memory check program is supplied and skilled technicians are on hand to offer technical support.

Monitors

Atari SM144 Mono £ 139.99

Atari SC1435 Colour £ 219.99

The new colour Atan monitor comes with cable and tilt monitor stand.

Philips 8833MKII £ 219.99

includes cable, F19 & 12 months on site warranty.

Philips 15" Cube TV £ 269.99

A 60 channel, FST, Fastext scart input TV which gives near monitor quality. Includes scart cable.

Golden Image

Golden Image External
3.5" Drive £59.99

Includes through port and LED track counter.

Golden Image Hand
Scanner £119.99

Special Offer while stocks last

ST Secure

ST Secure is a security device which uses a combination of hardware and software to prevent unauthorised use of your ST. The 'Timeclock' hardware can be installed in your ST in approx 30 minutes with no soldering involved. Then when you switch on your ST you must enter the correct password using the 'Key disk' or your ST will reset after 45 seconds. Only £25 inc VAT & Delivery

St Internal drive £53.49

A/B Boot switch £14.99

Our technicians can carry out repairs to all ST's. Phone for details.

Printers

Star SJ48 Bubblejet £239.99

Star LC-20 £139.99

Star LC-200 colour £199.99

Star LC24-20 £199.99

Star LC24-200 £229.99

Star LC24-200 colour £289.99

All Star printers include 12 months on site warranty. All printers include ST/Amiga/PC compatible Centronics cable.

Brush Mice

The Golden Image Brush Mouse is an opto/Mechanical mouse in the form of a brush. It has a resolution of 150Dpi, is switchable between ST/Amiga and costs £19.99. The Brush mouse also comes with the excellent Deluxe Paint software for just £24.99

Golden Image Optical Mouse £24.99

The Golden Image Optical mouse has a resolution of 250Dpi, comes complete with mat and is switchable ST/Amiga.

Jin Tech Mouse £12.98

High quality replacement ST mouse.

Emulators

PC Speed,(XT) £ 90

Please state STFM or STE version.

AT Speed £ 150

Includes DR DOS

AT Speed C16 £ 229

Includes DR DOS 6, Socket for 80C287 Co-Processor Norton factor of 8.2

AT Speed-STE Adaptor £24.99

AT Speed-Mega

Adaptor £ 24.99

ALCATRAZ

Infogrames' latest shoot-'em-up offers us a once-in-a-lifetime chance to visit this infamous island prison. Al 'Capone' Dykes checks out the hard cell

This may be San Francisco, but there's no time for Bud breaks on the quayside and there's not a single Japanese tourist in sight. But you won't find yourself short of company: the island of Alcatraz has more dirty rats on it than London's Hackney sewers and naturally you've got dispose of them all. The rats in question here belong to the stinking low-life criminal category which has already been wiped out in many other shoot-'em-up games and keep cropping up with alarming regularity in various parts of the globe to wreak havoc and destruction.

ENEMY TERRITORY
The nasty bunch currently inhabiting Alcatraz belongs to the evil drug baron Miguel

Excellent for two-player games
Large array of weaponry
Precise control

PROS AND CONS

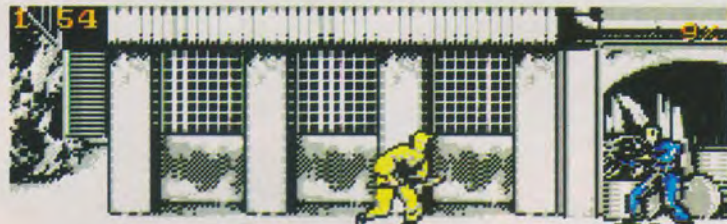
Too much of a formula shoot-'em-up
Changing weapons can be too difficult
Not enough depth



Tardiez, the U.S. Government's public enemy number one. He has been holed up there since the San Francisco earthquake of 1989 and has expanded a vast criminal network using this almost impregnable fortress as his base. Now you (Bird) and a close friend (Fist) must oust the evil Miguel, landing by night on the infamous island with just one hour to complete the mission and a ton of bad guys to sort out.

MADE FOR TWO
Alcatraz can, and should, be played by two players. The screen is permanently split into two halves: top and bottom for the horizontally scrolling sections and left and right for the 3D scenarios, with events happening simultaneously on each half. This makes for some superb action as both players can be in completely different parts of the prison at the same time. However, to move onto a new level both players must reach the same entry point - unless, of course, one of them gets killed along the way. In single-player mode the game is less exciting: the screen remains split in half and co-operative action, in this game at least, is much more fun.

STANDARD FORMULA
There are lots of weapons to choose from, but a maximum of only nine rounds of ammunition can be carried at any



The most useful weapon is the Stayner Aug 77 assault rifle. It bumps off all baddies from a distance, but it only has nine bullets.



Start off with a knife (which is pretty ineffective), then pick up a flamethrower, grenades, time bombs and an assault rifle.

one time and weapons are not easy to change during combat.

Although the graphics are competently executed and there are plenty of realistic sound effects, *Alcatraz* is no more than a standard shoot-'em-up. It seems to have been designed mainly for two players and as such it does shine, but it doesn't really match up to its historic name or its attractive packaging.

"Good two player fun, but nothing new"

NAME: ALCATRAZ
COMPANY: INFOGRAMES
CONTACT: 071 738 8199

PRICE: £25.99
RELEASE DATE: NOW
MIN MEMORY: 0.5Mb

| | |
|-----------------|-------|
| GRAPHICS | ☆☆☆☆☆ |
| SOUND | ☆☆☆☆☆ |
| VALUE FOR MONEY | ☆☆☆☆☆ |
| PLAYABILITY | ☆☆☆☆☆ |

OVERALL **67%**



The flamethrower is very useful, but not too loud, so it shouldn't wake up the guards. Unfortunately, grenades, assault rifles and time bombs will.

If you're not at the meeting point, you'll be left behind.



ATARI REVIEW
ESSENTIAL BUY

FORMULA ONE

Just one of the attractive screens that appear at important parts of the game. Here, I've just crashed.

It's a sharp left at Abbey Curve as Tony Dillon straps himself into Microprose's world-class racer. . .

Games reviewers have been raving about Geoff Crammond's latest foray into the motoring world for months now, and not without reason. With Crammond's impeccable track record, including such giants as *Revs*, *The Sentinel* and, more recently, *Stunt Car Racer*, you'd expect *Formula One Grand Prix* to be something special. You certainly won't be disappointed. This is the closest you can get to actually getting in the car and driving it yourself.

The heart of the game is the racing section itself. Designed as a standalone section, the game can be played from an arcade viewpoint, where you merely race against the clock to get the fastest times you can, or from a more competitive view, where you race in a pack of 26 riders through all 16 of the world championship race-tracks.

However you play it, the

traces follow along the same lines. All of them require you to race a qualifying session, for the fastest possible lap time, which decides your position on the starting grid. The aim of the race is, of course, to finish it in the fastest possible time.

ON THE MENU

Around the race is built an intricate, yet extremely user-friendly menu system. From this you decide how many human players there are, the overall difficulty of the game, and you can choose any driving aids you want to use.

The menus allow you to tailor the difficulty level to suit you, from the rough standards of the other drivers, down to how easy it is to control your car, as well as how much assistance you have from the computer in the form of automatic driving aids. These transcend mere automatic gears, although that is one of the six options

available. On top of that, you can also choose to have an indestructible car, automatic brakes that set you at the right speed for each corner, a car that correctly orientates itself after a spin so you don't end up driving the wrong way, a gear suggestor that tells you which gear to be in at the next corner but doesn't actually change it for you and an ideal line generator, which paints a white dotted line along the track in front of you, telling you the best line through corners. You can also adjust your car, altering speed and handling ratios, along with gear ratios to change acceleration.

LOOKING GOOD

The secret behind a great driving game is a combination of playability and graphics. The game certainly has playability, but that isn't a patch on the graphics. The screen display is a combination of vectors and sprites, creating a really authentic feel. By using vectors for the track and a lot of roadside objects, the ST is pushed to its limits, and it shows by the incredible speeds that the game works up to. Add some cleverly designed animated

sprites, such as marshalls waving flags and a fully automated pit crew, and the look is incredibly realistic. This is, without a doubt, the best-looking race game yet seen on the ST.

INSIDE INFO

Geoff Crammond is one of a rare breed of programmers. His flair for design and coding, along with his love for racing cars and polygon graphics have always kept him at the top of his class. His first foray into racing games was way back in the early eighties when he produced *Revs* on the BBC micro, which was a miracle of programming, if a little hard. Moving on to stranger things, he created the classic *Sentinel*. A strange game based on dominating a mountainous chessboard, it has been on more formats than *BASIC*. Then came *Stunt Car Racer*, one of the most fun racing games ever created, and which finally re-involved his love for racing and coding. Has he created the perfect race game, or does he have more tricks up his sleeve? We wait with bated breath...



The pits is where you go should your tyres blow, engine overheat or if you would just like to see sprites interact with polygons.

With all detail displayed, the update is smooth and fast enough to be enjoyable. Switching through the three display levels (full, medium, low) shows you what your machine is really capable of. Changing down the details just removes trackside objects, such as buildings, trees and spectator stands, detracting from the realism slightly, but that is more than made up for by the enormous boost of speed.

CROWD CONTROL

The game allows you to take part in a full 16-country tour, from the USA to Australia, with all track distances and world records intact. You can

GRAND PRIX



Storming through the highly detailed pack. The blue car in front isn't going to let me overtake without a fight.



Racing down a straight, you can take time to really admire the display. The bushes are sprites, whereas everything else is polygon-based.

DRIVING AIDS

There are six aids to choose from, and these allow you to make the game as easy as you like. With all of these selected, the braking and gear changing is done for you, leaving you to hold the joystick forward and burn your way around the courses. Turn them all off, and you've got a struggle on your hands. They are:

Auto Brakes

With this switched on, the computer will automatically slow the car down to the perfect speed for any corner. It won't slow you when approaching other cars, however!

Auto Gears

Standard automatic gearbox system, without losing any of the manual power.

Self-Correcting Spin

Once you hit an obstacle, or get caught in a pile-up, it's all too easy to race off in the wrong direction. This will ensure that you drive the right way down the one-way track.

Indestructible Mode

This gives your car an armoured shell, leaving you to ram other cars out of the way without sustaining any damage yourself.

Ideal Line

If you're not familiar with a track, this option paints a dotted line for you to follow, which gives you the best racing line around the whole circuit.

Suggested Gear

As an alternative to automatic gears, this device lets you know which gear you should be in for the current part of the track.

Incredibly fast

Very realistic

The best of its kind

PROS AND CONS

Overly tricky on harder levels

No machine link-up

"Realistic and enthralling, an instant classic"

NAME: FORMULA ONE

GRAND PRIX

COMPANY: MICROPROSE

CONTACT: 0666 504326

PRICE: £25.99

RELEASE DATE: NOW

MIN MEMORY: 0.5 Mb

GRAPHICS ○○○○○

SOUND ○○○☆☆

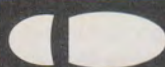
VALUE FOR MONEY ○○○○○

PLAYABILITY ○○○☆☆

OVERALL **94%**



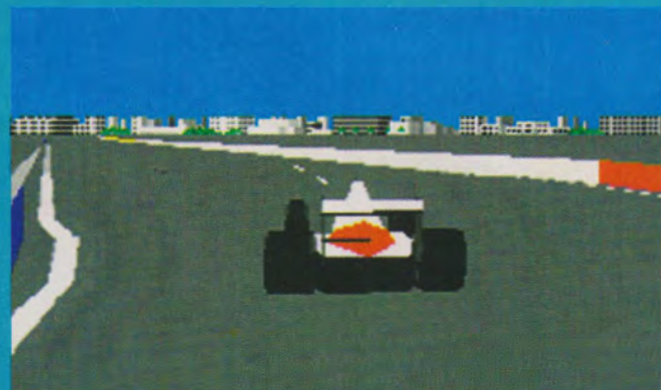
STEP BY STEP



1 Grand Prix allows you to view the outside world in any of three modes. The first, and standard view, is with full detail. Here, everything is displayed, including trees, buildings and crowds.



2 The same corner, this time viewed with medium detail. As you can see, all but the major buildings have been removed. This gives quite an authentic display, but can't match the speed of...



3 ...having the detail level set to its lowest. All buildings are now removed, as are most of the roadside objects, except for the bar track markers and road markings. At this level, the speed is phenomenal!



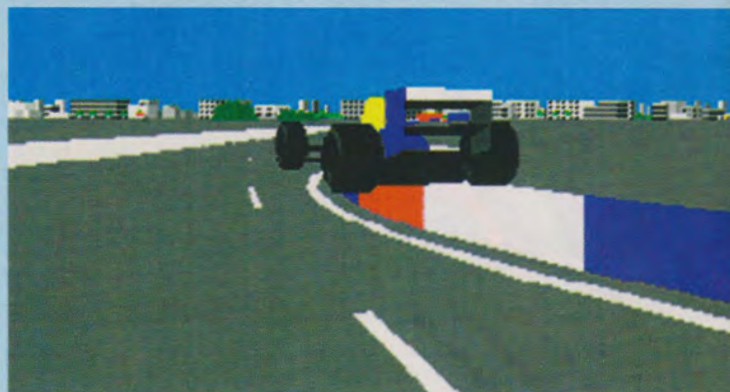
Before each race, you are given a detailed view of the course, in this case the street circuit in Phoenix.



Most game options are available from this menu, from changing the driver's name to making windows pop up faster.



The starting grid, and Robert Davies is nowhere to be seen.



One crash too many, and you'll find yourself being taken off the track and out of the race.

race through these solo if you want to, but like any game it's always more fun with a friend, and **Formula One Grand Prix** allows you to play with up to 35 others if you wish! The way it works is awkward on paper but is fine in practice.

The race is broken up into time segments, with each player taking it in turns to race. While one player is riding, all other human cars are put under computer control, and the game switches control throughout the race. For example, if four players race over a 16-lap race, then each player gets to race for four laps.

The program records the standard of your driving from your qualifying session and drives your car accordingly. Interestingly enough, there's no feature to link machines. This is a real minus point, and something that the game would be ideally suited to.

Amiga owners have been raving about it for ages, but ST owners will be happy to know that the game runs far faster on their machine. **Grand Prix** is the way forward for racing games, and a triumphant product for Microprose. If you like cars, you will die for this game. This should not be missed at any cost.

Over 100,000 people have joined Special Reserve
The club with no obligation to buy
Phone 0279 600204 for a free COLOUR catalogue

Special Reserve

Games Club

0279 600204
Open to 8pm Weekdays
and to 5pm Weekends

ANNUAL MEMBERSHIP
UK £6.99 EEC £8.99 WORLD £10.99
We only supply members but you can order as you join.

The Special Reserve full colour club magazine **NRG** is sent to all members bi-monthly. **NRG** features full reviews of new games plus mini-reviews, all the gen on new products, the Special Reserve charts, Release Schedule of new games and hundreds of special offers.



PLUS - EVERY ISSUE CONTAINS £30 worth of money-off coupons to save even more money off our amazing prices.

We sell games and accessories, all at amazing prices, for Megadrive, Master System, Game Gear, Super NES, Game Boy, NES, Lynx, Amiga, Atari ST, IBM PC, CDTV and IBM CD ROM.

Best Service, Best Prices, Biggest Selection
That's why over 100,000 people have joined Special Reserve.

| | | | | | | |
|------------------------------|----------------------------|-----------------------------|------------------------------|----------------------------|------------------------|------------------------|
| | | | | | | |
| HOLLYWOOD COLLECTION 9.99 | RAINBOW COLLECTION 9.99 | POWER UP 7.99 | F15 STEALTH FIGHTER 14.99 | FLAMES OF FREEDOM 11.99 | MAN UTD EUROPE 8.99 | CAPTIVE 6.99 |
| | | | | | | |
| ANDY JONES ADV 8.99 | KICK OFF 2 8.99 | PLAYER MANAGER 8.99 | LEMMINGS 13.99 | SUPREMACY 9.99 | ULTIMA 5 10.99 | WOLFCHILD 12.99 |
| | | | | | | |
| ELITE 9.99 | GOLDEN AXE 8.49 | F15 STRIKE EAGLE 2 11.99 | ROCKET RANGER 3.99 | SCRABBLE 9.99 | WONDERLAND 13.99 | WHEELS OF FIRE 8.99 |
| | | | | | | |
| THUNDERHAWK 9.99 | | | | | | |

229.99
Philips CM8833
Mk 2 Monitor
FREE MEMBERSHIP
FREE MONITOR LEAD

134.99
CITIZEN 120D+
80 COLUMN, 9 PIN
144 CPS/25 NLQ
24 MTH WARRANTY
FREE PRINTER LEAD
FREE SPECIAL RESERVE MEMBERSHIP

CITIZEN SWIFT 9 COLOUR PRINTER,
80 COLUMN, 9 PIN, 213 CPS, 24 MTH W.
FREE SPECIAL RESERVE MEMBERSHIP
FREE PRINTER LEAD199.99

CITIZEN 224 24 PIN COLOUR PRINTER,
80 COLUMN, 192CPS/64LQ, 24 MTH W.
FREE SPECIAL RESERVE MEMBERSHIP
FREE PRINTER LEAD249.99

AUTO SHEET FEEDER FOR CITIZEN 224 79.99

RIBBON (COLOUR) FOR SWIFT 9 OR 224 15.99
RIBBON (BLACK) FOR SWIFT 2246.99
RIBBON (BLACK) FOR SWIFT 9 OR 120D+ 6.99

SQUIK MOUSE FOR ATARI ST
15.99
SPECIAL RESERVE MOUSE MAT...4.99

COMPETITION PRO
EXTRA CLEAR WITH
AUTOFIRE
9.99

COMPETITION
PRO 5000 (COLOURS
MAY VARY)
8.99

QUICKJOY
MEGAJAY
22.99

QUICKSHOT 111A
TURBO 2
9.99

DELUXE DISK BOX
(HOLDS 80)
10.99

EXTERNAL
DRIVE
FOR ST
54.99

FULL RANGE OF JOYSTICKS IN OUR CATALOGUE

| | | |
|---|---|---|
| Atari ST Software | MARLEQUIN.....16.99 | RBI BASEBALL 2.....19.49 |
| 2 HOT 2 HANDLE.....16.99 | HEAD OVER HEELS.....7.99 | REALMS.....9.99 |
| (OFF ROAD RACER, TOTAL RECAL, SHADOW WARRIOR).....19.49 | HEIMDAL (1 MEG).....17.99 | ROADWYR EUROPA (SSI).....3.99 |
| 3D CONSTRUCTION KIT.....29.99 | HEROQUEST (GEMINI).....16.99 | ROBIN HOOD.....16.99 |
| 3D TENNIS.....8.99 | HILL STREET BLUES.....15.99 | ROBOCOP 3.....16.99 |
| 4 WHEEL DRIVE.....16.99 | HITCH HIKERS GUIDE.....8.99 | ROCKET RANGER.....3.99 |
| (LOTUS ESPRIT TURBO, TEAM SUZUKI, TOYOTA CELICA, COMBO RACER).....19.49 | HOLLYWOOD COLLECTION (ROBOCOP, HOSTELSTERS 2, INDIANA JONES ACTION)9.99 | RODLAND.....16.99 |
| A320 AIR-BUS.....21.49 | BATMAN (THE MOVIE) D/S.....9.99 | ROKKE'S DRIFT.....15.99 |
| ACTION MASTERS.....16.99 | HOME ACCOUNTS 2.....39.99 | RUGBY WORLD CUP SAMURAI - THE WAY OF THE WARRIOR.....19.49 |
| (F16 COMBAT PILOT, ITALY 1990, DOUBLE DRAGON 2, TURBO OUTRUN, WELLTRIS).....18.99 | HOME ALONE.....16.99 | SCRABBLE DE LUXE.....9.99 |
| ADVANTAGE TENNIS.....16.99 | HOCK.....16.99 | SEASTALKER (INFOCOM).....3.99 |
| AFTERBURNER.....7.99 | HUNTER.....19.49 | SECRET OF MONKEY ISLAND (1 MEG).....16.99 |
| AGONY.....16.99 | IAN BOTHAMS CRICKET.....19.49 | SHADOW OF THE BEAST 2.....9.49 |
| AIR SEA SUPREMACY.....16.99 | IK-.....7.99 | SHADOWGATE.....3.99 |
| (GUNSHIP, SILENT SERVICE, P47, F15 STRIKE EAGLE, CARRIER COMMAND).....19.99 | INDIANA JONES ADVENTURE.....8.99 | SHADOWLANDS.....19.49 |
| ALCATRAZ.....15.99 | INDY HEAT.....16.99 | SILENT SERVICE 2 (1 MEG).....22.99 |
| ALJEN STER.....16.99 | INTROSCOPIC CHALLENGE.....16.99 | SIM CITY & POPULOUS.....16.99 |
| ANOTHER WORLD.....16.99 | INT SPORTS CHALLENGE.....19.49 | SMASH TV.....16.99 |
| ARKANOID 2.....7.99 | JAGUAR XJ220 (1 MEG).....17.99 | SPACE CRUSADE.....16.99 |
| ARMOUR-GEDDON.....9.99 | JAMES POND.....7.49 | SPECIAL FORCES.....22.99 |
| AWESOME.....9.99 | JAMES POND 2 - ROBOCOP.....16.99 | SPEEDBALL.....8.99 |
| BAAL.....6.99 | JET + JAPAN DISK (SUBLOGIC).....9.99 | STORM MASTER.....19.49 |
| BARBARAN 2 (PSYGNOSIS).....16.99 | JINXER SUIT LARRY 2 D/S.....14.99 | STOS (GAMES CREATOR).....19.99 |
| BATTLE ISLE.....19.99 | KICK OFF 2.....8.99 | STOS 3D.....24.99 |
| BATTLE OF BRITAIN D/S.....19.99 | KICK OFF 2 FINAL WHISTLE.....9.49 | STOS COMPILER.....17.99 |
| BEYOND ZORK (INFOCOM).....3.99 | KICK OFF 2 GIANTS OF EUROPE.....7.99 | STOS MAESTRO.....19.99 |
| BIG RUN.....16.99 | KICK OFF 2 RETURN TO EUROPE.....7.99 | SUPER CARS (GBH).....5.99 |
| BLUE MAX.....19.99 | KICK OFF 3.....16.99 | SUPER CARS 2.....16.99 |
| BUES BROTHERS.....16.99 | KID GLOVES 2.....16.99 | SUPER HANG ON.....7.99 |
| BONANZA BROS.....16.99 | KILLING GAME SHOW.....9.99 | SUPER LEAGUE MANAGER.....16.49 |
| BREACH 2 (ENHANCED).....18.49 | KINGS QUEST 4 (SIERRA) D/S.....12.99 | SUPER SPACE INVADERS.....16.49 |
| CADAVER LEVELS THE PAY OFF.....11.99 | KLAX.....7.99 | SUPREMACY.....9.99 |
| CAPTIVE.....6.99 | KNIGHTMARE.....19.49 | SWIV.....16.99 |
| CARRIER COMMAND.....7.99 | KNIGHTS OF THE SKY (1 MEG).....22.99 | TNT 2 (HYDRA, SKULL & CROSSBONE, BADLANDS, STUN RUNNER, HARD DRIVEN 2).....16.49 |
| CENTIC LEGENDS.....19.99 | LEADER.....16.99 | TERMINATOR 2.....16.99 |
| CHAMPIONS.....19.99 | LEATHER GODDESSES.....8.99 | THE MANAGER.....16.99 |
| (MANCHESTER UTD, BOXING MANAGER, J.KHANN SQUASH).....12.99 | LEGEND OF THE SWORD.....5.99 | THE SIMPSONS.....16.99 |
| CHAMPIONS OF KRYNN (SSI).....19.99 | LEONARD RAC RALLY.....7.99 | THUNDERHAWK.....9.99 |
| CHAMPIONSHIP MANAGER.....19.49 | LEWIS TURBO CHALLENGE.....8.99 | TIP OF THE FOX.....16.49 |
| CHOTTI ATTACK.....9.99 | LIPTON (MSCROLLS).....3.99 | TITUS THE FOX.....16.99 |
| (LOTUS ESPRIT, GHOULS AND GHOSTS, JAMES POND, VENUS THE FLY TRAP).....19.49 | MANCHESTER UNITED EUROPE.....8.99 | TOKI.....16.99 |
| CHASE H.O 2 (SCI) D/S.....16.99 | MEGA LO MANIA + FIRST SAMURAI.....19.99 | TOYOTA CELICA GT RALLY.....7.99 |
| CHUCK ROCK.....16.49 | MEGA TWINS.....16.99 | TURBO CUP (WITH CART).....4.99 |
| CHUCKIE EGG.....9.99 | MEGATRAVELLER 1.....19.99 | TURTLES 2.....16.99 |
| CHUCKIE EGG 2.....9.99 | MURDER D/S.....16.99 | TV SPORTS BASEBALL.....10.99 |
| CORPORATION.....7.99 | MURDER OF PERSIA.....7.99 | ULTIMA 5.....19.99 |
| CORRUPTION (MSCROLLS).....3.99 | MERCHANT COLONY.....18.99 | ULTIMA 6.....20.99 |
| COVERT ACTION.....22.99 | MICROPROSE 3D GOLF.....9.99 | UNINVITED.....16.99 |
| CRUISE FOR A CORPSE.....19.99 | MIDWINTER.....19.99 | UNIVERSAL MILITARY SIMULATOR 2 (1 MEG).....22.99 |
| DAILY SPORTS COVER.....16.99 | MOONSHINE RACERS.....12.99 | UTOPIA.....19.49 |
| GIRL POKER.....3.99 | MOONSTONE.....19.49 | UTOPIA NEW WORLDS DATA.....11.49 |
| DEJA VU.....3.99 | MURDER D/S.....16.99 | VENGEANCE OF EXCALIBUR.....19.49 |
| DEUTEROS.....16.99 | NITRO.....6.49 | VENUS THE FLY TRAP.....7.49 |
| DOUBLE DRAGON 3.....16.99 | OPERATION WOLF.....7.99 | VROOM.....16.99 |
| ELF.....16.49 | PAINTWORKS (ART PACKAGE).....6.99 | WAR ZONE.....12.99 |
| ELITE.....9.99 | PAPERBOY 2.....16.99 | WARHEAD.....5.99 |
| EPIC (COMING SOON).....16.99 | PARASOL STARS.....16.99 | WHEELS OF FIRE (HARD DRIVEN, POWERDRIFT, CHASE H.O, TURBO OUTRUN).....8.99 |
| ESWAT D/S.....13.99 | PARASOL (MSCROLLS).....16.99 | WOLFCHILD.....12.99 |
| EXILE.....16.49 | PIRATES.....16.99 | WOLFPACK.....19.99 |
| EYE OF HORUS.....6.99 | PITFIGHTER.....16.49 | WONDERLAND (1 MEG).....16.99 |
| F15 STRIKE EAGLE 1.....11.99 | PLAYER 9 FROM OUTER SPACE.....19.49 | WORLD CLASS RUGBY.....16.49 |
| F16 FALCON.....10.99 | PLAYER MANAGER.....8.99 | WWF WRESTLING.....16.99 |
| F16 FALCON + MISSIONS 1&2.....19.99 | POPULOUS & SIM CITY.....16.99 | X-OUT.....5.99 |
| F19 STEALTH FIGHTER.....14.99 | POPULOUS 2 (1 MEG).....19.49 | |
| FERRARI FORMULA 1.....8.99 | POWER UP (CHASE H.O, TURRICAN, X-OUT, ALTERED BEAST, RAINBOW ISLANDS).....9.99 | |
| FINAL BLOW.....16.99 | POWERDRIFT.....3.99 | |
| FINAL FIGHT.....16.99 | POWERMONGER D/S.....15.49 | |
| FIRST SAMURAI + MEGA LO MANIA.....19.99 | POWERMONGER WORLD WAR 1 DATA DISK.....11.99 | |
| FISTS OF FURY (DYNAMITE LUX, NINJA WARRIORS, SHINOBI)9.99 | PRESIDENT ELECT (SSI).....2.99 | |
| DOUBLE DRAGON 2.....9.99 | PRINCE OF PERSIA.....7.99 | |
| FIVE NATIONS RUGBY.....16.99 | PRO TENNIS TOUR.....16.99 | |
| FLAMES OF FREEDOM (MIDWINTER 2).....11.99 | PROTEXT VERSION 4.3.....39.99 | |
| FLOOR 13.....20.49 | QUEST & GLORY (BLOODWYCH, MIDWINTER, CADAVER, IRON LORD).....20.49 | |
| FORMULA 1 GRAND PRIX.....22.99 | RACE DRIVEN.....16.49 | |
| FUN SCHOOL 2 (2-6, 6-8, 8+).....14.99 | RAILROAD TYCOON (1 MEG).....22.99 | |
| FUN SCHOOL 3 (2-5, 5-7, 7+).....16.99 | RAINBOW COLLECTION (BUBBLE BOBBLE, RAINBOW ISLANDS, N ZEALAND STORY).....9.99 | |
| FUN SCHOOL 4 (2-5, 5-7, 7+).....16.99 | | |
| GAUNTLET 2.....3.99 | | |
| GAUNTLET 3.....16.99 | | |
| GOODS.....16.99 | | |
| GOLDEN AXE.....8.49 | | |
| GOLF WORLD CLASS LEADERBOARD.....7.99 | | |
| GRAHAM GOOCH CRICKET.....18.49 | | |

NINTENDO SUPER NES NOW IN STOCK



84.99
Atari Lynx 2

PLUS FREE Mains Adaptor (essential) worth £12.99
PLUS FREE Special Reserve Membership worth £6.99
Back-lit screen. 4096 colours. 64K RAM. 8 meg game capacity.
4 channel sound. 16MHz processor. Lemmings coming soon.

| | | |
|---------------------------|--------------------------|----------------------------|
| APB.....23.99 | KLAX.....23.99 | SUIMESWORLD.....23.99 |
| AWESOME GOLF.....23.99 | MS PACMAN.....23.99 | SUPERSKWEK.....23.99 |
| BILL AND TEDS.....23.99 | NINJA GAIDEN.....23.99 | TOKI.....23.99 |
| EXCELLENT ADV.....23.99 | PACLAND.....23.99 | TOURNAMENT.....23.99 |
| BLOCK OUT.....23.99 | PAPERBOY.....23.99 | CYBERBALL.....23.99 |
| CHECKERED FLAG.....23.99 | QIX.....23.49 | TURBO SUB.....26.99 |
| CHIPS CHALLENGE.....21.99 | RAMPAGE.....23.99 | ULTIMATE CHESS.....27.99 |
| CRYSTAL MINES 2.....23.99 | ROBO SQUASH.....23.99 | VIKING CHILD.....23.99 |
| ELECTRO COP.....23.99 | ROBOTRON 2084.....23.99 | WARBIDS.....23.99 |
| GRID RUNNER.....23.99 | S.T.U.N RUNNER.....23.99 | XENOPHOBE.....23.99 |
| HARD DRIVEN.....23.99 | SCRAPYARD DOG.....26.99 | XYBOTS.....23.99 |
| ISHIDO.....23.99 | SHANGHAI.....23.99 | ZARLOR MERCENARY.....23.99 |

Inter-Mediates Ltd. Registered Office: 2 South Block,
The Mallings, Sawbridgeworth, Herts CM21 9PG.

INEVITABLY, SOME GAMES MAY NOT YET BE RELEASED.
PLEASE PHONE SALES ON 0279 600204 FOR
LATEST RELEASE DATES AND STOCK AVAILABILITY.

WE ONLY SUPPLY MEMBERS BUT YOU CAN ORDER AS YOU JOIN.
THERE IS A SURCHARGE OF 50p PER GAME ON TELEPHONED ORDERS.
(PLEASE PRINT IN BLOCK CAPITALS)

ST REVIEW 20

Name _____

Address _____

Postcode _____

Telephone _____ Machine type _____

Enter membership number (if applicable) or
Membership £6.99 UK, £8.99 EEC, £10.99 World

Item _____

Item _____

Item _____

Item _____

ALL PRICES INCLUDE UK POSTAGE & VAT £

Cheque/P.O./Access/Mastercard/Switch/Visa _____ Switch Issue No. _____

Credit card expiry date _____ Signature _____

Cheques payable to: **SPECIAL RESERVE**
P.O. BOX 847, HARLOW, CM21 9PH

Overseas Orders: EEC software orders - no extra charge
World software orders please add £1.00 per item.
Non-software items please add 10% EEC or 25% World.
Overseas orders must be paid by credit card.

Goldstar DS/DD
Disks with labels
69p each or
24.99 for 50



You choose your profession from the four available. Each has different strengths: the stuntman may be good at fighting, but not as good as a programmer when it comes to breaking into a security system.

ELVIRA II

THE JAWS OF CERBERUS

The short woman with the push-up bra and the push-up hairdo is back. Tony Dillon gets to grips with the situation. . .

Sometimes Accolade must sit back and wish the computer market was like the good old days, when the ZX Spectrum reigned supreme, and games such as *Vixen* shifted in droves as 14 year-old males rushed out to get their Corinne Russell poster. In those days, selling games

with the Elvira endorsement would be a piece of cake. Sadly, the market has grown up a bit since then and people are no longer fooled by a bit of cleavage. Accolade has had its work cut out to make this licence work, and nobody can say they're making a bad job of it. After the success of the first Elvira adventure, and

the impending success of the arcade game, Messrs Woodroffe, Woodroffe and Bridgman have returned with another *Dungeon Master*-style graphical adventure.



A LOT TO LOOK AT
Rather than viewpoints built from blocks, as is commonly done with this sort of game, every single location has four pictures on the disk, one for each direction. This gives the game a sense of realism and variety that no amount of block-built images could create.

GO GET HER
After the previous game, Elvira returned to the film studios to continue churning out shlock horror after tacky thriller. But something strange has happened to the studios. A passing monster, finding himself quite at home amongst the latex models and slimy rubber costumes, has taken Elvira prisoner. You have to find your way in, rescue her and get out again - or, as she puts it in the manual, "Come and get me, you brute."

The game begins with you standing outside the studios. This is where you encounter your first problem - how to actually get in. In front of you are the security building and a solid gate.

You can't open the gate from outside the building, and you can't get in because the door is locked. This is a perfect example of exactly how interactive the graphics are.

The first thing you'll notice as soon as you open the box are the seven game disks. These basically hold the graphics for the game, almost five Megabytes in all, and you'll need that much if you're going to install the game on a hard drive.

If you take a look at the road, you'll see a small rock lying by the side. Clicking on it with the mouse and dragging it into the bottom of the screen places it in your inventory. You can now throw it through the glass in the door of the building and then open the door.

BUYERS GUIDE

How does Elvira II compare to other games of this type? Our at-a-glance chart shows how we think it does.

| Name | Gra | Sou | Pla | Cha | Dep | Overall |
|-------------|-----|-----|-----|-----|-----|---------|
| Elvira 2 | 10 | 6 | 8 | 7 | 8 | 84% |
| Captive | 9 | 7 | 8 | 10 | 9 | 88% |
| Dun Master | 6 | 5 | 7 | 6 | 7 | 80% |
| Corporation | 8 | 7 | 9 | 8 | 8 | 90% |

Key: Gra = Graphics, Sou = Sound, Pla = Playability, Cha = Challenge, Dep = Depth



Here she is, talking to you via a magic spell. Spend too long on a problem and she may just pop up and give you a hint.



Oo-er, this looks a bit of a mess. Judging by the amount of blood on the wall, someone obviously wasn't welcome, but who?



The reception of the studios. The door in front of you leads into the studios themselves, while the toilets are on the left.



Just one of the many corpses you'll encounter in the game. This is the dead security guard in mid-flop from the cupboard you just opened.



Excellent, atmospheric graphics
The game never stops changing
Simple mouse interface

PROS AND CONS

Takes up too much memory on a hard drive
When loading graphics, the pauses can be irritating

Some characters will be willing to talk to you. The game offers you three responses to anything that's said to you, although it's usually easy to tell which one is the right one.

F CERBERUS

INSIDE INFO

Although massive in the States, Elvira has never really made her presence felt this side of the pond. Heavy Metal addict and biker by trade, she hosts one of America's most popular shows, *Heavy Metal Heaven*, which mixes rock music with horror movies, so who could be better qualified to present it?

As well as recording the weekly late-night show for the US audiences, she has also appeared in her own full-length movie, imaginatively titled *Elvira - Mistress of the Dark*, a tacky tale somewhere along the lines of Disney meets the Children's Film Foundation meets Hammer. And of course, she has played a role in one or two successful computer games.

So are we going to see more of the tastelessly dressed vampira? After a series of six shows broadcast December '90 to January '91, hopes were raised for a regular show, but a spokesperson for the BBC says that the chance of any more shows is "unlikely in the near future."

The game is completely icon-controlled, with no keyboard interface whatsoever. Your view of the world is through a window placed just above the centre of the screen. To the left of the view are all the statistics concerning your health. A beating heart tells you how nervous you are, and a diagram of your torso tells you how damaged various parts of your body are. To the right of the window are all the game options. These control all your actions, such as talking to people, modes of fighting and object manipulation beyond picking things up and putting them down again.

A TIDY BOTTOM

At the bottom of the screen is a tidy inventory window. This gives you a pictorial view of everything you are carrying and holds any text messages that appear in the game, such as descriptions of objects or results of conversations with people.

Most of the time the mouse is used to point and click on options, but it also serves one other, vital purpose. Clicking and dragging objects to and

from the inventory window is how you pick them up and drop them, and this forms the core of the game. All puzzle solving is in the "put the right object in the right location" mould - a security key in a safe, for example, or a coin in a condom machine (it's true, I swear it!).

Combat is carried out in the same way. Selecting a weapon and then choosing a fighting style from the weapons menu turns the mouse pointer into one of four icons. These represent the styles, ranging from normal combat to berserk attacks that do differing levels of damage, but also affect the amount you take yourself.

Elvira II's biggest selling point is the presentation. Rarely does a game look this good. Everything looks like it's been carefully planned and it has more than enough surprises to make you jump - for example, the realistically dead security guard, who falls out of the cupboard at the start of the game.

It's been said of this game that all you can do is pick things up. I think that's selling the game very short

indeed - there's loads of fun to be had finding out where to use objects. That, coupled with the wonderful presentation, makes *Elvira II* a winner.

"Playable graphic adventure, with some stunning graphics"

NAME: ELVIRA II - THE JAWS OF CERBERUS
COMPANY: ACCOLADE
CONTACT: 081 877 0880

PRICE: £25.99
RELEASE DATE: MAY
MIN MEMORY: 1 Mb

GRAPHICS: ○○○○○○
SOUND: ○○○☆☆
VALUE FOR MONEY: ○○○☆☆
PLAYABILITY: ○○○☆☆

OVERALL: 84%



EAGLE SOFTWARE

118a Palmers Road
New Southgate
LONDON N11 1SL.

(10 am - 6 pm 6 days)

Tel: 081-361 2733/5730
(2733 Faxline after 6pm)

FREE
MYSTERY
GAME
WITH ORDERS
OVER £50



ST & AMIGA BUDGET TITLES UNDER £10

| | | | | | |
|------------------------------------|-------|-------------------------------------|-------|----------------------------------|-------|
| 1 Meg Cricket (Amiga only) .. | £4.99 | Fantasy World Dizzy | £5.99 | Platoon | £5.99 |
| 3 Stoggles | £6.99 | F16 Combat Pilot | £7.99 | Predator | £6.99 |
| 3D Pool | £6.99 | Gauntlet II | £6.99 | Rambo III | £6.99 |
| Afterburner | £6.99 | Ghostbusters II | £6.99 | Red Heat | £6.99 |
| Altered Beast | £6.99 | Ghouls'n'Ghosts | £6.99 | Resolution 101 | £6.99 |
| Arkanoid (Amiga only) | £4.50 | Golden Axe | £6.99 | Road Blaster | £6.99 |
| Arkanoid II | £6.99 | Hard Drivin' | £6.99 | Rocket Ranger | £8.99 |
| Baal | £5.99 | Head over Heels | £6.99 | R-Type | £6.99 |
| Barbarian | £5.99 | Hitch Hiker's Guide to Galaxy | £7.99 | Run The Gauntlet | £6.99 |
| Barbarian II | £6.99 | Hong Kong Phooey | £6.99 | Shadow of the Beast | £6.99 |
| Batman The Movie | £6.99 | IK | £6.99 | Sherman M4 | £6.99 |
| Beach Volley | £6.99 | Impossible Mission II | £6.99 | Shinobi | £6.99 |
| Blood Money | £6.99 | James Pond | £6.99 | Shuffle Puck Cafe | £6.99 |
| Cabal | £6.99 | Jet Set Willy | £7.99 | Speedball | £7.99 |
| California Games | £6.99 | Kid Gloves | £5.99 | Sinike Force Harrier | £6.99 |
| Carner Command | £8.99 | Last Ninja II | £5.99 | Stunt Car Racer | £6.99 |
| Celica GT4 Rally | £6.99 | Lionce to Kill | £5.99 | Super Hang On | £6.99 |
| Centrefold Squares | £6.99 | Lombard RAC Rally | £6.99 | SwitchBlade | £6.99 |
| Cloud Kingdom | £6.99 | Manic Miner | £7.99 | Teenage Mutant Turtles | £6.99 |
| Colosus Chess | £6.99 | Michael Jackson Moonwalker | £6.99 | Thunderstrike | £6.99 |
| Conflict in Europe (ST only) | £7.99 | Moonshine Racers | £5.99 | TV Sports Football | £7.99 |
| Continent Circus (ST only) | £4.99 | New Zealand Story | £5.99 | Vigilante | £6.99 |
| Defender of the Crown | £7.99 | Ninja Rabbits | £5.99 | War Zone | £6.99 |
| Def of the Earth | £6.99 | Nitro | £5.99 | Waterloo | £6.99 |
| Deluxe Strip Poker | £6.99 | North & South | £7.99 | Wings of Fury (Amiga only) | £6.99 |
| Double Dragon I or II | £6.99 | Out Run | £6.99 | Wizball | £4.99 |
| | | Operation Wolf | £6.99 | WC Leaderboard | £6.99 |
| | | | | Xenon II | £7.99 |

| TOP TITLES | ST | AMIGA | TOP TITLES | ST | AMIGA | TOP TITLES | ST | AMIGA | TOP TITLES | ST | AMIGA | TOP TITLES | ST | AMIGA |
|--------------------------|--------|--------|------------------------------|--------|--------|---------------------------|--------|--------|--------------------------------|--------|--------|-------------------------------|--------|--------|
| Half Meg Upgrade + Clock | N/A | £25.99 | Cohort | £20.99 | £20.99 | Harpoon (1 Meg) | £19.99 | £19.99 | Mystical | £15.99 | £15.99 | Space Gun | £15.99 | £15.99 |
| World Series Cricket | N/A | £16.99 | Combo Racer | £6.99 | £6.99 | Heart of China | £24.99 | £24.99 | Myth | £15.99 | £15.99 | Space Crusade | £16.99 | £16.99 |
| 3D Construction Kit | £29.99 | £36.99 | Cover Girl Poker | £16.99 | £16.99 | Heimdall | £23.99 | £23.99 | Narc | £15.99 | £15.99 | Space Quest I, II, III, or IV | N/A | £19.99 |
| A320 Airbus | £26.99 | £26.99 | Covert Action | £23.99 | £23.99 | Hero's Quest (Grenin) | £16.99 | £16.99 | Navy Seals | £15.99 | £15.99 | Special Forces | £23.99 | £23.99 |
| Abandoned Places | £19.99 | £19.99 | Crazy Cars III | £21.99 | £21.99 | Hill Street Blues | £15.99 | £15.99 | Nebulus II | £15.99 | £15.99 | Speedball II | £15.99 | £15.99 |
| Addams Family | £16.99 | £16.99 | Crime Wave | £16.99 | £10.99 | Home Alone | N/A | £23.99 | Neighbours | £16.99 | £16.99 | Spirit of Excalibur | £20.99 | £20.99 |
| Advantage Tennis | £16.99 | £16.99 | Cruise for a Corpse | £17.99 | £17.99 | Hook | £15.99 | £15.99 | Nightshift | £10.99 | £16.99 | Starfighter II | £6.99 | £6.99 |
| Agony | £15.99 | £15.99 | Darkman | £15.99 | £15.99 | Hudson Hawk | £15.99 | £15.99 | ORBITUS | £12.99 | £12.99 | Star Trek V | £16.99 | £16.99 |
| Air Support | £15.99 | £15.99 | Days of Thunder | £15.99 | £8.99 | Hunter | £15.99 | £15.99 | Operation Thunderbolt | £6.99 | £6.99 | Star Trek VI | N/A | £16.99 |
| Alien Storm | £16.99 | £16.99 | Deliverance | £15.99 | £15.99 | I. Bothams Cricket | £19.99 | £19.99 | Ork | £15.99 | £15.99 | Stratego | £17.99 | £17.99 |
| Alpha Waves | £16.99 | £16.99 | Demoniak | £19.99 | £19.99 | Into Heat | £16.99 | £16.99 | Ork Europa | £16.99 | £16.99 | Steel Empire | £20.99 | £20.99 |
| Altered Destiny | N/A | £21.99 | Deuteros | £19.99 | £19.99 | Ivanhoe | £6.99 | £6.99 | Pacific Islands (T. Yankee II) | £20.99 | £20.99 | Strider II | £15.99 | £15.99 |
| Another World | £18.99 | £18.99 | Devious Designs | £16.99 | £16.99 | Jaguar Unlimited Clipart | N/A | £10.99 | Pang | £15.99 | £15.99 | Strike Fleet | £17.99 | £17.99 |
| AMNIOS | £15.99 | £12.99 | D/Generation | £16.99 | £16.99 | Jaguar XJ220 | £21.99 | £21.99 | Paperboy II | £16.99 | £16.99 | Supaplex | £6.99 | £6.99 |
| Amos (Easy) | N/A | £23.99 | Disciples of Steel | £17.99 | £17.99 | Jahangir Khan's Squash | £8.99 | £8.99 | Parasol Stars | £15.99 | £15.99 | Super Cars II | £15.99 | £15.99 |
| Amos 3D | N/A | £23.99 | Double Dragon III | £16.99 | £16.99 | Jimmy White's Whirlwind | £19.99 | £19.99 | Pegasus | £16.99 | £16.99 | Super Hero | N/A | £15.99 |
| Amos Compiler | N/A | £19.99 | Dr Dooms Revenge | £9.99 | N/A | John Barnes (1 Meg) | £16.99 | £16.99 | PGA Golf Tour + | N/A | £20.99 | Super Off Road | £8.99 | £8.99 |
| Amos The Creator | N/A | £36.99 | Dungeon Master/ Chaos | £15.99 | £15.99 | John Maden's Football | £16.99 | £16.99 | PGA Courses Disk | N/A | £10.99 | Super Space Invaders | £16.99 | £16.99 |
| Aquaviva | £15.99 | £15.99 | Dyna Blast | £20.99 | £20.99 | Kick Off II (1 Meg) | £15.99 | £15.99 | Pinball Dreams | N/A | £15.99 | Supremacy | £20.99 | £16.99 |
| Armourgeddon | £15.99 | £15.99 | ELF | £15.99 | £15.99 | Kick Off II (5 Meg) | N/A | £14.99 | Pitfighter | £16.99 | £16.99 | Suspicious Cargo | £16.99 | £16.99 |
| Armourgeddon Upgrade | £10.99 | £10.99 | EVRA Mistress of Dark | £21.99 | £21.99 | Kick Off Winning Tactics | £9.99 | £9.99 | Plotting | £15.99 | £15.99 | Swap | £16.99 | £16.99 |
| A.T.A.C. | £23.99 | £23.99 | EVRA II Jaws of Cerberus | £23.99 | £23.99 | Kill Gloves II | £16.99 | £16.99 | Populous II | £20.99 | £20.99 | Switch Blade II | £15.99 | £15.99 |
| ATOMINO | £12.99 | £12.99 | EVRA III Jaws of Cerberus | £16.99 | £16.99 | Killing Cloud | £11.99 | £11.99 | Predator II | £9.99 | £9.99 | Terminator II | £15.99 | £15.99 |
| AWSOME | £12.99 | £12.99 | Epic | £15.99 | £15.99 | KILLING GAME SHOW | £15.99 | £12.99 | Prince of Persia | £15.99 | £15.99 | Test Drive III | £15.99 | £15.99 |
| B17 Flying Fortress | £23.99 | £23.99 | Eye of the Beholder | N/A | £19.99 | Kings Quest I | £14.99 | N/A | Puzznic | £15.99 | £15.99 | Their Finest Hour | £19.99 | £19.99 |
| Back to the Future III | £10.99 | £10.99 | Eye of the Beholder II | N/A | £20.99 | Kings Quest V | £26.99 | £26.99 | QUEST AND GLORY | £20.99 | £20.99 | The Manager | £16.99 | £16.99 |
| Back to the Golden Age | £16.99 | £16.99 | F14 Tom Cat | £18.99 | £18.99 | Knight Mare | £16.99 | £16.99 | Race Drivin' | £19.99 | £19.99 | Thunderhawk AH-73M | £21.99 | £21.99 |
| BARBARIAN II (Psyc) | £12.99 | £15.99 | F15 Strike Eagle II | £23.99 | £23.99 | Knigh of the Sky | £23.99 | £23.99 | Railroad Tycoon | £24.99 | £24.99 | Thunder Jaws | £6.99 | £6.99 |
| Bard's Tale III | N/A | £16.99 | F171A Stealth Fighter | £21.99 | £21.99 | Last Ninja III | £16.99 | £16.99 | Rainbow Islands | £16.99 | £6.99 | Tip Off | £16.99 | £16.99 |
| B.A.T. II | £22.99 | £22.99 | F19 Stealth Fighter | £19.99 | £19.99 | Leander | £15.99 | £15.99 | R.B.I. 2 Baseball | £20.99 | £20.99 | Titus the Fox | £16.99 | £16.99 |
| Battle Chess II | £16.99 | £16.99 | F29 Retaliator | £15.99 | £15.99 | Leisure Suit Larry II | £14.99 | £25.99 | Reals | £20.99 | £20.99 | Toki | £14.99 | £14.99 |
| Battle Command | £15.99 | £15.99 | Face Off - Ice Hockey | £15.99 | £15.99 | Leisure Suit Larry III | £25.99 | £25.99 | Red Baron | £23.99 | £23.99 | Total Recall | £15.99 | £15.99 |
| BATTLE HAWKS 1942 | £8.99 | N/A | Face Off - Ice Hockey | £15.99 | £15.99 | Leisure Suit Larry V | £26.99 | £26.99 | Red Bull | £15.99 | £15.99 | Turcan II | £7.99 | £9.99 |
| Battle Isle | £18.99 | £18.99 | Falcons II | £23.99 | £23.99 | Lemmings | £15.99 | £15.99 | Renegade (Coin-op Hits) | £6.99 | £6.99 | Twilight 2000 | £23.99 | £23.99 |
| BATTLE MASTER | £19.99 | £11.99 | Falcons III | £23.99 | £23.99 | Lemmings - Data Disk | £13.99 | £13.99 | Rise of the Drago | N/A | £24.99 | Ultima Marlan Dreams | £20.99 | £20.99 |
| Battle Squadron | N/A | £7.99 | Fantasic Voyage | £23.99 | £23.99 | Lemmings - Stand Alone | £15.99 | £15.99 | Robin Hood | £16.99 | £16.99 | Ultima Underworld | £20.99 | £20.99 |
| Betrayal | N/A | £8.99 | Fate of Atlantis (Adventure) | N/A | £17.99 | Life and Death II | £20.99 | £20.99 | Robocop | £15.99 | £15.99 | Ultima V | £19.99 | £19.99 |
| Big Run | £16.99 | £16.99 | Federation of Free Traders | £6.99 | £6.99 | Lord of the Rings | N/A | £20.99 | Robocop II | £14.99 | £14.99 | Ultima VI | £20.99 | £20.99 |
| Billiard Simulator II | £16.99 | £16.99 | Final Blow | £16.99 | £16.99 | Lotus Patrol | £15.99 | £15.99 | Robocop III | £15.99 | £15.99 | ULTIMA VII | £20.99 | £20.99 |
| Bike GP | N/A | £15.99 | Final Flight | £16.99 | £16.99 | Lotus Esprit | £15.99 | £15.99 | RobLand | £16.99 | £16.99 | ULTIMATE RIDE | £10.99 | £10.99 |
| Birds of Prey | £23.99 | £23.99 | First Samurai/MgaLoMania | £20.99 | £20.99 | Lotus Turbo Challenge II | £16.99 | £16.99 | Rollin' Ronny | £15.99 | £9.99 | UMS II | £23.99 | £23.99 |
| Blue Max | £19.99 | £19.99 | Flight of the Intruder | £16.99 | £22.99 | M1 Tank Platoon | £19.99 | £19.99 | Rubin | £15.99 | £15.99 | Under Pressure | £17.99 | £17.99 |
| Blues Brothers | £16.99 | £16.99 | Floor 13 | £19.99 | £19.99 | Lotus Turbo Challenge II | £19.99 | £19.99 | Rugby World Cup | £15.99 | £15.99 | UnReal | £16.99 | £16.99 |
| Boston Bomb Club | £16.99 | £16.99 | Football Crazy | £16.99 | £16.99 | Lotus Turbo Challenge II | £19.99 | £19.99 | R.V.F. Honda | £6.99 | N/A | UN Squadron | £15.99 | £15.99 |
| Buck Rogers | £19.99 | £19.99 | Future Baseball | £16.99 | £16.99 | Magick Garden | £16.99 | £16.99 | Secret of the Silver Blues | £21.99 | £21.99 | UnTouchables | £6.99 | £6.99 |
| Cadaver | £16.99 | £16.99 | Fuzzball | N/A | £13.99 | Magick Pockets | £15.99 | £16.99 | Secret Weapon Luftwaffe | £19.99 | £19.99 | Utopia | £20.99 | £20.99 |
| Cadaver - the pay off | £10.99 | £10.99 | G-Loc R360 | £16.99 | £16.99 | Man Utd. Europe | £15.99 | £15.99 | Shadowlands | £20.99 | £20.99 | Vendetta | £16.99 | £16.99 |
| Captive | £15.99 | £12.99 | Gauntlet III | £16.99 | £16.99 | M. Dika Ultimate Football | £18.99 | £18.99 | SHADOW OF BEAST II | £12.99 | £12.99 | Vengeance of Excalibur | N/A | £19.99 |
| Cardiax | £17.99 | £17.99 | Global Effect | £16.99 | £16.99 | Megatraveller II | £20.99 | £20.99 | Shadow Sorcerer | £19.99 | £19.99 | Video Kid | £17.99 | £17.99 |
| CARTHAGE | £15.99 | £12.99 | Godfather | £18.99 | £18.99 | Megatwins | £16.99 | £16.99 | Shadow Warrior | £15.99 | £15.99 | Voifed | £20.99 | £20.99 |
| Carve Up | £15.99 | £15.99 | Gods | £16.99 | £16.99 | Microprose Golf | £23.99 | £23.99 | Shuffle the Sim | £29.99 | £29.99 | Vroom | £16.99 | £16.99 |
| Chaos Engine | £16.99 | £16.99 | Golden Shot | £16.99 | £16.99 | Midwinter II | £23.99 | £23.99 | Silent Service II | £23.99 | £23.99 | War Head | £7.99 | £7.99 |
| Champion of the Raj | £9.99 | £9.99 | Graham Gooch Cricket | £21.99 | £21.99 | Mig 29 Fulcrum | £21.99 | £21.99 | Sim Ant | £15.99 | £15.99 | White Death (1 Meg) | £19.99 | £19.99 |
| Chase HQ | £6.99 | £6.99 | Graham Taylor | £19.99 | £19.99 | Might of Magic III | N/A | £19.99 | Sk Earth | £20.99 | £20.99 | Wild Wheels | £14.99 | £14.99 |
| Chase HQ II | £14.99 | £14.99 | Grand Prix (Formula 1) | £23.99 | £23.99 | Moonfall | £15.99 | £15.99 | Simpsons | £15.99 | £15.99 | Wing Commander II | £19.99 | £19.99 |
| Chuck Rock | £16.99 | £16.99 | Gunship 2000 | £21.99 | £21.99 | Moonslave | £21.99 | £21.99 | Ski or Die | £16.99 | £9.99 | Wolf Child | £16.99 | £16.99 |
| Cisco Heat | £15.99 | £11.99 | Harsh the Hombie | N/A | £15.99 | Monkey Island | £15.99 | £15.99 | Smash TV | £15.99 | £15.99 | WOLFPACK | £14.99 | |

Gremlin's latest escapade is a foray into the world of video. Tony Dillon steps in...

The plot of *Video Kid* is thin – extremely flimsy – in fact, and merely provides the player with yet another chance to blast his way around a world populated by armed enemies and oversized robots. This time it seems that the player takes the part

The first end-of-level meanie, that prompted one or two people to pass reference to a certain coin-op set in New Zealand...

and you enter the Science Fiction world, full of robots, lasers and spaceships. Next comes the Gangster world, complete with villains and, for some strange reason, biplanes. Beat that and you have to face the Horror world, a place where even Freddy gets nervous.

You start the game armed with nothing but a simple missile launcher. By collecting the bubbles that appear at specific stages of the game,



VIDEO KID

of a couch potato who gets sucked into a video compilation. And it's chips for the player – unless he or she can escape.

The format is as standard as the plot. A central sprite whizzes about a scrolling level, ducking and diving bullets, firing like crazy and clocking up the points. Set over five scenes, each broken into four levels, you have to kill everything while trying to keep yourself alive, or at least to keep some of the five lives you have been generously graced with.



you can upgrade through arrows to lasers that fire four ways and even diagonally. There are also four smart bombs, and if they don't kill everything, switching your ST off definitely will.

Unplugging your ST may seem a bit drastic, but the controls are awful and the game is unfair. Most of the time there's so much on screen that you're left with nothing to do but get hit.

HAIL AND PACE

About halfway through level one, you have to fly through a hail of arrows. This is no ordinary hail, but a torrent that fills the screen. The arrows are indestructible and you can't move around them.

The timing of the fire button is crucial. If you hit it at the right moment, you might actually fire something. If you're one of those people who like to switch on the autofire and let rip, or like to pummel the opposition with a steady stream of lead, then this isn't the game for you.

The Wild West, and here Kid has become Video The Kid, swapping your wizard's robes for spurs and Smith and Wessons.



Here, Kid tried to avoid the castle walls by flying over them, and got hit by a high flying arrow.



At important moments of stress, such as death, our hero will look out of the screen and let you know that everything's all right.

"Unplayable, standardised arcade romp. Ripe for the budget bin."

NAME: VIDEO KID
COMPANY: GREMLIN
CONTACT: 0742 753423

PRICE: £25.99
RELEASE DATE: NOW
MIN MEMORY: 0.5 Mb

GRAPHICS ○○○☆☆☆
SOUND ○○○☆☆☆
VALUE FOR MONEY ○○○☆☆☆
PLAYABILITY ○☆☆☆☆

OVERALL **53%**

BUYERS GUIDE

How does Video Kid stand up in the face of the enemy? The table lets you see at a glance. All scores bar the overall one are out of ten.

| | Gra | Sou | Lev | Wea | Dif | Overall |
|---------------|-----|-----|-----|-----|-----|---------|
| Video Kid | 7 | 6 | 20 | 5 | 9 | 53% |
| First Samurai | 8 | 7 | 4 | 2 | 7 | 81% |
| Harlequin | 7 | 6 | 20 | 5 | 7 | 82% |
| Leander | 9 | 7 | 20 | 1 | 7 | 86% |

Key: Gra=Graphics, Sou=Sound, Lev=Number of levels, Wea=Number of Weapons, Dif=General level of difficulty

Attractive graphics
Variety of levels

PROS AND CONS

Unresponsive Controls
Too many enemies at once
Poorly designed levels

Blue moon you saw me standing alone

The Star Business Series is in a class of its own. Because for quality, value for money and hassle free printing, the blue Star logo stands alone.



The Business Series was designed for the rigours of the office. Which means it's better designed, packed with features and easy to use. But it's also affordable by serious home users.

Competitively priced, the range comprises seven dot matrix printers. From the LC-20, the new low cost printer to replace the award winning LC-10. To the LC24-200 Colour at a price our competitors charge for black printing.

The blue Star logo. The mark of a better printer.

For more information, contact your local Star Registered Dealer or complete the coupon.



A division of Star Micronics Co., Ltd., Japan.

Star Micronics U.K. Ltd., Star House, Peregrine Business Park, High Wycombe, Buckinghamshire HP13 7DL. Tel: (0494) 471111. Fax: (0494) 473333.

Specifications: Business Series * LC20 - 9 pin, 80 col, 180cps draft 45 cps NLQ * LC-15 - 9 pin, 136 col, 180 cps draft 45 cps draft 45 cps NLQ * LC24-10 - 24 pin, 80 col, 180 cps draft 60 cps LQ * LC24-15 - 24 pin, 136 col, 200 cps draft 67 cps LQ * LC-200 - 9 pin colour/mono, 80 col, 225 cps draft 45 NLQ * LC24-200 - 24 pin, 80 col, 222 cps draft 67 cps LQ * LC24-200 Colour - 24 pin colour/mono, 80 col, 222 cps draft 67 cps LQ. Standard drivers are available through your Star Registered Dealer.

I'm standing alone without any information on the Star Business Series. Please send me some.

Name

Address

Postcode Tel.



HMSO preferred.
For information, ring 0603 695250.

FREE!

WITH EVERY ST FROM SILICA

When you buy your new Atari 520, 1040 or Mega ST-E computer from Silica Systems, we will give you an additional £324.75 worth of software FREE OF CHARGE, including some great entertainment and productivity programs. These free gifts will introduce you to the world of ST computing and help you to get off to a flying start with your new ST. Plus, with every ST and every TT computer, we will give you up to 16 nights FREE holiday hotel accommodation for you and your family to enjoy a break at home or abroad.



TENSTAR PACK:

- 10 Superb entertainment titles:
- ASTERIX £24.99
 - CHESS PLAYER 2150 £24.95
 - DRIVIN' FORCE £19.95
 - LIVE AND LET DIE £19.99
 - ONSLAUGHT £24.99
 - PIPE MANIA £19.99
 - RICK DANGEROUS £24.99
 - ROCK 'N' ROLL £19.99
 - SKWEEK £19.99
 - TRIVIAL PURSUIT £19.95

PRODUCTIVITY PACK:

- 1st WORD £59.99
Word processing package from GST
 - SPELL IT £19.99
Spelling checker to complement 1st Word
 - ST BASIC £24.99
Basic programming language with tutorial
- TOTAL VALUE: £324.75**

16 NIGHTS HOLIDAY HOTEL ACCOMMODATION

Every Atari ST from Silica comes supplied with a free 72 page colour brochure with accommodation vouchers. These entitle 2 people to stay up to a total of 16 nights in any of 250 hotels with accommodation FREE. All you have to pay for are your meals (prices are listed in the brochure).

WORTH NEARLY £325

NEW!

EXCITING LINE-UP FOR

ATARI ST

NEW!

TENSTAR GAMES PACK

SPELL-IT!
SPELLING CHECKER
BY FRONTIER SOFTWARE

NEW! 520ST-E START PACK

- HARDWARE:**
520ST-E COMPUTER £299.99
8MHz 16-Bit 68000 CPU, 512K RAM, Mouse, TV Modulator, Internal PSU, 1Mb Floppy Disk Drive
- SOFTWARE - ARCADE CLASSICS:**
Missile Command - Shoot Em Up £9.99
Crystal Castles - Platform Capers £9.99
Super Break Out - Wall Demolition £9.99
Battle Zone - 3D Tank Battle £9.99
- SOFTWARE - PRODUCTIVITY:**
First Word - Word Processor £59.99
Neochrome - Art Package £29.99
ANI ST - Animation Package £29.95
- PLUS! FREE FROM SILICA:**
Silica Productivity Pack £104.97
TenStar Games Pack £219.78
- Total Value: £784.63**
Less Pack Saving: £525.63
SILICA PRICE: £259.00
- PLUS! 16 NIGHTS HOLIDAY ACCOMMODATION**

£259
INC VAT & DELIVERY Ref: STC 6052

DISCOVERY XTRA

HARDWARE:
520ST-E COMPUTER £299.99
3 1/2" 1.44Mb Double Sided Disk Drive, TV Modulator, Internal PSU, 1Mb Drive

SOFTWARE - ENTERTAINMENT:
ESCAPE FROM ROBOT MONSTERS £19.99
Fight to destroy the robot army
FINAL FLIGHT £25.99
Fast action beat-em-up game
NINE LIVES £24.99
Save Clauzette from the mad scientist
SIM CITY £29.95
Take control of your own city

SOFTWARE - PRODUCTIVITY:
CONTROL ACCESSORIES... FREE
V52 EMULATOR PROCESSOR... FREE
ST TOUR £4.99
GEM tutorial for the ST
FIRST BASIC £49.99
Basic programming language
NEOCHROME £49.99
Powerful drawing package

PLUS! FREE FROM SILICA:
Silica Productivity Pack £104.97
TenStar Games Pack £219.78

Total Value: £830.63
Less Pack Saving: £551.63
SILICA PRICE: £279.00

PLUS! 16 NIGHTS HOLIDAY ACCOMM

£279
Ref: STC 6252

FAMILY CURRICULUM

HARDWARE:
1040ST-E COMPUTER £399.99
8MHz 16-Bit 68000 CPU, 1Mb RAM, Mouse, T.V. Modulator, Internal PSU, 1Mb Disk Drive

SOFTWARE MODULES:
PLAY AND LEARN £76.59
Prof Plays a New Game with Words and Sentences
JUNIOR SCHOOL LEAVER £58.54
Answer Back/General Knowledge Quiz, Spelling and Primary Maths
GCSE £55.54
Micro Maths, French, History and Geography Quiz
BUSINESS £159.85
ST Word, ST Base & ST Calc
CREATIVE £134.97
Hyper Paint II, Music Maker and First Basic

PLUS! FREE FROM SILICA:
Silica Productivity Pack £104.97
TenStar Games Pack £219.78

Total Value: £1210.23
Less Pack Saving: £861.23
SILICA PRICE: £349.00

PLUS! 16 NIGHTS HOLIDAY ACCOMM

£349
Ref: STC 1250

MEGA ST-E

NEW FASTER MODELS! WITH MORE COLOURS & GREATER EXPANSION OPTIONS

MONITOR NOT INCLUDED

- 16MHz 16-Bit 68000 Processor
- 3 1/2" 1.44Mb Double Sided Disk Drive
- 1/2Mb RAM Versions
- 47Mb Hard Drive Versions available
- 4096 Colour Palette
- Stereo 8-Bit PCM Sound Output
- FREE Silica Productivity Pack
- FREE TenStar Games Pack
- FREE 16 Nights Holiday Accommodation

| | | |
|----------------|----------------|-----------------|
| 1Mb RAM | 2Mb RAM | 4Mb RAM |
| £586.32 | £985.82 | £1097.45 |
| STC 8421 | STC 8522 | STC 8544 |

ATARI TT

32MHz 32-Bit STEREO 4096 COLOURS & POWER SYSTEM

MONITOR NOT INCLUDED

- 32MHz 32-Bit 68030 Processor
- 3 1/2" 1.44Mb Double Sided Disk Drive
- 2/4/8Mb RAM Versions
- Stereo 8-Bit PCM Sound Output
- 4096 Colour Palette
- Built-in 68882 Maths Co-Processor
- Up to 1280 x 960 Resolution
- VME & SCSI Expansion Ports
- Expandable to 36Mb RAM
- Hard Drive Expansion Options
- FREE 16 Nights Holiday Accommodation

| | | |
|-----------------|-----------------|-----------------|
| 2Mb RAM | 4Mb RAM | 8Mb RAM |
| £1169.12 | £1462.87 | £1874.12 |
| STC 8925 | STC 8939 | STC 8977 |

ST BOOK

NEW! ST COMPATIBLE NOTEBOOK COMPUTER WITH 20Mb HD & MONO SCREEN

- 8MHz 16-Bit 68000 Processor
- 1Mb RAM Memory - 20Mb Hard Drive
- Supertwist 640 x 400 mono display - compatible with standard ST mono monitors
- 3 Programmable Sound Channels
- Up to 10 hours battery life
- RS232, Parallel, MIDI, DMA and 120 Pin Expansion Ports
- Includes Organiser Software, File Transfer Software & Cable
- 3 1/2" 1Mb External Drive Available Soon
- FREE 16 Nights Holiday Accommodation

£1295
Ref: STC 9320

1040ST-E MUSIC MASTER

The Music Master Pack features one of the most popular computers used by musicians combined with the renowned MIDI package PRO 24 III to provide a perfect environment for novice and professional alike. The acclaimed MIDI Recording and Editing System from Steinberg. PRO 24 III is used by many top musicians including Dire Straits and PWL. Using any MIDI keyboard, PRO 24 offers the ability to write and compose music to a very high standard. You can record up to 24 tracks simultaneously, and then apply real time editing to remove mistakes.

HARDWARE:
1040ST-E COMPUTER £399.99
8MHz 16-Bit 68000 CPU, 1Mb RAM, Mouse, TV Modulator, Internal PSU, 1Mb Disk Drive

SOFTWARE:
PRO 24 III £150.00

PLUS! FREE FROM SILICA:
Silica Productivity Pack £104.97
TenStar Games Pack £219.78

Total Value: £874.74
Less Pack Saving: £525.74
SILICA PRICE: £349.00

PLUS! 16 NIGHTS HOLIDAY ACCOMM

£349
Ref: STC 1261

ALL PRICES INCLUDE VAT - DELIVERY IS FREE OF CHARGE IN THE UK MAINLAND

SILICA SYSTEMS OFFER YOU

- **FREE OVERNIGHT DELIVERY:** On all hardware orders shipped in the UK mainland.
- **TECHNICAL SUPPORT HELPLINE:** Team of technical experts at your service.
- **PRICE MATCH:** We normally match competitors on a "Same product - Same price" basis.
- **ESTABLISHED 12 YEARS:** Proven track record in professional computer sales.
- **BUSINESS + EDUCATION + GOVERNMENT:** Volume discounts available for large orders.
- **SHOWROOMS:** Demonstration and training facilities at our London & Sidcup branches.
- **THE FULL STOCK RANGE:** All of your requirements from one supplier.
- **FREE CATALOGUES:** Will be mailed to you with offers and software/peripheral details.
- **PAYMENT:** By cash, cheque and all major credit cards.

Before you decide when to buy your new Atari ST computer, we suggest you think very carefully about WHERE you buy it. Consider what it will be like a few months after buying your ST, when you may require additional peripherals or software, or help and advice with your new purchase. And, will the company you buy from contact you with details of new products? At Silica Systems we ensure that you will have nothing to worry about. We have been established for over 12 years and, with our unrivalled experience and expertise, we can now claim to meet our customers' requirements with an understanding which is second to none. But don't just take our word for it. Complete and return the coupon now for our latest Free literature and begin to experience the "Silica Systems Service".

MAIL ORDER HOTLINE
071-309 1111

SILICA SYSTEMS

MAIL ORDER: 1-4 The Mews, Hatherley Rd, Sidcup, Kent, DA14 4DX Tel: 081-309 1111
Order Lines Open: Mon-Sat 9.00am-6.00pm No Late Night Opening Fax No: 081-309 0608

LONDON SHOP: 52 Tottenham Court Road, London, W1P 0BA Tel: 081-580 4000
Opening Hours: Mon-Sat 9.30am-6.00pm No Late Night Opening Fax No: 071-323 4737

LONDON SHOP: Selfridges (1st Floor), Oxford Street, London, W1A 1AB Tel: 071-629 1234
Opening Hours: Mon-Sat 9.30am-6.00pm Late Night: Thursday until 9pm Extension: 3914

SIDCUP SHOP: 1-4 The Mews, Hatherley Rd, Sidcup, Kent, DA14 4DX Tel: 081-302 8811
Opening Hours: Mon-Sat 9.00am-5.30pm Late Night: Friday until 7pm Fax No: 081-309 0017

To: Silica Systems, Dept STREV-0692-79, 1-4 The Mews, Hatherley Rd, Sidcup, Kent, DA14 4DX

PLEASE SEND INFORMATION ON THE ATARI ST

Mr/Mrs/Miss/Ms: Initials: Surname:

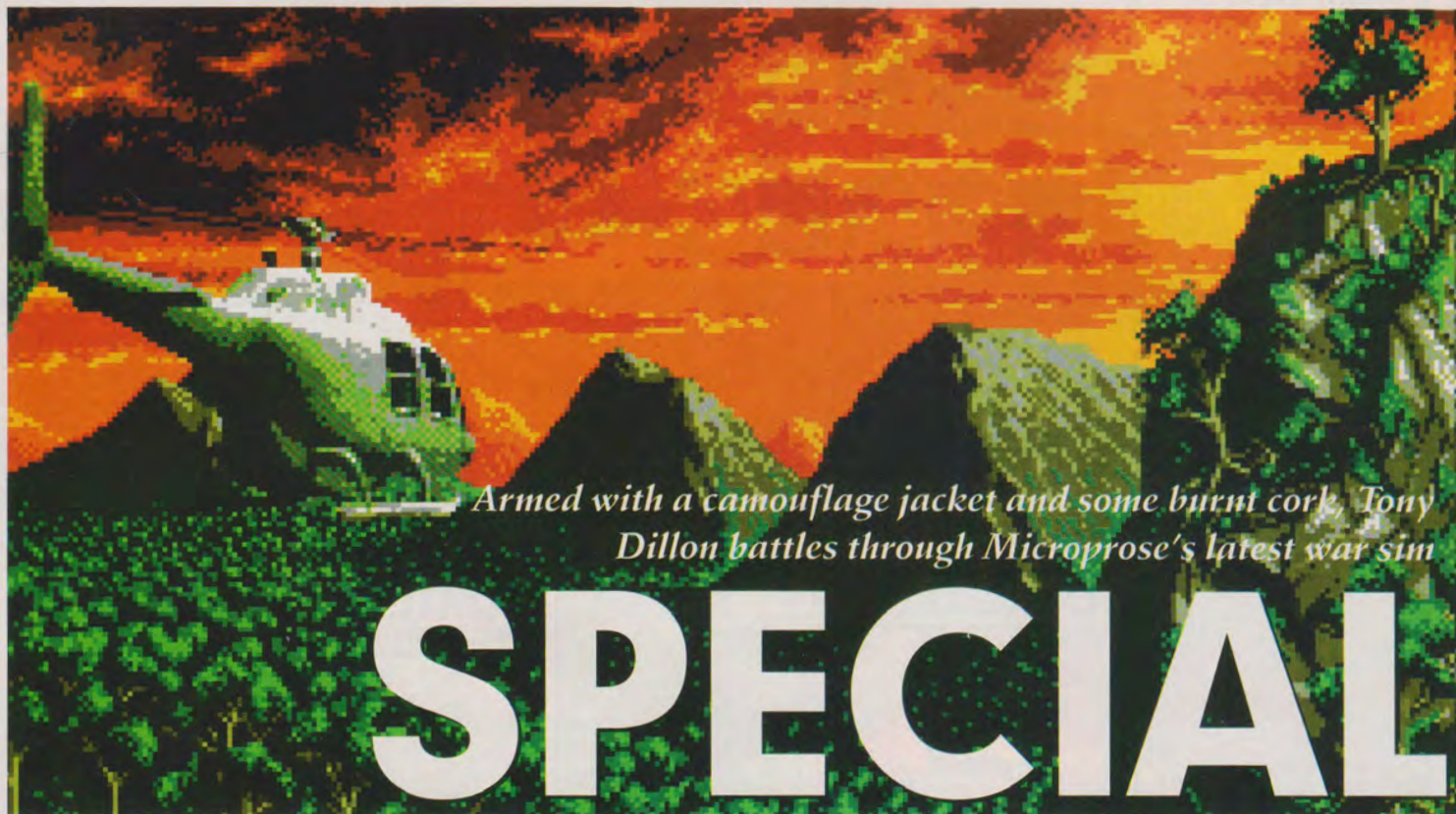
Address:

Postcode:

Tel (Home): Tel (Work):

Company Name (if applicable):

Which computer(s), if any, do you own? 79



Armed with a camouflage jacket and some burnt cork, Tony Dillon battles through Microprose's latest war sim

SPECIAL FORCES

Microprose has built quite a reputation for combat simulations, from the early days of *F-15 Strike Eagle* right up to *Gunship 2000*.

We've been placed in all sorts of craft and many different wars, but one theme that has remained fairly constant is one-man war. Whether in a helicopter or a biplane, you have always been alone, fighting solo against entire continents. This is set to change with the release of *Special Forces*.

There's no more mucking about in the sky, this time it's all on foot. You command a team of four crackpot soldiers risking their all in small, strategic strikes in 16 missions across the globe. You can control all four soldiers, or take a back seat and command them as computer controlled units.

ON THE LEVEL

As always, the first thing to do is to select one of the difficulty levels. These four affect the amount of information you are given at the start of each mission, the intelligence



and arming levels of the enemy, the reward you receive at the end of the mission and, of course, the difficulty level of each mission.

With the easy level, there are few enemy units, they're all poorly equipped with slow reflexes, and your mission targets are clearly marked on the mission map. On harder levels, the enemy become as hard as you, and you are left with little or no idea of where you are supposed to go.

Next you have to select the mission itself. The missions are laid out over four global areas (Tropics, Arctic, Temperate and Desert). The missions are all of a standard difficulty, and can be played in any order, although playing the range from start to finish is far more rewarding, as it's been designed to make up a full campaign.

Objectives range from rescuing prisoners of war, through laying targeting devices for later air strikes, to destroying the enemy's complexes. Once a mission has been spent, it can't be played by the same team again,

although if personnel goes missing in action, you are able to go back and try to rescue them.

CHARACTER COUNTING

Next comes the team selection. You have eight characters to choose from, all with different strengths and talents. You can only take four into the field with you, so making sure you have the right people is vital to the success of your mission. For example, there isn't much point in taking an explosives expert on a mission where explosives aren't necessary. All characters have different ranks and fitness levels. Fitness is basically another way of showing how much equipment a soldier can carry, and it isn't worth taking a weak soldier onto the field.

Finally you have to select your equipment. There are eight types of weapon to choose from, and each soldier has six pouches in his backpack. You can set up each player individually, or use one of the three standard backpack set-ups. Once all that is done, you can finally move out into the field.

THE RIGHT PERSPECTIVE

At first glance, the game looks like a poor *Commando* variant: it contains little of the excessive amounts of enemy soldiers, flashy graphics and endless violence that made that game a classic. But if you view it in such simple terms, you'll miss a great strategy game.

To begin with, your four soldiers are dropped at a designated point. The first thing to do is to locate the primary target. For this you need to call up a map screen on which, if you are on one of

Challenging missions
Sharp graphics
Original gameplay

PROS AND CONS

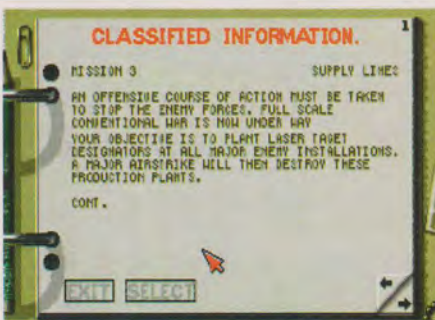
Needs more missions
Early missions too easy
to complete



The main menu. All options have to be selected in order, so the next won't become available until you have selected the former.



In this filing cabinet are all the details of the 16 menus. They can be played in any order, but they tell a story if played from start to finish.



One of the later missions. The objectives are clearly outlined, and the rules of engagement must be adhered to, or you're likely to blow the entire campaign.

Your eight soldiers. Each can be assigned a code-name, and this is how they are referred to for the rest of the game.



INSIDE INFO

The four players are likely to get separated, so you need to keep tabs on what they're all doing. There are several ways of doing this. The first is to refer to the small radar at the bottom of the screen that displays the positions of the four in relation to the entire warzone. Secondly, you can refer to the main map or call up a miniaturised version which is displayed in the top left of the screen. Neither of these can show you what's going on in any detail. What you really

need is a split screen, and *Special Forces* has one. Cutting the screen into quarters, with each quarter centred around one of the troops, this is the perfect way to keep an eye on everything.

the easier levels, your target will be marked.

From this map, you can issue movement orders to your four troops. Clicking on the function key corresponding to the man you want to move makes a crosshair appear. Move this to where you want that man to move to and press the spacebar to set him on autopilot. He will move to the target in the route the computer considers the most wise — which is not necessarily the most direct. As he moves across the terrain, he makes use of all cover he comes across, such as trees and bushes, engages the enemy in combat, and even hides if he has to. All this happens without you lifting a finger. At this level, you can play more as a commander than a soldier.

DIRECT ACTION

If that isn't active enough for you, you can take direct control of any, or all, of the four commandos. This takes them off computer control and puts them under joystick direction. In front of each man is a

"Challenging and addictive strategy title"

NAME: SPECIAL FORCES
COMPANY: MICROPROSE
CONTACT: 0666 504326

PRICE: £34.99
RELEASE DATE: NOW
MIN MEMORY: 0.5 Mb

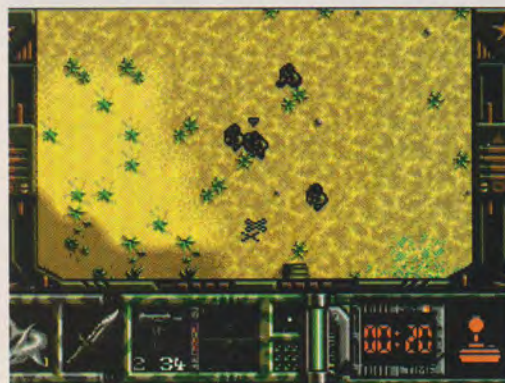
GRAPHICS: (5 stars)
SOUND: (5 stars)
VALUE FOR MONEY: (5 stars)
PLAYABILITY: (5 stars)

OVERALL: **81%**

crosshair gunsight, which is also used to move the players around. Pushing the joystick in a certain direction causes the character to turn and face that direction, and then move that way. You can change the priority, so that the player moves before the gunsight swings round. Each method is as useful as the other, but in different situations.

Enemies can spring up from anywhere, but are clustered around their own bases and important locations such as bridges and roads. Keep this in mind when you race across the map, as sometimes it's worth taking a long way round if it saves you getting blown to smithereens. You only have eight soldiers to play with, and each of those only has one life.

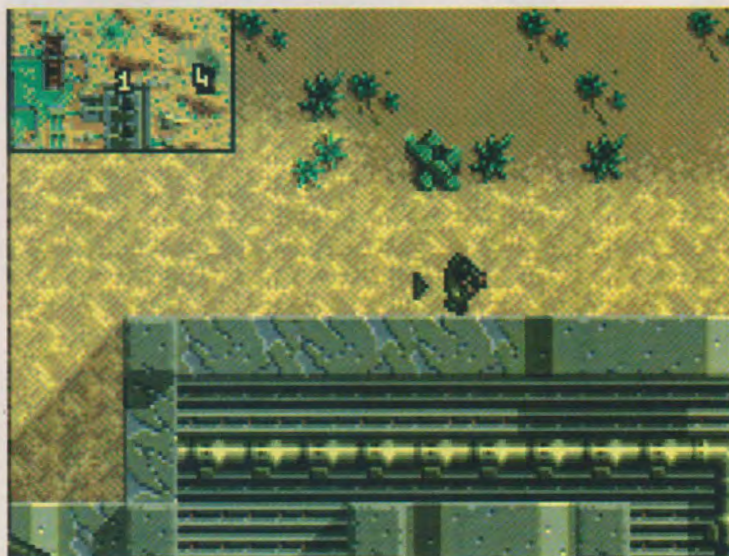
Special Forces may initially look like a *Commando* clone, but take a closer look and you'll find an excellent strategy game fighting to get out. It isn't too complex, although it will take a little while to get into. An entertaining attempt at a field that has yet to be fully exploited.



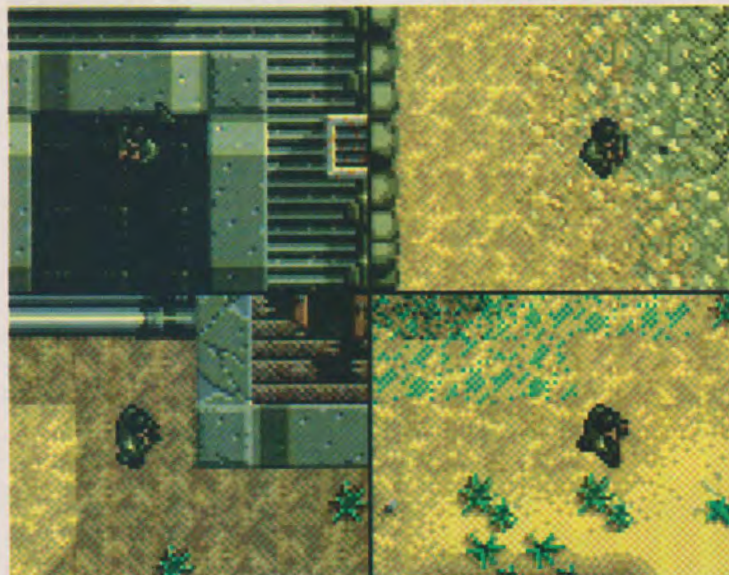
The main view of the warzone. The view scrolls to follow the currently selected man, and all details on current weapon, time, control method and score are in the bar at the bottom of the screen.



Your soldiers can be controlled by remote control, by setting destinations on the map screen. The rubber band lines show the most direct route, but this isn't always the route the men will follow.



To help you keep an eye on where everyone is, you can call up a local mini-map in the corner of the screen. This isn't much use if the players are far apart.



The actions of all four players can be viewed at once, using this split-screen system, but only the details on the currently selected player will be displayed at the bottom.

BIG GUNS



Special Forces has a variety of weapons to choose from. Find the best ones for you with our guide

BROWNING PISTOL

A stealthy, light sniping pistol. Not the fastest to fire, but can be carried with a lot of magazines.

STERLING MACHINE PISTOL

Not as light as the Browning, and a hell of a lot louder. However, it fires at a very fast rate, so is excellent for attack.

LEE-ENFIELD RIFLE

Very accurate single-shot weapon. Best over long distances.

GRENADE

Destroys all targets within a small radius. Needs to be thrown at a distance, and is ideal for attracting the attention of the enemy.

ENGAGER MACHINE RIFLE

A heavy, automatic version of the Lee-Enfield.

LAW ROCKET

Portable, shoulder-mounted rockets that can destroy anything. Must be fired at long distance.

LASER TARGET DESIGNATOR

This is used to guide air strikes by emitting a laser beam to pinpoint any target.

EXPLOSIVES

Completely remote controlled bomb packs. Once planted, they can be activated at any time from anywhere in the war zone. Each man can drop up to nine separate explosive packs.



At the end of the mission, you have to find your way back to the pickup point and radio for a helicopter, which comes zooming over the landscape. Once all soldiers are out, the mission is finished.

ZERO-G

THE SAMPLE-CD SERIES FOR DANCE PRODUCERS + ARTISTS DJ'S / PROGRAMMERS / REMIXERS

OVER 1000 SAMPLES
DIGITALLY MASTERED ON EACH COMPACT DISC
Sounds Level-Matched for Fast Sampling * 99 Tracks * Detailed Indexes

Produced by Techno Pioneer **ED Stratton**
aka **Man Machine** (Rhythim Is Rhythim / Virgin)

Already In Huge Demand...

>>>> DATAFILE ONE >>>>

* Over 60 Breakbeats * 100's of Vocal hooks/Vocal FX * Biting synth, dub and sub basses * Tons of dance-orientated percussion including: * Classic TR808/TR909/RR727 drum kits * 120 Killer snares + bass drums * Techno and electro beats * Pieces * Scratches/FX * Over 100 original Drop-ins * Sci-fi FX / Alien + robot speech * Oriental vocals + FX * Ethnic flutes and other instruments * Spacey and ambient FX * Stabs - techno / orchestral / horn / guitar types * Many more unique one-offs

"Unreservedly excellent... an unbelievably valuable addition to your sample library... the definitive dance sample CD" - MUSIC TECHNOLOGY, AUG 91
"An exceptional and extremely useful product... an invaluable tool for the professional sound technician" - DJ MAGAZINE, JULY 91. "Stratton knows his business... if the quality of Datafile One's sounds is anything to go by Volume 2 & 3 should be unmissable" - INTERNATIONAL MUSICIAN, AUG 91

And now just released, an even deadlier selection...

>>>> DATAFILE TWO >>>>

* Over 100 Breakbeats * Another arsenal of over 150 soulful Vocal hooks & ad-libs/FX * Kraftwerk-style electro percussion * 40 killer basses incl. an essential selection from Roland Juno 106 and SH 101 synths * Guitar FX + guitar rhythm breaks * Tons more Sci-fi/Techno FX/robots * Roland RS & Alesis HR16B drum kits * Complete human beatbox * Stabs * Ambient FX includes whalesongs/birds + film atmospherics * Industrial percussion/FX * Italo-house piano * Automotive FX / horn blasts * Drop-ins * One-offs

"The vocals & FX are even more powerful... I saved plenty of my best stuff for Two and Three..." - Man Machine

Coming soon... The final chapter...

>>>> DATAFILE THREE >>>>

* More sounds to blow the b***s off a Rhino at 100 paces...
All Existing Customers Will Be Sent Info/Order - Form Ahead Of Release)

ZERO-G: The result of years of sample collecting and creation for house/rap/soul production, never before have so many jealously-guarded sounds been made available on disc. At £49.95 inclusive, each **ZERO-G** CD retails at only around four times the price of a CD Album, while you could spend forty times that amount on breakbeat and sound FX Albums (And 100's of hours) to get 1000 samples as effective.

If you're in to house/rap or related styles, you know how important good samples can be. Owning these CD's will make a big difference to your creative output - ask anyone who's used them, or read the reviews.

Call: 0442 870681 for Visa/Mastercard orders, or post or fax details:

To: Time And Space, P.O.Box 306, Berkhamsted, Herts. HP4 3EP England

Please send: _____ copies of **ZERO-G** DATAFILE ONE at £49.95 each inclusive
 _____ copies of **ZERO-G** DATAFILE TWO at £49.95 each inclusive

(International orders: Add £5.00 for express air-mail/handling.)

I enclose a cheque/postal order to the value of £ _____ made payable to "TIME AND SPACE" or:
 Please debit my ACCESS _____ VISA _____ MASTERCARD _____

Number: _____ / _____ / _____ / _____ Expiry Date: _____ / _____

Name (Capitals): Initials: _____ Surname: _____

Address (Capitals): _____

_____ postcode _____

Telephone orders: (0442) 870681 or Fax This To: (0442) 877266



DA@TASCAN

Pro Plus

THE scanner for your Atari ST

DaataScan Pro Plus

A superb high quality image capture package compatible with all Atari ST's. Scan images from magazines, books, photos, etc. for use with DTP and ART applications.

Scanner:

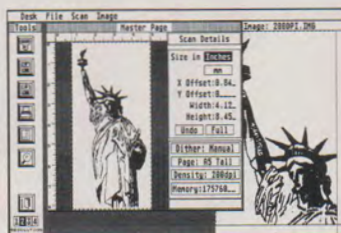
- 100-400 dpi resolutions.
- 64 grey levels.
- B/W text mode.
- 3 halftone photo modes.

Supplied with a high speed interface cartridge, which plugs into the parallel port, and a dedicated, regulated power supply.



DaataScan Professional 2.40

Image capture software package supplied with the DaataScan hand scanner.



Software screen shot

Features:

- 100% machine code - STE compatible.
- Saves in IMG, DEGAS & TIFF file formats.
- Runs in high and medium resolutions.
- GDOS printer support with print scaling.

Scanning & Editing:

- Real-time scanning display.
- Variable scan page size.
- Rotate, flip, invert and crop.
- Zoom with pixel editing.

FREE Colour modifier software included.

(Also available DaataScan Pro A4 £499.95)



Line art scan



Halftone scan



Colour-in image

Calamus DTP 1.09N

The most comprehensive page design package available for the Atari ST.

The ultimate publishing solution.



(Calamus SL phone)

£139.95

All prices include VAT and postage.



CREDIT CARD HOTLINE
0234 84 33 55



Pandaal Marketing Ltd
44 Singer Way, Kempston, Bedford MK42 7AF

UNBEATABLE PRICE

£109.95
inc VAT

£239.95 with Calamus

Draw your backdrops from back to front. You may find it saves a lot of time to put stationary foreground objects on now, such as still platforms. Place your background colours first, and then add details, such as trees and hills. If you want to save a little time, though, you can load in the STOS game graphics from the cover disk. See the cover disk pages for full details.



CREATE YOUR OWN STOS GAME

PART TWO

One of the most important aspects of any game is the way it looks. In the second part of our STOS tutorial, Tony Dillon focuses on game graphics

Last month we looked at how to prepare *Super Squirrel*, a platform puzzler based on the larger commercial where the performing squirrel leaps through hoops and races across wires in an attempt to get to some nuts. This month we're going to create some sprites and backdrops for the game.

GRAPHICS

In an arcade game, graphics are divided into two groups, background and foreground. The background graphics are the backdrops that set the atmosphere of the game. For example, the kiwi from *New Zealand Story* spends most of his time racing around on the outskirts of a forest. If you replaced the backdrop with the starfields of *Z-Out* or the ring from *Wrestlemania*, you'd have a completely different game.

Foreground graphics are, essentially, all the sprites and elements of the game that you interact with. Alien spaceships are foreground objects, as is the main character of the game.



DESIGNER LOOKS

First you have to decide what elements you want in your game, how big these are going to be, and how many frames of animation you need. To do this, get the sketch pad out and draw a couple of the screens you want in the game. Of course you need your squirrel graphic, but what else? Think about the platforms. Will they be floating blocks or something more realistic, like a tree branch? You'll also need obstacles, such as swinging ropes and see-saws. Make a list of all the objects you want, and then number them from one onwards.

Size is important when you start to design your graphics. If you make them too large, you won't be able to fit a lot on screen at once. On the other hand, if you make them too small, they could end up being unrecognisable.

Finally, you need to decide how many frames of animation are necessary. Graphics take up a lot

of room, so try to work out how many different frames you need to create the effect you want. You could have 25 frames of the squirrel running, which would create a smooth effect, but the amount of memory used would make the rest of the game a little difficult to program. Three or four frames are ample to create an impression of walking, and jumping should only take two or three. Any objects that don't need to be animated shouldn't be.

GENESIS

Load the sprite designer and grab a sample of the sprites to see how they fit. If drastic changes need to be made, return to the art package. Otherwise, use the sprite designer for small alterations.

You will need semi-detailed sketches of everything in the game, with all animation documented. Some thought has to go into designing your sprites, as these will decide the feel of the game. Decide whether you want something that looks like a real squirrel or a cute version. The beauty of drawing cute characters

is that movement need not be realistic. The squirrel could strut on two legs, even wiggle its behind. Just ensure that all the animation has the same feel.

There are two ways to turn your sketches into computer animation. The first is to use the sprite creator supplied with *STOS*. Although this is comprehensive enough to create with, you'll find it easier to work with an art package, preferably one that you're familiar with. Most art packages

The squirrel sprites in all their glory. At the moment, there are three for running in either direction and one for jumping. These are only a guide, feel free to use more or less sprites.



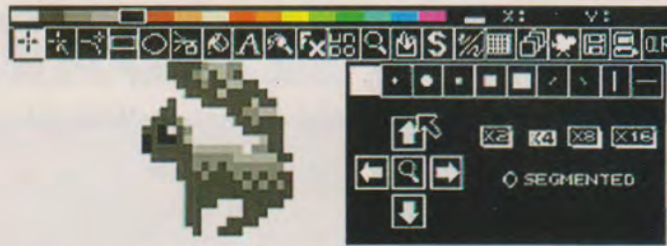
allow you to enlarge areas of the screen to work on, which is a necessity for working on detailed sprites.

COLOUR BY NUMBERS

STOS will only allow you to have 16 colours on screen at once, and that includes sprites and backdrops. Clever use of colour can give some staggering effects. For example, if you wanted to draw a tree in the background, it would look impressive if you had seven shades of green and five shades of brown for the leaves and bark respectively. However, this would only leave you with four other colours. What you could do is have two or three shades of green and two shades of brown, or even brown and black. Airbrushing one shade over a solid block of another gives a different tone to the colour, and with this you can paint just as good an image with less than half the colours.

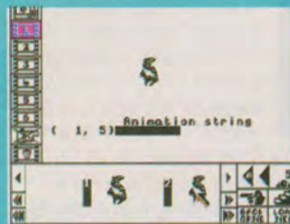
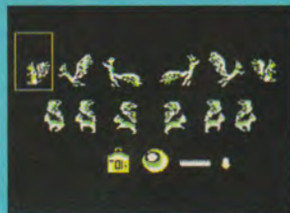
When drawing your sprites on screen, only draw them facing one way. Art packages can flip areas of the screen automatically, so don't waste time doing it by hand. Draw them to the size you decided upon earlier, and leave a black box around each sprite, to enable you to grab them later and place them in the sprite bank. First draw the parts that don't move. Only the squirrel's legs and tail move when it walks, so draw the head and torso first. Copy your graphic as many times as you have frames, then add the legs and tail, placing them in a different position each time.

When you've finished, load up the sprite designer, use the grab tool to lift the sprites from your art package and place them in the sprite bank. Using the animation tool, lay the sprites down in the sequence you want them to go. If you're happy with the way they animate, save the sprite bank and move on to the next section. If there are only subtle changes to be made, edit the sprites from within the sprite designer. If there are some drastic changes, then load the sprites back into your art package and try again.



One of the squirrel sprites being perfected with Deluxe Paint. You will probably find it easier to use an art package to design all your graphics, as they offer far more sophisticated drawing tools than STOS.

STEP BY STEP



1 With STOS, you get a fully-functioning sprite and animation editor.

This enables you to check quickly how your sprites work together and against a backdrop. Load the screen with your sprites on it and place them in the sprite bank.

2 Then, using the animation editor, set up your first animation string, by clicking on the sprites you want in the order you want them.

Remember that three or four frames should be ample to provide movement.

3 Once this is done, load up your previously drawn backdrop, and check how the sprites match it by clicking on the backdrop icon in the bottom right of the screen.

Needless to say, your sprites should match the mood of the backdrop.

4 This is how Super Squirrel looks at the moment.

If you have any ideas on how the look can be improved, or even some new ideas for the game, then feel free to drop us a line at ST Review, Priory Court, 30-32 Farringdon Lane, London EC1R 3AU.

SILHOUETTES

To keep your development time to an absolute minimum, don't try to draw your fully detailed sprites from scratch. It makes it very difficult to ensure that the animation is smooth and constant. The best way to start is to draw silhouettes, which are filled outlines of your sprites, with little or no interior detail, rather like masks.

Firstly, draw the outline of your basic shape, and fill it with a suitable colour. If you can, use the main backing colour of your sprite – in the case of the squirrel use grey or red. This means you can add detail later on without changing too much. Then design and draw your other frames. Animate them in the STOS sprite editor, and note any alterations that need to be made. With a little practice you'll find that silhouetting is the quickest and easiest way to create fluid animation.

FEELING YOUR WAY

Creating a consistent look for a game is one way of ensuring that it looks professional. For Super Squirrel, we are trying to show a squirrel adapting to man-made intrusion, so we have a collision of graphical styles. The backdrop has to show a natural scene, so we need lots of trees and grass. However, all the platforms and obstacles are artificial, so they have to look regular and unnatural. Use squared platforms and perfect spheres instead of rounded objects. The contrast created should set the scene perfectly.



VFM

If it's real value for money you're after, take some advice from Paul Rand as he reviews the latest in Budget games

RAINBOW ISLANDS

ATARI ST
BUDGET BUY



Hit Squad
£7.99

IN BRIEF: Two years ago, *Rainbow Islands* appeared on the ST to rapturous applause for Ocean and the game's programmers, Graftgold. A conversion of the seemingly unconvertible coin-op, the game shot to the top of the

charts the moment it hit the streets.

Bub and Bob, originally seen in the classic *Bubble Bobble*, are back in human form, but the evil Baron von Blubba is out for revenge. Taking the inhabitants of the Rainbow Islands hostage, he has set a challenge to the two young heroes - to save their friends or face a life of solitude and unhappiness. What this leads

to is a cute platform game with a difference. As well as conventional platforms, the player (or players, this being a two-player game) must create his own walkways in the shape of magic rainbows.

There are seven different islands to conquer, each of which is split into four separate areas. The object in each area is to reach the top of the island, starting from the bottom, avoiding von Blubba's minions and collect bonus objects along the way.

Helpful items such as speedy training shoes, double and triple rainbows and magic gemstones can be collected, all of which help toward completing the levels and racking up the points.

ST REVIEW COMMENT:

"Cute platform games are ten-a-penny nowadays, but *Rainbow Islands* still manages to hover around at the top of the pile. If there are any major differences in either graphics or gameplay between this ST version and the original coin-op, I've yet to find them.

Both the sprites and the backdrops are amazingly similar to those of the arcade game and that all-important addictiveness abounds from start to finish.

One of the all-time greats on the ST, *Rainbow Islands* grabs you the second it's loaded, and won't let go until every secret bonus has been found, every end-of-level guardian has been defeated and both - yes, both - endings have been viewed. *Rainbow Islands* is a true classic in every sense of the word and is a must for everyone's software collection".



SHADOW WARRIORS

Hit Squad
£7.99

IN BRIEF: If there's one genre that's stood the test of time, it's the good, old-fashioned beat-'em-up. Wherever you look, there's just no getting away from them. The ancient art of ninjitsu has always given programmers the excuse to slot together a few levels of whack 'n' smack action, and *Shadow Warriors* is no exception. Based upon the Tecmo arcade game which was released in 1989, *Shadow Warriors* uses the tried and tested plot of mythological demon emerging in a modern-day USA city, bringing death and destruc-

tion with it. The player controls the Shadow Warrior: bursting at the seams with ninja skills, and sporting a natty new ninja suit, his job is to battle through the levels, cutting a swathe through the enemy guardians who dare to stand in the way. Six progressively more difficult stages stand between the Shadow Warrior and his ultimate goal, with a different end-of-level enemy to defeat before passage to the next stage can be granted.

If you've ever played the coin-op, you'll immediately notice that the graphics in this ST version are strikingly similar to

those of the original. The programmers dumped the arcade's sprites and backdrops directly into their conversion and simply altered some of the colours, giving the game a look virtually



Beat 'em up action at its most demanding - *Shadow Warriors* is one that'll keep you on your toes.

indistinguishable from that of the original. There are the usual kick, punch and jump moves that you would expect to find in a game such as this, along with a variety of power-ups, extra lives and other bonuses. And with telephone boxes to smash up, lamp-posts to hang onto and swing-kick baddies from, and with some challenging end-of-level guardians to take on, *Shadow Warriors* isn't a game that will become boring in a short space of time.

ST REVIEW COMMENT: "One of the better arcade conversions, this is a game that has stood the test of time".



DIZZY'S EXCELLENT ADVENTURES



Bubble Dizzy: just one of a five-game compilation which isn't as excellent as Codemasters would have us believe.

Codemasters £24.99

IN BRIEF: Codemasters' ovoid superhero is the star of a five-game compilation spanning a plethora of genres, from *Tetris*-style shape manipulation to classic adventure and frantic arcade action.

There are two arcade adventures: *Spellbound Dizzy* and *Dizzy - Prince Of The Yolkfolk*. In the first, our hero has accidentally banished his pals to the underworld by uttering a magic spell, and he must find them by collecting special items and using them to release the imprisoned Yolkfolk one by one. *Prince Of The Yolkfolk* sees the old egg-head searching for a way to defeat the evil Rockwart the Troll, at the same time collecting cherries so that Daisy can make a pie for the Grand Dizzy. The plots may be a load of tosh, but the games

themselves aren't the worst around. Aimed at the younger end of the market, the puzzles to be solved aren't too taxing, but they should give the kids a few headaches.

The three remaining titles are based upon games that we all know and love. *Kwik Snax* is a blatant copy of *Pengo*, which was very popular in the early to mid-80s and involved crushing marauding monsters with blocks of ice. This version sees Dizzy and his chums pushing blocks and collecting items in five different worlds. The only differences between *Kwik Snax* and *Pengo* are that, instead of having to kill baddies to complete levels, the player must now collect all the objects on a screen; also, in the first game the player could throw individual blocks at the patrolling enemies, while the *Kwik Snax* player has to shove rows of blocks, a task made more difficult by the inclusion of immovable blocks. A simple yet extremely effective



Not the best-looking game ever to grace the ST, Spellbound Dizzy will nonetheless keep the kids quiet for a time.

reworking of an old favourite.

Puzzle games have been popular for a long time and *Panic Dizzy* is the latest title to jump onto the bandwagon. It's a cross between *Tetris* and the toddlers' manipulation toy which entailed slotting various shapes into the corresponding holes. The shapes fall from chutes at the top of the screen, and the player lines up a conveyor belt at the bottom of the screen to catch the shapes in the correct holes. When a certain number of shapes have been collected, a new shape appears on the conveyor. The chutes slowly travel down the screen, making it more difficult to line up the holes with the shapes. *Panic Dizzy* becomes slightly tedious after a while, but the inclusion of a split-screen, two-player mode adds to the value.

Bubble Dizzy smacks of *Rainbow Islands*, in that the object of the game is to get from the bottom of the vertically-scrolling playing area to the top. Set under water, the player controls the snorkel-wearing Dizzy, attempting to escape his soggy predicament by riding on bubbles. These bubbles come in various shapes and sizes and



Puzzle fans and lovers of pre-school manipulation toys should be more than happy with Dizzy Panic.

travel at different speeds, but all have one thing in common - they all burst after a short amount of time, sending Dizzy plummeting back to the ocean floor. On top of that, our hero has only a limited amount of oxygen and must continuously top it up by collecting the few air tanks available. While it will provide plenty of fun in the short term, this game soon becomes monotonous and frustrating - you never know when the bubbles are going to burst and, when they do, there's little hope of finding another one until you've fallen a long way down; and unless you're lucky enough to land on a ledge with an air-tank, you'll die from lack of oxygen before reaching the top of the screen.

ST REVIEW COMMENT: "A mixed bag of games is what you get with *Dizzy's Excellent Adventures*. Three of the titles make the package worthwhile, and even the poorer ones are initially worth the effort. Definitely a compilation for the kids, though".



ST DRAGON

Kixx £7.99

IN BRIEF: *St Dragon* comes from Kixx, the budget arm of US Gold, and is a conversion of a little-known coin-op from Jaleco. The plot revolves around an army of evil machines which are roaming the cosmos, bringing all manner of evil wherever they travel. Most planets are

quickly defeated, but one will defend itself to the last, thanks to Saint Dragon, an enormous mechanical version of the mythical fire-breathing beast.

What ensues is five levels of blasting, *R-Type* style. Not only can the Dragonship fire an impressive array of weaponry, it can also shield itself from attack by bending its metallic tail over its head. Starting with plasma bolts and a small fireball-thrower,



Reverse the St George legend in Kixx's St Dragon, a minor

extra artillery in the form of lasers, mega-fireballs and power-ups can be collected by picking up the relevant tokens that appear on the screen.

ST REVIEW COMMENT: "There isn't an awful lot more to say about *St Dragon*. It's

the same old plot, the same old power-ups and extra weaponry, but thankfully the game holds its own amongst the current glut of shoot-'em-ups. As a conversion it's admirable; both graphics and gameplay are close to the coin-op. There's always something happening, so you won't get bored and, although there are only five levels, they are lengthy and challenging. If you think there's enough room in your software collection for yet another arcade blaster, then you could do worse than taking a look at *St Dragon*".



NAVY MOVES

Hit Squad £7.99

IN BRIEF: Spanish software house Dinamic is the team behind *Navy Moves*, the sequel to the good-looking but ultimately annoying *Army*

Moves. Most of Dinamic's titles have been plagued by over-difficult gameplay; which is a pity because, had the playtesters put in as much time as the graphic artists, they would have been onto some real winners.

As the title suggests, *Navy Moves* puts you in the flippers

of a naval commando, who's on a mission to foil a terrorist plot to steal a nuclear submarine armed with the brand-new Raider homing missile. The mission, code-named Operation Octopus, is split into two parts spanning four stages. Stage one involves finding a suitable site to deploy a bathyscaphe while running the gauntlet of enemy soldiers on jetskis and high-explosive mines. Once you've found the best place to begin stage two, dive below the surface, locate enemy headquarters and capture the bathyscaphe. Next, escape the enemy base while avoiding such terrors as giant octopi and sea monsters. It's then onto the second part of the mission, a conventional platform shoot-'em-up set

inside the submarine. The object is to plant a time-bomb and escape before it detonates. There are the usual variety of weapons to use, an assortment of baddies to destroy and a number of codes that need to be found in order to prime the bomb.

ST REVIEW COMMENT:

"There's no denying that there's a lot of game stored on the *Navy Moves* disk; the trouble is, there's little chance of the average player ever getting the opportunity to see it all. As with Dinamic's previous titles, this is way too difficult. Most of the time, especially in the earlier stages of the mission, there are too many enemies around to stand a chance. That, plus the demands put upon your reflexes in situations such as leaping over mines in a speedboat, makes the package a non-starter. Unless, of course, you use the cheats supplied in the package by *The Hit Squad*; admission of defeat, perchance?"



Nice graphics, shame about the gameplay; Navy Moves refuses to break the Dinamic duck.



QUATTRO FIGHTERS

Codemasters £7.99

IN BRIEF: Codemasters has had a fair degree of success with its *Quattro* range; this isn't surprising, considering you get four games for the price of one. It's often said that the games offered aren't worth the money; so here's the latest in the series to try and dispel that criticism.

Unsurprisingly, *Quattro Fighters* features a quartet of blasters - *SAS Combat*, *Mig 29*, *Kamikaze* and *Guardian Angel*.

SAS Combat takes place across four stages, the objective in each being to seek out and destroy the enemy leader. This *Commando*-style multi-directional scrolling blast-'em-up has everything you'd expect from a game of this type, including extra weapons and baddies a-plenty. It's also one of the worst examples of the genre you could ever hope to see. Obscene graphics and dull, lifeless gameplay will leave you feeling decidedly flat

after only a short time.

Mig 29 is a blatant attempt to cash in on the so-called explosion of interest in *Afterburner* clones. Unfortunately, that happened two years ago and was more of a whimper than a bang. This is a second-person 3D perspective shoot-'em-up, in which the player controls a Mig 29 Fulcrum, the latest Soviet fighter. Where *Mig 29* falls flat on its face, apart from the fact that the Soviet Union is now just a dim and distant memory, is the inability to accurately gauge where to let loose your bullets, resulting in enemy planes flying right into you.

Kamikaze is, to all intents and purposes, a poor man's version of the excellent *Flying Shark* coin-op. A group of military advisers have been kidnapped and taken to an enemy stronghold. As the kamikaze pilot of the title, cut a swathe through enemy fighters, tanks and trucks, picking up extra weaponry as you travel up the vertically scrolling screen. *Kamikaze* is an apt title for this particular game - it should have



Just one of the quartet of games in the Quattro Fighters pack which proves that four into one just does not go.

crashed and burned the second it was completed.

The final game in the compilation casts the player as a Guardian Angel - one of a group of beret-wearing vigilantes who patrol the underground stations in America. You take on hordes of evil gang members using punches, kicks and not much else. A *Double Dragon* clone, *Guardian Angel* features flat gameplay and graphics which can only be described as comical.

ST REVIEW COMMENT:

"*Quattro Fighters* is a compilation which would leave a bad taste in the mouth of a rottweiler. What's worse is that Codemasters has the nerve to print a line of blurb on the box which reads 'An excellent four game compilation pack - amazing gameplay'. Perhaps the Advertising Standards Authority should be informed".



STARBLASTER



**Soccer Will Never
Be The Same Again**



Available on the Amiga (one meg only)
and Atari St from mid May 1992
Rage Software unit 21 Edward Pavilion
Albert Dock Liverpool L3 4AA.
Telephone: 051-707 2280 Fax: 051-709 2621

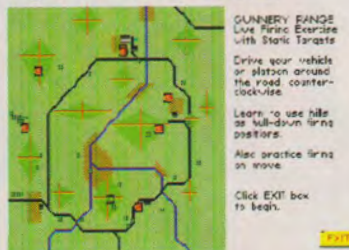
THE ALL-TIME TOP

Welcome to the second and final part of our A to Z of the best games ever released. If you want shoot-'em-ups, simulators, platform games, beat-'em-ups, puzzle games, arcade conversions, hard-core strategy games, or even a game that lets you play God, read on...



1 M1 TANK PLATOON MICROPROSE £30.64

If you've played a few battle simulators you'll know all about the M1A1. It's featured in games such as *Tank*, *Steel Thunder*, *Heavy Metal* and *Abrams Battle Tank*, as well as here. MicroProse's effort is the pick of the crop for a couple of reasons. The smoothness of its graphics is second-to-none and it boasts a huge range of options, enabling you to select training or combat missions,



The M1A1 Abrams is the most widely emulated armoured vehicle in tank games, and this is the most comprehensive and accurate simulator available.

optional enemy capabilities, randomly generated terrain conditions and even the weather. Since tanks obviously haven't got the speed or manoeuvrability of other combat vehicles, tank simulators usually give you a wealth of strategic planning with a 105mm rifled gun thrown in. This game is no exception, but it goes further than most. First of all, you're given a 16,000 acre battlezone to practise in and full control of a quartet of M1A1s: this includes 16 crewmen whose

morale and performance are affected by your decisions. The degree of involvement is up to you: you can take over their actual battle positions at any time or just sit there issuing orders. You also have to organise other ground, artillery and air support as well as using technological achievements and tactical philosophy that are bang up-to-date, making *M1 Tank Platoon* probably the closest you'll ever get to the real thing.

★★★★★



2 MIDWINTER MAELSTROM RAINBIRD £30.64

You probably already know about *Midwinter II: Flames of Freedom*, because it was in the first part of the Top 50 last month. So why bother with its predecessor? Simply because it's one of the landmarks in computer game design, and an entirely different game from *Midwinter II*. It's set in the mid-21st century. In 2017 a meteor collided with the Earth and caused



Maelstrom's fractal graphic landscapes superbly recreate the cold isolation of the post-apocalyptic island of Midwinter.

widespread global cooling. The Azores archipelago was transformed into the island of Midwinter, which quickly fell under the threat of domination by the tyrant General Masters. It's your job, with few resources to hand, to recruit a band of followers and sabotage the General's plans. There are 32 characters to choose from and six different modes of transport, including hang-gliding, cable car and skis. Maelstrom has managed to capture perfectly the sense of stark isolation on a frozen wasteland by using a combination of fractal graphics (for the landscapes and map) and filled polygons (for the buildings). The game is virtually flawless, with excellent graphics, easy-to-use controls, a superbly detailed map to help you plot your course and beautifully understated sound effects. It's instantly playable - you can just wander off and ski down a mountainside - but winning takes a lot of hours and effort.

★★★★★



3 OIDS FTL £24.99

This was one of the earliest shoot-'em-ups to be released for the ST and is still the best. The plot is simple enough: the evil Biocretes have created and enslaved a race of android slaves they call 'Oids'. As a member of a compassionate race, you are so incensed by the Biocretes' behaviour that you climb aboard your V-Wing fighter and decide to free every single Oid from each of the 30 planets across half a dozen galaxies. Your V-Wing comes with four spares, a limited shield, unlimited ammunition and a full tank of fuel. Each planet has reserve fuel supplies, warp gates and a host of enemy defences, including anti-gravity and gravity generators, huge missile bases and the tortuous terrain itself. As for big guns,

Oids features one of the most satisfying weapons around: the NovaBomb. This is a last resort weapon which can be detonated either on contact with an enemy, or (for a wider range) at any point between launch and impact. It releases a huge, almost



Don't be fooled by the cute and basic graphics: Oids is the toughest shoot-'em-up around.

irresistible nuclear fireball, which is ideal for getting you out of tight situations. This is an instantly addictive game and it would be a crime to miss it; unfortunately, because of its age, you'll have to search long and hard to find a copy.

★★★★★



4 ORIENTAL GAMES MICRO STYLE £25.53

(AVAILABLE ON BUDGET SOON)

Most beat-'em-ups just give you one event, usually Kung Fu. *Oriental Games* gives you three: Kung Fu (of course), Kendo and the bizarrely named Kyo-kushin-kai. You aren't just thrown onto a pretty background and asked to slug it out until knackered, either. After registration you can select from three difficulty levels, enter the championship against 15 other competitors (either human or computer), or just have a one-to-one bout with a



Oriental Games is an accurate and very serious beat-'em-up.

50 ST GAMES

PART TWO – THE LAST 25

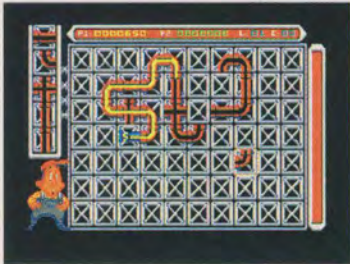
human or computer opponent. What makes this game so special is its joystick editor: apart from the 48 default moves spread across the three events, you can program your own movement sequences. So, with just a simple click on the fire button you can execute a chest punch followed by a round-house kick and a sweep; and once you've customised your fighter you can save and load the kick sequences. The action graphics throughout are good, although they can look slightly untidy; but in the heat of the fight you haven't got time to think about how you look. Another minor criticism is that the moves in *Kung Fu* and *Kyokushin-kai* are fairly similar (though you do get a neat head-butt in the latter). Ignore these minor drawbacks: if you like beat-'em-ups, *Oriental Games* shouldn't be missed.



5 PIPEMANIA EMPIRE £20.42

Who could have guessed that a game based on the gripping world of household plumbing would gain practically universal applause? *Pipemania* is one of those rare achievements where a simple idea is perfectly executed. The basic principle takes only seconds to grasp: all you have to do is construct a continuous pipeline by linking together variously shaped sections of pipe before a thick, slow-moving liquid (or 'flood', as it's known) starts to flow. Playing is a different kettle of fish. The components aren't always dispensed in the order you'd like (so you have to think far ahead), a piece can easily get into the wrong

position by mistake, and a one-way section can mess up your whole design. You can bomb misplaced pieces for a 50-point penalty but once the magic flood has filled a section of the pipeline, you can't change it. The excellent game design makes the most of a brilliant idea with bonus levels, obstacles and reservoirs (which slow down the move-



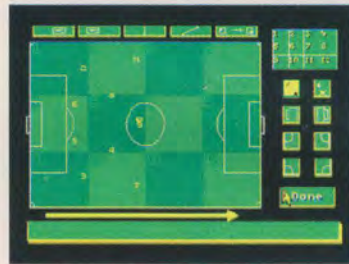
Pipemania is more than just a plumber's nightmare: it's one of the most addictive puzzlers around.

ment of the flood), plus expert and standard modes. Thanks to neatly graded difficulty, a password system and a two-player option, this is definitely what you'd call a family game.



6 PLAYER MANAGER ANCO £19.99

The original *Kick Off* was hailed a classic – the best football game ever written. That was until *Kick Off 2* went one better. *Player Manager* was the half-forgotten game sandwiched between these two footballing milestones and offered you the chance not only to smoke fat cigars, wheel and deal and kick ass in the dressing room, but also to score the winning goals yourself. It's not perfect: it takes about 10 minutes to set up your first



The only quality football management game that allows you to hoof the ball upfield as well.

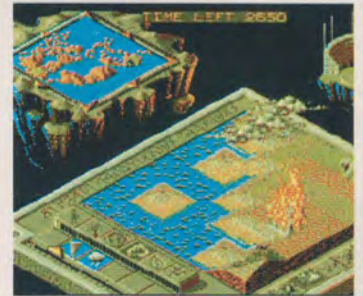
game, and there are a couple of minor bugs which can cause the program to crash (frustrating if you're at the top of Division One and haven't saved the game). On the other hand, it is almost perfectly comprehensive. There are 1,000 individual players, match reports on every single game, the ability to name and customise your club, set-piece and squad training, as well as the more usual transfer deals and team selection facilities. Even with all its inconsistencies, it's a must-buy for any footy fan. By the way, you don't necessarily have to pay the full price: you can either get hold of *Player Manager* on compilation, or you can order the game at a reduced price directly from Anco's mail order department (Tel: 0322-291649).



7 POPULOUS II BULLFROG/ELECTRONIC ARTS £29.99

ATARI ST ESSENTIAL BUY The first *Populous* was a truly original game, although its classic isometric viewpoint and strategic planning have since been emulated by (among others) *Megalomania* and *Utopia*. However, *Populous'* fatal flaw was that it was

only one basic game played on increasingly difficult landscapes, and as the months went by it became boring. *Populous II* rectified the fault and added dozens of new features. The aim remains the same – you play a semi-divine



If you want a God simulator that's even better than Populous, look no further than this.

being whose job it is to encourage the growth of your population on one of 1,000 worlds, and ensure the demise of your opponent's followers. There are 32 opponents ranged against you, and you can only defeat them by combining the strength of your people with some handy home-made natural disasters. With 30 effects at your disposal you would think it was easy – but you have to earn the right to wield your powers. The ultimate goal is to convince Zeus, your father, that you deserve a place on Mount Olympus. With bags of excellent presentation features (including the ability to design your own head), a one or two-player option, and 1Mb and 0.5Mb versions available, it's your God-given right to play it.



**8 POWERMONGER
BULLFROG/
ELECTRONIC ARTS
£29.99**

Bullfrog's philosophy is to produce games that the team enjoys playing. As well as its successes with *Populous*, *Enlightenment* (a Gauntlet-style arcade adventure), *Fusion* (a shoot-'em-up) and *Flood* (an excellent platform game), there's *Powermonger*, an arcade strategy game with strong emphasis on military tactics and social planning. Your homeland was destroyed by a devastating seismic upheaval, so you (with a small band of trusty followers) sailed the seas and found paradise. Unfortunately, the local population also likes it, and it's your task to persuade them to join your



If playing God is just too divine, why not try life as a military commander?

cause or be killed resisting you. There are 195 territorial maps to conquer, and you need to bring two-thirds of the population under control. There's only one way to do this - conquer settlements, get food and men, invent weapons and trade items. The result is a more serious alternative to the *Populous* games. If you want a more historically accurate plot, there is a data disk of the First World War available (you need the original to run it), and more scenarios could be in the pipeline.

☆☆☆☆



**9 PRINCE OF PERSIA
BRODERBUND/
RESPRAY
£7.99**

ATARI ST BUDGET BUY To perfect the animations in *Prince Of Persia*, its author, Jordan

Mechner, meticulously digitised frames from a specially filmed video of his younger brother, who performed all the key actions. The result is awesomely realistic character animation and a real quality feel. As a young adventurer new to the Sultan's court, you have exactly one hour to battle through the palace



Superb animation and blood-curdling screams make Prince of Persia a real winner.

dungeons and save the princess. If you fail she will be forced to marry the appallingly ugly Jaffar and betray your love; succeed and she'll probably fancy you for some considerable time. If you decide that the odds are worth it, a nail-biting 60 minutes of sprinting, leaping, fighting and hanging onto ledges by fingertips are yours - if you can stay out of trouble long enough to avoid falling roofs, collapsing floors, an array of man-traps and dozens of precipitous drops. The impeccable cinematic presentation, complete with several animated sequences, adds the final flourish to an impressive technical achievement. An excellent remedy to the hordes of mediocre cute platform games doing the rounds.

☆☆☆☆



**10 PROJECTYLE
STAR PERFORMERS
£10.99**

ATARI ST BUDGET BUY What can you say about a future sport that pits three teams of aliens against each other over three time periods on a pitch with four goal zones? Only that it's just about the fastest and most furious sport you'll ever play. You take control of one of eight teams in league, cup or one-off matches, and you can play with any combination of computer or human players (two on the joysticks, one on the keyboard). Your



Crazy cats get their claws out and cause a commotion in the coolest contest in the cosmos.

job is to bump a sliding puck, ice-hockey-style, into one of your opponents' goals, and whichever team scores the most goals can boast about it forever. It's all the extras which make this such a great game: you can opt for automatic action replays; there are 18 special effects (including freezing your opponents, grabbing cash and sealing all the goals), and you can improve your players' skills with six training bonuses, paid for in hard cash. There are also a couple of natty presentation features, including a table of the top goal scorers and comprehensive league statistics. If you didn't catch this the first time around, get it now.

☆☆☆



**11 RAILROAD TYCOON
MICROPROSE
£34.99**

ATARI ST BUDGET BUY Anyone who's ever owned a train set will take to this game straight away. Railway construction in the 19th century may not be the most likely candidate for simulation, but Sid Meier's design combines utility, graphical interludes and a heavy dose of strategy to make an irresistible game. Your task (once you've selected the difficulty level) is to construct the most profitable railway in any one of four geographical terrains:



When you hear the tootin' of the whistle, it's you at the throttle of the Cannonball Express.

Europe, England, and the East and West Coasts of America. This is a logical process: to build railways you need to clear land and lay track, you need stations and junctions, and you need to know whether you are just going to carry passengers between towns or arrange a regular cargo run. The level of control you're given is astounding: you can manage everything from your company's finances to the number and type of carriages for each train. It's packed with neat spot effects, too, including sparse (but appropriate) sound effects and still graphic screens announcing key events in the action. The price tag is a bit steep, but if you like strategy spiced with crisp, colourful graphics and neat action sequences, it's more than justified. This is an unusual and brilliantly implemented game with great depth, and it's hard to see anyone failing to like it.

☆☆☆☆



**12 RAINBOW ISLANDS
GRAFTGOLD/
THE HIT SQUAD
£7.99**

ATARI ST BUDGET BUY It's almost a miracle that Graftgold's superlative coin-op conversion found its way into the



Bub and Bob bounce back in the official sequel to Bubble Bobble. shops. It began as a project for Firebird - until they ceased trading, when MicroProse temporarily snapped it up. It was then signed by Ocean who published it at full price to rave reviews, and now it's available for under a tenner. The action is easy to get to grips with: one or two players have to negotiate a series of vertical levels armed only with rainbows. These rainbows are used to scale the more difficult parts of the landscape, to knock out approaching enemies, and as a smart weapon which can

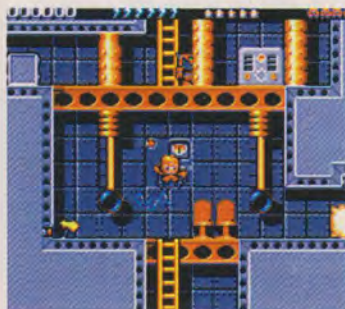
wipe out anything which lies beneath them. There are also plenty of pick-ups to be had, the best of which include magic shoes (for greater speed), red potions (for more rainbows, up to a maximum of three) and yellow potions (which speed up the rainbows). It's not arcade perfect (the last three levels weren't included), but it's got all of the first seven islands, including the bonus and hidden levels, and it's packed with secrets and tricks. With great graphics, a range of monsters unique to every island, a cute (if sometimes annoying) tune and superbly graded difficulty, there's no better platform game available on the ST.

★★★★★



**13 RICK DANGEROUS 2
CORE DESIGN/
MICRO STYLE
£25.53**

After the success of his death-defying mission to out-think the Goolu tribe and defeat a bunch of fiendish Nazi agents, Rick Dangerous is ready to laugh in the face of danger and tweak the nose of trouble yet again. For the second of Core Design's exceptional platform games, our hero has been given something of a facelift. Instead of the rugged Indiana Jones-style hat and coat, Rick sports a cutesy golden quiff and a handy little laser-bolt gun. But the magic ingredients that made the original *Rick Dangerous* such an amazing success are all still firmly in place. Fearlessly, our hero scales ladders, laughs at really obvious traps, flicks secret switches with his little finger and kicks the asses of remote-controlled guards in his quest to save the world from the Fat



Rick Dangerous - he's blond, he's smart, and he gets quite mad if you pull his ears.

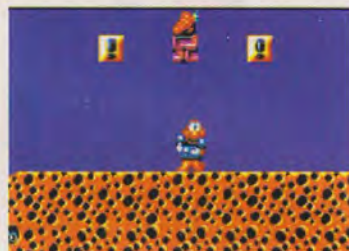
Man's evil machinations. This takes him on an incredible journey via a spaceship, the Ice World, the forest and the Atomic Mud Mines, culminating in the final showdown in the Fat Man's huge orbiting palace. If you're man (or woman) enough to take it, *Rick 2's* got the lot: slick graphics, fast action and addictive gameplay.

★★★★★



**14 ROBOCOD
MILLENNIUM
£25.99**

James Pond looked pretty and played well, but didn't have much depth. *James Pond II: Robocod* is prettier, plays even better and has all the depth you could want, establishing Chris Sorrell as one of the best game designers in the business. The sinister Dr Maybe has returned. He has infiltrated Santa Claus' main toy factories in the North Pole and is planting bombs disguised as penguins throughout the building. They



Robocod takes the best features of James Pond one stage further.

are due to detonate in 48 hours. Only a special kind of fish can pick up all the penguins in time, and even he needs a specially adapted robotic suit, designed by Phil the scientist. This has an extendi-neck (to reach the highest platforms) and allows him to crush enemies from above. As you'd expect from the scenario, this game is packed with humour. There are dozens of levels full of googly-eyed enemies, as well

as cute cars and other vehicles in which you can hitch a ride. The theme of every factory is different and each one presents new hazards spread over a number of levels; even when you've completed a factory, you have to face a huge end-of-level guardian. Life is made easier with goodies such as wings (for flying), umbrellas (to break a fall) and ankhs (extra lives), but there are so many obstacles that it will take months to discover all the secrets.

★★★★★



**15 SIM CITY
MAXIS/INFOGRADES
(IN A DOUBLE-PACK
WITH POPULOUS)
£29.99**

Like *Populous*, *Sim City* is a highly original product which started off whole new trends. You're given a randomly configured area of land, a reasonable budget and the task of creating a viable community. This means building industrial, commercial and residential zones, laying railways and constructing roads, all of which cost huge wads of cash. You set your own tax rate and have to make sure there's enough money in the coffers to cover all building and maintenance costs at the end of the year; however, if your taxes are too high the population soon gets annoyed and leaves town.

As your settlement grows bigger all sorts of problems emerge: among them are cli-



Sim City turns you into a town planner in your own home.

matic disasters, pollution, traffic, rising levels of crime, huge marauding monsters - even the citizens' dissatisfaction at the absence of a baseball stadium or an international airport. The widespread appeal of *Sim City*, and its sequel, *Sim Earth*, is justifiable. It may not sound or look like much, but it is guaranteed to keep

you burning the midnight oil for months to come.

★★★★★



**16 SPEEDBALL II
RENEGADE
(BUNDLED WITH
CADAVER AND
XENON) £25.99**

The Bitmap Brothers have established a reputation for producing polished and very playable games in every field, with *Xenon*, *Cadaver*, *Magic Pockets*, *Speedball* and *Gods* to their credit. First impressions of *Speedball II* are good: an inventive manual includes a



Crunch skulls in this fast and furious, futuristic combination of Rollerball, pinball and ice hockey.

full guide to the game and a mock match programme. After that, things get even better. The action is played on a multidirectionally scrolling metal pitch by two teams equipped with roller-skates, body armour and a desire to maim the opposition. Each game is played in two halves, and the basic aim is to score goals; but on the way you can activate points accumulators to multiply the value of a score, crack a few bones, and pick up cash for the management facilities. These include a limited training screen which helps you improve your players' abilities, and a transfer market in which you can buy the meanest and leanest players available. There are two divisions of eight teams (you start off in the lower division) and a cup competition against the game's finest opponents; but if you prefer you can just enter a one-off contest against another human or a computer opponent. This is a top-quality future sports simulation which shouldn't be missed.

★★★★★



17 STUNT CAR RACER
KIXX
£7.99

ATARI ST BUDGET BUY Originally released by MicroProse on its Micro Style label, this is now available on budget. The author, Geoff Crammond, has a discography second-to-none. As well as producing one of the best games ever (*The Sentinel*), he's also renowned for programming racing games, beginning over half a decade ago with *Revs* for the C64, and culminating with *Formula One Grand Prix*. *Stunt Car Racer* is a racing simulator with a difference: it's set in the future, on a series of increasingly difficult tracks raised high above the ground. The effect is something like a cross between a roller coaster ride and a drag race. You have to put your foot down to beat the nifty computer opponents (or a



Racing in the future: speed, power and car crunching falls from the elevated racetrack.

human player, if you have a link cable), but you also have to watch out for uneven track, steep slopes, death-defying leaps and banked curves. The 3D effect is stomach-churningly good, particularly when you fail to negotiate a banked section, fly through the air and take a long time to crash.

★★★★



18 SUPER SPRINT
ELECTRIC DREAMS
£19.99

The oldest game in the Top 50 is also one of the best coin-op conversions ever produced for the ST. This isn't much of a boast when you consider the coin-op: Atari's own arcade machine isn't the

most sophisticated overhead racing game, but despite tiny graphics and minimal effects and music, it's a lot of fun. There are four cars competing for first place over eight increasingly tough tracks; as you progress you come across obstacles such as banked curves and opening and closing gates. Each race consists of four laps of the track, and you can pick up bonus points and golden spanners along the way. Spanners are vital if you're going to get a big score: for every four you collect you can buy extra points, turbo acceleration, higher top speed or



Super Sprint is one of the best coin-op conversions ever produced for the ST.

increased traction. When you've completed all eight courses you have to start all over again - only this time there are obstacles such as oil slicks, water patches and raised metal pillars to watch out for.

★★★★



19 TOOBIN' RESPRAY
£7.99

ATARI ST BUDGET BUY Bif and Jet are two hip dudes who thought it would be a wacky idea to pull on their shorts, inflate their rubber inner-tubes and leap



Bermuda shorts and a rubber ring are all you need to go Toobin' down the river.

into the world's longest and most dangerous river. Having taken that decision, they've decided that you have to help

them out. One or two players can take part: two players can clear the obstacles and fight it out for bonuses, but they use up more credits; in solo mode you've got everything to yourself, including enemies. The aim of the game is to paddle your way to the end of the river and avoid being drowned, savaged by crocodiles, blasted by laser-spitting aliens, spiked by twigs, sunk by rocks, pierced by fly fishermen and trapped on rapids. Your only defences against these terrors are half-a-dozen Cola cans and your own paddling skills. There are different opponents and a wacky tune on each level, but the bonuses are common to all: you can collect up to 1,000 points by paddling through gates, and there are spare Coke cans and lives to be grabbed. It's not the most accurate conversion of the Tengen original, nor is it particularly tough in the early stages, but it's still a great game to play, and if you can't root out the budget version you'll find it on numerous compilations.

★★★



20 TOWER OF BABEL
RAINBIRD

£24.99

ATARI ST ESSENTIAL BUY *Tower of Babel* didn't get the recognition it deserved when it was released a couple of years ago, but it's undoubtedly one of the most sophisticated and brain-taxing puzzle games ever released. There's nothing else quite like it: programmer Pete Cooke has created a nightmarishly surreal 3D world of over a hundred towers populated by spiders, enemy zappers, worms, land lizards, mines, lifts, blocks and prisms. control three spiders, each with unique abilities that are used to negotiate the different puzzles that each tower offers and then collect energy modules - known as Klondikes. As you progress onto more difficult towers, you have to learn how to program your co-spiders so that they can go off and perform tasks while you concentrate on something more important. However, once you set the program in

motion you have the satisfaction of watching the action from a number of remote cameras. And that's not all: even when you've completed all the levels you can go on to create your own towers with the built-in designer. This is a classic, and well worth seeking out.

★★★★



Tower of Babel is the most unusual puzzler around, a 3D world of tricks, traps and bizarre enemies.



21 UMS II
RAINBIRD
£30.64

No self-respecting strategy collection is complete without *UMS II*. Blessed with a manual the thickness of a house-brick and a windows menu system that requires



If you're a serious wargamer there's no better scenario designer than UMS II.

some studious application, this is a strategy gamer's heaven. There are three major scenarios: the battles of Alexander The Great, the Napoleonic Wars and the D-Day landings of 1945. You can specify virtually anything, from the nature of your forces right down to terrain and weather conditions. Everything you could possibly need is included: supplies, missiles, budgets, diplomacy, plus full-scale land, air and sea operations; and, believe it or not, up to 50 players can take part in any one game. This in-depth approach is clearly designed to satisfy

every tactician. If planet earth is too boring for you, there's talk of an extra planet editor (complete with two scenario disks) which will allow you to create and enact new plots on an imaginary area as large as the real world's surface. Vastly more complex than the original *UMS* (which was complex enough), this is king of the highbrow strategy market.

★★★★★



22 VAXINE US GOLD £25.99

The Assembly Line - also responsible for the development of the more mainstream *Pipemania* - has acquired a reputation for producing original, off-beat brainteasers. Like *E-Motion*, its predecessor, *Vaxine* takes you deep into a strange and alien 3D world. Your inner space is under heavy bacterial attack: to survive you need to blast the enemies with your antibody gun. You start off with a limited amount of colour-coded ammo, and all you have to do is match the colour of the bullets to the colour of the baddies and blast them. By targetting mysterious twinkling stars you can replenish stocks of a particular colour any time. If that doesn't sound weird enough for you, there are surreal black rectangles to jump through and super-powerful strands of DNA to create and exploit. Confusing it may be, but boring it's not. Strange shapes, ethereal sound effects and bright primary colours create an addictive New Age feel and help convince you that this game is definitely out of its tree. All you need to provide are excellent hand-eye co-ordination, a taste for the bizarre, and the cash. And if you look long and hard enough you might



Strange shapes and bright colours give *Vaxine* an addictive feel.

even find the special-edition round metal canister which the original release came in.

★★★★★



23 WARHEAD ACTIVISION £29.99

Designed by Glyn Williams, this is one of the most compelling arcade strategy space games of the last couple of years. It's the middle of the 21st century and the Earth is faced by an enemy it knows little about. We may not know much, but what we do know is that they're an insectile race from a nearby star system, responsible for killing billions of human beings, wiping out countries and throwing the planet into a nuclear winter. It's been decided that a lone FOE-57 space craft will be launched to infiltrate their defences, find out as much as possible, and (hopefully) escape with the information. The result is a smooth 3D space epic in the style of *Elite*, characterised by impressive realism. Part of this is due to the weapons and intelligence systems, including the credible Data Gathering Probe which penetrates an enemy craft hull, deep-scans the target and relays the data back to your ship's computer, and the devastating Pseudo-Stellar Missile, which has a wide effective kill range and can annihilate your own craft if you fly too close. The atmosphere is also enhanced by a lack of information in the manual - you're told the basic controls - and the rest is up to



Impressively realistic, *Warhead* is an *Elite*-style space epic.

you. This can be annoying, but it tests you to the limit. An unusual but very enjoyable deep space exploration and combat game.

★★★★★



24 WONDERLAND MAGNETIC SCROLLS/VIRGIN £29.99

The British company Magnetic Scrolls has long been famous for producing top quality text-based adventures like *Jinxter*, *Fish!* and *Guild Of Thieves*. But these days, pure text adventures are considered old-fashioned and the average gamer doesn't want to bother with an outdated system and the frustrations of a limited parser. That's why *Wonderland*, based on Lewis Carroll's classic children's book, *Alice in Wonderland*, had to be different from the famous Magnetic Scrolls products of yesteryear. Instead of the popular American point-and-click approach, *Wonderland* features an original windows interface which is mainly



Magnetic Scrolls' windows menu system has taken graphic adventure games to new heights.

menu-driven but still allows the flexibility of typed-in commands. The puzzles are logical, well-thought out and highly absorbing, and the still graphics screens are superb without exception. Frequent saving is recommended: playing in cavalier fashion can lead you into frustrating dead ends, and there are a couple of minor bugs which could throw you off the trail.

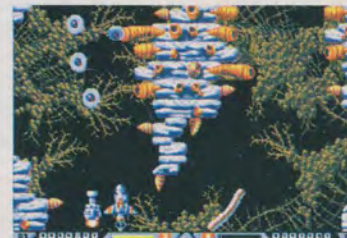
★★★★★



25 XENON II RENEGADE £24.99

Like most shoot-'em-ups, *Xenon II*'s plot is irrelevant. For what it's worth, though, the Xenites have planted time

bombs throughout history, which means the fabric of time is in danger, and you've been assigned the task of single-handedly, etc. etc. What is important is that when you're flying up a narrow canyon, there are dozens of blood-sucking, missile-spitting and multi-tentacled aliens about, you've got a single blaster, and there are only a couple of sheets of reinforced metal between you and the darkness of space. Occasionally, a strange-looking metallic canister floats by, and you're well advised to grab it. There could be health, power, weapons or money inside, and the latter comes in particularly useful for purchasing hefty weapon upgrades at the nearest intergalactic service stop. Your ship can also purchase a dive mechanism, which allows you to slip under trouble for



Great graphics, smooth scrolling, repulsive aliens and huge weapons - *Xenon II* has it all.

10 seconds - not a function you should abuse. *Xenon II* is dark, sinister and tough: getting through the first organic level to the end-of-level mothership is no doddle and if you survive through to stage five you probably eat half a dozen Shredded Wheat for breakfast. If you've got superhuman reflexes, buy it.

★★★★★

BUT I CAN'T FIND IT...

If you have serious trouble finding any of the games mentioned in the Top 50, don't despair. Even if they aren't on the shelves of your local software emporium, there are three other places you can look:

- Reputable mail order companies usually have a large back catalogue of games.
- Some of the releases are already available on budget.
- Many can be found on compilations, or in bargain buckets.

Happy hunting...

WHO CAN SAVE CIVILIZATION FROM THE MOST DESTRUCTIVE FORCE ON EARTH?

A few thousand years ago, Atlantis sank to the ocean floor. With it sank the secret of the most destructive force on earth. But the Nazis have rediscovered the lost Kingdom, and they'll soon have a bomb which can end World War II in fifteen minutes. Unless Indiana Jones gets in their way...

- Control two characters - Indy himself and his capable sidekick Sophia.
- Whips, weapons, fistfights, gambling and puzzles.
- Dazzling 3D isometric world - click from one camera angle to the next.
- Awesome animation, music and sound effects.
- 9 lavishly - detailed action-packed locations.

Available on:
Amstrad, C64 Cassette & Disk, Spectrum Cassette, Atari ST, Amiga & PC and Compatibles.



Break the bank in Monte Carlo - and buy a bundle of clues and weapons.



Borrow the keys to Adolf's submarine and take it for a ride.

Drop by the local watering hole for a friendly game of darts.



Screen shots are only intended to be illustrative of the gameplay and not the screen graphics which may vary considerably between different formats in quality and appearance and are subject to the computers' specifications.

WHO ELSE?

INDIANA JONES and the FATE of ATLANTIS

LucasArts
Lucasfilm Games



Indiana Jones is a registered trademark of Lucasfilm Limited. Lucasfilm Games is a trademark of LucasArts Entertainment company. Indiana Jones and the Fate of Atlantis © 1992 LucasArts Entertainment company. Used under authorisation by U.S. Gold Limited, Units 2/3 Holford Way, Holford, Birmingham, B6 7AX. Tel: 021-625 3366. All rights reserved. All other trademarks are acknowledged as the property of their respective owners.



The ACTION game with much, much, more

GOLD PHONE
THE HINTS & TIPS LINE

LEGEND OF DARKMOON (EYE OF THE BEHOLDER II) • SHADOW SORCERER TEL: 0839 654 139
HILLSFAR • DRAGONS OF FLAME • HEROES OF THE LANCE TEL: 0851 442 025
CURSE OF THE AZURE BONDS • POOL OF RADIANCE • CHAMPIONS OF KRYNN TEL: 0891 442 026
BUCK ROGERS • SECRET OF THE SILVER BLADES • EYE OF THE BEHOLDER TEL: 0891 442 030
OPERATION STEALTH • ANOTHER WORLD • CRUISE FOR A CORPSE TEL: 0839 654 284
LUCASFILM HELPLINE • LE CHUCKS REVENGE (MONKEY ISLAND 2) • INDIANA JONES • ZAK MCKRACKEN • MANIAC MANSION • IQOIM • SECRET OF MONKEY ISLAND • BATTLE OF BRITAIN TEL: 0839 654 123

NEW RELEASES • COMPETITION TEL: 0839 654 124
COMPETITION - £200.00 WORTH* OF U.S. GOLD GAMES TO BE WON EACH MONTH.
* At Retail Prices

If you are under 18 please get permission to use the telephone. Calls

SMALL WONDERS

THE TOP 10 LYNX GAMES



With games ranging from strategic puzzles to out-and-out blasters, Lynx owners are spoiled for choice. This month, Frank O'Connor takes a look at 10 essential purchases on the Lynx, the games you can't afford to be without. . .

AWESOME GOLF



Awesome Golf is one of only two golf games available on the Lynx. It's a fairly standard golf sim with three courses to choose from – Britain, Japan and the United States – and these courses vary in difficulty, with Britain being the easiest (at least in terms of greens) and Japan the hardest. The usual hazards are

there for you to avoid, including bunkers, water and miles and miles of rough. You have a full selection of clubs at your disposal and intelligent players will choose their own, although the computer will make that selection for you if you're a beginner.

The game scrolls vertically up the course and you can use the joystick to zoom in on specific areas of the course. This scaling is used to good effect when you take a shot: the "camera" follows the ball as it rises and falls and the effect is very impressive. Graphically, this game is excellent and the sound is even more impressive. While the music is great, it's the sampled speech that really impresses. This is a brilliantly playable simulation of a fun sport and probably the best game on the Lynx.



PACLAND



Abundant platform hazards and superb graphics make Pacland one of the best platform games ever.



This is a conversion of an old Namco coin-op. The original arcade game was one of many sequels to the classic **Pac Man**. It took the voracious yellow beach ball one step further, incorporating most of the characters into a superb, horizontally-scrolling platform game. Lots of secret rooms and hidden levels make this a huge and challenging game. The object is simple: guide the sprite to the end of each level, avoiding ghosts and hazards as he goes. There are several worlds to explore, each with a cartoony feel. There are lots of things to help Pac Man, such as power pills and extra lives, but the best things are hidden in the landscape. There are plenty of platform hazards, and Pac Man can achieve limited flight by repeated pressing of the direction buttons. The graphics throughout are superb, very colourful and well-animated.



STUN RUNNER

ATARI ST
REVIEW
ESSENTIAL BUY



Fast polygon graphics and sheer speed set *Stun Runner* way ahead of the competition.



For sheer, unadulterated speed, nothing can compare with the awesome *Stun Runner*. This game caused a real stir in the arcades with its superfast polygon graphics and incredible sampled sound. The Lynx conversion retains all these features, down to the last sampled word. The polygons are there, portraying the futuristic race course perfectly. The object is to finish the course in as fast a time as possible, trying not to destroy your craft as you do so. You can pick up lasers and smart bombs to take out the opposition and there are boost pads and bonus stars littered around the tracks and tunnels – although everything moves so fast that you'll miss most of them. Boost pads double your speed for a few seconds, making your craft almost uncontrollable, and bonus stars simply give you points. Graphically, this is the best thing on the Lynx and for sheer adrenaline rush, nothing can touch it.



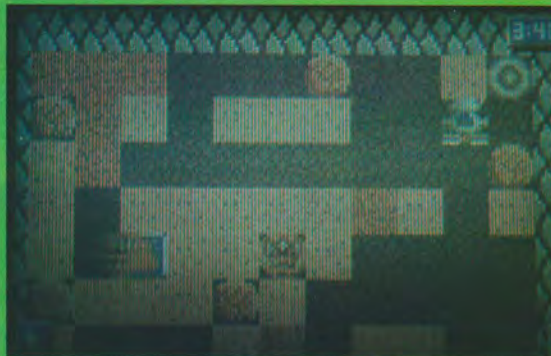
SCRAPYARD DOG



More platform action, but this time with a humanoid instead of a beach ball. The human in question is a little boy whose dog has been kidnapped. To rescue his best friend, he must overcome obstacles in the scrapyard where the dog is being held. This is huge and infested with gangsters and vicious animals. Fortunately, the boy is a crack shot and can outwit even the most dangerous foe with a well-placed throw. You have a limited supply of ammunition, but you can replenish it by picking up junk and weapons from around the scrapyard. The platform element is intense and in true Mario style, there are secret rooms and levels galore, which you generally find by experimenting with the obstacles strewn around the land. Graphically, this game is very similar to an old Atari coin-op called *Peter Pack Rat* and indeed much of the gameplay has been borrowed from that game. All in all, this is a solid and satisfying platform game which will have you playing into the wee small hours.



CRYSTAL MINES



Despite bland sound and limited graphics, playability is excellent in this *Boulderdash* clone.



The main reason for the success of *Crystal Mines* is that it's a blatant rip-off of *Boulderdash*. For those of you who don't know what *Boulderdash* is, it's a maze game with you as a robot hunting a mine for crystals. You have to collect all the crystals on each level to escape to the next. You burrow through dirt to clear a path to the crystals, but this can dislodge boulders. One falling boulder can cause a massive and destructive chain-reaction, sometimes for the good, but more often than not blocking your exit. Patience is a virtue in this game. Decide which is the best path to take and collect those gems! The graphics are workmanlike rather than spectacular, but suit the game perfectly. Sound is bland and repetitive but it's gameplay that counts and this has it in oodles!



WARBIRDS



Doing away with lasers and smart bombs, *Warbirds* takes a trip back to the good old days of biplanes and machine guns.



One of the most unusual releases on the Lynx is *Warbirds*. The scenario is World War One, an age of biplanes and machine guns. The polygon graphics are fairly slow, but very smooth and portray the handling of a biplane quite well. In a one-on-one shoot-out, you can take on several German air aces, including the Red Baron himself. The graphical touches are stunning, right down to the wispy clouds as you soar through the skies, and while the music isn't up to much, the sound effects are brilliant. This is a brave and ultimately successful stab at bringing something a little different to this market.



Impressive

The first version of Redacteur became the standard word processor for the ST in France. For journalists working for the newspapers *Liberation*, *Quest-France* and *La Voix du Nord* it has become an indispensable tool. Its speed and features have attracted thousands of users.

The latest version of Redacteur, version 3, has retained the speed of the original version and added a greater degree of flexibility, and many more functions and facilities:

- Multiple rulers, paragraph styles and page layouts;
- Choice of character height/width and line spacing;
- Footnotes and endnotes;
- Automatic creation of tables;
- Graphics handling (16 formats recognized);
- Programmable macros
- Built in switcher for toggling between programs;
- Font Editor and Editor for mathematical formulae;
- English and French spell checking plus Verb conjugation;
- Editor for user-defined dictionaries;
- Automatic Hyphenation;
- Option to save text files in compressed format;
- Saves in ASCII with or without end of line carriage returns, First word (Plus), Word Perfect formats;
- Full configurability of most functions;
- Database and Mail Merge;
- Runs on any Atari ST(E) Mega ST(E) or TT with at least one megabyte of memory. Colour or monochrome display.

Our customers think so. Here is just a small selection of the feedback from Redacteur 3 users: "An excellent product", "Formidable value!", "Very good, clean and concise manuals. Very pleased", "Wow!", "Beats anything I've got here", "Excellent!", "The best word processor available on the Atari", "One of the most useable WP's I have encountered - including PC and Mac", "A most comprehensive program", "Excellent text handling", "A great product!".

And the press agree. In *ST User*, Andrew Wright summed up Redacteur 3 users: "looks set to make a considerable impact as a high-end, high-speed wordprocessor. In *ST Applications*, Dr Steve Henderson has this to say about Redacteur 3: "The combined value of AZtheque (Redacteurs database) and Sigma (Redacteurs formulae editor) exceeds the price tag for the whole Redcatuer 3 package. The combination of its text and graphics power is going to make this a very hard program to beat."

Formed in 1986, we have established an enviable reputation for supplying quality products to the ST market. Our collection of PD and Shareware disks runs to over 2,000 disks and we guarantee same day despatch on all orders. Our Free Catalogue (60-pages A4) details these disks and all of our products and services: PD disks, ST Club Software, Accessories, Books, Budgie UK Licenseware and Laser Printing. We publish the following commercial software titles: Redacteur, Fontkit Plus, Universal Item Selector, Quick ST, FastCopy PRO, Page Assistant and Calamus (SL) Assistant, Imagecopy, Fontpac Plus Signum and GEM fonts, Clip Art Packs, Guides to Timeworks DTP and 1st Word, Trimfont, Molgraph, Astronomy Lab, Oxford Chess and Key Master.

We also publish a highly acclaimed magazine, *ST Applications*. Each issue is packed full of news on software, programming articles and projects for your ST.

For further information on all of our products please complete the coupon opposite.

Please send me: Free copy of the 60-page ST Club Catalogue
 A copy of *ST Applications* magazine (£2)
 A demonstration version of Redacteur 3 (75sp)

Name _____
Address _____
Post Code _____
Please post or Fax this coupon to:
The ST Club
2 Broadway, Nottingham
NG1 1PS

AT LAST!



The first comprehensive guide
to PC Entertainment and more!

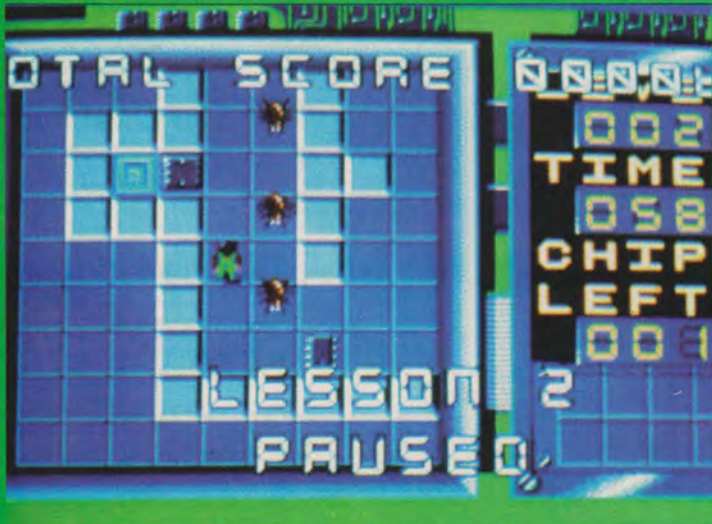
PC *review*

- ★ Offering more than entertainment, **PC Review** tackles graphics, sound, hardware and productivity based software like *no* other magazine can.
- ★ FREE discs for you to sample the best in entertainment software.
- ★ FREE supplements covering the best games by genre.
- ★ Comprehensive reviews and qualified information about past, present and future software.
- ★ Huge Shareware section
- ★ News section
- ★ Buyers guide
- ★ Packed with editorial about the ultimate in entertainment software.

emap.
Images

PC Review - available from all
good newsagents NOW!

CHIP'S CHALLENGE



Help Chip to get the girl in this highly original puzzle game.



This is a puzzle game with a difference.

Borrowing elements from classics such as *Pengo* and *Boulderdash*, it sees you controlling the hapless Chip - he's after a lovely lady who will only go out with him if he solves a series of puzzles. These will stretch his brain (and yours) to the limit. The game takes place in miniature on the surface of a computer board, and you have to guide Chip around a maze of transistors and microchips in an attempt to open a locked exit. Once you unlock the exit you can go to the next level, one step closer to the lovely lady. The puzzles involve a lot of moving blocks and switches - some of these open doors, some alter the behaviour of monsters and some are red herrings. You can move parts of the background, making bridges across water, or clearing paths to the exit. Things get gradually more complex as you progress and some of the levels are almost impossible. A password system allows you to continue where you left off and the computer always gives you clues at the start of a level. *Chip's Challenge* is an excellent and challenging title, not to be missed.



GATES OF ZENDICON

ATARI ST
ESSENTIAL BUY REVIEW



One of the first Lynx releases and still one of the best, *Gates of Zendicon* is a horizontally scrolling shoot-'em-up, which borrows elements from *Salamander*, *Nemesis* and *R-Type*. There are lots of extra weapons, lots of firepower and the obligatory end-of-level baddies. The screen scrolls horizontally

all the time, but moving to the top or bottom of the screen also scrolls things vertically, giving you a huge playfield to move around in. One of the nicest features in this game is the secret level where all the aliens have been replaced by tiny portraits of the games programmers. The graphics are slick and colourful and the sound effects are amazing. Featuring some of the most imaginative baddies ever, this is a must buy.



ROBOTRON 2084



Robot monsters abound in this conversion of the Williams classic.



This conversion of the Williams classic is a near perfect shoot-'em-up. The rather unlikely plot tells the tale of a planet inhabited by robot monsters, who have decided to eradicate human life from the planet. As a lone space crusader, you have to destroy the robots before they destroy the humans.

The original arcade game has long since vanished into the realms of obscurity, but it got a new lease of life recently with the release of *Smash TV*, which is basically a revamped version of *Robotron*. The robot baddies are difficult adversaries, but there are lots more obstacles to hamper your progress. These include laser-firing drones, homing missiles and exploding shrapnel canisters. There isn't much in the way of variety, but the adrenaline rush makes up for it. The controls are tricky, but perseverance reaps rewards and this game is probably the most addictive shoot-'em-up ever.

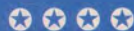


FIDELITY CHESS



Fidelity Chess was programmed by the people responsible for professional chess computers. With skill levels from beginner to expert, it actually teaches you as you play. The graphics are crisp and clean, giving a nice view of the board and pieces, not nearly as cluttered as some chess programs.

The presentation is almost perfect, with brilliant options and control methods.



Professional and educational, *Fidelity Chess* is one of the best chess games available on any format.



WHAT MAKES WIZARD SPECIAL?

**FULL DOUBLE SIDED
DISKS**

RELIABLE

KEEN PRICES

TOP QUALITY

(we only use the best)

FAST SERVICE

JUST A FEW EXAMPLE DISKS FROM OUR COLLECTION

ART 07 Superb art package, idea for simple DTP. 23 built in fonts. A4 size paper works in mono chrome for best quality of print. Ideal for leaflets etc. DS disk.

BRD 01 MONOPOLY, LAZERCHES, OTHELLO, CHECKERS, WHEEL OF FORTUNE, and more a superb collection of **BOARD GAMES**.

ADV 01 DDST, DUNGEONS & DRAGONS, Role playing adventure. **PARANOIA**, ENCHANTED REALM and **ELBOZO CITY** 3 more good adventures also on this disk.

DART 05 ANJST. Great animation package formerly sold at £80.00 now PD, VAN GOUGH Paint package with animated sprites. 4 **LANDSCAPE** Generators including GENASIS and a CAD Package.

DMUS 31 The ACCOMPANIST SEQUENCER From H. COSH.

DWPR 01 ST WRITER V4.2 and **FIRSTWORD**. The 2 best word processors for the ST(E) plus a spell checker, print spooler and a selection of ready to use letters.

ODD 07 THE WORLD OF STARTREK Over 300K of text interviews and biographies from the original STARTREK and NEXT GENERATION plus loads of pictures from both series. A must for all TREKKIES!!!

AST 01 PLANETARIUM simply the best PD Astronomy program. SKYMAP another great Astronomy program plus aSTronomer.

**NEW
CATALOGUE
OUT NOW!**

EST. 1989 **WIZARD P.D.** 24 HOUR ORDERLINE

178, Waverley Rd, Reading, Berks, RG3 2PZ Tel: 0734 574685



For disk catalogue send blank + S.A.E. OR 70p Paper or disk catalogue free with order on request
P.D Disks 1 or 2.....£2.25 3+.....£2.00
We also stock Budgie, POV and KME disks.



New Age PDL

All PD disks are DOUBLE SIDED

Telephone: 0702 232826
Only £1.50 Each (UK)
All PD disks are FULL

To order our extensive, easy to use disk catalogue featuring over 800 jam-packed disks, and filled with 2 games, 4 soundtracker modules, a text editor and a brilliant demo. Just send us either a £1 coin or a blank disk and a stamped SAE. Alternatively add 30p to any order.

Any disks with prices in brackets are either Licenseware or multiple disk sets. All disks will only run on a COLOUR system except: 'H' = High resolution monitor only, 'A' = Any monitor suitable.

ART AND GAMES

BU 76 - Clunk - Puzzle clone (£2.95) BU 78 - Clacker - Klax clone (£2.95)
BU 81 - Dead Or Alive - brilliant adventure game (£2.95) BU 83 - Cyberlarm - excellent Defender clone (£2.95)
BU 84 - Hylelios - skill and strategy game (£2.95) BU 86 - Quattr - similar to Tetris / Sime Nemesis (£2.95)
BU 89 - Horse Racing Simulation (£2.95) BU 90 - Match-It - Shanghai clone (£2.95)
BU 91 - Flipped - very hard puzzle game (£2.95) COM 25 - Football Genius / Super League Soccer (£3.95)
ART 35-37 - In Bed With Madonna 3 disks (£4.00) ART 51 - Crack Art - better than Neochrome! (1 Meg)

ART 40-48 - These 9 disks contain pictures in Spectrum 512 Extended format (SPX). They are full colour and span several screens. The best quality pictures available on your ST! Buy all 9 disks for just £12 -

GAME 6 - Scanner, Bridge-It, Darts, Mister Rocky, Tunnel Vision, Air Warrior (flight simulator)
GAME 13 - Wizards Tower, Tomb Of Death, Invasion (STAC Adventures)
GAME 17 - Room (brilliant shoot 'em up), Snatch & Crunch, 1st Serve Tennis, Video Poker, Labyrinth
GAME 21 - Hanou, Heia (Courriel clone), Sensor, Penite, Millpede, Wormwar, Jigsaw
GAME 44 - Skapan (overhead car racing), Haunted House, Rap Music Challenge, Technate Demo
GAME 62 - House Of O's, Lottery, Mold 1, Underground (Adventures) 'A'
GAME 63 - Treasure Search, Coweats (a battle of the programmers!) - THIS DISK NOT SET!

DEMONSTRATIONS

DFMO 3 - UIM Mega Demo
DFMO 42 - Ialal Chaos Double Dozer Demo
DFMO 51 - Hobby One Mega Demo
DFMO 74 - Slaytanic Cut - STE Only
DFMO 81+82 - Warbeauce 2 Demos (£3.00)
DFMO 93 - Songs Of The Unexpected - STE Only
DFMO 16 - Things Not To Do (Very Funny!)
DFMO 45 - Decade Demo (Some Bad Language)
DFMO 69 - Electro Reset Demo (1 Meg)
DFMO 78+79 - Punish Your Machine Demo (£3.00)
DFMO 92 - Shamen Music Demo
DFMO 95 - Corporation Mega Demo - STE Only

APPLICATIONS AND UTILITIES

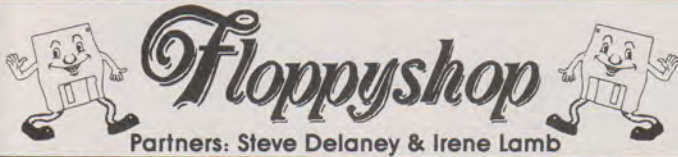
BUSI 7 - Sheet 2, Home Accounts, Dbase One 'A'
UTIL 3 - Almanac, Treasures, Biomorph, Potter 'A'
UTIL 10 - Printing Press v 3.0, File Tool 'A'
UTIL 13 - German To English, Dbackup, DC Utils 'A'
PRO 20 - Video Master - Superb video filter (£3.95)
BUSI 1 - Invoice And Statement Generator 'A', Nomencl (database) 'A', Sales Controller 'H'
UTIL 15 - Tons of misc utils including copiers, formatters, virus killers, directory lists, dirty, etc. 'A'
LANG 13 - Tim Oien's Guide to Professional GEM in C, tutorial, source code and utilities 'A'
LANG 24 - C Adventure book v 2.0 - Very powerful language for creating large, complex text adventures.

SOUND TRACKER MODULES

These disks contain brilliant quality tunes at great value for money. All disks come with the ESION tracker which is a complete module editor and player. There are versions for both the ST and the STE. Those disks
TRAC 6 - Tune One, Art of Noise, Charlmix, Deadlock, Deagnet, Rainbow, Popcorn, Wander Chicken
TRAC 11 - Clothes, Comicalote, Fratherme, H-energy, Hunters, Jackanoe, Scratch, Magic, Sir9
TRAC 20 - Albit, Bluerman, Clutch, Disco, Entlen, Megamix 88, Shortish, Symphate, Song, Fish 4
TRAC 49 - Berry, Close, Depress, Doc II, Eagles, Fg, Tremies, Fson, Going, Goodlife, H-dance, I-around T
TRAC 50 - Got-ya Home, How-deep, Intuition, Jow, Jumping, Kifer, Link, Night, N-speed, Official T
TRAC 74 - Brain, Deadcop, Jamer Tune, Mastersy, Power, Rockpeda

As well as these disks listed we also stock hundreds of demos including the complete range of POV. We also have over 100 disks of clipart and also cover disk magazines, wordprocessing and communications.

(STR2) 30 Anderson Estate, Lower Road, Hockley, Essex SS5 5NG
Modern users call New Age BBS on (0702) 715025



Partners: Steve Delaney & Irene Lamb

OVER 3,000 DISKS OF PUBLIC DOMAIN, SHAREWARE AND LICENSEWARE

After many years supporting the Atari ST, Floppyshop are now the largest stockist of high quality, low cost software in Britain. Our nearest rivals are several hundred disks behind us! Our full catalogue is disk based and uses a customised version of the popular Hitchhiker's Document Displayer. It received a highly favourable review in the January 1992 issue of Shareware Shopper. For a free copy, send us a blank disk with a note of your name and address. Alternatively you can send a Cheque or PO for 80p and we'll supply the disk. We can guarantee you will not be disappointed. No-one beats us for service. All orders received by 2pm are despatched the same day. We also accept payment by VISA or Mastercard, either by post or telephone.

BUDGIE UK AND SHOESTRING LICENSEWARE STOCKED

Floppyshop were one of the first distributors for the Budgie UK and Shoestring Licenseware ranges. Budgie produce games, demos, disk magazines and utility software. Shoestring specialise in educational software for young children. Both organisations produce programs which are comparable to full price software but at a fraction of the cost. With utility software at £3.95 and everything else at £2.95, you're really getting a bargain! Only approved distributors like ourselves are allowed to sell these titles.

MORE NEW TITLES THAN OUR COMPETITORS

With numerous top contacts throughout the world and a good working relationship with software authors, we add more new titles to our catalogue than any of our competitors. The catalogue is updated every two months and during 1991 the lowest number of new disks added was 150, we actually added 184 on one occasion! This is even more surprising considering that we accept only the best titles and typically reject about 20%-30% of all submissions. If you have written a top quality program and would like us to include it in our collection, send it in for evaluation. If we accept your work, we will swap between 2 and 4 disks of ours for each one of yours. Please don't split your programs over more disks than necessary. We will be fair with you and expect the same in return! If we don't accept your programs, they will be returned to you.

PROTECTION AGAINST THE GROWING MENACE OF COMPUTER VIRUSES

If you've tried the demo version on the July 1991 cover disk of Atari ST User, you will no doubt have found at least one Virus in your collection. It is more than likely that you found several. For a mere £6.95 you can have the full version of this invaluable program and check every new disk you receive BEFORE you risk infecting the rest of your collection. Low cost updates will be made available to all registered users. Remember, prevention is better than cure! At £6.95 it's simply not worth taking the chance. Buy PVK now, before Viruses destroy your valuable data!

Please make Cheque or PO (UK currency only) payable to Floppyshop. Major Credit Cards welcome. UK Postage FREE, Overseas Postage to: Europe £1.00 per order, Rest of World 10% of order value.



PO Box 273, Dept:STREV
Aberdeen, Tel: (0224) 312756
AB9 8SJ.

COMPUTE 'In style'
Dept (STR)
64 Castle Hill Road,
Hindly, Wigan,
Lancs, WN2 4BJ
Tel: (0942) 522970

FOR THE BEST IN P.D LICENSEWARE & COMMERCIAL SOFTWARE

| PD GAMES & ADVENTURES | BUDGIE SINGLES 2.95 EACH |
|-----------------------|--------------------------|
| M625 The Mystic Well | NEW Match-It |
| M305 Panic + Spooks | M036 Dog Fight + Cycles |
| M601 Nova | M023 Space Blob |
| M604 Skate Tribe | NEW Football Magic |
| M308 Wizards Tower | M065 Douglas Rockmoor |
| M359 The Holy Grail | M041 Exodus |
| M566 Sherlock Holmes | M037 Mr Dig + Tank |
| M410 Blaster + More | M081 Dead Or Alive |
| M361 Battle / Throne | NEW Horse Racing Sim |
| M621 Ammotrak + More | M070 Pac Man ST |

BLANK DISKS

10 x 3;5 DS/DD = 5.49 20 x 3;5 DS/DD = 9.99

UTILITY DISKS 1.99 EACH

M445 STE Boot / Address Book + 16 other utility programs.
This is an example of our utility disks. We have over 700 utilities on 50+ utility disks.

PRODUCTIVITY 3.95 EACH

M167 Splash Art Package for Children 3 years +
M171 Classroom Maths 2 Inc printed instructions.

BUDGIE DEMO'S 2.95 EACH

BUD3 Wot a scorcher, very very impressive.

SPECIAL OFFERS

ThunderHawk.....one fine helicopter simulation = 14.99
Leisure Suit Larry 3..... = 18.99
Captive.....brilliant spave age dungeon master = 17.99
Mystical.....very good and amusing shoot-em-up = 6.99

We have hundreds of special offers just for you. Also check out our new and exciting exchange club.

FOR A FULL DETAILED 'FREE' CATALOGUE ON ALL OUR PRODUCTS PLEASE PHONE OR WRITE STATING YOUR NAME & ADDRESS.

ALL ORDERS ARE GENERALLY DESPATCHED WITHIN 24 HOURS.

PLEASE ADD 50P TOWARDS P&P AND PLEASE MAKE ALL CHEQUES & POSTAL ORDERS PAYABLE TO 'COMPUTE IN STYLE'.

WHERE IN THE UK CAN MY ST BE REPAIRED?

So your ST won't work, you're not into DIY and you need it up-and-running quickly to finish that all-important job. Fear ye not, for help may be just a stone's throw away...

also NOVELL & UMIX Systems. We are the Autocad Specialists for SLOUGH. Tel: 0753 696499 Fax: 0753 696211

COMPUTER BASE

8 21-23 Market Ave, City Centre, PLYMOUTH PL1 1PG. Tel: 0752 668635

WEST WILTS MICROS

9 2 Whiteheart Yard, TROWBRIDGE. Tel: 0225 762759

ANALOGIC COMPUTERS

10 152 Latchmere Road, KINGSTON-UPON-THAMES, Surrey KT2 5TU. Tel: 081 546 9575 Fax: 081 546 1467

PENGE TV & VIDEO SERVICES

11 49 Parish Lane, PENGE, London SE20 7LJ. Tel: 081 659 2851

DAWSONS MUSIC

12 65 Stanley St, WARRINGTON WA115U.

CHIPS COMPUTER CENTRE

13 53 Rugby Road, WORTHING, W Sussex BN11 5NB. Tel: 0903 700804

ACS ELECTRONICS

14 Business Enterprise Centre, Eldon St, SOUTH SHIELDS, Tyne & Wear NE33 5JE. Tel: 091 455 4300.

service available, plus door-to-door pick-up and delivery. Contact: Star Association, Unit 10 Bridge Park, Harrow Road, BRENTFIELD, London NW10 0RG. Tel: 081 961 5366 (open 9am-6.30pm).

DATAMATION SERVICES LTD

7 Datamation Services prides itself on offering quality in sales, service and support. Single & multi-user systems; main boards & addons; repairs & upgrades —

37 Crossall St, MACCLESFIELD, Cheshire. Tel: 0625 503 448 (9am-6pm Mon-Sat).

STAR ASSOCIATION COMPUTERS

6 Repairs for the ST range and monitors. Hard drives and upgrading for only £23.50 + parts, and quotes will be given before we undertake any work. Same day

WTS ELECTRONICS

1 Atari Registered, WTS are one of the largest and most renowned Atari repair centres in the UK charging a minimal £15 diagnostic fee and providing a cost-effective quotation with a quick turnaround. Contact: WTS Electronics, Chaulend Lane, LUTON, Beds. Tel: 0582 491949.

BYTES & PCS

2 Guaranteed! Fast repairs to all Atari products. Same day service available to callers by appointment only (subject to spares availability). Contact: Bytes and PCs, 4 Stockwell Head, HINCKLEY, Leics. Tel: 0455 613232. Fax: 0455 615164.

KEMPSTON COMPUTER SYSTEMS

3 Computer Repairs offer the highest quality with a 90-day guarantee on all repairs. We have agents in Beds, Cambs, Herts, Bucks, Oxon and Northamptonshire — and we serve all other areas by courier. Computer outlets are welcome to join our agents and offer a complete service to your customer. Contact: 88B Bedford Road, KEMPSTON, Bedfordshire. Tel: 0234 843282.

AVON ELECTRONIC SERVICES

4 Specialists in all Atari Repairs, including upgraders. Fast and efficient service. Courier service available at competitive prices. Contact: Unit 4, Western Road Industrial Estate, STRATFORD-UPON-AVON, Warwickshire CV37 0AH. Tel: 0789 292269.

THE UPGRADE SHOP

5 UPGRADES AND REPAIRS. We do repairs from £12.00 and give free, written quotations. STFM 0.5 mb upgrades, including fitting, cost only £44.00 — all other upgrades available. Contact: The Upgrade Shop,

8

12

5

4

2

3

1

7

6

11

13

14

PD ZONE

THREE NEW GAMES FOR YOUR ST

FREE PROGS?

*Public domain, shareware, licenceware...
Are they really as cheap as they say?*

There is very little that you can get for nothing these days. How many times have you wandered around a hypermarket car park trying to give your parking ticket with two unexpired hours on it to someone who's parking? It takes a lot of convincing before some happy motorist takes it from you. Everyone is wary of gifts and eye "something for nothing" offers with the look of a once-bitten Trojan. The world of Public Domain (PD) software seems to suffer from the same reluctance...

Perhaps it's the air of mystique that surrounds Public Domain, Shareware, Licenceware and Bulletin Board software distribution that forms an impenetrable barrier which an unarmed newcomer cannot penetrate? Or maybe the people already using what is a cheap and nationwide source of software find themselves unwilling to share the secret. Here are the secrets...

The most readily available source of free software is PD. For reasons best known to the individual authors, whether it be public recognition of their works or the hope that their disk catches the eye of an employer, programmers relinquish all rights they have to their programs so that they may be copied and freely distributed without charge.

Licenceware means more or less the same as Public Domain to users - the differences lie with the stockists. In Licenceware's case the author places his program in specific PD libraries and only they are licensed to sell it. The library must then pay a royalty to the programmers' company for every disk it sells, which works out at around 50p per copy.

Shareware is a different subject altogether. It is as freely distributed as PD, but if you use the program regularly you are expected to register the copy you have with the author and pay him a token fee (usually about £5.00). The user is often rewarded for this honesty by the author, who may send a full manual or even the latest version of the program.

Bulletin Boards are operated by computers linked to modems - anyone can set up their own Bulletin Board by combining their ST and modem with a hard drive on which to store the PD and Shareware. The system allows users to swap programs with each other. Although these systems are quite wide-spread, the amount of programs they can hold is limited by the size of the hard drive being used. The long phone calls required are also expensive, and it's not unusual for a library just starting out to receive a £3,000 bill for the first quarter. However, if you do have a modem, contact numbers are regularly published in *Micro Mart* and free ads.

CLOD HOPPER



Make your way through the crumbling walkways, avoiding all the nasties in this challenging licenceware game.

● FLOPPYSHOP ● DISK NO: BUD.91C
● £2.95 ● MEMORY 0.5 Mb ●
LICENCEWARE.

IN BRIEF: This is a platforms and ladders game in which you guide Bill through the depths of a dis-used plutonium mine in an attempt to rescue his girlfriend Sonia, who has carelessly wandered into the mine and become trapped. The mine is in a state of near collapse and you must repair the crumbling walkways to complete each level and progress to the next. In addition, you must avoid the various creatures which have mutated and infested the mine. Your supply of oxygen is

limited and you must complete each level before it runs out. One of your three lives is lost if you come into contact with one of the mutants or fall from too great a height. Various pieces of machinery can be found abandoned throughout the 10 levels. Bill must make use of it to aid him in his quest. Can you succeed where others have failed?

ST REVIEW COMMENT: "A brilliant game which will pose a real challenge. Graphics and music are great and it's fun to play."

★★★★

You are about to enter the PD Zone, an area beyond belief where games and all manner of useful utilities can cost you next to nothing. . .

LOBOTOMY INVADERS

● CALEDONIA PDL ● DISK NO: STE-36
● £2.50 ● MEMORY 1 Mb ● STE ONLY
● PUBLIC DOMAIN.

IN BRIEF: *Lobotomy Invaders* takes a simple and much-used theme and gives it a new lease of life in such a way that it can't be matched on any existing home computer. It demonstrates the STE to its maximum potential by employing hardware scrolling, stereo DMA sound and use of the machine's extended 4096-colour palette.

The screen is updated 50 times per second, there is over 380K of sampled stereo sound and three original stereo MODs. With all that on offer, it probably comes as no surprise that this quirky crustacean shoot-'em-up needs one

Megabyte of memory to run successfully.

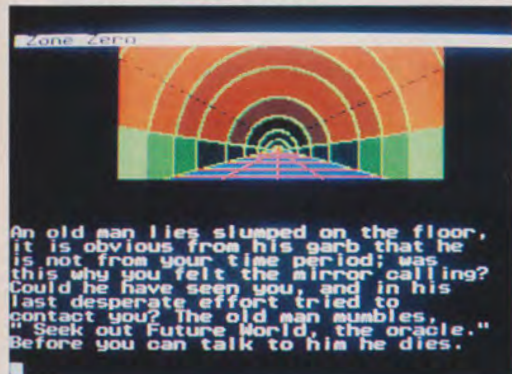
The game is essentially a *Space Invaders* clone but with much faster action. The physical play area is larger than the ST screen and you can move from top to bottom in a fraction of a second.

Lobotomy Invaders is tough: you must completely wipe out two waves of alien attack before moving on to the next level.

ST REVIEW COMMENT: "Don't dismiss this as just another *Space Invaders* clone, it's simply too good to miss. If this is what PD can do for the ST, software houses have a lot of catching up to do!"

★★★★★

Written by some inmates and a member of staff of Risley Prison, Phantom Zone is a challenging and well-written adventure game, despite the off-beat plot.



PHANTOM ZONE

● COMPUTE 'IN STYLE' ● DISK NO: BU101 ● £2.95 ● LICENSEWARE
MEMORY 0.5Mb ● LICENSEWARE

IN BRIEF: This is a graphic adventure created using *STAC*. It is unique in that it was written by inmates and a member of staff from Risley Prison.

You are a collector of antiques and curios and are given an old mirror by your grandmother. You feel yourself drawn to the mirror, and on closer examination you see an inscription and rub it. Before you can blink, you have become

the image in the mirror; you are trapped within it and can see no escape.

ST REVIEW COMMENT: "The plot may sound far-fetched, but it is the beginning of a pretty extensive, well-written adventure game. It presents enough of a challenge to hold your attention and keep you coming back for more. You either love adventures or you hate them. Either way, a lot of work went into this one and you won't solve it in a day or two."

★★★★★

PD ZONE TOP TEN

1

MYSTIC WELL ● A.P.D. ● DISK NO: G115 ● £1.50
A *Dungeon Master* clone which puts many commercial releases to shame. Negotiate your way through the dungeons avoiding or killing monsters which cross your path. Collect objects which will help you on your way. Good graphics, well thought-out gameplay.

2

PACMANST ● COMPUTE 'IN STYLE' ● DISK NO: BU070 ● £2.95
The latest and greatest version of the arcade classic which started it all. Choose from classic or modern game and select normal or hectic speed. Will this one start the craze all over again?

3

SPECTRAL SORCERY ● PUBLIC DOMINATOR ● DISK NO: G50 ● £3.00
A one or two-player game. Turns all the squares to your own colour by moving on to them or casting spells. The problem is, your opponent is trying to do the same thing!

4

COL-TRIS ● FLOPPYSHOP ● DISK NO: GAM.196C ● £2.50
Probably the best adaptation of *Tetris* to date. A one or two-player game. Choose from seven stone sets including traffic signs, diamonds, dice and disks. Really addictive.

5

TREASURE SEARCH ● NEW AGE PDL ● DISK NO: GAME63 ● £1.50
Try to guess the location of the buried treasure. Your position will be marked by a colour coded peg to show your proximity to the treasure. Top quality graphics, digitised speech and sound effects.

6

SHIPWRECK ● COMPUTE 'IN STYLE' ● DISK NO: M581 ● £1.49
A basic counting game. Each time a question is correctly answered you row closer to the island. Progress through the island, answering questions correctly to get you up the cable car until you finally get home. Not STE.

7

SUPER BREAKOUT ● NEW AGE PDL ● DISK NO: GAME33 ● £1.50
Simply the best *Arkanoid* clone yet. Collect the different icons for different effects. Features countless original screens. There's just one drawback, it's for high resolution monitors only.

8

VIRUS ● L.A.P.D. ● DISK NO: G88 ● £1.50
Wander through the inner circuitry of your computer and locate the five disks with virus killer programs. Collect them all, avoid the viruses and reach the CPU before your time runs out!

9

KRABATCHESS ● GOODMAN'S PDL ● DISK NO: GD4 ● £2.75
An impressive adaptation of the boardgame. Countless features including seven levels of play, load and save game, analyse moves, create your own setup etc. Play against the computer or a friend.

10

TRIVIA CHALLENGE 1 ● FLOPPYSHOP ● DISK NO: GAM.155C ● £2.50
A cross between the TV quiz *Blockbusters* and the board game *Trivial Pursuit*. Four subjects to choose from, each with dozens of questions. The best Trivia game on the ST. Won't run on machines with more than one Megabyte of memory.

FIVE UTILITIES FOR BUSINESS

ST Review looks at ways of cutting overheads by using PD and Shareware software...

ALMANAC

CALEDONIA PDL • DISK NO: AU132 • £2.50 • MEMORY: 0.5 Mb • SHAREWARE

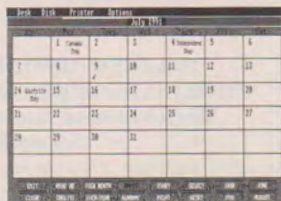
IN BRIEF: This is the only calendar program you will ever need. It is GEM-based and has three modes of operation which can be used to display different types of events. You can view by month or year and move to the previous or next month or year easily. The heading for each entry is displayed on the monthly calendar and selecting this brings up a box where notes can be entered. **Almanac** can be fully configured to suit the individual's needs and all data can be saved for later recall.



ST REVIEW COMMENT: "You need never forget an appointment with **Almanac**."

★★★★★

Almanac - the only calendar program you'll ever need.



ST 68K REFERENCE V3.0

L.A.P.D. • DISK NO: PR016 • £3.95 • MEMORY 0.5 Mb • LICENSEWARE

IN BRIEF: A custom-written database with information on everything you need to know about programming the ST. It covers such subjects as BIOS, XBIOS GEMDOS, and Line-A calls as well as the 68000, 68901, 6850 and YM2149 chips. You can move from one subject area to another easily and page through the information.



ST REVIEW COMMENT: "Subjects covered are clearly and concisely documented and the program itself is a joy to use."

★★★★★

ST 68K Reference: all you need to know about programming.

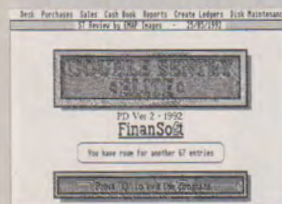


DOUBLE SENTRY ELITE V2.0

CALEDONIA PDL • DISK NO: AU158 • £2.50 • MEMORY 1 Mb • PUBLIC DOMAIN

This is the PD version of a commercial package. It is a comprehensive double-entry accounting system which is ideally suited to the small or medium-sized business. **Double Sentry** maintains all the ledgers and day books and can generate reports to a printer. Epson and HP com-

patibles are supported. This version has several features such as VAT reconciliation and generation of standing orders and statements disabled. The full version has no such restrictions.



ST REVIEW COMMENT: "Usable enough for a small business starting out and facilities to try before you buy."

★★★★★

Double Sentry: a comprehensive double-entry accounting system.

IDEALIST V3.1

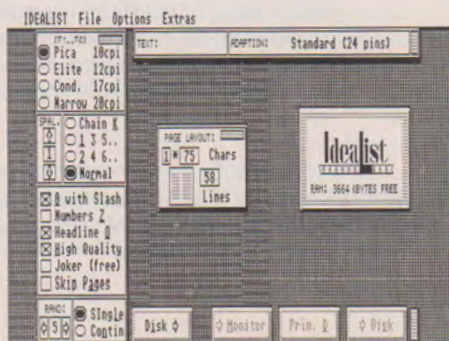
FLOPPYSHOP • DISK NO: UTL.3021 • £2.50 • MEMORY 0.5 Mb • SHAREWARE

IN BRIEF: **Idealist** is a custom print utility which allows ASCII or **First Word** documents to be improved before printing out to any printer. Your documents may be printed using multiple columns in one of four font sizes. Downloadable fonts can be sent to printers which support these. **Idealist** can output to screen, disk or printer, and a miniature display of each full page can be viewed, with the cursor acting as a magnifying glass.

ST REVIEW COMMENT: "Helps simplify the downloading of printer fonts and the creation of multiple column layouts."

★★★★★

Idealist helps simplify the process of downloading printer fonts.



STOS TYPING TUTOR

GOODMANS PDL • GD523 • £2.75 • MEMORY 0.5 Mb • PUBLIC DOMAIN

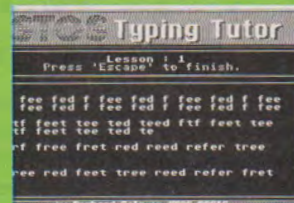
IN BRIEF: **STOS Typing Tutor** is a comprehensive aid for the touch typist. Load in and copy a document from disk or work your way through the 82 lessons provided. At the end of each lesson, mistakes are highlighted and you are given your typing speed and accuracy rate. There's also a game where the keyboard is displayed on screen and a letter is highlighted. The idea is to hit the correct letter without looking down at the keys.



ST REVIEW COMMENT: "One of the best typing tutors around. All it lacks is a layout diagram for hand positions."

★★★★★

STOS Typing Tutor provides 82 lessons and a simple game.



PACK IT IN

"Waste not, want not" is an excellent maxim for disk space. That's why you should use low-cost alternatives to buying more disk memory...

If there's one problem which every computer user comes up against with increasing regularity, it has to be lack of disk space. There are two different types of program which help overcome this - archivers and file compressors. The following should help you decide which of these two methods is best suited to your needs.

Archivers are intended for backup purposes only. You can't run a program straight from an archived file, it has to be de-archived first. Archivers are used for compressing files which are to be uploaded/downloaded to bulletin boards and also for storing programs which you seldom use. Subject only to available disk space, you can compress as many files as you like into a single archive. The archivers reviewed here are compatible with their PC counterparts and support sub-directory structures.

File compressors pack program and data files. You simply run the packed program as normal. It loads into memory, decompresses and runs. The best file packers decompress the programs in memory and run them almost as fast as uncompressed programs. Although data files can be packed, the depack routine must be incorporated into the program which uses the data file. Good packers come with source code to enable you to do this.

ARC V6.02 AND ARCSHELL V2.6

GOODMANS PDL • DISK NO: GD700 • £2.75 • MEMORY 0.5Mb • SHAREWARE

IN BRIEF: Based on the PC program of the same name, this is the most commonly used of all archivers. **Arc** is a TTP which requires a precise syntax, so it is usually paired up with Charles Johnson's **Arcshell**. The latest version is probably the fastest of all archivers and now saves the full directory information within the archive. In conjunction with **Arcshell**, it is easy to use, but is beginning to date.

ST REVIEW COMMENT: "Remains in constant use, probably only due to familiarity with users and its PC compatibility."

★★★★

| Add | Extract | Hold Screen | Exit Backup |
|--------------|---------------|--------------------------|-------------|
| Move | Run | Suppress Compression | |
| Update | Copy to Shell | Suppress Messages | |
| Refresh | List | Suppress Notes | |
| Delete | Delete List | Include Subdirectories | |
| Test | Convert | Overwrite Existing Files | |
| Def: ARC.TIP | ARC.SHELL | ARC.DOC | ARC.DAT |
| ARC.LIB | ARC.PAT | ARC.COPY | ARC.DIR |
| ARC.SHELL | ARC.CHECKER | ARC.DIR | ARC.DIR |

Probably the fastest of all archivers, Arc is usually used in conjunction with Arcshell.

LHARC V2.01L

ATARI ST BUDGET BUY FLOPPYSHOP • DISK NO: UTL.3092 • £2.50 • MEMORY 0.5Mb •

SHAREWARE

IN BRIEF: This program is based around Yoshi's compression techniques as used on the PC. However, it is not a true Yoshi clone as Thomas Quester has optimised the routines for greater speed and flexibility. Despite this, it is downwardly compatible with Yoshi's versions on the ST and PC up to v1.13.

Regrettably, this is another TTP which requires a precise syntax to run. For this reason, we recommend that you use **Arcshell**, although versions of **Arcshell** below v3 are not compatible in all respects.

ST REVIEW COMMENT: "LHarc is undoubtedly the most efficient of all archivers."

★★★★

ICE PACKER

GOODMANS PDL • DISK NO: GD702 • £2.75 • MEMORY 0.5Mb • PUBLIC DOMAIN

IN BRIEF: This is perhaps the best known of all the file compressors. It will save between 30 per cent and 70 per cent, depending on the type of file, with 50 per cent being the most common. Files compressed with **Ice Pack** decompress very fast, with those of 100k or less (before compression) being indistinguishable from unpacked files in the time they take to run. Always use **Ice Pack** on a copy of your program as it overwrites the original. Source code for the depack routines are included on disk but files cannot be depacked from within Ice Pack itself.

ST REVIEW COMMENT: "Lightning fast at compressing files"

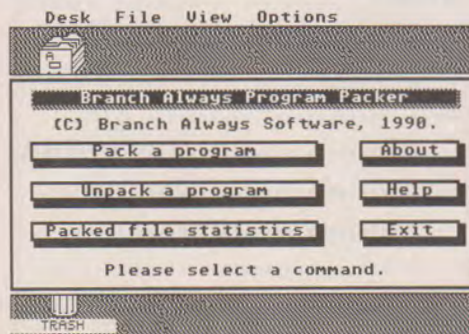
★★★★

BACK PACK

GOODMANS PDL • DISK NO: GD702 • £2.75 • MEMORY 0.5Mb • SHAREWARE

IN BRIEF: This relatively unknown packer comes from the creator of **Quick ST**. It is a desk accessory which compresses program files, including other accessories.

It is the only non-commercial packer which



Back Pack is the only non-commercial packer that can compress ACCs.

can compress ACCs. Compression speed is very fast, but the compression rate, although variable, is not usually as good as the others. Packed files decompress in memory as fast as **Ice Packed** ones and faster than those created with **Jampack**.

ST REVIEW COMMENT: "If you want to compress ACCs, this is your only choice, otherwise go for one of the other two."

★★★★

JAMPACK V4.0

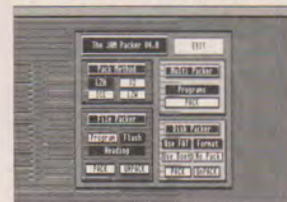
FLOPPYSHOP • DISK NO: UTL.371 • £2.75 • MEMORY 0.5Mb • SHAREWARE

IN BRIEF: **Jampack** has been around for a few years, but the latest revision is unique in that it gives you the choice of four different packing methods (**Jampack v2**, **Ice**, **LZH** and **LZW**). **Jampack** is painfully slow on large files, regardless of which method you use. In addition to packing programs and data files, **Jampack** can compress entire disks. Everything which can be compressed using **Jampack** can also be decompressed with it. The multi-packer option allows a batch of files to be compressed but it supports only the current directory. Files compressed with **Jampack** are usually larger than those compressed with **Ice Pack**. However, they always take longer to depack.

ST REVIEW COMMENT: "The strengths of **Jampack** lie in its user friendly interface and the wealth of options catered for."

★★★★

A user-friendly



interface and a wealth of options.

ST ZIP V1.02

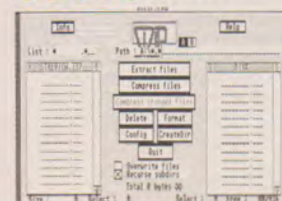
ATARI ST BUDGET BUY FLOPPYSHOP • DISK NO: UTL.3023 • £2.75 • MEMORY 0.5 Mb •

PUBLIC DOMAIN

IN BRIEF: This is the ST adaptation of **PKZIP** on the PC. As archivers go, it isn't the most efficient in terms of compression, but it does have valuable features that are not available in other archivers. It has by far the friendliest GEM-based user interface around. File compression and extraction is relatively fast when compared to the others and it is possible to read compressed text files from within **ST Zip**.

ST REVIEW COMMENT: "If speed and ease of use are more important than disk space, this is the one for you."

★★★★



ST Zip allows you to read compressed text files.

CUT OUT 'N' KEEP ORDER COUPONS

ATARI ST REVIEW

PLEASE SEND ME
CLOD HOPPER
FROM
FLOPPYSHOP,
PO BOX 273,
ABERDEEN,
AB9 8SJ.
PRICE: £2.50

NAME.....
.....
ADDRESS
.....
.....
.....
.....

ATARI ST REVIEW

PLEASE SEND ME
LOBOTOMY INVADERS
FROM
CALEDONIA PDL,
250 OLDTOWN ROAD,
HILTON,
INVERNESS,
IV2 4PT.
PRICE: £2.50

NAME.....
.....
ADDRESS
.....
.....
.....
.....

ATARI ST REVIEW

PLEASE SEND ME
PHANTOM ZONE
FROM
COMPUTE 'IN STYLE',
64 CASTLE HILL ROAD,
HINDLEY,
WIGAN,
LANCS,
WN2 4BJ.
PRICE: £2.95

NAME.....
.....
ADDRESS
.....
.....
.....
.....

ATARI ST REVIEW

PLEASE SEND ME
DOUBLE SENTRY ELITE V2.0
FROM
CALEDONIA PDL,
250 OLDTOWN ROAD,
HILTON,
INVERNESS,
IV2 4PT.
PRICE: £2.50

NAME.....
.....
ADDRESS
.....
.....
.....
.....

ATARI ST REVIEW

PLEASE SEND ME
IDEALIST V3.1
FROM
FLOPPYSHOP,
PO BOX 273,
ABERDEEN,
AB9 8SJ.
PRICE: £2.50

NAME.....
.....
ADDRESS
.....
.....
.....
.....

ATARI ST REVIEW

PLEASE SEND ME
ALMANAC
FROM
CALEDONIA PDL,
250 OLDTOWN ROAD,
HILTON,
INVERNESS,
IV2 4PT.
PRICE: £2.50

NAME.....
.....
ADDRESS
.....
.....
.....
.....

If you want to buy any of the products reviewed in this month's PD Zone, just fill in the relevant coupon and return it to the supplier, together with a cheque or postal order. A photocopy of the coupon is acceptable; please allow 28 days for delivery

ATARI ST REVIEW

PLEASE SEND ME
STOS TYPING TUTOR
FROM
GOODMANS PDL,
16 CONRAD CLOSE,
MEIR HAY ESTATE,
LONGTON,
STOKE ON TRENT,
STAFFS,
ST3 1SW.
PRICE: £2.75

NAME.....
.....
ADDRESS
.....
.....
.....
.....

ATARI ST REVIEW

PLEASE SEND ME
ARC V6.02 AND ARCSHELL V2.6
FROM
GOODMANS PDL,
16 CONRAD CLOSE,
MEIR HAY ESTATE,
LONGTON,
STOKE ON TRENT,
STAFFS,
ST3 1SW.
PRICE: £2.75

NAME.....
.....
ADDRESS
.....
.....
.....
.....

ATARI ST REVIEW

PLEASE SEND ME
LHARC V2.01L
FROM
FLOPPYSHOP,
PO BOX 273,
ABERDEEN,
AB9 8SJ.
PRICE: £2.50

NAME.....
.....
ADDRESS
.....
.....
.....
.....

ATARI ST REVIEW

PLEASE SEND ME
ST 68K REFERENCE V3.0
FROM
L.A.P.D.,
80 LEE LANE,
LANGLEY,
HEANOR,
DERBYSHIRE,
DE7 7HN.
PRICE: £3.95

NAME.....
.....
ADDRESS
.....
.....
.....
.....

ATARI ST REVIEW

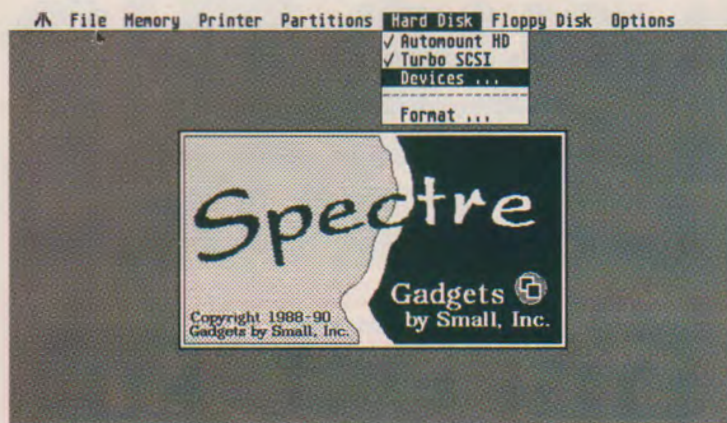
PLEASE SEND ME
ICE PACKER & BACK PACK
FROM
GOODMANS PDL,
16 CONRAD CLOSE,
MEIR HAY ESTATE,
STOKE ON TRENT,
STAFFS,
ST3 1SW.
PRICE: £2.75

NAME.....
.....
ADDRESS
.....
.....
.....
.....

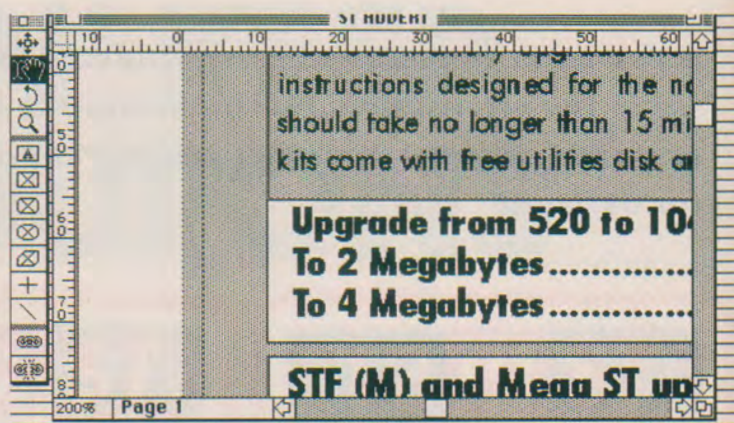
ATARI ST REVIEW

PLEASE SEND ME
JAM PACKER V4.0
FROM
FLOPPYSHOP,
PO BOX 273,
ABERDEEN,
AB9 8SJ.
PRICE: £2.50

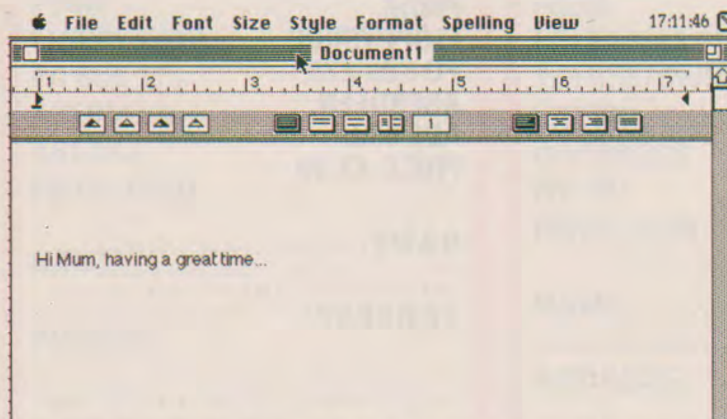
NAME.....
.....
ADDRESS
.....
.....
.....
.....



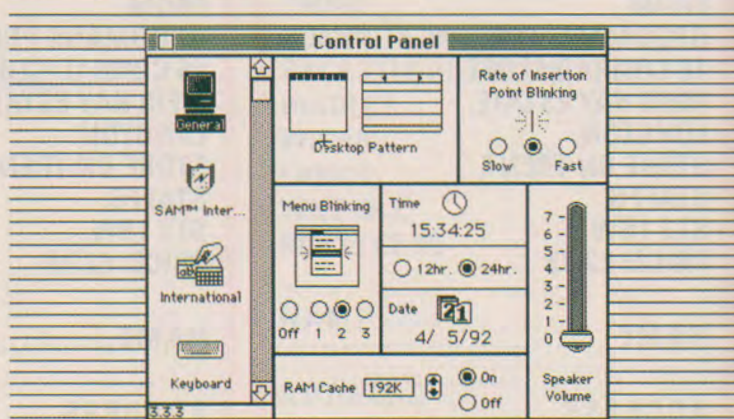
The GEM menu bars in the Spectre program hold plenty of options



Forget about those huge typesetting bills for your adverts. Just load up one of the Macintosh's DTP programs and have immediate access to hundreds of Mac bureau's.



MacWrite II. It runs perfectly well on the ST as does MacWrite which, incidentally, bears an uncanny resemblance to Script on the ST...



Spectre means that you can even use Mac desk accessories to customise your working environment even more that you already have. Voila, the Mac's control panel.

TWO MACHINES

The ST is many things to many people, whether it's a music studio, a word processor or a games machine. It can also be something else entirely, as Maurice Collins finds out...



As it is, the ST makes a good all-round home computer with superb graphics for games and art and a fast processor and operating system for more serious applications from DTP to music. However, despite the range of ST software available, there is always an advantage in being able to use software from other computers such as the Apple Mac.

Spectre GCR, the innovative hardware emulator from Gadgets By Small, allows you to do just that. It actually turns your ST into an Apple Mac Plus, enabling you to do exactly the same things as a Mac owner can do. You can run classy DTP software such as **PageMaker** (the first ever DTP program and still the most popular) or word processors such as **Microsoft Word**. **Spectre GCR** even lets you read and write disks in Apple Mac format, which means you can write letters in **First Word Plus**, save them on to a Mac disk and take them to the office for printing on a PostScript laser! All

you need is one Megabyte of memory and a mono monitor. **Spectre** makes a brave attempt at running on a colour monitor, but it just isn't worth the effort.

MAC ROMS

So how does it work? **Spectre** is supplied as a small cartridge about five inches long by four inches wide with a short cable, two disks and two manuals. One manual is the original version, the other is an update. One end of the cable plugs into the Spectre cartridge and the other into the floppy disk port on the back of the ST. You also need two 128K Apple Mac ROMs - but if you buy from a dealer such as HCS, these can be supplied. I'd advise buying these from your supplier - it can be very hard to get them through normal channels.

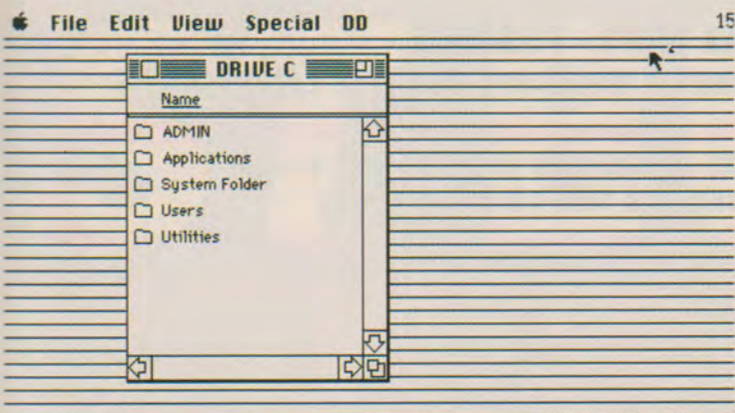
Last, but not least because you can't do without it, you will need a Mac System disk with a matching version of **Finder**. This is part of the operating system which the Mac still has to load from disk - primitive, eh? It can be purchased from any Apple dealer.

With the cartridge and cable properly installed, the only thing that remains is to run the **Spectre** program. This is a normal ST program which presents you with a GEM menu bar and various options. You can allocate one or more hard drive partitions to **Spectre**, for example, and tell **Spectre** whether to load the System from floppy or hard disk. You can also format and copy real Mac disks or use a hybrid format unique to **Spectre**. Various other options can be configured to your taste, including sound, which port your printer is attached to, and the memory you want to use.

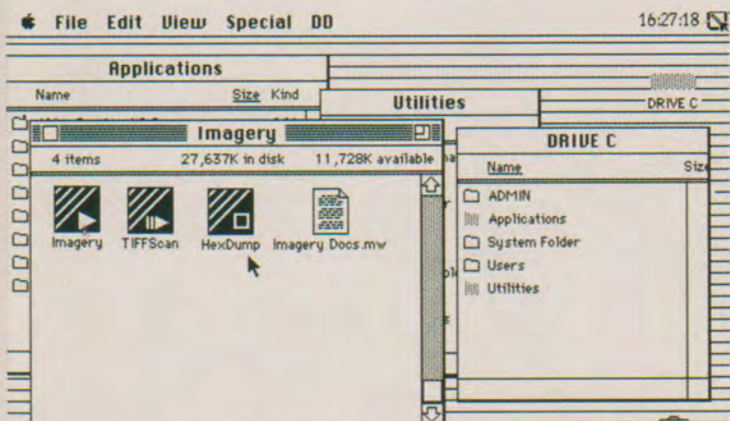
USING THE RIGHT DRIVE

Once done, press return and the **Spectre** menu dissolves away and is slowly replaced by the Macintosh welcome screen. "Welcome to Macintosh" it proclaims - and welcome indeed. It's an odd moment as your ST suddenly metamorphoses into another computer entirely.

Unfortunately, this is the point where a few of you might suffer. The ST's disk drives are built to



The worktop is completely indistinguishable from the Mac's. It's almost impossible to believe that this screen is actually an ST's.



The Mac's multiple windowing system is indicative of the similarities between the Mac and the ST. The only difference is that with an accelerator card the ST's faster!

EMULATION THROUGH THE AGES

The Spectre GCR is certainly not the first Mac emulator for the ST, although it is undoubtedly the best. . . .

In the early days of ST computing, there was *Magic Sac* which was purely a software emulator. This was followed by *Aladin*, another brave attempt that never really took off as it too was unreliable.

At about the same time came *PC Ditto*. This was another software emulator which was simply run as an ST program and turned the ST into a standard IBM PC. The trouble was that it was incredibly slow.

Far more powerful PC emulators started to appear in the form of Compo's *AT Speed* and Vortex's *AT Once*. These are 80286 based PC emulators which run at about the same

speed as the average IBM compatible. They allow far more flexibility for ST owners, opening up a whole range of cheap, easy to access software based on the PC's DOS operating system. It's even possible to run *Microsoft Windows*, the new graphical user interface that's taking the PC world by storm.

The latest addition to the emulator scene is the Vortex 386SX emulator. This very neat piece of engineering lets the ST emulate the even more powerful 80386 processor with its multitasking capabilities. Fitted with some special fast RAM chips and a maths co-processor, it can give many a real 386 PC a run for its money!

The BBC emulator has been around for a while now. It only emulates the BBC's popular version of BASIC. The Spectrum emulator, on the other hand, lets the ST do pretty well anything a Spectrum can do. It isn't much in comparison to an ST, but it provides some nostalgia. The documents have just been converted from German into English by Riverdene PD Library (0734 452416).

S FROM ONE. . . .

take ST format disks - the Apple Mac uses a totally different disk format where even the speed of rotation is variable. Using Spectre places an awful strain on the humble ST disk drive, with the result that a fair proportion won't work with Spectre GCR at all. If they don't, you can't read the System disk and if you can't read the System disk, you can't play Apple Macs.

Epson-built disk drives are the best. They always seem to work. Sony ones aren't too bad but NEC ones require additional shielding to be added. Guess which one I had in both my STs? Undaunted, I swapped disk drives with a friend and that was the end of the problem.

When you get to the Apple Mac desktop, a few things are different, otherwise you're looking at pure, 100 per cent Apple Mac. Everything is the same, including the famous Chicago screen font and the click-and-then-drop-down menus. It's not surprising really - the ST's operating system is nowhere to be seen and the whole show runs from the two ROMs in the Spectre cartridge.

ST IMPROVEMENTS

The good news is that many things are a lot better than a real Mac. The Mac Plus's tiny screen measures a pitiful 512 by 342 pixels whereas the ST's monochrome screen displays 640 by 400 pixels - a 30 per cent improvement in size. Some of the keys are slightly different as the

true Mac keyboard barely resembles the ST's at all.

To get files from one environment to another, a program called Transverter is supplied. This can read certain Mac disks and transfer the data, either text or graphics, on to an ST disk. It works particularly well with hard drives and runs surprisingly fast.

The ST's board design is also a lot more efficient than the Mac's with the result that *Spectre* runs about 20 per cent faster than a Mac Plus. Add an accelerator board such as System Solutions 25 MHz 20/25 and just watch those Mac owners' faces turn green!

The *Spectre* manual lists a whole raft of Mac software that is supposed to work with Spectre and I've no reason to believe that it's not telling the truth.

I've run *Aldus PageMaker 4.0*, *Microsoft Word*, *MacWrite*, *MacDraw*, *Cricket Draw*, *Microsoft Works* and *Aldus Persuasion* quite happily, as well as numerous public domain programs downloaded from the online networks such as CIX.

"An excellent piece of hardware - it's a whole lot better than a real Mac"

NAME: SPECTRE GCR 3.0

COMPANY: HCS

CONTACT: 081 777 0751

PRICE: £340 INC 128K

APPLE ROMS

RELEASE DATE: NOW

MIN MEMORY: 1Mb

EASE OF USE ★★★★★

DOCUMENTATION ★★★★★

EFFECTIVENESS ★★★★★

VALUE FOR MONEY ★★★★★

OVERALL **85%**

Runs most Mac software

Runs faster and has a bigger screen than a Mac

Lets you swap text and pictures with other Macs

PROS AND CONS

Some ST disk drives may prove incompatible

MT SOFTWARE

**PUBLIC DOMAIN,
LICENCEWARE,
SHAREWARE FOR
ATARI ST/STE**

MT SOFTWARE (STR)
Greensward House,
The Broadway,
Totland, I.O.W
PO39 OBX

☎ **0983 - 756056** ☎



FAX 0983 - 755800

RING OR WRITE FOR OUR FREE CATALOGUE

**FOR EVERY 3 DISKS YOU BUY, YOU MAY CHOOSE
ANOTHER DISK ABSOLUTELY FREE**

COLOUR GAMES

- G228 Temon
- G227 Battlescape
- G226 Haris Went Skiing
- G225 Centurian
- G220 Puzzle Generator
- G217 Mutant Wipeout
- G216 Colourspace (SH)
- G215 Drop It On'em
- G214 Rescue
- G213 Mystics
- G212 Number Guesser
- G211 Pool, Roulette, Craps
- G209 Beilun, Bubbles
- Maggee, Blockade, Boggler
- G207 Zog
- G202 Zedonoid
- G201 Pop Music Challenge
- G198 Boing
- G196 Liamatron
- G195 Corewars
- G151 Daniels Dungeon
- G153 Froggy
- G191 Droid
- G192 Wizard
- G193 Caverns of Nerak
- G194 Haunted Monastery
- G147 Jitterbug
- G146 Bonk the Gonk
- G145 Glob
- G141 Boxing Champ
- G128 Overlander
- G121 Chance
- G120 Escape From Ra
- G118 Mutant
- G117 Key to Atlantis
- G136 Grand Prix
- G127 Battle Command
- G126 Wheel of Fortune
- G125 Hedgehog
- G124 The Name Game
- G119 Chess
- G110 Company
- G109 Fruit Machine (not STE)
- G104 Bermuda Race 2
- G102 STumped
- G072 Bumper Jack
- G049 Tennis
- G019 ST Vegas
- G116 Chunnel - French Tutor
- G044 Flight Simulator
- G103 Top of the Pops

MONO GAMES

- G131 Bounce, Pacman, Reversi
- G130 Naval, Columbus, Arkonoid
- G113 Napoleon
- G076 Pentimo
- G064 El Boin City, Sherlock, Squixx, Happy 4
- G063 Around the World in 80 days
- G029 Space Invaders, Chess, Arkonoid
- G021 Puzzle, Pacman
- G014 Anduril, Runners Revenge

ADVENTURES

- G106 Don't Bank On It
- G158 Pyramid of Muna
- G159 Battle of Phillips Against The Forces of Creation
- G160 Underground Adventure
- G162 Tamoret
- G164 Sir Ramic Hobbs and the High Level Gorilla
- G165 Quest For The Holy Grail
- G166 Dragon Slaver
- G167 Son Og Stagefright
- G168 Fast Lane
- G170 Crusade Adventure
- G171 Adventures of Alice Paranoia
- G172 Squynchta
- G174 Elys Adventure
- G175 Star Portal
- G176 Pork
- G177 Easter Egg Hunt
- G179 Ghost Town
- G180 A Fable
- G197 Operation Blue Sunrise
- G208 The Mystic Well
- G096 Dudley Dilemma
- G084 Elven Crystals
- G055 Hero
- G038 Wizards Tower
- G037 Under Berkwood

EDUCATION

- G224 Franglais 3, Solar System, Geography 2
- G225 Learn to Read, Learn to Count, Trains, Flashcards
- G222 Franglais 1
- G157 Noah
- G199 GCSE Maths
- G204 Franglais 2, World at Risk
- G142 Dot 2 Dot, Kidcolour, Kidshape
- G139 Mix 'n' Match
- G138 The Body Shop, Perfect Match
- G137 Solar Svatern Geography
- G135 Geography Tutor
- G134 The Search
- G133 Zoo Maker
- G098 Shipwreck
- G094 Coloursing Book

EDUCATIONAL PACK 1 5 DISKS ONLY £10.99

Lots of educational programs for the young STE. Includes Kidpotato, KidsABC, Kidsketch, Kidstory, Kidsong, Numeric Go Round, Kidpublisher, Number Maze, Kidmusic, Kidpiano, Kidgraph, Kidgrid 2, Colouring Book, Shipwrecked, Hangman

EDUCATIONAL PACK 2 10 DISKS ONLY £19.99

* NOW STE COMPATIBLE *
A bumper education pack that includes G9, G16, G22, G23, G41, G36, G94, G98

EDUCATIONAL PACK 3 2 DISKS ONLY £9.99

7 Great games for 3-7 year olds - Gone Fishing, Playtime, Sun Spinner, Kid Grid, Find the word

BUSINESS

- U009 1st Base - Database
- U112 DB Master - Database
- U013 Data Handler - Database
- U036 Card ST - Database
- U039 UG Data - Database
- U072 TCOS Graphical Database
- WP01 ST Writer Elite
- WP10 First Word
- WP02 Spell Check, Mailmerge
- Word Count
- U017 Home Accounts
- U034 Double Dentry Accounts (DS)
- U110 Gemcalc - Spreadsheet
- U042 Opus 2000 Spreadsheet
- U030 ST Sheet
- U078 Sheet V2
- U041 Typing Tutor
- U040 Inventory Pro
- U070 Address Book
- U090 Filofact
- U111 How to Make Money With Your Micro

EASY TEXT PLUS

A fully featured desktop publishing package that produces stunning results on 9 pin, 24 pin and laser printers
ONLY £19.99
RING FOR DETAILS

- U019 Mono Emulator - run mono programs on a colour TV monitor
- U079 Colour Emulator - run colour programs on a mono emulator

ART + GRAPHICS

- A54 KDoodler
- A63 Colourburst II
- A62 KDraw (mono)
- A57 Alt Help Disk
- A58 Fractal Chaos (DS)
- A59 Mandelbrot Adventure
- A61 Electric Image (not STE)
- A44 Sprite Studio + Sprite ST
- A43 Low Cost Cad (SH)
- A41 IMG Utilities
- A34 Animate
- A24 Ani-2D
- A22 Eplan (mono)
- A20 Fractal Zoom
- A36 Picture Convertors
- A19 Easy Text Plus Demo
- A18 Printmaster Library
- A12 Pearl 3D Raytracing
- A09 Vangoch, Studio 2
- A08 Degas Extras
- A05 Graphic Artist
- A01 Palette Master
- WP15 LCI0 Font Generator
- Calamus, Pagestream + Signum fonts also available

PROGRAMMING

- P55 Gem Classes
- P54 Turbo Assembler
- P53 STOS Speak Text TABS
- P59 C Information
- P45 STOS Programs (DS)
- P46 STOS Shoot-em-up Builder Kit (DS)
- P47 STOS Soundtracker
- P48 MODPAS Pascal
- P49 Database Programmer
- P43 Hitchhikers Guide to BIOS
- P40 Gemdos Users Guide
- P39 GFA Basic, Programs
- P38 GFA Basic Tutorial
- P37 XLisp
- P36 Toy Prolog
- P34 STOS Tutorial
- P31 Small Talk
- P29 Fast Basic Programs
- P27 Modulo 2 (2 disks)
- P26 Pascal Information
- P25 Pascal Programs
- P23 C Tutorial
- P22 STOS STE Upgrade
- P17 C Programs
- P14 GEM Information
- P11 ST Basic
- P107 Forth

C PROGRAMMERS PACK 6 DISKS ONLY £16.99

Complete package for anybody learning C. Comprises Sozobon C (fully configured and ready to use) + 4 disk tutorial.

MUSIC + MIDI

- M07 Accompany Emulator - run
- M30 Noisetracker ST
- M42 Kawai K1 Editor
- M53 TBS Tracker (DS)
- M52 Midi Music Maker
- M51 Yamaha DX/TX Voices
- M48 Make Music
- M39 Yamaha 4 on op Editor
- M38 Roland Juno Editor
- M34 Quartet Samples
- M33 Quartet Music
- M31 The Midi Guide
- M28 Quartet Samples
- M24 Sampling
- M23 Staccato
- M22 Piano
- M21 Music Image (Mono)
- M17 Roland D50 Librarian and DX Patches
- M13 Yamaha P55 Editor
- M10 FB01 Voice Ed
- M09 TXB12 Voice Ed
- M08 MT32 Voice Ed
- M03 Casio C2101 Progs

CLIP ART

We have many disks of Clip Art for use with all DTP packages.

CLIP ART PACK 6 DISKS FOR ONLY £16.99

5 Double Sided Disks full of Clip Art+1 disk full of format convertors. Ideal for all DTP packages. Animals, Office, Sport, Flags, Maps, Fonts, Christmas, Trademarks, lots, lots, more.

THE CATALOGUE

Our catalogue details hundreds of disks.....
ACCOUNTS
ART + GRAPHICS
ASTROLOGY
ASTRONOMY
BUDGIE UK
BULLETIN BOARD SYSTEM
CHEMISTRY
CLIP ART
COOKERY
DATABASES
DEMONSTRATION DISKS
DESK ACCESSORIES
DATA PROTECTION
DISK + VIRUS UTILITIES
EDUCATION
ELECTRONICS
FILM INFORMATION
FOOTBALL
GAMES
GENEALOGY
MUSIC + MIDI
OPERATING SYSTEM
PICTURE DISKS
PROGRAMMING
SPEECH SYNTHESIS
SPREADSHEETS
SATELITES
TYPING TUTORS
WORD PROCESSORS
and much, much more
ORDER YOUR FREE COPY NOW

BUDGIE UK

What's new from Budgie?
B82 Dead Or Alive
B81 Travel Game
B80 Dennis & Denise
B78 Chunk
B77 Clacker
B76 Shark
B75 Drizzy Lizzy 2
B74 Firegame
B73 Seventh Heaven
B72 Avina Blue
B71 Dark Wars
B70 Pacman
B69 Douglas Rockmoor (1/2 Meg)
B68 Blackstar Mountains
B67 Paco and the Tunnels of Doom
B65 Space Weller
See our catalogue for the entire range

* MTS SPECIAL *

25 Blank Disks£12.99
Mouse / Joystick Ext Lead.....£5.99
Atari ST/STE Dust Cover£4.99
Deluxe Mouse Mat.....£3.99

| | |
|-------------|---------------|
| NORMALLY | £27.96 |
| ONLY | £24.00 |
| SAVE | £3.96 |

INTRODUCING ATARI ST MACHINE CODE

A complete assembly language programming environment for the beginner and intermediate ST programmer. Learn assembler the easy way, Step-by-step!
BOOK COMPLETE WITH DISK
(Over 400 pages) **only £19.99**

The comprehensive book introduces the reader via many assembly language examples how to program the ST. No knowledge of assembler is assumed, all examples in the book are held on disk and can be assembled using the supplied text editor and assembler. The disk also contains a complete resource construction kit for producing dialog boxes, drop down menus, etc. Learn to program like the professionals. Registers, GEMDOS, XBIOS, GRAPHICS, DROP DOWN MENUS, DIALOG BOXES, WINDOWS and much, much more.

MT SOFTWARE

PRICES - £3 each + 1 free with every 3
CODES - DS = Double Sided,
SH = Shareware
1 Meg - 1 Meg memory required
Mono - High Resolution
Not STE - Not STE Compatible
OVERSEAS - Europe add 10% to total, World add 25% to total.
Immediate despatch by 1st class post.
Mail order only.

BLANK DISKS & ACCESSORIES

Highest quality blank disks supplied with protective wallets and labels.

| | | | |
|-----------------|-----------------|-----------------|------------------|
| 10 DISKS | 25 DISKS | 50 DISKS | 100 DISKS |
| £5.99 | £12.99 | £22.99 | £42.99 |

COLOURED DISK LABELS

| |
|---------------|
| 50 - £2 |
| 100 - £3 |
| 1000 - £13.50 |

TRACTOR DISK LABELS

| |
|---------------|
| 100 - £3 |
| 200 - £5 |
| 1000 - £17.00 |

ATARI ST/STE DUST COVER - £4.99
ATARI ST/STE MOUSE/JOYSTICK EXT LEAD - \$5.99
DELUXE MOUSE MAT - £3.99

RING, WRITE, OR FAX FOR OUR FREE 60 PAGE PRINTED CATALOGUE

ST BUYER



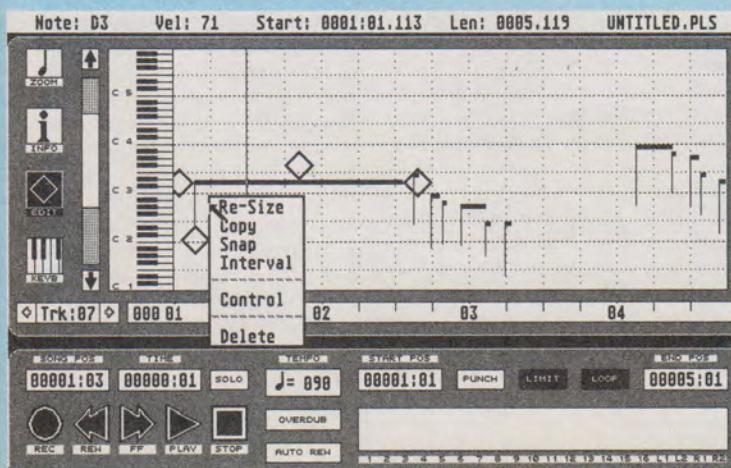
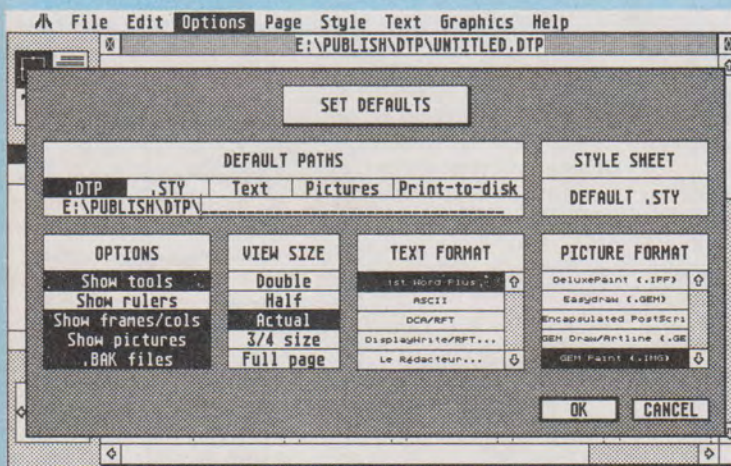
Welcome to the blistering blues, 32 packed pages choc-a-block with tests, tips and tutorials on all-manner of useful products for your ST.

This month we're offering even more . . . there's more joysticks than you can, er wave a very large stick at, in the second part of our joystick roundup, page 116. . . and we'll be giving your ST a good boot up the pants in our feature on boot up utilities, which starts on page 120. . . ST Review strikes it lucky next, with reviews of three of the latest productivity programs: read Jon Bates testing Sequencer One on page 124 – and learn all about the Vivace notation package on page 126. Changing senses, we move on to art with a review of the easy-to-use Art Master package that's compatible with your Video Titler coverdisk utility. . .

In need of fresh PD? Get some via our nationwide contact list on page 128. . .and then it's time for a change with our review and tutorial of the Timeworks 2 DTP package, page 129.

And we still haven't finished: there's the comms column, readers' letters, your technical questions answered, charts, a jargon-busting guide, and an invitation to write for us rounds up this month's ST Buyer.

Remember, you'll never feel down with our blues. . . .



STICKY MOMENTS



Buying a joystick is easy. Buying one that doesn't fall apart or stop working within a week is another matter entirely.

Faced with an endless array of rubber-necked wonders, each with its own ergonomic design and outrageous claims of longevity, it's a thankless and costly task choosing which one to pit against the likes of *Turrican*, *Speedball II* or *Rainbow Islands*.

If you're fed up forking out a small fortune each month to replace faulty joysticks, then fear no more! ST Review's crack team of wagglers have been busy over the last two months putting some of the finest joysticks that money can buy through arduous routines and subjecting them to literally hours and hours of solid play. The result of all this wagglings? Probably the most comprehensive joystick reviews ever!

To make things that little bit easier for you, we've given each joystick an overall score that takes into account innovation, durability, ease-of-use, comfort factor, and responsiveness.

HYPERSTAR

1 Spectra Video
Price: £16.99

Looking more like a North Sea Oil Rig than a conventional joystick, the Hyper Star is probably best suited for left-handed players. If you're right-handed, you'll find the cord travels in the opposite direction to your ST and has to double-back on itself. With only a very short three-and-a-half foot cable to play with, right-handed users almost end up sitting on their computer.

The two fire buttons are very small, but each is split into two levered halves so that rapid fire is easily achieved by rocking to and fro between the buttons. There's also an auto-fire switch to make life even easier. The shaft is lightly sprung but with just enough resistance to make it easy to use, and the five suction cups are as good as super glue at times.

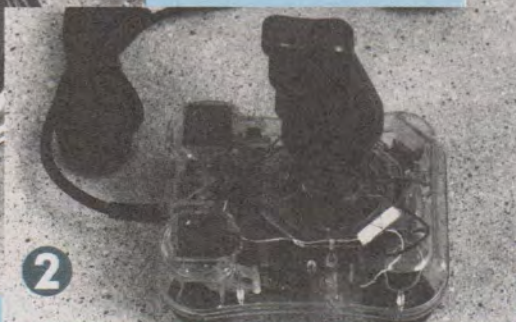
The biggest drawback is the ridiculous design of the stick and, in particular, the spindly legs which the suckers are attached to. I honestly cannot see them lasting for very long.

VERDICT:

Good overall feel, but spoilt by careless design.

☆☆☆

After last month's huge joystick round-up of 15 top sticks, we're going to do it all over again. We've lined up another 11 of the finest joysticks money can buy and put them through their paces



CRYSTAL TURBO

2 Sonmax Price: £14.99

Transparent plastic joysticks may be a passing fad, but they are certainly intriguing. Featuring a mish-mash of multi-coloured wires, circuit boards and soldered contacts, the Crystal Turbo looks the business. With a red pistol grip and two auto-fire buttons positioned at the base of the machine, the stick also sports Powerplay's 'Triple Action' auto-fire. This means that you can opt to fire at your own speed with the auto-fire switched off or, with the auto-fire switched on, the stick is capable of spewing out short rapid bursts or a more deadly continuous blast (depending on a game's configuration).

Other refinements include fully microswitched buttons and eight-way controllability with an adequate five-and-a-half foot lead. It doesn't feel well constructed, but held up to hours of testing. I must admit to some degree of bias here, though, as a Turbo joystick was one of the first sticks I bought and I still have a liking for them.

VERDICT:

Well-proportioned stick with good response and feel.

☆☆☆☆



HOT STUFF

3 Euromax Price: £9.95

With a name like Hot Stuff, you just know that this stick is going to be bad. And it is.

It looks so cheap and nasty that even the most tasteless gamesplayer would turn their nose up at it. Fool that I am, I decided to give it a go with a couple of games and, predictably, the stick was every bit as bad as I had supposed. Response is awful, with little tactile feedback, and the cord length is a miniscule three-and-a-half foot! When the box mentions such amazing features as "stress relief cord" (which is standard on almost all joysticks) and "four rubber suction feet", you know that even the makers are struggling for something to say.

Okay, so it possesses such features as an auto-fire switch (gosh), eight-directional control (wow), and a contoured handle (zoinks). Unfortunately, these are standard on almost every stick on test, but that doesn't stop Beeshu crowing about them. And if you're really a glutton for punishment, it comes in four garish colours: bright yellow, pink, blue and green.

VERDICT:

Definitely the worst joystick we reviewed!

★



FOOTPEDAL

4 Spectra Video
Price: £24.99

What, you may be asking, is this weird-looking contraption?! It certainly doesn't look like a joystick, that's for sure.

In fact, the Footpedal is probably the ultimate accessory for people who take their driving games seriously. Used in conjunction with a conventional joystick, the Footpedal can selectively take over three controls from the connected stick.

For example, on a typical car racing game, the three foot pedals can be used to incorporate the up and down movements on a joystick and take over the gear change/fire button function. So, with this in mind, you can now move the car side to side using the joystick, while the speed and gear changes of the on-screen car are dictated by pressing one of the foot pedals. For extra realism, it's possible to use the device with the Zoomer steering column (reviewed last issue) so you've got a near-arcade perfect representation of a coin-op conversion.

Its use doesn't end with racing games, however, as the device can also be used in virtually any other game you feel comfortable using your feet instead of your trigger finger. We tried it on IK+ and found that it worked a treat, transferring some of the deadly kicking moves to the pedal.

Admittedly, it does take a while to get used to the new control method, but once you've adapted to it, you'll never want to go back. The machine is also sturdily built and uses industrial standard micro-switches. The configuration device allows you to transfer any four-way joystick movement or firebutton control method to the pedal.

With colour-coded pedals and an almighty 8-foot cable, plus joystick adapter, the Footpedal is unique and adds a new dimension to almost any game you care to mention.

VERDICT:
Highly innovative and, what's more, it actually works.



MEGA STAR

5 Spectra Video
Price: £24.99

Obviously designed with the right-handed gamer in mind, the Mega Star is another one of those transparent sticks, finished off with a nice orange trim. The knobby stick has a recess in the top which is a nice idea and is presumably there to rest your thumb.

It's quite a bulky stick with five suction cups to plant it firmly onto any convenient flat surface. It's also extremely well made and you'd have to run a steam roller over this one to cause it any harm. But that's half the problem - it's so well made and so sturdy that it's difficult to use! The shaft is so well sprung that it's stiffer than most Spectrum users and I doubt if anyone could use it for more than an hour at a time without their hand seizing up in muscle spasms.

Curiously, the three-and-a-half foot cable is attached at the wrong end of the stick so it has even longer to travel to the ST. This means, in practice, that you've got to be virtually on top of your machine to even use the stick. The firebuttons come in three different button sizes to stab at. It's definitely for table-top users only as it's incredibly cumbersome design and hefty weight prevents it being portable enough for hand-held use.

VERDICT:
Too bulky and well-sprung to be of much use.



COMPETITION PRO

6 Star Price: £19.99

Arriving in a Pop Art-style box, the Competition Pro is a gleaming stick constructed from chrome-effect plastic with a mottled blue transparent base. If that's not enough to set you dribbling, the stick also handles as well as it looks.

Using a sturdy steel shaft for prolonged life and a spring-return so that the stick is recentered after each movement, the Pro is ideal for fast-paced arcade games although not particularly well-suited for flight sims. Two large fire-buttons at the front of the machine cater for left or right-handed players while two small triangular keys provide temporary rapid fire or temporary slow motion. Towards the back of the joystick base is a switch which activates continuous fire or continuous slowmotion.

A five-foot cord, coupled with a comfortable hand-grip, helps make the stick even better. The knobby handle and long stem also affords more controllability with the micro-switches giving a tactile feedback and a reassuring click each time the stick is moved.

VERDICT:
A classy stick with a proven pedigree.



PYTHON 1

7 Spectra Video
Price: £10.99

Too big for a hand-held, the Python 1 is a table-top joystick with 'bio-grip' (advertising agency talk for a comfortable pistol grip that fits the hand to perfection), and was one of the most comfortable sticks we tested. Its sleek design is complemented by two firebuttons perched on top of the handle, with an auto-fire switch placed just below the thumb.

The lack of micro-switches doesn't give a very positive feel when in use, but for those who prefer leaf-sprung joysticks you won't find much better. The length of travel is about right for a flight sim although the stick under-performed when put through its paces on some of the more demanding arcade shoot 'em ups. The rigid stickers will affix the device to most smooth surfaces and the six-foot cable is more than adequate.

VERDICT:
Stylish and sleek, a definite winner.





ALPHA-RAY

8 Logic 3 Price: £10.99
Looking very similar to the Sigma Ray (reviewed last issue), the Alpha Ray uses the same pistol grip but has a smaller base so it's just about possible to use it as both a table-top and as a hand-held. Most of the comments made about the Sigma also hold true for the Alpha: it's a stylish stick more suited to flight and racing sims than the ultra-fast arcade-orientated games. I also found the micro-switched firebutton a little loose.

Cord length, at a pathetic four feet, is nowhere near long enough if you consider the mass of wires which encircle most people's STs. The suction cups worked well, though, and virtually bolted the machine onto the table. The pistol grip was very comfortable, too. The fire buttons fell nicely under the thumb and index fingers, although their response wasn't brilliant due to the slackness of the micro-switches. Conversely, the eight-way micro-switched shaft worked a treat.

VERDICT:

Gorgeous to look at stick with a solid feel to it.

★★★★

JETFIGHTER

9 Spectra Video Price £12.99
Apparently aimed at the flight sim specialist, the Jetfighter attempts to mimic the yoke of an aircraft control lever. Unfortunately, the feel just isn't right as the lightweight device is both too tinny and cumbersome to be practical.

The large base limits its use to that of a table-top device, but the cups proved more than capable in fixing the machine to any flat surface. The twin firebuttons, positioned so that they fall beneath the thumb and index finger, offered a positive click when depressed, but didn't feel particularly positive or robust.

Autofire comes as standard and is also variable thanks to a sliding scale. The three and a half foot cable is miserly and the whole thing seems insubstantial and lightweight. Not a particular favourite around the office.

VERDICT:

Cheap and nasty, offering a poor response and poor controllability.

★



SUPERSTAR

10 Spectra Video Price: £13.99
A distant cousin to the Megastar, the Superstar is a cut-down version of the same stick, although it's still too bulky for hand-held action.

Possessing five suction cups and a three-and-a-half foot cable, at least the Superstar's connecting lead exits at the right point for easy connection to the Joystick port. Another major difference between the machines is the thin steel shaft which is much looser than the Megastar's and is very easy to control. Although industrial-standard microswitches are used for the stick mechanism, the fire buttons have sprung-leaf switches which aren't as effective.

Overall, this is a belter of a stick with brilliant control. *Project X*, *Speedball 2*, *Kick Off 2* and *R-Type* proved no problem and even flight sims responded well to the stick's control. It certainly looks nice, due to its transparent features and curved design and, as with all QJ sticks, it's certainly built to last.

VERDICT:

Despite the poor response from the fire buttons, this is one of my favourite sticks.

★★★★

MANTA RAY

11 Logic 3 Price: £11.99
If you thought the Sting-Ray (reviewed last month) was strange, then the Manta-Ray propels joysticks into a totally new and weird dimension.

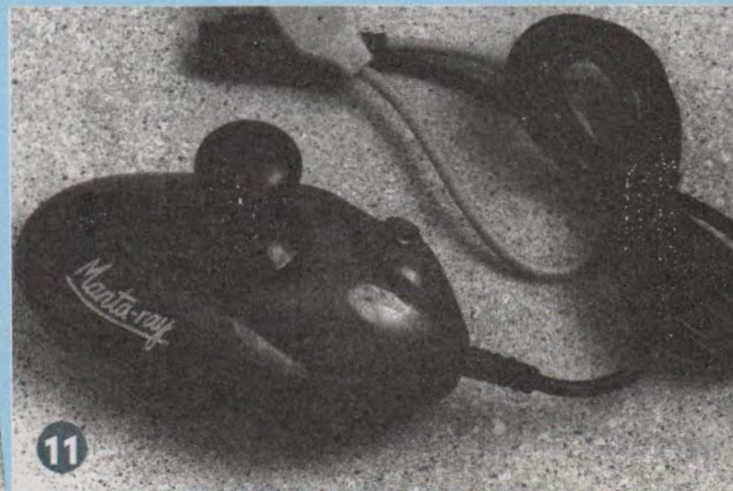
Its bizarre shape has been designed to fit the palm of the hand and, although looking suspiciously like a beached whale, it is remarkably easy to hold and control. The nobbly shaft is the same as the Sting-Ray's and is positioned on top of the device offering excellent control. The index and middle fingers cover the two firebuttons recessed in the four finger grip at the side of the device and prove remarkably well-positioned for continued firepower. There's also an auto-fire facility and thruster button, the latter strategically placed under the thumb.

Cord length is a meaty six feet and the fully micro-switched stick responds excellently and never once malfunctioned during more than four hours of continuous testing. It might be one of the ugliest sticks we've reviewed, but it's also one of the most responsive and easy to use.

VERDICT:

No beauty, but offers solid controls.

★★★★



THE ULTIMATE JOYSTICK

The ST Review team have been avidly putting some of the top sticks through their paces over the last three months. The following table lists all the sticks we've reviewed so far, with contact information and overall rating, plus a few sticks that arrived too late for a full review.

| JOYSTICK | PRICE | COMPANY | AUTOFIRE | CABLE LENGTH | OVERALL SCORE | VERDICT |
|--------------------|--------|------------------------------|----------|--------------|---------------|---|
| Sureshot Standard | £10.99 | Sonmax (0457 876705) | No | 5 foot | 75% | Fails to meet expectations |
| The Bug | £14.99 | Cheetah (0222 555525) | Yes | 5 foot | 52% | Looks cute, but plays like a brick |
| Tortoise | £19.99 | Cheetah (0222 555525) | No | 5 foot | 11% | One to avoid! |
| Navigator | £15.32 | Konix (0495 350101) | Yes | 5 1/2 foot | 58% | Strong on ergonomics, weak on playability |
| Cruiser | £10.99 | Sonmax (0457 876705) | No | 5 foot | 82% | Stands up well to serious wagging. |
| Speed King | £12.25 | Konix (0495 350101) | Yes | 6 foot | 82% | Looks aren't everything. Definitely worth a test. |
| Controller | £9.99 | Quickshot (081 365 1993) | Yes | 4 foot | 37% | Solid construction, but not much else. |
| Prof 900 de LUXE | £34.95 | Euromax (0262 601006) | Yes | 4 foot | 86% | Smart and stylish with plenty of manoeuvrability |
| Zoomer | £69.95 | Euromax (0262 601006) | Yes | 6 foot | 92% | Costly, but essential for flight and bike sims |
| Switch Joystick | £39.99 | Spectra Video (081 900 0024) | Yes | 6 foot | 92% | A stick with more options than the Stock Market |
| Sting-Ray | £13.99 | Logic 3 (081 900 0024) | Yes | 6 foot | 79% | Weird design, but a nice stick |
| Sigma-Ray | £14.99 | Logic 3 (081 900 0024) | Yes | 4 foot | 89% | Nice looks, solid construction, good value |
| The Ultimate | £34.95 | Euromax (0262 601006) | Yes | 6 1/2 foot | 57% | If you want a table-top joystick look elsewhere |
| Superpro Zip Stick | £14.99 | Sonmax (0457 876705) | Yes | 5 foot | 95% | The undisputed King of the sticks |
| The Arcade | £19.95 | Euromax (0262 601006) | No | 4 foot | 86% | Tough, resilient and very manoeuvrable |
| Hyperstar | £16.99 | Spectra Video (081 900 0024) | Yes | 3 1/2 foot | 77% | Poor design ruins an otherwise nice stick |
| Crystal Turbo | £14.99 | Sonmax (0457 876705) | Yes | 5 1/2 foot | 82% | Good response and feel |
| Hot Stuff | £9.95 | Euromax (0262 601006) | Yes | 3 1/2 foot | 9% | Absolutely awful - avoid |
| FootPedal | £24.99 | Spectra Video (081 900 0024) | N/A | 8 foot | 90% | Innovative design that really works |
| Mega Star | £24.99 | Spectra Video (081 900 0024) | Yes | 3 1/2 foot | 72% | Bulky and too stiff to be of much use |
| Competition Pro | £19.99 | Dynamics (061 626 7222) | Yes | 5 foot | 92% | Classy stick with a proven track record |
| Python 1 | £10.99 | Spectra Video (081 900 0024) | Yes | 6 foot | 86% | The best leaf-sprung joystick available |
| Alpha-Ray | £10.99 | Logic 3 (081 900 0024) | Yes | 4 foot | 85% | Good solid feel and construction |
| JetFighter | £12.99 | Spectra Video (081 900 0024) | Yes | 3 1/2 foot | 52% | Cheap and nasty feel and performance |
| Superstar | £13.99 | Spectra Video (081 900 0024) | Yes | 3 1/2 foot | 84% | Poor response, but still a favourite |
| Manta-Ray | £11.99 | Logic 3 (081 900 0024) | Yes | 6 foot | 89% | No beauty, but offers solid control |
| 125+ | £9.99 | Cheetah (0222 867777) | Yes | 5 foot | 80% | Firm feel, with a good response |
| Exterminator | £6.99 | Cheetah (0222 867777) | No | 4 foot | 79% | Comfortable grip with long travel |
| Flashfire | £14.95 | Euromax (0262 601006) | Yes | 2 1/2 foot | 67% | Long travel with good firebuttons |
| Terminator | £15.99 | Sonmax (0457 876705) | Yes | 5 1/2 foot | 40% | Horrid stick design |
| Star probe | £14.99 | Cheetah (0222 867777) | Yes | 5 foot | 38% | Shabby design with loose micro-switches |

A BOOT UP

With the right utility you can kick your ST into supergear. Andrew Wright's here with a brace of the best. . . .

Have you ever wondered how much time you spend making up boot disks with a special set of accessories and auto programs just for one particular program? Or navigating round the GEM desktop looking inside half-a-dozen folders for the application that you want to run?

The chances are that you waste a good 10 or 20 minutes every day, perhaps even more. It may not sound much, but over a month or so, it adds up to a lot of time which could be put to better use. All this time could be saved if you were to use one of the increasing number of utilities now available that are specifically designed to boost productivity.

Boot-up utilities, for example, let you start up your ST quickly with exactly the right combination of desk accessories and auto programs loaded. To speed up your work even more, there are program launchers that allow you to start up applications at the press of a mouse button, from a neat, easily configured menu screen. Read on, if you've been missing out.

BOOT UP RIGHT FIRST TIME

The two most popular boot-up programs are **Superboot**, a regularly updated shareware utility which is currently at version 7.2, and **XBoot**, a relatively new commercial product.

Both of these are auto-folder programs that present you with an opening screen, from which you select the desk accessories and other auto-folder programs that you will need during the coming session. Some accessories and programs will always be needed - for example, software accelerators such as **NVDI** or

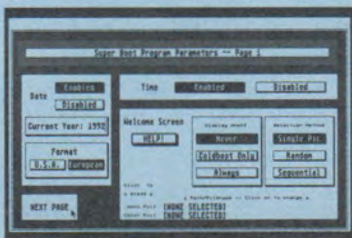
system patches such as **STE_FIX.PRG**. Others will depend on your application: for word processing, you might want to load a spell checker, a RAM disk or even an address book accessory.

XBoot and **Superboot** both go about their work in more or less the same way. Accessories and programs that are not required are renamed with **ACX** and **PRX** extensions, so that **TOS** will ignore them when it goes through its boot-up procedure.

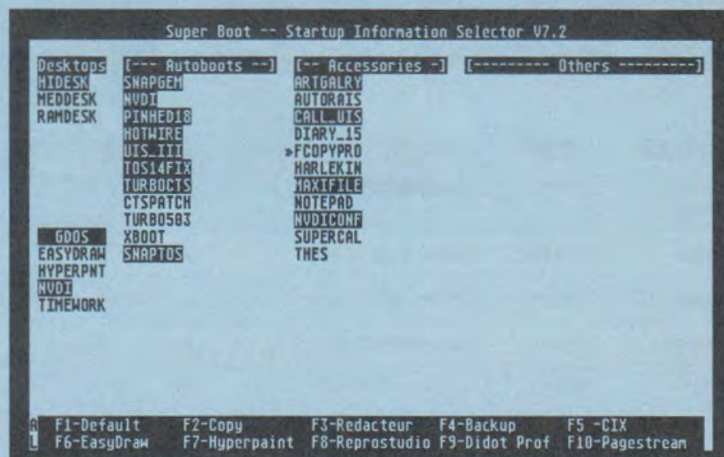
Both **DESKTOP.INF** and **ASSIGN.SYS** files can be treated in the same way, enabling you to keep several **ASSIGN.SYS** files for the same application, each with different sets of fonts installed. Alternatively, you may have several different **GDOS** programs requiring their own **ASSIGN.SYS** files.

Several **DESKTOP.INF** files can be useful too. One file could have a RAM disk icon installed on the desktop and another could have a floppy disk drive window opening, ensuring that drive A is read as the desktop appears - useful if you are transferring files to or from a floppy, for example.

Both programs work well with floppy disk-based systems, reducing the need for several different boot disks and speeding up loading times considerably.



The comprehensive Superboot configuration program lets you customise the program completely.



Superboot's main screen. You select the required accessories and AUTO programs using cursor keys and space bar.

SUPERBOOT

Superboot achieves its aim with a functional opening screen. This may be rather unexciting to look at, but it does display accessories, auto-file programs, **DESKTOP.INF** and **ASSIGN.SYS** files. Others, including RAM disk configuration files, can also be installed.

Preset configurations are created and saved by pressing the "S" key and selecting a function key combination to assign it to.

Up to 30 are supported, in conjunction with the alternate and control keys. If, on the other hand, a one-off setup is required, the relevant combination of programs can be selected and the program exited via the Esc key.

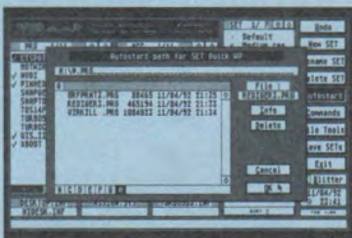
Each preset configuration can have an autoboot program assigned to it which is launched immediately after the auto folder programs and desk accessories have been

loaded.

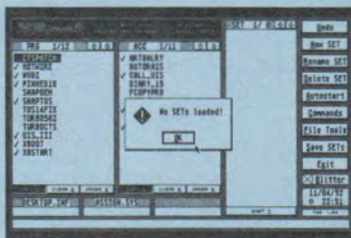
Other features of **Superboot** are the ability to load personalised welcome screens in Degas, NEO or Tiny format and to play digitised sound samples. Numerous other features are available, including setting the time and date, setting the delay (if no key is pressed, **Superboot** will then load the default preset), floppy disk seek rate, turning verify on or off, and requesting a password.

Superboot is very easy to set up. The main program, **SUPERBT.PRG**, needs to be the first, or certainly one of the first, programs in the auto folder. A second program, **SUPERBTA.PRG**, is added last to prevent any intermediate programs which reset the ST after installing themselves from starting the whole boot procedure again.

The various **ASSIGN.SYS** and **DESKTOP.INF** files are stored in a sub-directory within the



The word processor can even be launched from within the RAM disk using the Autostart facility.



Nice screen, easy to use and plenty of power. What more could you ask for in a utility?

THE PANTS

AUTO folder. The configuration program can also be stored there for convenience.

The manual is included on disk in the form of a 90K ASCII file and registration is a modest US\$15 or around £9.10. This is excellent value for such a well-documented, regularly updated utility.

XBOOT

XBoot does virtually everything that **Superboot** does, but it manages to do it that bit better.

The main advantage of this program is the mouse support which allows accessories and programs as well as preset configurations (called SETs) to be selected or de-selected using the mouse. The list of functions on the right of the screen can be activated by the mouse.

The opening screen is much more aesthetically pleasing, as well as a lot more functional. Although, as already mentioned, both programs work in the same way, **XBoot** tends to be easier to use and more flexible.

Files can be viewed in alphabetical order or order of execution, and they can be toggled between each mode. Once you've reached this all-important screen you will have access to the programs and desktop accessories for your next task.

Eight programming commands are available: COPY, NAME (rename or move), KILL (delete), EXEC (run), CHEXT (change extension), MKDIR (create folder), RMDIR (delete folder) and CHKEMP (check for empty).

These commands can be

used to build up short routines associated with each SET for keeping hard drives clear of unwanted backups and temporary files, as well as installing RAM disks and copying to and from them.

XBoot is easy to install: all you need to do is simply to run the short installation program which places it in the auto folder, changes its position to first, and copies the ancillary files into a folder called XBOOT. A special program for autostarting GEM programs is also installed if you have a pre-1.4 TOS.

This excellent program will allow your ST to focus only on those items it needs. The manual is well-written, telling you all you need to know about the program and how to use it. At £29.95 it represents good value for money.



The XBoot configuration program.



Each SET can have up to 10 separate commands to be executed before the auto programs and desk accessories.

STRAIGHT TO THE POINT

Having booted up with your chosen set of accessories, the next step is to start the application you need. . .

The chances are, if you're a hard disk user, that you will know where most of your main applications are, even if they are several mouse clicks away. But what about that IMG to Degas conversion utility that you know is in there somewhere? Or the scores of other minor utilities that are so hard to find when you need them?

Start-up utilities provide you with a menu containing all your applications and utilities. Running one is as easy as clicking the mouse button - no more navigating through nested folders to get where you want to be.

GOGO-ST

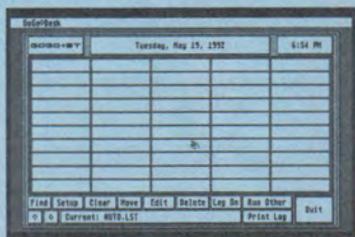
At the cheap and cheerful end of the start-up utilities line-up comes **GOGO-ST**, a shareware offering from the USA which is well up to commercial standard. At US\$5, the registration fee won't exactly break the bank either.

GOGO-ST is an easy to install

utility with a limited range of functions, but its effect on your productivity can be quite dramatic.

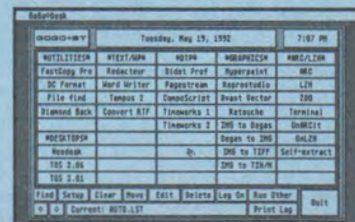
It can be started by double-clicking from the desktop or installed as an autobooting application on the boot disk. Even better, it can be autostarted from within Superboot or XBoot, for maximum speed in starting up.

GOGO-ST presents you with a neat menu screen containing 50 blank boxes. Any GEM, TTP or TOS application or even a

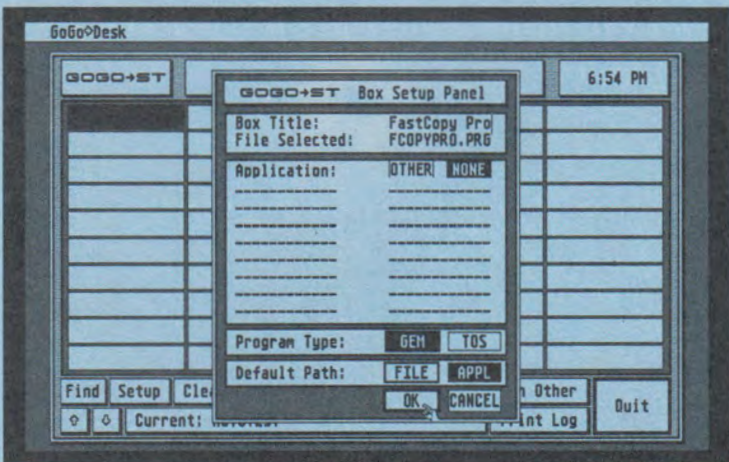


GOGO-ST: the slots will be filled with headings and the commands are accessed from the buttons along the bottom.

document can be installed in each box and run with the click of the left mouse button. Once the screen has been configured and saved as an LST file, the boxes can be moved,



This is the kind of screen that greets you every time you boot up - an awful lot quicker than clicking your way around the GEM desktop.



Adding a program to **GOGO-ST**. The mouse control makes it relatively easy but, surprisingly, hitting Return from here doesn't activate the "OK" button. A minor niggle in an otherwise excellent utility.

deleted or changed by clicking on the appropriate operation at the bottom of the screen. Different LST files can also be loaded and saved.

All the desk accessories can be accessed in the normal way while running **GOGO-ST** and whenever you exit a program called from within **GOGO-ST**, you are automatically returned to the **GOGO-ST** screen.

Another interesting facility is the ledger, which automatically tracks the time you spend in any given application. It's ideal for business where the time taken to create or edit a document in a word processor or DTP package can be recorded and charged to a client.

GOGO-ST can also be used on floppy disk-based systems. An AUTO.LST file, the self-loading screen configuration, must be present on every floppy disk and it has to be edited to reflect that disk's contents. Once this is done, **GOGO-ST** can be launched from the boot disk.

Floppy disks can then be changed and the program forced to read the disk's individual LST file by simply pressing the up arrow key. Programs or documents on the disk can then be started in the normal way, using the mouse. Time is saved by dispensing with the need to update the window when a new disk is inserted and hunt through folders for a given program.

HOTWIRE

The commercial equivalent of

GOGO-ST is CodeHead's **Hotwire**, which is now up to version 3.0, and more powerful than ever.

The opening screen comprises 54 blank lines in three columns. As with **GOGO-ST**, each one can be filled with a program or document. However, as well as being mouse controlled, **Hotwire** can also be used with hot keys - an extremely quick way to start up applications.

Individual screens can also be customised easily, thanks to the ability to incorporate graphics in the headers and even colour, depending on resolution. It has everything **GOGO-ST** has, including the ledger, and much more besides.

Hotwire supports command line entry for programs which require it, allowing you to set up customised shells for many utilities, especially archivers such as ARC and ZOO.

Programs can also be chained together, passing the same file between them if necessary, through **Hotwire**'s unique work file facility. This allows up to eight separate filenames, including paths, to be referred to by a key number prefixed by the tilde character (~). This coded reference can be entered in command lines and need never be changed - only the work file list need ever be altered.

For example, a chain of programs could be set up to convert a graphics file from one format to another, compress it into an archive and

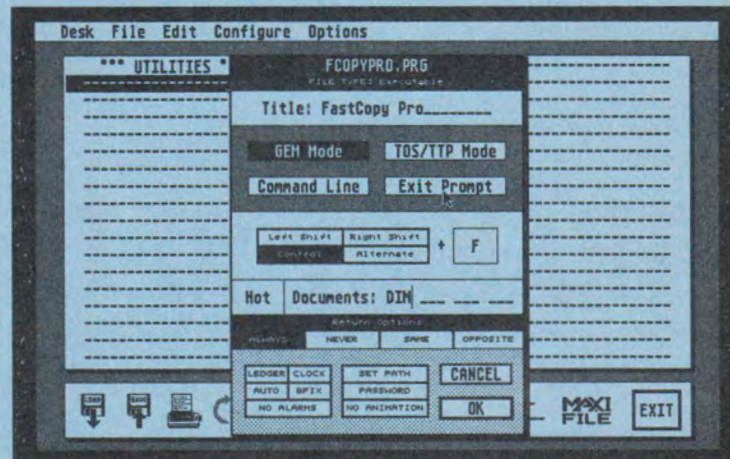
store it in a particular directory, all with one mouse click or key press.

Another advantage of **Hotwire** is that it is memory resident - it can be called from the ST's desktop by clicking the right mouse button and it appears almost instantaneously.

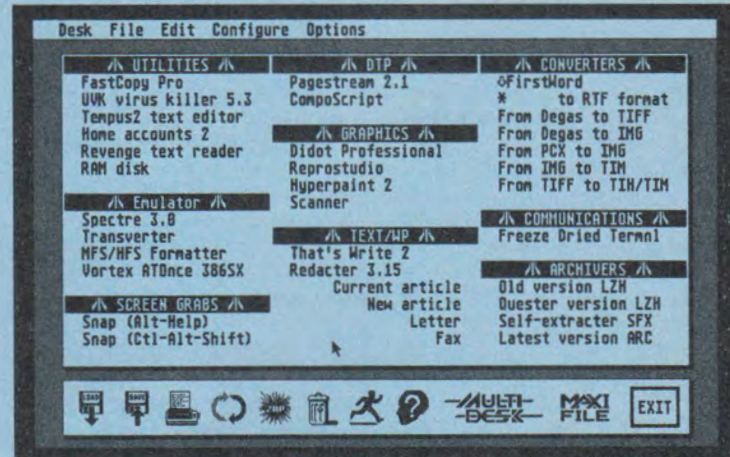
Add the long list of additional features, such as corner clock, user definable, recurring alarms and its integration with other CodeHead products (**Maxifile**, **Little Green File Selector** and **MultiDesk**), and **Hotwire** becomes one of the most powerful utilities ever conceived on the ST.



A rather bland screen hides enormous power and versatility. The drop-down menus and the icons conceal plenty of useful commands and features, making **Hotwire** one of the fastest desktop replacements available.



Adding a program to the **Hotwire** menu is quick and easy. There are also plenty of other options to set for each program installed.



My own day-to-day working environment, courtesy of **Hotwire**. The keyboard shortcuts would normally be shown on the same line as the program name, but I don't use them. Note the document "templates" installed under **Redacteur**. The ARC and LZH programs have programmed command lines so that files can be archived using the file selector rather than typing in filenames.

IN PLAIN ENGLISH

Just in case you find some of the terminology used in this piece a little hard to fathom, here are a few terms explained. . .

.ACX/.PRX Extenders: These provide a simple way of preventing accessories and auto programs from loading at boot time. Simply rename an .ACC file to .ACX (or any other letter as the last letter) and a .PRG to .PRX. It is much easier than removing them from the disk and, if you need to use them again, they are always there.

.TTP: Short for TOS Takes Parameters and indicates a program that will request user input when it is run, such as filename or command.

ARC, ZOO, LZH: Three of the most common compression formats used on the ST. Files can be reduced to a fraction of their original size which is especially useful when spending material over the modem - it saves on your phone bill!

**“Try the Turbo 20/25
from Atari Workshop.
It’s unbelievably fast -
three times ST
performance. Screen
updates are actually
faster than on a TT.”**

Andrew Wright, Technical Editor, ST User

Running at a clock speed of 25 mHz, the remarkable new Turbo 20/25 is very nearly as fast as, and much more software compatible than, other accelerators costing almost twice the price.

It comes bundled with the very latest "wafer" 68000 CPU. New technological advances mean that this new processor handles much faster clock speeds than the old type supplied by Atari.

And, because this new 68000 chip is 100% compatible with the old chip, you'll have new speed without the software problems associated with 68030 processors.

The Turbo 20/25 works like a dream with Spectre GCR and, additionally, you can toggle between 25 mhz and true 8 mhz at the flick of a software switch.

But the speed story doesn't end here. Now there's new nVDI.

As a stand alone program, or with Turbo accelerators, nVDI boosts some graphics/windows functions to up to 25 times faster.

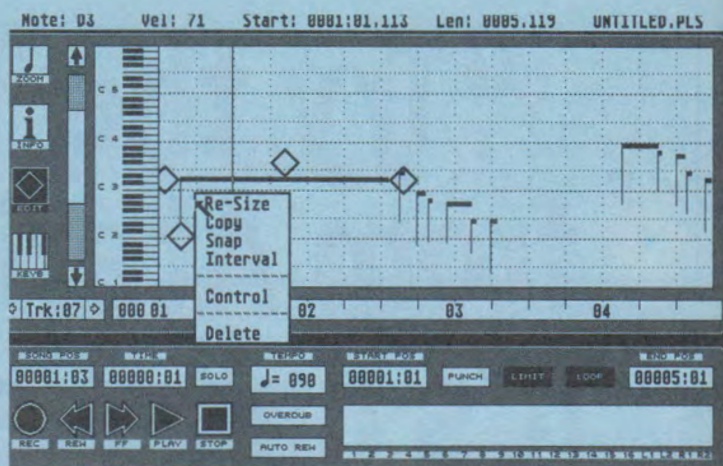
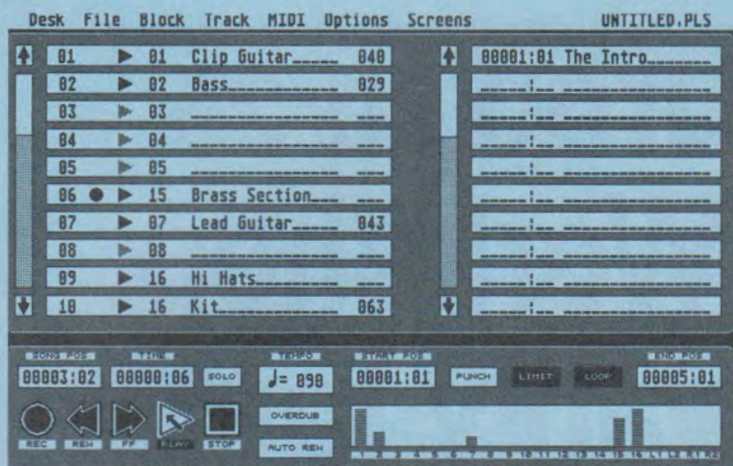
It also has a built in mouse accelerator plus a fast and robust, easy to configure, GDOS.

These are just two of the dozens of new products we've got for ST and STe computers. Ring us on **0753 832212** or write today for more information.

The remarkable new Turbo 20/25 new accelerator board is available only from Atari Workshop and costs just £299. DIY or workshop installation. Its superb software companion, nVDI, is just £39.95. All prices include VAT but exclude post and packing.

Atari Workshop, Suite 47/8, Windsor Business Centre, Vansittart Road, Windsor, Berks SL4 1SE. Tel: **0753 832212** Fax: **0753 830344** Prop: Brandt Fernandes (Europe) Ltd

ATARI
WORKSHOP



Sequencer One Plus. Recording tracks to the left, cue sheet on the right with transport and channel meters at the bottom.

Here's how the notes are edited: the diamond boxes move the note about and the menu gives more options.

Can Gajits repeat the success of Sequencer One with their new upgrade? Jon Bates finds out

VARIATIONS ON A THEME

ATARI ST REVIEW
ESSENTIAL BUY

Sequencer One was a huge success, selling over 70,000 copies, largely because it offered a range of functions, including the extra Hit Kit and the play back option at reasonable prices.

CARRYING ON THE TRADITION

All of these functions are included in **Sequencer One Plus**, and all have been

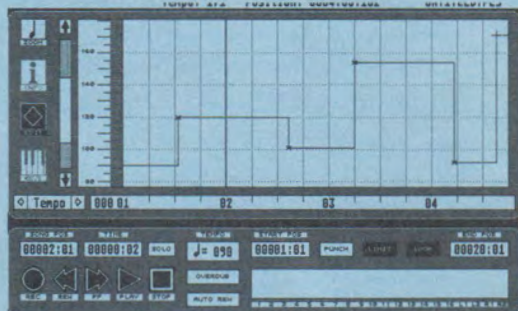
improved and upgraded. The basic set-up remains the same: **Sequencer One Plus** is a 32-track sequencer, supporting all 16 MIDI channels, plus four channels of sampled sound. The main screen divides into three sections: the left-hand main area contains the 32 tracks which record and play back the



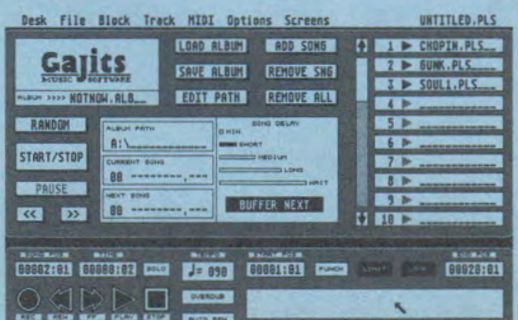
music, the right-hand area is a non-active cue sheet which lists the sections of the piece and underneath are the transport controls that start, stop record and wind the music forward and back. Also in this lower window are the MIDI and sample channel activity meters which show you what channels are currently playing. Above these are two location points which set specific sections in the piece. Once the section is set you can cycle it around, record or edit notes and any other MIDI data between the locations. Data can be entered direct from the keyboard or copied very quickly from the song position window. Most features of the program have keyboard shortcuts and there's a help page to get you used to these.

Quantise function or by turning to the Step Edit page and physically altering elements. This page has several unique features. You can jump from track to track without having to return to the main screen and you can overlay a screen display of a keyboard to enter notes in Step Time; individual notes are typed in in the manner of a word processor: set the length and pitch and enter them at any point.

Once you've got the tracks playing what you want, you then need to assemble them into a piece of music. Music is often repetitive and designers of sequencing software usually account for this by having an arrange page that copies sections backward and forward.



The new tempo editing map. Each cross represents a new tempo.



Songs lined up to play in Juke Box mode. Notice the wide variety of playback options.

The currently active track is indicated by a solid circle and you can either record afresh or 'dub' (add) new notes to previous data on that track. The channel, MIDI or sample, is set on-screen next to the track name, and the program number - the sound that is used by the synth - is set up here.

Once the notes are recorded you correct them by using the

Easy to use
Ideal for beginners
Good value for money

PROS AND CONS

Some facilities are slow in operation

Select Area: Left button = Ok, Right = Cancel.



Using the keyboard on screen to enter notes individually.

wards. **Sequencer One Plus** has a Bar Editor which displays the tracks as shaded blocks running concurrently from left to right. Tracks are earmarked by dragging the cursor over them. They can then be cut and copied into a clipboard, much like a word processor, and pasted anywhere you choose any number of times.

Sequencer One Plus retains other features from the original, such as the import and export of MIDI files and a high level of recording accuracy. It can remap MIDI controller data: if you want to change the volume of a particular track over a certain number of bars you can remap, say, the modulation wheel to produce volume control data which is recorded on a separate track volume as you record with the modulation wheel. The program will run in either medium or hi resolution on all STs.

ONE STEP BEYOND

Perhaps the single most useful new feature, though, is the Drag Edit mode. Previously the only way to edit individual notes was by entering data from the keyboard. Now you can click on a note and four diamond-shaped boxes appear. These enable you to

hear the note, change the pitch or time and alter its length. The notes also have 'tails' which denote their velocity.

A pop-up menu can resize, copy, line-up a note in time or delete it. Any note can be changed into MIDI control data, but editing for the data itself is limited; the manual hints that future developments might change this.

'Alter Notes', which transposes and changes velocities, can now be set to apply only to notes within a specified pitch area instead of to all notes. The lengths of the notes can be changed as well; very useful for drum tracks.

On the main screen there are two major improvements: you can now 'solo' any track and set 'punch in' recording sections by using the start and end locator positions; any section of the current track can be overdubbed or re-recorded. This is great for getting short sections correct or replaced.

A new Tempo Map track enables you to enter different tempos throughout the progression of the piece - not all music plays at the same speed throughout. Should you decide that the overall speed is incorrect it will alter any subsequent tempo changes by

Select Area: Left button = Ok, Right = Cancel.



The shaded areas of the piece can be cut and pasted anywhere you like in Bar Edit mode.

a corresponding amount. Editing is achieved by using the diamond drag boxes.

Samples can now be played back through an (additional) AVR sampling cartridge for superior sound reproduction and there are five disks worth of samples on offer from Gajits. A 'Juke Box' mode can set up to 32 songs to be played one after another, either automatically, in random order, with delays or on a key press. Yet another weapon for the ST karaoke artist!

Other worthwhile upgrades are the ability to record systems-exclusive dumps, the MIDI data which sets up the instrument/voices initially. These can be saved as separate files and loaded automatically at the start of a song. The metronome has been enhanced and now you don't have to waste a bar or two at the beginning of every song as you can set-up a count-in section to run before you start recording. Owners of Yamaha PSS 590 and 790 keyboards will be pleased to learn that Gajits have come up with a 'fix' which will overcome the severe problems that these instruments have when used with sequencers.

All in all, these are a very

"A good deal for your money and seriously easy to use!"

NAME: SEQUENCER ONE PLUS

COMPANY: GAJITS

CONTACT: 061 236 2515

PRICE: £129.95

RELEASE DATE: NOW

MIN MEMORY: 0.5 Mb

EASE OF USE ★★★★★

DOCUMENTATION ★★★★★

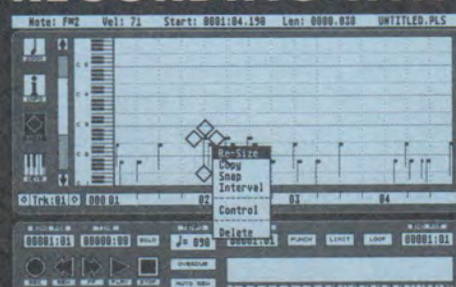
EFFECTIVENESS ★★★★★

VALUE FOR MONEY ★★★★★

OVERALL **90%**

worthy and cost-effective set of upgrades to a successful program; they make an already user-friendly sequencer even more attractive - and you can run it without a MIDI lead in sight.

RECORDING WITH SEQUENCER ONE PLUS



How to start a piece - the drums are recorded and they are now ready for a little editing.

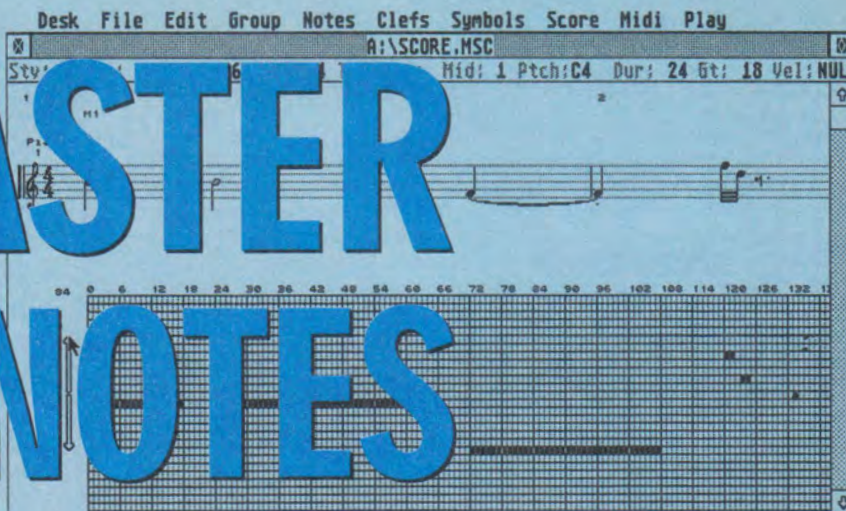


Now the whole shaded area is cut and pasted forward to make a lengthy and solid rhythm track.



Having recorded more instruments the piece starts to take shape and the sections are marked up in the cue list.

THE MASTER OF THE NOTES



Can you believe it? A sequencing program that tells you how to play! Jon "master and servant" Bates will now perform for you...

At first glance, **Vivace** might not seem anything special: it's a music sequencing and editing program that displays traditional music notation. But what really sets it apart is that it interprets the way the music is played, displaying it accurately with dynamic markings.

HARD AND SOFT

Dynamic markings are the signs and abbreviations that tell the performer how loud or soft to play (fff to ppp), whether to play a note for its full length (tenuto) or to cut it short (staccato). **Vivace** works out how hard and long you've hit the notes and grades them accordingly. These markings appear instantly in the score and since all performers and instruments differ, the thresholds that decide exactly what loud and quiet or short or long are can be altered to suit the individual.

Other signs such as crescendo

(get louder) and rit. (slow down) can be inserted afterwards, functioning over a number of beats set by the user. Repeat signs and most other music symbols are included and actually do what they are supposed to do; the result being a visible score that can be readily understood by a classically trained musician.

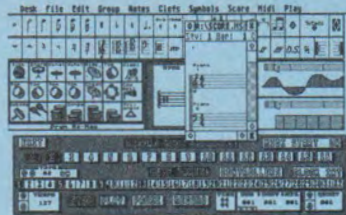
PRINT OUT PROBLEMS

The main display is both quick and accurate and can cope with up to 32 staves, working with all keys, time signatures and clefs, including drum parts. It uses multiple windows that enable recording to take place while part of the display remains visible. The problem is that you can't print any of it out. Having gone to all the trouble of interpreting the MIDI data for the non-MIDI musician to understand, it's incapable of producing a hard copy.

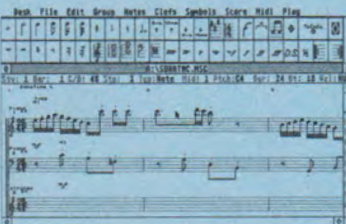
There are other faults with the recording page. Quantization is either off or on and is set numerically rather than by note values such as crotchets or quarter notes. This is rather fiddly as you need to keep looking up the note values in the manual. The manual, although very thorough (but lacking an index), spends an awful lot of time telling you how to put in notes on screen. This is all useful, but most users would find it less time-consuming to actually play the notes in and correct the results afterwards. Many of the on-screen controls, notably the up and down arrows, are very tiny and hard to work with. The page lacks cue points and loop modes, which are real shortcuts to recording sections of music.

As a notation display package **Vivace** is very good, except that you can't print from it. As an editing program for music it holds its own: the display features for controlling MIDI data such as volume, sustain and velocity are excellent. As a sequencer, though, it's basic and could really do with being more polished and user-friendly - there are easier ways of getting an overview of a piece than the one offered by **Vivace**.

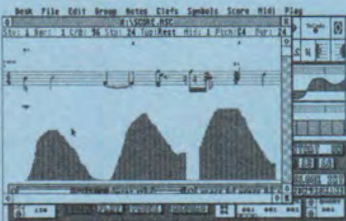
Here graphic and traditional music notation are aligned on the same screen, providing two ways to edit each note.



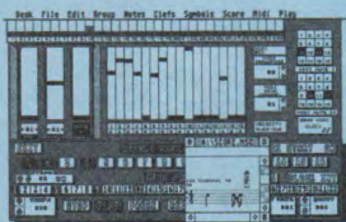
The sequencer page has transport controls set across the bottom. Here the score display can be re-sized and overlaid so that you can see the score as it plays - a good use of multiple windows.



This is Vivace's score edit screen with the symbols set across the top of the screen.



The shaded grey areas are drawn by the cursor and control tempo, volume, modulation and pitch bend.



The central "mixing desk" has a track meter above plus on-screen pitch and modulation "wheels".

"Nice ideas and clever innovations, but suffers from lack of printout and sequencing features"

NAME: VIVACE
COMPANY: DESERT
SOFTWARE
CONTACT: 051 430 7400

PRICE: £199.00
RELEASE DATE: NOW
MIN MEMORY: 1Mb

EASE OF USE: ★★★★★
DOCUMENTATION: ★★★★★
EFFECTIVENESS: ★★★★★
VALUE FOR MONEY: ★★★★★

OVERALL: **65%**

Innovative and quirky sequencer

Easy-to-manipulate control data

Has quick and accurate main display

PROS AND CONS

Long-winded manual

A little on the basic side

Notates but won't print out notation

INSIDE INFO

The program won't, at the moment, read MIDI files and although it can cope with 32 staves, you can't see them all at the same time as there's only one size of display. When you edit by moving notes about, there doesn't seem to be any way of actually hearing the notes, although you can do this using the multiple display of both staves with a note graph underneath - a good display that is easy to work with. It's also good at graphically displaying and controlling other MIDI data.

Art Master for the ST is produced by Laser Distribution and is mainly designed for use with Video Titrer (see this month's cover disk). But it also happens to be ideal as a simple to use stand alone art package in its own right.

This program works in low resolution and supports Neo, PI1, PC1, and IFF formats. On loading you are presented with a logo, followed by a request to input a code number. This number is printed on a separate sheet that comes with the program, and you can't actually get into **Art Master** until you've keyed in the code.

Once past the protection,

If you buy a cheap art package, you usually have to sacrifice quite a few advanced drawing features. Not so with Art Master, says Dave Burns

unlike the Spraycan, only uses the colours already in that area.

Block manipulation is comprehensive. Once a block is selected there are loads of options available to you. Cut & Paste, Resize, and Flip are there. And so too are Cylinder, to wrap the selected block into a vertical cylinder, and 3D Shape, for wrapping the block to a shape drawn out freehand with the mouse.

OPTIONS

Another option, Sphere, turns your square block into a spherical shape. This is, of course, a variation of the 3D Shape option, but this time there is a preset outline, and the size

smooth curves. Just fix the points that you want your curve to touch and hit the button. Squares, circles and polygons can be drawn with ease, either filled or outlined, while airbrush will turn your mouse pointer into a spraycan.

GRADUATED COLOURS

Something that really impressed me was Gradient. This allows you to put graduated colours on the screen in many ways, circular, horizontal, blended - the limits are purely set by your imagination. When you set the gradient you are presented with two sets of 16 boxes. The top group is the current palette, the bottom one the colours that will be used. Of course, you do not need to use all 16 colours, but the actual execution of this option is simplicity itself.

You are not limited to one workscreen, either: the amount available is entirely

"Ideal as a simple to use standalone art package"

NAME: ART MASTER

COMPANY: LASER

DISTRIBUTION

CONTACT: 0579 82426

PRICE: £29.95

RELEASE DATE: OUT NOW

MIN MEMORY: 0.5Mb

EASE OF USE ★★★★★

DOCUMENTATION ★★★★★

EFFECTIVENESS ★★★★★

VALUE FOR MONEY ★★★★★

OVERALL **83%**

AFFORDABLE ART

there is a very attractive icon driven menu bar to enable you to create your masterpiece. Surprisingly, there are a number of options that you would not expect to find in a package of this price; options such as Smear, to smooth out straight edges. Not unlike the Spraycan operation, this will mix the pixels in the selected area to give a far more pleasing edge. This option, though,

depends on the size of the block being manipulated. Cones is another interesting option, allowing you to wrap your selected block into a cone shape.

The standard functions are also available, such as Draw, Fill, Zoom (to enlarge an area for closer work) and Curve, allowing you to turn your straight lines (drawn with 'Line' or 'Ray' perhaps) into

dependant on the memory you have. Unlike some other packages, with **Art Master** you can cut from one workscreen and copy to another. You can also duplicate onto all other workscreens making an animation sequence far easier to create

Summing up, I would say that in its favour, **Art Master** is very simple to use with a wide variety of options that are usu-

ally only present in more expensive packages. On a slight minus note, I found the protection to be a slight irritation, especially as the codes are printed in red on a grey page, making actual reading difficult. The fact that this program will only work in low resolution is also slightly annoying, although the variety of formats that can be loaded and saved is a bonus.

COVERDISK SERVICE

DON'T FORGET TO USE OUR COVERDISK HOTLINE IF YOU NEED ANY HELP.

Ring the PC Wise helpline between 10.30a.m. and 12.30p.m. during weekdays on (0443) 693233.

And in the unlikely event that your coverdisk won't load, send it to ST Review Disk Returns, PC Wise, Merthyr Industrial Park, Pentreebach, Mid Glamorgan CF48 4DR.

Please enclose a stamped addressed envelope and PC Wise will replace the offending disk.

PD DEALER DIRECTORY

Looking for the best in PD software? Then look no further – our comprehensive list of dealers tells you all you need to know. . .

16/32 PDL,
35 Northcote Road,
Strood, Kent, ME2 2DH

Advantage,
56 Bath Road, Cheltenham,
Gloucestershire, GL53 7HJ

Alpha Computing,
32 Meadow Drive, Halifax,
West Yorkshire, HX3 5JZ

Arrow PD,
6 Kents Orchard,
Perry Street, South Chard,
Somerset, TA20 2QB

Atari User Group Scotland,
9/3 North Hillhousefield,
Edinburgh, EH6 4HU.

Awesomedemos,
3 Mason Road, Seaford,
East Sussex, BN25 3EE

B-Soft,
2 Oliver Drive, Calcot,
Reading, Berks, RG3 5XN

Byteback,
6 Mumby Close, Newark,
Notts, NG24 1JE

Caledonia PDL,
250 Oldtown Road, Hilton,
Inverness, IV2 4PT

Compute 'In Style',
64 Castle Hill Road, Hindley,
Wigan, Lancs, WN2 4BJ

Computer Connections,
Ashlaw House,
Euximoor Drove,
Christchurch, Wisbech,
Cams, PE14 9LS

Crown Software International,
38 Warrington Avenue,
Slough, Berks, SL1 3BQ

Drake PD,
12c How Street,
The Barbican, Plymouth,
Devon, PL4 0DA

D W Stables,
Unit 1,
Johnson's Shopping Centre,
29-31 Bond Street, Blackpool,
FY4 1BQ

Elmsoft,
PO Box 17, Loughton,
Essex, IG10 2EE

EM PDL
54 Watnall Road, Hucknell,
Nottingham, NG15 7LE

EVPD,
15 Cleeve Road,
Gotherington,
Cheltenham, Gloucestershire,
GL52 4EW.

Freaks PDL,
29 Leap Valley Crescent,
Downend, Bristol,
BS16 6TQ

Floppyshop,
PO Box 273,
Aberdeen, AB9 8SJ

Gemini Shareware,
10 Warwick Avenue,
Slough, Berks, SL2 1DX

Goodmans PDL,
16 Conrad Close,
Meir Hay Estate, Longton,
Stoke On Trent,
Staffs, ST3 1SW

Imageart,
19 Brenda Road,
Tooting Bec,
London, SW17 7DD

L.A.P.D.,
80 Lee Lane, Langley,
Heanor, Derbyshire,
DE7 7HN

Merton PD,
10 Grasmere Avenue,
Merton Park,
London, SW19 3DX

Metropolis PD,
38 Howick Park Drive,
Penwortham,
Preston, PR1 0LU

Micro Choice,
30 Townhead,
Kirkintilloch, G66 1NL

Mr Disk Shareware,
72 Glencoe Road,
Sheffield, S2 2SR

MT Software,
Greensward House,
The Broadway,
Totland,
Isle of Wight, PO39 0BX

Nightshift PD,
50 Averill Road,
Highfields,
Stafford, Staffs, ST17 9XX

New Age PDL,
30 Anderson Estate,
Lower Road, Hockley,
Essex, SS5 5NG

Office Choice,
Suite 14, Avon House,
Town Centre,
Cumbernauld, G67 1EJ.

Page 6 Publishing,
PO Box 54,
Stafford, ST16 1DR.

Paradise Computers,
11 Winfield Avenue,
Patcham, Brighton,
East Sussex, BN1 8QH

PD Essentials,
22 Fern Avenue, Mitcham,
Surrey, CR4 1LS

PD ST,
95 Elton Road, Sandbach,
Cheshire, CW11 9NF

Premier Mail Order,
8 Buckwins Square,
Burnt Mills, Basildon,
Essex, SS13 1BJ

Prophecy PD,
390 Coulsdon Road,
Old Coulsdon,
Surrey, CR5 1EF

Public Domain & Shareware,
Supply Company,
5 Walnut Close,
Barkingside, IG6 1HE

Public Dominator PD Atari,
PO Box 801,
Bishops Stortford,
Herts, CM23 3TZ

Public Sector PDL,
50 Ripon Road, Stevenage,
Herts, SG1 4NA

Riverdene PDL,
30a School Road,
Tilehurst,
Reading, Berks, RG3 5AN

Senlac,
14 Oaklea Close,
Old Roar Road,
St Leonards On Sea,
East Sussex, TN37 7HB

Seven Disk,
Digswell Water Lodge,
Digswell Lane,
Welwyn Garden City,
Herts, AL7 1SN

Solent Software,
53 Rufus Gardens, Totton,
Herts, SO4 3TA

Softville,
Unit 5, Stratfield Park,
Elettra Avenue, Waterlooville,
Hants, PO7 7XN

South West Software Library,
PO Box 562, Wimbourne,
Dorset, BH21 2YD

Solent Software,
53 Rufus Gardens, Totton,
Herts, SO4 3TA

ST Club,
2 Broadway,
Nottingham, NG1 1PS

ST Adventure PDL,
32 Merrivale Road,
Rising Brook,
Stafford, Staffs, ST17 9EB

State 808 PDL,
3a Old Lanark Road,
Carluke, ML8 4HW

STing Public Domain,
23 Manor Grove, Westvale,
Kirkby, Liverpool, L32 0UZ

The Circular PD Library,
14 Morrison Drive,
Lennoxton,
Glasgow, G65 7BA

The Source PD,
7 Shearwater Lane, Norton,
Stockton On Tees,
Cleveland, TS20 1SH

Trust PD,
18 The Park, Southowram,
Halifax, HX3 9QY

Warzone PDL,
53 Ropewalk, River Street,
St Judes, Bristol, BS2 9EG

Wizard PD,
178 Waverley Road, Reading,
Berks, RG3 2PZ

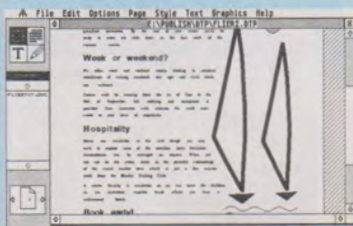
TIME FOR A CHANGE?

Timeworks played an enormous part in making DTP accessible to the home user. Can Timeworks 2 bring the old master up to date? Terry Freedman investigates. . .

Timeworks has definitely gone up-market since its first incarnation in 1988. This latest version has the feel of a simplified professional package, rather than a nifty amateur one. To start with, you can insert or delete several pages at a time rather than only one, as was the case with the original, and there are now four page numbering formats instead of just one, enabling you to produce documents with the foreword and contents pages numbered differently from the main section.

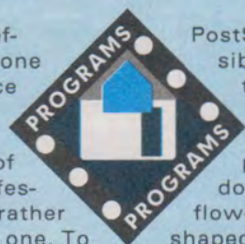
INCREASING YOUR OPTIONS

Besides these relatively simple changes, *Timeworks Publisher 2* features some radical improvements. The first of these is the ability to set a wide range of options as defaults. Whereas before you had to content yourself with setting up a default style sheet, now you can, among other things, set up a default directory (in which to save or look for documents), set text and graphics formats, and choose whether or not rulers



Don't be fooled by Timeworks' apparent simplicity: some clever effects can be obtained.

are visible. The program has also been made more "universal", in that a far greater range of text and graphics formats are recognised, more fonts are supplied, and a wider range of printers are supported, including Hewlett Packard lasers and the Canon Bubblejet.



PostScript printing is possible which, provided that your printer can handle PostScript files, speeds up printing tremendously. Text can be flowed around irregularly-shaped objects, and an automatic timed backup facility has been added.

SIMPLICITY ITSELF

The great thing about all these changes is that GST has managed to incorporate them without making the package any more difficult to use. If anything, it's actually easier. Installation is straightforward: just insert Master Disk One, then double-click on INSTALL.APP and swap disks when you're prompted to. There are seven disks in all, but you probably won't need all of them.

There is, however, a price to pay for this increased sophistication, not merely in terms of money. For one thing, you'll probably encounter a few problems if you try to use it with half a Megabyte of RAM. It might just about be OK for a very simple document, but even with two Megabytes, the program sometimes doesn't function properly if there are more than two or three desktop accessories loaded.

Working with a floppy disk system is possible, but there are limitations, especially with a single drive system. You won't have enough disk space to store the fonts required for laser printing unless you use a font compression program, and the amount of disk swapping required when it comes to printing is unbelievable.

If you intend to install it on a hard disk, you'll need at least three Megabytes of free hard disk space. And even with a hard drive, you'll need at least one Megabyte to run it.

UPS AND DOWNS

These reservations aside though, *Timeworks 2* is a pleasure to use, especially if you

take the time and trouble to set up the defaults mentioned earlier. You can work smoothly and achieve some excellent results without having to be a technical wizard.

The downside of this, though, is some lack of sophistication. For example, you can give frames a tint ranging from white to black, and opaque or transparent, using a small range of preset fills. This saves you having to worry about what, say, "23% grey tint" means, but there will probably come a time when your level of interest and experience is such that you'll want to know details like this.

Timeworks' closest rival, in terms of price, is Silica Shop's *Pagestream*. The more sophisticated in many ways, *Pagestream* gives you more control over text, supporting colour printing, and handling a wider variety of graphics types. On the other hand, *Timeworks* supports more word processors and is easier to get started with. The chart on page 130 gives you a full breakdown of how the two packages compare.

PRINTING PROBLEMS

An irritating feature of *Timeworks 2* is its occasional unpredictability when it comes to printing graphics, sometimes resulting in highly distorted printouts. More seriously, printing is laborious, taking about five minutes per (average) page on a laser printer and even longer on other printers. Unfortunately, you can't obtain a quick draft printout without running a program called *Fontwid*, which adjusts the width of the fonts. And if you do that, don't be surprised if the formatting of the document is altered as a result.

A related problem is the continued use of GDOS fonts, rather than vector fonts. GDOS fonts are memory and disk space intensive and slow things down. Hopefully, all this will change when Atari releases its own version of GDOS, FSM GDOS.

Timeworks Publisher 2 is a definite improvement on the original: it's worth upgrading to if you have the old version and worth considering if you're new to desktop publishing. Ultimately, of course,

its value depends upon what you want to use it for. It still has an appeal to the person who wants to produce classy-looking material without having to get a degree in computer science first. On the other hand, its relative simplicity may start feeling like a ball and chain if your expectations and needs rise above a certain point.

Easy to use

Many word processors supported

Many graphics formats supported

Many default settings possible

Flowing text around graphics is very easy

PROS AND CONS

Memory hungry

Printing can be slow

Scaleable fonts not used

Not sophisticated enough for advanced users

"A great improvement on the original, and still easy to use"

NAME: TIMEWORKS
PUBLISHER 2
COMPANY: GST
CONTACT: 0480 496 789

PRICE: £129.95
RELEASE DATE: OUT NOW
MIN MEMORY: 0.5 MB

EASE OF USE ♂♂♂♂♂♂
DOCUMENTATION ♂♂♂♂♂♂
EFFECTIVENESS ♂♂♂♂♂♂
VALUE FOR MONEY ♂♂♂♂♂♂

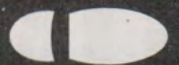
OVERALL **83%**

BUYERS GUIDE

Timeworks' closest rival is Pagestream. Our at-a-glance chart shows how the two packages compare

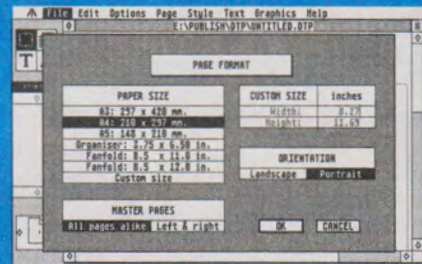
| | TIMEWORKS | PAGESTREAM |
|--------------------------|-------------------|-----------------------------------|
| GENERAL | | |
| RRP | £129.95 | £199.95 |
| RAM | 0.5Mb | 1Mb |
| Monitor | High/Med Res | High/Med Res |
| Custom Page Sizes | Y | Y |
| On-screen Help | Y | N |
| View Options | 5 Presets | Presets+ Variable |
| Style Sheets | Y | Y |
| Macros | Y | N |
| Automatic Backup | Y | N |
| TEXT IMPORTS | | |
| ASCII | Y | Y |
| 1st Word + | Y | Y |
| Protect | Y | N |
| Word Perfect | Y | Y |
| Le Redacteur | Y | Y |
| ProWrite | N | Y |
| Wordstar 2000 | Y | Y |
| Excellence | Y | N |
| Microsoft Word | N | Y |
| Displaywrite | Y | N |
| Locoscript | Y | N |
| Multimate | Y | N |
| Microsoft Works | Y | N |
| DCA/RFT | Y | N |
| ST Word | Y | N |
| IFF FTXT | Y | N |
| TEXT HANDLING | | |
| Fonts | GDOS, FSM-GDOS | Adobe, Pagestream Compugraphic |
| Font Scaling | Fixed | 0.01-185,000 |
| Kerning | Manual | Manual/Auto |
| Text Flow | Manual/Auto | Manual/Auto |
| Runaround | Manual | Manual/Auto |
| Spell Checker | Y | N |
| Hyphenation | Manual/Auto | Manual/Auto |
| Rotate Text | Y | N |
| Tagging | Y | N |
| GRAPHIC IMPORTS | | |
| Degas | Y | Y |
| IMG | Y | Y |
| Gem | Y | Y |
| Neo | Y | Y |
| Tiny | N | Y |
| IFF | Y | Y |
| TIFF | Y | Y |
| EPS | Y | Y |
| GIF | N | Y |
| PC Paintbrush | Y | Y |
| Splash | Y | N |
| Pro Draw | N | Y |
| Aegis Draw | N | Y |
| DR2D | N | Y |
| Lotus 1-2-3 | Y | N |
| Macpaint | N | Y |
| GRAPHICS HANDLING | | |
| Rotate Graphics | N | Y |
| Scale Graphic | Y | Y |
| Edit Graphic | Y | N |
| Crop Graphic | Y | Y |
| Bezier Curves | N | Y |
| Grey Frames | PRESETS | 0-100% |

STEP BY STEP

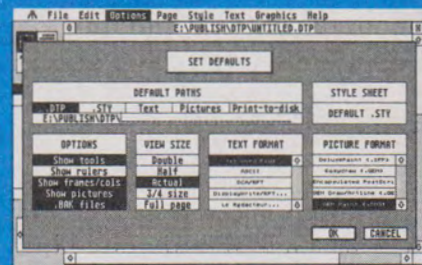


So you've bought Timeworks Publisher 2 and you want to take over Fleet Street. We start you off with a step-by-step guide to producing your own newsletter

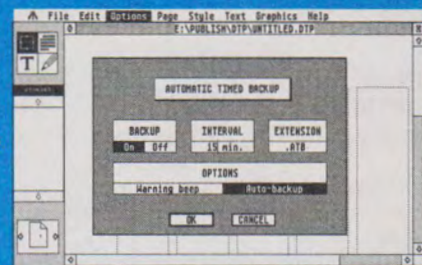
1) Having installed the program, set up the defaults, such as page size and paper type and save the info as a Style Sheet.



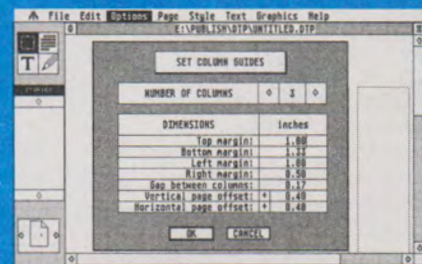
2) Next, configure the program — where to import text files from, what kind of graphics to use, etc.



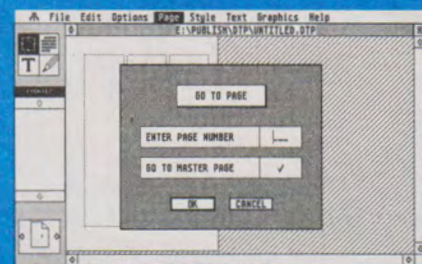
3) Now set the automatic timed backup: choose the intervals between saving, and whether to have your work saved or for you to be bleeped at.



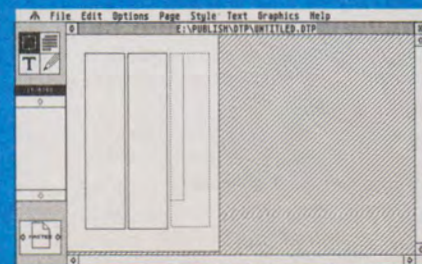
4) Now you're ready to start. Set the column guides for three columns — all the measuring is done for you.



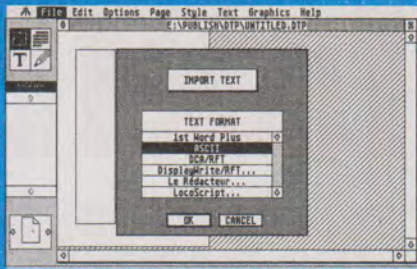
5) If you do everything on the Master Page to begin with, all the pages will look the same, so you won't need to do all this again.



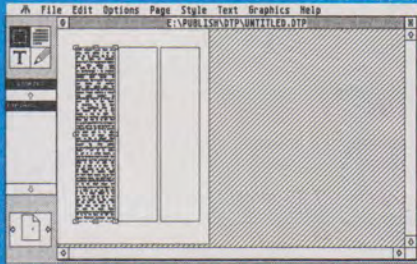
6) Now draw the frames with the mouse. The Snap to Guides feature makes it easy to be precise.



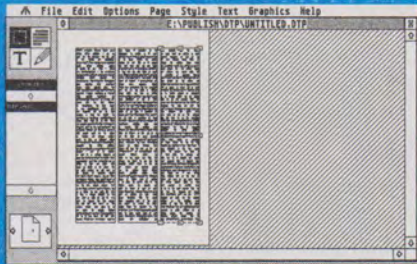
7) You've set up the layout, so now you need to import the text you prepared earlier.



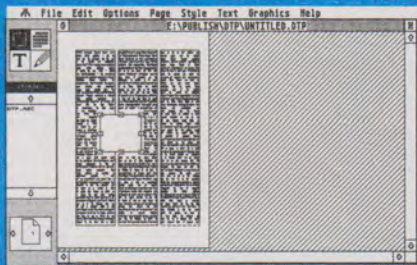
8) In this example, the text was imported directly into the frame, but you can import it and assign it to a frame later if you like.



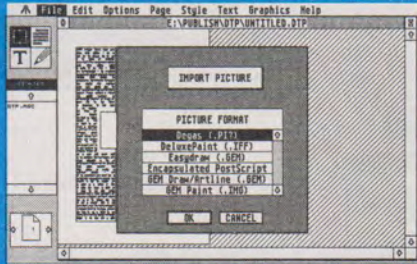
9) The imported text overflowed the frame. Making it flow into other frames takes just a couple of mouse clicks - first to select the frame, then to select the text from the panel on the left.



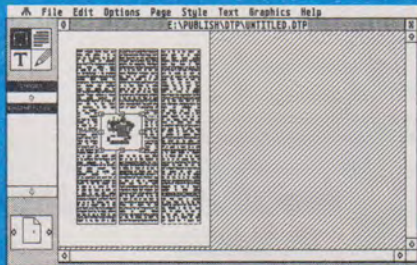
10) Now draw a frame for a picture; the frame icon is still selected from the tool box on the top left. Note how the text flows around the new frame without your having to tell it to.



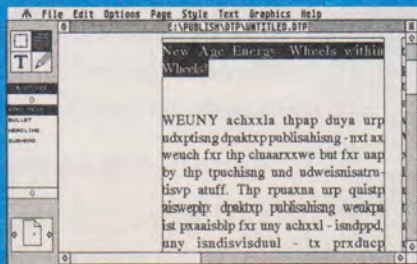
11) Next, import a picture.



12) Having selected the required picture, you can crop unwanted parts of it and rescale it to retain the correct proportions. Here's the result.



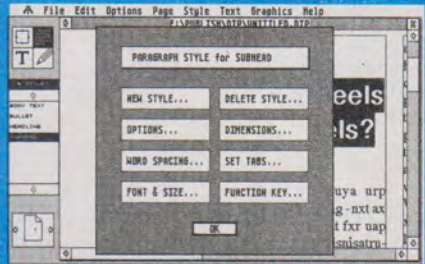
13) Now put a headline in. Do this by clicking on the T tool and typing it in directly. Then click on the paragraph style icon, as shown here.



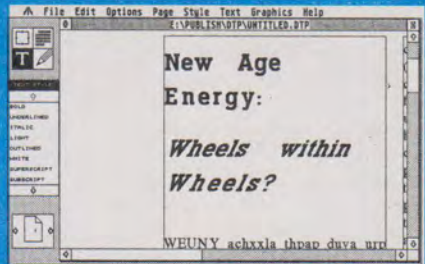
14) The headline is in Body Text style. Click on the headline, and then on the Subhead style to change it instantly.



15) You can change the Subhead style itself by double-clicking on the word Subhead. There are quite a few options, not all of which are shown here.



16) Switching to Text mode again and highlighting part of the headline enables you to introduce italicised (or bold) text.



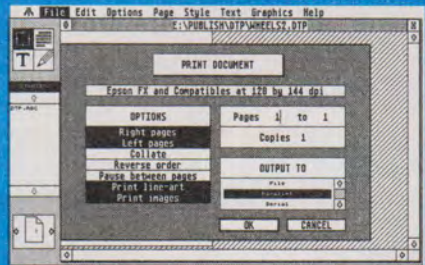
17) The newsletter now has some character to it.



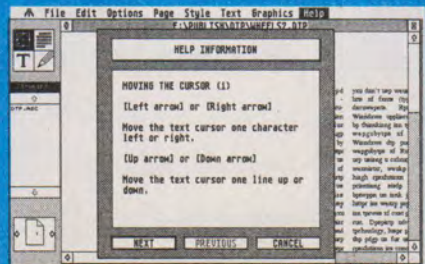
18) You can flow the text around the shape of the picture. It looks good enough to print - but save it first!



19) The print options are extensive - for instance, you can opt to not print out the pictures to save time.



20) If you get stuck at any point, just click on Help at the top of the screen.



GETTING STARTED W

In the first of a four-part tutorial, Terry Freedman looks at how to set up and produce a simple document



lished documents, eg D:\PUBLISH\DTP\, or simply A:.

Now do the same for STY (for style sheets), Text (for word processed documents) and Pictures. If you're using a hard disk drive with a PostScript compatible laser printer, you'll need to follow the same steps for Print-to-disk - you can then save the document and print it afterwards directly from the desktop.

Next, choose whether you want to show the tools, rulers and frames and columns. It's a good idea to show all these for your first few attempts, as it will help you feel more confident. A useful feature at this stage is the facility to not show pictures, since every time you change the view size the pictures are redrawn on the screen, taking a fair amount of time. The .BAK option enables you to backup your document every time you save. It's a good failsafe device, but it takes up space.

SIZE MATTERS

The next point to take into consideration is the view size. If you choose to show the full

page on screen, drawing frames and getting an overall impression of the page layout will be easy, but you won't be able to read the text. On the other hand, selecting double size will give you excellent readability but you won't be able to see very much at a time. A good compromise is to select actual size, which allows you to see most of the page and still read the text. You can always switch between the various view sizes from within the Page menu.

Timeworks supports a large number of word processors and art programs, so you should be able to word process your document and then import it straight into **Timeworks** without any fuss. If the worst comes to the worst, you can always save your text in ASCII format, ie without special attributes like underlining.

PICTURE THIS

In the picture format section, choose the file type you're most likely to use. Remember - and this goes for all of these default settings - none of these decisions is irrevocable: you can make new choices while working on a document.

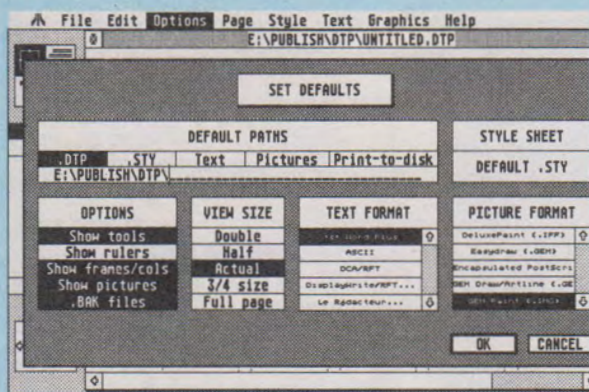
As for the STYLE SHEET option, keep it as DEFAULT.STY for now. Now click on OK or press Return. These default settings will be put into effect automatically every time you use **Timeworks**.

The next timesaving device to consider is the style sheet. A style sheet is a template which you can use to determine the layout of a number of documents. It contains information about the type of printer paper you're using, the size of the printed page (not to be confused with the view size mentioned earlier) and the Master Page.

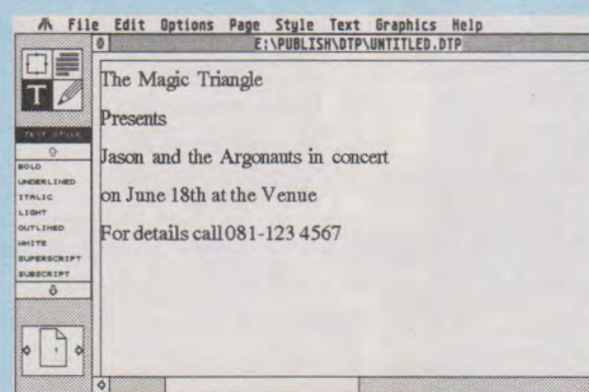
For example, if you are going to produce leaflets that are always A5 in size, you can set up a style sheet called LEAFLET.STY and use this whenever you want to produce another leaflet. In fact, there's nothing to stop you having different style sheets for different types of document. The important thing to remember is that you need to set up each one just once. The box shows you how to set up the style sheet one step at a time. When you've done that, you can back to the Default settings and change the default style sheet to the one you've just created.

DEFAULT SETTINGS

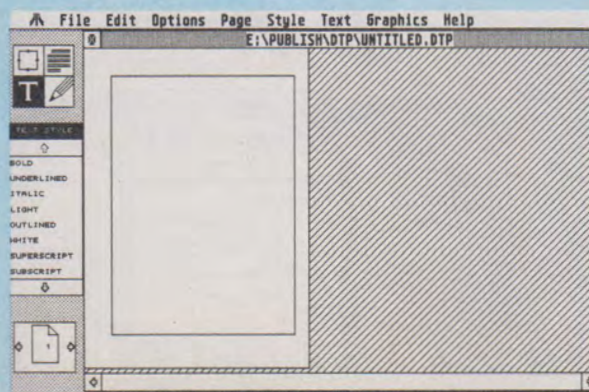
Point to the Options menu, click on "Set defaults", and you obtain the dialogue box. First, click on "DTP" in the section called DEFAULT PATHS. (All documents that are desktop published in **Timeworks** are saved with the letters DTP at the end). Then type out the location of your desktop pub-



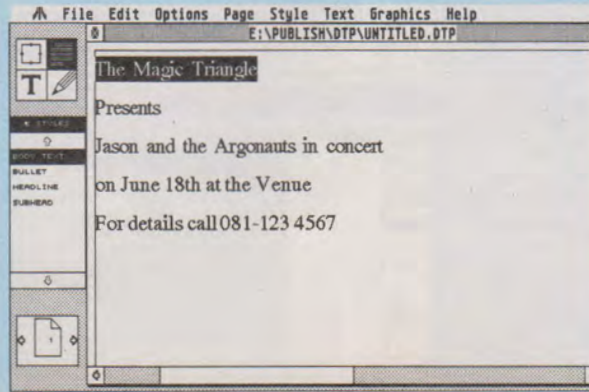
The range of default options is impressive, and a vast improvement over version 1.



Typing directly into Timeworks is fine for a couple of sentences, but not really for longer amounts of text.



You've drawn the frame, so how about putting something in it?



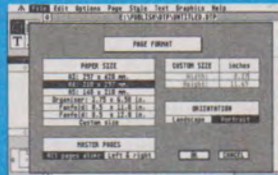
The paragraph style of the selected text is shown on the left-hand side.

WITH TIMEWORKS 2

STEP BY STEP

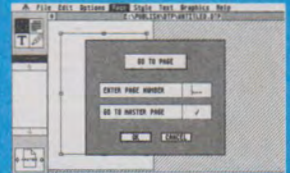
Before you can make a start on serious DTP you'll need to set up a style for your pages. Here's how to do it...

- 1 Point to the File menu and click on New. When you're asked if you wish to load a style sheet, click on NO.
- 2 The PAGE FORMAT dialogue box appears. Click on the paper size you're going to be using most of the time, or configure your own "Custom" size if you're using an unusual format: the limit is 22.5 x 22.5 inches.
- 3 Next, select the right type of Master Page. The Master Page determines how each page of the document will look - for example, how many columns there are and the positions of headers and footers. If you want to print on both sides of the paper, choose "Left and Right". For now, choose "All Pages Alike".
- 4 The last option in this dialogue box is the Orientation. "Portrait", the most common, is where the short sides of the paper are on the top and bottom. "Landscape" is where

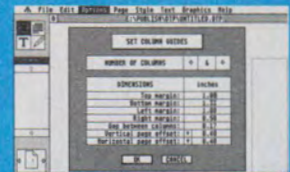


the paper is turned on its side. Choose Portrait for now, and then click on OK.

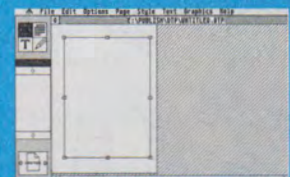
- 5 Now point to the Page menu and click on Go To Page, and select Master Page. Now any frames you draw will appear on every page.



- 6 Select "Set column guides..." from the Options menu, and then click on the left-pointing arrow in order to reduce the number of columns to 1. Click on OK.



- 7 Now draw a frame over the whole page: simply click in the top left hand corner of the frame guide, hold the mouse button down, and drag the mouse to the bottom right-hand corner. Then release the mouse button.



- 8 Now point to the File menu and click on Save style sheet, and save it as MYSTYLE.STY.

Now that you've done all this setting up, how about having something to show for your efforts? Start a new document, telling the program to load the style sheet called MYSTYLE.STY - you'll be prompted for this information. Click inside the frame on page one in order to select it (you'll know you've done so because frame handles will appear).

At the moment, you're still in the frame mode, as you can tell from the Tool box, so click on the "T" to get into the text mode. The mouse pointer turns into an "I-beam" - so

called for obvious reasons. Now click inside the the frame and type the following text (CR indicates that you must press Return):

The Magic Triangle {CR}
Presents {CR}
Jason and the Argonauts in concert {CR}
on June 18th at the Venue {CR}
{CR}
For details call 081-123 4567

If you can't see what you're doing, try changing the view size from within the Page menu. Now switch to paragraph

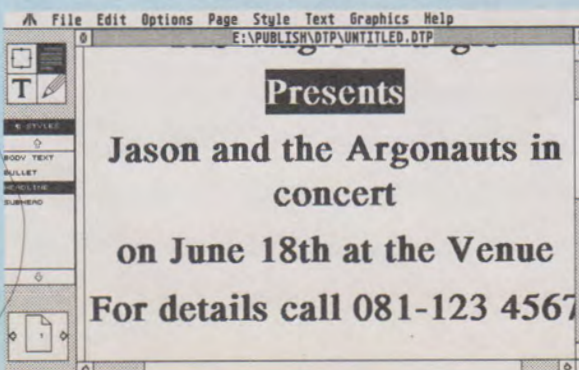
mode by clicking on the top right-hand icon in the tool box. As you'll see if you click on a paragraph in the text, the style of your text is called Body Text.

With the text highlighted, click on Headline in the panel on the left. If you don't like it, try one of the other paragraph styles. You can also change the appearance of text by highlighting it (in either text or paragraph mode) and then selecting one of the options from the Style menu.

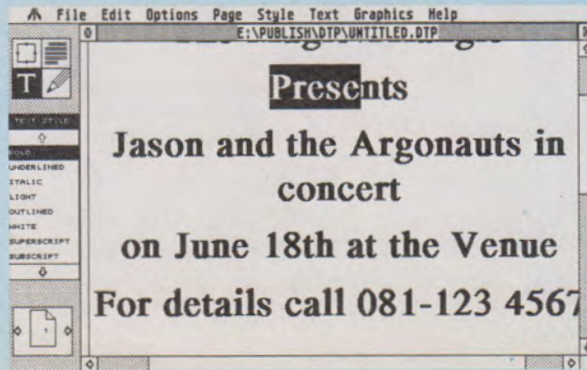
Now save the poster from within the File menu, and then print it out by pressing Alt P

and then Return. If the print-out isn't aligned on the paper properly, select the column guides option again from the Options menu and adjust the page offsets (+ moves the page upwards or to the left, and - does the opposite). You may have to do this a few times before you get it right, but when you do, save the information in the style sheet itself by saving the style sheet again.

● Next month we will be taking a look at how to get some excellent effects with graphics.



Changing the appearance of the paragraph is a mouse click away...



...or change just a part of it from within text mode.

PD

AUTHORS SOUGHT

Write a program for our coverdisks and you could earn up to £500

If you've written any neat programs, fun games, incredible utilities, or anything that you think other people might want to see, why not turn your hard work into hard cash?

Unlike mags that offer to pay you £1000, we won't promise you the earth, but if we use your programs you may get paid a small fee, and if your work is exceptional you could earn up to £500.

We are interested in seeing anything you've written, so come on, don't hold back. You may not rate your small routine that works out every prime number between one and five, but it could be just what somebody else needs.

We're also interested in seeing any outstanding PD that hasn't already been doing the rounds for years.

Please put your programs etc, onto a standard ST disk. Full documentation should also be included on the disk.

PLEASE NOTE THAT ALL READ-ME FILES MUST BE IN ASCII.

ST REVIEW PROGRAM SUBMISSION FORM

NAME.....

ADDRESS.....

PHONE.....

PROGRAM SIZE IN K.....

VERSION OF TOS YOU ARE RUNNING.....

PROGRAM NAME.....

ADDITIONAL FILES REQUIRED BY MAIN PROGRAM.....

BRIEF SUMMARY OF WHAT MAIN PROGRAM DOES.....

TYPE OF PROGRAM:

GRAPHICS/MUSIC PACKAGE

GAME

DEMO

PROGRAMMER'S TOOL

PROGRAMMER'S ROUTINE

FUN

OTHER (PLEASE SPECIFY).....

PLEASE ENSURE THAT YOUR DISKS ARE VIRUS FREE AND THAT YOUR NAME, ADDRESS, AND PROGRAM NAME ARE WRITTEN ON THE DISK.

IMPORTANT

You MUST sign this declaration before your programs will be considered: "The above named program(s) are submitted for exclusive publication in ATARI ST REVIEW magazine. It/they are wholly my own work and I agree to indemnify EMAP Images against any possible legal action should copyright problems arise.

SIGNED.....

DATE.....



LOGGING ON TO COMMS

In the last issue we looked at what comms means and how to set up your system to communicate with the outside world. This month we look at three new boards

Now that you have your modem connected and the software is loaded, you are ready to log on to a bulletin board. Recommended software comes from the best Public Domain Libraries: the quality of these is so high that it's not worth buying commercial software. **FZT**, or the **Freeze Dried Terminal**, is a very good package which will enable you to set up a directory to dial a board and send your ID and password at the press of a button. Very easy to use, this is available from any ST bulletin board or most major PD Libraries. Now we'll take a look at some of the latest boards to go on-line.

WOMBATS BURROW II 0634 377303 • 10pm-8am • SPEED: 2400BPS • GILLINGHAM, KENT

IN BRIEF: This is a relatively new board that is running part-time only seven days a week. This board is running on a PC and the software for download is PC-only. Message bases are lively and active, as Wombats Burrow II is networked through the Fido Network. One of the bases on this board is for ST Review, where messages can be left for the Editor.

ST REVIEW COMMENT: "The layout of the board is pretty basic yet accessible — could

do with a few improvements and the addition of a game." ***

THE NEW AGE BB 0702 715025 • 24 hours • SPEED: 2400BPS • SOUTHEND ON SEA •

IN BRIEF: Home of the new Age PD Library, this board runs on a PC, but is very much ST-oriented. The log on sequence for new users is very simple and straightforward, and doesn't take too long. As with all boards, it is to your own advantage to answer all the questions truthfully. This way the Sysop (systems operator) can upgrade your access level in a very short space of time (normally within 24 hours).

The first menu presented is the main one, where all the options available are displayed. Bulletins contain all the latest news and notices, and there is a separate section for computer news and weekly reviews. News is covered by Henry Doyle, the Sysop, while reviews are by Caroline Price, the Proprietor of New Age PD, with contributions by users of the board.

Messages cover a wide variety of topics, and many are networked via Fido Net, so they can have a distinctly international flavour. The board has three areas for the Atari: Programming, Demos and ST General. All of these

carry a wide variety of "chains" (messages linked by subject), so it might take a long time to read them all. There is also an area specifically for New Age PDL, where questions about or feedback on the software can be left after viewing the online catalogue. Buy and Sell is another popular area, where items that you wish to convert to cash can be advertised, or you can pick up a bargain or two.

If messaging becomes boring you can, at the press of a key, play an online game. In this case it is **Tradewars**, in which you pilot an intergalactic trading ship whilst fighting off bandits and pirates. It takes a while to get into, but documentation is available for downloading. Once involved, your phone bill will rocket.

ST REVIEW COMMENT: "All in all, this is a very well-thought out board. It's user-friendly and well worth looking into, although the messages area does leave a lot to be desired."

HOTEL BBS 0634 831389 • 24 HOURS MON-SAT • MAX SPEED: 9600 HST • ROCHESTER, KENT •

IN BRIEF: Briefly mentioned last issue, the Hotel BBS is one

of the better-known Kent boards, and not without good reason.

This is a very good system with a large variety of message areas catering to all tastes and computers. Networked with Fido, Nest, Mystic net and the newly-forming Mag-net, you will find messages from all over the world discussing almost every topic you can imagine.

Some of the areas are restricted, and therefore use of them involves a registration form being completed to gain access to these, but otherwise the board is open to all.

The online game on this board is **Space Empire Elite**, which has a worldwide network of players and there is even a message area provided for players to discuss the game.

ST REVIEW COMMENT: "The presentation is very well done. Running ///Turbo on an ST, this board is a highly professional service provided for the user by Kit Watson. Hotel BBS is the originator of the ST Review area, where messages can be left for the magazine".

● When logging on to a board advertised or mentioned in ST Review, please leave the sysop a message telling him that you spotted it here:

RECOMMENDED BOARDS

All the following boards have networking facilities, so everything you leave on them will also appear on all the other boards in this list

| NUMBER | NAME | LOCATION | SYSOP | MAX SPEED |
|--------------|-----------------|------------------|-----------------|-------------------------|
| 0236 747393 | Dregal BBS | Aldrie | Mark Anderson | 9600 (HST/V32/V42/V42B) |
| 0252 341751 | Super Shot | Aldershot | Graham Lawrence | 2400 |
| 061 928 8801 | 2001 | Altrincham | Chris Gottlieb | 9600 (HST) |
| 0494 728094 | Storehouse Bits | Amersham; Bucks | Iain Phillips | 2400 |
| 0296 398166 | The Gourmet | Aylesbury, Bucks | David Barnes | 9600 (HST/V32/V42/V42B) |

| NUMBER | NAME | LOCATION | SYSOP | MAX SPEED |
|--------------|-------------------------|-------------------|-------------------|------------------------------|
| 0296 770454 | Roy's Realm | Aylesbury, Bucks | Roger Hutchings | 9600 (HST) |
| 0324 840868 | The SMC Opus | Banknock | Rashad Aslam | 9600 (HST) |
| 0282 817379 | Random Access | Barnoldswick | Keith Whiteley | 9600 (HST) |
| 041 880 7845 | Scottish Opus | Barrhead | Donald Whannell | 9600 (HST) |
| 0256 768331 | BAS Opus | Basingstoke | Graham Butler | 9600 (V32/V42/V42B) |
| 0424 83654 | Shareware Librar | Battle | Vince Apps | 9600 (HST) |
| 0232 768163 | Yukon Hol | Belfast | Mark Kerr | 9600 (HST/V32/V32B/V42/V42B) |
| 0482 870919 | Fido At Odyssey | Beverley | James Willmott | 2400 |
| 021 430 3764 | The Magic Castle | Birmingham | Mick Coleman | 2400 |
| 021 441 1801 | Barney's Rubble | Birmingham | Jon Morby | 2400 |
| 021 552 9839 | The Cult | Birmingham | Jason Reeves | 2400 |
| 021 788 1751 | Faint Breeze | Birmingham | Norman Molineux | 2400 |
| 0253 57941 | Blackpool opus | Blackpool | Ian Ingleby | 2400 |
| 0258 455117 | Blandford BBS | Blandford | Bob Weeks | 2400 |
| 0204 596245 | Time Tunnel | Bolton | Dave Roodcroft | 9600 (HST/ V32) |
| 0202 5327801 | The Co-Ops | Bournemouth | John Mileham | 2400 |
| 0274 481363 | Strange Daze | Bradford | John Poltorak | 9600 (HST) |
| 0274 547006 | Magnum BBS | Bradford | Keyop Troy | 2400 |
| 0273 571457 | Cslbb | Brighton | Mark Eaton | 2400 |
| 0273 600996 | On the Beach | Brighton | Marc Bowden | 9600 (HST) |
| 0272 572322 | Noah's BBS | Bristol | Bob Voisey | 2400 |
| 081 678 6087 | Rock Of Gibraltar | Brixton | Paul Bonifacio | 9600 (HST/V32/V42/V42B) |
| 0444 870559 | Accent | Burgess Hill | Nigel Hewitt | 2400 |
| 0282 23960 | The Saturn BB | Burnley, Lancs | Thom White | 2400 |
| 0249 817704 | The Phoenix | Calne | Ade Truelove | 9600 (HST) |
| 0222 66907 | Public House BB | Cardiff | Stephen Ogbourne | 9600 (HST) |
| 0228 26478 | Scorpions Nest | Carlisle | Bill Searle | 9600 (HST) |
| 091 388 3078 | Jackies Place | Chester Le Street | Jackie Sturees | 9600 (HST) |
| 0246 236510 | Artadia | Chesterfield | Phil Clifford | 2400 |
| 0342 717800 | Airtel Remote | E. Sussex | Adrian Pop | 9600 (HST/V32/V42) |
| 0536 400195 | Corby Town BBS | Corby | Felix Harrigan | 9600 (HST/V32) |
| 0892 667091 | PDSL | Crowborough | Neil Blaber | 9600 (HST/V32) |
| 08656 5190 | DTP User | Croydon | Steve Dick | 9600 (HST/V32) |
| 0846 693067 | Quasser | Dromore | Dave Bryne | 9600 |
| 0 711047 | Trinity College | Dublin | David Doyle | 9600 (HST) |
| 021 717 0455 | Apricot Tech Sup | Edgbaston | John Krzesinski | 9600 (HST) |
| 021 717 0454 | Apricot Tech Sup | Edgbaston | John Krzesinski | 9600 (HST/V32/V42) |
| 021 717 0453 | Apricot Tech Sup | Edgbaston | John Krzesinski | 9600 |
| 0392 412370 | The Lost Arc | Exeter | Helen Rogers | 2400 |
| 0392 45 384 | Night Hawk | Fareham | Robert Leach | 2400 |
| 0367 242674 | Trinity 2 | Faringdon | Andrew Bessant | 2400 |
| 0795 530961 | Chancellors Den | Faversham, Kent | Denis Benett | 9600 (HST/V32/V32B/V42/V42B) |
| 0795 538357 | Dataserve Sys BBS | Faversham, Kent | Graham Jenkins | 2400 |
| 0795 538359 | Chancellors Den | Faversham, Kent | Denis Benett | 9600 (HST/V32) |
| 0202 873911 | The Abbey | Ferndown | Chris Durham | 9600 (HST/V32/V32b/V42/V42B) |
| 0252 626233 | BOOB BB | Fleet, Hampshire | Jeremy Browne | 9600 (HST/V32) |
| 0452 330238 | Atlantis1 | Gloucester | Alan Walker | 9600 |
| 0452 330244 | Atlantis2 | Gloucester | Alan Walker | 9600 (HST) |
| 0274 851027 | More Sum Wine | Gomersal | Nigel Beaumont | 9600 (V32) |
| 0343 830315 | Moray BBS | Gordonstoun | Mark Parlour | 2400 |
| 0323 844455 | Excalibur's Edge | Hailsham | Mike Atkinson | 2400 |
| 0422 381154 | Style QBBS | Halifax | John Carolin | 9600 (V32) |
| 0706 832437 | P & P Distribution | Haslingdon | Stephen Mitchener | 2400 |
| 0273 846504 | Diamond Opus | Hassocks | Paul Hughes | 9600 (HDST) |
| 0424 433816 | North Of Archemez | Hastings | Steve Anderson | 2400 |
| 0424 853361 | Piston Popper's UK | Hastings | Peter Burnett | 9600 (HST/V32/V42/V42B) |
| 0707 263695 | Torture Chamber | Hatfield | Steven Gee | 2400 |
| 0865 64958 | DDLG ACE Centre | Headington | David Colven | 2400 |
| 0434 606639 | Log On In Tynedale | Hexham | John Rawson | 9600 (HST) |
| 0434 608324 | The Dog House | Hexham | Ian Dodd | 9600 (HST/V32) |
| 0628 810889 | Mirror Info. Ex. | High Wycombe | Lee Evans | 2400 |
| 0484 653234 | Summer Wine | Huddersfield | Chris Townsend | 9600 (HST) |
| 0480 406261 | Byte Brothers | Huntingdon | Ritchie Dakin | 2400 |
| 0473 232540 | MiracomTechSup | Ipswich | Paul Garrett | 9600 (HST/V32/V42) |
| 0536 414151 | The Pegesus Connection | Kettering | Gary Marden | 2400 |
| 0536 725180 | Publisher's Paradise | Kettering | John Wilson | 9600 (HST) |
| 0553 761290 | West Norfolk (10pm-7am) | Kings Lynn | Chris O'Shea | 2400 |
| 0482 805225 | Forum 88 | Kingston | Frederick Brown | 2400 |
| 0524 752245 | The End Zone | Lancaster | Adam Purnell | 9600 (HST/V32) |
| 0732 845338 | Pacific Lightning | Larksfield, Kent | Colin Spice | 9600 (HST/V42/V42B) |
| 051 236 3105 | Ps&Qs Tel | Liverpool | Alan Smith | 2400 |
| 051 270 1635 | Kelsha BBS | Liverpool | Ken Dalton | 2400 |
| 051 428 8924 | Liverpool Int. Mailbox | Liverpool | Peter Tootill | 9600 (V32) |
| 051 734 5817 | Graykarn Tech Support | Liverpool | Bill Phillip | 9600 (V32) |
| 051 931 4271 | Grin! | Liverpool | Ben Goodwin | 9600 (V32/V42/V42B) |
| 0924 411109 | The Wine Rack | Liverseage | Ron Brookes | 9600 (HST/V32) |
| 071 409 7597 | Conner BBS | London | Eddie Seymour | 9600 (HST/V32) |
| 071 537 9854 | The Docklands Project | London | John Clift | 2400 |
| 071 580 1690 | Polynet SNC | London | Eileen McCabe | 9600 (HST) |
| 071 608 1899 | GnFido | London | Mike Jenson | 9600 (V32) |
| 071 824 8863 | Wino's Bar Line 1 | London | Andrew Brown | 9600 |
| 071 730 5145 | Wino's Bar line 2 | London | Andrew Brown | 2400 |
| 071 962 1238 | The Hoovers Retreat | London | Frank Toohey | 2400 |

| NUMBER | NAME | LOCATION | SYSOP | MAX SPEED |
|---------------|----------------------------|---------------------|------------------------|------------------------------|
| 071 976 6807 | Nite Life | London | Neil Jelley | 2400 |
| 081 207 2989 | Dark Crystal | London | Phil Day | 9600 (HST) |
| 081 395 8372 | The Domain BBS | London | David Boardman | 9600 (HST) |
| 081 566 5393 | Paradigmus Maximus | London | John Taylor | 9600 (HST) |
| 081 748 0974 | London Guest House BBS | London | Richard Pike | 2400 |
| 081 905 5176 | Poptel | London | Josh Greifer | 9600 (V42B) |
| 081 984 1522 | the Stateside Link BBS | London | Brian Willis | 9600 (V32/V42) |
| 0502 518274 | Disabled Data Link BBS | Lowestoft | Cliff Jones | 2400 |
| 0829 782676 | The Power House | Malpas | Edward Hobson | 9600 (HST/V42/V42B) |
| 0204 364319 | Post Box | Manchester | Graham Stephens | 9600 (V32) |
| 061 434 9907 | D.I.E. | Manchester | Si Thornton | 9600 (HST/V32) |
| 061 707 20-08 | Dead On Arrival | Manchester | Christopher Seeley | 2400 |
| 061 748 3855 | The Sphinx | Manchester | Lorna Price | 2400 |
| 061 792 0260 | Aspects | Manchester | Dave Gorski | 2400 |
| 061 832 1961 | The Co-Op Manchester | Manchester | Frank Dent | 2400 |
| 0858 466594 | Aureal | Mkt. Harborough | Eddy Ralphson | 9600 (HST/V42) |
| 0642 232142 | Middlesborough Social Ser. | Middlesborough | Tom Lamb | 2400 |
| 0895 272021 | Software Madness BBS | Middlesex | Gary Weston | 2400 |
| 0594 544865 | Scottish Wildcat | Montrose | James O'Hara | 9600 (HST) |
| 0509 620442 | Pagemaker User | Mountsorrel | Gill Foster | 9600 (HST) |
| 0282 698380 | Look Northwest | Nelson, Lancs | Neil Metcalfe | 2400 |
| 0635 248622 | Terminator BBS | Newbury | Neil Boffin | 9600 (V32) |
| 063571324 | Eddies BBS | Newbury | Eddie Seymour | 2400 |
| 0953 851351 | Track 83 Atari St | Norwich | Les Partner | 9600 (HST) |
| 0602 476175 | Nottingham University | Nottingham | Ian Sherman | 2400 |
| 061 627 0630 | Oldham Access Centre | Oldham | Wayne Winterbottom | 2400 |
| 0689 827085 | Fox's Den BBS | Orpington | Barry Freeman | 2400 |
| 0865 53999 | Daily Information | Oxford | Simon Barber | 9600 (V32/V42/V42B) |
| 0865796430 | RM Support BBS | Oxford | David Taylor | 2400 |
| 0865 882872 | M-G-M | Oxford | Nik Garfield-Middleton | 9600 (HST) |
| 091 518 1058 | The Castle Eden BBS | Peterlee | Andrew Lackenby | 9600 (HST) |
| 0202 600305 | Fourth Dimension | Poole | Wayne Weedon | 2400 |
| 0705 754851 | The Co-Op Board | Portsea | Geoff Wade | 2400 |
| 0705 871434 | Community Centre | Portsmouth | George Cordner | 1200 |
| 0745 855959 | Coastline BBS | Prestatyn | John Timmis | 9600 (HST) |
| 0772 828975 | Grizzly The Third | Preston | Colin Adams | 9600 (HST) |
| 0296 668148 | Komputer Knowledge1 | Prince's Risborough | Andrew Eaves | 9600 (HST/V32) |
| 0296 668141 | Komputer Knowledge2 | Prince's Risborough | Andrew Eaves | 2400 |
| 0737 766027 | Infotel | Redhill | Bob Garbutt | 2400 |
| 081 7830207 | Oldfield House School | Richmond | Mike Burleigh | 2400 |
| 0706 358331 | The Gas Lamp | Rochdale | Ian Strachan | 9600 (HST/V32) |
| 0632 883696 | Tequila Sunrise | Rochester | Paul Boakes | 9600 (HST/V32) |
| 0634 831389 | The Hotel BBS | Rochester | Kit Watson | 9600 (HST/V32/V32B/V42/V42B) |
| 0722 414605 | TABS Opus | Salisbury | Jon Stephenson | 9600 (HST/V32) |
| 0742 729621 | Disu PC | Sheffield | Phil Green | 2400 |
| 0795 425341 | Sittingbourne Co-Op | Sittingbourne | Phillip Clements | 2400 |
| 0753 513435 | R U Connected BBS | Slough | Chris Norris | 2400 |
| 021 705 2906 | Academic's | Solihull | John Kelly | 9600 (HST) |
| 08892 516304 | Demo Factory | Southborough | Ian Mugridge | 9600 (HST/V32) |
| 0702 78330 | Adullams Cave | Southend On Sea | Tim Coles | 9600 (HST/V32) |
| 0259 89803 | Telefantasy | Stirling | Gutherie Wernham | 9600 |
| 061 429 9803 | Stun NeST Central | Stockport | Daron Brewood | 9600 (HST/V32/V42/V42B) |
| 061 442 6758 | Seven Seas Maximus | Stockport | Vince Flecter | 2400 |
| 0642 360301 | Tees For Two | Stockton On Tees | Gordon Smith | 2400 |
| 0384 441929 | Crystal Junction | Stourbridge | Bert Ilesley | 9600 (HST) |
| 091 549 2249 | Log On The Water | Sunderland | Alan Myres | 2400 |
| 021 323 2617 | The Red Dwarf | Sutton Coldfield | Steve Pitt | 2400 |
| 081 643 1015 | Number 42 | Sutton, Surrey | Dave Arkley | 2400 |
| 0793 430029 | State Of Shock | Swindon | Phillip Timm | 2400 |
| 0793 480287 | Spark! | Swindon | Steve Bernhardt | 9600 (HST/V32) |
| 0793 724195 | Boar's Nest | Swindon | Terry McBride | 9600 (HST/V32) |
| 0952 641724 | Silver Link | Telford | Phil Gadsby | 9600 (HST/V32/V42/V42B) |
| 0666 504597 | The Alchemist | Tetbury | Bob Henson | 9600 (HST) |
| 081 312 2123 | 3 Below Forum | Thamesmead | Dave Powell | 9600 (HST/V32/V42/V42B) |
| 0734 320812 | Golly! | Twyford, Berks | Terry Robertson | 9600 (HST/V32/V42/V42B) |
| 091 228 0427 | The Olive Grove | Tyneside | Peter Scargill | 9600 (HST) |
| 091 261 5228 | The Publishing Shop | Tyneside | Roger Booth | 2400 |
| 0634 200707 | Fuzzy Logic | Walderslade, Kent | Phil Piddell | 9600 (HST) |
| 051 638 0639 | Bob's Baud | Wallasey | Bob Fraser | 2400 |
| 0932 231347 | Valhalla | Walton On Thames | Ivar Peterson | 2400 |
| 0926 403904 | The Music Studio | Warwick | Paul Urmston | 9600 (HST/V32/V42/V42B) |
| 0705 264180 | Paragon Support | Waterlooville | Andy Smith | 9600 (HST/V32) |
| 081 428 9476 | Catweazle BBS | Watford | Trevor Riley | 9600 (HST/V32) |
| 0749 670030 | World Of Cryton | Wells | Hugo Fiennes | 9600 (HST/V32/V42/V42B) |
| 0732 870941 | Chatterbox BBS | West Malling, Kent | Mick Spice | 9600 (HST/V42/V42B) |
| 0206 385358 | The Sages Cave | West Mersea, Essex | Peter Jezard | 2400 |
| 0501 44262 | Chilba City | Whitburn | David McIntosh | 9600 (HST) |
| 0980 863031 | The Manor QBBS | Wintersow | Peter Jowett | 2400 |
| 0734 891355 | PMI Data Plastics | Wokingham | John Shepherd | 2400 |
| 0793 849044 | My Little Phoney | Wooton Bassett | Steven Green | 9600 (HST) |
| 0905 613968 | The Smallest BBS | Worcester | Jim Richardson | 2400 (V42B) |
| 0904 679758 | York's Best Price | York | Simon Williams | 2400 |

NEED SAMPLES ?....

Try our Sample Library

- Get Professional 8-bit Samples for the price of PD
- Compatible with Quartet, Replay, Replay Pro, Stereo Replay, Sequencer One Plus, TCB Tracker
- 100's of sounds to choose from : Drum Kits, Instruments, Percussion, Sound Effects, Vocals
- Expanding Sample Library
- Still only £3.50 per disk

SEND £1.50 FOR CATALOGUE

+ SAMPLER DISK

PLEASE SPECIFY SOFTWARE USED

CUBASE A PROBLEM ?....

You need MIDI guru Geoffrey Ryle's

OFFICIAL CUBASE HANDBOOK

- Helpful hints, tips and secrets
- Tutorials and step-by-step instructions
- Written in the USA

ONLY £19.95 + £2.50 p&p
by Cheque or Postal Order

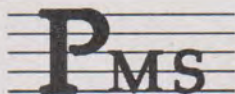
PREMIER MUSIC SERVICES LTD. Dept:STREV

18 Foyle Road, Chandlers Ford,

Eastleigh, Hants.

SO5 3QP.

Tel: 0703 260485.



DIAL - A - TIP

Cheats, Tips, and Game Solutions

CHEATS GALORE

0891 101 234

MEGATIP GAMESLINE

0891 445 987

ST GAMESTIPS

0891 445 787

SHADOW OF THE BEAST I AND II

BARBARIAN II SOLUTION

0891 442 022

FIRST SAMURAI HELPLINE

0891 445 926

MAGIC POCKETS/RODLAND SOLUTION

0891 445 928

COMPUTER FUNLINE

0891 445 799

FOR INFORMATION ON ALL OUR

HELPLINES

0891 445 904

ALL LINES UPDATED WEEKLY

PROPRIETOR:- Jacqueline Wright, P.O. Box 54, Southwest, Manchester M15 4LS
Calls cost 36p per min at 'cheap rate' and 48p per min at other times

LONDON ATARI REPAIR CENTRE

REPAIRS, SPARES, SWITCH BOXES AND LEADS

Atari 520/1040 STE/STE - £49.95 • Free estimates
Disc Drive replacement - £69.95 • 3 Month's Warranty
• Fast turnaround

Switchboxes

| | |
|--|--------|
| Mouse/Joystick switchbox - Manual..... | £13.95 |
| Mouse/Joystick switchbox - Auto..... | £18.95 |
| Parallel Port switchbox..... | £18.95 |
| 2 computers to VGA Monitor..... | £24.95 |
| 2 computers to IBM standard TTL..... | £24.95 |
| Dual ST Monitor switch..... | £16.95 |
| Dual Floppy drive switchbox..... | £24.95 |
| Serial Port splitter (2 way)..... | £18.95 |
| Scart Switchbox (2 way)..... | £39.95 |
| Stereo Headphone Adaptor (2 players)..... | £14.95 |
| AB Dataswitch (2 way) serial/parallel..... | £14.95 |
| ABCD Dataswitch (4 way) Ser/Par..... | £19.95 |
| X Dataswitch serial/parallel..... | £26.95 |
| Switchboxes made to order..... | Call |

Consumables

| | |
|---------------------------------------|-------------|
| Diskettes 5 1/4" or 3 1/2" HD-DD..... | from £14.99 |
| Printer Ribbons..... | from £4.40 |
| Disk Boxes..... | from £7.99 |
| Mouse Mats..... | from £4.99 |
| Dust Covers..... | £5.50 |
| 3 1/2" Cleaning Kit..... | £6.50 |
| Mouse Holder..... | £5.99 |
| Lifting Paper..... | Call |
| Labels..... | Call |

Atari Extras

| | |
|-------------------------------|--------|
| 3.5" Internal Disk Drive..... | £69.95 |
| Replacement keyboard..... | £69.00 |
| Internal Power Supply..... | £53.00 |
| Mouse..... | £15.00 |
| Spare Parts..... | Call |

Engineering Services

- Wiring
- Soldering
- Special cables to order

IF YOU DON'T SEE WHAT YOU WANT JUST CALL!

Opening hours: Mon - Fri 9.30am - 7.00pm. Sat 10.30am - 3 pm
All prices include VAT. Please add £1.50 postage for small items,
£3.50 for large items. Phone David to check stock availability.

COMPULINK
071-790-2424



Wickham Business Centre, 10 Cleveland Way, London E1 4TR E&OE

Leads-Monitor

| | |
|---------------------------------------|--------|
| Atari - TV/Monitor with Scart..... | £12.95 |
| Atari - NEC Multisync 2A/3D..... | £12.95 |
| Atari - NEC Multisync RGB..... | £10.95 |
| Atari - Composite video monitor..... | £12.95 |
| Atari - Commodore 1084S..... | £12.95 |
| Atari - Commodore C1084SPI..... | £12.95 |
| Atari - Commodore C1084SD..... | £12.95 |
| Atari - Philips 8533 RGB Monitor..... | £12.95 |
| Atari - Philips 8833..... | £12.95 |
| Atari - Philips 8873..... | £12.95 |

Leads-General

| | |
|--|--------|
| Mouse/Joystick twin extension..... | £5.95 |
| Joystick extension lead (1.2m)..... | £5.00 |
| ST Hi-Fi Lead..... | £12.95 |
| 4 Player Adaptor (25cm)..... | £6.95 |
| Hi-fi connection lead STE (1.2m)..... | £2.95 |
| Audio Port splitter STE (2 way)..... | £3.95 |
| Null Modem Cable (2m)..... | £8.95 |
| Replacement Mouse cable (1.5m)..... | £5.95 |
| Midi interface cable (3m)..... | £2.99 |
| Hard Disk extension cable (1m)..... | £14.95 |
| Floppy Drive cable (2m)..... | £14.95 |
| Floppy Drive extension cable (2m)..... | £14.95 |
| Printer lead - Parallel (2m)..... | £5.95 |
| Printer lead - Serial (2m)..... | £7.95 |

Upgrades

| | |
|----------------------------|---------|
| 520STFM to 1MB..... | £55.00 |
| 520/1040STFM to 2.5MB..... | £99.99 |
| 520/1040STFM to 4MB..... | £169.99 |
| 520STE to 1MB..... | £29.99 |
| 520/1040STE to 2MB..... | £79.99 |
| 520/1040STE to 4MB..... | £159.99 |



IF AN
ADVERT IS WRONG,
WHO PUTS IT RIGHT?

We do The Advertising Standards Authority ensures
advertisements meet with the strict Code of Advertising Practice.

So if you question an advertiser, they have to
answer to us.

To find out more about the ASA, please write to
Advertising Standards Authority,
Department X, Brook House,
Torrington Place, London WC1E 7HN.



ASA

This space is donated in the interests of high standards in advertisements.

ASK THE EXPERTS

VIC LENNARD Music, MIDI and sound recording.

Our very own technical editor can actually handle most enquiries that you have but as President of the UK MIDI Association, there's no-one more tuned into the ST music scene than him. A wiz with a mixing desk too, he can help with all your musical enquiries from playing music to recording

ANDREW WRIGHT Non-programming and all your more general problems.

Erstwhile Technical Editor of Atari ST User, Andrew was an obvious choice for our panel of experts. One of the best known all-round technical experts in the ST World (eh?) he can answer all the quirkiest questions that you have.

JOHN MALLINSON Word Processors, DTP and Printers

If reincarnation is true, then John will no doubt return to this earth in the guise of a laser printer. If you have any problems with your Word Processing, DTP or printing, be it dot matrix, bubblejet, or better, then John will be the answer to your problem.

GARTH SUMPTER Games and consumer watch- dog...

Yes our very own editor will be looking at your consumer problems. Want to know where to get that game or program? Garth will know or can find out. As the consumer watchdog, he can also tell you where to get the product that you want or what to do if you're not satisfied once you've got it.

TONY DILLON STOS /Graphics

The writer of the STOS tutorial, Tony has already imparted some little gems of information but is still on call to answer all your STOS programming questions and graphics questions.

There comes a time in every ST owner's life when a problem just seems insurmountable. They look from their keyboard to the heavens and hope for a divine intervention and find... that God refuses to exist in binary and they need some solid, practical help. Enter ST Review's panel of experts who will endeavour to answer every question.. Why won't your printer work? How do you convert PI? to GIF? Why does your modem refuse to work? ST Review knows the answer...

COMMS HELPLINE

The principle sounds straightforward but the practice can be a little more tricky. Help is at hand, however. . . .



COMMUNICATION BREAKDOWN

I've owned an ST for some time but I've only just got into COMMS. The problem is that all the files that are available for downloading end with '.LZH', '.ZIP' or '.ARC' and won't run once I've downloaded them. How do I actually use them?

LZH, ZIP and ARC are files that have been compressed, to minimise storage space, and cut down on downloading times. To use these files you must de-compress them with the correct program. For '.LZH' files, you need a program called LHARC.TTP. For '.ARC', and '.ZIP' files, you need ARC.TTP, and the STZIP.PRG.

To make these compressed files usable, you must double click on the '.TTP' program, then type in the following command line: `-x [filename].LZH` and the program will extract all the files you want. This is analogous to ARC.TTP. ST Zip has a graphical interface, so you don't have to type in a command line.

Simon Paris, Caster, Cambridgeshire

WHEN YOUR CREDIT RUNS OUT.

How do I increase my 'credits' on

a BBS? I've downloaded a few files, and now the board won't let me.

Phil Brice, Kingswood, Bristol.

Simple, you just need to either enter a few messages, this will increase your access, or upload a file.

UPLOAD

How do I compress files so I can make upload?

K Vale, Bath.

Put everything you want to send in a folder with Lharc in the same directory as this folder. Then double click on Lharc.TTP and enter this command line: `-a /r filename.LZH folder-name*. *'` where you name the 'filename.LZH' and 'folder-name' parts of it. Lharc will compress everything into one file. Alternatively, for simplicity, use arcshell.

THE X, Y AND Z OF MODEMS.

I have a COMMS program but am not sure which of the offered programs I should use for data transfer. Should I use X, Y or Z modem?

Use Z modem if your COMMS program supports this, if it doesn't, then get one that does. I would recommend Freeze Dried Terminal as it's freely available. Z modem is very fast and has error recovery, whereas X and Y modem are slow, and outdated.

FAST TALKING SALESMAN

When I purchased my 2400 bps modem, the salesman said it could go faster. I have never been able to get it to do this. Why?

You must have bought a modem with a compression protocol such as v42 bis, or MNP 5. A throughput faster than 2400 is possible, but only with text files and menus. You won't get any speed gains on compressed files. MNP 5 actually slows down compressed file transfers, due to overheads of recompressing compressed data. You can emulate this effect by compressing an already compressed file, it's slow, and you won't decrease it's size. On the other hand, v42 bis is intelligent, it doesn't attempt compression on compressed files.

FREEPHONE...?

I really enjoy using my ST and use a modem to take advantage of free software. But is there a way that I can reduce my phone bills?

Peter Enis, Poulton,

Used wisely, calls needn't cost you more than £2 a week. You could order Mercury, which costs around 4 pence a minute, long distance, cheap rate. You don't need special equipment to use Mercury, as long as you're modem supports tone dialling. To use Mercury, find a good COMMS package such as Freeze Dried Terminal, in it's dialling prefixes, enter `'atd 131,0123456789 <insert>'` '0123456789' represents both parts of your mercury PIN. The 'comma' is a 5 second pause command. Your modem may be configured slightly differently, so please refer to your modems manual. The '<insert>' signifies the telephone number which Freeze Dried Terminal will place there when dialling. Another way is to use an Offline mail reader such as the 'MicroTalk Offline Mail'. This allows you to limit your online time, letting you read and reply messages offline.

PRINTER'S WORKSHOP

No matter what the machine might be, the most common questions a computer manufacturer faces pertain to the use of printers - just ask anyone who works at Atari's technical helpline. . . .



SAVING THE RAINFORESTS

I've heard that laser printers are environmentally unfriendly. Is this true, and what does it mean?

It's true, but a matter of degree. Laser printers use toner in some sort of cartridge, and have a drum on which the image of the page is formed: both of these have to be changed every few thousand pages.

They are disposable but not degradable items and usually end up on the rubbish dump. Some manufacturers (Hewlett-Packard for instance) will now take back these bits from their machines and recycle them. Another environmental problem is ozone. Holes in the ozone layer are worrying in the long term, excess ozone in your work room or office is immediately unpleasant. Most laser printers have what is called a corona wire which carries a very high voltage to generate an electrical field to make the powdered ink (toner) stick to the drum and paper. This voltage is high enough to split the oxygen in the air to form small amounts of ozone (in the same way that lightning does). The result is an unpleasant smell when printing - you can get the same thing with photo-copiers too. Apart from the nasty smell, ozone can also be irritating to the eyes and throat. Some people are more sensitive to it than others. Most laser printers have a charcoal filter which is supposed to remove the smell, but they are not usually completely effective. Manufacturers tell you to use laser printers in a well-ventilated area: don't ignore this advice.

Certain machines such as the HP LaserJet IIIP and Star LP4 use the Canon LX engine (print mechanism) which doesn't seem to have this problem. Think about this before

buying, and use your nose as well as your eyes when you inspect a laser printer in a shop or showroom.

THE UNIVERSAL PRINTER...

Can I use any printer with my STFM?

Almost any. Assuming you only have a half megabyte machine you would not be able to use the Atari laser printer as that needs at least a megabyte of computer memory in which to compose the page before sending it to the printer. Other printers (dot matrix, inkjet, laser) don't rely on your computer's internal memory. If you are thinking of buying non-current model second-hand (and there are lots of good bargains to be had) you should check that your word-processor has a driver for it; that could mean ringing the software company. For a long time I used a daisy-wheel electronic typewriter as the printer for my ST - a pretty way-out combination but it worked well!

FANCY FONTS

I'm quite pleased with the quality of the fonts on my Panasonic KXP1170 but would like a bit more variety and a bigger range of sizes.

Should I buy a DTP program?

No. The KXP1170 is an excellent cheap 9 pin dot matrix printer but I suspect that you would be disappointed by the quality of output if you invested in Timeworks or one of the other DTP programs. If you want to extend the range of typefaces and sizes for letters, leaflets or reports you would be better to use a word processor which prints in graphics mode and doesn't use the printer's fonts at all. Printing will be slower but you'll get your variety. That's Write or Write On from Compo or Calligrapher from Working Title give a good representation on screen of what you'll get on the page and

come with a decent range of fonts.

WASTE NOT WANT NOT

I have an HP DeskJet printer. It is very good but quite expensive to run as the ink cartridges cost about £15 each. Is there any way of refilling them?

It can be done though HP (of course) don't recommend it. There are several firms that either sell kits for refilling the cartridges or will do it for you for much less than £15 - also you may be able to get coloured inks which HP don't supply. If you look through the small ads in the back of many computer mags you will find the names of DJ refillers and vendors of re-inking kits for dot matrix printer ribbons. One such company is System Insight on 0707-276913, though none of us here have used their products. Re-inking dot matrix ribbons can be messy and seems a bit penny-pinching: a page of text from a dot matrix costs about 0.25p as opposed to 4p for an inkjet (and 2-3p for a laser).

TWO TON PRINTER

I've got about £200 to spend on a printer. What should I buy?

At this price there's a surprisingly good choice these days. There are quite a few 9 pin dot matrix printers and several 24 pin printers for £200 or less (including VAT), and there are three inkjets for just over this. Print quality from the inkjets and 24 pin printers is rather better than from those with fewer pins to their name, but you may get more features from a 9 pin than a 24 pin machine at this price. Make a short list by looking through the magazines to see what's in your price range, visit your local computer dealers to see printers in action, phone the manufacturers for leaflets and print samples. If there's a computer show coming up it may be worth waiting to see what bargains are on offer there.

A mixed bag of questions for our last section - but our mixed bag of experts can help.

CLEAN CONTACT

Having read through a certain all-for-mats title recently, I noticed a gadget produced for consoles which was placed in the cartridge slot and cleaned the machine. Is there any chance of such a device



being produced for that I use on my ST or Lynx?

Jeff Alsop, Manchester.

The ST already has a number of cleaning disks available, but they're not often needed. Occasionally, if poorly stored, dust can build up in the disk

drive of the ST and cause it to malfunction. Consoles have a bigger problem with this as the information storage components (ie the microchip) is in part directly exposed to the elements, as opposed to being protected by a disc shell. There is however, a Naki industries Lynx cleaner in production for static-frustrated Lynx owners.

SPEEDING FINES

In your first issue, I noticed an advertisement for the Turbo 20/25. It looks like a superb package, but there are a couple of points I'm a little remiss on. Firstly, I don't know a lot about the mechanical side of computers. Would this package be difficult to install? Secondly, will I experience any problems pertaining to software compatibility with this upgrade?

Peter Enis, Poulton, Bath.

Installing a processor upgrade can be pretty tricky, especially for a first timer. There is a manual included with the Turbo 20/25, and Atari Workshop, the suppliers of the board, offer a full technical back-up service to everyone who buys them. We will be showing you how to fit the Turbo 20/25 accelerator board in a later issue of the magazine just to show you exactly how difficult it is. As for software compatibility, the Turbo 20/25 allows you to switch between a breath-taking 25MHz and the standard 8MHz, so you should be able to run all software, and the majority of it will run at the increased speed (there is a problem with some music composition software though that relies on the 8MHz speed for their timing!) Once again, for any accelerator board, ask your dealer if the specific application you're hankering to run with it is compatible.

BIG SWIZ

I recently had my beloved ST in for repairs as the joystick/mouse port was playing up somewhat. It was returned along with a rather hefty bill. It seemed to me that all the dealer had done was straighten the pins of the port out, which is not much for almost fifty pounds! The technician told me that he had had to replace the port response bus. Being more interested in games, I have no idea whether he was telling the truth or not. Have I been swizzled?

Chris Cornell, Morton on the Marsh

Yes, you have indeed been fiddled. There is no such thing as a port response bus, the signals from the ports go straight to the motherboard. What is more likely is that the pins in your

number one port were fully replaced, although you're right in thinking that's a little less than fifty pounds worth of repairs! Next time ask for a diagnosis and estimate before handing over your computer for repairs, it could save a lot of frustration and cash in the end. Unfortunately, you have very little legal footing in this case - you must remember at all times to ask for a written quotation for any work carried out on your computer.

FIRST BITE AT THE APPLE

I have been word processing on my ST for a while now, using First Word Plus. At work we have recently taken an order for a whole heap of Apple Macs. Is there any way I can work from home and port my files over to Mac?

Kim Crowther, London

There is a way, but it's a little convoluted. First of all, your files must be saved as ASCII on your ST and either dumped onto a PC disk or you can put a PC Boot sector onto your ST disk (using something like the excellent DC Formatter (Shareware). From here, the PC disk can now be translated using the Mac File Exchanger from ASCII to MacWrite. Sadly, the Mac will not accept an ST-formatted disk, so a PC one be used, which makes the whole thing something of a palaver.

UNPACKING...

Help! How on earth can I de-archive files on my ST? I am utterly lost and really need to know.

Ben Thomas, Southall.

Unpacking archived files can be a real pain in the neck unless you know what you're doing. First of, you must copy the contents of the disk onto a second, blank and formatted disk. Then, try to load the program. It may take a while as the data needs to be sorted, but eventually your GEM Windows package should re-appear with the unpacked file ready to go. Don't forget to delete the copy, though, as there may be secondary disk-swapping required which will register the back-up - and reset it all!

IN BLACK AND WHITE

I recently obtained a PD copy of Neochrome for my ST. I think it's really fantastic and



want to use it to design sprites for my STOS games, but I have a problem. I can re-access the pictures I have done, but I am unable to re-boot them into the drawing screen to alter them. This makes really complex works impossible, as I have to do them all at once. Please help.

Ken Bassett, Leeds.

Without hearing what you've done to try and re-load your pictures it's difficult to say what the problem is. It's possible that your Neochrome is bugged. Still, as you have STOS, there is a way to utilise that in solving your problems. First of all, load your picture as normal and dump it over to STOS. Now make any changes you wish on STOS's not inconsiderable art package. If you still feel you need that Neochrome touch, boot your Neochrome art package as if you were about to start a new picture and behold, you should now be able to upload your previous work onto the Neochrome design screen.

CHOCOLATE USER

I think I have broken my ST. Unfortunately, I slipped and spilt a large quantity of chocolate milkshake into the keyboard. I thought I had got most of it out by tipping it upside down and draining it, but I can't tell whether I have done any permanent damage because the keys refuse to work. Is there any way you can help me?

Gavin Hall, Peterborough.

Fixing your keyboard is easy enough. Most computer (or especially PC dealers should sell some contact cleaner. This can be applied without opening

your ST up and should clear the dried milkshake from your key contacts, stopping them from sticking down and allowing the impulse signals to once again flow freely. Still, you really should take your ST to get fixed very soon. If some of the drink have spilt into the drive or motherboard whilst the computer was switched on you could have seriously damaged your computer. Be prepared to fork out an inordinate amount of money for repairs and remember to get a written estimate BEFORE having any work undertaken.

SHARE AND SHARE ALIKE

I'm very interested in some of the Shareware packages available for the ST. Is there some kind of nationwide user-base for this stuff? It seems like a good idea to me. Also, is it true that it is perfectly legal to copy Shareware software? Would I need a special utility to do this?

Zoe Roper, Leamington Spa.

There is indeed a Shareware user-base. It's called the ST Club, and they can be contacted on 0602 410241. Shareware indeed has no copyright on it, hence the name, although if you wish to obtain a first-generation copy you will usually have to fork out a couple of quid for it (to cover disk costs etc.). Generally, the disks have no special protection on them, after all, there's no reason to go to the trouble, so your built-in file duplicator should do if you wish to circulate particularly juicy piece of 'ware around a few of your friends.

If you have a question or problem that needs attention then write it down and mail it off to our team of experts right now. We will answer all your questions eventually but our level of mail at the moment is huge so please bear with us.

Send your letter to Ask the Experts, ST Review, 30-32 Farringdon Lane, London EC1R 3AU. Remember to mark on the outside of your envelope the nature of your enquiry.

ST BUYER

*Got a point of view that needs airing?
A problem that needs sharing? If you have then
you may need to share it with everyone.
We want to hear what YOU have to say- so drop
us a line now and give us your Point of View...*

LOST IN STOS

For my birthday recently I was given **STOS**, plus the sprite library and sound sampler kit. Since then I have been working on a game using the sprites and sounds already programmed into the packages. There are two things I would like to know. Firstly, would I have to pay royalties to Mandarin or Jawx for use of

their effects and secondly, how can I market my game once it is finished?
G Hughes, Stoke-on-Trent, Shropshire

Although you won't actually have to pay Mandarin for use of their graphics and sound, you should credit them somewhere along the way, whether in the packaging or preferably on the

title screen, also stating that the program was constructed with STOS. As for the second question...This is really the eternal problem of the budding games designer. Sending your material to various software houses is your best bet, but start with the smaller labels as they are more likely to consider your work than larger companies who already have scores of in-house

ADDRESSING THE ISSUE

Will you please address the main issue that faces all ST owners? The issue of abandonment. More and more the ST is being referred to as a has-been machine. More and more software companies are deciding not to convert games to ST that are being written for other formats. I don't know of any games that are being originated on the ST these days.

The main excuse seems to be piracy, which the pirates say happen because of high prices, but we all know that this is rubbish. If high prices is the reason for piracy, then how do they explain the piracy of Spectrum games a few years ago? Piracy was rife even then and the games were only a tenner.

I don't pretend to have any answers, but one thing that should feature in the equation is Shareware. Recently some great games have been published as Shareware. **Violence** and **Llamatron** to name but two. As consoles steal the games market as well as the software companies interests, then the ST is going to be bottom of their priorities. Maybe a return to the bedroom programmers that were the pioneers of the home computer in the early days will keep the ST alive.

Maybe the Falcon is the next generation of home computer and perhaps it will excite software companies more than the ST. But, on the other hand perhaps software companies will stick with the piracy safe consoles, after all

that's what the kids are clamouring for. To quote a computer shop owner I know, "We're throwing Megadrives out of the door but I've sold no STs since Christmas and very few Amigas".

Come on, don't dodge this like other mags. Address the issues.

Stephen Hards, Mansfield NG21 0DG.

The last thing that I'm going to do either as an Editor or (more importantly) an ST enthusiast, is to lie to a fellow ST user about the market that I'm involved in. So let me address your points.

Piracy - This is by far the biggest killer of any software market and the fact that pirates excuse their illegal behaviour by pointing at the high cost of software would be laughable were it not for the fact that these parasites are DIRECTLY responsible for the collapse of games software markets.

Some software companies ARE pulling out of the ST games market - Electronic Arts have publicly stated that they will be doing no more ST games whilst others sit on the fence wondering what to do next. It's up to us to let them know what we want.

Shareware - There are a number of excellent products in the shareware market - Llamatron is an excellent product and exactly what you would expect from its author Jeff Minter who has previously released several commercial products. I suspect, although

let me know if I'm wrong Jeff, that Llamatron may well have started off life as a commercial product, but with the contraction of the games market, its commercial life was curtailed and so Jeff released it for everyone to enjoy.

And as for consoles, I'm afraid they're here to stay and although cartridge pirates are operating (on a worldwide basis due to vast amounts of money involved), piracy is minimal compared to disk based software. So, all software companies are clamouring for the Sega and Nintendo licenses and in most cases to the detriment of the ST and the Amiga games markets.

The future? Well, let's not paint too bleak a picture. With the resounding success of the Family Curriculum pack, Atari have been shown that a renewed confidence in the ST is emerging. A confidence built on the ST's abilities as a home computer and not a games machine, with over 150,000 units having been sold this year. And with the Falcon just around the corner, Atari could be set to beat the Amiga as a games machine and all the eight bit consoles too. It all depends on people's confidence in their machine and I believe that there will always be a market for the Atari, and with its latest developments, the sky could be the limit...

This is our star letter of the month and the sender will be receiving a crisp £50's worth of software.

developers etc. Good luck anyway - and if you do get a deal, remember to give us the exclusive review of it!

GAMES ZONE TOME

It's good to see an ST magazine that takes the games market for the machine seriously, without being patronising, and still manages to pack plenty of technical information in (without getting bogged down in "techie" details). What I'd like to know is have you considered a pull-out games index? You could divide games up into their separate genres with a colour co-ordination system and then list them in alphabetical order, doing say one genre or letter a month to build up into a full list of all the best ST games. I think if you included this in your magazine it would make it better than it already is.

James McCready, Edinburgh.

The idea of a games index is a pretty good one James, it's just that it would be very difficult to implement. For starters, there are thousands of ST games out there, and by the time we'd finished indexing all of those, the list would already be way out of date. We wouldn't be able to update the system because the alphabetical system would make it impossible to insert new games - unless they were given a side each, with the other side being left blank. Still, perhaps a classic games feature might be feasible...

OPENING THE BOOK

I was intrigued by your feature on the ST book, but I was left needing the answers to a couple of questions.

1) Will the mouse 'submarining' problem be rectified by the time the Book goes to production, or can we expect to have an "updated" version released in the future which resolves the hardware bugs?

2) Is there any existing hardware I could use which would utilise the 120-pin expansion bus?

3) Will the Book operate with a mains adaptor of any kind?

4) Is there any hope of upgrading the Book to full or partial PC compatibility, or will Atari

be releasing any Microsoft-ware clones?

Congratulations on the launch of your magazine and I wish you every success.

Robin Gossard, Dagenham, Essex.

1 Ah ha, a bit of sarcasm about Atari policy there, eh? No, all the hardware bugs will be ironed out by the release date.

2 Not yet.

3 Yes, a standard 9V adaptor should do the trick.

4 No, there will be no PC upgradability for the book in the foreseeable future, although the Book will have full ST compatibility.

GAME ZONE MOAN

I was given my ST for Christmas and since then I have amassed quite a library of games. What I would like to know is, are any of the following arcade games ever going to be converted to the ST -

Street Fighter 2, Crude Busters, Terminator 2, Final Lap 2.

Also, will Sonic the Hedgehog ever be programmed for the ST, as another mag said it would be a while ago.

Bruce Jenkins, Co Durham.

Well, bad luck for you, I'm afraid. Although certain parties have hinted at a possible Street Fighter 2 conversion, there's yet to be any concrete evidence to support them. Crude Busters is another lost cause, although there may be a T2 conversion in the offing. As for Sonic, US Gold were negotiating with Sega for the rights at one point until Sega got a bit worried about how it might affect Megadrive sales and pulled out. Sorry.

HOUSE DROPPINGS

I would like to know why many software developers are dropping out of the ST market. I have read that some of the major software houses are switching their development over to PC, Amiga and consoles only. Is this true? If so, why? The ST has demonstrated its potential for producing great games time

and time again, it would be a crime for houses to abandon it now.

Barry Williams, Rugby.

Hold on a minute, there Barry. You're being a bit premature in forecasting the death of the ST! We've seen a couple of software games producers pull out because of lower profit margins but there are a huge amount of machines out there and people want software.

HUNTING THROUGH THE MAZE

Whilst flicking through some old magazines recently, I saw a review of a title known as Midi Maze. This allowed up to sixteen players to link up and hunt each other around a maze (providing they all had STs and a copy of the game!). Try as I might I haven't been able to track a copy of this game down, as I and a couple of ST owning friends are desperate to play it. Could you help us find an outlet which stocks this game? Also, whatever happened to the use of MIDI in ST games? It was given a promising start with games such as Flight Simulator 3 and Eco, but it soon fizzled out. There was an enormous potential for some stunning multi-media stuff here, so what happened?

Tony Packrington, Peterboro, PE2 4FA

Midi Maze has long since gone out of production I'm afraid. Your best bet would be to try advertising in classified pages for a second hand copy. As for the question of MIDI, it just seems that programmers were unwilling to devote the vast quantities of research and development needed to produce good MIDI products, and as the demand was never placed on them by the public, the whole MIDI scene pretty much collapsed.

MAIL ORDER

I'm a fairly new computer owner and there's something that I'd like to know. There are a lot of mail order dealers which advertise on your pages and their prices seem very competitive. I'd like to know

whether these companies are reputable, and what I can do if one of them does give me some trouble.

Jeremy Abott, Nottingham.

On the whole, mail order companies are pretty honest fellows, so there's no need to worry as you part with your money. There are a few things you should do, however. Firstly, never send cash through the post as that's asking for trouble. Secondly, always keep a record of all correspondence between you and the company, it will make things much easier if by some chance you do have a problem. Also, don't be afraid to keep on ringing them and nagging to get your goods. If the worst does happen and after twenty-eight days (no matter what they promise, legally they have this long to deliver the goods) you have not received your order, stop your cheque and threaten them with legal action. It really shouldn't come to this, but as long as you have proof that they're in the wrong you should have no trouble.

WHAT'S IN A NAME

I was very impressed with your first issue and I shall buy the magazine regularly from now on. What I would like to know is why you are called ST Review when you cover all the Atari computers/consoles? Also, will you cover the Jaguar and Panther when they are released?

Karl Edgily, Stockton on Tees.

We deliberated over our title and that's why we're called Atari ST Review as we mean to cover everything Atari but in relation to its user base. Hence the majority of our coverage is for the ST. As for the Panther, that project has actually been shelved, so unless Atari have a drastic rethink there'll be no Panther coverage anywhere. We're really looking forward however to covering the Falcon as soon as it's released but until then we just look forward to having you as a regular reader.

CHARTS

You know what's good, because you've read our reviews. But which are the most popular packages? These are the top 20 best-selling games, budget games, and utilities.

FULL-PRICE GAMES

PACKAGE SUPPLIER

| | | |
|----|----------------------|-----------------|
| 1 | Populous 2 | Electronic Arts |
| 2 | Robocop 3 | Ocean |
| 3 | Formula 1 Grand Prix | Microprose |
| 4 | A 320 Airbus | Thalion |
| 5 | Titus the Fox | Titus |
| 6 | Legend | Mindscape |
| 7 | Shadow Lands | Domark |
| 8 | Special Forces | Microprose |
| 9 | Race Drivin | Domark |
| 10 | Harlequin | Gremlin |
| 11 | Storm Master | Silmarils |
| 12 | Alcatraz | Inforgrammes |
| 13 | Nights of the Sky | Microprose |
| 14 | Space Gun | Ocean |
| 15 | Another World | Delphine |
| 16 | Robocod | Millenium |
| 17 | WWF | Ocean |
| 18 | Microprose Golf | Microprose |
| 19 | Jimmy White Snooker | Virgin Games |
| 20 | Lemmings | Psygnosis |

BUDGET CHART

PACKAGE SUPPLIER

| | | |
|----|------------------------|-----------------|
| 1 | Treasure Island Dizzy | Code Masters |
| 2 | Lotus | GBH |
| 3 | First Division Manager | Code Masters |
| 4 | Golden Axe | Tronix |
| 5 | ADF | Action 16 |
| 6 | James Pond | GBH |
| 7 | Hunt for Red October | Unique |
| 8 | Navy Moves | Hit Squad |
| 9 | Puffy Saga | Hit Squad |
| 10 | St Dragon | KIXX |
| 11 | Shadow Warriors | Hit Squad |
| 12 | Populous | Star Performers |
| 13 | Hover Sprint | Code Masters |
| 14 | Monty Python | Tronix |
| 15 | Head Over Heels | Hit Squad |
| 16 | Quattro Fighters | Code Masters |
| 17 | Rainbow Island | Hit Squad |
| 18 | Ninja Warriors | Tronix |
| 19 | Italia 90 | Tronix |
| 20 | Bubble Bobble | Hit Squad |

UTILITIES CHART

PACKAGE SUPPLIER

| | | |
|---|-----------------------|-----------------|
| 1 | STOS 3D | Europress |
| 2 | Play Back | Microdeal |
| 3 | Stereo Re-Play | Microdeal |
| 4 | Protex Version 5 | Arnor |
| 5 | Fun School 4 (5-7yrs) | Europress |
| 6 | Quartet | Microdeal |
| 7 | Deluxe Paint | Electronic Arts |
| 8 | Mavis Beacon Typing | Mindscape |
| 9 | Tiger Cub | Zone |

| | | |
|----|------------------------|-------------------|
| 10 | VIDI ST | Rombo Productions |
| 11 | Re-Play 8 | Microdeal |
| 12 | STOS Compiler | Europress |
| 13 | Canvas | Microdeal |
| 14 | Turbo ST | Hi-Soft |
| 15 | Prodigy | Digital Muse |
| 16 | First Word Plus | Electric |
| 17 | DEF Pac 2 | Hi-Soft |
| 18 | Time Works | Electric |
| 19 | Fun School 4 (7-11yrs) | Europress |
| 20 | Home Accounts 2 | Digita |

ADVERTISERS INDEX

| | |
|------------------------|----------------------|
| Analogic28 | MT Software114 |
| Caladonia PD41 | New Age PDL..104 |
| Compu Link.....138 | OceanOBC |
| Compute In Style.. | Offical Secrets ..75 |
|104 | Pandaal.....85 |
| Copy Care41 | PMS.....138 |
| Dial - a - Tip138 | Rage.....91 |
| Eagle Software..78 | Rombo91 |
| Floppy Shop.....15 | Silica69,81 |
| Gajits123 | ST Club101 |
| Halco.....28 | Star Micronics...80 |
| HCS.....45 | Thalion.....18 |
| Hisoft13 | US Gold ...IFC,6,98 |
| Kosmos15 | We Serve54 |
| Ladbrokes68 | Wizard PD.....104 |
| Melville Marriot .28 | Working Title.....52 |
| Midnight Oil.....68 | Zero G.....85 |
| Moriarty Software.68 | |

IN PLAIN ENGLISH

One of the major hurdles for newcomers to computers is the amount of jargon used. Don't despair, though - our A to Z of the most common terminology should make sense of it all. . .

ASSEMBLY LANGUAGE:

A programming language in which Machine Code commands are named according to their purpose. Assembly Language must be translated into Machine Code by an assembler before it can be executed by a processor.

BENCHMARK:

A set of standard tasks given to different computers to compare their performance. They can either be a series of mathematical operations, or based on real applications.

BINARY NOTATION:

The number system a computer uses for its internal calculations: base two.

BUFFER:

A temporary storage area for information being transferred from one part of a computer's memory to another. It can be used to control the way data is transferred between devices operating at different speeds.

DOWNLOAD:

Receiving information from another computer, either directly or indirectly, for example via a disk or bulletin board.

HANDSHAKING:

A series of special signals which two computers (or a computer and another device like a modem) exchange to check they can communicate and synchronise speeds, communications and so on.

I/O:

Input/Output. Devices which allow instructions to be given to or received from a computer, or the data being exchanged.

LOOP:

A series of instructions in a program that is repeated until a certain condition is satisfied.

MACHINE CODE:

The programming language which can be directly understood by a computer.

MEMORY MAP:

A diagram which shows how

the various areas of memory, such as available memory, operating system or screen memory, have been allocated in a particular machine.

MODEM:

Short for modulator/demodulator, a modem converts the digital signals of a computer to analogue signals which can be transmitted down the phone line, and vice versa.

PARALLEL INTERFACE:

An interface, used to connect to many printers, in which each of the eight bits in a byte is transmitted simultaneously.

RAM:

Random Access Memory. Memory in which stored information can be examined and altered by the user. There are two types: static, which retains its information when the machine is turned off, and dynamic, which needs to be refreshed every few milliseconds.

RESOLUTION:

The amount of accuracy with which a picture can be displayed, either on a screen or on the output of a printer. It is usually expressed in dots per inch (dpi).

ROM:

Read-Only Memory. Memory in which information is stored permanently. The information can be read, but not re-written. ROM is generally used to store the basic functions of a computer.

STACK:

A part of memory where data can be continually stored, but only the last item stored can be retrieved.

SUBROUTINE:

A self-contained part of a program that can be called up and run by other parts of a program.

UTILITY:

A program which performs a common operation within the computer, such as virus checking or copying files.

C'MON AND JOIN THE FUN STAFF WRITER WANTED FOR ST REVIEW

Can you write quickly and to style? Sub copy? Explain technically difficult subjects with simplicity and style?

If so, please send a 600 word review on a utility or a piece of hardware of your choice. We're looking for someone who can quickly get to grips with our house-style, so, in addition to the word count please supply the following in the style of the magazine:

- A score box
- A pros and cons box
- One of the following: a step-by-step guide, a Buyer's Guide comparison box, or a box-out that gives some background details to the product.

All applications to be in writing.

There'll be extra Brownie points for those who submit pictures, diagrams or printed-out screenshots with captions.

You should be hard working, conscientious and organised. An additional interest in games would be an advantage, as there may be occasional duties for you on the coverage of our magazine.

So please send your review, a covering letter and a CV to Garth Sumpter, ATARI ST REVIEW, Priory Court, 30-32 Farringdon Lane, London EC1R 3AU. Don't forget to include a day-time telephone number.

EMAP IMAGES, the publishers of ST Review, are based in central London, near Fleet Street. We are an equal opportunities employer and employ people on their merit.

THE COMPLETE COLOUR SOLUTION

£179

Vidi ... No 1 in UK & Europe (Leading the way forward)



"BEST BUY" ... AWARD
IN ST WORLD.
COMPARISON REVIEW BETWEEN
(SAM, COMPUTEREYES, TURBO
DIZER, PRO 9800 AND
PRO 9800 COLOUR)

EDITORS COMMENTS

Vidi-ST is well designed, well thought out package — good hardware driven by some equally impressive software.

Sam has the edge in performance terms — by a narrow margin. Vidi-ST, however, is considerably cheaper, has the best software, good documentation and can just about match Sam for image quality. This making Rombo's Vidi-ST, beyond doubt, the best buy in Video digitising on the ST.

Get the most out of your ST by adding:

"The Complete Colour Solution"

The Worlds ultimate creative leisure product for your Atari ST. Captures dynamic 512 or 4096 colour images from video into your ST in less than a second.

And Look No Filters

Images can now be grabbed from either colour video cameras, home VCR or in fact any still video source. The traditional method of holding three filters in front of your video camera is certainly a thing of the past. Because Vidi splits the RGB colours electronically there are no focussing or movement problems experienced by some of our slower competitors. Lighting is also less of an issue as light is not being shut out by lens filters. Put all this together with an already proven Vidi-ST / VidiChrome combination and achieve superb quality 512 or 4096 colour images. (4096 colours only available on STE). Mono images can be grabbed in real time from moving video.

PUSH YOUR ATARI ST TO ITS LIMIT ...

You will see from independent review comments that we are undoubtedly their first choice.



• Actual unretouched digitised screenshots •

THE SOLUTION ENABLES YOU TO ...

- Capture colour images from any still video source.
- Have perfect freeze frame from any video.
- Grab momo images from any video source in real-time.
- Digitise up to 24 mono frames on a 1 meg ST
- Animate 16 shade images at a choice of speeds.
- Grab 3-D images from TV.
- Replace many scanner features.
- Add images for D.T.P. applications.
- Import images into art packages in mono or colour.



Full colour demonstration disk available for only £1.95 to cover P&P.

Livingston Scotland
Telephone 0506-414631

Fax 0506-414634

VISIT US AT COMPUTER SHOPPER SHOW
STAND 56
NATIONAL HALL, OLYMPIA
28th - 31st MAY 1992



Hook™

PETER PAN has now grown up, far away from NEVERLAND, but his old enemy CAPTAIN HOOK has not forgotten and schemes his revenge.

Kidnapping Peter's children, he lures our hero back to the Island of PIRATES and "LOST BOYS" for a final confrontation.

With the help of TINKERBELL the faithful fairy, you take on the role of PETER in this magic adventure fraught with danger and excitement.



ALSO AVAILABLE FOR
Nintendo



ocean®

**ATARI ST
CBM AMIGA
IBM PC &
COMPATIBLES**

© 1991 TRI-STAR PICTURES, INC.
ALL RIGHTS RESERVED.
HOOK™ AND ASSOCIATED CHARACTER NAMES
ARE TRADEMARKS OF TRI-STAR PICTURES, INC.
NINTENDO®, GAMEBOY™, NINTENDO
ENTERTAINMENT SYSTEM AND THE
NINTENDO PRODUCT SEALS AND
OTHER MARKS DESIGNATED AS TM
ARE TRADEMARKS OF NINTENDO.

OCEAN SOFTWARE LIMITED · 6 CENTRAL STREET · MANCHESTER · M2 5NS
TELEPHONE: 061 832 6633 · FAX: 061 834 0650