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January 1993 • Issue 83

# ATARI ST USER

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Power Scanner .....£99

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PC720B .....£65

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### PC720P

- Disk drive inc. power supply unit .....£50

## Drive Accessories

Maxell Multi-Colour disks (10) .....£9.95  
 Floppy disks bulk supplied .....£POA

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- External SCSI host adaptor
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The Link™ .....£69.95

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 Knife ST .....£29  
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- Ideal upgrade from dot-matrix

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- Adobe postscript option
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- Flexible paper management
- 225cps print speed
- Easy access control panel
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- Optional tractor feeder

- LQ570 ..... **£289**
- LQ1070 ..... **£449**  
(132 column printer)

**LQ100**



- 24-pin
- 250 cps printspeed
- Space saving
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- Enhanced graphics
- 50 sheet A4 paper tray
- Dual position design
- Optional tractor feed
- LQ100 fits in anywhere!

- LQ100 ..... **£209**

**Dot Matrix Cont.**

**LX100**

- 9 pin
  - Tractor feed
  - Cut sheet feeder
  - Cables
  - Some of the LQ100 features
- LX100 ..... **£189**

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**Philips CM8833 MK2**

- With cable
- On-site maintenance

- CM8833 MK2 ..... **£199**

**The Ultimate Cartridge**

The Ultimate Cartridge will break into any Atari ST program. Whether you're a programmer, hacker, games player, or just curious about your Atari ST, The Ultimate Cartridge gives you the power that you need. Updates available with new software.

**Features:**

- Break into any program
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- Search memory
- Print memory
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- Disassemble to disk
- Edit memory
- Search for graphics
- Search for sprites
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- Set up colour palettes
- Alter plane configurations
- Load and save screen displays
- Run external TOS programs
- Load TOS programs
- Load and save graphic screens
- Low level disk editor
- Disk analyser
- Examine formats
- Format analyser
- File editor
- Directory editor
- Formatter
- Break and restart function
- Search for infinite lives
- Look for music
- Play music
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- Search for soundtracker music
- Search for sound samples

The cartridge the ST has been waiting for

- The Ultimate Cartridge ..... **£25**

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EUROPRESS  
ENTERTAINMENT

For over six years Atari ST User has been the leading magazine for ST enthusiasts. As a key member of the Europress magazine group, Atari ST User promises to inform, educate and entertain its readers each month with the most dedicated coverage of the ST available.

Atari ST User • Amiga Computing • PC Today  
 Arcane Computing • Amiga Action • ST Action  
 N Game • Zap! • Super Fun • C&A Action  
 Super Action • PC News • Bad Influence!

Welcome to the latest issue of Atari ST User, Britain's most comprehensive magazine for ST enthusiasts - and still £1 cheaper than the rest.

STOS users are this month given the perfect extension for their versatile programming language - STOS 3D, the amazing package which enables you to build your very own 3D games.

Many of you will be looking for some sound advice to get the best results from the software, so manuals are offered at an attractive price and a regular tutorial starts in this issue.

This month's main feature explains everything you need to know before choosing RPG, strategy and adventure games this Christmas.

There's an in-depth article about the public domain, where we tell you what it is, what you can buy and find out whether it's worth registering for shareware.

And for anyone who has become familiar with their ST, we have some excellent articles which will help you get even more from the computer. Our wordprocessing special for

example, takes you from the basics, revealing how most packages have hidden features that will help you get better results if you gave them a try. But if you're still looking for a package then we have a review of Easy Text Professional in a new format.

Our product grading system has been improved - the familiar Bottom Line grades have been extended to include value for money and the best products are given a Blue Chip award.

So all that remains to be said is, enjoy your magazine!



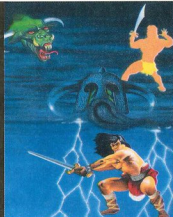
John Butters

John Butters, Editor

COVER  
FEATURE

We help you to find  
 the right RPG, strategy  
 or adventure game to have  
 fun with this Christmas

## Amazing Adventures 20



midi and music ♦ emulation ♦ communication ♦ dtp ♦ business

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# The CoverDisk



Containing the full working version of **STOS 3D**, the essential extension to the **STOS** programming language that will enable you to write spectacular 3D games

## PLUS:

● **GMAP** - a disk mapping utility to enable you to check and analyse data on your disks for fragmentation

● **Linked** with this month's main feature, **Ditch Day Drifter** is an exciting adventure game based on life in a college campus

● **YMG125** is a new and fast communications transfer protocol that claims to be faster than the rest for downloading and uploading files

● **Never miss an important appointment again.** The **Alarm** is a useful desk accessory that will help you keep track of the time

**The DISK starts on page 12**





# What's New?

Exciting and new products from the company that gave you The BEST Add-On of the Year.

## Accelerators

If you're in to Desk Top Publishing, you know the need for speed! The **TURBO 25** is the very best accelerator available today, based on a 68000 processor running at a blinding speed of 25 MHz. Close to TT speed, maintains 100% compatibility.

**NEW! Plus Cache ST.** A budget 16MHz 68000 Accelerator for the ST(FM) and STc.

Special introductory price: **£99.95**

**Available Soon - TINY TURBO - 030/40MHz**  
8-8 times TT speed!! For All ST computers.

## NVDI

Accelerate your screen, too! **NVDI** optimises TOS Display routines using Assembler Code. Up to 10x faster!! Includes a very fast replacement GDOS system which can be switched off. 1000's of copies have sold in Germany. Indispensable for DTP, Graphics and Animation programs. New Price 49.95

... It'll make you wonder how you ever used your ST without it! (ST User Aug 1992)

## Crazy Dots

The Colour Graphics Card for the TT/Mega 51c. Select resolutions from 640x200 to 1664x1200. Use 256 colour palette from a 16 million colour palette. Essential for Colour DTP. New Price **£449.00**

**NEW!** High Colour Option (32768 colours)  
**NEW!** NVDI for Crazy Dots.

## MODEMS and FAX Software

The **TKR2400** supports speeds up to 2400bps. The **TKR14400** will go up to a lightning speed of 14400 bps. Data compression and error correction modes MNP5, Lap-M, V.32bis and V.42bis are standard. Both are Group 3 compatible fax Modems, and of course are Hayes compatible. They support the UK split rate 75/1200 bps.

**TeleOffice**, is the best Fax Software for the Atari available today. Used as a Desk Accessory, **TeleOffice** allows sending of faxes from within wordprocessors and DTP software. Also sold separately. **Xmas Special: TeleOffice and TKR2400 £199.95 or TKR14400 £299.95**

## High Density Floppy Drives

Yes, you too can use those IBM 1.44Mb floppy disks with our **Eico High Density module** and drive kit. The kit comes with fitting instructions, software (HD formatter) and high quality 1.44 megabyte floppy disk drive. It is fully compatible with your old double density disks. Works with PC Emulators. A perfect replacement for those troublesome single-sided A drives! **Special Offer £89.95** The module is also available separately.

## CartMaster

**NEW!** The Multi-Cartridge Control System manages up to 40 devices including Spectre GCX and a huge range of 'Dongles' using software switching. **CartMaster** is compatible with all known cartridge port devices for the Atari ST and TT.

Special Introductory Offer: **£99.95**

## NameNet

**NEW!** Have you tried using a Database and got utterly frustrated trying to set it up? **NameNet** is for you. No setting up required! Just load the program to start entering your addresses. Prints labels and filofax pages, perfectly. Use the mouse or keyboard shortcuts. It can dial for you using your modem. It is even compatible with Mercury. Convert telephone numbers - just type 'Bristol' to get 0272. **NameNet** is easy, super fast, and you don't need a hard disk. Its global lookup facility is so fast that we have replaced our old Database program with **NameNet**. A brilliant feature-packed easy-to-use program for **Only £49.95**

## Hard Disks

Quality 40Mb-2Gb SCSI Hard Drives from **£299.00** carefully assembled into beautiful UK made cases. Hard disk system repairs and upgrades. 20 Megabyte Floppy Drives from **£399.00**

This month's Special:

128Mb Magneto Optical Hard Drive **Only £999.95**  
Also available are Hard Drive Kits, Squest Drives, 650Mb & 960Mb Optical and WORM Drives Fully compatible and ready for the Falcon.

## CodeHead Software

**And here is another amazing offer:** MultiDisk Deluxe **£29.95**. HotWire, MaxiFile II, CodeKeys, G+Us, Warp 9, LookIt! PopIt! and MidiMax

**Only £24.95 each, or £39.95 for Two** if purchased with any other product in this Advertisement.

## Tower Power

Is your computer taking over your work-space? Transform your computer into a professional tower system. Fit all those extras into a tower with lots of space for floppy and hard drives. Gain the advantage of a separate keyboard on the ST and Falcon. Ask for the new leaflet. For DIY installation: no soldering required. Or ask for our professional fitting service. Ready-to-use assembled Towers with or without hard disks available. Keyboard kits also sold separately.

Prices: Mega ST/Ste & TT **£169.95**  
ST(FM)c includes keyboard kit **£199.95**  
**Special Limited Edition ST(FM)c Tower**  
**Unrepeatable Offer £179.95 Save £22.00**

## TOS 2.06 Operating System

**NEW!** We supply only the Official Atari UK TOS 2.06 upgrade with manual. A Switch Board allows you to keep your old TOS. **Price £69.95**

**Xmas Offer: Fitted by Experts for Only £10.00**

## Keyboard Improvements

The 'Key-Clicks' replacement kit is one of our most popular products, giving the Atari keyboard a firmer, more positive feel. You'll be amazed at the difference. For ST(FM), 51c & Falcon. Easy DIY Fitting. Get the professional feel for **Only £29.95**. Do you ever hit two keys at once? Our replacement Key Top Set is spaced correctly. **Only £29.95**. Special key top set available for PC emulator user.

**Xmas Offer: Buy Key Clicks and Key Tops** together for **Only £44.95**

## Autoswitch Overscan

Fill those borders. Gain up to **60%** extra screen in colour modes and up to **40%** in Hires (752x480max). Excellent for multisync monitors. Automatically switches to 'standard' resolutions when loading incompatible programs. For ST/ST/1/STFM and MegaST computer ONLY!

**Xmas Offer: Only £39.95!! Save £10.00**

## AutoSwitch OverScan TT

**NEW!** ATARI said it was not possible. But the OverScan team has done it again! **61%** extra usable area in ST resolutions! **34%** in TT low and medium resolution! The 640x400 pixels of ST 490 expand to an unbelievable usable area of 832x496 pixels. Essential for RDP and Spreadsheets.

## TT Fast Ram

Two boards to choose from. Both can be populated in stages up to 32 or 64 Megabytes. This board will speed up Calamus SL and Pagestream significantly. We can upgrade to 256Mbytes!

## ST memory upgrades

Out of memory? Phone for a quote. You'll find we are competitive without compromising on quality. **NEW** is our 'while you wait' fitting service. Please phone to book your appointment. Tired a DIY Memory Upgrade and failed? We are happy to help put things right.

## Other Products

BioData EtherNet, ICD, Multisync & Big Monitors, EOS, DIP... and more. Too many to list. Our new catalogue and price list is only a phoned away.

We would like to take this opportunity to thank you for your support and wish you all a Merry Xmas and a Happy New Year.

Mail Order & Windsor Service Centre 07 53-832212 Showroom & London Service Centre 081-693 1919

**ATARI**  
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Do you realize we operate fully equipped workshops at both addresses? Professional service and customer satisfaction are the essence of our service. We are happy to collect and deliver items for repair. Whilst we make a small charge for diagnostic only, there is no-fox, no-charge policy. Our high standard of workmanship has been endorsed by ATARI UK.

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**Solutions**

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# Support grows for Falcon

THE massive Comdex computer trade show held in Las Vegas recently was the launch pad for new Falcon products and a major deal was struck which will help ensure the computer's success.

Alongside a major presence from Atari, Europe-based Compo Software previewed two products including the Falcon's first 286 PC emulator.

As yet unnamed, the board will plug straight into the expansion port and take advantage of the computer's graphics capabilities. Its speed and price have not been announced.

The firm's second launch was Musicom, a package that is capable of direct-to-disk recording and real-time special effects using the Falcon's DSP chip.

It includes a karaoke feature which strips out vocals, a sample rate of 49.7kHz, and can record straight from the computer's microphone jack. It will cost less than £50.

Digital Optical Analog's BlackMail is set to become the first voicemail system for the Falcon. It will require 4Mb of memory and a 30Mb hard drive.

Micro Creations also previewed communications software. Their Gimetern and GimeBBS integrated package is used for sending graphics with text.

And sources in the States claim that photography giant Kodak signed a deal with Atari to use the Falcon as a system



Falcon products shown at Comdex

for displaying and editing CD-ROM images.

Images shown by German firm Colour Concept were described as "nothing short of dazzling" and at \$200 the software will become the medium's lowest price option for display and manipulation.

At the time of going to press, Falcons had not appeared with British dealers, but *Atari ST User* will let you know as soon as they become available.

## Monitors can tune in to TV

VIDEO specialist Rotec Electronics have announced a "picture-in-picture" display for computer and home video applications.

PIP View is designed to display two video sources on the same television or monitor, with the main picture accompanied with a scaled-down image from another source.

The device also has a built-in tuner which turns any composite monitor into a television, and its linear stereo capability ensures Nicam video-quality is maintained.

Full remote control is available for most functions including tuning, volume and programming. PIP View will cost around £150.

## Bad Influence! is on song

A COVER-mounted cassette containing rare tracks from top bands is being given away free with the first issue of *Bad Influence!* magazine, the new publication for games players.

On side A of the tape is a preview remix of Right Said Fred's Love for all Seasons, taken from their Up album. This remix will never be available in Britain.

Side B features the latest track from Brooklyn. Aptly named Bad Influence, it is taking US dance-floors by storm.

And running in conjunction with the *Bad Influence!* television show, readers are offered the chance to win a recording session with Brooklyn, who will create a song with the winner.

*Bad Influence!* is available from all good newsgagents or by sending a cheque/postal order for £2.95 to *Bad Influence!* Competition, Europress Direct, PO Box 2, Ellesmere Port L65 3EA.



Free cassette with *Bad Influence!*

## Atari go on show

THE publisher of *Atari ST User*, Europress, have confirmed they will be sponsoring the next International Computer Show, due to be held in February.

Organised by Westminster Exhibitions, the three-day event is promised to be the launch pad for several new ST products from leading software and hardware firms including Atari.

Although the firm have not yet announced their plans for the show, it is likely the Falcon will be featured in the British public for the first time.

One of the show's main features will be on-going demonstrations which are to take place within five main sections - entertainment, education, the home office, music and consoles.

The music section - appearing for the first time - will feature all aspects of technology in music today



and Zone Distribution, MCM and Steinberg will explain their catalogues of software.

"Following our successful sponsorship of the last International Computer Show, *Atari ST User* is pleased to announce its support of the forthcoming February event," said Europress Enterprise boss Ian Bloomfield.

"We look forward to meeting our readers and being able to talk to them on a one-to-one basis."

Running between February 19 and 21 at Wembley Exhibition Centre, the organiser recommends that to avoid disappointment visitors should obtain advance tickets.

The discounted tickets can be ordered by telephoning 0726 68020.

## News flashes

● **DELTA** Ray is the name of a new joystick due soon from Logic 3 (081-902 2211). With four Fire buttons, two-speed auto-fire, six heavy duty microswitches and a "comfort" grip, it will cost £13.99.

★ ★ ★  
● **EDUCATION** program Noddy's Playtime is now on sale for £24.99, and is not due next spring as reported last month.

★ ★ ★  
● **NAMENET** is the latest database package which enables names and addresses to be stored and retrieved easily on the ST. Operated through mouse or keyboard shortcuts, it sells for £49.95 from System Solutions (081-693 1919).

★ ★ ★  
● **ST ENTHUSIASTS** interested in attending the touring All Formats Computer Fair can now get 50 vouchers to entitle adults to £1 off the normal admission price.

The vouchers detail the venues and dates for all events up to the end of April, and can be obtained by sending a stamped addressed envelope to Bruce Evrisse, Maple Lead, Stratton-on-Avon, Moreton-in-Marsh GL56 9QX.

★ ★ ★  
● **WIZARD PD** (0734 574685) have asked us to remind readers that there is no connection between their public domain library and a mail order company trading as Wizard Games.

Established in 1989, Wizard PD have become one of the country's largest and respected sources for ST software.

★ ★ ★  
● **ACCORDING** to the American computer press, Atari's ST-Sutro home productivity package has been renamed Concierge.

★ ★ ★  
● **MOTOROLA** are to extend their 68000 series of microprocessors with the release of the 68064 by the end of 1993. It is claimed that the chip will run at 100 million instructions per second.

## Kids aim for DTP

PUPILS at a Chelmsford school are to raise cash to buy a new desktop publishing system for their school by selling wordprocessing manuals to ST users.

A *Practical Guide to Write On* on the Atari ST features two programs from Compo Software - Write On and That's Write - and has so far raised £200.

The guides can be bought by sending a cheque for £5 payable to The William de Ferrers School (ECC), to Terry Freedman, William de Ferrers School, Trinity Square, South Woodham Ferrers CM3 5JU.

## Electronics show for Britain

STEPS for a massive consumer electronics show to be held in London next September have been unveiled by News International, publisher of many leading newspapers.

Many computer hardware firms have already pledged their support for Live '93, and the organiser expects up to 175,000 people to attend during the four-day event. "The UK has needed this pre-Christmas chance for consumers to get an early hands-on opportunity with the latest products," said Bob Denton, the exhibition manager.

"Manufacturers will be on hand to give demonstrations and advice from their stands and via our interactive seminars."

The event will be held at Olympia's Great Hall and Olympia 2.



Ocean to release charity game

## Ocean wear a Red Nose

OCEAN Software have announced their support of next year's Comic Relief charity, with plans to release the first ever Red Nose game, SleepWalker.

Due at the end of January, the game will be released on most computer formats including the ST and is expected to earn Comic Relief £500,000.

The company also organising a national Red Nose Challenge, where games players will be able to compete against each other to raise extra money for the charity.

"We are delighted to involve Ocean Software in the work of Comic Relief," said the firm's boss David Ward.

"They have identified the games medium as a perfect way to reach a huge audience. We will do all we can to ensure that everyone who enjoys games will take part in Red Nose Day."

## Epilepsy warnings played down

BRITISH doctors have played down warnings from two leading games console manufacturers and scares in national newspapers that light patterns used in video games could trigger epileptic fits.

Instructions supplied with Sega's Sonic 2 say that the video game may induce an epileptic seizure, and advises players to discontinue use if they feel certain conditions.

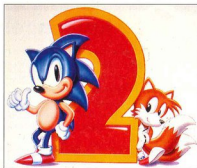
Sega say they issued the warnings to protect themselves against legal action, although the firm were unaware of cases of epileptic fits being caused by games.

Similar advice to Nintendo customers was given after one or two isolated incidents, a spokesman said.

But experts stress that games cannot cause epilepsy in people not affected by the condition, although they admit that light flashes in games played on some television sets could trigger fits.

Sue Cooper, spokeswoman for the British Epilepsy Association, said that there are up to 350,000 British epilepsy sufferers but fewer than 10,000 are sensitive to flashing lights.

"It's such a small proportion of sufferers that we don't consider it a problem," said Sue. She advised parents not to be put off buying video games for their children.



Sonic 2 carries a warning

## DO YOU KNOW SOMETHING WE DON'T?

Although Atari ST User has scores of contacts in the ST world we need you. If you have some hot news ring John Butters on the news desk now on 0625 878888 or fax to 0625 879966. All information supplied will be treated in the strictest of confidence.

## DIARY DATES

4 to 5 December 1992  
Gamesmaster Live  
Organiser: EMAP  
(0234 212988)  
Venue: NEC Birmingham  
A big games show with TV coverage.

19 to 21 February 1993  
7th International Computer Show  
Organiser: Westminster Exhibitions  
(081-549 3444)  
Venue: Wembley, London  
Most popular computer formats covered, and popular among ST users.

4 to 6 April 1993  
European Computer Trade Show  
Organiser: Blenheim  
(081-742 2828)  
Venue: Business Design Centre, London  
New software and hardware is pre-viewed to the industry. No public admission.

23 to 25 April 1993  
Midi Music Show  
Organiser: Westminster Exhibitions  
(081-549 3444)  
Venue: Wembley Exhibition Centre  
Catch up with the latest ST Midi software.

## OVERSEAS

7 to 10 January 1993  
Consumer Electronics Show  
Organiser: (010 1 202 4578700)  
Venue: Las Vegas, USA  
Often the launch pad for new Atari hardware.

24 to 31 March 1993  
CeBit  
Organiser: Deutsche Messe  
(010 49 511890)  
Venue: Hanover, Germany  
Massive electronics show. Atari usually have a large presence.

● If your company is organising a show relevant to the ST and it's not listed, let us know so we can include the information in the diary.

## The 16 bit Breakthrough

As last from Microdeal, the first ever low cost 16 BIT sound sampler for the Atari ST range of computers. Never before has a 16 BIT sampler been available at such a low price. With the superb quality of 16 BIT technology, the completely new hardware cartridge contains 16 BIT Analog to Digital and Digital to Analog converters. The system can record sound from suitable equipment such as a portable cassette or C.D player or any 'Auxiliary' or 'Line' level source. The PHONO output provides a standard 'Line' level output for connection to a wide range of sound systems.

As you have come to expect from MICRODEAL and Audio Visual Research, the SOFTWARE provided with the package is packed with the latest features. REPLAY 16 has the latest generation EDITOR, DRUMBEAT, MIDIPLAY software, which have been radically updated and rewritten from the REPLAY PRO / STEREO packages. Just look at these features:

### REPLAY 16 EDITOR

The EDITOR program provides the user with the ultimate in power and sophistication, packed with features which appear for the first time on ANY home computer. The fully DESKTOP and WINDOW styled editor allows individual samples to be loaded into the computer and edited separately. The program will allow the user to load samples of 8, 12 or 16 BIT format and freely convert between them. Sampling rates up to 48KHz can be used and the program can re-synthesise samples to practically any other speed.

The REPLAY 16 editor supports many useful editing functions including Cut, Paste, Overlay, Clear, Fill, Hide, Insert, Loop join, Loop, Loop cross-fade, Repeat gap, Volume up / down, Fade in / out, Reverse, Sample, Play, Pre-sample, Monitor, Scope, Load sample (AVR, .BSVX / IFF and AIFF), and Save sample.

The Editor can also perform more advanced forms of editing such as Sample FOURIER analysis using a 128 point 3D FFT. Special effects (including Echo, Multi echo, Flange, Reverb, Room and Hall), Digital Filtering (Band pass, Low pass, High pass, Band stop, Frequency boost). In addition to all these functions the REPLAY 16 editor now comes complete with a SAMPLE TRACK SEQUENCER, which allows you to Rearrange / Remix samples using a SAMPLE list style editor.

### DRUMBEAT 16

DRUMBEAT 16 is a simple to use, full feature Drum machine with one main advantage over a dedicated unit, it is a FULLY re-configurable SAMPLING drum machine. DRUMBEAT 16 can load up to 30 samples into memory, to create a KIT. Samples can be up to 1 Meg in length, permitting the user to record sections of music and completely RE-MIX them. Patterns of BEATS are arranged on a grid style PATTERN editor. SONGS are then constructed from simple lists of patterns. Up to four SAMPLES can be played simultaneously, which turn DRUMBEAT 16 into a powerful sample sequencer. DRUMBEAT 16 has full MIDI support and can act as a MIDI SLAVE or MIDI MASTER and responds to MIDI START, STOP and SYNC commands.

### MIDIPLAY 16

MIDIPLAY transforms your ST into a flexible Multivoice MIDI keyboard emulator. Samples can be assigned to any individual note or range of notes in a 9 octave range. MIDIPLAY 16 can play up to 4 VOICE / NOTE polyphonic with 3 levels of velocity sensitive white in a single voice mode. An advanced sample loop point editor with AUTOLOOP (zero crossing) detection is also incorporated to ease loop point editing. Four separate keyboard layouts can be held in memory at any one time. MIDIPLAY 16 now has SWITCHABLE SOFTWARE FILTERING to reduce sample noise and improve sound quality.

### FULLY COMPATIBLE WITH BREAKTHRU FROM GAJITS

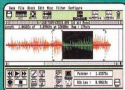
Not included with this package but fully compatible is BREAKTHRU, from Gajits, a professional quality 32 track midi sequencer with a difference. At the same time as it plays your midi instrument, BREAKTHRU will drive your REPLAY 16 cartridge to provide a four channel 16 Bit sample output! BREAKTHRU offers all the editing and arranging facilities you need to produce great music, including Gajits DIAMOND DRAG editing system.

### Sample Dump Feature

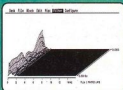
As if all this was not enough, Replay 16's sample EDITOR supports MIDI SAMPLE DUMP as defined in version 1.0 of the INTERNATIONAL MIDI SPECIFICATION. This very powerful feature allows users of many rack or keyboard mounted samplers to transfer samples between themselves and REPLAY 16 for more advanced and simpler editing. These samples can be tested within REPLAY 16 before sending them back to the remote unit.

# REPLAY 16

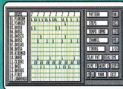
## The 16 bit sampler for the Atari



REPLAY 16 MAIN EDITOR



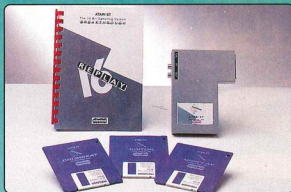
FFT 3D DISPLAY



DRUMBEAT SONG EDITOR



MIDIPLAY MAIN SCREEN



### REPLAY 16 ORDER FORM

REPLAY 16...£129.95 Name: .....

BREAKTHRU...£129.95 Address: .....

POST & PACKING £1.00 .....

TELEPHONE .....

0726 68020 .....

WITH CREDIT CARD No. ....Postcode: .....

CHEQUE/POSTAL ORDER ENCLOSED FOR £.....

CREDIT CARD ORDER ENCLOSED FOR £.....

EXPIRY DATE: .....

Send to: Microdeal Ltd, PO BOX 68, St Austell, Cornwall. PL25 4YB





# COVERDISK

This month's disk contains an incredible giveaway – the

# STOS

Create your own 3D worlds and games with this extension to the very popular STOS programming language

Programmed by: Anthony Wilkes and Richard Lewis  
Configuration: All STs (1Mb recommended) – lo-res  
Filenames: X\_DEMO1.TOS, X\_DEMO2.TOS, X\_INSTL1.TOS, X\_INSTL2.TOS – All self-extracting archive files

Although you can use STOS 3D on its own to create and view 3D objects, you will require STOS Basic in order to develop games which use such objects.

Also, although the Object Modeller will run in 512k, owners of STs with less than 1Mb are advised to upgrade to 1Mb to take full advantage of STOS 3D's powerful features.

## STOS 3D games

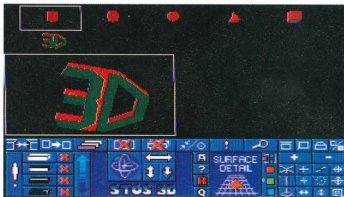
Once you have mastered STOS 3D programming and created your first 3D game, why not send it in to us for evaluation and possible inclusion on the CoverDisk? If it's good enough we may even pay hard cash for it too! So make sure you don't miss our STOS 3D tutorials – they could earn you some money.

STOS 3D is an extension to STOS Basic adding over 40 new commands to manipulate and create 3D environments created by you.

With STOS 3D installed, you can let your imagination run wild and create

games and demos featuring stunning 3D graphics as found in programs such as Cybercon III and Starglider II.

To help you design and create 3D objects, STOS 3D features a very powerful and easy to use Object Modeller



STOS 3D's versatile and powerful Object Modeller makes creating 3D objects quick and easy

## GMAP

A utility that examines the level of fragmentation on both hard and floppy drives and displays the results as a graphical map

File fragmentation is a phenomenon whereby a file has been stored on disk in such a way that it has been split up into various parts rather than being continuous.

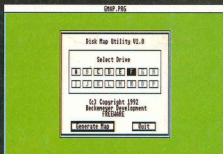
Heavy fragmentation is often responsible for poor performance in the amount of time a file takes to load and if that file is accessed frequently, the problem can become more frustrating.

GMAP provides you with a method of detecting whether poor disk performance is due to heavy fragmentation by presenting you with a graphical map of the contents and condition of your disk. The map consists of symbols representing continuous data, fragmented data, free space and also bad sectors.

When run, the program asks which drive you wish to check. Once the drive is chosen, click on Generate Map and the map is displayed. GMAP also analyses the results and recommends whether optimisation is required.

Optimisation is the process whereby all the data is reorganised so that the data for each file is continuous and unfortunately, GMAP does not have a built-in optimiser but there are many available from PD libraries that do the job.

Programmed by: Beckemeyer Development  
Configuration: All STs – med/hi-res  
Filenames: X\_GMAP.TOS – Self-extracting archive



Selecting a drive to check is as easy as clicking a button

fully-working version of the powerful STOS 3D package! Read on...

# 3D

(OM). The OM includes all the tools and facilities you will need to create 3D objects as detailed as your imagination allows.

There is also the powerful facility to "paste" bitmap images directly onto the surface of your 3D object to add even more detail.

Imagine your 3D ship with your name written on the side of it as it flies through 3D space, or you could paste a bitmap design onto a ship as a missile hits the hull, thereby representing the damage inflicted.

By now you're probably raring to go, so follow the "Extracting STOS 3D" directions and then turn to our "STOS 3D basics" on page 49 for details on installing STOS 3D onto your STOS Basic disks.

We will also be running a STOS 3D tutorial (starting in this very issue) in future issues to help you get the most from STOS 3D.

## Extracting STOS 3D

STOS 3D needs to be placed on two disks called DEMO DISK and INSTALL DISK. Because of the large amounts of data that comprise each disk, the data for each had to be split up into two sets of related files to fit onto our CoverDisk.

These files are called X\_DEMO1.TOS and X\_DEMO2.TOS for the DEMO DISK and X\_INSL1.TOS and X\_INSL2.TOS for the INSTALL DISK. Follow the directions below for a successful extraction process.

1. Back up your CoverDisk! Always use a copy of the disk.
2. Format four disks and label them DEMO DISK, INSTALL DISK, WORK DISK 1 and WORK DISK 2 (refer to your Atari manual for details on formatting disks).
3. Insert your (backed up) CoverDisk and copy the files X\_DEMO1.TOS onto WORK DISK 1 (refer to your Atari manual for details on copying files).
4. Now copy X\_DEMO2.TOS onto WORK DISK 2.
5. Insert WORK DISK 1 into the drive.
6. Double click on X\_DEMO1.TOS. The program will now begin to extract.
7. Once the extraction has finished, delete the file X\_DEMO1.TOS from WORK DISK 1.
8. Insert WORK DISK 2 into drive.
9. Double click on X\_DEMO2.TOS. The program will begin to extract.
10. Once the extraction has finished, delete the file X\_DEMO2.TOS from WORK DISK 2.
11. Copy all files from WORK DISK 1 and WORK DISK 2 onto

the DEMO DISK.

12. Once files have been copied, delete all files on WORK DISK 1 and WORK DISK 2.

You should now have all the required files for the DEMO DISK. You now need to repeat the above steps in order to extract X\_INSL1.TOS AND X\_INSL2.TOS onto the INSTALL DISK, using the (now blank) WORK DISKS 1 and 2 again.

If all goes well, you should end up with two disks containing the following files on each:

DEMO DISK  
 AUTO (folder)  
 EXAMPLES (folder)  
 OM (folder)  
 UTILS (folder)  
 OM.PRG (Object Modeller. Double click to run)  
 SIMPATHS (file)  
 INSTALL DISK  
 AUTO (folder)  
 DEMOS (folder)  
 C3D.PRG (executable file)  
 README (documentation file)  
 UPC.PRG (executable file)  
 UPL.PRG (executable file)

Make a backup of these disks and put them in a safe place so that you will not have to go through the extraction procedure again should they become damaged.

## Cold Revenge "Wrong Resolution" message

It seems that some people are experiencing a confusing error message when trying to play Cold Revenge, the multi-computer game that appeared on November's disk.

Apparently, after selecting one-player mode and choosing ships, clicking on DONE displays the error message "Wrong Resolution", even though the game was booted in the correct resolution.

The problem is that an incorrect configuration of ships has been selected, but instead of getting an error message that says incorrect configuration or something similar, you get the wrong resolution error, which is obviously confusing.

To get around the problem, you have to make sure you choose the correct ship configuration. As an example, consider a user wishing to play a one-player game with the user controlling one Federation ship against one Klingon ship, the procedure for choosing ships will be as follows:

1. Click on CA 1 to choose a Federation ship. The words COMPUTER LEADER 1 appear to the right.
2. Click on the words COMPUTER LEADER 1 to change it to PLAYER LEADER 1, indicating the ship is to be controlled by the user (this is the step most people seem to miss).
3. Now click on a Klingon ship (D7 1). The words COMPUTER LEADER 1 appear to the right. This indicates that this ship is to be controlled by the computer, so leave it as it is.
4. Click on DONE.

The game should then load normally with no sign of that annoying error message. Hopefully, if the author decides to develop the game further, a more user friendly selection process will be included.

## ORDER FORM

### Buy the STOS 3D manual for only £7.50

Get the most from our CoverDisk giveaway with this excellent user guide detailing all the STOS 3D commands with descriptions and examples showing how to use them in your STOS Basic programs.

Detach this order form and send it to Europress Direct, PO Box 2, Ellesmere Port, South Wirral L65 3EA.

I want to buy the STOS 3D manual for £7.50 Code No.9207

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Please allow 28 days for delivery



## COVERDISK

## Ditch Day Drifter

**A text adventure based on the antics of an undergraduate experiencing the age old tradition of Ditch Day**

**Programmed by:** Michael J. Roberts  
**Configuration:** All STs - med-res  
**Files:** X\_DITCH.TOS - Self-extracting archive

To complement our adventure feature in this month's issue, I thought I would put a good old text adventure on the disk to bring back those memories of the days when Infocom provided us with alternate worlds to explore and experience.

Ditch Day drifter is centered around the Caltech college campus during Ditch Day, a traditional part of the year when seniors leave the campus for the day, but not before barring the doors to their rooms with all manner of complex puzzles and devices called stacks.

You play an undergraduate who has to defeat the stack left by the senior who lives across the hall from you in an attempt to get into his room and claim whatever prize the

senior has left behind. Ditch was written using TADS (Text Adventure Development System) which is a adventure writing programming language available on shareware basis. Not having played a text adventure for a while, I found myself becoming quite involved in this game and for a moment, I had a strange feeling that the Infocom implementers were looking over my shoulder as I played (very strange).

Those of you who have experienced Infocom adventures will be pleasantly surprised at the way Ditch Day plays. It has a full sentence parser that accepts all manner of complex commands and even has the good old VERBOSE and SCRIPT commands.

**Programmed by:** Ofir Gal  
**Configuration:** All STs - all resolutions  
**Files:** X\_ALARM.TOS - Self-extracting archive

## The Alarm

**A simple alarm facility to help you keep track of that most ethereal of qualities - time**

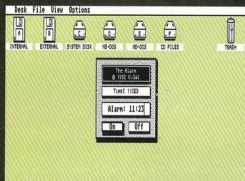
As the saying goes, "time flies when you're having fun". So, when you are enjoying the amazing ST User CoverDisk programs, I can imagine that time must travel at light speed.

Therefore, The Alarm will provide you with some way of jolting yourself back to the mundane reality of life to partake in such trivial and unimportant things such as having to eat or go to bed.

The Alarm is a desk accessory that you must place into the root directory of your boot disk and is then available from the Desk menu. To set the alarm, simply select the accessory, then type in the required time (in 24-hour format) then click on OK or press the Return key.

Make sure you have set the system time correctly first using any control panel like Atari's own XCONTROL. When the time reaches that specified by you, the alarm will go off.

At this point, there's no need to throw your ST against the wall to stop it - simply clicking and holding the left mouse button anywhere on the screen will do the job.



*Alarm is accessed via the Desk menu. Once selected, just type in the time you wish to be notified*

## Ymodem-G (Batch)

**A file transfer protocol that claims to outperform many of the other protocols available**

**Programmed by:** Robert McKeown  
**Configuration:** All STs - all resolutions  
**Files:** X\_YMG125.TOS - Self-extracting archive

Ymodem-G is claimed to be one of the fastest protocols to date and will outperform Xmodem, Ymodem, Ymodem Batch, Kermit, Sliding Windows Xmodem and even Zmodem. The protocol uses a 16-bit CRC to make sure that your data is transferred correctly.

One drawback of Ymodem-G though is that if an error occurs, the transfer is aborted and it is therefore really only suited to modems with built-in error correcting capabilities (or a null modem).

One of the omissions that I find when using other transfer protocols is the lack of a average speed indicator showing the average speed of data transfer in characters per second (CPS) and also a graphic indication of the remaining time left until the transfer is complete. Thankfully,

Ymodem-G has both such niceties with a status bar and numeric percentage showing overall progress and average CPS throughput.

Ymodem-G is a TTP type program and can be used with any terminal program that allows the use of external file transfer protocol utilities.

**YMG's comprehensive status display complements the fast transfer speed making it an effective alternative to the other protocols available**



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When you buy your new Atari 520, 1040 or Mega STE computer from Silica Systems, we will give you an additional £324.75 worth of computer 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 TT, we will give you 10 days holiday hotel accommodation for you and your family to enjoy a break at home or abroad.

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 2mb MEGA STE (see text)

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**RRP:** £449  
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\*Does not include 1st Word

**INC VAT - Ref: STC 8300**

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The Music Master Pack features one of the most popular computers used by musicians for home and professional studio use. PPO 24 is a complete performance environment for the professional musician. The included MIDI Recording and Editing System (MRES) and PPO 24 is used by many top musicians including Eric Slick and Phil Collins. PPO 24 offers the ability to write and compose music in 24 tracks simultaneously, and then apply real time editing to recording mistakes.

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**HARDWARE:** £299.99  
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**Total Value:** £774.74  
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**SILICA PRICE:** £299.00

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**The Falcon Has Landed!**

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# STOS 3D basics

**A**t one time, producing a good quality game incorporating 3D graphics meant having to master the complexities of matrix arithmetic and also having a good understanding of machine code programming.

Now, with the combined help of STOS Basic and STOS 3D, the ability to produce good quality 3D games is at the fingertips of everyone with a sound understanding of STOS Basic programming.

STOS 3D provides all the necessary tools for creating 3D objects as well as taking away the need to understand the mathematics behind all the calculations required to produce 3D graphics.

STOS 3D installs all these 3D commands to manipulate 3D objects into STOS Basic which can be easily called from your program.

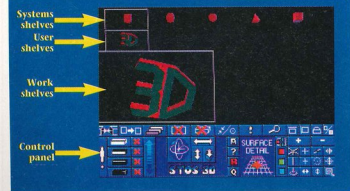
As soon as you have extracted the STOS 3D files from our CoverDisk (refer to Disk pages for details on extracting STOS 3D) you should have two disks marked Install and Demo. The first thing you should do is to make a backup of these disks.

## Working copies

It is also wise to backup your STOS Basic disk and Compiler if you have them, as STOS 3D will require working copies of these to install itself onto.

To run the install program, simply put the Install disk into the drive and reboot your ST. The installation program should then automatically load and you will be presented with the installation menu screen showing three selections - READ ME, UPDATE and INSTALL.

Clicking on READ ME will give a brief explanation of the 3D installation disk. Clicking on UPDATE will allow you to update your current version of STOS Basic and Compiler to the latest version (STOS Basic and Compiler versions prior to 2.6 will need to be updated).



*Darren Evans guides you through the installation and the basics of using this months amazing giveaway - STOS 3D*



The Install Program main menu where you can Update STOS Basics and Compilers prior to version 2.6 and also Install STOS 3D

## Getting to know STOS 3D

To help you to get the most out of STOS 3D, we will be running a tutorial over the coming months showing various techniques of programming with STOS 3D.

Also, there is a full ring-bound and comprehensive STOS 3D manual available which lists all the STOS 3D commands and their syntax as well as including comprehensive documentation on some of the more advanced commands and techniques.

Should you produce what you think is the best 3D game in the world, be sure to send it in to us! You may find your masterpiece appearing on our CoverDisk. So what are you waiting for? Get 3D-ing!

Clicking on INSTALL activates the installation procedure and places the 3D extension onto a copy of your STOS Basic and Compiler disks.

If you have a version of STOS prior to 2.6, now's the time to stop right here and follow the instructions on "Updating STOS Basic and Compiler".

STOS 3D should only be installed on v2.6 or higher. Those of you with v2.6 or higher should load up the Installation

program on the STOS 3D Install disk.

Once the main menu appears, click on INSTALL. You will then be prompted to place a backup of your STOS basic disk into Drive A. It is then just a matter

of following the on-screen instructions.

Once the 3D extensions have been installed on your STOS Basic disk, you will then be asked if you have the STOS Compiler. If you do, you will be asked to place your Compiler disk into drive A.

The heart and soul of STOS 3D is the Object Modeller (referred to as OM from now on). It provides you with a comprehensive and easy to use set of tools and utilities for designing and constructing all your 3D objects.

To run OM, locate the file OM.PRG and double click on it. OM will then load and an initial intro screen will appear. Click any key and you will be presented with OM's main display.

OM is quite a large program so if you're short of memory, try either running the OM from an AUTO folder or removing any accessories that you have in memory. OM uses an extra 32k when run from the ST's Desktop.

OM's main display is divided into two areas. The upper area is the display area and is a window into the 3D world where objects you create and assemble are displayed.

The display area is further subdivided into 12 shelves. Each of these shelves can hold one object. The system shelves contain the five basic shapes that constitute the building blocks for your objects.

At first, five basic building blocks may seem a little restrictive, but you are able to change the shape of each block and combine them to create completely different blocks. Below the five system shelves are the user shelves. These spaces provide you with a place for you to place work in progress, such as cus-

## Updating STOS Basic and Compiler

You should only install STOS 3D on v2.6 or higher of STOS. If you have a version prior to this, there is a free update facility available from within the installation program (UPDATE) that comes with STOS 3D.

It is essential that older versions of both the STOS Basic disk and the Compiler are updated using this facility before selecting the install procedure.

If you do have a STOS version prior to 2.6, click on UPDATE from the main menu and follow the instructions displayed on the next screen.

The update process is completely automatic. If you have your STOS programs on a hard disk, you will have to update a floppy disk-based copy first, then copy the updated floppy disk version onto your hard disk.

After your STOS Basic disk has been updated, you will then be given the option of updating the STOS Compiler. If you have the STOS Compiler, type Y at the prompt and follow the instructions on screen.

Make sure you only update a backup of your STOS Basic disk first. Check that the updated version works, then update your original STOS Basic disk. Users of STOS Compiler should follow the same procedure.



tom blocks, half finished objects etc.

The remainder of the upper area is divided into two large work shelves. All of the modelling functions available to you from the control panel operate on these two areas.

The lower area is the control panel consisting of the many controls, tools and utilities that simplify the creation of your 3D worlds and objects. You may notice that except for the system blocks, the display area is blank and the actual shelves are not outlined or displayed in any way.

To see where the shelves are, or to select a shelf, simply hold the left mouse button down and move the mouse pointer around the screen. Each of the shelves will be highlighted as you move onto them. Familiarise yourself with the positions of each shelf.

Let's actually do something interesting now and manipulate one of the system blocks. One of the main functions you will use when creating objects is the Copy tool.

This allows you to copy the contents of one shelf to another and the procedure for doing this is as follows. Click the left mouse button on the shelf you want to copy from, then click the left button on the shelf you wish to copy to.

Now click on the Copy icon in the control panel and you will see that the object that was in the first shelf you selected is duplicated in the second shelf you selected.

Test this by copying the Cube system block into one of the two large work shelves. You will see that the Cube appears in the work shelf and is larger than the Cube shown in the system shelf. This is to facilitate easier and accurate manipulation when moving or joining objects.

To remove an object from a shelf, you use the Object Delete tool. To delete an object, click on the shelf containing the

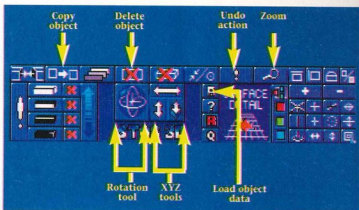
object you wish to delete, then click on the Delete icon. If you accidentally delete an object, you can click on the Undo icon to reverse the action. The Undo icon works for most functions that change the object in any way.

Once you have the Cube object in the work area, you are free to manipulate it in any way. To view the object from various angles and positions, you use the Rotation tool and the XYZ tools. This collection of icons lets you move and turn the object in the selected window to any position required.

To rotate an object, select the work area it occupies and hold the left mouse button down over the Rotation icon. Moving the mouse left or right will then rotate the object about the y-axis while an up/down movement rotates it about the x-axis.

The XYZ icons let you move the centre of a shelf in the direction indicated by the arrows. The left/right arrow icon moves the centre of the shelf in the x-axis, the up/down arrow moves the shelf in the y-axis and the last arrow moves the shelf towards and away from the observer.

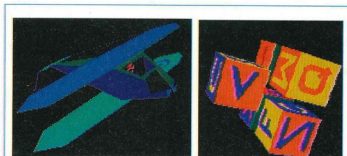
Each click of the left button on the arrow points moves the shelf a pre-set distance in that direction. Holding the



right mouse button down over any XYZ tool while moving the mouse will allow continuous movement using the mouse in that direction.

Other object manipulation icons allow you to stretch and re-size objects to form completely different shapes for building with. Such actions are performed by the Stretching tools.

These tools let you stretch an object both horizontally and vertically. To stretch an object horizontally, hold the left mouse button down over the horizontal stretch tool and move the mouse right to stretch and left to shrink.



Three examples of the kind of objects that you can create with STOS 3D and the Object Modeller

## Backing up a disk

The following procedure is followed for backing up a disk using the ST's built in copying facility. A basic understanding of Desktop operation is required - if in doubt, refer to your ST's manual for instructions.

1. Boot up the ST's Desktop
2. Place a blank disk into drive A and format it using the sub-menu command for formatting from the file-menu.
3. After formatting is complete, remove the blank disk and place the disk to be copied into drive A.
4. Drag the drive A icon onto the drive B icon.
5. Follow the on-screen instructions displayed.
6. Repeat instructions 2 to 5 for any other disks that require backing up.
7. Store the master disks that have been copied in a safe place.

## STOS 3D commands

STOS 3D provides more than 30 new commands to your STOS Basic language, allowing easy manipulation of complex 3D objects. Here are just a few of them.

Td SCREEN HEIGHT	Sets 3D screen height
Td REDRAW	Redraw visible objects
Td CLS	Fast screen clear
Td DIR	List object files
Td LOAD	Load 3D object
Td OBJECT	Create 3D object
Td MOVE	Move an object
Td MOVE REL	Move object relative to current position
Td POSITION	Read object's world co-ordinates
Td ANGLE	Set object's attitude
Td ATTITUDE	Read object's attitude
Td BEARING	Calculate bearing and range of object
Td RANGE	Read range of object
Td COLLIDE	Detect a collision
Td WORLD	Convert local co-ordinates to world co-ordinates
Td SET ZONE	Define spherical zone around object

## A whole new language

Once you step into the world of 3D graphics, you are exposed to a completely new set of buzzwords. Here are just a few examples of the 3D tech-speak that you will encounter.

Axes:	The three scales used to measure distances in a particular direction. The X axis runs left/right, the Y axis runs vertically and the Z axis points into the distance.
Co-ordinate system:	A set of axes usually at right angles to each other.
Local co-ordinates:	The co-ordinates based around a specific object.
Observer co-ordinates:	The co-ordinates based around the viewpoint.
Viewpoint:	The position in 3D space from which the view into the 3D world is seen.
Projection:	The result of moving a point or object to another co-ordinate system with a different number of dimensions.
Rotation:	Moving a point or object through an angle relative to an axis of rotation.
Translation:	A change in position.
Vertex/Vertices:	Any area on an object where lines meet at a point.

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Over the years a certain type of game has become increasingly popular – the adventure or role-playing games (RPGs). People play them because they get a chance to lose themselves in a completely different world or dimension.

Schoolboys run home from school and turn into detectives, business people get home and turn into snarling vicious barbarians. The appeal of this type of game is astounding – people of all ages seem to enjoy a good adventure.

There are several types. First is the dungeon or maze game, where the would-be adventurer walks around and explores a dungeon or maze. *Dungeon Master*, *Knighmare* and *Captive* are just a few good examples.

The second is not strictly an adventure, but an RPG. The "god" game – examples are *Populous*, *Mega-Lo-Mania*

and *Civilisation* – is where the adventurer take on the role of God and alters whole nations and worlds.

The third is the interactive adventure game such as *Monkey Island* or *Lure of the Temptress* where the computer user takes control of the "hero" and has to save the world by pointing and clicking the mouse around the screen.

The sheer addictiveness of this type of game is unbelievable – people get genuinely frustrated by not being able to complete such games, although it should take them a couple of months to get anywhere in a game like *Dungeon Master*.

The games here have been picked by personal preference only and no doubt most of you will have your own favourites, but if you're on the look out for a new adventure then you won't go wrong with these.



Hmm, how do you get past that tree? That twig could be a clue



# Amazing

Jonathan Maddock wields his sword, grabs his maps and gets down to business in the world of fantasy games

## Dungeon Master • Psygnosis

We definitely couldn't have an RPG/adventure roundup without including the game that practically started it all off. *Dungeon Master* is without a doubt one of the classics.

If there was such as thing as a computer equivalent to Desert Island Discs then *Dungeon Master* would be included on everyone's list. The game way back then caused many people's jaws to fall agape at the sheer brilliance of the idea.

It actually appeared at a very opportune moment because at around the same time, original board role-playing games were the "in" thing.

So, when *Dungeon Master* arrived, all those RPG fanatics let out a little yelp of joy. There was no need to throw any dice or take hours setting up the board – you were instantly transported to a world of trolls, dragons, wizards and warriors.

There was a definite feeling of you actually being in the dungeon and in control of your destiny. The game was very addictive – even non-RPG fans were hooked.

A friend of mine almost sent himself mental trying to complete the game. Warnings should have been plastered on the box: "Dungeon Master can seriously damage your health".

The game is a tale of a wizard, Grey Lord, who in his old age forgets a spell and recites it wrongly, in turn creating Chaos, the evil side of Grey Lord who is wild and uncontrollable and who now seeks to rule and destroy civilisation.

Chaos has taken control over the dungeons which houses the Power Gem – the only thing that will kill Chaos. Chaos also controls the Firestaff, but doesn't know how to use it.

It's about this time that a brave muscle-bound warrior leaps in and shouts something like "I'll save the world" or "Have no fear, I am here" and thrashes his sword about, killing all the evil in the land – but alas it is not yet that time.

The task to recover the Firestaff is all down to the Grey Lord's

little apprentice, Theron.

To be honest Theron not exactly brave warrior material, so inside the dungeon there is a hall of champions with 24 of the land's greatest champs.

Theron must choose just four of these and using the Grey Lord's magic he must control them through the dungeon. Throughout the dungeon there are wave upon wave of fiendish puzzles for Theron's team to solve.

So, there you have the story of *Dungeon Master*, the game that spawned a ton of copy-cats, some of which were good and some of which were awful.

For the purpose of this feature I booted up *Dungeon Master* once more and was amazed to see that it had lost none of its original appeal or playability. Granted the graphics do now look a little bit dated, but all in all it is still the greatest adventure game that ever was.

You can still get the game from *Psygnosis* and the sequel *Chaos Strikes Back* is lumped in too – a bargain if I ever saw one.



Mummies and ghouls get nasty in *Dungeon Master*

## Populous 2 Electronic Arts

I know we said that this was an adventure feature, but it's also an RPG feature. Role-playing games are simply games where you play a role, and many people like nothing better than to settle down and play the role of God.

Well, thanks to *Electronic Arts* and *Bullfrog*, you can have that chance with a game called *Populous*. However, we're going to concentrate on the sequel, *Populous 2 – Trials of the Olympian Gods*, because it's a lot better than the original. But first, a tale of lust...

The god Zeus's lust for mortal women was legendary, but he never seemed satisfied coming to them in the form of a God (big fella, white beard, long hair – you know).

So instead he chose other forms such as a swan and if that failed he turned himself into a demon and had his wicked way with his women.

The hero of *Populous 2* was conceived in one of these girl-meets-demon encounters. Yep, you play the part of one of Zeus' wildly-sown outs.

To cut a long story short, after about 20 years, you decide you want to join the Pantheon, a place where gods get together and have a drink and a laugh.

Zeus, being the fussy chap that he is,

## Knighmare • Mindscape

Dungeon Master as mentioned before was the game that spawned a thousand sequels. Most were useless, but over the years there have been some that have almost been worthy of the Dungeon Master crown, and Knighmare is one of them.

The game is loosely based on the children's adventure programme. The TV series is a rather extravagant affair with impressive computer graphics created on very large computers, so how will the ST reproduce those sort of graphics?

Well, it's simple... it doesn't. I said the game was loosely based on the TV series, and I meant it. The only things incorporated from the TV version seem to be the main characters, Treguard and Pickle, who appear at regular spots throughout the game.

So, you don't get four spotty kids wandering around dungeons shouting "move a little bit to your left, Malcolm" and other such messages, all of which will confuse you if you have never seen the programme. In

the computer version of Knighmare you are in direct control of four adventurers, rather like Dungeon Master.

There are four quests to be completed in order to gain the knowledge to defeat a chap called Lord Fear and banish him from the earth altogether.

The way Knighmare is set out is unbelievably similar to Dungeon Master, but at least it's simple and not confusing. The main screen contains a main view window which is where all the action takes place.

To the right there are all the control icons. The team icons allow you to swap between members of your team easily and efficiently, and also keep a check on their health, magic and stamina. The movement icons allow you to move your characters around the screen.

Finally, there are the hand icons which show you what your character is holding in his/her hands. Clicking on these when facing an adversary enables

your team to fight.

Knighmare does have much better graphics than Dungeon Master and is just as playable. If you completed Dungeon Master a long time ago, then I strongly suggest that you take a good look at Knighmare - it's quite possibly Dungeon Master for the '90s.



Selecting your characters in Knighmare

# adventures!

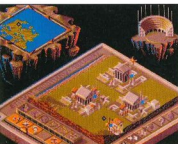
decides that anyone who wants to join the Pantheon has to survive the trials of the Olympian Gods.

What it all basically boils down to is that you have to defeat the 32 divine opponents who rule the 1,000 worlds of Populous 2, but the ultimate goal is defeat your father and supreme master, Zeus.

Defeat him and you can take your seat among the gods. The tasks are simple. It's a straightforward battle between good and evil populations, with you in charge of the good guys.

There are a number of people wandering the land seeking to establish well-populated settlements. Now they need shelter against the climate and they'll settle on any flat piece of land that will support them.

Once settled they will create dwellings. Once dwellings are created people will start to multiply. To defeat the evil population you will need more people than your opponent. So what you have to do is try and delay or stop the evil ones. This is the good bit.



Control whole populations and...

You have at your disposal an awesome arsenal of powers and disasters. These range from whirlwinds to earthquakes to volcanoes to tidal waves to practically any nasty disaster that you can think of. I can already see you grinning inanely and rubbing your hands with glee like a power-crazed psycho. Good isn't it?

There you have it, the ultimate God game so far. It's got wonderful graphics, brilliant playability and its addictiveness is way beyond danger levels.

If you fancy taking control of a whole population, then Populous 2 is one game that you have to have in your collection - that's if you haven't got it

already. Hey, what the hell, it's that good, go out and buy it again. Role players have never had it so good.



...make friends with God in Populous 2

## Mega-Lo-Mania • Virgin

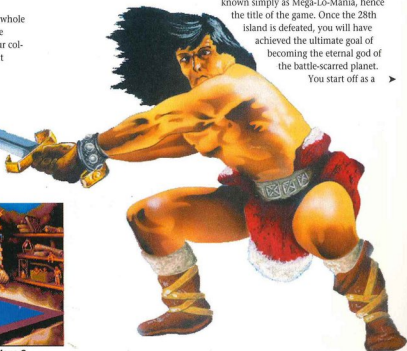
If Populous 2 is the "serious" god game then Mega-Lo-Mania has got to be the funniest god game. Programmed by those wacky lads at Sensible Software who were responsible for two of the biggest games of '92, Wizkid and Sensible Soccer. Mega-Lo-Mania is where you choose to be one of four would-be-gods, each seeking to gain

total supremacy over a planet.

Each of the four would-be-gods controls a race of people who slowly advance in weapon and defence technologies and fight each other for control of the islands on the planet.

The player wins by taking control of all 28 islands situated around the planet's surface. The 28th island is known simply as Mega-Lo-Mania, hence the title of the game. Once the 28th island is defeated, you will have achieved the ultimate goal of becoming the eternal god of the battle-scarred planet.

You start off as a





◀ cavemen, but this is where most of the fun comes in, because depending on how good you are, you can have your cavemen fighting with medieval cannons and the like.

To give you more of an idea of how the game works I'll run through what a normal game of Mega-Lo-Mania entails. You start off on your section of island and your first task is to build some weapons.

You decide to create a stick weapon, but now it's decision time – you have to decide how many men you want to design your stick. More men means that the job gets done quicker, but you are susceptible to attack from the opposition.

By now the stick should be ready. It's a defensive weapon, so you place four stick men on your tower turrets to defend yourself. Now, using the same procedure as before, you start making a rock weapon to attack the enemy.

Once you've done that little task it's time to attack the enemy. There are only

limited resources on the planet, so some of your men will carry rocks and some won't, but you will still win the first battle.

This is because on the starting levels the opposition is a bit easy, just to get you into the swing of things – but you can rest assured that it won't be so easy from now on.

Now this all sounds very boring indeed. Well it does on paper, but you have to actually play the game to feel exactly what it's like because words simply don't do Mega-Lo-Mania justice at all.

This is one of the most enjoyable games I have ever played. I think the



Mega-Lo-Mania, Fun with a capital 'F'

reason is because the whole game is so nicely presented. The graphics are more mouth-watering that a big packet of Opal Fruits and I'm not even at the best bit yet, which is the sound. There's a



Go power crazy in this wacky "God" RPG

whole lorry-load of samples which add that extra bit of atmosphere to the game.

The sound was recorded by professional radio actors especially for the job. All the opposing team leaders speak to you throughout.

Also, your own team members make reports to you when things happen. The funniest voice has got to be your chief designer who can't pronounce his "r's", so the phrase "the design's ready" comes out as "the design's weddy". I can guarantee it'll raise a smile.

Mega-Lo-Mania is undoubtedly one of the most fun RPGs out today. It is one of the most original and different computer games you'll ever play.

## Heimdall • Core Design

OK, so up to now we've had a couple of dungeon-wandering RPGs and a couple of god games, but here's something completely different, but still with an RPG feel to it.

Core Design's excellent Viking game Heimdall has a certain RPG feel to it, but it's definitely a cross-breed because it's got lots of arcade bits in it.

Anyway, the story behind Heimdall goes a little like this. It is prophesied that the evil god Loki will come and destroy all the good gods and will scatter the weapons of the gods throughout the Viking lands, so that the good gods don't have a chance of winning.

Not ones to rest on their laurels, the good gods thought something like this must happen and so they created Heimdall, the hero of the game, a long time ago. The reason was simple – Heimdall would have to find the weapons for the good gods.

Fairly unbelievable I know, but hey it makes a great game, so don't complain. So, our hero Heimdall sets off throughout the Viking world trying to find the three weapons, so that the good gods can tell Loki, the evil god where to go and then peace, love and happiness will return to the world once more.

Unfortunately for Heimdall, finding the weapons is no easy task – they're guarded by many fearsome monsters and fiendish traps. Heimdall, being the intelligent Viking warrior that he is, decides to take some chums along on his quest and heads out into adventure land. In the main part of the game

you control Heimdall and his crew as you explore all the islands which make up the Viking world. The land is separated into three – the Land of Men, the Land of Giants and the Land of the Gods.

In each land you will find one of the mystic weapons, but there are plenty of puzzles to be solved before you even get a sniff of one of the fabled weapons.

Now, Vikings aren't you're friendliest bunch of lads and lasses and it's more than likely that on your travels you will meet some fearsome beastie that won't let you go about your business. So, it's fight time – axes are sharpened and helmets are donned.

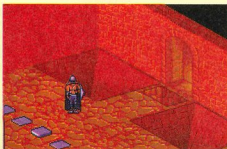
The combat section is controlled via the mouse. The action is seen from the first person perspective and more often than not you'll find a really ugly creature facing you. Click on the weapon you want to use and then click on the Attack icon and battle will com-

me. Timing is of the essence, as your enemy will dodge any mistimed attacks.

Magic can also be used to see off your opponent, but it's not half as much fun as swinging a blood-soaked axe about the place. The combat sections in Heimdall are great – your opponent is wonderfully animated and it all adds up to tons of exciting gameplay.

In fact the graphics throughout are all really rather good – very similar in parts to the Dragon's Lair series. The attention to detail really brings the game it to life.

There isn't much sound, but what there is quite good. If you're adventure mad and looking for something slightly different then Heimdall could well be the game your heart is searching for. Check it out, it's a cracker.



There's no norseing around in Heimdall



Kill that beast and the treasure will be yours...

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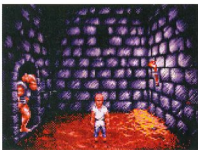
## Lure of the Temptress • Virgin

OK, two god games, two wandering around a dungeon games and something a little different – what are we missing? Yes, we're missing the interactive adventure game. That was, until Lure of the Temptress.

You are Diermont, a hero who'd rather not be a hero, but instead would rather put his feet up and enjoy a quiet life. A quiet life you might like, but you can't have everything.

After decades of unrest, the king has united all the warring factions in his kingdom and everyone goes around with smiles on their faces and all love each other and peace reigns throughout.

Well, almost throughout – there is just one place left where peace doesn't exist, a remote region around a town called Turnvale. A revolt has just taken place in Turnvale and the person behind it is an apprentice sorceress called Selena. Now the King is not



First job is to get out of prison...

happy, so he calls upon his best horsemen and heads off to Turnvale. Unfortunately you work for the king and you have to go with them.

As the riders approach Turnvale they encounter a welcome – not from harmless peasants, but a whole army of disgusting creatures known as the Skorl who are all armed to the teeth.

The battle which follows is very unpleasant and all the horsemen and the king are slaughtered in a bloody battle. Diermont, however, being the non-hero type, falls off his horse and hits his head rather hard.

Everything goes a bit blurred and it's lights out. Diermont wakes up and finds himself in a cell with a major headache. His first task is to get out and so the adventure begins.

Right, first things first. Lure of the Temptress is quite possibly the first "virtual theatre" game in

the entire history of computer games. What? You don't know what "virtual theatre" is?

I'll explain. In normal adventure games, the characters just seem to appear and then disappear never to be seen again. Well in Lure of the Temptress each and every character leads his or her own little life.

Each character moves independently on their own free will, so on the day they'll walk around and do jobs and at night they'll go to bed. You get the idea. Anyway, this "virtual theatre" makes the whole game that little bit more realistic.

Lure of the Temptress is entirely mouse-controlled and is very easy to use. You don't actually know what you're supposed to do, but that's the

whole point of adventure games – to work your way through them until you finish your ultimate task and complete it.

Lure of the Temptress is one of the best interactive adventure games you can buy for your ST. The graphics are brilliant to say the least with some wonderfully drawn backdrops.

The sound is surprisingly good and adds some atmosphere to a game which is packed full to the brim with humour. Nothing astoundingly funny, but most of it will make you smile.

Lure of the Temptress is very addictive and will give you months of enjoyment. Monkey Island 2 never appeared on the ST, but Lure of the Temptress is a worthy substitute.



Wonder around town and talk to the local drunkards



## Cruise for a Corpse • US Gold

If you fancy something completely different, then Cruise for the Corpse could be the adventure game you're looking for.

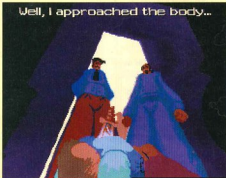
You play the part of the hero, Raoul Dusentier, a detective who looks like Hercule Poirot, but taller. The story goes that way back in the roaring twenties, Raoul was hunting down a nasty criminal who was hiding in a restaurant and rather than take ages searching him out, he decided to arrest everybody in the restaurant.

Not exactly police procedure, but it gets the job done. Naturally everyone in the restaurant was a bit perturbed by Raoul's unorthodox police methods.

Everyone, that is, except a Greek fella called Niklos Karaboudjian who stood up and applauded Raoul's behaviour. Obviously he was nuttier than large bag of dry roasted peanuts. Mad Niklos was so impressed, though, that he invited Raoul on a luxury cruise.

Raoul went on the luxury cruise and no sooner had the ship left port than a murder had taken place. Mad Niklos was the unfortunate victim. Raoul, being the only detective, felt duty-bound to solve the case.

On board the ship are a group of friends and colleagues of Niklos, all of whom are now suspects. It's Raoul's job to question these suspects about the murder. He can also pick up clues from eavesdropping on



There's been a murder, Lewis!

the others, or by inspecting objects that he finds. You move Raoul around the ship using a point and click interface.

As you can see from the screenshots, Cruise for a Corpse is a stunner. The graphics are big and beautiful and better than anything you'll see in any other adventure game. The animation is out of this world, it's smoother than a baby's bot. It's not incredibly fast, but this type of game doesn't need to be that quick.

The game does have an incredible atmosphere – it's

almost like reading an Agatha Christie novel, where everyone is a suspect and anyone could be the killer.

At first the game seems to be fairly boring – you can walk around the ship for ages and not find any clues whatsoever. Stick with it though and you'll be pleasantly surprised.

Cruise for a Corpse is one of those games that makes people sit up and take notice of what the ST is actually capable of.

The game is intriguing and entertaining and couple that with the fantastic graphics and sound and you get an all-round addictive interactive adventure game.



Collect the clues and solve the murder



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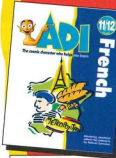
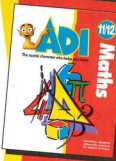
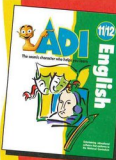
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## Space Crusade • Gremlin

◀ This is one of my personal favourites. Space Crusade is to me what Elite was to space action games – an accurate conversion from the board game.

You are the controller of a group of five space marines. There are three groups to choose from. You start off at quite a lowly rank – it is your aim to make you way up the ranks by completing a number of missions on board a space station swarming with aliens.

I can only describe this as a cross between Dungeon Master, Gauntlet and Alien Breed. You view the playing screen from either a plan or an isometric view depending on what is going on at that certain time. For the most part the isometric view is just to illustrate what's happening to you or the aliens.

There are many different missions you can be sent on from seek and destroy missions to find and collect. But as in any space game there is no easy way around things – there are the usual nasty aliens trying to stop you dead in your tracks.

You have four normal members and one leader. Each has a different weapon that is attuned to a different job. Usually you have a sharp shooter, a hand-to-hand combat man and two characters equipped with guns that can level a house.

But big isn't everything y'know – these weapons have to be taken into consideration when on the move. If you've got a hulking great machine gun you're not going to be able to run a marathon – the bigger the weapon the less moves the character can have.

When it comes to battling, the scor-



Choose your marines and go to battle

ing system works in a similar manner to a proper role-playing board game. The computer will role a dice for you, the result determining the success of your attempt at harming the other person – the higher the better.

When it's the alien's turn to have a go, the computer will go through the exact same procedure, first moving the character then shooting at somebody and so on. You can watch it all happen but it doesn't get tedious. On the whole, the alien's moves are short and to the point, not to mention effective.

To control all of your characters you have to use the icon bar at the bottom of the screen. First click on the character you are dealing with then click on the action which you want him to perform. If you want the character to move or

fire, the area where you can move and the targets you can choose will be highlighted. It sounds like quite a laborious and slow task but after a bit of playing most of the things you do in the game will become automatic to you and gameplay will speed up.

Graphically the game is smooth. The characters on the screen don't get confused and the environment is well laid out. The only really impressive animation part is when the game flicks to the isometric view and you see routines like your men being reduced to pairs of smoking boots and so on.

Space Crusade has smart graphics, tons of playability and is that addictive you'll be playing it for weeks on end. It is a terrific adventure/RPG/strategy game.



Roll the dice and kill those evil aliens

One of your marines comes to a sticky end



Board game in brilliant computer game shocker



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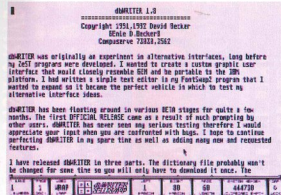
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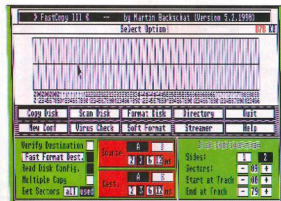




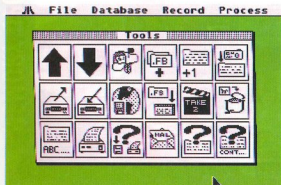
Howdy, partner! Fancy a few hands of Coyote Dave's Poker against some treacherous opponents? Stop right this way...



dWRITER - you might just come to love it, in spite, or maybe because of, its quirksiness



Copy and format floppy disks much more quickly with FastCopy III



Fastbase 2.4 - capable of storing graphics in .IMG format

# Great software

If you're a newcomer to the ST, or perhaps fairly experienced with the machine but you've so far only used commercial software, you may be wondering just what public domain, shareware and other types of free or extremely inexpensive software are.

So, you've come to the right place! This and the next five pages of this issue of *ST User* is all about the cheap but effective and very useful software you can get for your machine without busting the bank.

And, for the more adventurous, there's even some advice about setting up your own PD and/or shareware library. Let's get started with a description of the various kinds of software available in these amazingly comprehensive categories:

**Shareware:** This is a marketing concept based on the "try before you buy" principle. Apart from the usually very modest duplication and postage and packing costs, plus a little bit of profit for the library that supplies the disks, you pay absolutely nothing until you decide you want to use the program fairly regularly.

If you do find a program useful, then the onus is on you to register with the author, or sometimes with the library that provided the program, depending on whether it acts as agent for the author.

Registration, which might typically be between £5 and £25, brings you a printed manual instead of the usually

less informative on-disk instructions, and the promise of future updates.

**PD (public domain):** This software is donated to the public by its owners, and is free apart from the library's small charge as outlined above. It is quite legal to copy it as often as you wish because it has no copyright.

**Freeware:** Like PD, there is no registration fee for this software, but the author does retain the copyright. The author may stipulate certain conditions, such as you must not alter the software in any way, although you can copy and use it as much as you wish.

**Charityware:** If you like the software and want to make use of it, you are asked to give a donation to a charity nominated by the author.

**Licenseware:** Part of what you pay the library for the disk goes directly to the author.

Apart for its cheapness - and that does not imply shoddiness! - there are several major advantages in opting for shareware and registering.

You can usually expect personal support from the author - and you can't get it more directly than that! - and you get full information about new versions of the program as they become available.

One thing needs to be made clear - you don't always get the full works when you initially send off for a shareware disk.

Some options may be disabled, or you



Freeze Dried Terminal - a little short of perfection, but still one of the best comms/BBS systems



Freeze Dried Terminal's RS232 config. screen

What is public domain, shareware and other kinds of almost-free software? How does the system work, and how do you, the software buyer, benefit? Richard Williams finds out

# free-for-all?

may find some useful file like a dictionary or the printer driver you need is missing.

Upon registration, the full suite of programs and files will be provided along with the manual. It may seem to you that you're being blackmailed into registering.

But remember the concept - it's try before you buy, and if you've no intention of buying but still want to use the software, you're bucking the system, and failing to support the spirit of shareware.

The programs are so cheap because the authors have few overheads. But it's obvious that if people fail to register in sufficient numbers, the author will be unable to continue - and in most cases, that would be a big loss for the ST community.

So how good is this super-cheap software? We looked at 15 of the more popular programs on the ST, and found the standard generally very high.

## Llamatron

Shareware • 512k

Author: Jeff Minter (UK)

Not your average shoot-'em-up, this. Hippy Jeff Minter, at home with a range of wild beasts on his Mid-Wales farm, is not the kind of guy to produce anything average.

Although written as a kind of send-up of the shoot-'em-up genre, it is, in fact a fast, frantic action game which will test your stamina and concentra-

tion. You fire at your enemies from the rear end of your llama. The aliens become increasingly far-out as the game progresses, and include Mandelbrot baddies, Coke cans and zombies.

Quite simply, it's a game which deserves the description s\*\*t hot in more than one sense of the expression.

## Coyote Dave's Poker

Freeware • 512k

1Mb recommended

Author: David Becker

Howdy, pardner, an 'welcome to the rear end of your llama. The aliens become increasingly far-out as the game progresses, and include Mandelbrot baddies, Coke cans and zombies.

Quite simply, it's a game which deserves the description s\*\*t hot in more than one sense of the expression.

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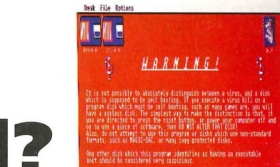
Howdy, pardner, an 'welcome to the rear end of your llama. The aliens become increasingly far-out as the game progresses, and include Mandelbrot baddies, Coke cans and zombies.

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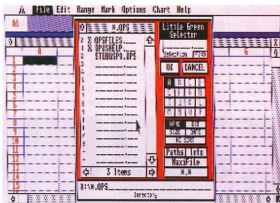
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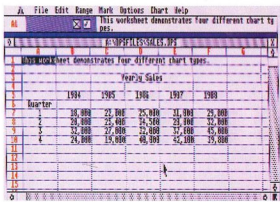
Freeze Dried Terminal's main menu



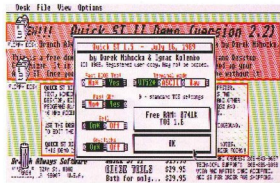
VKiller - If you value your software, don't take any chances!



The Little Green File Selector - seen here in action with Opus 2.2. LGFS is a vast improvement on the standard GEM file selector



Opus 2.2 - superb spreadsheet equally suited to office and home



Speed up your screen operations with Quick ST

► can be given. The superb interface shows a graphical display of formatting or copying as the job is done.

Running as a desk accessory, Fastcopy can be executed while you're using other programs, with obvious advantages.

## ST Writer v4.8

Public domain • \$12k

What do you want to do with a word-processor? If it's basic stuff like letter writing – even if they're business letters – do you really need to spend a fortune when you can get ST Writer for next to nothing?

It's nothing fancy, and looking at the ST Writer edit screen, you'd never guess wysiwyg had been invented. But it's very fast, efficient and effective.

A GEM front end has recently been added, but the speed of this great little text cruncher has been unaffected. Ascii mail-merge makes this a program of use

to organisations and businesses as well as home users, and there are many other features, including search, replace, tabs, block manipulation, columns and global formatting.

## dbWriter v1.8

Freeware • 1Mb or more recommended  
Author: David Becker

This is quite a unique wordprocessor. It's a weird sensation, dropping down menus simply by moving your mouse pointer to the top edge of the screen, with nothing written there to guide you to any particular menu.

But you soon get used to the idea of going to left (for disk and file operations), middle (for text formatting) or right (for miscellaneous functions) of the top boundary of the menu items you want.

For some operations, you don't have to use the menus – there's a command line at the bottom of the screen for,

among other things, loading and saving files, loading the dictionary, printing, and setting left and right margins.

I personally found dbWriter rather quirky – why, for instance, have a toggle switch on the command line which you can click on to toggle Caps Lock, when you can do it more easily from the keyboard?

Having said that, it's packed with features, including calendar and character, word, line and page count, and despite, or maybe even because of, its quirksiness, you might just come to love it.

dbWriter is specifically designed for the hi-res mono monitor. It is fully configurable and so, in theory at least, can be used with all STs.

## Fastbase v2.4

Shareware • \$12k  
Author: Andrew Brown

Fastbase has a very easy to use icon panel interface – but don't let the ease of use lead you to the conclusion that

this is a very simple database. Once you begin to explore the menus, you'll find the real power of this program, which can store graphics in IMG format along with the obvious text.

A programming language is included, which makes it possible to automate certain tasks which could otherwise be tedious. There's a 20k limit on file size in this shareware version, but the limit is lifted when you pay your registration fee of £20.

## Supercard v2.4

Shareware • \$12k

Author: B.Ware Software

Described as an electronic card file, this database is ideal for indexing the likes of CD and video collections, keeping customer records or details of an organisation's membership.

Searches can be made on specific details, and macros assigned to find a

# Who'd be a PD librarian?

Easy, isn't it? Get together a collection of a few hundred ST PD and shareware disks, place an advertisement in a few favoured publications, then just sit back and wait for the orders to flood in.

Well...er...yes. But don't give up your day job just yet – and don't be surprised if you're still waiting for your new enterprise to creep into the black after a year or more.

Setting up an ST PD and/or shareware library is not a venture for those who want to get rich quick, or even slowly. But wait, I here you cry – what about all the libraries who advertise regularly in ST User and other ST magazines – surely they must be making a fortune?

No, they're not. Some are making a reasonable living, and most have other forms of income, like programs for other machines, commercial software and in some cases other, full-time jobs.

The successful ones – like Goodman International, run by the genial Mike Goodman (42) and his wife, Jean, from an extension in their detached bungalow in Longton, Stoke-on-Trent – have been in the business for several years, and have established an excellent reputation for quality and service among an extremely wide group of users.

## International

In Mike's case, about one in five of the customers is from abroad. That's partly why his firm recently changed its name from Goodman Enterprise to Goodman International.

Mike says the equipment required for running the business is really quite simple. Apart from the obvious computer hardware, a modem and good comms program are vital for scouring other libraries' bulletin boards, many of them in the US and Germany, for the latest ST programs.

A dot matrix printer is fine for both disk and address labelling, though an inkjet might make the job look that little bit more professional.

As for duplicating – you need nothing but your ST and some disks to copy onto. "You don't need duplication machines," says Mike Goodman. "The whole thing with PD and shareware is not so much an individual program which sells in quantity, but the collection you have."

"You might have a disk which only has two customers a year. So it's not really about quantity, but having sufficient programs to meet everyone's needs, and the quality of the service you provide."

Mike says there is an important distinction between PD libraries and what he describes as "shareware services".

"Shareware is a method of distribution, not a type of software. It has to be presented in the right way to the customer."

Mike is a member of the Association of Shareware Professionals, an American organisation – it's America that the bulk of available shareware comes from, and where the idea first started – which looks closely at the standard of a firm's catalogues, its method of presentation and the way it promotes shareware, before granting membership.

"Shareware is very big in the States," Mike says. "They even have representation in Congress now."

He says that in many cases shareware is now presented better than commercial software.

"I personally believe wholeheartedly in the shareware concept."

The thing which encourages those who try shareware to register more than anything else is a good update service, whereby users automatically receive new releases of the program.

And even though the on-disk documentation is often quite good, receiving a full, "hard-copy" manual is also a major plus for those who invest in registration.

"People may pay a little bit more for our service than they do for certain others, but it means we can afford to scour the shareware bulletin boards and provide a first-rate service that you just can't do otherwise," Mike says.

A single disk from Goodman International is £2.75. Two to nine disks are £2.50 each, and ten or more, £2.25 each. His printed shareware guide, listing many of the vast range of programs available plus other useful information, used to cost £1.95.

However, his latest guide costs £2.95 and has a new, loose-leaf format, which means that updates can take the form of an extra or replacement sheet or two which customers can slot in.

Despite its higher price, it is more environmentally friendly and should work out cheaper for the customer in the long run.

Depending on how much PD, shareware and any other economy-ware a customer buys, it often works out cheaper to become a member of, or



## Registration - all present and correct?

So how responsive are shareware software authors when you post off your cheque to them, together with a note saying you want to register a program?

I registered two programs - Mini Magic Story Book, by Jayne and Richard Dunn, of Squirrel Soft, in Warwick, and Supercard 2.43, by B Bytes, of Hincley, Leicestershire (see mini reviews of both programs).

Registration in each case cost me £10. I could have paid £15 for my Supercard registration and received a more substantial manual than the "Quick Guide" I actually got, but felt a more elementary guide would be sufficient for my particular needs.

I posted each registration application on a Tuesday (first class stamps), and was pleased to receive replies from each the following Saturday - a mere four days later.

### Extra stories

In each case, I received precisely what had been promised. In the case of Magic Story Book, this included a 1Mb version of the program, additional stories, a 20,000-word manual complete with tutorials - nothing special, this, but quite adequate - and a sprite converter which allows any sprite from pre-written MSB stories to be used in your own original stories.

There was also a clear message in one of the on-disk text files to the effect that the registered version is not shareware and must not be copied for all and sundry.

At a cost of £10 for the registered version of this brilliant program, my suspicion is that people who would copy it for anyone's gain are the sort who would steal the milk from your doorstep.

My Supercard registration brought me a Quick Guide of similar printed quality to the Magic Story Books guide, the complete Supercard program in archived form, plus several other archived programs and demos I hadn't requested, but was quite pleased to receive.

### Personal touch

Rather disappointing was the hand-written disk label - a more professional, printed job would have looked far better, although I suppose it shows the personal touch!

Another minor moan - although it could be a major one for the almost totally inexperienced - was the lack of explanation of the de-archiving procedure.

All in all, I was impressed by the speed of the replies, and pleased with what I received. There is, of course, the promise of news about future upgrades to the programs, and of support (via telephone, naturally) if there are any problems.

Unfortunately, I didn't have time to register an American or German program before my deadline for this article, but if US and German authors are as good as their British counterparts, the future for shareware internationally looks good.

subscriber to, a library. The benefits in the case of Goodman International include free catalogues and catalogue updates, a couple of free disks of your own choice when you first join and a saving on the price of each disk you purchase - £2.25 per disk regardless of quantity.

Mike's library became a full-time undertaking four years ago. Before that, he worked for more than 20 years in retail management, but his library was established as a part-time operation some time before he and Jean made it their main occupation.

"We'd already more or less decided we wanted to do something for ourselves full-time, but it was when I was made redundant by my last firm that we decided this was the thing to do.

"But the library was already well-established because we'd run it in our spare time for about three years prior to that. My daughter was involved in the library for a while, too, but she now has a full-time job elsewhere."

Make no mistake - the work involved in running a successful library is hard. Mike says he often works 12 to 14-hour days, particularly when he's compiling a new catalogue, which is vital to continued success. Apart from the long hours,

there are also some large overheads. "The telephone charges are horrendous," says Mike. "Mine is a minimum of £1,000 a quarter. Then there's the constant investment in new or replacement equipment."

As well as providing programs from authors with whom customers can register direct, Mike acts agent for some authors, which means he accepts registrations for the programs and provides the update and advice services.

He clearly loves his work, but there's a question mark over whether the business could survive on ST shareware and PD alone.

He also deals in commercial software, but says it is the PD and

shareware operation which has provided him with the number of customers needed to keep the business afloat.

Mike is looking to the future, which, of course, means the Falcon, and the 386/486 PC market. Falcon and PCs are not entirely separate considerations.

Mike says the Falcon will be capable of an impressive 386 emulation, bringing the world of top grade PCs to Atari's future customers, and, hopefully, many new customers to his library which will include a wide range of PC programs.

He says the main problem with the home computer market at the moment is that it is not bringing in enough new customers.

"Most of the people I deal with have had a computer or computers for a long time. The same people are upgrading all the time.

"It's good that they do, but what we need is a marketing approach that brings in lots of new people, with consequent benefits for everyone."

So do you still want to set up your own shareware library? If the above has not put you off, consider the other likely problems. Running a PD and shareware library is, in every sense of the word, a business.

### Ill advised

Part of the attraction may be that it can be operated quite easily from home. But you would be ill-advised to start any business until you know what the costs compared with income are likely to be.

List your available resources, work out the costs of any new equipment you need, and cost the other materials your new business will eat up, such as disks and disk and address labels.

Then there are costs like postage, telephone calls and - most important if you're to stand any chance of success - advertising.

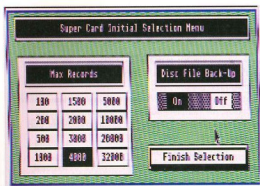
You can then think about producing profit and loss and cash flow forecasts, which, if you've done your homework properly, will give you a reasonable prediction of the likely success, or otherwise, of your library.

Then it would be sensible to speak to the experts - a qualified accountant, your bank manager - unless you've thousands to burn - and, especially if you are starting up with someone else, a solicitor.

It's then that the really hard work begins - gathering sufficient programs, producing a catalogue, haggling over the cost of advertising space and making such an impression that people are inclined to buy from you rather than someone else.

If you can achieve all that, you will deserve to be successful. But even then, there's no guarantee.





Initial selection screen of SuperCard 2.43 - ideal for indexing CD or video collections, or keeping customer records

particular section of records, so you could, for instance, find all the Vivaldi concertos in your classical music collection at the press of a key.

If you don't need the greater power of Fastbase 2.4, this is probably the database for you.

## Opus v2.2

Shareware • 1Mb  
Author: Doug Harrison

Opus is a superb spreadsheet program, equally suited to office and home. One of its fortes is excellent charting, which it achieves via GDOS, the graphics device operating system.

One of the major advantages of this that charts created in Opus can then be imported into almost any DTP package. Opus has just about every function you are ever likely to need.

It's powerful, fast and fairly easy to use. Some very helpful example files are included on this disk.

## Mini Magic Story Book

Shareware • 512k  
Authors: Jayne and Richard Dunn

Children (of all ages) will love this beautiful program which enables them to create and illustrate stories. Not only

that, but the stories can then be brought to life with easy animation.

And there's more! Atmospheric sound effects can also be added. The creations can be as simple or as complex as children want them to be. In fact, the results will be limited only by the child's progressing ability and imagination.

At a mere £10 to register - an act which will bring you a 20,000 word manual, a 1Mb version if you can use it, two extra pre-written stories (the shareware version comes with three ready-to-use stories) and other benefits - it's a must for anyone with children, or just the young at heart.

## VKiller

Freeware • 512k  
Author: George Woodside

The really important thing to remember about virus killers is that they must be up to date. New viruses are appearing at such a rate that detection and killer programs are updated more frequently than any other kind of program around.

The good thing about George Woodside's Virus Killer is that it is constantly updated. But it appears the way to keep up to date yourself is not to register, but to keep ordering new versions from your favourite library as they arrive.

As George says in the documentation

on this disk: "VKiller does not require any licence, registration or shareware contributions. Of course, all such contributions are gratefully accepted, but none are solicited." If you value your software, don't take any chances.

Once you've located a problem with VKiller, there are a whole range of options at your disposal for further action.

George is also responsible for several other first-rate virus protection programs you may wish to seek out, including Penicillin. Another of his creations, Flu, simulates the effects of certain viruses to help you identify them.

## Freeze Dried Terminal

Shareware • 1Mb  
Author: Aaron Hopkins

Written by an American BBS (Bulletin Board System) addict because he says, the "best" of all available terminal programs "just wasn't good enough".

However, he admits that after over a year of working on it, he realised it could never be quite perfect - although it was the nearest anyone had got! It's easy to use, features ANSI graphics, has a 45-slot auto dialler, an editor and script files. FDT has an intuitive, non-GEM user interface with full mouse control and keyboard commands for most selections.

Shareware version is a "fully usable demo" - only non-essentials are disabled. You can register for the full version for just £15.

## VanTerm

Shareware • 512k  
Author: William A Van Nest, Sr

Fast becoming a favourite for many ST users, this excellent shareware package

features built-in help files that make life easier for the newcomer to communications.

Vanterm includes Xmodem, Ymodem and Ascii transfer, disk and file manipulation from within the program. It's a complete package that should be useful for beginners and experts alike, although the on-disk documentation with the shareware version leaves a rather a lot to be desired if you know precious little about comms.

Best to register and get the manual. Mr Van Nest Sr is most keen to hear from those who wish to register - as you can read elsewhere in this feature.

## Little Green File Selector

Shareware • 512k  
Author: Charles F Johnson

A complete replacement for the dreaded GEM item selector. Once installed, all programs that call the GEM selector will then call LGFS instead - and the difference is quite remarkable!

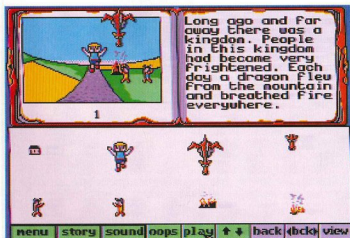
It optimises the process of file selection, with many unique features. It's only \$15 to register as a user with the splendidly named Little Green Footballs Software.

Don't suffer any longer - order a copy today, and get it registered. It really will make life easier.

## Quick ST Demo version

Shareware • 512k  
Author: Branch Allways Software (USA)

This program replaces parts of the ST's operating system (TOS) which deal with



Mini Magic Story Book - children will love this beautiful and creative educational program

## Easier ways of making a living

How many customers of shareware libraries actually register the software they get "for free"? Is it worthwhile, financially, becoming a shareware author?

Some, like Jeff Minter, have fared quite well (though none spectacularly so). Perhaps more typical, however, is the experience of the author of VanTerm, William A Van Nest Sr, who says in an on-disk document which accompanies the shareware version of the program:

"This program is shareware and donations will help keep it alive and growing.

"A few have purchased source, a few have made donations, but I know for a fact that there are hundreds, and perhaps thousands, who use it every day and haven't sent a penny...

"This program represents hundreds of hours of programming and frustration! Please help.

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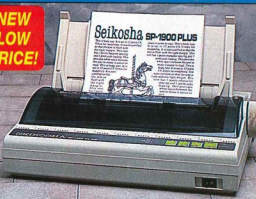
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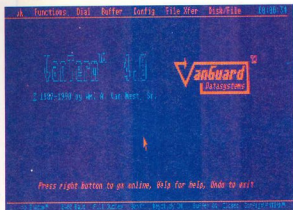
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Which computer(s), if any, do you own? .....



VanTerm - fast becoming a favourite among ST BBS/comms fanatics

## Why the "raiders" don't succeed

Like several other established vendors, Goodman International has survived a fair few "raids" on its service.

Mike Goodman explains: "A company buys a large quantity of disks from us, splits them down or swaps the contents, then resells them. They can even try a cheaper price, since the only cost they have incurred is the initial purchase from ourselves."

But this method of relying on other services to source new titles usually fails, because the collection goes out of date quite quickly.

"Although they obviously do some damage to our business, it is usually short-lived," says Mike. "We have a fairly large customer base, which sticks with us come rain or shine, so it's generally the new user who is simply choosing on cost alone who goes elsewhere."

"The problem is that they may well receive disks with missing files, and possibly even a disk with a virus, which affects their view of all shareware vendors."

screen operations, with more efficient code. Quick ST's code is all machine language, whereas TOS is written in C, which is slower.

Screen operations such as scrolling the screen and popping up windows and dialogue boxes are faster. Treat your ST to some go-faster stripes if you get this program.

It works with mono and med-res monitors, but does not support GDOS. Quick ST is very memory-efficient, requiring only 16 to 28k depending

upon configuration, though an extra 32k is needed for the optional installation of Desktop background pictures.

### Maxidisk

Public domain • 512k  
Author: Max Boehm

Constant disk accesses, especially if you have a floppy-only system, are time-consuming. The solution in many cases can be a RAM disk, which is not really a disk at all, but an area of your computer's memory reserved for whatever files you

choose, giving you virtually instant access. Problems may arise if you have only 512k of memory and can ill afford to set some of it aside for very fast "disk" operations, but you will still find that it works well with some applications, and those with 1Mb or more will find a RAM disk a superb aid in many situations.

Maxidisk installs a reset-proof RAM disk, which also compresses the files stored in it, to minimise the amount of

space the RAM disk occupies. Any memory size up to 4Mb is supported. The contents of the RAM disk will remain intact over any number of "warm" resets, although the Maxidisk program will have to be loaded again each time before the contents can be accessed.

Files can be copied automatically into the RAM disk on a cold boot-up. The amount of memory it occupies is user definable.

## Where to get those software bargains

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● Publication of a company's name in the above list does not imply that Atari ST User recommends or endorses the company.

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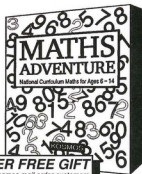
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## Coming up trumps

Long, long ago I entered a competition run by *Atari ST User* when it was in the throes of re-introducing *ST World*. The prize? A Condor Supercharger SC plus 286 PC emulator.

Well no one was more surprised than I to discover that my very non-Shakespearean verse had won it. This was nicely confirmed by Condor and my praises sung by our favourite mag.

Well I won but I did not receive. Ah me 'twas sad indeed. Probably more sad for Condor et al who went out of business before they could deliver... and the months dragged by.

Humph... sign of the times you say? Well yes true. But also a sign of the times - well a good magazine actually - is that chivalry or just plain nice people are still around.

*Atari ST User* came up trumps. After not being able to supply the emulator, that provided a jolly good piece of hardware that is also very useful - a Power Computing Series 900 hard disk.

A nice quiet little number, but it packs 'em in. What more is there to say? Er... thank you.

Mr Hardy, Hampshire

We're glad that you are pleased with the alternative prize, and apologise for the earlier problems. I've passed your thanks on to our customer service staff.

## Got anything to say to the ST community? Send your scribbblings to:



The Editor  
Write Now!, Atari ST User,  
Europa House, Adlington Park,  
Macclesfield SK10 4NP

## To DP or DTP?

I was somewhat surprised to find that Andrew Wright's otherwise excellent DTP article in the November issue, made no reference to the use of Calligrapher Professional.

OK, I realise that this is a document processor rather than a full-blown DTP

program but I, and I am sure many others, find it perfectly adequate for producing club newsletters, reports and leaflets.

As I understand, the only essential difference between a document processor and a DTP program is that in the latter graphics and layout are dominant but in the former the text takes preference. For club newsletters and the like

## Staying with the ST

There has been a great deal written in the Atari-related magazines concerning the arrival of Atari's new baby - the Falcon.

With the arrival of this technically superior model of computer, just how long will it be before *Atari ST User* deserts the ordinary ST range of computers in favour of the new baby?

ST owners can already see that software houses are leaving the computer alone as regards new software. As this ridiculous move gains more and followers, will you yourselves be forced to follow suit?

How long will it be before Falcon news and reviews completely take over the pages of *ST User*?

I do not doubt that the Falcon will soon be the machine to own - its specifications will almost guarantee this - but there will always be people who cannot afford to upgrade to the new machine or just do not want to.

I have always believed that computers live or die in relationship to their magazine support. There will always be software of some sort for the ST, but if there is no direct magazine support then it's funeral time.

I know that I have asked you a question that really cannot be answered, but I am sure that many ST owners have had the same thoughts cross their minds.

Perhaps we are a little worried that we'll soon be the

proud owners of a machine that is capable of doing everything we want but is no longer considered a viable proposition.

Whatever the outcome, I must say that *ST User* has always given value for money and great enjoyment. I will continue to collect it for as long as it has something to offer in relation to my machine.

Mr Ernest Smith, Birmingham

We certainly don't plan to suddenly desert the ST range. What you must remember Ernest, is that although there is much enthusiasm for the Falcon, it can't be bought.

More than 700,000 STs have been sold in Britain since its launch and it would be foolish for us to turn our backs on those users in favour of a machine that only developers own.

Even when Falcon becomes available it will take quite some time before a reasonable user base is installed, and ST owners will continue as our main audience.

You will continue to find unparalleled advice and tutorials in *ST User*, although the news pages can only report what the rest of the industry is up to.

As many companies pull away from the ST I suspect many of the new products reported will be for the Falcon. Even with new products your ST should serve you well for many years yet.

this difference is unimportant and in any case makes the production very much more straightforward for the beginner.

Calligrapher Professional is a sophisticated package and has many advantages, among them being very economically priced at £74.99, able to use a wide variety of fonts in sizes from 6 to 128pt and being supported by an excellent manual.

In combination with a bubblejet printer it produces an excellent quality product for remarkably little capital investment.

G Williams, Bicester

As you say the feature was about desk-top publishing and no document processors were covered.

We generally link document processors with wordprocessors rather than DTP packages, although as you have found they satisfy many people's needs.

## Falcon fears removed

Is Falcon dead in the water before it has even taken off? I have been following with great interest all the rumours, fantasies, half-truths and facts about Atari's new wonder computer, the Falcon.

I am now becoming convinced that this glorious tribute to Atari's design team is going to be a dismal flop.

First we were told that nearly all ST software will run on it. It has since been revealed that virtually no games and only some very well behaved GEM/TOS software will work.

This in itself is not too disastrous, but when you consider that little of the promised software seems to be appearing it could cause severe difficulties.

Not everybody will be able to afford upgrades for their software to become Falcon-compatible after just shelling out nearly £500 for a new computer.

We are told that Falcon is to have a new case in the new year, and the price is to be cut to £399 to compete with the new Commodore A1200 - which looks decidedly unimpressive but does have the Amiga badge to give it an instant advantage.

I don't think many potential customers are going to be thrilled with the fact that their machine will be obsolete within a matter of months and replaced with a better one for £100 less. I know I wouldn't be.

Lastly, how much advertising has Atari taken out to promote their new baby? None. Wasn't their stand at the recent computer shows impressive?

I'm afraid the European Computer Trade Show does little to boost consumer knowledge as it doesn't allow them to actually see the machine.

Michael Kirk, Hertfordshire ▶

◀ At the Falcon's launch Atari's Sam Tramiel told ST User that it would be "very, very compatible".

Tests have shown that nearly all games are incompatible and many other programs need tweaks to enable them to run on the computer, so I have no idea why the claim was ever made.

However, several firms have either made their existing ST software Falcon-compatible or prepared new titles for the computer. These products will be released when Falcons appear.

A new case design won't make early Falcons obsolete - the technology inside will be unchanged and so all Falcons will be compatible.

Bearing in mind the recent unfavourable dollar-to-pound exchange rates, I wouldn't be surprised to see the £100 price drop put on hold, and the Amiga 1200's price increased during spring.

With regards to advertising, I'm sure Atari will promote the machine when they feel the time is right. Their participation at the European Computer Trade Show was welcomed.

At the time it was far more important for Falcon to be sold to the trade. An enthusiastic industry will write software and help the product once it arrives.

Atari have announced they will attend the International Computer Show in February. Expect to see Falcon there.

## The spruced up Amiga

What is the Amiga's answer to the Falcon and what specifications will it have? Is it only a spruced up Amiga?

I think your magazine is excellent. Keep up the good disks, I like the large



We can be contacted on several bulletin boards and conferencing systems. If you have anything to say, why not get it off your chest online?

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amount and selection of programs you give.

Edward Perfect, Kent

Commodore recently launched a new Amiga 1200, and it has been on sale for a couple of months for £399. We don't have space to list in-depth specifications but here are its basic details.

It looks similar to the old Amiga 500, and uses an improved version of the Amiga's operating system. While its graphics have been advanced somewhat the sound remains unchanged.

Based on a 68020 processor but without a DSP chip, high density disk drive and SCSI II interface, the A1200 is compatible with about 60 per cent of existing Amiga software.

The Falcon specifications make it the better of the two computers, but its fight is against the Amiga's availability and strong brand name.

If you want to read a full review of the A1200 I recommend you pick up a copy of January's Amiga Computing magazine.

## More praise for dealers

I am now writing this letter to my new Atari 520STE thanks to the fast service offered by Ladbroke Computing.

I had a 520STFM for two years and decided to upgrade. Ladbroke Computing were offering the best deal so I sold my STFM and ordered the STE.

I wanted the machine with 4Mb of memory and next day delivery. So we rang at 3pm on a Monday afternoon and because I wanted 4Mb they said it wouldn't be possible for the next day, but would be there on Wednesday.

It was left at that, but the next day when I returned home I found the computer had been delivered with the extra memory fitted that morning.

So full marks go out to Ladbroke Computing and I hope they keep up this high standard of customer service.

Stuart Shorthouse, Staffordshire

From the letters we receive it appears that most dealers now offer a high standard of service, and have successfully cleaned up the poor image many had with their customers a few years ago.

COMPUTING



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# RING, WRITE OR FAX FOR FREE CATALOGUE

Marc Young looks over the wide range of hardware controls available for the ST today



Trackball - the static mouse



You can spend as much or as little as you want on a joystick

# It's all in hand

When you bought your ST you certainly got a mouse, and maybe even a joystick too. Compared to those provided with other, lesser, computers, the ST mouse is not a bad rodent, but many third-party suppliers have started flooding the market with their own alternatives.

Most mice work on the same principle. You can get a pretty good idea by (carefully) taking your mouse apart. The ball is held in place by three rollers. One just holds the ball in place, while the other two generate a small electric pulse every time they turn. One operates as the mouse moves horizontally across the mat, and the other is affected by vertical motion.

The device's resolution is thus determined by the number of pulses generated per inch moved. The ST model is not known for its high resolution — with some applications you have probably had your mouse dropping off the edge of your desk until you mastered the art of "revving" it by picking it up and moving it back before sweeping across your desk again.

The majority of mice have far higher resolutions than the ST unit, and call for a much smaller amount of desk space in which to operate.

Although with most programs this will be an advantage, you may find that

accurate movement — say with an art package or your favourite game — is difficult, so before parting with your hard-earned cash for a new mouse try it out.

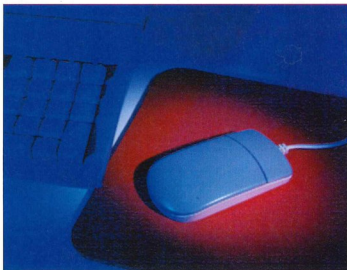
## Speed

On the other hand mice with low resolution can always be used with accelerator software, which can effectively increase their resolution.

Shape is a matter of personal prefer-

ence. Most popular is the slightly rounded variety which fits the hand nicely. But hand sizes differ, and if you use your ST a lot it is worth while making sure that you are thoroughly comfortable with the mouse.

Another thing to consider is cable length. Although your mouse may be used only be a few inches from the ST, the positioning of the connections underneath means a longer lead can be



Mouse and mat - computing essentials!

helpful. Such a lead is also useful if you use software where access to the keyboard is unnecessary, and you can sit back with the mouse on your lap.

Although using a mouse is fine in most situations, there are times when you may want to consider some of the alternatives on offer. Long before the ST was available, the Trackball was being seen in arcades and pubs around the country on games such as Missile Command.

In essence, this device is an upturned mouse, where you move the ball with your hand.

Although initially created for games, and available as an add-on to the old Atari 800 computers, the Trackball can be an excellent investment if desk space is limited.

As the Trackball itself doesn't move, you will not find yourself sweeping disks and books on to the floor when the going gets hectic!

## What a drag!

The main problem with using a Trackball can be in dragging — holding a mouse button down while moving the mouse pointer. This is easily achieved with a mouse, but Trackballs often have the buttons too far from the ball itself to make this operation easy.

On the other hand you can take the Trackball on to your lap, or the arm of your chair, and use it just as effectively as at the desk.

A relative new hardware add-on is the mouse pen, which is basically a tiny mouse placed at the bottom of a pen-like tube. This allows you to hold the mouse like a pen, operating the buttons, which are placed along the stem, with your forefinger.

This sounds like a dream for budding computer artists — what could be more natural than using a pen for input? But it has to be said that the mouse pen does take a little getting used to.

## Frustrating

Because of the small size of the ball, the pen has to be kept at a reasonable angle for it to work correctly, which can be frustrating. Also I found that the pen tended to move whenever I pressed the button, though this diminished with time and use.

It is important to remember that the mouse pen is only another mouse. Try writing your signature with it using an art package, and for the first few tries all you get is a meaningless squiggle. (Actually, that's what my signature looks like anyway, but you get the idea.)

The reason for this is that, with a pen or pencil, you will tend to hold the implement at an ever-changing angle. This simply does not work with the mouse pen, and it can seem almost like learning to write again when first used.

The mouse pen really comes into its



## Mice and trackballs

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Power Mouse	£15	Power Computing	Good quality and reliable mouse at an attractive price
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Star Cursor Joystick	£17.95	Europress Direct	Based on the MCA Arcade joystick, regarded as the best in the world. Features selectable four or eight-way microswitch operation. Two fire buttons.
Golden Image Mouse	£14.99	Ladbroke Computing	A low price, optomechanical mouse with 290dpi resolution and Amiga/ST switch
GI Brush Mouse	£24.99	Ladbroke Computing	A somewhat different mouse which is held as a paintbrush would be. 150dpi, 500mm/sec tracking speed and comes complete with the Deluxe Paint art package. £19.99 if purchased without Deluxe Paint Kidz
Mouse	£32	Logitech	Has a novelty look to it, poor 200dpi resolution but does feel very smooth
Alfa Data Infra red	£44.95	Gasteiner	An infra red mouse which rids your Desktop of the intrusive mouse cable. Quite expensive and unpredictable during quick movements
125*	£9.99	Cheetah	Auto-fire joystick with four fire buttons. Good ergonomic feel
Turbo Fighter	£49.99	Cheetah	Aeroplane control-type design with clamp to secure it to desk. Quite expensive
The Bug	£14.99	Cheetah	A very distinctive, if somewhat stubby, design. Very comfortable in the hand. Has auto-fire function. Good value

own with a portable computer. Because of its small size and portability, the pen can be kept with your machine, or even in your pocket, until required.

## The joy of sticks

It doesn't matter how seriously you take your ST, chances are you own at least one entertainment package, and if this is so you almost certainly need a joystick to play (sorry, use) your software.

There are so many joysticks on the market it's difficult to know where to start when you are looking for one, and a lot depends on the type of game as well as personal preferences.

The standard joystick, if there is such a thing, is merely a spring-loaded stick which pushes one of four switches when moved North, South, East or West. Moved diagonally it may press two switches. For example, moved Northeast, both the North and East switches will be pressed. The software can work out from this where your joystick is, and what to do.

Most joysticks also have two or more fire buttons. These are simply more switches, and, however many there are, will all have the same effect.

Some joysticks have eight, rather than four, switches, adding an individual one for diagonal detection. These can feel more accurate with some games, as there is no tendency for the joystick to detect a diagonal movement as two separate movements, horizontal then vertical.

I have found that beat-'em-up' games – you know, the Seven Samurai of Severn Valley beat up the Five Fingering Friends from Feltham – are best played with this sort of stick.

Two main types of switch are used in joysticks. The cheaper ones are simple pressure pads, which have the advantage of quiet operation but tend to wear out rather sooner. More expensive – and more noisy – are the microswitch joysticks which incorporate small micro



Old and new, there is no shortage of mice and trackballs

switches which are far more hard-wearing, but tend to require more movement of the stick to activate – hence their increased noise.

## Extras

Very popular among gamers are joysticks with added extras, such as auto-fire or slow motion. Auto-fire is a simple electronic circuit which effectively pushes the fire button repeatedly far faster than your finger could keep up with. Some sticks even offer a variable speed auto-fire, which allows you to tune the stick to a particular game.

Unfortunately not all games can be used with the autofire option switched on, so make sure yours can have the option deactivated. Also, if the stick is plugged in with the auto-fire option selected when you boot your ST, be prepared for a long wait. Some STs refuse to boot until the auto-fire is switched off.

Slow motion is seen more rarely, but

can be useful in some games where the action is particularly fast. This option works on the joystick movement rather than the fire button, in a similar way to auto-fire.

It has the effect of you wagging your stick quickly in the direction you are holding it, so the movement detected by the game is far slower.

This is a particular boon in some platform games where you want to edge slowly to the brink of a precipice, rather than sprint over the edge to your doom.

Final thing to check in a joystick is its stability. Some have felt or rubber feet, some rubber suction cups, and others are hand-held. I have yet to find the suction cup which doesn't plunk off just as you're about to let the nasties have it with your laser rifle, and felt or rubber pads always need to be steadied with the other hand.

So for me it's hand-held every time unless I need to use the keyboard as well

as the stick during a game. If you are into serious joystick use, nail the damn thing to your desk!

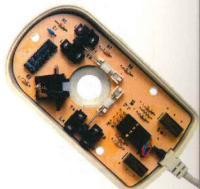
Now mice are available in the PC world with ten or more buttons. The extra ones allow the mouse to be used for function key presses, or can be programmed for particular key presses. Will the day come, I ask myself, when the whole keyboard will move around on a little ball?

## The shape of things to come

Available right now is the Gravis Mousestick. This confused beast is a joystick which thinks it is a mouse (or is it a mouse which thinks it's a joystick?). By means of some clever – and programmable – electronics, it allows a joystick to replace the mouse completely.

Although not too good at Desktop operations, it is simply fantastic (sic) for flight simulators, giving the advantages of an analogue joystick to the ST.

Now that Atari have dropped the analogue joystick port from their range – it appeared only on STes – the Mousestick could be the answer to your prayers, if, like me, you are a flight simulator fanatic.



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With dual colour Crystal Ball  
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Batman Returns - Stuart Hallybone



Mask - Marcus Johansson

# GALLERY

*If a picture paints a thousand words, welcome to War and Peace...*

**L**ong time no see, it's the Gallery. Yep, after being absent for a few issues it's back and twice as big. This is due to the fact that we have received a whole plethora of brilliant art disks, some of which might put Mr Da Vinci to shame. So without further ado, let's get this show on the road.

The first artist to show us his wares in this new improved Gallery is Marcus Johansson from Sweden. Even though his football team beat England in the European Championships I've decided to include some of his pictures simply because they are so good and because I'm such a nice person.

As you can see, Marcus takes his inspiration from the film Terminator 2.

The Terminator pictures is very good indeed as is his other picture simply entitled Mask. I chose Mask to appear in the Gallery simply because it was such a colourful and striking picture.

Yet another film is the inspiration for our next artist's masterpiece. Yes, Andrew Blanchard's superb picture of a drooling and fearsome Alien is a worthy inclusion into our Gallery spot.

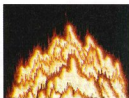
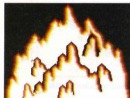
The detail is astounding and the use of colours is very impressive as well. Plus, just to prove that the picture wasn't a fluke, Andrew - who hails from Liverpool - included a cartoon picture of a wolf which is very bright and very



Spiderman - N Hudson

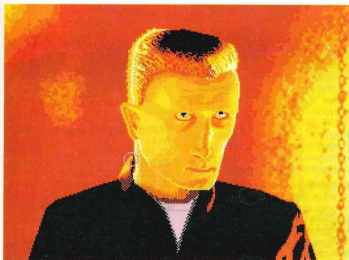


Warmaster - Traush Shulason

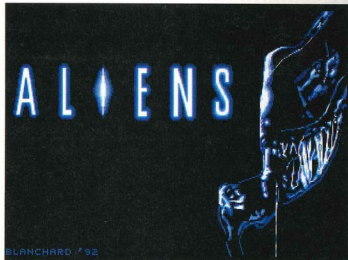


Flames - N Hudson





T1000 Marcus Johansson

BLANCHARD '92  
Aliens - Andrew Blanchard

colourful and would look great on a T-Shirt.

Good stuff! This is what we want more of in the Gallery and in return if you win you'll receive a copy of Deluxe Paint ST, which is kindly provided by Electronic Arts, the sponsors of these very pages.

The next piccies are kindly provided by a Mr/Mrs/Miss N Hudson from Middlesex. Come on you lot, let's have your first names please, it's so unfriendly when we don't know who you are.

### Neighbourhood superhero

N's first picture is a brilliant image of friendly neighbourhood superhero Spiderman. The web encrusted crime-buster is accurately reproduced on the ST by N.

The picture is good, but it's not as good as his/her other drawing entitled Flames. As you can see, it features a man showing off his pectorals while encased in a circle of flames - the detail of the man and the flames is great.

Just to show us how he did it you can see the picture in stages. Well done N a great effort.

Not much space for words this month because of all the pictures, but here's a few quick notes about the other artwork featured here, before I get on to the winner.

Traush Shulason from Iceland is the proud owner of the picture called War

Master. Traush shows us what can be achieved by using a simple image surrounded by a colourful backdrop. Great pic Traush, well done.

If you take a quick look around the pages then you'll see a picture of an old friend. Yep, it's the Bat man faithfully reproduced by a chap who calls himself Hairhopper (oh dear - Ed).

Hairhopper's real name is Nigel Rowbotham, he's from Warwickshire, and he used that brilliant art package Neochrome to produce his wonderful drawing of our yellow-skinned chum.

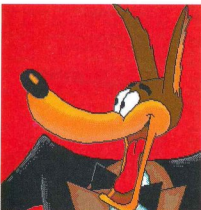
Right, fanfare please - it's time to announce our winner, who is Stuart Hallybone. His amazing picture of Batman and the Penguin is a worthy winner of Deluxe Paint ST by Electronic Arts.

### Unbelievable detail

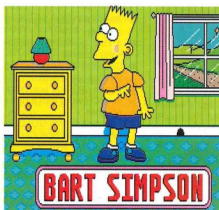
The detail on the Penguin's face is unbelievable and he obviously used Degas Elite to create this little masterpiece.

Just one thing though, Stuart - it's been so long since the Gallery last appeared that it seems we've mislaid your address, so if you could either write in or phone then we'll whisk your prize off to you in a jiffy.

What a fitting end to this month's Gallery! The Gallery returns and it just so happens that the winning picture is from the film Batman Returns. A coincidence? I'll let you decide. Bye for now, but remember to keep on scribbling.



Wolf - Andrew Blanchard



Bart - Nigel Rowbotham

## Oi you!

Yes, you. What are you doing sitting around doing nothing when you could be on your ST hard at work creating a masterpiece for ST User to show in its Gallery?

Go on, do it now and when you've finished you can send your pictures in to us at:

The Gallery, Atari ST User

Europress Enterprise, Europa House  
Aldington Park, Macclesfield SK10 4NP

Remember to write your full name and address, and the format your pictures are in, on your disk. A short but informative letter explaining how you created your picture(s) would be very helpful too.

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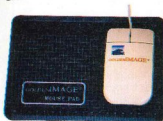
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Once upon a time, in those long forgotten days of 1984, a classic 3D space simulation game was born on the BBC Micro. The basic idea was simple. All you had to do was travel from star to star, making deals, zapping the occasional enemy, and having a lot of fun in the process.

It sounded deceptively easy. But once you really got into the game, your mission became murderously addictive. You'd start playing casually, and find yourself entrapped in the thing for months!

Over the years, the game was successfully converted onto everything from the Sinclair Spectrum to the Atari ST. As computers evolved, the graphics improved dramatically, but the magic remained the same.

The only time the formula broke down was on the Amiga, where the conversion failed utterly due to sloppy programming. Typical!

Hopefully, you'll already have guessed the name of the game. It was called *Elite*, and it's rightly regarded as one of the true classics in the history of computer games.

## Buy it!

In the unlikely event that you don't actually own a copy, it's now available from Special Reserve for just £10.99. Rush out and buy it today! Believe me, you won't regret it.

Originality is rare in the computer industry, and best-selling computer games have a habit of spawning dozens of imitations.

After *Elite*'s phenomenal success, you'd naturally have expected a whole host of challengers. However, aside from fast action arcade games like *Warhead*, and feeble rip-offs such as *Federation of Free Traders*, there was practically nothing.

It's only now, eight years on, that we're finally promised a return visit, in the form of an official sequel from one of the original programmers.

*Elite II* has a hell of a tough act to follow, but the initial reports are looking decidedly promising. Suffice it to say, if it's anything like as good as its predecessor,

# STOS 3D Tutorial

*Effects which only a few years ago were unimaginable are now easy to achieve using STOS 3D. Stephen Hill's new series begins by tracking down that elusive third co-ordinate*

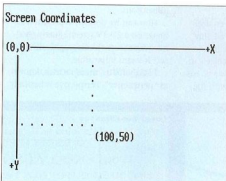


Figure II: Co-ordinates calculations can be simplified

or, we'll be in for a real treat!

The reason for the *Elite*'s isolation may seem puzzling, but it's probably understandable. The authors of *Elite* were tremendously gifted, and they achieved effects which seemed impossible on those early BBC Micros.

*Elite* was a massive game, and included over 2,000 planets in eight separate galaxies. Yet they packed the entire program into just 32k! That's about the size of a single ST screen.

Beating *Elite* was never going to be easy. So it's not surprising that most of the potential clones died still-born before they got off the drawing boards.

Nowadays, of course, everything's changed. The Atari ST represents a level of sophistication which would have been unimaginable in 1984. And it's finally possible to tread carefully in the footsteps of the original creators, and write our own 3D simulation games on the ST.

Unfortunately, in order to generate realistic 3D

effects, we'll have to push our ST to its absolute limits. This is going to be difficult even using ultra-fast 68000 assembly language, and unless you're a dedicated assembler freak, you might as well forget it.

If that applies to you, buy a book such as *Real Time 3D Graphics on the ST* by Andrew Tyler and program away. Alternatively, read on...

In an ideal world, we'd be able to write the whole game in a simple language like Basic. A few years ago, this would have been ludicrous, as Basic just wasn't up to the job. But that was before the introduction of STOS Basic on the ST.

## Simple

STOS Basic took the skills of some of the best ST programmers, and concentrated their ideas into a range of simple, easy to use, commands.

Armed with STOS Basic, you could write anything from a fast arcade game to an adventure, without the need for complicated assembly language at all. It was incredible! Maybe I'm just a little biased, as I wrote the STOS Basic manual.

However, I could get better results in half an hour with STOS Basic than I could achieve in a day's worth of assembly language. I practically threw my assembler away.

Now, the same idea has been adapted for 3D. With the advent of STOS 3D from Europress software, 3D is no longer an

impossible dream, it's an achievable reality.

STOS 3D takes the original STOS Basic system, and adds in a host of powerful new 3D programming commands. These allow us to move, rotate, and animate our 3D objects directly on the screen, just like normal sprites.

Creating our objects is easy. We simply draw them up using the powerful Object Maker accessory, and load them straight into STOS Basic.

The entire 3D drawing system has been taken straight from a commercial game, and it's been written by some of the top programmers in the industry. So it's naturally capable of generating some really top-notch effects.

Suddenly, 3D Space Simulations are within the reach of all ST programmers. And we can finally allow our imaginations to run wild.

In the next few months, we'll be demonstrating this package in action. As an example, we'll have a bash at writing a small, but perfectly playable 3D space combat game using STOS 3D.

## Routines

Along the way, we'll be developing general routines to handle 3D targeting, collision detection, laser beams, and real-time 3D combat. Once the game's complete, we'll then be able to expand it still further to create full-blown trading simulations, RPGs or 3D adventures.

Before we can flip our spaceship through our 3D universe though, we'll need to understand a bit about co-ordinates. These will allow us to keep track of the exact positions of all the various objects in our game, and move the spaceship realistically through our simulation.

All co-ordinate systems work in the same general way. They specify the position of an object using a list of distances taken from a fixed reference point known as the "origin".

On a map, the origin is a point on the Equator, and the distances are entered in the directions East, West, North, or South. So we could locate our object using a grid reference such as: (35

## Graphs and Coordinates

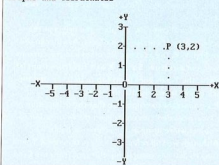


Figure I: Point at co-ordinates 3,2

## A Three-Dimensional Cube

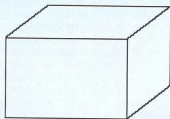


Figure III: Viewpoint facilitates 3D

East, 23 North) if we're drawing a graph, we normally place the origin at the centre, and read our distances along axes called X and Y. X measures the horizontal distance from left to right.

As a rule, values to the right of the origin are represented by a positive number, and values to the left are considered negative. Similarly, the Y axis enters the vertical distance, and increases as we go upwards.

## Co-ordinates

Figure 1 contains a single point with the co-ordinates (3,2). As you can see, we've entered our co-ordinates in the order X,Y. This standard mathematical notation, and it's shorthand for:

(3 units in the X direction,  
2 units in the Y direction)

Note that there's nothing special about the directions we're using, or the position of the origin point. Co-ordinate systems actually come in a variety of flavours, and there's no "right" way of doing things.

When we're positioning our graphics using screen co-ordinates, it's more con-

venient to place the origin point at the top left corner of the display.

The Y co-ordinates are now measured downwards, and negative values represent a point above the origin rather than below.

This system corresponds nicely with the way the screen is organised in the ST's memory, and it simplifies our co-ordinate calculations considerably. You can see an example in Figure II.

Up until now, we've only been dealing with two directions. These are fine for flat surfaces such as screens, but they're incapable of handling objects in the real, 3D world. We can however, easily extend our system to cope with the

extra dimension.

Let's define a new axis called Z. We'll now be able to fix the position of any object in 3D space using three values for the X,Y, and Z co-ordinates.

Unfortunately, there's a snag. The magazine you are reading, and the screen of your TV set, are both more or less flat, and they're unable to display solid objects in all three dimensions.

How can we possibly represent a 3D image on a 2D TV screen? Surely we'd need some sort of holographic 3D TV set? It seems impossible.

Luckily for us, there's a trick, known as "perspective". Perspective is basically

just common sense, and exploits the fact that real objects seem smaller as they recede into the distance.

Try taking this magazine, and moving it back and forth from your eyes. As you move it away, it will seem to get smaller, and as you zoom in, it will expand to fill your entire field of vision.

Now have a look at the image in Figure III. Although it's actually nothing more than a jumble of lines, your brain will cleverly assemble it into a solid-looking 3D cube.

## Viewpoint

Notice how we've positioned the viewpoint slightly to one side. This allows us to see all three dimensions at the same time. If we viewed the cube head on, we'd only be able to see a single face, and we'd be left with a simple square.

Well, that's about it for this month. In our next exciting instalment, we'll be demonstrating some of these ideas in action.

So get your joystick ready, put on your flight helmet, and prepare yourself for a thrilling flight through the exciting world of STOS 3D.



Positioning an object using 3D coordinates

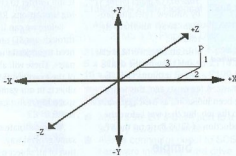


Figure IV: Representing three axes

Local Coordinates

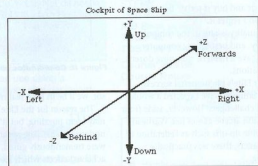


Figure V: Axes are relevant to current movement

## Viewed from a different perspective

We can easily represent all three axes on our displays. The result can be seen in Figure IV. The Z axis now appears to go downwards through the paper. Note that the angle between the Z axis and the other axes is the same as the angle between X and Y, but it's squashed due to the perspective effect.

Take the point P as an example. This is positioned three units right, one unit up, and two units forward from the origin. So it has the co-ordinates (3,1,2).

Thankfully, STOS 3D handles the entire perspective system for us automatically. All we have to do is choose the co-ordinates of our objects and specify the position of our viewpoint. STOS 3D will now perform the calculations, and display the appropriate images on the screen.

The only minor complication is that STOS 3D uses two different "types" of co-ordinates. One set, known as the World co-ordinates, stores the positions of our

objects from a fixed origin placed at the centre of our universe. Each object in our game can now be fixed in place using its own set of three co-ordinate values. If we change these values, our objects will jump immediately to a new location.

Object zero is special, as it's used to represent the position of our viewpoint on the scene. Whenever it's moved, our spaceship will move accordingly, and we'll be left with the illusion that it's rushing realistically through our 3D universe.

World co-ordinates are great for measuring absolute positions, but they're lousy for things like targeting. As far as the player is concerned, the only distances that matter are the distances between the attacking objects and the actual ship. Anything else is irrelevant.

STOS 3D therefore allows us to measure our co-ordinates relative to any object we like. This has a lot

of advantages. If we read them from the current viewpoint, we'll be able to instantly discover the position of our attackers relative to the spaceship.

And if we measure them from the attacker, we'll be able to see things from the enemy's point of view as well.

These Local co-ordinates place the origin at the precise centre of our selected object. As you can see from Figure V, the axes are all relative to the current movement direction. So the X axis stretches from left to right, the Y axis goes from top to bottom, and the Z axis points forwards into the screen.

It's important to emphasise that the orientation of the object we're using as the reference point.

Although we still refer to the directions as X,Y, and Z, they're actually completely different from the fixed axes we've provided for our World co-ordinates.

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## Hard drive decisions

I have an Atari STFM, now upgraded to 1Mb RAM and 1Mb internal and external disk drives. To meet the ever-increasing needs of my family, a hard disk drive was suggested. This has now brought me to a dilemma! Where do I go from here?

I have read that the STFM does not take full advantage of a hard drive as would a modern STE. Therefore, do I purchase a new computer, or upgrade my STFM to TOS 2.06? Will this be of any benefit when connected to a hard drive?

W G Hayes, Banbridge

*With respect to the STFM not taking full advantage of a hard drive, I am a little surprised. Although some STFM's with TOS 1.2 may not exactly have efficient disk access routines, the hard drive performance you will receive will be quite sufficient.*

*In fact, some STEs have a serious problem with third-party hard drives in that you can lose your entire data due to a incompatibility between the STE's DMA and the hard drive.*

*I would suggest that you eventually upgrade your TOS but I would suggest that you give priority to the hard drive and leave the TOS upgrade until later.*

## Boot up failure

A while back I invested in an Atari STFM and, after 18 months of continuous attempts to teach myself how to use it, I have been unsuccessful and find I am unable to boot up even the simplest disk, including the Language disk issued with the computer.

Please could you advise me how to solve my problem? I do not want to use it for games, which I have never been able to boot up, but to make it a productive piece of equipment.

B Grevis, Morecambe

*There are various ways of executing a program. The majority of games should merely require that you insert the program disk into the internal drive and then turn the computer on. The game should then load automatically.*

*Some games and most serious software require that you "double click" on the program specified in the instructions in order to run it.*

*All programs that will execute by double-clicking will have their last three letters (after the period) as either PRG, TOS, APP or TTP. Double-*

*clicking means that you must position the mouse pointer over the file you wish to run and then click the left mouse button twice in quick succession.*

*Alternatively, you can highlight the file to run by positioning the mouse pointer over the filename and clicking the left mouse button once (the filename will turn dark).*

*Now move up to the File selection on the Desktop menu and select Open. This has the same effect as double clicking.*

## Strange goings on

I bought my Atari 520STE in February 1990 and it worked very well until I decided to upgrade it to 1Mb RAM. I sent it off to the dealer for the upgrade to be fitted and sat at home and waited in anticipation.

When I received it I went home and tested it and there it was, a whole 1Mb. I was very happy indeed. Unfortunately, the happiness didn't last too long.

When I tried to start some of my programs that I had been using without any problems before the upgrade, they started to bomb out during the loading process.

Some of the programs in question were Uniterm, 1st Word Plus and Sheet. Other programs worked perfectly well and I couldn't recall that I had had any similar problems before.

I tried some games which I played for a while and then I tried one of the "problem programs" again and to my big surprise, it worked, and so did the other ones. From then on, it seemed

that my Atari had to warm up for an unknown amount of time before the programs that wouldn't load properly worked without problems.

I called my dealer and told him of the situation and he told me that he had never heard anything like it before. I sent my Atari back to him and got it back some weeks later without any explanation of what he had done to it.

I tried some programs and they seemed to work perfectly. After several months however, strange things are happening again.

After using the computer for a while, it frequently hangs. The mouse arrow doesn't move and the only cure is to reset the computer.

Sometimes, the computer hangs with just the Desktop running up and running. I have sent it back to my dealer two more times but he can't find anything wrong with it so I have given up on him.

Do you have any idea about what is wrong? I use a mouse/joystick switch, so I change cables very seldom. I have also removed the mouse/joystick

switch but the problem still persists.

I have the feeling that the computer hangs most often if I use the mouse/joystick and I have tried various other memory boards, but the problem still remains. Do you have any suggestions?

Goran Larsson, Skovde, Sweden

*I have to say I haven't come across any of the problems you describe in your letter. Considering that your computer was working perfectly before the upgrade, I can only assume that the problems with programs bombing out during loading stem from the fitting of the memory boards.*

*It may be that either a faulty memory board or one damaged by static during fitting was the cause of your first problem.*

*Although you checked your STE when you got it back and found that it did indeed show that 1Mb was installed, it is advisable to run a RAM checking program (which the dealer should have done) which checks each RAM chip on the board for faults.*

*Although you sent the computer back to the dealer and found that the initial problems have disappeared only to be replaced by the computer hanging, this probably not due to the memory boards and is just an unfortunate coincidence.*

*Is your dealer qualified to fit upgrades? If not, he may well have caused static damage to other components. Send your STE off to a qualified repair service (preferably Atari approved) for them to check it out.*

## Catching the bus errors

I am retired, helping charities as a volunteer. I have a 105Mb Quantum hard drive and a Mega STE2. The Mega STE2 worked very well with Protext v4.3 and a short time ago, I started using Needak 3.01, which seems to work well initially until the problem outlined below arose.

Protext gives a message indicating

## Got a problem?

Is your printer playing up? Floppies behaving strangely? Having problems loading ZX81 games on your Spectrum emulator? Maybe ST User can help. Jot down your gripe, along with as much information about your set-up as possible, and send it to:

Darren Evans, Advice Service,  
Atari ST User, Europa House,  
Adlington Park,  
Macclesfield SK10 4NP

that a bus error has occurred (two bombs) and gives the option of listing the system's registers. Please help as I am totally snookered.

J Clarke, Wilmslow

*I have found Protex quite unco-operative when used with certain other programs in memory. Apart from normal desk accessories, it is very fussy about what it shares memory with.*

*Needsk takes up quite a large part of the STEM's memory and I think that the two programs are not getting along with each other.*

*Try loading Protex without Needsk installed and I think you will have no problems other than putting up with the less flexible Atari Desktop as opposed to Needsk's nice features.*

## Not so fast

I currently own a very old 1040STF computer with a problematic disk drive. Every now and again the disk drive will not read or load certain disks I place in it. The common fault that I've noticed is the drive seems to slow down almost to a standstill.

The window then pops up with its usual message "Drive A is not responding", but when I load the same disk into my external drive, it loads the disk straight away with no obvious problems. All the data is still there with nothing messed up or destroyed.

I have opened up my ST and removed and opened the drive in the hope that it was merely the band slipping. Unfortunately, the internal drive fitted does not use a band to drive the disks but uses a linear motor instead.

Can I cure this problem or should I just call in the undertaker and have my old drive unit buried and replaced?

L Platt, Macclesfield

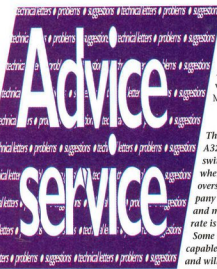
*If your drive is as old as your ST, I would suggest that you do indeed call in the undertaker and replace your drive with a new one.*

*Drives are quite cheap at the moment (around £40). Check out Power Computing on 0234 843388 for current prices and availability.*

## MiniDraft drivers required

I've written a CAD program called MiniDraft which is now in the public domain. At the moment, it will only print out drawings on Epson compatibles and create CAD ASCII files.

I am receiving requests from users for other printer and plotter drivers, eg



Atari SLM804 laser, Deskjet 500 (and other bubblejet printers), HP7475 plottter and many other D/M printers.

As an amateur ST programmer since 85, how can I get hold of the necessary info on these devices to enable me to satisfy the users of my program?

Jim Taylor, Sunderland

*I would suggest that you contact the manufacturers of the printers you require information on. Surely it is in their best interest that as much software as possible supports their printers.*

*Atari no longer produce the SLM804, having replaced it with the newer SLM605, so make sure you contact them for the new model also.*

*I would be interested in any response that you get from any attempts to obtain information from such companies mainly to dispel my (suddenly paranoid) pet theory that all technical information required by Atari ST users seems to be top secret and unavailable, unless you are a developer prepared to pay for it, that is.*

## Quick as a flash

Being a keen player of flight simulators, I am very interested in the recently released Airbus A320 simulator.

However, my local computer shop has told me that I will need a colour monitor to play the game because it updates the screen display too quickly for a standard television to keep up with.

I thought that the TV modulator was as capable of displaying both the low and medium resolutions as a dedicated monitor, although I realise that

some clarity is lost.

Could you please tell me if what this shop is claiming is correct?

My computer setup is a 520STFM connected to a television via the modulator. Many thanks.

L J Russell, Ramsgate

*The actual problem with Airbus A320 is that it automatically switches to a 60Hz display rate when loaded, which is probably a oversight on the part of the company who wrote the game. In lo and med-res, the normal display rate is 50Hz.*

*Some older televisions are not capable of handling this display rate and will have a very poor picture quality and can even sustain damage.*

*However, most newer televisions should not have a problem. My Sony Trinitron can quite happily cope with the 60Hz, but the shop is quite right in pointing out the problem because of the potential damage that can be caused.*

*I can't guarantee that your television will not be damaged but if it is a new model, I would guess that, at worst, all you will get is a unstable display.*

## DIY hard drive

I have an Atari 1040STE and I would like to get a hard drive. Can you tell me if there is anyone who sells hard drives in kit form?

P Archer, Witham, Essex

*I can indeed tell you who sells hard drives in kit form. It's those jolly nice people at Gasteiner (tel 081-365 1151) who offer everything you need to build your own drive.*

*The Mega Drive Kit package includes host adaptor, metal case, power supply, DMA cable and SCSI cable. You also have a choice of hard drive capacities and mechanisms. If you can afford it, I suggest you opt for the Quantum mechanisms. These are very quiet, very reliable and very fast.*

## Falcon questions

I am planning to upgrade from my 2.5Mb STFM to a Falcon and plan to use a dial-up to connect to the mainframes at Newcastle University where I am a student.

Since the Falcon contains the DSPS6001, which can be used to simulate a fax/modem, I would like to know two things, if indeed you know:

1. Are there any companies that you know of who are making or planning to make a BABT approved connector for the DSP?
2. Is there the software for a fax/modem under development?

If there are no imminent plans for a software modem, it seems that I will have to buy a separate hardware modem.

C Cuckow, Scunthorpe

*I am unaware of any software or hardware under development that will fulfil your needs as yet.*

*Such developments would require that a interested company be provided with a development machine from Atari before mass release and it is common knowledge that even some big software houses have had to wait for Atari to overcome initial production problems before they were provided with one.*

*I have no doubt that such hardware and software will eventually become readily available when the Falcon is eventually on sale but I think that standard terminal software will make an appearance before modem simulation packages so you will probably have to opt for a standard modem till then.*

*The Falcon is a superb machine and I am sure that when companies realise its potential, there will be a flood of applications and hardware developers eager to support the machine.*

## Modem manuals please

Please could you give me some advice on two modems that I have purchased. The modems in question are: a Datacom DSL 3123AD Auto dial and a Intertek Prospect. Both are quite old. Unfortunately, I have no experience with modems and neither modem came with a manual.

I would be grateful if you or any of your readers can help with either advice on getting them to work or obtaining a manual.

Mark Blurton, Nottingham

*I'm afraid I'm not familiar with the modems in question so I'll leave this one open to our large number of readers who are experienced in comms.*

*Being a knowledgeable lot, someone is bound to know the ins and outs of both modems or, if not, can provide information on where to get a manual.*

*If anyone can help Mr Blurton, write in to me and I'll pass the information on.*



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## REPLACEMENTS

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The "AdSCSI ST" ICD host adapter gives SCSI output from the STs DMA port, complete with software and full documentation, DMA cable and hard drive formatting software. Keyboard interface allows the use of PC compatible keyboards on the ST. Multirez allows the ST to display all 3 ST resolutions on the multisync monitor. The forget me clock sets your STs time and date with cartridge-through port.

AD SCSI .....	£69.99
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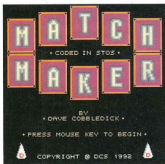
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## Match Maker

Programmed by: Dave Cobblecluck  
Available from: Dunces Cap Software

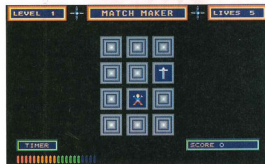
Match Maker from Dunces Cap Software is one of a growing collection of "mind games" from Dave Cobblecluck. His other games include Quizzical, Mindlock and The Wiz.

In Match Maker, you are presented with a grid of squares which, when clicked on, turn over to reveal a symbol. The object of the game is to turn over two squares with the same symbol thereby matching them and scoring points.



If the squares do not match, they turn back over and you must click on another pair. The trick is to remember the symbols which were revealed by the unmatched pairs so that you know which square to reveal should you come across its twin later on.

When you have matched all squares you move on to a higher level with more symbols to match. The game requires quick thinking as you're play-



Frantic match-making in this addictive game

## Where to get them...

- Dunces Cap Software, Match Registrations, 245 Rosalind Street, Ashington NE63 9AZ
- New Age PD, 30 Anderson Estate, Lower Road, Hockley SS3 5NG
- Public Dominator, PO Box 801, Bishops Cleeve CM23 3TZ
- Floppypop, PO Box 273, Aberdeen AB9 8SJ
- Goodman International (DEPT STU), 14 Conrad Close, Meir Hay Estate, Longton, Stoke-on-Trent ST3 1SW

# Public Sector

Once again we delve into the world of PD, the source of many wonderful and varied programs. From matchmaking to genocide, it's all here.

Darren Evans takes a closer look

ing against a time limit in which to correctly match all the squares for that particular level.

Your memory skills will be stretched to their limit as you progress through the levels and there is a high score save feature for exceptional scores.

Match Maker is a Shareware game and the registration fee is a paltry £2.50.

## Genocide

Programmed by: Chaos Software  
Available from: New Age PD +  
Disk No Genocide

Genocide is a strategy game in which you must build up your forces and send them off to annihilate the nearest sentient being, usually the – not so intelligent – computer opponent, or one of your buddies.

The game consists of levels which you can design yourself with the built-in editor. Upon selection of a level you are given a brief background to that level.

In a two-player game, the other player must avert his eyes or alternatively be



Good strategy game but the computer opponent doesn't exactly tax your skills

coloured balls. This is achieved by making all the balls in a horizontal or vertical line the same colour, at which point they will disappear from the grid. There are four colours – red, green, blue and grey.

thrown out of the room while the opposing player plans his/her movements.

There are numerous things to do during a player's movement phase. You can build a number of buildings ranging from mines and laboratories to sawmills and castles.

Alternatively you can recruit troops to send off in search of people to beat up or be more productive and develop a sector in order to establish a new city.

Of course it's rather difficult for troops to fight if they don't have weapons, so building laboratories is essential. These quiet establishments allow you to develop all manner of high-tech weapons such as swords and catapults.

Genocide is quite enjoyable to play with fairly good graphics. Playing against the computer is not very demanding though, so bring a friend along to increase the challenge.

## Outrageous Fortune

Programmed by: Dave Cobblecluck  
Available from: Dunces Cap Software

Yet another program from Dunces Cap Software (DCS), this time with a competition to win £200 worth of software. As with other DCS games, Outrageous Fortune is designed to tax your mind. In this case, your objective is to complete the various levels in the game.

Each level has a different objective – for instance, the objective in level 1 is to clear a grid of nine squares containing

When you click on a coloured ball, the colours will rotate according to a colour sequence which is shown for a brief period before you start the level. You must remember this colour sequence in order to successfully change each coloured ball in the grid.

This may sound trivial but there are – inevitably – catches. You can only turn each ball once. However, you can choose the direction of colour rotation.

For example, if the colour sequence is red, blue, green, grey and the ball you have chosen to turn is green, turning the ball with the left key will change it to blue while turning the ball with the right key changes it to grey.

Other catches are that you must ensure you do not make the balls in a diagonal line all the same colour. If you do, the line will disappear and it will be impossible to complete the level.

The graphics are colourful, the sound effects are digitised and all in all, Outrageous Fortune is enjoyable.

Outrageous Fortune is another shareware philosophy product and the entire eight levels – as opposed to the first four – will be made available to those who register the game.



Games that tax your mind from the Dunces Cap stable



## Virus Killer collection

Programmed by: Various authors  
Available from: Goodman International • Disk No GD59

Everybody who owns a computer is probably aware of the damage a virus on your disk can do. Many people have lost their favourite games and some have even lost megabytes of valuable data stored on their hard drive.

Luckily, there are many programs available in the public domain that can kill, prevent and sometimes repair disks that have been infected with the many types of virus currently lurking around.

This disk consists of a collection of seven virus killer utilities. Some are accessories that are available at any time from within a program while others are standalone programs.

A virus killer should be in everybody's disk collection.

## Eaglestar

Programmed by: Graven Image  
Available from: Floppyshop • Disk No GAM3269

Over the years, adventure games have lost some of their appeal due to the ever-increasing sophistication of games that feature stunning graphics such as Another World.

These games have taken over from the mere text adventures and provide a visual representation of the world you find yourself in rather than leaving it to text and your imagination.

However, there are still good text adventures that also include graphics – although they're usually a little static – and Eaglestar is one of them.

Eaglestar is a text/graphic adventure created using STAC. The story is set in a "dark future" scenario and is based around the life of a simple city dweller who's had enough and decides to rebel against the system.

The graphics are fairly good and the storyline is quite well thought out. The game starts out with you in your dingy

apartment which you must leave and find your way about the somewhat Blade Runner-type world.

The first thing you have to contend with is the fact that your ID card has not been renewed, which is quite unfortunate because unauthorised wandering about the city is punishable by having your entire body blown to smithereens by security drills.

If you still enjoy a good adventuring session, then you will probably find that Eaglestar will keep you occupied for quite a few hours.

## The Wiz

Programmed by: Dave Cobbleddick  
Available from: Dunces Cap Software

Now's your chance to become a budding Paul Daniels (does that include losing your hair too? – Ed) as Dunces Cap Software introduces a game of magic and mystery.

The ultimate aim of The Wiz is for you to attain the status of Wizard. This magical feat can only be achieved by being rather intelligent, good at general knowledge and also having pretty good eye/hand co-ordination.

This totally riles me out, but I still somehow managed to get a good idea of how good the game is despite this fact.

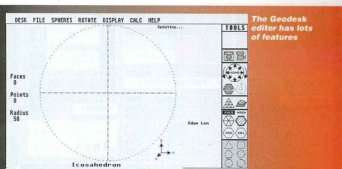
The Wiz is a challenging game indeed. The various stages on your quest for wizardhood have you answering all manner of quizzing questions as well as testing your reactions.

The first test you will come up against is the Ten Steps. Here you will be faced with questions on such topics as history and music. You must answer ten questions correctly in order to complete the test, at which point you will advance.

The questions are not exactly simple and you also have to contend with a time limit in which to correctly answer ten questions.

Visually, The Wiz is quite good and there are also mystical sound effects which are digitised.

This is another "brain-acher" from Dave Cobbleddick and if you enjoy playing his games, be sure to send in your registration fee. That way, you will receive the full versions of the game.



## Geodesics + The Ancient Art of ASCII

Available from: Goodmans International • Disk No GD1704

This disk contains two programs, The Ancient art of ASCII and Geodesic, both of which require a mono monitor.

As everybody knows, geodesic means the shortest distance between two points on a sphere (then why were you looking for the meaning in a dictionary? – Ed).

Geodesic spheres are balls created using flat surfaces (triangles, squares and so on) that are arranged in such a way that they form a sphere where each point of the flat shape rest on the surface of the sphere.

Some advantages of geodesic domes are that the least amount of material provides the greatest interior volume, the surface is self-supporting (interior walls are unnecessary), domes are energy efficient thereby providing natural air circulation, they are less prone to environmental attacks such as high winds and they are very spacious inside.

This program removes the intensive mathematics involved in the calculations required in the process and provides an easy way to create domes or spheres.

The program doesn't yet have printer output, but if enough interest is shown in the program, the author will incorporate a printer facility.

There are many examples on the disk to fiddle about with and once loaded, you can rotate the object about all axes and display it in various modes using hidden line removal or shaded faces. There is also a facility for animating the currently loaded shape and saving the animation to disk.

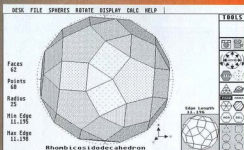
Remember those printed pictures you use to see which were made up from simple printed characters? Well this second program on the disk allows you to transform Degas pictures into an ASCII image that can be printed on a normal printer.

The program has some other features such as a density-to-ASCII translation table, which is the heart of the program. With it, you can configure which characters the computer uses for the varying densities.

When the program scans a loaded Degas picture, it assigns a number to square areas the size of one ASCII character. Each area can have a density from 0 (white with no black dots) up to 90 (solid black with all dots in the area filled).

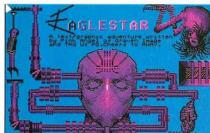
After conversion, if you look closely at the result, you may not be able to recognise what the picture is. Take a few steps back however and the picture miraculously becomes visible.

So now's your chance to share in the ancient art of ASCII, found in many a company's computer room, or positively hanging on your very own walls at home.



## New PD library opens

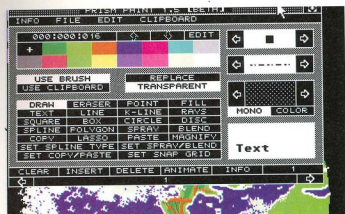
Yet another PD library has recently opened, in Swansea. GL-PD is run by G. Lovering and their address is GL-PD, 62 Colwyn Avenue, Winch, Swansea SA1 7EJ. Tel: 0792 799762



Text/graphic adventures are still popular and this one is quite enjoyable

# Art of the

Andrew Wright takes a look at a new paint and animation package from across the pond, Prism Paint



The main menu at full size

A year or two ago, it seemed paint packages were being released for the ST every other month. As a result the market quickly reached saturation point, partly because of the wide variety available and partly because the originals like Degas Elite and Neochrome were hard to beat anyway.

Let's face it, everyone's got a paint package of some sort and if not, why not? After all, we gave away Quantum Paint on last month's CoverDisk!

Against this background, it seems brave or just plain foolhardy to launch yet another paint package onto the market. So what can it offer?

## Intuitive

The answer is that it doesn't offer much that's already available and it doesn't even have what I would call top end features like extended palettes and multi-coloured brushes. On the other hand, it is one of the nicest paint packages I've ever seen in terms of ease of use. Add some very simple but highly intuitive animation facilities and things start to look up.

Prism Paint is supplied on a single disk with a 200-page A5 manual in a simple ring binder. It works on any ST or TT in any resolution, including

mono, and it even supports large screens and ISAC high resolution colour graphics cards.

A hard drive is recommended but it worked well enough on my colour system, which is floppy only. It is even designed so that you can load the program then work with a data disk in the drive.

For those of you with TTs, Prism Paint works in fast RAM, if required, and includes a configuration process which is accessed when loading the program.

The first problem encountered is that the manual describes version 1.0 while the version supplied is 1.5. There are considerable differences in the way the menu is set out and this can cause some confusion.

Most of the commands are the same however so it isn't critical, although the blend tool isn't described. The manual is aimed at beginners and contains well-written sections on handling the mouse, loading the program and drawing basic shapes.

Prism Paint doesn't use the standard GEM interface. The user interface is based on a large floating toolbox or menu, very similar to that in Degas Elite, giving access to all the program's features and commands. It is also fully mouse driven. The main menu has its

own pull-down menus in normal GEM fashion and it can be reduced further to make some drawing operations easier. For example, the full menu can be hidden and just the drawing, animation or colour palette displayed to allow fine tuning of pictures. Each can be moved using the mouse to access any part of a screen.

In high resolutions (including ST mono) the main menu can be halved in size letting you see most of your picture while still having access to every feature. To edit a picture, all you do is click the right mouse button, do what you need to do and click the button again to return to the menu.

It is an excellent system that beats any other I've come across but for keyboard lovers many of the commands have keyboard shortcuts.

## Tools

A good paint program lives or dies by its ease of use but the range of tools used is just as important. Prism Paint is equipped with all the basic ones and one or two more advanced tools into the bargain.

The brush offers 15 pre-defined shapes but it is very easy to design your own using the 16 by 16 pixel grid in the appropriate dialogue box. Brushes can also be grabbed from the work screen but only in one colour.

Spray tools are designed to help you shade 2D images and to blur and smudge other areas for effect. Prism Paint has a simple, single colour spray tool and an equally useful blend tool which lets you mix two adjacent colours.

The spray dialogue lets you choose the size of the sprayer's nozzle and offers eight flow rates and eight speed settings. Square or circular shaped nozzles are available and the size can be changed one pixel at a time using the

buttons or by dragging the outline to the required shape with the mouse, an as yet undemanded feature.

Other tools include K-Lines - for drawing a series of interconnected lines, rays - useful for perspective drawing, and of course the usual selection of lines, circles and boxes. Another interesting facility is the irregular filled polygon which lets you draw a random shape and apply the current fill.

To help you get it just right, Prism Paint has a Snap To Grid facility which can be customised to meet your particular needs, from two to 16 pixels.

Cut and paste features are well-designed with a standard copy tool which can grab a rectangular area from the workscreen, resize it, flip it, rotate it in single degree increments or skew it either horizontally or sideways.

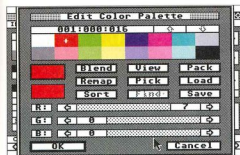
There is also a lasso tool for copying irregular shapes, all of which can be



Blending two colours

## BOTTOM LINE

FEATURES	Excellent
Full function paint package with lots of impressive features.	Good Average Bad Appalling
EASE OF USE	Excellent
Dead simple to use - I was up and running in seconds. The documentation is also clear and well-written.	Good Average Bad Appalling
VALUE FOR MONEY	Excellent
Value for money. Over-priced but a good product nonetheless.	Good Average Bad Appalling



The colour palette editing dialogue

manipulated as above, and a control panel for cut, copy and paste settings. Pasting can take place in either transparent or replace mode and can be set to run off the screen or stop at the edge.

Clicking on the magnification tool lets you select an area of the screen and then display it in magnified mode with a smaller area to the left-hand side

lution ST mode, and clicking the edit button produces a neat menu for editing and remapping the colours.

There is even a picker which lets you select a colour from the image itself and work on it. This is particularly useful for editing existing images, perhaps those converted from different formats and dithered to 16 colours. If you are lucky

enough to have a colour graphics board or TT, the colours will be displayed in different pages which you can cycle through using the arrow boxes.

For the rest of us though, 16 colours is where it's at and Prism Paint isn't a hardware snob. It is designed to let you get the maximum use out of your 16 colour palette by offering an easy to use dialogue box to customise the palette for your particular purpose.

### Custom palettes

You can also remap pictures with custom palettes and blend colour ranges using the appropriate commands. Palettes can, of course, be loaded and saved, as can brush shapes and fill patterns.

While Prism Paint is undoubtedly a competent painting partner, its animation facilities are the most exciting part. They are simple enough to be used by young children yet powerful enough to let you create quite complex animations using the program's powerful painting features.

Along the bottom of the main menu lie several commands to do with animation. You can create any number of sep-

arate workscreens, limited only by available memory it appears, and paint on each, switching back and forwards using the arrow buttons or scroll bars.

While Prism Paint isn't a professional drawing application, it can be used to produce mono pictures for use in DTP. It can import and export quite a wide variety of formats including Degas, Degas compressed, Neochrome, IFF, GIF and its own proprietary format, PNT. It can also save clipboard contents as Basic, C or assembler source code.

For my money, Prism Paint is one of the best-designed programs I've come across for a while. It would certainly have merited an award but for the lack of correlation between manual and program and perhaps the slightly optimistic asking price.

Product: Prism Paint v1.5  
Supplier: CGS, 19 Ladbury Place,  
Croydon CRO 1ET  
Telephone: 061-686 8121  
Price: £62.28  
Configuration: Any ST/ST/TT

# States

showing it in its true size. Levels of magnification from two to 23 times are supported which means that really accurate close-up work is possible. A quick click on the right mouse button takes you back to the main menu.

The final tool is the curve drawing tool or spline. This is very well implemented and lets you use one of three different methods of drawing a curve, much as you would in a vector drawing program.

Linear splines are similar to those created by the K-Line function but the points can be moved afterwards. C-Splines are similar but the points are joined by curves not lines which pass through each point you place.

### Bezier curves

B-Splines or Bezier curves are calculated by the program based on where you place the points. The curve won't necessarily touch the points you place, but it will try to average out the curve by intelligent guesswork.

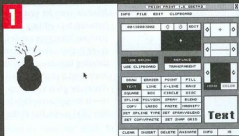
The overall shape can then be altered by moving either of the intermediate control points. Beziers make very accurate, smooth curves and this is a very powerful feature of the program.

Text can also be added to pictures using the system font or any properly loaded GDOS fonts. Using the standard Timeworks setup, for example, Prism Paint can access all the Timeworks typefaces and use them in creating images.

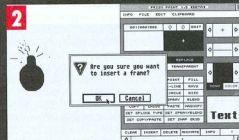
Colour handling is pretty good too. All 16 colours are displayed on the main menu, assuming you are using low reso-

## Let's animate

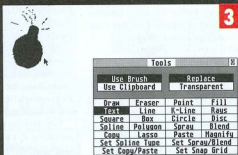
This step-by-step guide shows you how to create simple animations using Prism Paint. I've used mono for simplicity, but you could easily use lo or med-resolution if necessary. The whole animation took less than five minutes – an indication of how remarkably easy the process is.



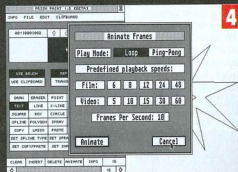
Select your tool and draw something on the workscreen. The first thing that comes into your head will do.



Click the right button and select "Insert" from the menu. Another screen is added, identical to the first.



Click the right button and edit the second screen. Here we have copied the original and rotated it, erased the original on the screen and pasted the new version further along. Note the reduced menu.



Back to the menu and add another screen. Continue editing in the same way until you have the desired number of frames. You can easily flip or enlarge your original if you like something to work from. Click on animate, adjust the parameters and off you go. Prism Paint displays the frames in a continuous sequence so smoothly that it's just like the movies. The more frames the better but even a dozen look remarkably good. Various options exist for changing the speed of the animation, up to around 50 frames a second.



# DTP

## the Easy Text way

**E**asy Text Pro is the long-awaited upgrade to Easy Text Plus, zSoft's budget priced DTP package. The Plus version, available for under £20, has always been aimed squarely at the home or small business user who needs an easy to use DTP program for quick one-off documents and as such it has developed a sizeable user base.

One of the reasons for its success has been the support available from zSoft, which although a small company, takes admirable responsibility for products by providing alternative printer drivers and additional fonts.

### Heavyweights

The Professional version seeks to take the program further forward to compete directly with Timeworks Publisher 2 and even take market share from heavyweights such as PageStream and Calamus 1.09n.

It now has added features such as page previews, rulers, an on-screen toolbox and much better graphics handling, including the capability to create vector graphics from within the program.

Easy Text Pro is supplied on three double-sided disks with a 130-page A5 ring-bound manual. Add-ons include a colour picture extension (to allow Degas, Tiny and Neo format colour pictures to be imported) and several extra font disks.

The typefaces available are PD ones which can be obtained elsewhere (see this month's fonts feature) and include Calligraphy, Old English, Chatsworth, Bakewell, Broadway, Wye and Thames. Future add-ons

*Easy Text Professional may be budget priced but that doesn't mean it isn't capable of good quality results. Andrew Wright takes the first look in an exclusive review*

are likely to include a fully integrated text editor (something even Timeworks or Pagestream don't have).

Printer drivers are provided for most 9 and 24-pin dot matrix, Deskjet, Bubblejet, Laserjet and Atari laser printers.

The program is installed using a dedicated installation program - floppy disk drive users will need four formatted disks to hand and hard drive owners will need 1.5Mb of space free.

The manual is aimed directly at first time users and few stones are left unturned. No knowledge of GDOS is assumed and there is even a section on adding new GDOS fonts at the back as well as some useful appendices.

Easy Text Pro is as easy to get up and running as it is to install. It resembles Timeworks in style and appearance

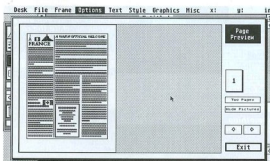
although there are rather more icons on the toolbox which can be placed on either the left- or right-hand sides.

The page is displayed in the usual GEM window and there are standard horizontal and vertical scroll bars for moving around the page.

Although Easy Text Pro appears similar to Timeworks and uses a frame system for laying out pages, it is actually more closely related to Calamus as there are four different kinds of frame, including text, bitmap graphics, vector graphics and lines.

There are two modes of operation, just as in Calamus, with the right mouse button switching between frame create and frame selection modes. Alternatively there are toolbox icons for both modes.

Two additional icons let you switch between text editing and paragraph tagging modes and there is also a dustbin icon for deleting frames or individual items and a clipboard facility. There are plenty of drop-down menus accessible from the GEM menu bar at the top,



Previewing a letter in Easy Text Pro

many producing additional dialogue boxes. The latter are clear and well designed.

There is even a customised file selector which pops up when you import files or load existing Easy Text documents. For keyboard users there are short-cuts for most of the menu options.

Frame-based DTP involves laying out frames on the page, filling them with text or graphics and then carefully positioning them in the desired locations. To help you with text, there are user definable column guides which are set from the appropriate menu.

Text columns can then be drawn in using the guides as reference but here we come to the first stumbling block. There is only one view possible - 100 per cent - and no automatic scrolling at the edges so drawing in full page text columns requires use of the scroll bars.

### Useful

Actually there is a page preview mode but you can't edit anything and although it serves as a useful check on how the page is shaping up, more flexible magnification facilities would be a great improvement.

To add text to the page requires either a switch to edit mode, after selecting the appropriate frame, and then typing text directly into the frame at the cursor or importing text from a word processor.

Screen redraws in text-heavy documents are not as fast as they could be but they are nowhere near as slow as in PageStream or Calamus, for example.

Text can be given various attributes by selecting areas of text with the mouse and applying the attributes from a menu. Bold, italic, light, underlined, outlined and white text attributes are

## Graphics

Easy Text handles most ST-only graphics formats with ease - the list includes IMG, GEM, P3, PC3, TNY and Doodle format files.

There are two different GEM import filters - this covers the slightly non-standard nature of the files produced by the popular EasyDraw package as well as those produced by standard packages such as Hyperpaint.

Screen redrawing of graphics is relatively fast but if you have a document with lots of graphics, they can be hidden to speed up redraws even more.

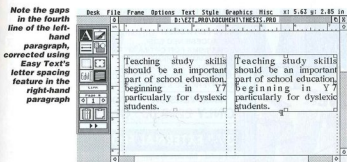
Bitmap images can be cropped in two ways - the cropped image can be fit-

ted in the frame or the frame will be resized to hold the graphic. The full image can be restored if necessary. Pictures can also be optimised for the printer or for the screen to avoid distortion when printing out.

The line frames are for simple lines and arrows in the vertical or horizontal plane only. Line widths up to 0.125in are possible and three different endings (arrowed, straight or rounded) are supported.

More complex shapes are possible in vector graphics mode where 16 different pre-drawn shapes are available, including stars and crosses.

Fills are well-supported with a built-in editor allowing customised fills to be saved to disk and greyscales of between 1 and 100 per cent can be applied to any vector object.



Note the gaps in the fourth line of the left-hand paragraph, corrected using Easy Text's letter spacing feature in the right-hand paragraph

## BOTTOM LINE

### FEATURES

Fully-featured package, nice manual, good drivers and fonts. Useful text handling

Excellent  
Good  
Average  
Bad  
Appalling

### EASE OF USE

Aimed squarely at the beginner, and accordingly easy to use

Excellent  
Good  
Average  
Bad  
Appalling

### VALUE FOR MONEY

For little more than the price of a game you get a fully-fledged application

Excellent  
Good  
Average  
Bad  
Appalling

available as well as superscript and subscript.

Single line headers and footers can also be created. Access to the extended character set is very easy – simply select the character from an on-screen dialogue box and off you go.

Up to ten GDOS typefaces can be installed and they can be doubled in size if necessary. For example, installing a 12-point Derwent face gives options of 12 and 24 points in the font menu. The symbol font offers four different bullets.

Easy Text uses paragraph tagging, a fast and flexible way of making global changes to documents. Four tags are pre-set (although they can be changed), including the default "Body text" style, and ten more can be added if necessary.

Paragraph tag options include user definable names, changing the point size, text attributes (same options as already discussed), altering the alignment, setting positions for up to four tabs and altering the leading and paragraph spacing.

Indents are catered for, but hanging indents – where the first line isn't indented but subsequent lines are – aren't possible without some fiddling with tabs and margins.

Where Easy Text does score highly is the fine control which can be exerted over text. Although font size is dependent on the GDOS fonts available, the leading and paragraph spacing can be adjusted to within 0.01 of a point which makes for easy alignment of columns in newsletters. Similarly accurate control is

possible when considering the spacing between characters. Tracking, the space between each character, can be altered to the nearest 0.01 of an em and the maximum character spacing can also be specified for justified text.

Maximum permissible word spacing can also be set by the user. All this control gives you a wide range of options when using columns, especially narrow ones, of justified text.

Any white spaces can be minimised by altering the spacing and tracking options which makes for relatively accurate typography.

Easy Text Professional isn't in the same league as the heavyweight such as Calamus, Didot Professional and Pagemaster but it is considerably quicker and can outperform Timeworks in terms of text layout and control.

## Major flaw

It has one major flaw – the lack of different page views. Even automatic scrolling around the page would help but unfortunately the GEM menu bars have to be used much more than they should.

As expected in a budget package, some features are missing, such as search and replace text, individual character kerning and the ability to make frames opaque or transparent.

There are also a few minor bugs but the package has just been released, it's perhaps not surprising. The developers are working on the bugs and fixes will no doubt be found.

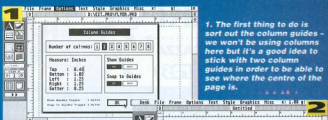
Let's face it, Calamus 1.09n has been with us for years and it still falls over all too often. Pagemaster, Timeworks and Didot haven't been without their problems either.

What you get for your money – and it is only £40 after all – is a good, easy to use DTP program capable of producing some very good results. If it's all you need, you won't regret buying it.

**Product:** Easy Text Pro  
**Supplier:** zSoft, 25 Honey Hole,  
Blackburn BB2 3BQ  
**Telephone:** 0254 672965  
**Price:** £39.95, or £25 upgrade  
**Configuration:** All STs, 1Mb,  
med or hi-res

## Designing a quick document

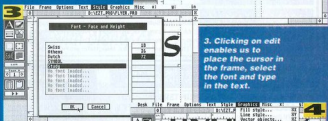
Let's have a look at the program in action by putting together a quick flyer



1. The first thing to do is sort out the column guides – we won't be using columns here but it's a good idea to stick with two column guides in order to be able to see where the centre of the page is.



2. Next the title text frame is drawn across the two column guides.



3. Clicking on edit enables us to place the cursor in the frame, select the font and type in the text.



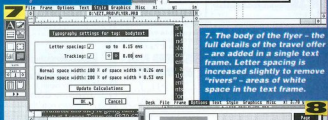
4. The main focus of the flyer will be a scanned image of a Germanic castle in IMG format – here it is imported into a bitmap frame.



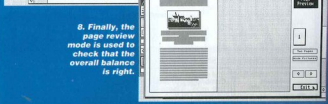
5. Two vector graphic frames are created around it, one to provide a border and the other to provide a drop shadow. Note that the frames have been turned off to get a close look at the image's alignment.



6. A further text frame is added under the image – this time it is centred.



7. The body of the flyer – the full details of the travel offer – are added in a single text frame. Letter spacing is increased slightly to remove "rivets" – areas of white space in the text frame.



8. Finally, the page review mode is used to check that the overall balance is right.

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N.B. Due to the large variance in design of the Atari ST, there is a small minority of boards in existence which may require a site soldering.

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N.B. Due to the large variance in design of the Atari ST, there is a small minority of boards in existence which may require a site soldering.

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In our August issue, we reviewed the NVDI screen accelerator—a relatively cheap way of turbocharging your ST and making screen displays considerably faster.

It looked the best buy at the time, particularly in terms of its compatibility with other programs.

Even as we wrote, some strange machinations were going on behind the scenes. A competing product, Quick ST, was transferred from a company called Branch Always Software to Codehead, the highly professional programming team that brought us Hotwire and Multidesk, to name but two of their excellent utilities.

While Quick ST was fast, it had several incompatibility problems with important programs such as That's Write and Fleet Street Publisher. Codehead's main aim was clearly to make it more compatible while still retaining the speed benefits.

Warp v3.72 is the very latest incarnation of Quick ST. It looks and feels like a different product and it has all sorts of useful bells and whistles which make it a good buy.

It comes on a single disk with a colourful 48-page manual and insert. There is also an extensive README file on the disk detailing the latest bug fixes and changes.

The disk isn't copy protected and you can quite legally make a backup. Support is available in the UK via the sole distributor, The ST Club, so you ought to be in good hands.

Installing the program is relatively easy. The program file is copied into your AUTO folder and the optional accessory into the root directory.

After resetting the ST, Warp 9 is installed and ready to fly. The program takes up 68k of memory, which is quite significant in a base machine, plus another 19k for the accessory.

The difference is immediately obvious when you start playing about with the Desktop. Windows and dialogues open and close much faster and text scrolling in most programs is considerably improved.

The Warp 9 CP—command post—accessory offers plenty of options. First, you can turn text and graphics screen acceleration and zoom boxes on or off and add function key support for GEM alert boxes. Other features include

# Ahead Warp speed

Andrew Wright gets his hands on Warp 9 from Codehead, a screen accelerator with plenty of other useful features

## Ness benchmarks

Benchmark	Normal ST	Turbo ST	NVDI	Quick ST	Warp 9
Text	33.1	27.2	6.7	7.4	7.4
Line	32	8,18.6	16.4	28.1	33.9
Object	29.2	29.2	4.9	29.2	29.5

mouse acceleration and effects such as wrapping around the screen or being unable to access menus until the right button is depressed.

Warp 9 also contains the same code as Pinhead, the speed loading utility, making it unnecessary to run both.

A second options menu provides facilities for changing the screen font, editing and changing the standard GEM fills and loading Desktop background fills or pictures in Degas or Tinty format.

There is even a built-in Extend-O-Save screen saver. This is a very good screen saver with loads of features—hot spots on the screen, configurable timeout values and a list of important activities that will prevent the screen saver

from kicking in, including incoming RS232 or Midi data. You can also construct your own screens.

There is a selection of no less than 72 screen fonts to choose from and a fill editor to alter the standard GEM fills.

A \*.DAT file can be created and edited in a standard text editor, allowing certain options to be disabled for certain programs.

Warp 9 automatically detects when they are run and configures Warp 9 to suit. This includes turning on and off the parts of Warp 9 that might conflict with a given program.

With the changes introduced by Codehead, Warp 9 should prove to be compatible with most programs. I found no incompatibility with my existing software apart from Redacteur—which, despite being the best thing that happened to wordprocessing on the ST, seems to be incompatible with nearly everything one way or another.

There were also problems with a snapshot utility which it disabled and two other AUTO folder programs. The latter was solved by altering the order of execution, using the AUTOSORT utility



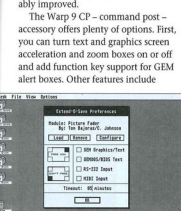
from the October CoverDisk.

So do all these features have an effect on Warp 9's performance? Oddly enough, using the benchmarks we used to test NVDI, Warp 9 comes out measurably slower than its Quick ST and a bit behind the competition.

Some of the Ness benchmarks even show it to be marginally slower than a standard ST! None of this is borne out in practice though, which just proves that benchmarks are a pretty unreliable guide to overall performance.

Warp 9 actually seems very fast—it certainly seems as quick in action as Quick ST and NVDI. It may not be quite as compatible but if you want the extras, like the screen saver, mouse acceleration and extra screen fonts, you certainly won't be disappointed—especially if you've never used a screen accelerator before.

Product: Warp 9  
Supplier: The ST Club, 2 Broadway,  
Nottingham NG1 1PS  
Telephone: 0602 410241  
Price: £84.95  
(upgrades from Quick ST £12.95, NVDI  
and Turbo ST £14.95)  
Configuration: All ST/STE/TT models



The screen saver modules can be easily loaded and configured



The command post's main options menu

## Quick Index 2.2 benchmarks

Benchmark	Turbo ST	NVDI	Quick ST	Warp 9
TOS text	331	289	354	324
TOS string	1347	1075	1433	1413
TOS scroll	138	131	138	137
GEM dialogues	310	308	326	304

## BOTTOM LINE

**FEATURES** Excellent  
Seems just as fast as the competition with plenty of added value

**EASE OF USE** Excellent  
Easy to use and install with clear dialogues and manual

**VALUE FOR MONEY** Excellent  
Compatible with most software and fast.  
A very reasonable price

**H**ave you ever wondered why there are so many different wordprocessors for your ST? There certainly wouldn't be if there wasn't a market for all of them, and there is a very large market indeed because everybody using a personal computer for serious purposes needs to write, edit and print text at some point.

Programmers type in source code listings, students write essays, small businesses send out correspondence and invoices, authors compose their latest blockbuster manuscripts, journalists chase copy deadlines.

The clatter of the good old typewriter is rarely if ever heard these days — the advantages of wordprocessing are just too obvious.

Graduating from the typewriter to the computer immediately liberates you from the tyranny of the carriage return lever and the correction fluid bottle. Now you can always go back and correct those little typos, even insert new phrases and delete unwanted ones.

## Ecological

You only commit yourself to paper when you are happy with the result of your work, thus saving a good many trees that used to find an unhappy end as screwed-up, discarded drafts in wastepaper baskets.

Yet, for a lot of people, this is where the wordprocessing revolution ends. Content with the writing freedom afforded by easy deletion and insertion, they never progress further to explore the full capabilities of their software.

I have often watched quite experienced writers scroll through lengthy texts by keeping the cursor keys depressed, blissfully unaware that their wordprocessor offers rather more efficient ways of moving around the document.

Mention macros, search-and-replace, keyboard remapping or text markers, and they look at you with incomprehension!

Precisely because of the intense com-

*An ST running wordprocessing software is more than just a glorified typewriter.*

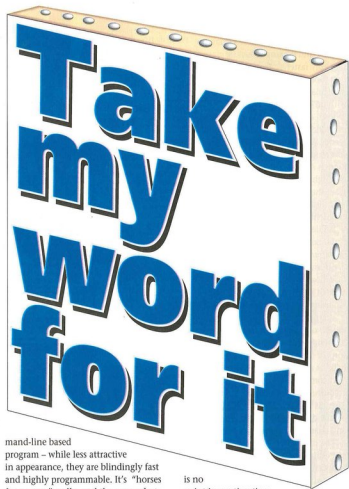
*Günter Minnerup shares his experience as a writer and journalist to help you get more out of a powerful combination*

petition between software houses, wordprocessors come up with new features all the time, not all of them useful to everyone.

Exact requirements vary greatly between different users, and most do not take the trouble to plough through intimidating manuals. If your keyboard skills were first developed on a typewriter, you may not even be aware of what computer-based text crunching is capable of.

Here we take a number of typical wordprocessing situations and suggest ways of exploiting the lesser-known features of your wordprocessor in creative and efficient ways. Since their precise implementation depends on just what package you use, only the general principles can be demonstrated.

Most ST wordprocessors are graphics-based, running under GEM and able to use different on-screen fonts as well as combine text with pictures. That makes them pretty as well as easy to use, but also tends to slow them down. Many professional writers and journalists using an ST therefore prefer a text and com-



mand-line based program — while less attractive in appearance, they are bindingly fast and highly programmable. It's "horses for courses" really, and the screenshots on these pages show Calligrapher and Protex, probably the most powerful representatives of the two types.

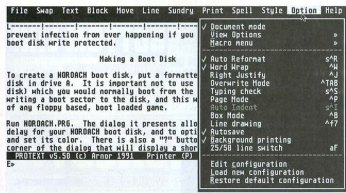
## Impressive

Perhaps the main use for your ST is in some other application — Midi music, graphics, spreadsheets, even games — and all you ever use a wordprocessor for is the odd letter to your aunt or bank manager.

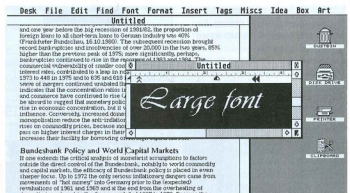
Productivity is hardly a major issue, but you want your correspondence to look neat and impressive. Even so, there

is no point in wasting time unnecessarily so you should set up one or more standard letter templates containing any standard items and setting up your preferred style of justification, line spacing, indents, and so on.

There was a time when people tended to be offended at receiving a "computerised" personal letter, but with the greater acceptance of personal computers generally, and especially the improved quality of printers these days, most people now tend to admire the neatness rather than take exception to the high-tech. Still, it is probably a



Extremely fast and powerful, flexible Protex offers a choice between command lines and menus but does not support graphics or GEM windows



Out — featuring everything else, Calligrapher approaches desktop publishing in graphical sophistication but can be slow on standard STs



PROTEXT	Document	LET	EMPL	DOC	IK	HW	AutFn	SCR	F3	For	Menu
Ch	215	Line	16	Col	2	Insert	No	Markers	dot		81:51:10
L											R
Sh	15										
LS2											
RJ	OFF										

JOHN SMITH  
12, SOUTH DRIVE  
BETHLEHEM  
B18 ZEJ  
  
Tel. (021) 449 2468

Ëssys.dat&

**A Protex letter template, defining such things as line spacing, justification and left margin. The 29 October 1992 variable is replaced with the current date in the printed output**

good idea to design the templates for purely personal correspondence to give a more informal look – justified text, in particular, should be avoided.

For the same reason, window envelopes are out as far as personal correspondence is concerned. But for more formal letters, these can be a real boon as they save writing the address on the envelope by hand or having to print separate address labels.

To make sure that the address appears clearly in the window area, and is not shifted out of the postman's sight while being transported in Post Office sacks, you need to measure precisely how the paper needs to be folded to fit the envelope.

If you run a small business you may want to incorporate a graphic logo into your letterhead, plus other information such as bank account numbers, names of directors and so on – there are certain legal requirements concerning this for registered companies.

With text-based wordprocessors such as Protex, you are restricted to compositions made up of the standard character set – which includes some graphics characters for line drawing, boxes and so on – but for really pretty logos, scanned images even, you need one of the graphics-based programs capable of importing and displaying

one or more of the standard file formats.

The most important wordprocessing function for business users, however, is mailmerge. It is also probably the most under-used as it can appear frightfully complex and only for "real power users". But you do not have to be a company with a mailing list the size of Littlewoods to take advantage of mailmerge even very small one-person setups can benefit enormously.

In essence, mailmerge means that a wordprocessed document can consist not only of actual text, but also include variable items which are replaced at every print run with different contents, read in from a data file or even entered at the keyboard.

## Common uses

The most common application for this is standard form letters sent simultaneously to a number of different addresses, but there are others.

Timetable printouts, for example – if the names of staff and students are held in a database along with their class hours, the wordprocessor document only needs to arrange these variables in neat tabular columns and then read in a different record on every print run to produce beautifully laid-out, individual

## Make the most of macros

A very useful feature, where provided, is the availability of numbered markers which allow you to jump from one position in a document to another with a single command. Moving the cursor quickly and efficiently around a long document is perhaps the most neglected aspect of efficient writing and editing, as many users never bother to learn all the keyboard short-cuts which software authors have so thoughtfully provided.

Even fewer people realise that you can add your own commands by exploiting the macro function – going to the end or beginning of a sentence, paragraph, quote, chapter, clause or whatever are all possible. All you need to do is understand how a computer handles text, and think like the computer.

Lacking the intelligence of human beings, computers recognise sentences not by their meaning but by the Ascii symbols at their beginnings and ends, so a macro to jump to the end of the current sentence would have to look for the next occurrence of a full stop and a blank space together.

Similarly, paragraphs begin and end with "hard" carriage returns – or even two of them depending on your typing style – and quotes are enclosed in quotation marks, chapters may have headings in bold, or begin with numbers followed by a full stop. And so on... With a bit of thought, the sky – or rather the number of macro keys available – is the limit for lots of useful, additional cursor control commands.

```

PROTEXT Document Ch 215 Line 16 Col 2 Insert No Markers dot SCR F3 For Menu 81:51:10
>E address1
>E address2 address3 address4 address5
>E address6
>E address7
>E address8
>E address9
>E address10
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**An example of what can be done with mailmerge – all the variables enclosed by the "E" symbol will be replaced with data read from a disk file**

Dear Sam,  
 I enclose date – dated report  
 Thank you for your letter about the insurance for Sam's car.  
 I'm sorry, but we think that you will find the rates quoted unreasonable.  
 Please phone us as soon as possible.  
 Please reply in writing as soon as possible.

**Although Calligrapher is perfectly capable of handling footnotes automatically, the two-windows method offers a manual alternative**

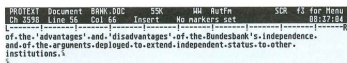


Graphics are no problem for Calligrapher letterheads, and the calibrated ruler makes it easy to position addresses for window envelopes

### @@Bundesbank Policy and World Capital Markets

If one extends the critical analysis of monetarist assumptions to factors outside the direct control of the Bundesbank, notably to world commodity and capital markets; the efficacy of Bundesbank policy is placed in even sharper focus. Up to 1972 the only serious inflationary dangers came from movements of "hot money" into Germany prior to the (expected) revaluations of 1961 and 1963 and at the end from the overheating of domestic investment in the "super-cycle" of 1967 to 1972. Because the Federal government had control over decisions to revalue or devalue the currency in the period of fixed exchange rates, the Bundesbank had limited scope to respond to the problem of "hot money" increasing the domestic money supply; "none of the Bank's monetary instruments... could manage imported inflationary pressures. Rises in interest rates made matters worse by attracting more external funds" (Kennedy 1991, 35). Only revaluation stemmed the tide. The flexibilization of exchange rates after 1972 effectively broke the Federal government's stranglehold over exchange rate policy or, in the words of the Bundesbank, "in principle removed this obstacle to an effective stability-oriented monetary policy" (Bundesbank 1989, 11) and thus increased the

Marking headings and subheadings with special symbols makes it easier to extract them later for a Table of Contents



## The Constitutional Framework of Bundesbank Policy

The law creating the Bundesbank was passed by the Bundestag in July 1957 along with another significant law for West Germany's economic constitution, the Law against Restraints on Competition. The latter was described by Erhard as the "Basic Law of the Social Market Economy". Arguably, however, it was the Bundesbank Law which was to define the operational framework of West Germany's economy and economic policy more than the famed Competition Law (Gleitke, 1976). The Bundesbank replaced the Bank deutscher Länder as central issuing bank. The Bank deutscher Länder had been created by the Western Allies in 1946 and was made independent of German political authorities, though it was subject to the potential veto of the occupation powers.

When Allied law was superseded by German law in 1957, the new Bundesbank retained its independent status but was not subject to any internal or external veto powers. Instead, the Bundesbank Law obliges the independent central bank to "support the general economic policy of the Federal Government", but only in switch on the display of CR, space, Tab and other codes before you define cursor control macros

timetables. The more complex mailmerge modules are almost complete programming languages, allowing the development of quite sophisticated invoicing, stock control and accounting systems - without needing to invest in any other software except the wordprocessor.

In a sense, wordprocessing really comes into its own where really long texts are involved - a short letter, after all, can be quickly retyped, but a major report or manuscript cannot.

Students, researchers, authors of non-fiction books used to live in dread of the last-minute revision, and paid fortunes to have their dog-eared notes and illegible hand-written corrections typed out.

The main problem with long texts,

however, even on a computer, is - their length! While it is rare that a file will exceed the capacity of a 720k floppy disk, automatic back-up files produced by many wordprocessors will cut the effective disk capacity down to half that.

## Scrolling

But long files also slow down the system considerably - scrolling through a 20,000 word chapter is a pain with graphics-based programs on an ordinary ST, so for bulky work it is best to use a fast text cruncher like Protex.

It is possible, break down the working file into smaller file segments - most wordprocessors are intelligent enough to carry page numbers through a chain of such subfiles.

To cut and paste between the seg-

## Select with mouse or cursor keys/return



The full wealth of characters and symbols available on the ST, displayed here by Protex's Choose Character panel

ments, it helps if your wordprocessor can keep several files open in memory at the same time, preferably in different windows. Protex can handle 36 files simultaneously, but switching between them is a bit cumbersome, whereas GEM wordprocessors have user-friendly windows but are, of course, restricted by GEM's limit of 7 at any one time.

Academic writing, apart from usually being long and wordy, also has to follow certain established conventions - footnotes or endnotes, bibliographies, indexes, tables of contents and so on.

A lot of wordprocessors boast such

specialised functions these days, but even if you do not - or the way they are implemented in your program does not suit you - it is possible to solve these problems through some creative use of standard functions found in the most basic software.

Footnotes, for example, can often be replaced by endnotes - this is how publishers and teachers prefer their manuscripts and essays anyway. Rather than jump to the end of the document every time you add a note, however, you should hold all the notes in a short, second file. Do not number the notes

## Foreign affairs

In these days of intense international trade and communication, foreign language characters are no longer an exotic requirement for only a small minority of users. Even if you are quite incapable of expressing yourself in anything other than English, courtesy demands that you spell other people's names and addresses correctly. Senor, Francois and Munchen don't look too good to their recipients, nor, come to think of it, does Guntet!

Most wordprocessors provide more or less complicated keyboard combinations for occasional access to such characters, or offer a table of available characters to click on. But if you need foreign languages regularly - and the same principle applies to other special characters, such as mathematical and currency symbols - it is better to modify your keyboard layout accordingly.

## Rare characters

Switching between different national keyboards altogether, an option offered by some programs, is of little use as it will only confuse the experienced typist trained on a UK keyboard. A much better approach is to define a custom keyboard which retains the essential layout of the UK Qwerty standard but replaces the rarely used characters - the curly and square brackets, for example, the # symbol and the figures on the numerical keypad - with the "aliens" you tend to require most regularly.

It is amazing how quickly you get used to such an arrangement, and you soon want to use the same custom keyboard across all your software. This is possible with keyboard remapping utilities such as Calligrapher's, which apply to the whole system until it is switched off, but can be a problem with hyper-sensitive software like Calamus which refuses to run under what it sees as the wrong version of TOS! Protex, by contrast, uses its own keyboard driver and returns control again to TOS when exited.

## Keyboard Mapper

Cancel OK



Designing a custom keyboard for use with English, German and French with Calligrapher's bundled remapping utility

yet either in the main text or the second file, but put a symbol which does not otherwise occur where the numbers will eventually go. When finished, use "Search" from the beginning of both files to find all occurrences of that symbol and replace them with the numbers in correct sequence. Finally, append the file containing the notes to the main file.

### Special symbol

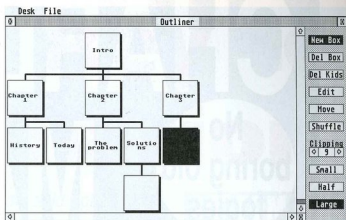
Much the same principle can be used to compile a Table of Contents - whenever you enter a heading or subheading, precede it by a special symbol. When finished, search all occurrences of that symbol, define the heading as a block, copy that block to a second file and proceed to the end of the document. Your

second file will now contain all the headings and subheadings.

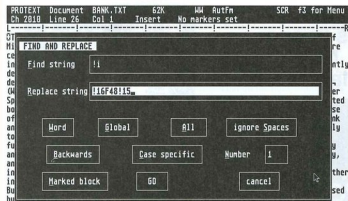
To obtain the correct page numbers, you can print the file to screen and make a note of which page the headings occur on, to be entered into your Table of Contents.

For this to work reliably, you have to make sure, of course, that your settings for page size, line spacing, headers and footers etc when printing the file to screen are exactly the same as they will be when you finally print your hard-copy.

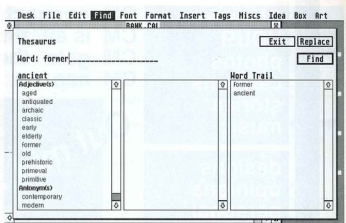
And don't forget to merge your Table of Contents file into the main document before you dot the page numbers, because it will obviously affect the pagination!



Now that Calligrapher has become the first ST wordprocessor to offer an outliner, expect the other heavyweight titles to follow suit!



Using Search-and-Replace to substitute a DTP program's font switching codes for the wordprocessor's embedded italics code



An on-line Thesaurus can be invaluable to the writer afflicted by mental cramp - you'll never be lost for words again

## Desktop publishers - one step beyond

Some graphics-based wordprocessors boast such an impressive list of page layout, font handling, and illustration features that they can rightly be regarded as providing a bridge between traditional wordprocessing and desktop publishing.

For simple newsletters, a program like Calligrapher or That's Write is probably all you ever need. If you really need the extra power of a full-scale DTP program such as Timeworks, Fleet Street Publisher, Calamus, PageStream or Didot Professional, a graphically sophisticated wordprocessor could well be the wrong choice as the companion program since most of its features would remain unused. For working alongside DTP, a fast and flexible wordcruncher like Protext really comes into its own.

### Formatting codes

The key requirements for effective collaboration between wordprocessing and DTP are a knowledge of the formatting codes used by the DTP program, the ability of the wordprocessor to display these, and a search-and-replace facility that can handle such codes even where they are not available from the keyboard or indeed printable.

Even when you have no other option than using the time-honoured Ascii standard for file export, it is still important that your wordprocessor can generate Ascii files with Carriage Returns at paragraph end only - many programs are incapable of handling the long, unformatted text lines resulting from this.

But Ascii's a compromise - ideally you want to import all text matter into the page layout with everything already in place. To do this, you save a sample of formatted text from the DTP application in its native text format - not in Ascii - and then analyse the resulting file in your wordprocessor.

Make a note of which codes switch from roman to italics or bold, which represent open and close quote marks, "m" and "n" dashes etc, and then set about using the search-and-replace function of your wordprocessor to replace your wordprocessor's own formatting codes on a prepared file with the appropriate

DTP codes.

If this sounds fiddly, relax: it only needs to be done once, as you can define the search-and-replace operations as macros, save them to disk and simply re-use them next time round. I highly recommend Protext for this sort of work, as the only wordprocessor fully equipped to do all this: to replace quotation marks automatically, for example, you need to be able to instruct search-and-replace to operate on only every second occurrence of the searched-for character, and I have found no other program that can do this.

Computers have a tendency to take over your life and working habits, and once you have replaced the manual typewriter with a wordprocessor you may regard anything reminiscent of traditional methods as inconsistent with your new, high-tech street cred. In response to this, software publishers have developed digital versions of the old-fashioned reference volumes that used to clutter the writer's desk: the dictionary, thesaurus, and grammar book.

### Words don't come easy

If your ST has a hard disk and enough memory, these additions to the heavyweight wordprocessing packages - there are also stand alone versions available - can be used to full advantage although they are hardly essential given the cheaper paperback alternatives.

I am surprised, however, that Calligrapher is the only ST wordprocessor so far to offer an absolutely brilliant feature which can really revolutionise your writing technique - an outliner. Put simply, an outliner is an electronic replacement of the back-of-an-envelope technique of planning.

You begin your work by jotting down the main headings and subheadings, rearranging them as you wish, homing in on one particular section to start writing, then returning to another to add something to the structure - all very intuitive and a genuine advance on pen-and-paper technology!

Step beyond the stereotypes

# CHARLOTTE

No boring old fogies

# MAG

Free classified ads

CM is for...  
YOUR photos  
cartoons  
stories  
music

CM connects the young  
CM is all 'zines in one  
CM gets the NEW stars  
CM has no slant or bars

designs  
opinions  
personal experiences  
poetry  
moans

messages  
suggestions

## ANYTHING



Out mid September



Like music?

CM's FLIPSIDE is the hottest music outlet

IN A BAND?



is the place to be seen



£1.40

£1.40

In all HMV, Tower Records, Virgin megastores and any half decent newsagent. Tel 048 641 3675

# The key to animation

*Real animation is hardly child's play but Lexicor's Chronos 3D key frame animator should make it a lot easier. Andrew Wright takes a quick look*

Computer animation has become big business. The mind-blowing special effects techniques used in films like Terminator II have started to filter into advertising and TV, and all of a sudden everyone wants to get involved.

Powerful computers and software are needed (fast Silicon Graphics workstations were used in Terminator II) but for artists starting out in the business, the ST makes a far more cost-effective platform.

Lexicor Software, a US company, has just launched its Phase 4 range of animation products in the UK through CGS. It believes its products can match those on workstations – and even work alongside them using the same industry-standard file formats.

Antic's Cyber Paint, Cyber Sculpt and Cyber Control have been around for years, but they aren't perhaps as user friendly as they might be. Complex animations can take hours of hard work using the animation programming language.

By making its products much easier to use, Lexicor is obviously hoping that its Phase 4 products will make animators and artists look at the Atari as a serious graphics platform once again. On first glance they shouldn't be too disappointed.

The flagship program is Chronos 3D, a key frame animator. It is backed up by Rosetta 3D, a file transfer utility which can translate between all common 3D file formats, including those on the PC and Mac.

For really professional quality rendering – shading objects to look as realistic as possible – there is also Prism Render and Prism Paint, reviewed elsewhere this issue.

OK, so Chronos 3D is a key frame animation program. What on earth is one of those? Well, in traditional cartoon animation, a "key" animator draws only those frames necessary to describe a character's action.

Key frames might show Tom holding

a pan above Jerry's head, the pan connecting with Jerry and then Jerry squashed flat on the floor. Another less experienced, junior animation artist would fill in the sequence, drawing all the intervening frames required to make action seem smooth and fluid.

Computerised key frame animation lets the computer do the tedious job of "in-betweening" while you make the decisions about how the key frames should look. Sounds simple doesn't it?

Actually it isn't too difficult, even with very little experience. I'm no cartoonist and serious animation is clearly a job for the experts. However, within half an hour of installing Chronos 3D and reading the tutorials in the manual, I was animating an Atari ST.

I hasten to add that I didn't draw it – the object file was downloaded from CIX - but with Chronos you can soon get the thing spinning about and moving.

In addition to moving objects around, Chronos can perform several different types of metamorphic animation. One object can be transmogrified

(lovely word that!) into another and back again, with Chronos computing the intervening objects.

The program also uses a simple yet powerful technique known as "cycling". A good example is a walking man – most of the actions are repeated so it can be defined as a cycling object and the frames can be used again and again in a fixed sequence.

Chronos is supplied with several animation and tutorial files and has a good quality manual running to several hundred A5 pages. The manual is aimed at beginners and takes the user right through the procedure using short but useful tutorials and detailed explanations.

The program will run from floppy disk but a hard drive is preferred for obvious reasons. Although it will run on 1Mb machines in either med or hi-res, 2Mb or more will be necessary. It is also dangle protected on the serial port which is a nuisance.

It has to be said that Chronos is little use on its own. It will take object files in CAD-3D or Cyber Sculpt format and use

## BOTTOM LINE

FEATURES	Excellent
A wealth of features for key frame animation. Sets a new standard.	Average
	Bad
	Appalling

EASE OF USE	Excellent
A mouse and some imagination is all you'll need. Good documentation and plenty of tutorials too.	Average
	Bad
	Appalling

VALUE FOR MONEY	Excellent
For serious users the price is right.	Average
	Bad
	Appalling

**Product:** Chronos 3D  
**Supplier:** OGS, 19 Ledbury Place, Croydon CRO 1ET  
**Telephone:** 081-686 8121  
**Price:** £180.95  
**Configuration:** Any 1Mb ST/STE/TT

them to create the animations. You can't create objects in Chronos or even edit them.

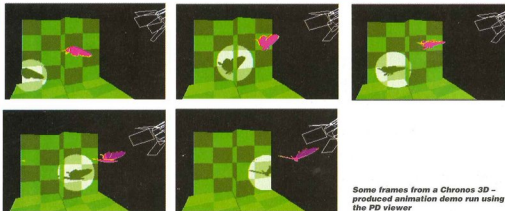
You can define the effects of shading, place and move the various types of light source available and alter just about every angle involved. Chronos will use the colours given and work in the modelling program and the objects the shades required.

Objects are moved, resized or skewed by clicking and dragging, creating key frames as you go. Chronos then fills in the "tween" frames and saves the animation as an FLM file.

You can play the FLM file in Chronos but you won't see it in colour on an ST (Chronos doesn't run in ST low resolution). As a result Chronos really needs TT low resolution (256 colours) or a graphics card for anything like photo-realism.

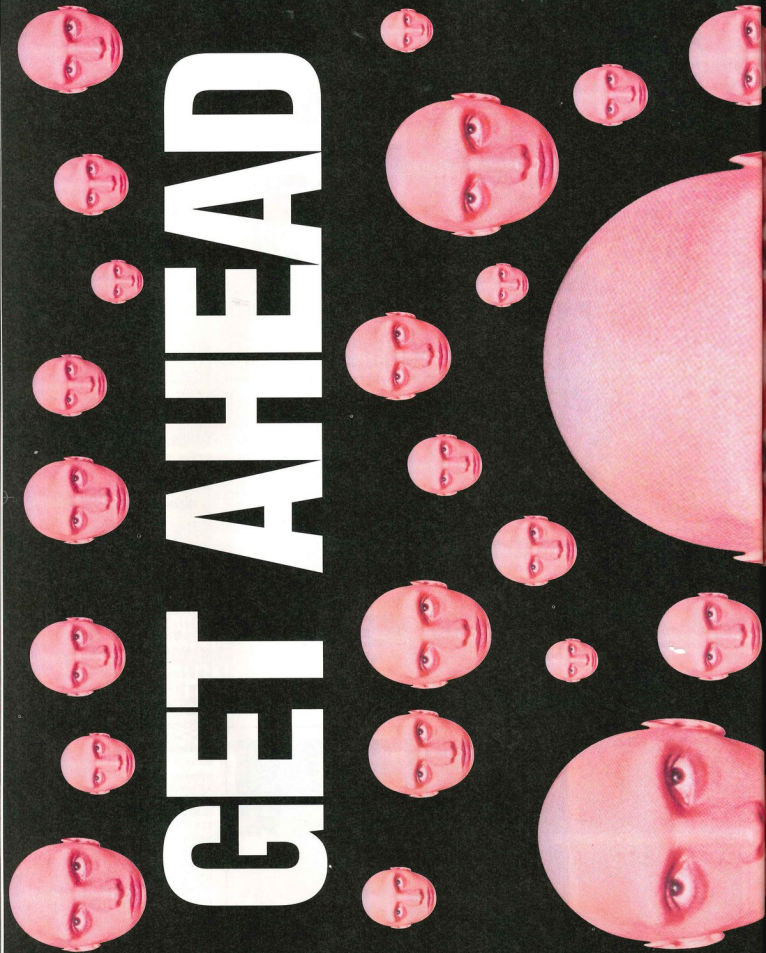
To colour the animation file you'll need Prism Paint or Prism Render as well as the special public domain viewer program (provided on the Chronos disk).

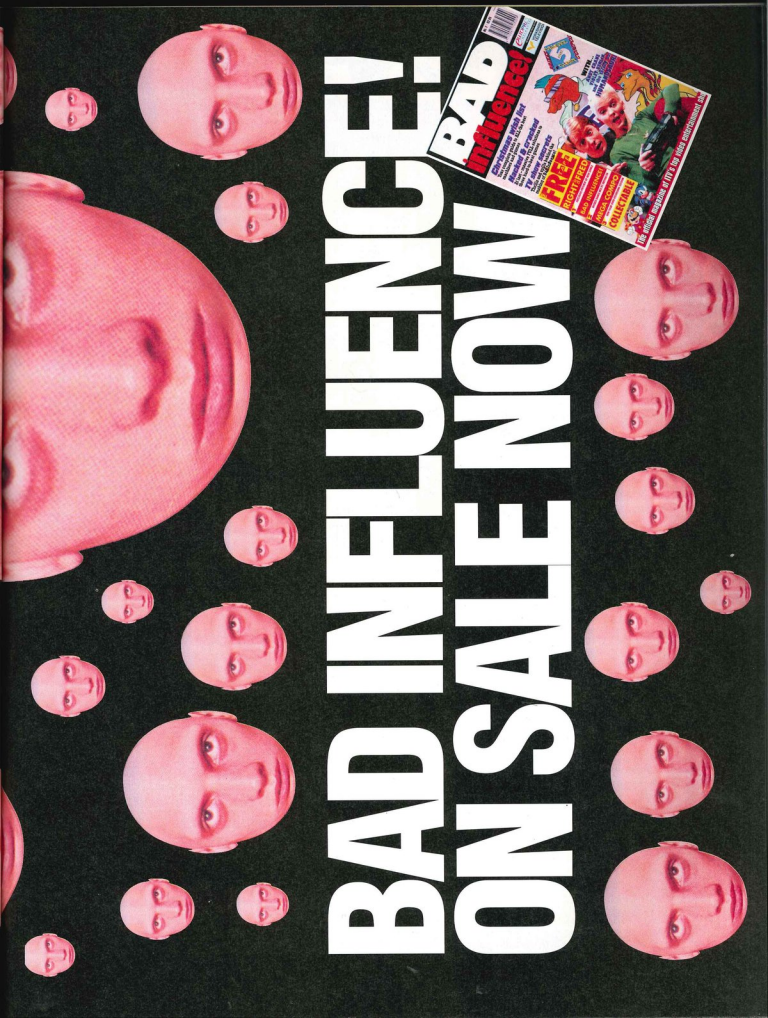
I've only scratched the surface of this very powerful package but it does open up some interesting possibilities for ST artists with decent hardware setups.



Some frames from a Chronos 3D - produced animation demo run using the PD viewer

# GET AHEAD





# BAD INFLUENCE! ON SALE NOW







**SINK PLUNGERS AND EGG CARTONS**

ISSUE SIXTEEN • JANUARY 1993

# GAMER

THE UNSTOPPABLE GAMES MACHINE



*The Daleks  
are back!  
And they  
still look  
slightly  
silly*

*Plus...*

**REVIEWS...** NIGEL MANSELL • REACH FOR THE SKIES • NO 2nd PRIZE •  
PREMIER MANAGER • CREATURES • COOL WORLD and more besides!  
**ALSO...** BLAST FROM THE PAST • LEMMINGS 2 PREVIEW • CHEAP SEATS •  
MASSIVE CAMPAIGN COMPETITION • AND WE'VE EVEN GOT A BACK PAGE!

# ONword

It's the news that even Trevor McDonald couldn't handle...

## Scrabble on-screen

Yes, the world's leading word game is just about to appear on your ST. Billed as the ultimate game of verbal wizardry to hit the home computer, Computer Scrabble is the definitive '90s version of the famous game.

It's the same fun-packed blend of skill and chance which enhances your word power as you play, but it does have some special features.

Brilliant computer graphics give an extra dimension to the game, as well as having the advantage of all pieces staying on board, so there's no chance of one of your relatives having one too many on Boxing Day and crashing into the board and ruining the game.

Locked into the game's memory is every page of the Chambers Official Scrabble Dictionary (over 126,000 words) so bluffs can be called in seconds.

A special souvenir computer print-out of the final board position can be put into effect at the touch of a button, so you can remember how badly you lost. Release date and price are as yet unknown as we go to press, but it should be available very soon.



## Contraptionsgate - Cute repair man in bug scandal

Mindscape's next release is a game called Contraptions. It's an isometric 3D puzzle game very much in the style of the now classic DiGeneration. You take the part of a "cute" repair man and you must work your way through a huge machine fixing "bugs" and making repairs while looking for tools with which you can exact these repairs.

Switching levers, jumping on pressure pads and turning screws will enable you to enter other rooms which in turn allows you to progress through the levels.

If it's half as good as DiGeneration then it'll be very good indeed. Contraptions should be available around about now for the quite low price of £19.99.



## Kixx out the jams

US Gold's budget label Kixx has just released a brand new sub label. Entitled Kixx XL, the company have a whole lorryload of forthcoming releases lined up. These include Midwinter, Battlehawks 1942 and Future Wars which are reviewed in the Cheap Seats this month, check them out.

Also released are Zak McKracken and the Alien Mindbenders and Indiana Jones and the Last Crusade - The Graphic Adventure. The games are more expensive than your average budget software. All of them cost £12.99 except for Indiana Jones which will cost you a penny under £15.

Looks a lot of money for a budget game, but I think you'll agree that these games are all really good and are worth that little bit extra. Just don't make the prices any higher, OK? All releases mentioned here should be available now.

## Welcome to Civilisation...

All you Atari owners shout "hoo-bloomin'-ray" because those kind people down at Microprose Towers have decided to release Civilisation on the ST.

The game received a whopping great 93 per cent and a juicy Gamer Gold in sister magazine Amiga Computing.

Basically all you have to do is create a civilisation and develop it from the Stone Age to the future. You start off with a band of nomads in the year 4000BC and you have to develop towns, cities, societies and explore brand new worlds.

You could even meet up with some famous historical characters such as Napoleon or Genghis Khan. Having had a little twid-

dle with Civilisation I can honestly say that all you ST owners will be pleasantly surprised when it finally comes out.

The game is set for release at the beginning of '93 and will cost you £34.99.

Yes, the God game that's almost bigger than God is almost here - brace yourselves.



## They think it's all over...

...but they're wrong - it's not over yet. Sensible Soccer, the biggest sport game of 1992, has just been improved. With the new title of Sensible Soccer v1.1, the game has loads more features and is almost guaranteed to be in the top three Christmas sellers.

The game now features new and improved goalkeepers. In the first game the goalies were a bit wishy washy, but now the goalies can recover more quickly, catch the ball properly, punch the ball away and when it's too hard to catch, tip the ball over the bar or around the post. All these features coupled together make the goalies a lot harder to score against.

For all you Vinny Jones fans there is trouble on the horizon. Any cynical professional fouls will now earn your players a red card and a long walk back to the dressing room. Plus there's more!

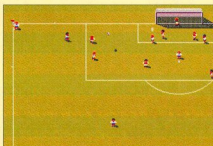
The new backpass rule is included, so that means your goalie can't pick the ball up, but he can run all the way up

the pitch and score a goal. All the new season's team and players names are included and there are some more brand new comedy custom teams.

Having played the new version I can say that it's loads better and loads more fun than the original - a bargain if

ever I saw one.

There is good news for people who own the original game. You can upgrade your copy by sending your disks to Renegade. Call them on 071-481 9214 for more details.

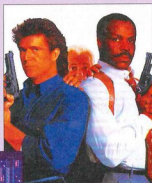


More of the same, only different

### Large sweaty men and big weapons

The race for the Christmas number one is hotting up and it looks as though Ocean are preparing to load their big guns. Coming your way this Crimbo are Lethal Weapon, WWF European Rampage and, as previously reported, Cool World and Universal Monsters.

Lethal Weapon is based on the trials and tribulations of Martin Riggs and Roger Murtaugh from



the Lethal Weapon film trilogy. You get to choose to play either Riggs or Murtaugh - each has varied abilities and have to tackle the missions in different ways.

There are five missions in all in which you have to conquer - drug smugglers, terrorists and the Organisation, or saving hostages under siege. The game, which is an arcade shoot-'em-up, is Ocean's biggest film licence ever and should be available now for a measly price of £25.99.

Ocean's big game is WWF European Rampage and hopefully it'll be better than their first effort. This time all your favourite wrestlers unite for a European Rampage Tour.

Hulk Hogan, The Ultimate Warrior, The Natural Disasters, The Nasty Boys and Legion of Doom are all featured. The game can be played as a two-player Tag-Team or a one on one grudge match.

It says on my wonderful press release that there are over 62 (count 'em!) individual moves for each wrestler which I find very hard to believe, but we shall see.

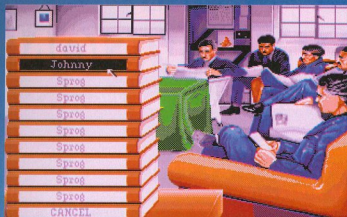
Expect to see a review fairly soon. WWF European Rampage will cost you £25.99 and should be available at the beginning of December.



### Coming to a screen near you soon

- Gremlin are just about ready to release Space Crusade 2. More aliens and more guns feature in the sequel to one of the years biggest games.
- Have you seen Virgin's Pool in the shops yet? No neither have we and we now know the reason why. It's been put back a month or so because Archer Maclean the games creator decided to add some extra bits.
- Hot on the heels of Dr Who and the Daleks come three releases from Alternative Software. The first is an educational package based on popular children's TV series Playdays. Thomas the Tank Engine is the next game release, the third being a platform game based on the trials and tribulations of singing cartoon favourite Huckleberry Hound. All should be available very soon indeed.

<b>REACH FOR THE SKIES</b> .....	<b>4</b>
Another game about "beating" Germany	
<b>DALEK ATTACK</b> .....	<b>6</b>
Dr Who fits new Duracells in K9...	
<b>RAMPART</b> .....	<b>8</b>
It's cannon fodder action all the way!	
<b>NICKY BOOM</b> .....	<b>10</b>
A small fat boy eats lots of sweets and jumps on things	
<b>NIGEL MANSELL</b> .....	<b>12</b>
A Murray Walker dream come true	
<b>NO SECOND PRIZE</b> .....	<b>14</b>
Thalion jump on the ever-popular racing bandwagon	
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The only way Brian Clough'll be managing a footy team come May	
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The first in Ocean's Crimbo line up	
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Gamer proudly presents the complete(ish) solution to Ween	
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Ah, so this is where the charts are! Hang on, what's this about me?	



Which of these budding young pilots will you choose to send to their certain deaths?

**H**ey, it's quiz night. F-15 Strike Eagle 2, Falcon, F-16 Combat Pilot and F-19 Stealth Fighter. What have all these games got in common? Have you got it yet? Come on, it's easy - they all start with the letter F!

Nah, only joking, the proper answer is that they are all flight simulators. More to the point, all the planes in these so-called flight simulators are very hi-tech and practically anyone can fly them.

Shooting down the enemy is no problem - click on a button and your missiles will hit the target, even though the target is 80 miles away.

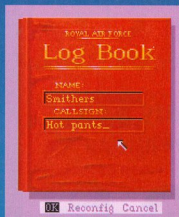
What you really need is a flight sim to test your raw ability. What could be better than a World War 2 plane simulator like, err Knights of the Sky? Wait a minute, that's far too old, what we need is brand new World War 2 sim like, err, umm...

Oh well there doesn't seem to be another one. Thank God for that I'm bobbins at plane games (crash of lighting followed by small thud). Oh dear, God does move in mysterious ways. Look what I've just received - a brand spanking new copy of Reach for the Skies. Gusp!

It's 1940, it's summer and the future of World War 2 hangs in the balance. The German Luftwaffe and the might of the RAF are about to go into battle once more. This time it's the Battle of Britain and whoever wins will have a damn good chance of winning the war.

Well, in Reach for the Skies anything could happen because you get a choice of who you want to be, Germany or Britain, the choice is entirely up to you. So, if you're good enough you could change history.

Everyone knows that Britain won the battle because we're smart, but what would of happened if Germany had won the Battle of Britain and eventually the war? It doesn't bear thinking about - all I can say is that there is no way you'll get me scoffing frankfurters although it has to be said



Scribble your name on your log book and then, err log away



Chock away chaps and tally ho and away we go

Chocks away chaps...

# REACH FOR

VIRGIN ■ £30.99 ■ 1 meg ■ Joystick/mouse ■ Out now



I'm glad I put on my brown trousers this morning. Waaarrrrrrggggghhhh.

that you'd always get a sunbed when on holiday.

Wahey, follow me on a journey, a journey back through time where the sights and sounds of the 1940s will shock and surprise you. A chance to become a World War 2 fighter ace beckons. So, let's don our flying jackets, grab our yokes and take to the skies. Or, instead I could just boot up the ST and play Reach for the Skies.

Right the game has loaded. Himm, it offers a choice of air forces. I could become a low-down, dirty Luftwaffe pilot or I could become a brave and heroic Brit and join the Royal Air Force. The choice is mine. Himm, a bit of a toughie. Right, proud British fighter pilot it is. Time to jump into

the old Spitfire and give those Jerries a right thrashing and be back in Blighty in time for tea and cakes. Chocks away, chaps.

Almost all of the game is spent in the air in your plane - or I should say planes, because you actually control a squadron. This enables you to hop from plane to plane during battle - very handy if you're about to get blown up.

The 3D is quite impressive, especially when you fly the plane over land. There are plenty of external 3D views, all with the option to zoom in and out.

The controls in Reach for the Skies are really simple. Pull back on the stick to gain altitude, push down on

the stick to lose altitude and left to go left and right to go, err right. Oh, and you push the Fire button to, umm, fire, see, simple.

There are plenty of dials and meters to confuse you and the control panel looks authentic enough.

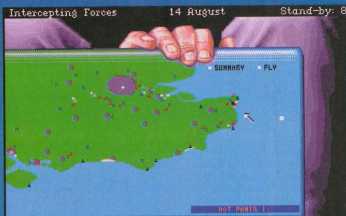
There is only one little problem with Reach for the Skies, and that is that when you take off it takes you ages before you finally get into battle with the enemy.

You can accelerate time, but it's not very realistic. Fortunately there is an option to start off in the air, so you're much closer to the enemy.

The game is quite difficult and chasing the enemy over land and sea is tough. The enemy always seems to be that one step ahead of you and it is really tough to shoot it down. It wouldn't be much of a challenge if you could shoot them down really easily, though.

Once your flight has been completed you have the great chance to watch it all again by using the video option. Oh, so camcorders weren't exactly available back then, but the video option is a very nice touch. You could even send your finished comedy dogfights into Jeremy Beadle and win loads of money.

Despite the little problem, Reach for the Skies is an excellent flight simulator. The presentation is very nice and everything down to the tiniest little detail has been researched, which makes the game that little bit more



The southern coasts of England in all their glory. Whoopie doo. Sigh...

**VISION**  
 GGGGG  
 Wonderful graphics especially the brilliant 3D bits.

**AUDIO**  
 GGGGG  
 Hmm, not much to report, but what there is is suitable enough.

**PLAYABILITY**  
 GGGGG  
 Good honest fun, plus it's really easy to control.

**ADDITION**  
 GGGGG  
 If you fancy a flight game then get addicted to this one.

**85%**

# THE SKIES



Pride, boys. Go and get the krauts and it'll be medals all round...

interesting.

There is a good manual that goes with the game explaining all about World War 2 and other such interesting facts about the planes and so on. You almost feel like you're actually flying a World War 2 fighter plane.

There is an ideal opportunity to enhance the atmosphere in three simple, but effective ways. One: Get a fan and position it on your monitor and set it at full blast. Two: Grab a white scarf and some swimming goggles and wear them. Three: Get someone with a shotgun to shoot it over your head every couple of minutes.

Hey, who said Gamer wasn't full of informative ideas? [me, get on with it you prat - Ed]. One thing that I defi-

nately would recommend, even though it's not essential, is that you play the game on an accelerated machine. This makes it mega fast and you will fall in love with it instantly.

If you're looking for a World War 2 flight sim that's as good as, if not better than Knights of the Sky, then Reach for the Skies could be the game that you're yearning for.

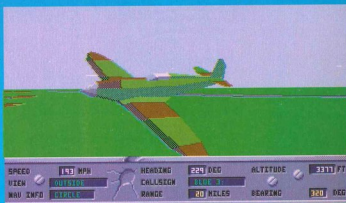
Rowan Software, the creators of such hits as Flight of the Intruder and, err, umm Flight of the Intruder, have come up with a cracker.

It's not exactly original stuff, but it's damn exciting and damn realistic. God damn. Reach out for Reach for the Skies, it's brill.

Jonathan



Don't fire till you see the whites of their eyes. OK, guv, but where the bloody hell are they.



It's a Spitfire. Everyone shout 'Yippie'. Oh dear my brain is hurting...

The Doctor. Must. Beee. Exterminateeeeeed!

# DALEK ATTACK

**S**teve Wright. In the afternoon is protected under copyright - nineteen nineteen two... LEAVE HIM!!

Unless you tune in to Radio One between three and six on weekdays you could be forgiven for believing that the cheap but cheerful adversaries of Doctor Who had dropped off the face of the planet.

Call it sentimentality, call it a cheap way of filling air time, but all things Who-like are going through something of a comeback at the moment.

Re-runs of the old Doctor Who series are popping up not only on UK Gold, which will readily show any old pap, but also on the rather more credible terrestrial outlet, BBC2.

And now, to top it all, Admiral software - little brother of education and budget specialists Alternative - are releasing for our delectation the game of the favourite foe, Dalek Attack.

I remember when I was about four or five years old and Jon Pertwee was our erstwhile do-gooder from the planet Gallifrey. We got a coloured television around this time.

It took my mum about three weeks to peel me from the living room ceiling after I discovered for the first time that the monsters weren't all black and white after all. Potty training was set back months. I'm telling you.

Like all Doctor Who fans, I was enthralled by the scary and futuristic-looking Daleks (this was around 1974 remember), but even at this tender age was a little confused as to how these robotic wash tubs could navigate a terrain full of potholes and contours on wheels the size of hal-pennies. Despite their dodgy synthesised

ADMIRAL ■ £16.99 ■ 1 meg ■ Joystick ■ Out now

voices and point blank refusal to adhere to even the simplest laws of physics though, the Daleks were, and remain the favourite and most recognised of all the Doctor's adversaries.

Davros, the Dalek leader and part-time kebab shop proprietor, has wheeled himself out of retirement once again for yet more outer-planetary evil. Well actually it's more like inner-planetary evil, because he's attempting to destroy the earth's ozone layer with the help of his evil minions.

Somebody should have told him that the job's already been taken - most of the population are undertaking it on a voluntary part-time basis - but anyway, that's what he's doing, and he's happy, bless him.

As usual, it's up to the Doctor to foil this dastardly plan, doing what he does best, which is... er, just what does he do exactly, apart from run around forbidding landscapes with an assortment of hapless assistants, that is? Or anyway, let's just say the Doctor must foil his plans, and leave it at that.

Dalek Attack is a five-level multi-scrolling shoot-'em-up. Oops - no, stop right there - it isn't a shoot-'em-up at all, because if memory serves me correctly, Doctor Who is a pacifist. It's a sonic screwdriver-'em-up, this

implement being the trusty tool that the Doctor is never without. Having said that, one blast from his screwdriver and the baddies certainly look dead to me - maybe they're just

midly concussed and suffer no serious after effects. Oh who cares?

As I was saying before I so rudely interrupted myself, the game is set over five levels - beginning in London, we

travel through Paris, Tokyo and New York before finally arriving on Skaro, home planet of Davros.

Each level is very large, and the whole game is quite a challenge from the start. Nothing much new to report in the gameplay area - dispose of the nasties (a large proportion of which are obviously Daleks) in traditional fashion, picking up bonuses and other useful items as you go.

The Doctor himself is a very versatile chap - jumping from buildings, hanging off ledges and scaling walls - poor old Sylvester McCoy would turn in the grave his career was buried in if faced with challenges such as this.

Speaking of Sly, he's one of the three Doctors you can choose to be - the others being Tom Baker (complete with daft scarf) and Patrick Troughton. In two-player mode you even have a choice of which assistant you want to take, although thankfully Bonnie Langford isn't included. Good God - it'll be Lionel Blair as the



This is Skaro - or is it Tokyo? Well anyway, that's a spaceship. Or maybe a satellite



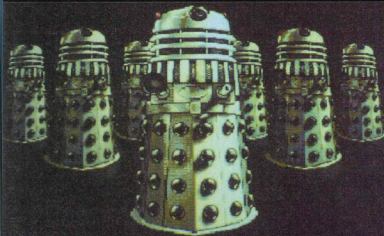
Dodgy character this one - kept winking at me he did!

Doctor next.

There will be those who criticise the graphics for being flat. It's true that a few parallax backgrounds could only have enhanced the game, but I was more than impressed with the level of detail, and the realism of the city backdrops, particularly the part where the Doctor gets flattened by a New York yellow cab.

It's not often we mention price tags in a review, the idea being that a game either will or won't stand up on its own merits. Dalek Attack is an original twist on a tried and tested formula - at seventeen quid it's outstanding value for money, an absolute must for all Doctor Who fans.

Paul



In typical NY fashion, the Doctor is assaulted by a flying crack head

Excuse me for asking, but we're your new neighbours. You don't have a spare sink plunger do you?

## VISION

Loveably detailed levels with large sprites.

## AUDIO

Pretty much standard music and sounds.

## PLAYABILITY

One gripe - more firepower would have been nice.

## ADDICTION

An interesting enough concept to keep you hooked.

# 83%

Wizard PD wish all customers and  
Atari ST User readers a Very Merry  
Christmas and a Happy New Year

# WHAT MAKES WIZARD SPECIAL?

## FULL DOUBLE SIDED DISKS

Compare our Contents with other  
Suppliers & see who's  
the best for Value

FAST SERVICE  
RELIABLE  
TOP QUALITY  
(we only use the best)

## JUST A FEW EXAMPLE DISKS FROM OUR COLLECTION

**ART 07** Superb art package, ideal for simple DTP. 23 built in fonts. A4 size paper works in monochrome for best quality of print. Ideal for leaflets etc. DS Disk.

**ADV 01** DDST, DUNGEONS & DRAGONS. Role playing adventure. PARANOIA, ENCHANTED REALM and ELBOZO CITY. 3 more good adventures also on this disk.

**ARC 50** HACMAN, superb pacman clone. MR PACKY, another super pacman. SOCCER brilliant 3D football game 2 players. MUTANT WIFEOUT aerial shoot em up. INVADERS needs no description.

**BRD 04** CHESS, superb chess game. DECODER, excellent mastermind. SUPER SIMON, computer version of hand held game. DOMINOES, puzzle game. GOLF card game. Also on this disk DRAGON MAZE, 2 game, SENSORI BACKGAMMON, BRIDGIT, ST ARTEK, BATTLESHIPS.

**ARC 14** HOME, and L'ORB 2 super pinball games. GALIC RANGER, unusual shoot em up. MONKIES & BALLOONS, bounce the clown and burst the balloons. FIRESTORM, another good arcade game rescue the humans. LAZERBALL, super game and interesting version on the pinball theme. Also on this disk LOST TREASURE, WIDOW MAKER, SLALOM & BREAK OUT.

**AST 01** PLANETARIUM simply the best PD Astronomy program. SKYMAP another great Astronomy program plus aSTronomer.

**BRD01** MONOPLY, LAZERCHESS, OTHELLO, CHECKERS, WHEEL OF FORTUNE and more. A superb collection of BOARD GAMES.

**WPR01** ST WRITER V4.2 and FIRSTWORD. The best word processors for the ST(E) plus a spell checker, print spooler and a selection of ready to use letters.

**ODD07** 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!!!

**ARC04** TETRIS, superb Tetris game. KLAX TRIX, WELTRIS & TETSIDE, 3 more good games on the Tetris theme. MR DICE, COLLAPSE & BURGER, 3 more good games to fill this super value disk.

**WPR02** IDEALIST. Super multi column text printer. EX COLUMN, DUAL COLUMN, 2 COLUMN, 3 more good multi column text printers. DOUBLE PAGE. Print 2 pages at once on A4 on your SLM 804.

**WPR03** ALICE. Super text editor up to 10 docs. In memory at once. EDITEXT. Super little text editor. Ideal for beginners. NEWORD 400v3. Easy to use text editor, again good for beginners. NOTEPAD. Make temporary notes from within any game program. PHONEPAD. Pop up telephone book. FILOFAX and ORGANISER. Everything a paper filofax would have and much more in these two programs. TYPEWRITE - Turn your ST into a typewriter.

**WPR09** LEXICON. A pure word list containing 46,209 words without slang, americanisms or other rubbish. Needs 1Mb to run with SPELLONE (spellchecker) also provided on this disk.

**ART01** ARTUTOR. For budding artist. Includes its own package.

**BRD05** AMERICAN FOOTBALL, DALEKS. START REK, DELTA 3, CELESTIAL CEASERS (versions 1 and 2), SPACE WARS, RED ALERT, MATCH, HANOI, OGRE, 11 Board and Strategy Games. SPLENDID SELECTION!!!

**ARC12** BELUM INTERACTUM - Good galaxians clone. BLOCKADE, HAUNTED HOUSE, AMORTRACK, BOING, INVADERS, MANIA. Another superb selection of arcade games.

**ARC13** VIOLENCE. Superb scrolling shoot em DROID - Excellent platform game.

**ADV03** CONQUEST. Graphic adventure. Should take weeks to complete! (Shareware).

**ADV06** BLACKDAWN. Good text adventure with excellent graphics. DUNGEON MASTER NEW LEVELS. Needs original DM disk to play.

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Rampart landed on my desk the other day and, workaholic that I am, and pausing only to fetch a cup of coffee substitute from the machine, I booted up the ST there and then to see what it was all about.

While the tired old Atari farted and rasped its way through the loading process, I took a look at the manual and was told that my aim was 'to build and fortify your empire by winning artillery battles against the opposition'.

So it was a strategy game then, right? Wrong actually – on further inspection it turns out that Rampart is a cannon ball-em-up with some serious Tetris overtones. Strange.

Darren arrived for work at this point – I'm always first here you see, I'm dead keen like that – and being the arcade hanger-arounder that he is, commented that he'd seen this game in a few places in town.

On questioning him as to what it was like, he responded that he'd never actually played it – in fact come to think of it, he'd never actually seen anyone playing it. Oh.

The ST's drive had settled down to a quiet hum by this time, and before long the

intro screen was proudly announcing that the game about to appear was indeed Rampart. Handy things, intro screens – no, they are.

The ramparts in question are those surrounding a castle – your castle in fact – and the object of the exercise is to sustain as little damage as possible to the aforementioned walls in the face of an enemy onslaught, or to at least rebuild quickly when damage does occur.

What happens is this. In one-player mode, after having chosen your battlefield and castle from the limited and similar choices afforded you by the friendly but spartan options screen, you must then pro-



Here's the tricky bit – rebuild your castle using the Tetris-like blocks

tect your stronghold from the computerised enemy.

For the task you are armed with cannons which must be placed within the boundaries of your... Ramparts.

Encroaching in boats of various sizes, the enemy are similarly endowed with firepower, and in order to eradicate the nasties you must jiggle the mouse furiously and place a cursor over the intended target.

Cannons can only fire one ball at once, meaning that at the beginning of the game you are way outnumbered in terms of actual cannons.

Another disadvantage is that your castle provides a static target while the enemy ships are constantly on the move. On reaching the beachhead, troops will be deployed and cause added damage.

When the battle is over – ie when either all enemy ships or your ramparts are totally destroyed – it's time to stick a Dr Spin record on the turntable and prepare for a game of Tetris's Strange Brother.

Multi-shaped blocks appear which must be rotated and dropped in to a corresponding part of your ravaged walls. It isn't necessary to reproduce the exact shape of the ramparts just as long as there are no gaps

left. If there's enough time, try to make your ramparts bigger than before so that more cannons can be fitted in.

The chances are you won't have time though, since the allowance is ridiculously small and will have you all of a dither and cussing in no time. A life is lost if there are any pieces missing.

Two-player mode dispenses with the sea and sees you and a chum blasting all merry hell out of each others castles while trying your hardest to keep up with the restoration process at the same time.

It's not a bad idea for a game, and as far as it goes Rampart is executed very well. Head to head is fun and quite addictive for a while, but the one-player version isn't very interesting at all, and a little more time on the rebuilding phase would have been nice.

Unfortunately the gameplay becomes very repetitive all too soon and although I enjoyed playing Rampart I can't envisage myself staying up until all hours of the morning.

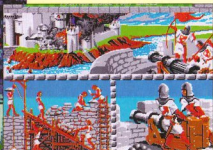
If you're desperately seeking a game in which you can directly compete with a friend then check it out – otherwise hang on to your cash.

Paul

## Domark in strategy/Tetris hybrid game scandal!



DOMARK ■ £25.99 ■ 512k ■ Mouse ■ Out now



Now blast away at the masty boats from behind your medieval curtains



Choose your attractive detached medieval abode from the vast array available

**VISION**  

 Nicely presented and colourful.

**AUDIO**  

 Turn it off they shouted. I didn't need telling twice.

**PLAYABILITY**  

 My only real quibble is the stingy rebuilding allowance.

**ADDICTION**  

 OK with a friend. Or enemy.

**70%**



# Sensible

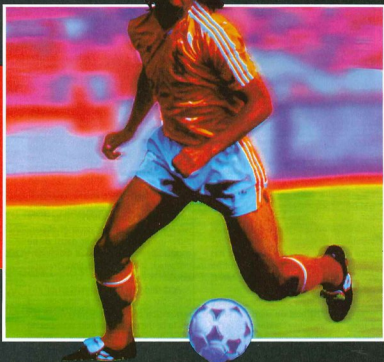
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**Sensible**  
SOFTWARE





Oh dear I think I'm lost - isn't this where Hansel and Gretel live?

Come here sweet thang and I'll give you the key to my heart

Nobody's sure why, but it's called...

# NICKY BOOM

MICROIDS ■ £25.99 ■ ½ meg ■ Joystick ■ Out now

It doesn't matter how much we may love them, or how many tens of thousands of copies they sell, it has to be said that there aren't a great many original platform games around nowadays (if indeed there ever were). You know - it would be nice to think that every once in a while we might come across a game that involved neither:

- Running blindly through endless garish landscapes warding off hordes of evil creatures in order to save someone close to our hearts, or;
- Running blindly through endless garish landscapes warding off hordes of evil creatures in order to collect the integral parts of a humanity-saving machine.

Just a little bit of variation, that's all. Like, say for instance... erm... maybe, no - but what about... ah, erm. Hmm, its not actually that easy after all, is it? When the whole essence of the game is to scamper madly hither and yon collecting all manner of items, there just isn't a lot of scope for a jaw-dropper of a plot twist.

Nicky Boom is seemingly no exception. Through reading the bumf on the box we find that Nicky's grandad has been captured by an evil magician who's used his magic to influence the forest creatures into protecting him.

Perhaps it's because the game hails from



There's nothing like an apple core to do maximum damage to the end-of-level wasp thing



What a versatile little fella - he can even juggle bombs

the land of the onion and the angry farmer and has subsequently lost a little in translation, but for whatever reason we find on reading the manual [yes, we do read them] that the perpetrator of this atrocious crime is actually a wicked witch who has locked grandpa in a dungeon until he reveals to her the secrets of the forest people.

Exactly who these people are and quite what secrets they hold we aren't told - but it really isn't important, and neither is the sex of grandpa's incarcerator. All we need to know - and I suspect we did already - is that Nicky must battle bravely against all the odds to find his grandad and maintain the apparently pointless secrecy of those fabled forest dwellers.

Well as I said, as with most platformers

the scenario would appear to be nothing new - so it's up to the old gameplay department to decree as to whether Nicky Boom will add the Christmas stockings of computer-mad kids (and their dads) or be engulfed by the méele of sheer ordinariness into which so many games sink. Pinwar - eloquent or what?

According to the information on the trusty box our hero Nicky is "adorable and unbelievably cute". Trash - Nicky Boom has got to be the ugliest and most sickly-looking game character ever - his face is deathly white and he sports the gut of a hardened bear swifter. If this is a typical example of an average French six-year-old then they are indeed a troubled race.

The story begins in the forest and at the beginning pretty much follows the tried and tested method of avoiding pitfalls and jumping on creatures heads. The creatures in question were once just your normal forest-type beasties - grasshoppers, beetles and suchlike.

Now, however, they are a thousand times their normal size, mutated by the evil witch [or is it magician?] and dedicated to the task of stopping Nicky at all costs as he trips merrily through the nicely detailed but over-cute scenery.

Anyone embarking upon such a dangerous mission would need weapons, and Nicky carries with him his arsenal of apple cores which are surprisingly handy for disposing of the nasty forest elements. Not only does the game scroll horizontally but also vertically, and it's quite a tricky job just

to find your way to the end of the level, let alone kill the creatures as you go.

As I progressed further into the game I was surprised by its size. There are eight levels in total, accompanied by four very acceptable tunes, good sound and even one or two examples of what I assume to be French sampled speech.

Loads of bonus objects are there for the taking in the form of various foods, along with power-ups of a sort in the form of bombs which Nicky will need to "unsquash" the ladders, intriguing eh?

It's a platformer for sure, but there's a touch of puzzle to some of the levels that give Nicky Boom more longevity than the average game in the genre. As far as the stocking question goes - I'd still rather have mine filled by Kim Basinger's leg, but as a second choice Nicky Boom is more adequate than most.

Paul



It's a new kind of weapon - the fiery carpet bomb!

## VISION



Colourful and well detailed, but a little too cutesy for my liking.

## AUDIO



Really nice tunes and plenty of sound FX.

## PLAYABILITY



The only problem was that I got a bit lost once or twice.

## ADDICTION



This game, is now my lunchtime favourite.

82%

**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 GAMES** 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, rebuil the team while holding off relegation.

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**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 these 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 dumpped. Football knowledge is the name of the game.

**MATCHSTATS** Your judgement will be put to the test in this unique 4 minute matchstats simulation against accurately simulated opposition. This is the measure of your talent 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 6 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.

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# HEAD COACH V3

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- Pop Comp.

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Players will age and teams will fade (a player will last about 6 seasons), but you will stay and rebuild...

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Manx mediocrity shocker!

# NIGEL MANSSELL'S WORLD CHAMPIONSHIP

GREMLIN ■ £29.99 ■ 1 meg ■ Joystick/keyboards ■ Out now

It's a shame but it had to happen - Gremlin's run of corking games has finally come to an end. They had Zool, Lotus 3 and Space Crusade, all of which knocked the socks off their competitors, but it looks like the end of a good run.

Nigel Mansell's World Championship certainly is a well-timed release with the - eventual - retirement of the racing god from the circuit. But can the game live up to old Nige's reputation?

Joystick in hand [ahem] I booted up with anticipation. After getting through the copy protection, the opening screen gave me the option of practising racing a single circuit or starting the season. I thought "a racing game's a racing game", so I didn't bother trying to qualify, going straight into the race.

So I'm in the car with all the usual instrumentation in front of me - speedo, rev counter and gear indicator. But there were a few new arrivals too - a nice little mock-up of the track in the top middle of the screen with coloured dots signifying the cars is a nice addition, and the best lap and stop-clock also added realism.

After a few circuits I have to say with all honesty that this is one of the most disappointing racing games I've ever played. Everything looks pretty and there is a lot of realism but the actual driving lets the game down. Once you start to move things start to look very iffy



Ah, Silverstone - home of the British GP and ES pints of lager

Indeed. The main problem is the screen updates. I thought that such problems were a thing of the past. Games like *No Second Prize*, a motorbike racing simulator which is reviewed in this very issue, seem to manage quite well because they don't have as much graphical information to deal with, and I would rather something that was fast and undetailed than a game that's slow and looks nice.

The only things that seem to move smoothly are the driver's arm - apart from that the graphics are pretty dodgy. The other cars on the track are nothing special - no more detailed than the old Pole Position machine.

On choosing your track you are

given a screen that gives you all the information on the track such as the weather report and the circuit length. On top of that there is a quick history to the track. The Mexico track that I chose was built on an old dry lake bed.

The weather reports and so on are there for a reason. If you are driving in dry conditions then there is no point driving on treaded tyres designed to disperse water. So there is an option to fine tune your car.

You have three types of tyre, three types of aerofoil (spoiler) and three types of gear ratio.

Once you get into the game and used to the circuits you will be able to judge better what you need for

the race. If you choose soft tyres this will improve your cornering but you'll need to change them sooner than you would hard tyres. All of the different fine tunings have up and down sides.

Of course to change things like tyres you have to pull into the pits which obviously carry a time penalty, but instead of you having to do all the work you just choose which tyres you want and the computer will give you a random time penalty between six and nine seconds - then you're off on your way again.

The pitstop is usually near the beginning of the track and it doesn't matter when you want to go for one.

Moving swiftly along, I tried out the Learn With Mansell option which I have to say is quite impressive graphically. The screen opens up and you see the view from the seat of car.

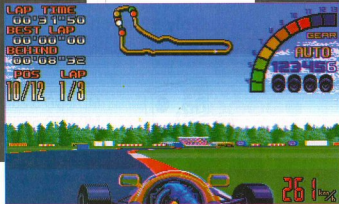
The main difference is the scary face of old Nige in the top left-hand of the screen, except Nigel looks like he's aged about 20 years.

He chats to you while you are driving the car around the circuit, giving you handy tips like "don't hit things" and "stay on the track", tips so blindingly obvious that you if you didn't know in the first place then you've been living in a cardboard box since the invention of cars.

There is the occasional good tip in there but nothing that is going



Off to a tart - even bleeding Johnny Herbert's in front of us



Hey scary, I'm actually moving up the field

Good job Ricardo Patrese's got a couple of points for the boys

ITALY		TIME	POINTS
MCLAREN		03:17.84	10
FERRARI		00:02.12	6
LOTUS		00:06.36	4
TYRRELL		00:10.20	3
WILLIAMS RENAULT		00:23.50	2
BRABHAM		00:37.84	1
LIGIER		00:48.35	
VENTURI		00:57.50	
BENETTON		01:00.35	
FOOTWORK		01:05.03	
BMS DALLARA		01:18.77	
JORDAN		01:22.18	

to make an earth-shattering difference to your driving.

Along with the Learn with Mansell option there is a driving school which lets you practice any track you like without having any other cars to dodge. The main difference between this and the other practice options on driving games is that the speed at which you travel around the track is controlled by the computer.

So if you are like me and you don't drive in the first place it's a bit of a bonus. I always try and take the hairpin corners at light speed and then wonder why I'm stuffed half-way through Granny Corcran's cottage three miles away.

When you race the season you are competing on the same points basis as the real GP circuit - ten for a win, six for second and so on. You can if you wish get straight into a race, in which case you will begin at the back of the 12-car grid.

A better idea, I found, was to qualify for the race in the usual manner - it's quite easy to earn a pole position this way.

Whether or not the programmers have actually kept stringently to the layouts of the real tracks I don't

know, but one thing is for certain - it's very difficult to overtake on most of the circuits. This brings me nicely to another small, but annoying, point - the crashes.

As I've mentioned, I'm not a driver myself, but it doesn't take Jeremy Whatsiname off Top Gear to work out that any object hurtling into a stationary object at a shade less than 200 miles an hour is likely to sustain not noticeable damage.

It's going to be absolutely knackered, isn't it? Well, perhaps this is why Nige is such a lemon on the track, but whenever he hits something - a car, a wall, whatever - his shiny blue and yellow Williams just bounces off it in a very rubbery fashion. It helps earn points in the races, but it's not that realistic, is it?

A slightly redeeming feature is the fact that you can save your Championship challenge - something that a few racing games in the past have been lacking.

Disk accessing is no problem, but on the few occasions when I managed to earn a place in the top three, I was disappointed by the lacklustre winner's podium anima-

tion that took quite a while to load. Nigel Mansell offers a great array of tracks and a few new options that other games can learn from, but as with all games of this type, it's the gameplay that counts, and sadly, what could have been the daddy of all racing games has turned out to be a second cousin, twice removed.

I won't say straight out that it's bad - it's not, but there are any number of similar games that can serve racing fans better.

Ben

**VISION**  
  
 Plenty of detail, but slow updates make for frustration.

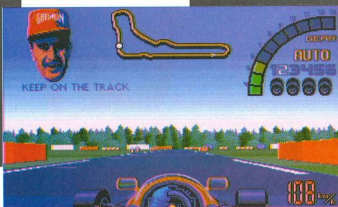
**AUDIO**  
  
 Rum, rum, soaram, rahn rahn rahn. And so on.

**PLAYABILITY**  
  
 Lets the game down in a big way.

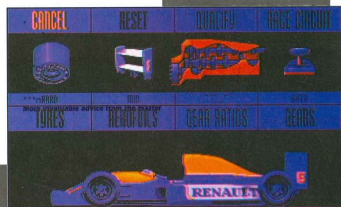
**ADDICTION**  
  
 Strictly for those race fans who own everything else.

**70%**

More invaluable advice from the master of the obvious



Oh cheers Nige, I was just about to plough through a field - NOT



Who cares, as long as it's got four wheels and goes forward

One of the biggest disappointments of my life came when I was about seven or eight years old. I think it was Halloween, but it might have been Christmas, and occurred at a fancy dress party held at our local parish church.

Now my mum is dead good at sewing and had spent days working on what turned out to be an absolutely top wizard's outfit – pointy hat, moon-and-stars jacket, magic wand – the lot.

I was a bit shy as a lad and didn't really want to go, but after a little persuasion and the threat of a spanked bottom, along I toddled in all my regalia.

On arriving my mood improved almost instantly, not only because I spied the Grandstand "Pong" video game and numerous chocolate treats that constituted the prizes, but because all the other kids' outfits were completely cack.

Well I was laughing, I can tell you, as that sorry bunch of misfits traipsed hopelessly around the parish hall in dress that looked about as fancy as a Michael Foot overcoat. Pong was mine for the taking!

When it was time for the prize giving I sat between my parents with a smug grin on my greedy little face – a grin that would soon turn to utter disbelief as some girl or other from my class at school was ushered towards the makeshift stage and presented with the fabled Pong at a reward for her pathetic-looking fairy outfit.

"But well done to everybody, especially Paul Roundell – and his mum!" boomed our compere jovially. All was not lost – at least I'd won the sweets.

"And now ladies and gentlemen, please give a big round of applause to our infants for last week's smashing play," he continued, whereupon a dozen or so five-year-olds trooped towards the front to be dutifully furnished with spangles and Texan Chew Bars.

Scandal! The sweets were for the kiddies and I would go home empty handed for

there was... No... Second... Prize.

Video games have come a long way since the days of Pong – now renamed the Sega Master System – and Thalion are taking a bit of a risk in thrusting yet another racing game into a market already overcrowded with mediocre offerings.

If No Second Prize is to have a hope in hell of raking in a decent chunk of the Christmas loot it will have to provide us with substantially more entertainment than the vast majority of its predecessors.

It does – in fact I think it's safe to say that it's one of the very best racing sims around, and it even has a story.

The most completely fabulous one-of-a-kind biketastic dreamcycle in the world is up for grabs – the owner is unknown but has offered his machine as a prize to whoever proves himself as the best motorcycle racer in the cosmos.

Competition has been narrowed down to just six riders who must now race head to head for ultimate supremacy.

You can choose whichever rider you want to be – some are particularly good on bends, or may be very fast, while others have a high hit point count, meaning they can sustain all manner of damage and continue racing unabashed.

After making this momentous decision you will then need to decide how to set up your bike. Basically this involves choosing a sensitivity setting for the mouse – no joystick option at all, which is a bit of a shame – and locking the gears onto either manual or automatic. Having done this, you're ready to race.

There are 20 tracks in all, and you must chug bravely round

them all for points – coming last actually results in a deduction from your overall score.

Chug really wasn't the right word to use at all, as the game is incredibly fast. Viewed from a 3D driver's eye perspective, it will have you and anyone watching swaying from side to side as you swing around bends, under bridges and into surprised bystanders.

Changing gear manually involves toggling a couple of the keys, and is a bit tricky at first considering control is by mouse. The game has a replay mode, and you can watch your hopelessness from four separate angles including from a chopper – I enjoyed playing the replay backwards as it gave me the impression that I was actually overtaking someone.

Graphics and sound are pretty much what you would expect from this kind of game, but how could I complain when it's as fast as this?

Since my last encounter with a real motorbike resulted in treatment for abrasions in a Greek hospital, I might not be the best person to advise you about the difficulty, but it does seem very hard.

In the races I did manage to finish I came sixth out of six every single time – there's nothing at all wrong with the control, once

mastered – it's just hard.

Hard it may be – but I played it solid for a couple hours without becoming even slightly frustrated and I'm dying for another go right now. Well done Thalion on producing one of the best racers I've seen.

Paul

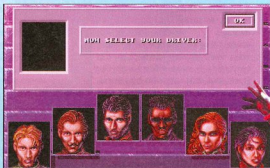
**VISION**  
 Screenshot OK, but it whizzes by too fast to matter anyway.

**AUDIO**  
 Music, bike noise, and the obligatory crash sounds.

**PLAYABILITY**  
 Tricky at first, the mouse makes it a much better challenge.

**PLAYABILITY**  
 Challenging and fun into the wee small hours.

90%



Wow – the choices are limitless. Where did this lot come from – Venus?

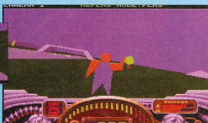
Hot rubber, throbbing engine, and other such entendres

# NO SECOND PRIZE

THALION ■ £25.99 ■ 1 meg ■ Mouse ■ Out now ■



The handy replay mode enables you to relive those moments of glory time and time again



Why not mow down a couple of stewards?



That's not fair – he's got a bigger bike than me. Wah!





**W**hen we learned that the kindly Gremlin person was to pay us a visit last week, a wave of anticipation swept through the office.

We'd been looking forward to the arrival of the much talked about Nigel Mansell World Championship for weeks, and since I had long since scheduled myself to review it I was delighted at the prospect of a Friday afternoon swerving round the circuits and generally being a right pain in the aerofoil.

Somebody asked if he was bringing "that football management game" as well.

I replied, uninterested, "Uh, yeah... I suppose so" - and promptly returned to that small place in my mind where I had already begun tuning my Williams.

Well, Gremlin Man duly arrived and I could literally smell the fumes from that ultra-powered engine as he neared the Gamer novel - he swore blind it wasn't his after-

shave With the Mansell box nestling teasingly under his arm we exchanged greetings, and then before I knew what was happening he hit me with the bombshell: "All right, shall we have a look at Premier Manager first then?"

What? Premier who? Was this some kind of joke? Now, I'm happy to look at just about any computer game - it's my job after all - but when you have a massive licence thrill-em-up such as Nigel Mansell at your disposal, a football management game starts to look a bit popy.

There was nothing for it - Biff was perched in for this one, so over he came to be talked through it, while I perched impatiently beside him.

Up to four players can take part, we learned, and I was invited to join in this veritable managerial feast.

This was at eleven o'clock. Six hours later, long after Gremlin Man had disap-

Famous footballing quotes no. 78 - Tommy Docherty:  
"Well I didn't know she was your wife!"

# PREMIER MANAGER

GREMLIN ■ £25.99 ■ 1 meg ■ Mouse ■ Out now



#### OPERATION SCREEN

This is the main screen, from which all the major features of the game are controlled. Finance, club staff, transfer markets, player profiles, league tables and more are all accessed from this point.



TEAM SELECTION										
PLAYER	FORM	ATT	DEF	PA	ST	GOAL	MARK	DIS	INJ	AVG
1	1	1	1	1	1	1	1	1	1	1
2	1	1	1	1	1	1	1	1	1	1
3	1	1	1	1	1	1	1	1	1	1
4	1	1	1	1	1	1	1	1	1	1
5	1	1	1	1	1	1	1	1	1	1
6	1	1	1	1	1	1	1	1	1	1
7	1	1	1	1	1	1	1	1	1	1
8	1	1	1	1	1	1	1	1	1	1
9	1	1	1	1	1	1	1	1	1	1
10	1	1	1	1	1	1	1	1	1	1
11	1	1	1	1	1	1	1	1	1	1
12	1	1	1	1	1	1	1	1	1	1
13	1	1	1	1	1	1	1	1	1	1
14	1	1	1	1	1	1	1	1	1	1
15	1	1	1	1	1	1	1	1	1	1
16	1	1	1	1	1	1	1	1	1	1
17	1	1	1	1	1	1	1	1	1	1
18	1	1	1	1	1	1	1	1	1	1
19	1	1	1	1	1	1	1	1	1	1
20	1	1	1	1	1	1	1	1	1	1
21	1	1	1	1	1	1	1	1	1	1
22	1	1	1	1	1	1	1	1	1	1
23	1	1	1	1	1	1	1	1	1	1
24	1	1	1	1	1	1	1	1	1	1
25	1	1	1	1	1	1	1	1	1	1
26	1	1	1	1	1	1	1	1	1	1
27	1	1	1	1	1	1	1	1	1	1
28	1	1	1	1	1	1	1	1	1	1
29	1	1	1	1	1	1	1	1	1	1
30	1	1	1	1	1	1	1	1	1	1

DAILY CLUB BUDGET STATEMENT		
STAGE	RECEIPTS	DEBIT
CLUB RECEIPTS	10000	
CLUB FEES		1000
CLUB RENT		1000
CLUB BILLS		1000
CLUB TAXES		1000
CLUB PAYMENTS		1000
CLUB INTEREST		1000
CLUB DIVIDENDS		1000
CLUB BALANCE		1000
MONEY IN ACCOUNT FORWARDS		
ACCOUNT	10000	
ACCOUNT	10000	

TRANSFER MARKET	
NAME	PRICE
1	10000
2	10000
3	10000
4	10000
5	10000
6	10000
7	10000
8	10000
9	10000
10	10000
11	10000
12	10000
13	10000
14	10000
15	10000
16	10000
17	10000
18	10000
19	10000
20	10000
21	10000
22	10000
23	10000
24	10000
25	10000
26	10000
27	10000
28	10000
29	10000
30	10000

## TEAM

OK, so we're Wycombe Wanderers, and here is the motley crew that constitutes our team. A team is ranked through five varying levels of fair, good, very good and superb, and through world class, exceptional and finally The Ultimate.

As you can see, we've got a long way to go - think we'd better check out the transfer market.

paired and Bill was arranging his life home. I was still doggedly guiding the mighty Wycombe Wanderers through the league and cups - bladder full, lunch unearned, and Nigel Mansell discarded and untouched.

Needless to say, some hectic workload juggling and rapid arm-twisting - not to mention bribing - took place in order that I could review this masterpiece, and thus further my excuse for playing it lots more.

I understand that Mansell has now been opened and will be reviewed by someone or other in this issue, but frankly I just don't care anymore... I'm in love.

Let's just clear one thing up before we go on. If this were a review of computerised chess, and you couldn't play, it wouldn't hold too much interest for you would it?

Similarly, those who loathe football are unlikely to be swayed by even my enthusiastic persuasiveness - but hey - read on... you never know.

You begin your career as the manager of a GM Vauxhall Conference League team - the choice of exactly which is yours - and the basic aim is to achieve as much success as possible from your humble beginnings, hoping eventually to become Premier League champs and maybe even win the European Cup.

## FINANCE

Before we can splash out on any new players, it might be an idea to consult our finances. It might look like a lot of money - but good players don't come cheap, and wages, bills and ground repairs won't take care of themselves either.

Loans are available, but interest rates are high, so be warned.

Not only will you utilise all of your mighty managerial skills, but a goodly amount of business acumen is required too, in order to ensure the overall stability of the club.

Premier Manager has got so many features that I really don't know where to start, so look at the boxes littered around this page for a run-down of the game's various features. This isn't all of it by any means - I haven't even touched upon the cup competitions or injuries or... I could go on.

Most people who do follow football are likely to support a league team, and may be disappointed that they can't jump straight into the game as Liverpool or Man United.

In fact the only way in which you can change clubs is by being offered a new

## TRANSFER MARKET

Having kidded ourselves that we can afford to spend, it's time to see just what's for sale. All team details are correct to within a few months, and there are plenty of famous names up for grabs.

By clicking on the magnifying glass icon more detailed information - and the asking price, gulp! - can be learned.

position at the end of a season - obviously dependent upon how well you fared. This doesn't detract from the game in any way, and if anything only makes the whole thing more realistic - let's face it - Liverpool versus Stalybridge Celtic in the Conference league isn't really likely, is it?

If you are a fan of this kind of thing, or have been disappointed by previous attempts - indeed even if you are an Eskimo hermit living on a glacier above a Norwegian hamlet with no access to electricity - buy this game.

Buy it, buy it, buy it. I love Premier Manager so much I want to have its babies.

Paul

GROUND IMPROVEMENTS	
ITEM	PRICE
1	10000
2	10000
3	10000
4	10000
5	10000
6	10000
7	10000
8	10000
9	10000
10	10000
11	10000
12	10000
13	10000
14	10000
15	10000
16	10000
17	10000
18	10000
19	10000
20	10000
21	10000
22	10000
23	10000
24	10000
25	10000
26	10000
27	10000
28	10000
29	10000
30	10000

## SPONSORSHIP

This is the most frequent and lucrative form of income available. Companies will be queuing up to sponsor you at the beginning of the season (even the odd quality magazine!) but a string of poor results will soon see the support drop.

Check for new sponsors after every couple of matches.

PREMIER MANAGER	
NAME	PRICE
1	10000
2	10000
3	10000
4	10000
5	10000
6	10000
7	10000
8	10000
9	10000
10	10000
11	10000
12	10000
13	10000
14	10000
15	10000
16	10000
17	10000
18	10000
19	10000
20	10000
21	10000
22	10000
23	10000
24	10000
25	10000
26	10000
27	10000
28	10000
29	10000
30	10000

LEAGUE TABLE	
TEAM	PTS
1	10000
2	10000
3	10000
4	10000
5	10000
6	10000
7	10000
8	10000
9	10000
10	10000
11	10000
12	10000
13	10000
14	10000
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20	10000
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22	10000
23	10000
24	10000
25	10000
26	10000
27	10000
28	10000
29	10000
30	10000



## OPPOSITION

Once you have made sure your team is training hard, you're almost ready to play the first match. Have a look at the opposing team first - they're ranked in the same way as your own team - and set your formation and playing style according to your strengths and their weaknesses. This should be a walkover!

## THE MATCH!

Yes, I know the game screen is small, but it's the result that matters. The match can be played at six speeds; the slowest is about 1/4 real time, the fastest about 30 seconds.

The name of the player currently on the ball is displayed, as are those of the scorers. Substitutions can be made at any time and - oh... I've lost.

## TRAINING

You could be forgiven for thinking that you had a team of slackers after that performance! Phone the coach to ensure your players are being properly trained.

All players can train to either shoot, tackle, pass or handle (advisable for goalies only). On returning from injury, a player will not train until instructed to do so - keep a check.

## LEAGUE TABLES

Hang about - what's all this? We're in Division II! Well, I did tell you I spent a lot of time on the game. It's all very well being in Division I, but a look at my finances at this stage would show a balance that's £7 million in the red.

Excuse me while I go and sort it out. Oh by the way, Gremlin Cheat 1 is just my nickname - honest.

If you're a fan of George and Lynne, then you'll love...

# Cool World



Hits paarray time! Who said policemen didn't get high?



There's only one way to get rid of those hard-to-remove Doodles - it's Vortex

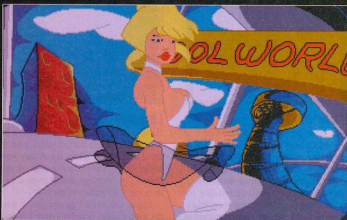
**O**cean seem loathe to develop any game that hasn't first appeared in cinematic form - Hudson Hawk, Bart vs Mutants, Terminator 2... the list goes on and on - in fact Cool World is only the first of three film licences to be released by Ocean in the coming weeks.

It isn't such a bad idea actually, this licensing business - it removes the need to come up with a plot, give it a title, and make up a few characters.

Such tiresomeness has already been taken care of by the film producers, and leaves the game team with nothing to do except write a completely stonking classic based on the hard work of others.

Should be easy. But it's not - at least, not if many of the past releases of this nature have been anything to go by. Perhaps programmers see it as an easy ride, but for whatever reason, numerous film licences - not just from Ocean I hasten to add - have turned out to be not only disappointing conversions, but plain old crap games.

Cool World is due to hit the cinemas in the early new year, and although little information has surfaced as yet, Bill tells me with a lecherous leer and through a mouthful of drool that it stars Kim



Was there something you wanted to get off your chest? Arf arf. Eh?

OCEAN ■ £25.99 ■ 1 meg ■ Joystick ■ Out now

Basinger.

From what we can gather, the action centres around some guy who produces a cult comic, unwittingly creating a parallel universe, thus enabling cartoon characters - Doodles - to enter the real world.

Well, all right, I read it on the box, but it's a pretty safe assumption that the game closely follows the plot of the film, so that makes it OK, doesn't it? These Doodles are characters created by Jack Deebis for his comic, and inhabit the mythical land of Cool World.

What with the parallel universe and all though, the Doodles are making the quantum leap from comic-strip immortality through to the real world, by means of spooly-looking vortexes that have cropped up all over the place.

The Doodles aren't quite as daft as they first appear though. It turns out that they don't have any wish to actually exchange their safe and easy lives in Cool World for the forbidding recession-ridden melancholic monotony that is the real world (having another bad day Paul? - Ed), but simply want to "borrow" certain items from our dimension to

make their own lives more comfortable.

Nothing wrong with that. Share and share alike, I was always told. But hold on! All this parallel universal to-ing and fro-ing is upsetting the cosmic balance. If too many items are taken from our dimension, it's not entirely out of the question that the whole world will simply explode.

Ignoring the obvious solution of asking the Doodles politely not to bag anything else, Deebis enlists the help of Harris the Policeman to counter the imbalance. You are Harris the Policeman, and this is where the game begins.

The idea is to beat the dastardly Doodles at their own game by using the same vortexes to travel through the worlds, returning pilloined items to their rightful place. Beginning in the streets of Cool World, you must first collect enough coins to bribe your way through to the actual level.

You are armed only with a Handy Pen, which is used both to "shoot" the Doodles and to suck them in. For those of you who think this all sounds a bit dubious, let me explain.

The whole point of the exercise is to prevent items from finding their way into the Cool World. Obviously, the more Doodles who make the crossover, the more objects they can take.

Shooting the Doodles with your pen turns them into big inky blobs, which can then either be shot once more for extra points, or "sucked in" in a Ghost-buster-type fashion by keeping the Fire button depressed.

When shot, it's only a matter of time before the little beasts become re-animated, whereas sucking the buggers in disposes of them for good.

To complete a level you must prevent too many items making the cross-dimensional leap for a specified period of time, which shortens as you progress.

My instant reaction to Cool World was one of disappointment. After the excel-

lent animated sequence at the beginning, the graphics - while colourful - seemed rather flat. The gameplay was rather repetitive and I quickly gave up.

On returning to the game later in the afternoon though, I became quite involved, and dare I say it, addicted to saving the universe from its impending oblivion.

More varied levels are definitely needed if the game is to reach anything close to classic status, and beefed up graphics - especially in the confrontation department - would have made for a more compelling game.

As it is, Cool World follows in the tradition of many previous Ocean games, in that it is a competent and enjoyable arcade platform adventure - but come on Ocean, surprise us!

Paul

## VISION



A lovely animation sequence suggests that the game graphics may have been neglected.

## AUDIO



Yes, there's sound here all right, and yes, it isn't half bad. But it's not great.

## PLAYABILITY



No real flaws, but unfortunately it does run quite a high risk of being repetitive.

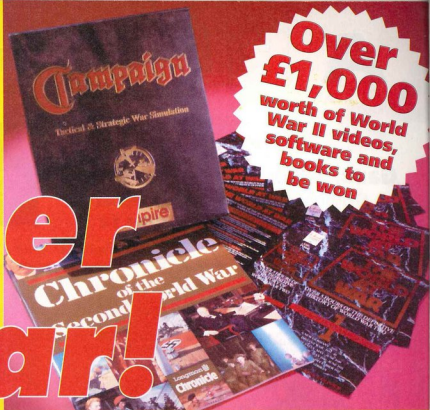
## ADDITION



The timed levels add excitement. Well, not excitement exactly - but they make it better.

# 76%

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*So get out your pen and set your sights on this easy to fill in form. Good shooting!*

## ENTRY FORM

All you have to do is answer the questions, and give your name and address. Easy!

### Questions

1. Who programmed Campaign?
- a. Jonathan Griffiths  
 b. Melanie Griffiths  
 c. Griff Rhys Jones
2. In Campaign, which of the following are you in charge of?
- a. Tramps  
 b. Trout  
 c. Troops

Name \_\_\_\_\_

Address \_\_\_\_\_

Postcode \_\_\_\_\_ Telephone \_\_\_\_\_

Entries to be in by February 2, 1993

Send to: Atari ST User December Campaign Competition, Europress Direct, PO Box 2 Ellesmere Port, South Wirral L65 3EB.

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# A BLAST FROM THE PAST 1983

## Game Title: **North and South** Original Company: Infogrammes Available on Budget: Action 16

Hey, if you want a real blast from the past then here's a game that you just can't ignore. North and South is an absolute classic in my opinion and it's French. Yep, a

game from France that isn't weird or crap. Slightly unbelievable, but it's true.

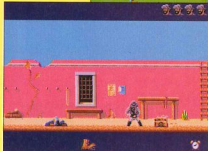
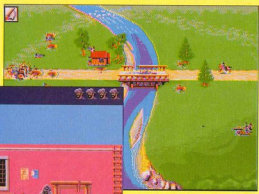
The game is of course set during the American Civil War and it offers you the chance to play the Yankees or the Confederates. The idea behind the game is simple - you have to defeat your opponent by capturing all the territory in his/her possession.

It sort of looks like a chess game, that is until it's time to fight for your territory - without doubt the best part of the game.

You start off with a cannon, six infantry men and three cavalry men and so does your opponent. Using the keys you have to destroy your opponent's men. Simple, but so much fun that you find yourself giggling and falling off your chair.

The graphics are really small, but they are so well drawn and animated that it doesn't matter. North and South features a

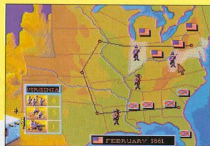
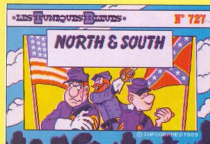
whole super-abundance of cartoon-quality graphics and is full to the brim with wacky sound effects. It features



you could because North and South is now available on the Action 16 budget label.

If you haven't got North and South then you're either quite mad or you've had a miserable childhood. North and South is the greatest thing to come out of France since, err, well since anything really.

Jonathan



## Game Title: **Pang** Original Company: Ocean Available on Budget: Hit Squad

I could do the world's shortest review just by writing the words "Pang... buy it!", but I won't do that because otherwise I could suddenly become unemployed. I mean, whoever heard of a staff writer who doesn't write?

I don't think there is a word that has been invented that could describe Pang adequately. The words original, funny, exciting, terrific, excellent and bloody marvellous could do it, but there isn't one single word that could do it justice. Pang is a

load of balls. Oops I'll rephrase that. Pang is about a load of balls. You take control of your pre-Akira character and the idea behind the game is to clear the two balls that are on the screen using what can only be at best described as a grappling hook.

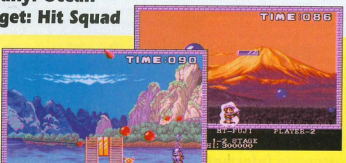
The only problem is that when you shoot a ball, it splits into two and when you shoot that it too splits into two and this process carries on until you have very tiny balls which can then be destroyed. Sounds simple, but believe you me it is not as easy as it sounds.

Pang was and still is one of Ocean's greatest games ever. It's now on budget, so if you haven't got Pang then I suggest you run down to the shops and buy it now.

It's one of those games that has instant appeal and playability while having great graphics and sound. Plus the game is so addictive that I had to have it taken off

humour only the French could muster.

Remember the photographer on the start-up screen? Click on his backside with the mouse and he emits a giggle. I was going to say that you can't buy that kind of humour any more, but then I realised that



me while I was working otherwise you wouldn't be reading this page. Hmm, now where did they hide it? Pang is a classic and I'm off to play it again. Bye.

Jonathan



Sick, sick, sick

# CREATURES

THALAMUS ■ £25.99 ■ 1/2 meg ■ Joystick ■ Out now

**T**wo years ago a game like this would have been banned, at least the programmer would probably have been strung up. But as times have changed so have the restrictions on what is acceptable and what isn't in the computer game world, so much so that games like this do exist.

Creatures is a puzzle game stroke platform run-around thing. You take the role of a cute and very stock little furry thing, and you must make your way through various levels dodging, shooting and collecting small creatures to make a potion with.

Once you have conquered these levels you are then faced with either a shop or a puzzle level. In the shop you are accosted by a shapely woman who tries to tempt you into buying something that will make you buy a weapon of some sort on the next level.

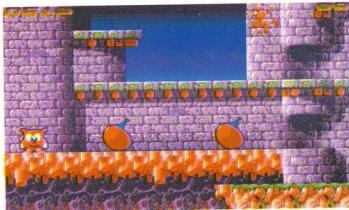
The lateral scrolling levels instantly reminded me of Ghosts and Goblins, except Creatures is a lot harder.

Basically Creatures makes a mockery of all the fluffy bunny games released in the last year or so, namely Lemmings, Skweeks, Dizzy and platform games too numerous to mention.

You notice something is amiss on the title screen when you have two cute little fluffy things walking round the screen looking in complete harmony with themselves and their idyllic surroundings.

Then a bloody great monolith with "Creatures" carved into it comes smashing down on top of them turning them into strawberry jam.

So I started playing the game with anti-



Phew, here's a picture that doesn't contain any gore...



Uh oh - can you guess what will happen next, children?



Splish, grind, splat...

patron and at first I was quite let down. It just seemed like your average puzzle game. Then I got to a later stage called Torture.

The screen opened up with your character at the bottom of the screen and another character very similar to yours glued upside down to a some sort of jack.

This poor thing was slowly being jacked to another level with a very nasty monster

standing on it that resembled a blue potato.

It was obvious that he was going to do something but nothing can describe just how graphic the mutilation is that occurs.

So I blundered around trying to help my little friend but to no avail. He was jacked up to the monster's level and the nastiness began. The creatures walked off the screen and came back with a chainsaw, turned it on and began to rev it up in front of the poor beastie glued to the jack.

After a couple of seconds the animal that looked like a blue potato began to rip in to the thing on the jack with merciless abandon.

Let me tell you, the programmers left out no detail. The poor thing's body vibrates as his organs are sprayed from his body. Sick, very sick indeed.

There are three other forms of mutilation in the game - you may just be able to glean what is going on from the pictures but I won't "spoil" it for you.

To stop this mindless mutilation you have to figure out the puzzle. It maybe involves jumping on seesaws or breaking glasses of fluid to kill the evil creatures but whatever it is, it's pretty challenging.

I think Creatures is a prime candidate for the cult game of 1993, but it's definitely



aimed at and older age group than the usual fluffy bunny games.

As long as you are not easily offended by violence then I would say Creatures is a good buy. It is challenging in every aspect and the animation of the creatures is fantastic.

My only beef is that it is a little too challenging in parts, and three lives just aren't enough. Oh, and don't show your granny...

Ben



**VISION**  
G G G G G  
Brilliant but sick animation.

**AUDIO**  
G G G G G  
Really good, humorous FX.

**PLAYABILITY**  
G G G G G  
Does get a bit tricky in places.

**ADDICTION**  
G G G G G  
If your stomach can stand it you'll be at it for ages.

**85%**



Ye-es, that's right - and now zippy will show us how to perform a tonsillectomy without surgical instruments

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## LEMMINGS 2

Paul Roundell, the closest thing to a lemming we've got, points the stupid creatures in the right direction.

**D**o you remember – oh, about two years ago – Britain was in the relatively early stages of a deep depression, repossessions were on the up, unemployment was spiralling once again, and to top it all England were knocked out of the World Cup thanks to a pathetic Chris Waddle penalty. Remember? It's all coming back, isn't it?

Psygnosis – a fine upstanding software house from the city that gave us the Beatles and car theft – took a good look at the sorry faces of the people around them, and were saddened.

What was once a great and happy land was awash with gloom – the population needed something to make life worth living once more.

So they created Lemmings – a 459,000-level cartoony puzzle frenzy that was so original, so funny and so damned addictive that the economic and social problems of the British Empire were solved overnight.

OK, so it didn't have quite that much impact – but the vast majority of ST and Amiga owners who played Lemmings found themselves spirited away to a distant plane where the existential problems of humanity became much less important than saving the big-nosed beasts. Yes, it went down a treat.

A year or so later, as discontent began to reassert itself and the nobs at Psygnosis became bored with the Porsches and Versac suits that were the fruits of Lemmings, a humble programmer presented Bernard Psygnosis with his next meal ticket – Oh No! More Lemmings, the data disk.

Once again the gaming public went wild, and even the office cleaners browsed the Lambourghini showrooms in between trips to Monte Carlo.

But the clock keeps turning friends, and it's almost a year since we were blessed for the second time with the gormless death-dodging tomfoolery.

Psygnosis – who in the meantime have employed an entirely new staff, since the "Lemming generation" have long since retired to luxury villas on the Algarve and Costa Brava – realised that the time was again right for the green-haired sheep clones to grace our TVs and monitors, and have duly obliged. The result is a full sequel, and sports the moniker Lemmings 2.

Of course there will be those sad few

who don't know what Lemmings is all about, so I'll briefly explain. The basic idea is to ensure that X amount of Lemmings make their way safely from one end of a level to the other.

A major obstacle that stands in your way is the unshakable fact that Lemmings are thick. They're stupid. They just haven't got a bloody clue mate – over cliffs, off tall blocks, they just cannot grasp the concept of death.

You must therefore steer the empty-headed rarely-seen mammals in the direction of safety, all the time making cunning use of what few talents they actually do possess, such as the abilities to jump and dig. There – now you know.

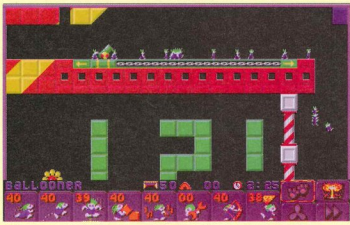
Anyway, Lemmings 2 is here, and whereas the prequels had us saving lemmings just for the sheer nobility of it all, we now have a plot.

The lemmings want to leave their island home, and must build a big vessel for the purpose. However, they can't leave without the fabled magic talisman, and as with most games nowadays it seems, the talisman is broken and the parts spread around the various levels just waiting to be collected.

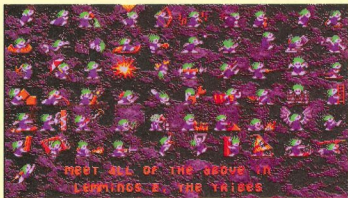
Psygnosis have given their pets loads more skills this time, and depending on the situation the lems can jump, dig, float upwards on a balloon and even spit!

Although the sprites are the same size as ever, you'll see Beach Lemmings, Polar Lemmings, Space Lemmings and others, performing against even better backdrops than before.

Complete with the harder puzzles and funky tunes, Lemmings 2 seems set to be a massive hit on its release in the early New Year – and of course, the full and unspargated review will appear in all its glory in these very pages for your consumption.



Much more versatility allows your lems to jump, float, build and even fire arrows!



We're looking forward to it mate



For the more adventurous among you, skiing lessons are available at reasonable rates



Lemming Island. Can't see why they'd want to leave really. It's nicer than where I live

# The Gamer Guide to...

## WEEN

Stuck? Well, yes you probably are if you're reading this page. Don't worry I won't laugh at you, I'll just smirk slightly...

**R**ight kids, without further ado, here's how to do it... Pick up tongs. Open cupboard. Take the lard and the knife. Take the crystal ball. Take the copper ball. Exit through the left-hand door. Take the straw. Use knife on reed. Use knife on reed again to create a flute. Use tongs on guard rail.

Take the wood. Go back through door. Go through facing door. Take portrait and place on hook. Take the sleeping draught and use it on the seeds to create a drug. Use drug on hideaway and the rat will fall asleep.

Click again on hideaway and take the wooden mould. Use grey key on the skull. Take the ring. Exit room. Use ring on copper ball. Use the straw and the wood on the fireplace. Use flute on Ween. Use strawberries on Urm.

Take gold. Take strawberry jam. Use flute on Ween. Use the jam on Urm. Use Urm on the fireplace. Use the cauldron on the fireplace. Use the gold on the cauldron. Take cauldron and use it on the wooden mould.

Take the golden key hat you've just made. Exit through facing door again. Use golden key on padlock. Take the half statue. Click on trap door to exit.

Take the tibia. Take the torch and use it on the hearth. Take the torch. Take the planks. Exit through the hole in the wall. Take the rope. Click on skull. Use ring on cauldron. Use copper ball on orbit on the skull. Take the moon stone.

Use the tibia on opening. Take copper ball back. Exit through the hole. Use ring on the copper ball. Use cauldron on hearth. Use the lard on the cauldron. Take cauldron.

Exit back through the hole. Use the oil on the opening. Click on the lever. Exit right once more. Use the rope on the lanks. Use the now bound planks on the precipice. Exit through the hole facing you.

Click on skull that's on the tomb. Take the sun stone. Use the torch on the torch holder. Take the spear that the guard on the right is holding. Take the tibia - it would be quite hard to find if it wasn't for this Cheat Mode.

The tibia is at the bottom of the guard on the left guard's right leg. Use the tibia on the spear. Use the newly constructed tibia-spear on curtain. Use tibia-spear once more on the blackberries. Take the blackberries.



Use the flute on Ween. Use blackberries on Urm. Use Urm on hole above the door on the right. Take the key that Urm drops for you. Use the key on the door lock. Exit through door. Click on the sword.

Click on the hook holding sword to wall. Take sword and use it on the statue. Put the sword back. Click on the trap. Use cauldron on acid twice. Put cauldron back in your inventory. Exit back through door.

Click on the stele. Use acid from the cauldron on runes. Place moonstone in the niche. Place sunstone in niche on top of the moonstone. Exit right to the other room once again. Click on sun and moon symbols, then the crown symbol.

Take elixir from the hole in wall. Now click on the moon and sword symbols then click on the crown symbol again. Take effigy from the second hole in wall. Exit back to the stele. Place effigy in the niche. Swap the sun and moonstones around and you'll obtain your first grain of sand.

Click on bridge. A monster will appear and won't allow you to pass over the bridge. In the meantime a feather will float down. Use the

feather on the chest. Some objects will appear. Take the pollen and the venom.

Experiment with them on the three pieces of quartz that are lying nearby. Now mix the venom and pollen together in the cauldron to create a potion. Use newly created potion on leaves. Take strawberries from bush. Use flute on Ween.

Give the strawberries on Urm. Take gold and use with half statue. Use the now full statuette on the water. Urm will take the elixir before you cross the water.

Click on strawberries. Urm will



Use CAULDRON on ROPE

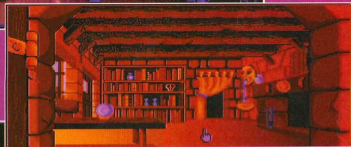


Use FLUTE on





# cheat mode

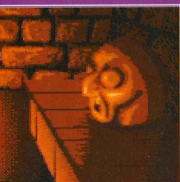


and ORBI.

appear and so will a pile of gold. Pinch the sword from the frog creature and use it on the large rock. Use your cauldron on the middle hole. An Orivor will appear. Use the Orivor on the pile of gold. Exit by clicking on the temple.

Use the venom on the snake and it will turn into a piece of quartz. Take the tiara. Use the torch on the brambles. Use Cauldron with the ring, then use the copper ball with the tiara. Use the pipe on the wasp trap. Use wasp trap on wasps. Exit through door.

It's now time to fight the dragon. You are given three magic pendants



to beat him. You have to change the dragon to a wasp. The puzzle is actually easier than it looks. All you have to do is click on the bottom pendant until the dragon changes to a wasp and you change into a worm.

Now all you have to do is use the wasp trap on the dragon who is now of course a wasp. Use the flute on Ween and Urm will appear...again!

Take the cherries from the bottom of the tree and give them to Urm. Urm will then take the wasp trap from out of your way. Exit via the door on

the right-hand side. You are now the proud owner of the second grain of sand.

Click on mechanism and take the phial. Now this puzzle does vary, but use Petroy to help you figure it out. It simply involves clicking on the pictures of the circle, triangle, square and the hexagon.

The key to the puzzles is how many corners each shape has. Once you've tried the combination, click on the lever and the door will magically open. Exit through the door to continue.

Take the hammer and use it on the arm of the statue. Take the amphora and use it on the hearth. Take the wood and use it on the hearth. Take the ECU and the rag and put them in your inventory.

Take the gargoyle and use it on the cyma. Click on stone. Click on fountain and take the lichen. There are

some numbered teeth, click on them in this order. 12, 4, 6 and 3 and the fountain will start to work.

Use the lichen on the hearth. Use the magnifying glass that's now on the floor on the beam of light. Use phial on the enclave. Use rag on water. Use wet rag on head of statue then use it on the head's eyes to reveal some quartz.

Use the pollen on the right eye and take the flower. Use the venom on the left eye. Use pipe on snake. Use coil on gargoyles. Use wet rag on coil. Use flower on hearth.

Use leaf on hearth. Finally use the phialtre on the guardian. Once transformation has taken place use copper ball on small statue that has appeared. Click on statue. Exit through door.

You now own all three grains of sand. You might think you have completed the quest, but the Princess has been kidnapped by the evil Kraal and taken to Vulcano Island and if you don't rescue her she's just about to become a wife to the slimy Kraal.

So, there's still plenty more of the quest left, but I'm not going to tell you how to do it. I think I've given you enough help, but if you are really desperate to complete the whole game then you might just find the rest of the solution in next month's Gamer.



In a vain effort to try and make the rest of Gamer a little more sensible the powers that be have given Biff and Ben this new page where they can make as many references to lager as they like.

But it is to have some proper uses as well, unfortunately. For starters, it's got the latest ST charts brought to you by Gallup and sponsored by Penguin biscuits, the finest chocolate biscuits money can buy.

Also, if you are baffled by any aspect of any game, Biff and Ben will try their level best not to laugh at you and then proceed to try and help you out of your predicament.

Just send your letters of woe to them at the usual address and label them Back Stroke. We can't guarantee that they will get in but we'll try our best. And try and keep the letters short because nobody can read very well here at the AC offices.

With Back Stroke being newer than a very new thing, none of you lot will have had the chance to write yet, unless you're psychic that is. So for this month only we're going to have to make them up.

Write to Biff and Ben the Gamer men at Europress Enterprise Ltd, Europa house, Adlington Park, Macclesfield SK10 4NP

Yummy, it's time for...

# Back STROKE

## Lummox I'm in a bit of a pickle!

Help, I am in trouble. I am having terrible troubles with that fine game that calls itself Wizkid. I just can't seem to get anywhere, but I was wondering whether those gorgeous and sexy Gamer lads could help me out.

Foxy Lady, Sheffield

Well Foxy Lady, we've never been ones to ignore ladies in distress, so help is on its way. On the first level, finish the tune as soon as possible. When the shop appears buy as many



starts as you can. When you have enough money buy everything. Next, jump on the handle of the well until the bucket appears. Jump into it. Enter the women's toilet and pick up the can of drink.

Now go into men's toilet. Use the coin on the condom machine and you will be transported to a cavern. Go through the men's door. You are now faced with another two doors, but to the right there is an invisible door which can only be seen when approached.

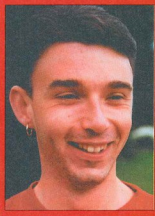
Go through it. You are now in the cavern maze. Another two doors can be seen. By going through the doors you will find level skips, continues and even a hidden game. It's now up to you to find them.

Well Foxy I hope we've been of some help and a wonderful Gamer badge is on its way to you.

## Insults Corner

This month: Paul Roundell Right, lads and lasses, take a look at that harmless little face and insult it. Write in to us at Gamer with your insults and the very best will get a shame spanking new Gamer badge.

Come on, you can do it, this is the man who controls Gamer. Anything you're not happy about, tell him, but make sure you tell him good and proper. The ruder the better as far as we're concerned.



## Oops!

Hey, you know the bit on Premier Manager where it says 1 meg? Well it's a rotten fib. Gremlin is 500 clever they managed to squash the whole game into half a meg. So now you know.

## THE CHARTS

This month

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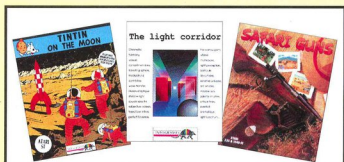
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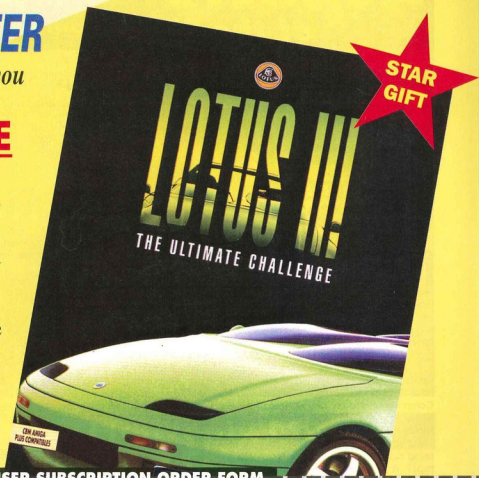
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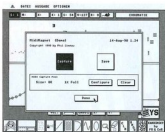
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# Aspects of the ST

Six pages devoted to your favourite applications on the ST



Midi Magnet set to Capture the output from the Kandinsky Music Painter

Aren't MIDI files wonderful? Apart from letting you buy off-the-shelf music arrangements which you can play, theoretically, on any MIDI file-compatible sequencer, they also let you transfer your own music from one program to another.

You'll want to do this if you use a composition program such as Improviser, M, Fractal Music Composer and so on, and want to tweak the output in your normal sequencer.

But what if the program you're using can't save files in MIDI format? A case in point is the Kandinsky Music Painter program, available from PD libraries, which featured in the August column last year.

## Capture

I found a program called Midi Magnet on Goodman's disk GD915 (It'll cost you about \$2.50) which will capture output from a music program and save it as a MIDI file.

It runs as a desk accessory so the program generating the music must support DAs.

Connect your ST's MIDI Out to its MIDI In and select the Capture option. Any data output from another program will be fed back into the ST and captured by Midi Magnet.

You can name the tracks, set the time signature, key signature and tempo, and you can save the data in MIDI file format 0 or 1.

Format 0 saves all MIDI channels in one large homogeneous track. Format 1 saves each MIDI channel on its own track. Most MIDI data

## Midi Help

As you may have guessed from this and recent columns, I've been scanning bulletin boards and PD libraries for interesting items of music software.

It'll keep you up to date on anything interesting I come across. If you have discovered a useful piece of PD music software, why not send me a copy so we can share it with other readers?

One item of interest I want to mention is Midi Help which runs as a desk accessory. There are no instructions but operation is obvious.

It presents a small control panel containing sliders. You select a MIDI channel and use the sliders to transmit program change numbers, five different sets of Controller data and alter the pitch.

You can play single notes or a chord by pressing the mouse buttons and moving the mouse. Press the Alt, Shift and Ctrl keys, too.

It's particularly useful for selecting sounds by remote if the software you are using doesn't have a very accessible program change routine. You can also use it to record data into a MIDI sequencer but this requires a little jiggery-pokery.

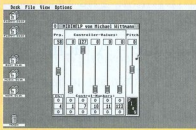
Essentially, you have to connect the ST's MIDI In to its Out. Set the sequencer to record and, assuming you can still access the Desk menu, changes made

in Midi Help will go out the Out socket and be recorded coming back to the In socket.

However, you won't be able to hear what the sequencer is playing. To do this you need to use a Thru box or MIDI switcher to split the out signal into two - one to feed back into the ST and the other to go to your synth.

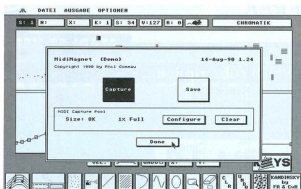
But you know what this will do? Yes it will record what the sequencer is playing onto the record track! You can remove this data prior to recording if your sequencer has an input filter or afterwards if your sequencer can selectively delete certain types of MIDI data.

I found Midi Help on the Sounds Digital Bulletin Board (091-284 6019) but it will probably be in most good PD libraries, too.



Midi Help just where you need it - in a D

# File under Midi



Midi Magnet Save options

recorders use format 0 files. Not all sequencers can save in this format so Midi Magnet could be used to

convert them.

The bad news is that the program is a demo and will only save

8k of data. The full version was written by a guy in Canada who asks for \$17 in return for a written manual and an unlimited data-saving capacity. Seems very reasonable.

However, 8k may be enough for some applications and it will certainly let you see if you find the program useful.

More from: Goodman Enterprises, 16 Conrad Close, Meir Hay Estate, Longton, Stoke-on-Trent ST3 1SW. Tel: 0782 335650.

**Midi files and conversion to and from them, music making books and Psycho on disk - it's all in this month's Midi and music column with Ian Waugh**

## Music Update – If it's new and good, it's here!

● Zone Distribution, probably best known as distributors of Amiga music software, have taken over the MPI catalogue which, as regular readers know, contains a lot of ST software.

The new company is concentrating on dealer support and will no longer be selling direct to the end user but buyers will still be able to call the Zone Helpline.

This move also means wider distribution of Zone products so you may even find a shop near you able to demonstrate some software.

Zone is also distributing the Plus 1 Board from Invision, a 4Mb expansion board for the Korg M1. It contains drum kits and samples carefully designed and selected to complement the M1's existing internal waveforms. It should be fitted by a qualified engineer and costs \$295.

Apologies to MPI/Zone for calling their GMX-1 GM sound module the JMX-1 last month – that's what you get for scribbling news down over a phone line.

The price has now been set at \$235 which makes it one of the cheapest expanders on the market and certainly the cheapest GM unit.

For more information on any Zone (and MPI) product and for details of your nearest dealer contact Zone on 071-738 5444.

● Creative Sound's Improviser – reviewed in this column last May – has jumped a generation and become a new program called Jazz Improviser.

It has all of Improviser's features plus variable length melodic and rhythmic patterns, altered scale options, a transpose function and it saves chord names to a separate track which it saves a MIDI file.

It also recognises extended harmony. It costs \$149 but existing Improviser owners can upgrade for \$39. More from Creative Sounds on 0272 244395.

● We mentioned D-SUG, the Roland D-series User Group, in our August

issue. It seems a lot of ST User readers have Roland D equipment as the club was inundated with calls.

However, around that time the club underwent a change of chairman and some readers may not have been able to make contact.

So if you have a D machine, get in touch with Garry Mason, 14 Poplar Road, Chestnut Avenue, Corby NN17 2UY. Tel: 0536 203198.

● Heavenly Music has updated the two Dr Beat disks. They have better documentation, separate drum and percussion tracks making the patterns easier to edit and they are now GS/GM-compatible.

The disks are £13.95 each. If you haven't already tried them, try them now. If you have, send your disk back plus \$1.50 for the latest version.

Heavenly Music has also put together a range of Mixer Maps for Cubase with all major parameters represented as knobs and sliders. Maps are available for the SC55, D110, U20/220, Yamaha TX81Z, DX21/100 and a TG100 Map should be available by the time you read this.

More about these next month but if you can't wait, the maps are £13.95 each from Heavenly on 0255 434217.

● The first music software to be announced for the new Atari Falcon is the 4T/FX which was demonstrated at the Atari Messe in August. It's a software-only package offering four-track direct-to-disk recording for \$299. More from 2D2 Systems on 0223 420252.

● Hot on the heels of one of last year's best-selling musical instruments – the Yamaha QY-10 – comes the release of its successor the QY-20.

It will have four times the features of the QY10 and, like the QY10 there will be an ST editor available for it. It will cost around \$399. More from Yamaha on 0908 366700.

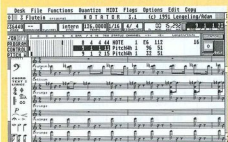
## Psyched out by Heavenly Music

At last Heavenly Music's arrangement of Bernard Herrmann's score for Hitchcock's Psycho has arrived! It's something of a tour de force consisting of 13 sections of music amounting to over 150k of data.

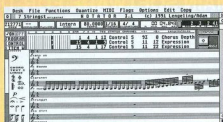
HM had intended to arrange the whole score but the sheer size of the project made them decide to stop at the shower scene. They've called the result The Essential Psycho!

The sections are numbered and named according to the scenes in the film they accompany so you can play them in the right order.

Three or four sound similar and while they



Hold on to your Mom! This is the score from the Psycho shower scene on heavenly Music's The Essential Psycho disk...



It may look like spiders to you but it's actually the famous Clarinet intro to Gershwin's Rhapsody in Blue

are based on the same theme they are, in fact, different – sneaky these film music composers.

The music is mapped to Roland's GS standard although lots of info is supplied so you should be able to play it using any MIDI multi-timbral synth or expander.

### Accomplishment

HM has also released a disk of Gershwin's Rhapsody in Blue which is also something of an accomplishment. The disk actually contains two arrangements – one is a piano version, the other is a full orchestration.

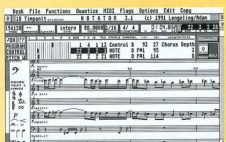
I don't mind admitting I like Gershwin and I enjoyed listening to these arrangements. There

is lots of pitch bend in the Clarinet part – brilliant. The piece is full of rubato passages and there are lots of tempo changes to produce this effect.

Like Psycho, the orchestral version is arranged to GS standard and plays very well on a Sound Canvas.

What next? The 1812 complete with cannons? Wagner's Ring Cycle? War and Peace – the musical? Keep up the good work, HM!

The Essential Psycho and Rhapsody in Blue are £14.95 each. More from: Heavenly Music, 39 Garden Road, Jaywick, Clacton CO15 2RT. Tel: 0255 434217.



...and this is where the Timpani come in





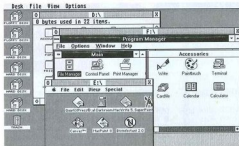
**T**he ST emulation scene has undoubtedly been a bit quiet of late. Minor software updates apart, DOS emulators have stood still since the appearance of Vortex's 386 AtOnce, and Dave Small has been preoccupied with accelerator boards at the expense of further development of Spectre.

Atari's half-hearted promotion of the TI has not been much of an incentive for developers to put much effort into catching up with what remains very much a minority machine.

There are hopeful signs, however, that the excitement generated by the launch of the Falcon may breathe new life into PC and Mac emulation.

Sack Electronics, the German manufacturers of the PC/AT-Speed series of DOS emulators, are already working on a 286/386 add-on for the new machine, and Spectre author Dave Small is known to be tinkering with Atari's new bird, too. While no hard-and-

# Taking off with the Falcon



*The shape of things to come? A mock-up of Microsoft Windows and the Macintosh Finder emulated in different GEM windows under MULTIOS.*

fast details are available as yet, the Falcon's specifications make the outlook for a new generation of emulation boards truly mouth-watering. Direct access to the processor will make installation much

easier, and the use of IDE hard disks will greatly simplify MSDOS bootstrapping configuration.

New video standards up to SuperVGA should be possible with PC emulation, and perhaps

Macintosh colour and full System 7 compatibility for a new Spectre.

The juiciest prospects, however, are perhaps offered by the new multi-tasking operating system, MULTIOS.

The day cannot be far now when it will be possible to run several operating systems concurrently in different GEM windows, switching effortlessly between software running under various emulators.

## Apple talk

Given Atari's new collaboration with BitStream on the font scaling technology for the new FSM-GDOS (which will now use industry-standard PostScript Type 1 fonts) and the hardware compatibility of the Falcon's LAN (Local Area Network) port with AppleTalk, emulation may at last soar to new heights of full and smooth integration of the ST, Mac and PC worlds in one machine - made by Atari.

## ST on a PC

There is also more news now of the Gemulator. Remember? - *ST User's Emulation Aspects* was first to bring you the news of an add-on board that enables any IBM 386 or 486 clone (including portables) to run ST software.

Designed by Darek Milhock of Quick ST, the well-known software accelerator, fame, Gemulator is now available and has been demonstrated to be compatible with most major ST programs, including Calamus, PageStream, Degas, GDOS, LDW Power and Tempus, at speeds which equal or surpass a genuine ST on a 486.

Amazingly, up to four versions of TOS (from 1.0 to 2.06) can be installed at once - a real boon for software developers! - and all ST screen resolutions can be displayed on a VGA monitor, including the Ste's 4096 colour palette.

The easily installed hardware costs US\$299.95, including TOS 2.06 ROMs (US version), and the required software is shareware with a registration price-tag of US\$50. Orders are now being taken by: Purple Mountain Computers, Inc, 15600 NE 8th St, Ste. A3-412, Bellevue, WA 98008, USA. Tel./Fax: 010 206 747 1519.

## The Mac way

While the DOS and ST disk formats are sufficiently similar not to pose any real problems of file transfer between the two environments, the quirky Macintosh is a different proposition.

The Transverter utility bundled with the Spectre emulator can do the job all right, but is slow and cumbersome to use. Above all, it will only communicate with old-fashioned MFS disks and partitions rather than the modern HFS standard.

A while ago I reviewed the excellent DOSReadA desk accessory, which allows you to read files from ST or DOS disks into any Mac application or the Mac clipboard, but up to now there has been no alternative to the Transverter as far as communicating with the Mac from the ST side was concerned.

I was therefore intrigued to find news of a program called MacSee in a recent edition of the Atari Explorer on-line magazine published in the USA. According to Atari Explorer, MacSee can:

- Read Macintosh (HFS & MFS) volumes with your Atari ST or TT
- Write to Macintosh volumes with your Atari ST or TT
- Read and write 800K Spectre-format disks and 1.44-meg disks and supports MacBinary and translated modes, Spectre and Macintosh format hard disk partitions as well as a wide range of removable devices, including SyQuest hard disks.

To quote Explorer's reviewer: "It's completely GEM-drive, so all you do is click through the choices, select the file you want moved from a standard item selector window, and boom - done! No fuss, no strain, no pain... just simple efficiency.

"And in comparison to Transverter, MacSEE is a speed demon! Hard drive partition to partition copying took no time at all. Partition to floppy was just as fast as copying a standard ST file."

Inquiries and orders to: Compu-Seller West, 220 1/2 West Main Street, St. Charles, IL 60174, USA. Tel. 0101-708-513-5220.

**Günter Minnerup looks to Falcon emulators and reveals the cut-and-paste of the Mac calculator accessory**

## Cut-and-paste calculator

Familiarity with your own computer can sometimes blind you to the most obvious features of the one you're emulating. This happened to me the other day when I found myself having to quickly type up a few figures while typing a document in MacWrite.

With my brain still in Atari mode, I selected the Calculator desk accessory, performed the calculation, and then proceeded to jot down the result on a piece of paper, ready to copy it into the MacWrite document.

This, of course, is how things have to be done on the ST, but the Mac has a wonderful cut-and-paste facility which makes it easy to copy the calculator's results straight into the main application.

Well, not quite so straightforward, because between the Calculator DA and the wordprocessor comes the clipboard. Selecting Cut (or Copy) from the File menu will temporarily store the result on the clipboard, whereupon selecting Paste from the wordprocessor will insert it at the cursor position in the text. I only wish that GEM could do that!

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- H40 ST 4 megabytes, Spectra GCR, Mac emulator, colour, mono monitor, 50 megabyte hard disk, printer Atari and Macintosh software. £1250 o.n.o. Tel 0932 252096. Contact Mr Hinton.
- "Feeling Partner" V1.6 Auto Acc Midi £85. Terry 0457 71713
- W54000 Modem, manual and leads included £40. 085-482 315
- Wanted any Atari Computer £100-£150. Tel Shrews 873978 fast!
- Atari STFM plus extensive software collection. Bargain £220. Tel 0405 817232.

- Atari STE 1Mb, Phillips 8833 with Midi Monitor, joysticks, mice, software, mags & comp discs. £350. 021 451 3369 (9am).
- For sale Calbase 3.0 for ST/TT worth £365. Will sell for £300 o.v.n.o. Excellent condition. Phone 0932 343407 anytime.
- Playback Cartridge (unused) £16 including postage. 0509 852513.
- S20STFM with Star Lac-20 Printer £280. Call Stephen 051 220 8570.
- Atari 1040ST + Monitor £250, Spectre GCR Mac Emulator £260, 45Mb Hard Disk System £250. All with full program libraries etc. Many other items - call for details tel 031 664 5831 Edinburgh.
- ST-IC £25, Track-it £20, HiSoft-C £25, Quantum 40Mb 16K Cache, Hard Disk, SCSI £100. Essex 0268 550455. Also most issues of Atari magazine.
- ST contacts wanted: John Pournaras, Kapodistrias 59, Athens 152 37, Greece.
- Castelineur Hard Disk 50 megabyte, utilities. £240. Tel 0642 464313.
- Atari compatible Camana 5 1/4" Floppy Drive. 40/80 switchable. 0302 351890.
- Wanted: Monitor and/or Printer. Contact: Cem, FC16, Erenkoy, Istanbul, Turkey.
- Contact wanted. Must be 20. Boy or girl. Tel 0884 332211.
- Portfolio with interface cable, £90 one. Tel

- 0603 760426 or 0603 860024, contact Charlie.
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- 40Mb power 900 hard drive, £185. S20STFM 1MB and mags, D29, PD, over 200 Games: Gods, Dungeon Master, Fists Retaliator, etc. £199. Tel Terry 0252 662972.
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- Atari Portfolio Expanded plus RAM card £80. Call Simon 0798 813151.
- ST-IC £25, Track-it £20, HiSoft-C £25, Quantum 40Mb hard disk, 16K cache, SCSI, £100. Essex. Tel 0268 550455.
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- 90 Meg Hard Drive cased PSM, DMH, £280, evenings 6 pm 05828 33411.
- Mega STE 4Mb Ram, 4MB HD £595. ATonce, 386X for Mega SE, £169. Swap for best 386 IBM-compatible offered. 0462 450405.
- AT speed 8MHz with DRDs and STE adaptor, £100. 12in colour monitor £120. 081 470 7553.
- Mega ST 105, 1.4, 2.06, 1 meg floppy, 4 meg £450, boxed. Phone evenings 6pm 05828 33411.
- 180 Meg hard drive cased P54, £380. Phone 05828 33411.
- Hi-res Mono Monitor £75. Phillips Hi Res Colour Monitor 8852 £175. Phone evenings after 6pm 0582 833411.
- Lyrx 16-bit Stereo Sampler runs with STFM £350. Tel 0261 32982.
- Atari SM125S Monitor for sale £65. Phone 0202 828494.
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- 1MB STE, 16in monitor. Protect 5.53, boxed documented. Sensible offers. John, 10a St Pauls Square, Preston.
- 4MSTE 65MB, hard disk software £600, contact Vim Tel 081 808 2637, after 8 pm.
- 1040 STE 4MB Ram 3 drives, £495. Tel 083 1350 793, evenings.
- Spectre GCR including Romms. £240. Contact John Tel 061 483 7893.
- Quartet £15, 1/2m STE upgrade £10. More bargains: Tel 0703 771479.
- Timeworks 2 £40, Supercharge PC emulator, £80. Tel 0703 771479.
- One meg STFM, serious software, games, £175. Tel 0205 743386.
- PD contacts wanted. Write to Guy Baldwin, 62 Helaarstraat, B-9506 Gerardsbergen, Belgium.

- Hand scanner Golden Image with touch up software, as new, still boxed £60. No offers. Phone 0303 257157 after 8pm.
- ST1040 1MB internal and external drives, 40MB hard disk, SM124 hi-res monitor, Vidi-Lots, lots of software, games, books and magazines £450. Will sell £10 separately £120. Tel (Malvern) 0684 569221.
- Wanted Procrast ST urgent. Tel 0706 225843 Les.
- Yamaha PSY870 MIDI keyboard still boxed £70 one. Richard 0493 667388.
- ST mags for sale: Simon Harvey, 3 High Lane, Hulfax.
- Games for sale 44 titles £100. Phone for list 081 543 3504.
- Wanted any software or information on P.R.M. Play by mail: Stuart, 14 Corbett, Wilneote, Tamworth.
- Atari contacts wanted. Write to Andy H, 187 Well Hall Road, Ebbw Vale, London SE9 6TU.
- Mega ST 225Mb fast hard drive £425 one. Tel Bradford 0274 671500.
- Atari STE 1 meg 100+ disks 5 months old, £195. Tel 0536 723265.
- Gamer-link: Penpal club for ST owners. Details 28 Churchfield, Ware, Herts. SG12 0EP.
- 10487 £12 meg SM125 Mega File 20 some software. Phone Terry 0594 826263.
- Mega 4 ST Mono Colour Monitors, 180 meg Hard Drive, Mega £800. Phone 05828 33411 after 6pm.
- Lattice C.S. 5.5, £80. Tel 0302 531725.
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- Atari 1040 STE, mono monitor and more £450 (0480) 216280
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# Transferring files

One of the most common problems when communicating with another computer over a somewhat variable quality telephone line is that of transferring files reliably.

It's usually simple enough to send text from one machine to the other — your eyes will tell if it has been corrupted en route — but what if you want to send a binary file, such as a program or a picture?

How do you tell if a few bytes of your precious file have been altered during the transfer? Back in the mists of time, way before error-correcting modems were even a glint in their designer's eyes, the problem was solved by Ward Christensen's Xmodem protocol.

Xmodem is a file transfer system which sends data in small chunks, checking after each one that it has been received correctly at the other end.

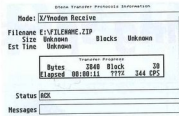
This is accomplished by sending a few extra bytes after each block containing a checksum based on the total value of the preceding 128 bytes. If these checksum bytes match at both ends, the block must have arrived correctly. If not, the block is sent again until it arrives intact. The final block is padded out with null (usually Control-Z) characters.

## Accepted

This protocol was very widely accepted, and almost every comms package on the market today still supports it. Unfortunately, its rather small block size and the associated wait for checksum verification can slow it down considerably — especially when using higher baud rates.

Other disadvantages include the rather inaccurate single-byte checksums and the lack of any way to transmit extra details such as the filename, date and size. Also, padding machine-code files with extra Control-Z characters at the end is not exactly desirable.

Various enhancements were introduced over the years, including an improved checksum system and the ability to send larger



Many programs will show you a status display during file transfers. A simple Xmodem transfer (above) can only show you how much data has been transferred so far, while Zmodem (right) provides information on filenames, time/date stamps and the percentage of the file transferred.



blocks of data, but the next major step forward came with the introduction of Ymodem.

This can use either 128 or 1024 byte blocks, and does not add any junk to the end of files. It also allows the sender to supply a filename and a time/date stamp, plus a count of the number of bytes to be transferred.

This system still suffers from delays

caused by the need to acknowledge each individual block of data before sending the next, but there is a variation (known as YModem-G) which circumvents that problem by performing error-detection, rather than error-correction.

If you are using a modem with MNP or V42 error-correction built in, it's a fairly safe assumption that

Program	modem	Ymodem	Ymodem-G	Zmodem	Kermit
ColNect	Ext	Ext	Ext	Ext	
Dterm	Y	Y	Y	Y	-
FastComm	Y	-	-	-	-
Flash (original)	Y	Y	Ext	Ext	Acc
Flash II	Y	Y	Y	Y	Y
Freeze Dried Terminal	Ext	Ext	Ext	Ext	-
K-Comm	Y	-	-	-	-
Stalke	Y	Y	Y	Ext/Acc	-
Unitem	Y	Y	Ext	Ext	-
XY2 or SZ/RZ modules	Y	Y	Y	Y	N/A

● Notes: Ext means a protocol can be supported using an external module such as XY2; Acc means a protocol can be supported using a deck accessory

File transfer protocols supported by common ST comms programs

**André Willey takes an informed look at a rapidly changing market**

there should be very few transmission errors, so Ymodem-G can prove a useful high-speed protocol.

However, if there is any corruption on the line, Ymodem-G will abort the transfer with an error message rather than trying to resend the faulty data.

Finally, along came Chuck Forsberg's Zmodem, which gives the best of both worlds while still maintaining backward compatibility with both Xmodem and Ymodem. It can run in a full streaming mode like Ymodem-G, thus avoiding the delays of waiting for an acknowledge signal after each block.

However, full 32-bit CRC (Cyclic Redundancy Check) checksums are still generated by the remote computer, and the protocol can easily go back and resend any defective blocks later in the transmission.

## Fastest

This makes it one of the fastest protocols in use today, often running only a few bytes slower than the actual baud rate of the hardware. It only slows down noticeably on very noisy lines which cause multiple errors.

Zmodem handles both filenames and directories, plus time/date stamps, file sizes and so on. It can even transfer multiple files in one session — either by giving the full filenames, or by using wildcards to send a group of files.

The icing on the cake is in terms of user-friendliness: Zmodem can detect when a remote computer has started to send a file, and it will switch automatically into receive mode.

Even if a transmission does fail for some reason, it is capable of resuming from the point it left off — very useful if the line drops three-quarters of the way through sending an 800k file!

One other protocol worthy of a quick mention here is Kermit. This was originally developed for sending files through more limited data links, and does not rely on the extended (8-bit) Ascii codes now supported by most machines.

However, it is a very complex system, which can be considerably slower than Ymodem or Zmodem. It is also rather poorly supported on small micros, although it is perhaps more common on PC and Unix machines.

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**S**ince writing last month's column, I've tried to organise my typeface library into some semblance of order, a job that was long overdue. This included printing out samples and storing the hardy used ones away on floppy disks.

It also made me follow the advice a respected typographer friend once gave me. His method was simple - divide all your typefaces into the appropriate classifications and then choose two or three contrasting ones from each. Then forget the rest.

### Practical

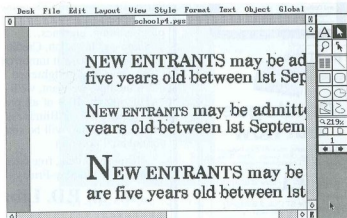
Obviously that advice isn't entirely practical. Occasionally you'll need to match a typeface with that in existing material or in a logo, but the sentiment is a good one.

Designers are all too often awash with obscure typefaces gathered from bulletin boards here and PD libraries there, most of which they would never dream of using!

One of the hardest classifications to choose from was the script faces, which look like handwriting and can be connected or unconnected.

They are very under-rated, mainly because it's hard to imagine a good use for them when they

# Printing pretty



Capitalising the opening words - normal capitals, a normal capital followed by simulated small caps and finally a larger capital leading normal ones

are not very legible as a rule and you should resist the temptation to use script faces for anything more than single lines of text.

Documents such as menus, invitations and certificates, for which script typefaces are ideal, should have the lines of text well spaced so that they are legible. Large point sizes are also a good idea, again to improve legibility.

Script typefaces are also useful for logos and embellishments and I much prefer to use

somehow. A common practice in older classical publications was the raised or dropped initial capital on the first page or start of a new chapter. The technique is still widely used and has found wider application.

The most common dropped capitals are three or four line "drop caps" as they are called. This means that they extend down the column for a distance of three or four normal lines of text.

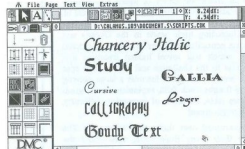
How you create them will depend on your choice of DTP program but it will probably require you to set the large capital in a frame of its own or as an individual text object in Poststream or Didot. You could even use a highly decorative single letter with normal body text. There are some basic rules to follow:

- The dropped capital should sit on the same baseline as one of the lines of standard body text.
- There should be a slight overhang to the left (a few points only). This is typographically correct but not vital, given the difficulties Timeworks or Easy Text users will face in doing it.
- Oblique letters such as "A" should have the remainder of the word drawn closely towards it though subsequent lines of body text will line up with the righthand edge of the base of the letter.
- With oblique letters such as "W", subsequent lines should be aligned with the righthand edge of the top of the letter.
- The rest of the word should always be capitalised.

### Capital

The dropped (or raised) capital works fine on the first page or story but it can be used too often. Subsequent sections or stories include capitalising the first word or phrase of a paragraph or even combining a raised capital with the remainder of a capitalised first word.

If you look carefully at some books, especially plays, you will see a special type of capital used - the small capital. Remember it is not the same as a full capital but at



Some Calamus PD script typefaces

are viewed on their own. Start to experiment with them, however, and they open up all sorts of design possibilities.

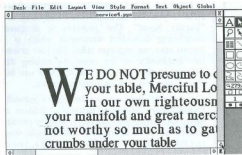
Connecting script typefaces strongly resemble calligraphic handwriting whereas non-connecting varieties cover all sorts of ornate typefaces such as informal scripts, brush and pen strokes and the various families of typefaces that look as though they belong in the Middle Ages, the commonest of which is Old English.

Script typefaces have to be used with care. Even the neatest

them this way.

When used singly, or in groups of two or three characters, they can look very nice. It is easy to put together a good logo just by using large characters from one or two standard typefaces.

With text-heavy documents the text has to be broken up



Dropped initial capitals - drops caps

a reduced point size. Typographically, it is a different character style altogether with lighter strokes and a flatter appearance designed to blend with lower case letters.

Very few DTP programs support small capitals but if you really want to experiment, try using normal upper case letters at about 70 per cent of the point size of the body text.

This opens up even more possibilities such as an opening word with initial upper case letter and subsequent letters set in small capitals.

**Andrew Wright continues his series on type with a look at script typefaces**

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**WARP 9**  
 Formerly Quick ST, this is the latest and greatest software screen accelerator for the ST/TT; graphics and text look the same, but appear with astonishing speed. Includes a host of utilities from CodeHead Software: mouse accelerator, desktop pictures, new system fonts, keyboard control over dialogs, and send excellent Anti-Crash utility: modular screen saver. Price: £24.95, upgrades from other screen accelerators (return manual code): £12.95.

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Around The World was programmed over more than a year by The Pixel Shop, better known for their many Budgie UK titles under the name of The Happening Bolt. To order your copy of Around The World, send a cheque or postal order for just £9.95 to the address below. UK postage free, please add £1.00 for Europe or £2.00 for the rest of the World. Credit card orders welcome. A disk with useable demos of Family Roots, Around The World and Professional Virus Killer is available for only £1.00.

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**S**tarting your own business is both an adventure and a risk. Some of you who have already made a start will have realised by now that expectation and reality can be poles apart, and that some rethinking and replanning may be necessary to reach your goals.

While the reason for taking stock of the whole situation and planning anew might well be because you have been more successful than you envisaged, in these recessionary times it's more likely that the opposite is the case, and that a new approach and possibly new finance is required.

If you've bought this magazine, the chances are you already have a powerful ally - your ST!

Even if your system has only 512k of RAM and a single floppy drive, you will find many of the procedures involved in starting up and running your business are much easier with the help of your computer and some relatively inexpensive packages - several of which may have been bundled with your machine.

### Setting up

Over the next few months I will cover, in as much detail as possible, the steps involved in setting up a small business and running an existing one, making use of the power of your ST where it saves you time, effort and money, and makes the job easier.

Of course, all the advice in the world plus access to an ST (or even a Falcon 030 or, for the very lucky few, a TT) cannot guarantee success.

But if you adopt the correct procedures, produce your plan to the best of your ability in a good wordprocessor, work out your projected profit and loss and cash flow in a spreadsheet and store vital information about customers and contacts in a database so that you can use them to maximum benefit, you will at least help to keep the odds on your side.

The emphasis will be on making use of your ST to achieve success, or greater success, in any kind of business.

We progress from writing a business plan, through market research, competitor analysis, objectives, marketing, premises, equipment, profit and loss and cash flow projections and financing to, hopefully, a successful first

# Making a fresh start



Setting up and running your business

Something free from your bank manager - yes, really! Advice and practical help for those starting up in business

year's trading. Even if you're exceptionally lucky and don't need any kind of loan to begin or improve your business, you would be making a major mistake if you started without a clear plan.

Several, if not all, of the big banks provide, free of charge, "info and action" kits for those setting up and running small businesses. In this series, I'm using the one from Barclays, but you will find that the NatWest and others have similar packs.

### Sense

For those with the convenience of an ST, writing the plan in a wordprocessor and producing the figures in a spreadsheet makes a great deal of sense - but the work the banks have done on our behalf need not be wasted!

The first job is to copy the headings from the bank's business plan form into your favourite wordprocessor.

That done, return to the beginning of the file and start putting some meat on the bones, with the help of the very informative booklet which comes with the bank pack.

You might want to skip the "introduction" for now, and write it after what may prove to be the eye-opening experience of seeing the projected results of the first year of business down in black and white.

And here's where the real work of planning a business begins - practically everything else which follows will require a good deal of thought, much of it backed up by some research.

The more thorough you can make the latter, the better. A seemingly simple matter like deciding the name of your firm might involve you in hours, if not days, of agonising over alternatives.

And if you decide to test some

of the names by taking them to your public, don't be surprised to find that, unless you have some way of rewarding them for their help (and that usually means some kind of prize or discount), they have more urgent cares than whether you should call your landscape gardening business Posey Patches or J. Smith's Garden Services.

Obtain your small business kit from the bank and, if you don't already have them, get together a wordprocessor, spreadsheet and database as the minimum of software you'll need.

### Healthy

Read the bank's advice carefully and put the main headings into your wordprocessor. Next time, we'll begin work in earnest on filling in the plan and some of the other exercises involved in presenting all the information necessary. Even if you never approach a bank with the plan, it's worth doing it only to prove that you have a potentially healthy business.

It will be worth checking out this page every month to compare notes - and you may be able to give the rest of us some advice in the light of your own experience. Don't hesitate to write to me with any information or points you wish to make.

## Suitable software

To take advantage of the advice you will be receiving over the next few months, you will need a wordprocessor, a spreadsheet and a database program.

You can make use of some of the software that came bundled with your machine, or go for higher spec packages with more features to make your task easier. My personal recommendations are wordprocessor Protekt (from Amor) or First Word Plus (GST), spreadsheet K-Spread v4 (HiSoft) and database K-Data (HiSoft).

A business accounts package will also prove very useful. System 3 (Digital) has the power and all the features you're likely to need. The August issue of *ST User* included a feature on accounts packages which you may find useful.

**Your ST is your greatest ally when setting up a business.**

**Richard Williams looks at how it can help you**

# ATARI ST USER

# READER OFFERS

## Replay 16

At last, a low cost 16 bit sampling system for the Atari ST, featuring full 16 bit input and output in the same unit. The system comes complete with a sophisticated sample making/editing program, superb digital Drum machine program, and a powerful MIDI keyboard emulation program which gives the user the ultimate in MIDI sample control.



**HARDWARE** - The 16 bit sampling unit plugs into the cartridge port of the ST. Audio connections to and from the sampler are provided via standard Phono connectors. An input volume control is also provided.

**SOFTWARE - EDITOR** - The sample editor is a highly flexible 'WMP' style program which allows conversion or editing between any AVR format 8/12/16 bit, Mono or Stereo samples. Sampling rates of up to 48KHz can be used, but the program can re-synthesise samples to practically any other speed.

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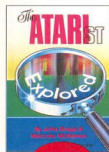
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Videomaster will work on any standard Atari ST with at least a single 1Mb floppy disk drive and a colour monitor. At least 1Mb RAM is recommended. RRP £69.95, save £15 with this offer

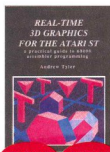
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