

# ATARI

## C O M P U T I N G

Issue 1 • September 1996

£3.00

### MagiC

Reviews and Utilities

### In Print

AtariPhile and Maggie

### DIY

Joypad for STe

### Software

PD/Shareware Selection

### NeST

The BBS Connection

Reviews: MagiC v5 • HD Driver • Kandinsky v2.5 • Deadlands • E-Copy • CoSTa



# THE UPGRADE SHOP

## TEL 01625 503448

### HI RESOLUTION MONO MONITORS

#### T.U.S. 14" MONO

T.U.S. 14" Mono monitor for ST series. High resolution picture for Cubase/Notator etc.....

**WITHOUT SOUND**  
**£94.00**

**WITH SOUND(STEREO ON STE)**  
**£109.00**

**ALL MONITORS INCLUDE APPROPRIATE CONNECTING LEADS AND A TILT AND SWIVEL STAND**

#### TOS 2.06

TOS 2.06 is the enhanced operating system from ATARI for the entire ST range. Improved desktop including full keyboard control of windows, place programs on the desktop for easy launching, or assign function keys to launch the required program. Switchers give access to old TOS system for complete compatability. All kits supplied with full fitting instructions and tos manual.

**STE VERSION 2.....£47.99**  
(TOS 1.62/2.06 supplied) Simple solderless installation

**STF/STFM.....£54.99**  
New multiboard out soon please ring

#### HIGH DENSITY DRIVE MODULE

Exchange data easily with other platforms by giving your ST the ability to read and write to high density (1.44mb) discs. Fully automatic switching capability depending which type of disc has been placed in the drive. Comes complete with software drivers and high density formatting software. Tos 1.4 or above required for high density support.

**HIGH DENSITY MODULE ..... £25.00**

**HIGH DENSITY MODULE AND 2MB DISC DRIVE.....£54.00**

### TOS / HIGH DENSITY SPECIALS

**STE TOS 2.06 WITH HIGH DENSITY DRIVE AND CONTROLLER**  
**£95.00**

**STFM TOS 2.06 WITH HIGH DENSITY DRIVE AND CONTROLLER**  
**£101.00**

### PARTS REPAIRS AND FITTINGS

#### NEW PARTS.

Full 12 months warranty. All parts are tested before dispatch.

#### INTERNAL REPLACEMENT DRIVE KIT

For any ST with INTERNAL drive. High quality mechanism, with standoffs for old ST's if required.

1MB or 2MB drive supplied **£34.99**

#### POWER SUPPLIES

New PLUG IN replacement, includes power switch and mains connector, no soldering required. **£33.99**

#### 280 DPI MOUSE

With free mouse mat **£9.99**

#### STE/FALCON SPEAKERS

Stereo speakers with leads **£19.99**

### REPAIRS AND FITTINGS

Fully trained engineers for a reliable repair. All jobs quoted for individually (no fixed prices). 48 hour turnaround on most machines. Long 4 months warranty as standard. Courier collection and return available for £14.00.

We can fit any of the advertised products to your machine for a one off fitting charge of £15.00. This means that if you require say an upgrade and high density drive fitted then the charge is only £15.00.

Please ring for an appointment before bringing your machine or call if courier collection is required. Please ensure all parcels collected are adequately packaged.

### CHEETAH HARD DRIVES

THE CHEETAH DRIVE FROM T.U.S. DEVELOPMENTS BRINGS AFFORDABILITY AND STYLE TO ATARI SYSTEMS. SMALL CASE DIMENSION WITH BUILT IN POWER SUPPLY, COOLING FAN, DUAL SCSI EXTERNAL CONNECTORS (FOR DAISY CHANING EXTRA DEVICES) AND ID SELECTOR GIVES A FULLY FEATURED SYSTEM FOR USE ON MORE THAN JUST ATARI COMPUTERS. ALL SYSTEMS ARE SUPPLIED COMPLETE WITH HOST ADAPTER CABLE AND FORMAT / PARTITIONING SOFTWARE AND ARE PRE FORMATTED AND PARTITIONED READY FOR IMMEDIATE USE.

**105MB.....£164.00**

**270MB.....£219.00**

**540MB.....£289.00**

**CALL FOR LATEST PRICES ON SYQUEST EZ135 DRIVE SYSTEMS.**



# ATARI MEMORY BONANZA

## STe / Mega STe

1/2meg.....£10.00  
2meg.....£34.00  
4meg.....£67.00

## STFM MARPET

1/2meg.....£28.00  
2meg.....£52.00  
4meg.....£85.00

**2meg TUS memory boards for ST(FM) few left at £44.00**

All kits are supplied with comprehensive fitting instructions, testing software and a free disk of useful PD/shareware utilities. Free technical support is available, as is a competitively priced fitting service.

## T.U.S. FAX MODEMS

**T.U.S. 14400.....£89.00**

14,400 VOICE, FAX AND DATA MODEM,  
Class 1 fax commands, full Hayes  
compatibility.

**T.U.S. 28800.....£149.00**

28,800 FAX DATA MODEMS,  
Class 1 + 2 fax commands, full Hayes  
compatibility.

BOTH MODEMS ARE BABT APPROVED WITH 'CE' MARKINGS, COMPLETE WITH  
CABLES AND SOFTWARE FOR BULLETIN BOARD ACCESS.

**COMA.....from £46.00**  
FAX SOFTWARE

**SERIAL PORT £20.00**  
Upgrade kit for STFM AND STE

\*\*\*\*\* **NEW PRODUCTS** \*\*\*\*\*

**\*\* EXTERNAL KEYBOARD / CLOCK CARTRIDGE \*\***

EXTERNAL PC KEYBOARD INTERFACE FOR THE ST(FM)E OR FALCON. £39.99  
PC KEYBOARDS FROM £12.99. CALL OR WRITE FOR DETAILS

EXTERNAL CLOCK CARTRIDGE FOR THE STE. £22.99  
DOES NOT TIE UP THE CARTRIDGE PORT. SIMPLE PLUG IN AND RUN

All prices include VAT @ 17.5% but exclude delivery (unless otherwise stated) please see below. Orders can be placed by TELEPHONE quoting credit card details or by MAIL ORDER, please make cheques and postal orders payable to "THE UPGRADE SHOP". 1 year warranty on all products (unless otherwise stated), 4 Months on repairs. Prices subject to change without notice.

**UNIT F2, VENTURE HOUSE, CROSS STREET,  
MACCLESFIELD. CHESHIRE, SK11 7PG**

MONDAY - FRIDAY 9:00AM - 6:00PM SATURDAY 9:00AM - 2:00PM  
SAME DAY SERVICE AVAILABLE FOR UPGRADES AND MOST REPAIRS

PLEASE RING BEFORE YOU BRING

ACCESS DELTA MASTERCARD VISA SWITCH

### DELIVERY CHARGES

Small items under £60.00 please  
add £3.00 P&P.

Large items and orders over  
£60.00 add £7.00 courier  
charge. Courier Pickup for  
Upgrades and Repairs £7.00



**T**ake my advice, never float the idea of starting a new magazine unless you have some objection to leading a normal life!

After the closure of Atari World and ST Format, I thought that the Atari scene needed a new magazine to complement those still available. Just going on a gut feeling, I asked on NeST and CIX for support, and received a big response.

What has amazed me is the amount of goodwill shown towards us. Many of the letters sent to us have contained suggestions, offers of help and heartfelt best wishes. For me personally, these messages of support have made all the hard work worth it.

I would also like to thank our advertisers for having the faith in us to get it all together. There are few firms willing to put money into the Atari scene, and those that do deserve our support and business.

As publisher of this magazine, I know the sacrifices that have been made, and I would like to thank everyone that has contributed in whatever way. It's probably wrong to pick out anyone in particular, but both Joe Connor and Darryl Godsmark do deserve a special mention for the unbelievable amount of work they have done in such a short time - my thanks gentlemen!

Finally, this is our first issue, we hope you enjoy it, it's not perfect, but we hope you find it good value and useful. Please do fill in the survey form, it will shape the way we do things in future. We need both your support and input, and we will take note of your ideas and suggestions!

Best wishes

*Mike Kerslake  
Publisher*

## REGULARS

6.....News

10.....Letters

38.....Readers Disk

55.....Questions and Answers

## FEATURES

12.....On the NeST

22.....Hard drive primer

26.....Music and MIDI

30.....Joystick DIY!

32.....RSC files

34.....Usergroups

46.....Maggie

48.....Atariphile

51.....Calamus User

54.....Intro to comms

**Publisher:** Mike Kerslake

**Editor:** Joe Connor

**Art Editor:** Darryl Godsmark

**AICIG Team:** Brian Stanton, Joe Connor, Al Goold, Andy Wilson, Sandy Thomson, Mike Kerslake, Neil Martin, Denesh Bhabuta, Chris Good, Ian Braby, Martin Milner, Norman Bland.

**Contributors:** Joe Connor, Graeme Rutt, Jon Ellis, Kev Beardsworth, Harry Sideras, Xav, Denesh Bhabuta, Carl Löfgren, Howard Carson, Colin Fisher-McAllum, Al Goold, Chris Good, Ed McGlone, Roy Goring, Neil Martin, Richard Spowart, Chris Holland, Steve Llewellyn, Phillip C

Matthews, Mark Baines, Nial Grimes, Thomas Binder.

**Subscriptions:** Brian Stanton 73 Bentinck Drive TROON Ayrshire KA10 6HZ Scotland

**Advertising Sales:** Mike Kerslake 42 Larch Hill Handsworth Sheffield S9 4AJ  
Telephone/Fax: +44 (0)114 2618940 - 10am to 6pm, Monday to Friday  
Email: acg@coconut.demon.co.uk

**Editorial Enquiries/Letters/Review**

**Material:** Joe Connor 65 Mill Road COLCHESTER CO4 5LJ Telephone: +44 (0)1206 852602 - answerphone  
Email: acg@inactive.cix.co.uk

Atari Computing is published by the Atari

Computing Group (AICIG)

Whilst every care is taken in the preparation of this magazine, the publishers cannot be legally responsible for any errors. The views of contributors are not necessarily those of the editors or publishers.

No part of this publication may be reproduced, stored in any form of retrieval system or transmitted in any form by any means, mechanical, electronic or otherwise without the specific written consent of the AICIG.

All rights reserved including translation into other languages. Copyright 1996 AICIG



# ATARI

## COMPUTING

### PREVIEWS

20.....Kandinsky

24.....MagiC 5

### REVIEWS

11.....CoSTa

14.....MagiC v4

18.....HD Driver

21.....How to use HTML3

29.....Deadlands

### SHAREWARE

39.....AudioCreate v2.6

39.....CPU MOD

39.....INcontrol v1.0

40.....Pysgham v2.0

40.....Start me up! v1.10e

40.....ST-Guide v1.4e

42.....7UP v2.32

42.....Appline v2.1e

42.....The filler v1.05

43.....CoMa v3.20

43.....Graph v1.20

43.....STD Codes v1.4

44.....The Croft Soft Newsletter 3

44.....Warp issue 4

44.....Maggie 20

The loss of Atari World and ST Format in quick succession ended over a decade of Atari newstand publications. Maybe we're all supposed to go away and buy a PC or a Mac now? I'd rather change nappies than platforms - although neither are my idea of fun. My mission is to put the F back into the Atari platform... or something like that!

There's a lot of twaddle talked about the Internet but without it this magazine would never have been launched. The Atari Computing Group (A|C|G) has around a dozen members who put their hands in their pockets to finance this launch issue. We've never met as a group in person yet we've created this magazine from the ground up, in a cosy corner of the CIX conferencing system. We're proud of this achievement - so if we nag you to get on-line you'll understand, won't you?

Have you experienced decision making by committee? The A|C|G only make decisions once in a blue moon but when we do they're smart ones. First, we elected Brian "Brains" Stanton as treasurer - although we did wait until he was away on holiday! Second we called the magazine "Atari Computing" instead of "They think it's all over" which proves something although I haven't figured out what yet.

I know it's a cliché, but the future of the magazine is in your hands. With no newstand presence or budget to publicise ourselves we need you to spread the word to other enthusiasts. Got a spare Atari in a cupboard? Why not give it to someone. Most of all we want your completed Survey forms back so we can plan future issues. Should we print more copies? Go quarterly? Add colour? We can't decide - over to you.

*I hope you enjoy the magazine,  
Joe Connor*

## NOTES

### About the cover

The landscape was commissioned from Phillip C Matthews and took over two days to render at 1020x1440 resolution in 256 greyscale using POV-Ray. The Atari Computing logo was created by Graeme Rutt. The page was assembled by Richard Pope and Joe Connor.

THE EDITOR SPEAKS!

CONTENTS



## Apex 3 announced

Titan/Black Scorpion Software (BSS) have announced a new art package with the working title Apex 3. Apex Media developer Douglas Little explained the strange choice of name: "Apex was intended to be a range of BSS media-related products," he said. "Apex 2 was Apex Animator. Apex 3 will be Apex Paint or something similar. Apex 4 might be Apex Audio or Apex Animator Professional or whatever" - so now you know!

Apex 3 is a standalone paint package for the Falcon designed to compliment Apex Media. Its paint and image processing capabilities will far exceed the paint functions found in current versions of Apex Media, according to Black Scorpion's David Encill. As well as the usual tools found in a normal art program you will also find:

- Full 24 bit image editing.
- Extremely fast real-time operation.
- Real-time zoom to any level of detail.
- Anti-aliased (mip-mapped) real-time block operations.
- Alpha channel paste operations (8 bit masking).
- Real-time alpha-channel tools.
- Variable alpha on gradients and masks.
- Analogue chromakey range masking.
- Compound (multiple) filtering using a real-time brush.
- Quick and easy cloning of pages for backup/editing.

Apex 3 will run on any Falcon with 4Mb or more memory and will take full advantage of any hardware modifications available such as the BlowUp FX card, Afterburner040 and Black Scorpion's own hardware accelerator called Nemesis. Apex 3 is expected to retail at a price of £99.00 including VAT and carriage in the UK.

## Afterburner040

Titan/Black Scorpion Software (BSS) are the UK distributors for the Afterburner040 accelerator. Doug Little revealed some interesting details on NeST recently.

"Afterburner can be fitted with one of two processors, either a 68040 (includes CPU, MMU and FPU) or a 68LC040 (CPU and MMU no FPU).

A standard Falcon fitted with an Afterburner operates at 16/32/64MHz depending on which area of the board you're talking about. In general, the middle value (i.e. 32MHz) is the actual effective clock rate of

# #NEWS

the processor.

The 68LC040 CPU is considerably cheaper, but incapable of hardware floating point (68881/68882) operations and it's not possible to fit a 68881/2 externally. If you use FPU software such as POV-Ray, Pheonix, NeoN and some CAD software you have to go for the full 68040. The LC version can perform software floating point operations but this means avoiding 68881/2 specific programs.

The 68040 with built-in FPU performs much better than an external 68881/2 device, but still requires software emulation to supplement the 68040 FPU (which isn't identical to a 68881/2). This emulation slows the 68040 FPU down a little, but it's still between three and a half to four times faster than a 16MHz 68882, the emulation software comes with the board. No such emulation is possible for the LC version of the chip.

Apart from the obvious processor benefits Afterburner includes with 2 SIMM sockets enabling up to 64Mb of 32 bit FastRAM to be fitted. The developers appear to claim 128Mb is possible, but the FastRAM is definitely addressed in two 32Mb banks which makes 128Mb an unlikely prospect. This FastRAM is very fast - 32 bit instead of 16 bit, and effectively 32MHz access instead of 16MHz access (not strictly true but near enough speedwise). Afterburner FastRAM is a minimum of four times faster than normal Falcon RAM - and up to 12 times faster during burst access.

**Performance:** Expect anything between five to ten times normal performance in general. There are exceptions (notably the lack of DSP acceleration) and specifically the lack of acceleration on the display. Screens have to be held in normal Falcon RAM so they cannot benefit from quick-access FastRAM although Nemesis makes a difference here by speeding up the bus. As for software such as compilers, GEM software, text editors and most of the software you'll want to use you're in for a real treat.

Fitting isn't easy. It involves the careful lifting of two of the 68030's

pins and soldering of nine wires to various locations. The Afterburner itself is plug-in, but after the modifications you can't use the machine without it plugged in which makes the need for thorough testing important."

## Nemesis

Titan/Black Scorpion Software (BSS) produce this accelerator. Again Doug Little via NeST revealed some interesting details. "Nemesis should be easy to fit (we reckon most people should be able to carry out the modification themselves) and it accelerates the bus and CPU to 24MHz and the DSP to 48MHz. Apex Media and Expos, users also benefit from this hardware modification especially during DSP operations. There's also an increase in Expos's capture rate. Figures of 25 frames a second at 256 by 160 are expected.

The idea is to allow the user to change to a higher system clock, without causing the machine to stop working. Nemesis offers these advantages:

- Speed
- Faster video bus - quicker graphics, bigger display
- Faster dot clock - bigger display and higher monitor refresh rates
- Afterburner uses the system clock (16/32/64MHz becomes 20/40/80MHz)

**Performance:** The system clock affects everything except the DSP (which Nemesis accelerates separately), so a jump from 16MHz to 20MHz produces a 25% boost across the board - including the display. A jump from 16MHz to 24MHz produces a 50% boost across the board!

Nemesis also allows large VGA Truecolor modes due to the higher bus bandwidth. 640x480 TrueColor VGA is definitely achievable - maybe more!

We're hoping most Falcon users monitors will be able to cope with a vertical refresh rate from 50Hz to 60Hz so they can run Apex 3 at 640x480, with a Nemesis board running at 48MHz (24MHz bus) - a demo program and a pre-release version of Apex 3 already takes advantage of this display."



Nemesis is expected to cost between £30 and £50 - but this is still to confirmed. For more information contact:

Titan Designs Ltd, 6 Witherford Way, Selly Oak, Birmingham B29 4AX  
Tel: 0121-693 6669

### Photoline Now Available

System Solutions reckon this is "a new killer application" for the Atari. It's a high-end image editor which offers powerful functions. The program is feature-packed, and supports both bitmap and vector graphics. Unlike Apex Media, Photoline uses GEM extensively to enable you to use the program on any Atari or TOS compatible machine. The enhanced GEM interface will also take advantage of any extra graphics modes available and is multitasking aware. We've had a sneak preview of Photoline and can report it looks and feels like a slightly cut-down version of PhotoShop, the industry standard high-end graphics programs, available for the Mac and PC. Our platform has needed a package like this for ages and it's great to see a software publisher producing software of this calibre. Here's just a few features of the program, some of the main ones are:-

- Bitmap functions include user definable paint-brush, clone, finger, erase, stamp, fill, gradient, etc.
- Change intensity of all paint functions.
- Vector tools include all the standards like straight-line, Bezier curves, move to front/back, etc.
- Work on as many images as memory allows.
- Drag and drop between image windows.
- Work in RGB, CMYK, greyscale, monochrome or vector on any monitor.
- Powerful cut/paste/copy tools which can work on the image or on the mask
- Add to or subtract from selections to make a new selection
- Magic-wand tool, including the tolerance and feathering \* Using NVDI 3 (or greater) it's also possible to use vector font technology to add text to any image
- Loading formats include all the standards, inc. PhotoCD Pro, you can save to TIFF, JPEG, IMG, CVG and GEM formats.
- There are filters, special tools, rotation, scale, distortion, picture projection in 3D space.
- Print or plot to NVDI/GDOS

printer/plotter drivers and it can use GDPS drivers to scan images directly into the program.

Photoline comes on 3 double-sided floppy disks, which include one disk for ST computers, one for TT's (and other machines with a minimum of 68030 CPU and FPU chips) and one containing a range of utility files. It includes a ring-bound 50 page manual. The program is available now from System Solutions for £169 including VAT - call them on 0181 693 3355.

### Cubase CD-ROM finally available

After what seems a lengthy wait the Cubase CD-ROM from System Solutions is now available. A boon for musicians of any standing the CD-ROM includes 605 MBs of information, spread across 400 drum loops, 1200 samples, 400 MIDI files and shareware software. The CD-ROM is packed with useful files for any musician, but it's specially tailored to be the ultimate companion for Cubase - on any platform.

All the loops, samples and MIDI files are of professional quality, covering a vast range of musical styles and tastes. The loop and samples are available in the standard AIFF format, ideal for Cubase Audio and the MIDI files are all GM compatible. In addition there are mixer maps, device drivers and a whole host of other files.

The CD-ROM also contains utility software for the Atari, Macintosh and IBM PC. Everything from patch editors to sample



librarians to audio calculators is included to make the Cubase musician's life easier. The Ultimate Cubase CD-ROM is available now from System Solutions (0181 693 3355) for £69.95 including VAT.

### Power PD to close

James Matthews has closed Power PD to concentrate on his commercial company Top Byte Software. He claims this will give Top Byte more time to focus attention on the development and release of new commercial titles. "The Atari market needs another commercial supplier more than it needs another PD library" he said. "Top Byte is still

100% Atari and will be for a long time to come." If anyone is interested in taking over the full time running and ownership of Power PD they should send their offers to 3 Salisbury Road, Maidstone, Kent, ME14 2TY. Two new products will be released shortly. The first is called Computer History, a three disk product containing details of over 1,500 different computers. You can search for a particular computer and find out when they were made, their specifications, their uses and their history, among other details. The information is accessed through a custom written shell and it will retail for £11.99. It requires 2 megabytes of memory. Kryptonite Data is the second. It is described as a cross between a shoot 'em up and a sci-fi flight simulator. You have to control a tank or plane and try to save fellow humans from kidnapping evil alien hordes. It's a 3D title and contains some of the fastest routines of this type ever seen on the ST (now where have we heard that before? - Ed). It will cost £19.99 and is available now.

### New C-Lab offshoot

C-Lab Digital Media GmbH has announced that its Falcon range is now being marketed and sold in the UK and France through a new company formed especially for the task. Digital Media Ltd, is to be headed by John Sharp, previously with Digital Village, and Paul Wiffen, formerly with Digital Awareness, joins as sales director. Gilbert Tycl, another ex-Digital Awareness employee, will handle the product in France. So what does all this mean for Atari users? Very little, we suspect, other than that existing users of the hardware will soon have access to a telephone hotline service from 9am until 12 noon. However, at the time of

going to press the number hadn't been announced. The company claims it will be heavily promoting the new Falcon Mark X with a series of instore presentations and other events. However, most of the advertising and promotion is aimed at the music market and mainstream Atari owners have seen and heard very little from the company and its products since its launch. The Mark X Falcon has the standard Falcon innards (with a number of sound-oriented modifications) built into a PC-style tower case with a PC keyboard and Atari mouse. There is an optional SCSI bus and it can use 3.5 inch IDE hard drives or a SyQuest



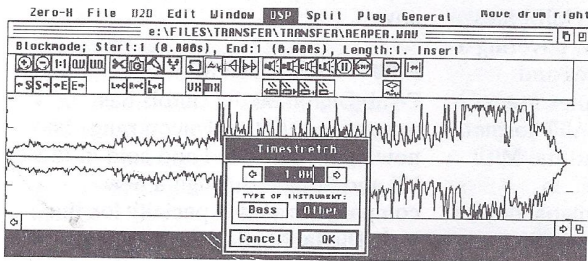
removable drive. Mk 1 and 2 owners can upgrade to the new version for the cost of the re-casing which is handled by C-Lab directly. Depending on age, Atari Falcons can also be upgraded too - contact Digital Media Educational will continue as the main distributor of Falcons to the educational market. It can be contacted on 0181 598 9955. C-Lab Germany is on 00 49 40 6944000 and Digital Media Ltd is on 01422 340875. In France call (1) 40 .18.43.16.

### Zero-X update

Zero-X has been updated to v1.51.

Here are some of the highlights:

- SCSI Sample Dump for EMU Systems, Kurzweil, Peavey and AKAI samplers.
- SCSI transfers are around 200(!) times faster than MIDI Sample Dump.
- SCSI Dump D2D (direct to and from disk, i.e. the RAM in the computer is no longer a limit).



▲ Zero-X gets a facelift

- New DSP functions: Highpass filter, Delay, Phase Shift, TimeStretch, DeTune, Sample Rate conversion, Mix and Change Gain.
- Speed! Screen updates as well as most functions are much faster.
- Improved interface: Toolbar, playback marker and autoscroll.
- New functions: BeatSplit, CreatePattern and Mute.
- MIDI Drivers for Ensoniq and AKAI S900/950.
- Undo (finally!) and compare Loop.

Contact System Solutions on 0181 693 3355 for more upgrade details.

### Burn your own CD

System Solutions has announced a new service to put your data permanently onto your very own CD-ROM. For a fixed fee, the company will take up to 650Mbs of data and burn it onto a gold ISO9660 CD. That's one backup you won't over-write by accident. The service is aimed at the one-off user who doesn't need to write their own CDs on a regular basis. Customers have to

send a SCSI device containing the data to be transferred (and nothing else). This means you can use SyQuest removable cartridges, Zip drives, magneto-opticals and even the hard disks themselves. The prices are as follows:-

- Up to 200Mbs £39.95
- 200Mbs to 400Mbs £49.95
- 400Mbs to 650Mbs £59.95

All prices include VAT but you have to add £3.95 postage and packing. There is also the facility to create Audio CDs. Tracks should come in WAV, AIF or AVR format and must be in 16 bit stereo @ 44.1 KHz. The prices are the same as above. Cubase Audio users should note that the AIF formats created by this program are not compatible with the CD writing process and they should first be converted with the shareware program "525".

### New CD-ROM range

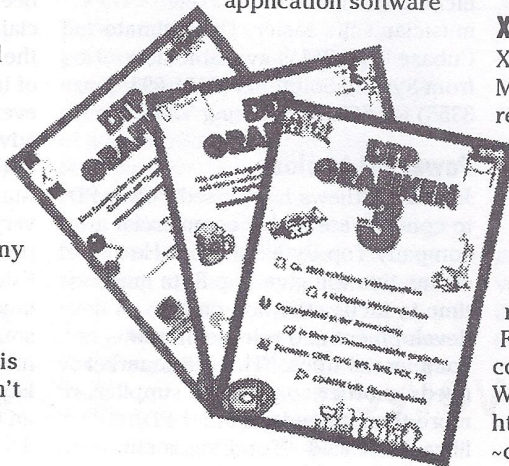
Hot off the presses, System Solutions have just released a new batch of

disks for those of you lucky enough to own a CD-ROM drive.

These include the 3 disk series of DTP Graphic CD-ROMs, which contain vector images suitable for all computer platforms (including Atari in the shape of Calamus

Vector Graphic files) and the Art Nouveau CD-ROM which includes graphics covering that exciting period in art and design. The 3 DTP Graphics disks are £29.95 each, with the Art Nouveau CD-ROM retailing for £39.95. A bundle price is expected to be announced.

Also in the range of new CDs is the Falcon Bird of Prey disk - designed to be compatible rather than competitive with other Falcon disks like Transmission and All Things Falcon. The disk focuses on application software



and has been compiled by two professional Falcon users in the shape of Matt Norcross and Scott McConnell. The disk costs £24.95 and is available now.

Finally, System Solutions have the Gemulator Gold CD-ROM. This disk holds the application software for all versions of Windows and DOS along with the Atari Xformer 8 bit emulator for the ST and PC. It's a kind of encyclopaedia of programmer Darek Mihocka's work over the past 10 years. The disk also contains a lot of shareware and public domain software. Beware - the Gemulator versions on the disk require a hardware board to run Atari programs on your PC, no MagiC compatible version is included! The disk costs £39.95 from System Solutions on 0181 693 3355.

### Battle Bowls

Frontier Software recently announced a new game called Battle Bowls for the STe and Falcon. It's designed to be the most attractive Reflexion clone ever seen on the Atari platform. Designers say it will push your brain to its limits and mastery of your joystick will also be essential to win the challenge. It can be played by one or two competitors and includes over 100 levels. Canadian Atari specialist Computer Direct has announced In Touch, a new combination name and address manager and diary. It will print to a variety of document formats using Speedo or NVDI and is fully GEM compliant. It will work in any resolution and multitasks with replacement operating systems like MagiC and Geneva.

### New breed of mouse

System Solutions have announced the availability of their very own branded mouse. The device has been made to their own specifications and offers a resolution of 280 DPI and a lead of 1.5m. The price is £14.95.

### XaAES - Alternative to MultiTOS

XaAES is a PD alternative to MultiTOS, the first beta version was released back in March. XaAES is being developed by an international group of TOS techies from Sweden, the US, UK and Germany. Programs such as Thing, Kandinsky, GEM-View, Lattice C, and even Cubase 3 are all up and running but there's still work to do. For more information contact the coordinator, Craig Graham on the World Wide Web at: [http://www.i-way.co.uk/~c\\_graham/home.html](http://www.i-way.co.uk/~c_graham/home.html)



*Magazines may  
come and go...*

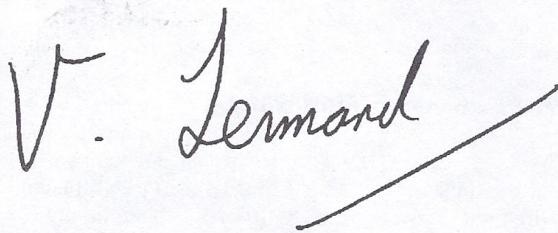
# **... but Atari computers live on!**

---

As former editor of *Atari ST Review* and *Atari World*, and previously a long-term contributor to *ST Format*, I dedicated many years to using Atari STs. Journalism, music, DTP, graphics – my now nine-year-old STFM was the studio workhorse.

And even with an Apple Power Mac now sitting in that position, my original STFM *still* gets used on occasions for data recovery and some music work, despite the existence of MagicMac.

No future for Atari computers? Don't believe a word of it! While the likes of System Solutions continue to support existing products and establish new brands for the UK, Atari computers will continue to be used by thousands of people throughout Britain.



*Vic Lennard*

---

**Good luck to  
Mike Kerslake,  
Joe Connor, and  
everyone involved  
with *Atari Computing*.**





# LETTERS

Put pen to paper - or better still send us an email and have your say...

## Atari RIP



The whole reason Atari pulled out the computer business was because they could not make a profit from it. That's not would not, could not. In 1990 or thereabouts, an ST cost £250, a PC £2500 and even then the PC would be inferior in many areas. Two to three years on, the ST was still much the same price but PCs had grown several times more powerful and dropped to £8-900. Now you can buy Pentium 133s for well under a

**Atari owe no-one anything. They made a product, it ran it's life and finished.**

thousand pounds.

Atari could have sunk cash into R&D and to an extent did, the result was the Falcon which was far too expensive for the market. The ST rapidly became a niche product.

Atari owe no-one anything. They made a product, it ran it's life and finished. Sure, there are a good few thousand people who still use them everyday, great, but it's not enough to run a company on. It would require storage, inventory, staff, data etc just to provide minimal support for existing stuff, let alone progress the situation.

Atari also had what Darryl Still used to refer to as the "Burden of History". Many long term Atari users still think as if Atari have 50 world wide sites, \$1 billion plus turnover, R&D like you wouldn't believe, 20,000 staff etc. They haven't. They have maybe 100 staff worldwide (if that), two or three sites and that's about it. Frankly, it's a miracle they managed to get world wide distribution on anything.

If you feel Atari let us down, would you suggest we all hassle Anamartic or whatever uncle Clive does these days because he flogged off the Spectrum? Should we mail bomb

whoever was responsible for Nascoms, NewBrains etc.?

If there was anything to be made, people would have been buying all the leftover TOS/ST rights. Has it happened? Nope. We have a slightly improved and still highly priced Falcon from CLab and Wizztronics have the rights to a few bits but haven't really done much with it plus a few overkill TOS machines that you'd have to be mad to buy unless you had a really huge legacy collection of essential software.

Anyway, with the Internet and the few 3rd parties left, who needs Atari? Atari users always got by fine with little or no help from them. Ever since I bought my first ST (1987), Atari were saying "we sell computers in boxes. That's all we do. The rest is up to you."

The result? A hugely creative, self-supporting and some may say fanatical core of users who will provide more than enough impetus to give the ST range a good few more years of useful service to those not yet ready or willing to move onto pastures new.

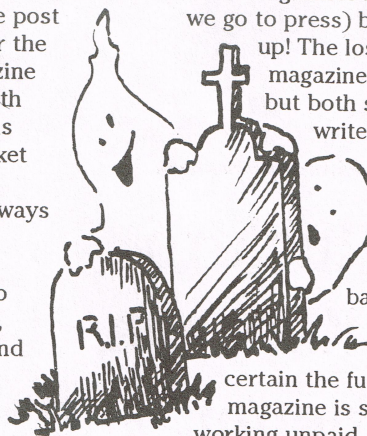
I've owned Atari VCS, 400, 800, 130XE, STm, STe, Mega STe, Falcon, Lynx and Jaguar and am as sorry as the next person to see how it all ended up.

Iain Laskey, [ilaskey@cix](mailto:ilaskey@cix)

## STF RIP



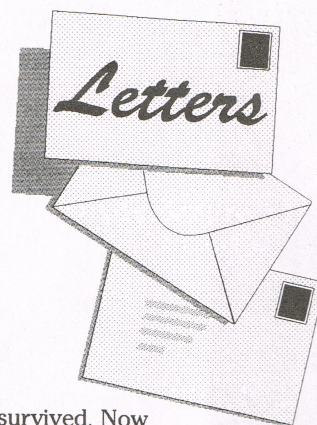
I've just received the final issue of STF in the post this morning, over the years I've seen this magazine shrink down to A4 size with less pages. However this is also true of the Atari market in general, even Atari abandoned us. STF has always tried to deliver an informative magazine to challenge its readers to do more with their machines, they had their knockers and I for one was not always happy with some of the content, but they



## Atari World



Despite the magazine ceasing to appear Specialist Magazines Ltd. still hasn't (as we go to press) been finally wound up! The loss of an excellent magazine was bad enough but both subscribers and writers lost money which is unacceptable. Atari Computing offers a money back guarantee to subscribers and until we're certain the future for the magazine is secure we're all working unpaid. If you'd like to write an article we would be pleased to consider it for publication. Please note we simply do not have time to reply to individual letters.



survived. Now we must survive, don't be pushed into changing platforms, your machine is still more than capable of doing all you want at a fraction of the

**Don't be pushed into changing platforms, your machine is still more than capable of doing all you want...**

Letters and editorial contributions should be sent to: Atari Computing, 65 Mill Road, Colchester, CO4 5L. Email: [acg@inactive.compulink.co.uk](mailto:acg@inactive.compulink.co.uk)



# THE CoSta COMMS

CoSta began life over two years ago as a simple utility for NOS users. Since then it's evolved into a comprehensive phone bill monitor.

CoSta extracts the call details from the log files generated by OASIS2/ICE, CoNnect, CixComm and MINtNet.

## Worried about the cost of comms? Neil Martin uses CoSta to keep tabs on his phone bill...

select Preferences from the Options menu and set the GMT adjustment as required. For example 01+ for British Summer Time, then select Paths and

▼ Set the call rates to the cost per minute, excluding VAT

Telephone: 01443 387249  
Description: cixip  
Peak Cost: 3.360  
Offpeak Cost: 1.400  
Weekend Cost: 0.850

CoSta v1.42						
Date	Time	Duration	Cost	Telephone No.	Origin	
Thu 01/08/96	18:40:00	00:07:56	12.396	01222 874464	CoNnect	+
Thu 01/08/96	19:08:42	00:01:10	5.068	0181 296 1255	CixComm	
Thu 01/08/96	19:21:42	00:20:32	32.086	01443 387249	ICE	
Fri 02/08/96	03:06:06	00:02:42	11.738	0181 296 1255	CixComm	
Fri 02/08/96	11:38:38	00:01:00	7.285	0181 296 1255	CixComm	
Fri 02/08/96	20:29:00	00:17:05	26.696	01222 689812	CoNnect	
Fri 02/08/96	21:32:54	00:05:24	8.438	01443 389666	ICE	
Sat 03/08/96	01:53:32	00:10:38	10.894	01443 389666	NOS	
Sat 03/08/96	16:51:00	01:02:39	62.571	vv-STIK-vv	STIK	
Sat 03/08/96	19:53:50	00:20:03	20.024	vv-STIK-vv	STIK	+
Total time: 6:58:17 Total cost: £ 13.94 Number of calls: 208						

▲ If you have a screen resolution with a width of 720 pixels (or more) click on the 'resize' button to stretch CoSta's main display window and eliminate the need for the horizontal scroll bar.

Unfortunately STiK doesn't generate a log file but is still supported via another utility, called STiKtime, which monitors the STiK cookie and generates a log file CoSta can utilise.

Installation is straightforward.

▼ Registered users have excellent control over which call details are displayed or printed

☐ NOS ☐ ICE ☐ STiK  
☐ MINtNet ☐ CoNnect ☐ CixComm

Between Dates: 01/08/96 to 03/08/96  
 Between Durations: 00:00:00 to 99:99:99  
 Between Costs: 0000.000 to 9999.999

Peak Start Time: 00:00:00 End time: 10:00:00  
 VAT Rate: 17.50% Minimum Cost: 4.200

Telephone	Description
0181 296 1255	Cix
01443 387249	cixip
01443 389666	demon
0753 106002	SMS mobile phone
01222 874464	College
01222 689812	Dream Machine

▲ The Costs dialog can handle 100 entries and copes fine with unusual services such as Phonebase or Orange SMS

locate the log files for each program. CoSta interrogates or ignores each log file depending on the checkbox at the right hand end of each line.

The next task is the set the call rates for individual telephone numbers via the Costs dialog. After receiving the first telephone bill, compare CoSta's details with the bill and use the Duration Offsets dialog box to compensate for any consistent irregularities, such as the variation in the time different modems take to dial and connect. After checking CoSta's information against the bill

▼ If your system clock stops one day, or if a rogue log entry causes a silly error, CoSta allows all individual call details to be adjusted or even recalculated.

CoSta - Edit a Call

Date: 03/08/96  
 Time: 16:51:00  
 Duration: 01:02:39  
 Cost: 53.252  
 Telephone: vv-STIK-vv  
 Origin: STIK

the Pay Bill dialog can be used to mark calls prior to a specific date as paid. The registered version offers a powerful Filter option to decide which calls details CoSta should display.

Gary is continuing to develop CoSta and hopes to develop support for anyone using more than one telecoms provider. At present it's only possible to specify one minimum cost figure in the Costs dialog. I got around the problem by installing two copies of CoSta on my hard disk. By renaming the COSTA folder to COSTA.BT and COSTA.ACC and COSTA.PRg to COSTA\_BT.PRg and COSTA\_AC.PRg I could select between them under MagiC. The call details for each provider are now listed in the appropriate folder.

### CoSta v1.42

#### Author

Gary A Priest  
32 Castle Street, Inner Avenue,  
Southampton SO14 6HF  
Email: gary@the-gap.demon.co.uk  
WWW: <http://www.the-gap.demon.co.uk>  
**\$6.00**

#### Requirements:

All Ataris

#### Pros

Daily monitoring of on-line expenditure, no more unexpectedly high phone bills, breakdown for each program at a glance.

#### Cons

Can only display details of ten calls on-screen at a time, insists on displaying itself centre screen, horizontal scrolling to view details on most screens. You know your bill is high so you worry even before the bill arrives!

### MONEY FOR NOTHING

Recently after Demon internet installed some new modems, there was an intermittent fault somewhere in the system between BT, Demon and Energis (who supply the virtual POPs which offer local call access around the UK to Demon's modems

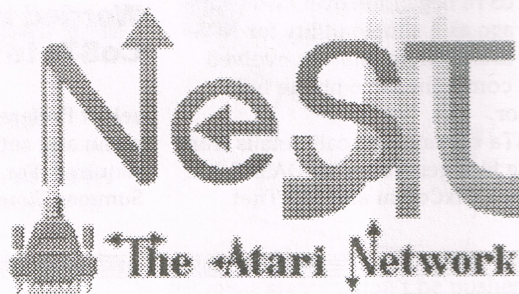
in London). This resulted in BT charging me for a significant number of calls which didn't connect. The problem has been solved and thanks to my CoSta logs I managed to persuade BT to give me a £20 refund!





# ON THE NeST

Joining the Bulletin Board networks can be a daunting task, Harry Sideras, veteran of the file echos, helps relieve the pain...



## INTRODUCTION TO NeST

Access to the Bulletin Board networks, privately run by experienced Atari enthusiasts, is free. All the software required is PD or Shareware and runs on any Atari compatible machine. Once set up you'll be able to send messages and participate in file areas which span the globe from America and Australia and all points in between.

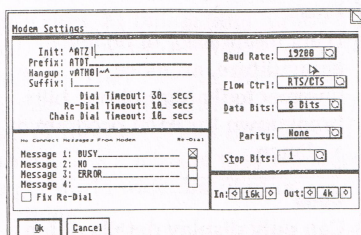
### Tooled up

Numerous software combinations can be used, but I've plumped for the following:

- Teddy Term v2.14, terminal software
- Kivi v1.41a, the off-line reader
- HSModem, serial port handling software
- LZHShell and STZip, to handle archived files
- Everest v3.5e, text editor
- XYZ.TTP v2.02b, ZModem data transfer

Don't forget to have a modem close by - you'll be needing that! After setting up HSModem the relevant programs should be placed in the Auto folder to ensure the serial port is set up properly (Atari World Issue 7 explains this in depth). I'd advise owners of Mega STe's and TT's to settle for the MFP module and

▲ Match your modem speed to the serial port for optimum connections



connect using the Modem 1 port, otherwise Teddy Term loses some features even with the M1EMU option set. Falcon owners may hit similar problems and should consider alternative terminal programs such as ConNect (Shareware) or Stalker (Commercial from Titan Designs) -

the principles of setting the terminal up still apply, although the details may differ.

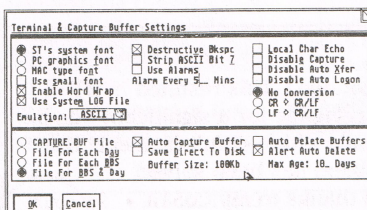
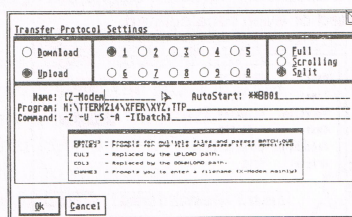
### Terminal setup

Configuration of Teddy Term is hidden in a popup menu called by a left mouse-click. The first dialog to configure is the Modem Settings and the defaults are adequate for any Hayes compatible modem.

If you are on a digital exchange make sure Prefix is set to ATDT (tone dialling), otherwise set it to ATDP (pulse dialing). The baud rate setting depends on your modem's speed - a basic 2400 baud modem with no data compression should be set to 2400 but if your modem is 9600 or faster with data compression select 19200 for starters. The serial port (RS232) input/output (I/O) buffers should be kept small because HSModem has its own.

Next, open the Transfer Protocol dialog, double click on the Program line and locate XYZ.TTP in the XFER folder. Once again the defaults are

▼ File transfer protocols control the uploading and downloading of files



▲ Terminal emulations can be set for a simple text display or full colour graphics

acceptable, but make sure you have ZModem selected (slot 1) and a split screen type for both uploads and downloads otherwise Teddy Term produces unpredictable results when on-line.

The final dialog to visit is Terminal Settings. At this stage the settings should be kept as simple as possible - you can customise them to view the pretty screens Sysops spend hours

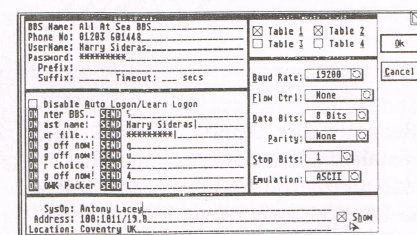
creating after you're comfortable being on-line, at the moment they're just one more thing to go wrong (with apologies to Sysops

everywhere)!

Go through the other options in the main popup menu and set up your personal preferences. We've configured all the mission critical stuff already so if there's anything you don't understand just leave it blank and save your settings.

### Ready, steady, dial!

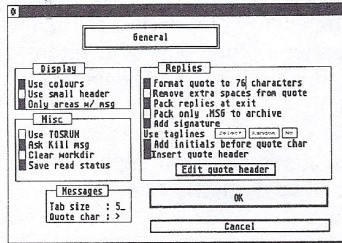
Choose a BBS local to you from the boxout. In the dialer select an empty box and click on Edit. The only options you need to enter are the BBS name and the phone number. Teddy Term has a nice feature that allows the entry under UserName to be sent to the BBS when you press



▲ Cost calculation to logon scripts can be specified for each BBS you dial



the cursor-left key and the entry under Password when the cursor-right key is pressed. Once you've got the hang of logging on manually it's worth setting these up to semi-automate the log on procedure. The port and terminal setting options are the defaults we set in earlier dialogs and the cost tables can be applied if they've been set up. The remainder of the dialog relates to a method of fully automating connections to the BBS - but we won't worry about that at the moment - let's save the settings and get on-line.



▲ Kivi's general options allow detailed customisation of your message reply format

Check you're ringing during the BBS operating hours (many offer 24hr access), select the BBS from the Dial Directory and hit Dial. After a series of screeching noises the two modems should connect!

Almost all BBSs "validate" new callers, so follow the on screen instructions. You'll be asked to enter your real name and password (remember that left and right cursor trick from earlier) and much more. Some of the questions will ask you how your terminal software is setup so make yourself familiar with these. Access to the BBS on your first visit may be restricted until the Sysop

validates your details. Take the opportunity to navigate around the menus, paying particular attention to bulletins and help files which are always available. Read them off-line if possible - your terminal capture buffer records all the text that scrolls past and saves it to a file when you log off. Alternatively you can download the files, Teddy Term automatically detects download attempts and starts XYZ ready to receive it.

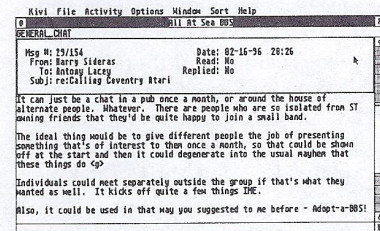
### Off-line reading

Even if you have shares in a telecom company it makes sense to read messages off-line. To do this you need an off-line reader. While you are on-line locate the QWK Message area and select the areas you're interested in. The first time you select an area you'll get loads of earlier messages which serve to bring you up to date and give you a flavour of what to expect. I recommend you select a few subjects to begin with and add areas once you've figured out how everything works. After selecting your areas select the option to download a QWK packet and one will be created while you wait. You'll be given a choice of using ZIP or LZH then the QWK packet is ready to download to your machine using XYZ, select the ZModem option in preference to any other available options. Before logging off leave the Sysop a message to introduce yourself or indicate any problems you experienced on-line. subjects to begin with and add areas once you've figured out how everything works. After selecting your areas select the option to download a QWK packet and one will be created while you

wait. You'll be given a choice of using ZIP or LZH then the QWK packet is ready to download to your machine using XYZ, select the ZModem option in preference to any other available options. Before logging off leave the Sysop a message to introduce yourself or indicate any problems you experienced on-line.

Configuration of Kivi is straightforward compared to setting up Teddy Term and BBS settings. Paths need to be selected as upload and download directories (set these to the paths set in your terminal software) and to the TTP versions of ZIP and/or LZH, to match the setting you selected to compress your QWK packets on-line. You need to select an external text editor because Kivi doesn't feature a built-in editor. This leaves the General dialog, for which a working set-up is shown in one of the screenshots. Once set-up load the QWK packet you downloaded into Kivi using the File menu, which will be unpacked to reveal a window showing the message areas you selected on-line. The cursor keys are used to select areas and read messages in turn. To reply to a message select Reply from the Activity menu, which runs your text editor and loads the message ready to add your comments.

Bulletin Board etiquette suggests you delete irrelevant parts of the quoted message and you insert your comments as desired. Use the



▲ Communication is the end result

existing messages as a guide and you won't go far wrong. When you've finished, save your message and exit your editor and you'll be returned to Kivi which will ask you to re-save the message in Kivi format after which you are free to read the next message. After a message writing session you need to pack your messages using the option in the File menu, ready for uploading in the QWK area of the BBS the next time you log on and the cycle is completed. Your messages are uploaded and replies and new messages are received.

Next time we'll take a look at tweaking your setup and how to make the best use of your on-line time.

UK ATARI SUPPORTING BBS SYSTEMS				
Name	Location	Sysop Name	Phone	Times
42BBS	Hants	Colin Fisher-McAllum	01256 895106	24 Hours
680+	Hull	Peter Buscada	01482 509700	24 Hours
Ad.Lib	Chester-Le-Street	Andy Curtis	0191 370 2659	24 Hours
All At Sea	Coventry	Antony Lacey	01203 601448	24 Hours
Conventus	Edinburgh	Kevin Norman	0131 556 9734	24 Hours
DanSoft	Carnforth	Daniel Horne	01524 732957	21:00-00:00
Dog House	Royston	Neil Burton	01763 230043	24 Hours
Dream Machine	Cardiff	David J. Thomas	01222 689812	24 Hours
Druid	Prestatyn	Peter Carr	01745 853503	21:00-08:00
Fortress	Plumstead	Kevin Osborne	0181 244 9825	24 Hours
Fractal	Dorchester	Tim Putnam	01305 266304	24 Hours
Keith's Point	Derby	Keith Jackson	01332 662988	24 Hours
Magic Castle	Birmingham	Mick Coleman	0121 430 3761	24 Hours
Penske	Kidderminster	Andy Taylor	01562 743661	24 Hours
PMT	Blackpool	Paul Seed	01253 344819	18:00-09:00
STandard	Felixstowe	Karl Foley	01394 271550	24 Hours
SysTem	Shotts, Scotland	Paul Leonard	01501 825856	24 Hours
Tavern	London	Paul Baker	0181 445 6514	24 Hours
T.G.M	Bradford	Paul Simmonds	01274 787361	24 Hours



# Magic V4



**Kev "Copperfield" Beardsworth takes a look at  
Magic v4 - the current UK release version...**

Magic v4

Every other mainstream platform offers multitasking as standard and you could be forgiven for wondering if our mid-eighties designed machines are up to the task - the good news is they are but the implications of Magic go way beyond offering multitasking, read on! I first saw Magic in action at an Atari show in Manchester over two years ago. It was running on a TT and I desperately wanted a copy for my Falcon. I couldn't believe it was incompatible with the Falcon and after a two year wait during which time Magic appeared for the Mac platform and a PC version was rumoured to be

under development I began to believe Falcon owners had been left in the wilderness. Happily I was wrong and Magic v4 finally appeared, was it worth the wait?

Magic is a complete replacement for TOS. It's doesn't come on ROM chips like TOS instead there's two double density floppies and an A5 sized 48 page manual. Uhuh, just 48 pages to describe an OS - and most of that relates to using MAGX Desk

which seems a waste. Happily it's reasonably well written - the usual couple of sentences betray its German origins but it does tell the average user everything necessary to get up and running. I guess since developers will have to look elsewhere for details.

Installation is a stress free affair and only takes a few minutes. Double click on the install program, fill in the registration dialog and that's about it.

The most difficult part of the whole procedure comes down to re-ordering the Auto folder. The Magic install program doesn't do this

**Magic is an exceptional product which turns any Atari into a new computer. The whole system feels more responsive and there's a general feeling of stability.**

automatically and MAGXBOOT.PRGM needs to run first. It's easy enough to move manually or using a boot manager and after a reboot MAGXBOOT reboots the machine a second time, presumably to replace TOS then the boot process proceeds as normal.

After the usual delay the MAGX desktop appears. The only clue Magic is running being the small curved double arrow Magic logo in

the top right hand corner of the menu bar. After a while boredom set in until in true Jekyll and Hyde fashion I launched every program I could find until I ran out of memory - that's more like it, after waiting two years I needed to do that!

## Confession

I couldn't wait two years for multitasking and have been using Geneva for ages. I only mention this now because Geneva registers each application in the Desk menu under the desktop accessories. I had to refer to the manual to discover a left click over an empty area in the menu bar displays a popup containing all the currently running programs along with some useful functions. Tidy up, redraws the screen - which comes in handy when a program gets confused and leaves garbage over the desktop. Start program, calls the Magic file selector to launch new programs. A Hide function helps cope with cluttered desktops by hiding programs running in the background - in contrast to a similar function in Geneva hidden software under Magic keeps on working, the windows are moved off-screen outside the visible area, a neat trick! To bring programs back into view there's an Unhide function and using these two functions together applications can be hidden or revealed individually or en masse as desired. Finally a free memory indicator plummets towards zero at an alarming rate! Apart from using the popup it's possible to switch between programs using a keyboard shortcut. A tiny dialog appears centre screen and cycles through each program name -release the key when the desired application is displayed and it's topped.

Compared to TOS Magic has a lot to offer. Pre-emptive multitasking (See boxout) with up to 64 open windows, ten applications and six desktop accessories (or 16 programs

## MULTITASKING

Multitasking is an ability to carry out more than one task at a time. There are two main types of multitasking and Magic can provide them both. The most powerful is pre-emptive, the other is co-operative. Most home computers have one CPU. How then is it possible to run many programs at once? It isn't, multitasking in an illusion. The CPU carries out a few instructions from each program in turn. It does this so quickly it appears several programs are running at the same time.

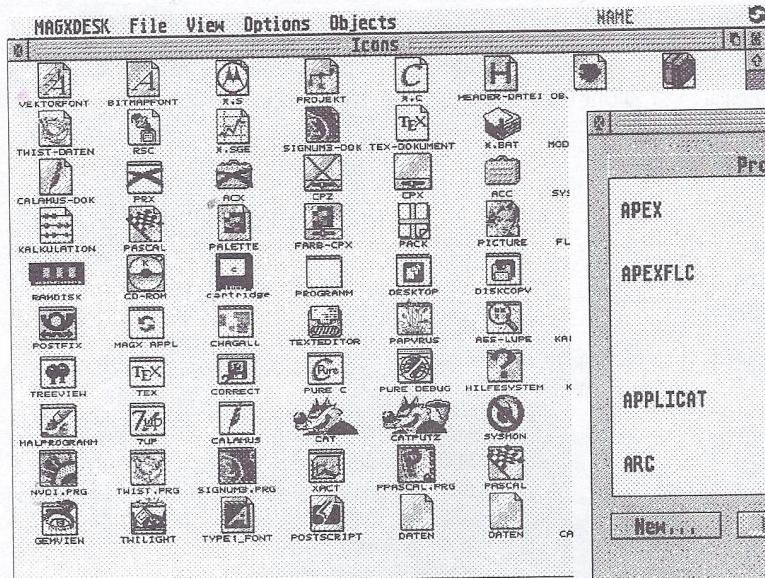
Co-operative multitasking means background applications only get processor time when the topped application makes a system call or is standing idle. Pre-emptive multitasking forces the topped



▲ This CPX allows you to fine tune the time slice and enables switching between pre-emptive and co-operative multitasking

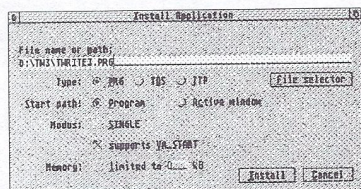
application to give time to background tasks - in other words processor time is shared between all running programs. This is achieved by "time slicing".





▲ Just some of the 100 MAGX Desk icons

without desktop accessories) running concurrently - so long as there's enough memory. The six accessory limit seems a bit strange but in a multitasking environment most desktop accessories become redundant. In any event most desktop accessories can be loaded and terminated on the fly so there's no real problem. Output from TOS and TTP programs into a VT52 terminal window which is at least a step up



▲ The main MAGX Desk Install Application dialog

from the white screen under TOS. MagiC is written in assembler and optimised for speed. TOS was written in some leisurely C code - the result is MagiC runs faster than TOS (see benchmark results). Enhanced dialog features including cut and paste, flying dialogs, windowed dialogs, program iconify and popup menus are all built-in so that's another handful of utilities made redundant! Programs can be forced to run in single tasking mode which usually persuades dinosaur programs to run but for some reason, desktop accessories are greyed out.

### So what's new?

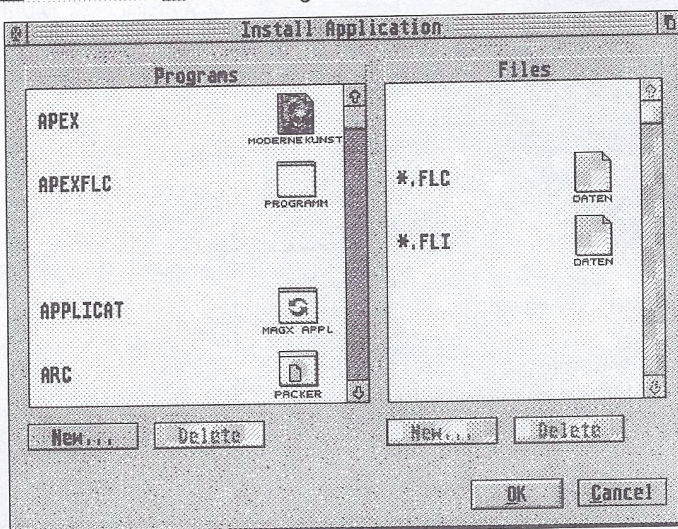
Most of the above features were in earlier versions of MagiC so what's in this version for users of earlier MagiC versions? The biggest change is the

forementioned Falcon compatibility, but there's more. MagiC 4 has a sporty 3D look and supports coloured icons. The 3D look isn't as crude as TOS 4.0 and although it takes a while to adjust I prefer it. Floppy disks can be copied or formatted in the background, so long as you use HD Driver v4.5 or later. Alternative file systems can be loaded, which holds out the prospect of long filename support in the near future. Files can have aliases, which means large files can be stored in one location and accessed from several other places which sounds useful, although I haven't figured out a sensible use for it yet. There's also an adequate font selector, a brain dead file selector and a revamped MAGX Desk.

### The desktop

MAGX Desk supports all of MagiC's new features along with a few tricks of its own. Tiled backgrounds are supported and some nice samples are included along with 100 colour icons. Kobold can be used for file operations and non-modal (non-blocking) disk copy, file copy and search routines have been

▼ Assign files for each application here



incorporated. Desktop windows feature an auto locator - enter characters on the keyboard to select files. MAGX Desk can assign an external file viewer, text editor, batch file CLI and a print utility which saves memory and provides flexibility. Up

▼ Another CPX allows you to change various attributes - handy for customising your MagiC set up



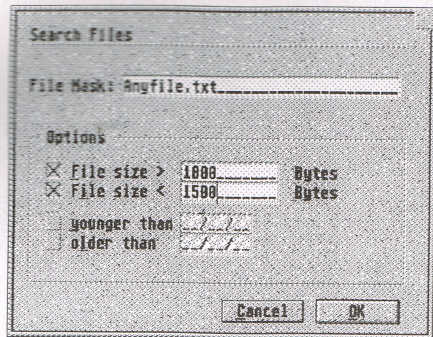
to ten items can be inserted in the Objects menu which is the ideal place to stash small utilities which don't deserve a desktop icon. MagiC symbolic links are supported and resolutions can be changed on the fly. I did encounter a problem in the Install application dialog which threw

## ALTERNATIVES

We're not short of choice when it comes to multitasking operating systems for the Atari platform. In addition to MagiC there's MultiTOS, Geneva, N.AES, SMS2 and Omen. In the UK MagiC's main competition comes from Geneva. MultiTOS is generally considered slow on a standard ST or Falcon, N.AES isn't available and SMS2 and Omen can't run TOS or GEM software. Geneva

will even run on a 520ST from floppy disks. Geneva offers co-operative multitasking or pre-emptive multitasking when used in conjunction with MiNT. Geneva features a 3D interface, custom file selector and low memory overhead. No desktop is included and although you can be away without one, most people opt for NeoDesk 4 because it is from the same programming team.

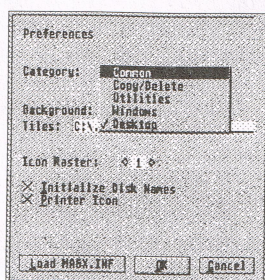




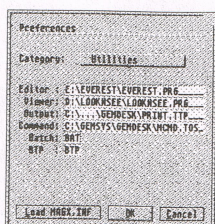
▲ MAGX Desk search, can search for files without blocking other applications

up a buttonless alert after I tried to install the same filetype twice for two different programs. This locked up the system requiring a reboot - nasty! Although MAGX Desk doesn't offer the sophisticated features available in other desktops it's ultra compact, well thought out and recommended for anyone who regularly runs short of memory. MAGX Desk can be

▼ The MAGX Desk preferences dialog



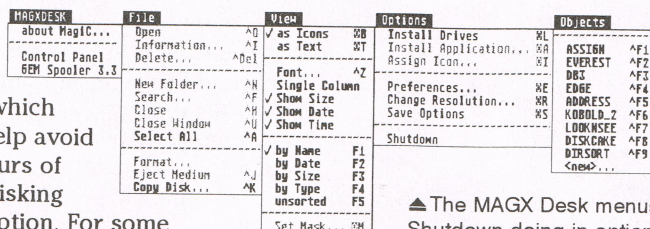
replaced with any of the multitasking desktops including Thing, Ease and Gemini. Installing another desktop is straightforward and involves editing one line in the INF file - but it isn't point and click. One new feature bought a smile to my lips. Since the arrival of Windows 95 I've taken great pleasure in winding up my PC using friends as they wait for permission to turn off their machines. Imagine the shock on my face the first time I noticed the Quit option in Thing had been replaced with Shutdown! Yes, Atari users now need permission to shutdown as well. It is a sensible precaution because it makes sure all programs are terminated and all files



▲ You can install four programs to use with MAGX Desk here

GEMBENCH RESULTS			
Falcon. No NVDI, No FX, No MagiC		Falcon running MagiC 4	
GEM Bench v4.03 © Ofir Gal - 3 March 95		GEM Bench v4.03 © Ofir Gal - 3 March 95	
Falcon 030 TOS 4.01		Falcon 030 MagiC 4	
AES v3.31		AES v3.99	
GEMDOS v0.48		GEMDOS v0.25	
MiNT not present		MiNT not present	
Blitter Enabled		Blitter Disabled	
NVDI not present		NVDI not present	
Video Mode: 640*480*16		Video Mode: 640*480*16	
LineF FPU installed		FPU cookie value=\$60000	
Run and Malloc from ST RAM		Run and Malloc from STRAM	
Ref: F030 + FPU, 640*480*16		Ref: F030 + FPU, 640*480*16	
GEM Dialog Box:	5.525 83%	GEM Dialog Box:	3.935 117%
VDI Text:	5.665 84%	VDI Text:	2.465 194%
VDI Text Effects:	14.575 70%	VDI Text Effects:	5.345 191%
VDI Small Text:	5.585 82%	VDI Small Text:	1.645 279%
VDI Graphics:	21.760 52%	VDI Graphics:	7.795 147%
GEM Window:	2.575 85%	GEM Window:	6.235 35%
Integer Division:	3.560 87%	Integer Division:	3.195 97%
Float Math:	0.390 94%	Float Math:	0.385 96%
RAM Access:	4.010 63%	RAM Access:	3.380 75%
ROM Access:	4.155 51%	ROM Access:	3.385 63%
Blitting:	4.015 91%	Blitting:	20.625 17%
VDI Scroll:	7.330 92%	VDI Scroll:	10.835 62%
Justified Text:	6.260 86%	Justified Text:	6.385 84%
VDI Enquire:	2.160 81%	VDI Enquire:	1.230 142%
New Dialogs:	7.615 76%	New Dialogs:	6.945 84%
Graphics:	80%	Graphics:	122%
CPU:	73%	CPU:	82%
Average:	78%	Average:	112%

As you can see a marked improvement. Add NVDI to the equation and you'll have quite a snappy system.



▲ The MAGX Desk menus. What is Shutdown doing in options?

closed - which should help avoid losing hours of work or risking file corruption. For some odd reason the Shutdown function in MAGX Desk is the Options menu - go figure...

MagiC is an exceptional product which turns any Atari (or Mac, or PC) into a new computer. The whole system feels more responsive and there's a general feeling of stability. If a program crashes you are usually informed by a friendly dialog and it's the attention to detail which delights. Almost all the programs I use regularly worked without problems. A couple had difficulties finding their files but this was easy to correct by

setting some environment strings in the INF file. In summary, I won't be returning to TOS!

**MAGiC v4**

**Publisher**  
System Solutions  
Tel: 0181 693 3355  
**\$69.95**

**Requirements**  
Any ST with 2Mb memory or more, TT or Falcon with TOS in ROM

**Pros**  
MagiC multitasks, it's fast and it's most excellent dude

**Cons**  
A 48 page manual isn't enough!

**30%**



# System Solutions Communications

**Comms Software:**  
CoNnect v2.46 £29.95  
**Modems (Fax compatible):**  
14.4K baud XLink £99.00  
28.8K baud XLink £189.00  
Straight Fax v2.50 £59.95

## CD-ROM Systems

**4X Speed Falcon System:**  
Toshiba Drive, SCSI II Cable £239.00  
**4X Speed ST(FM/e) System:**  
with ICD Link 2 £299.00  
above systems include ExtendoS Pro v2.4 and a free Mega Archive Volume 2 CD.

**CD ROM Disks**  
Mega Archive 2 £24.95  
Skyline Deluxe £24.95  
Suzy B 2CD Set £49.95

...and more. Too many to list here.  
Ask for our CD-ROM database.

## Falcon Add-ons

Falcon Memory Board 0Mb £49.95  
Falcon Memory 14Mb £195.00  
BlowUP 030 - Software £9.95  
BlowUP 030 - Hard 1 £49.95  
BlowUP 030 - Hard 2 £69.95  
14" Monitors from £99.95  
NEW 15" & 17" IDEK monitors £Call  
Cubase Audio 16 £599.00  
FDI Digital Interface £229.00  
FA8 analog outputs £349.00  
MO4 4 Extra MIDI outputs £149.00  
ADAT Digital Interface £499.00  
Digital Patchbay 2/4 for SPDIF £295.00

## New Releases

The Ultimate Cubase CD ROM £69.95  
Bird of Prey - Falcon CD ROM £24.95  
XWare Vector Clipart 1/2/3 ea. £29.95  
Art Nouveau Clipart & Fonts £39.95  
Gemulator Gold CD ROM £24.95  
Infopedia 2.0 CD ROM & Driver £49.95  
The Compendium on CD ROM £24.95  
CD-Writers Systems from £695.00  
Photoline Pro-Graphics Editor £169.00  
Epson 500 Colour Printer £299.00  
Texel Spreadsheet Software £69.95

Coming Soon - HADES 040/060  
the ultimate Atari Workstation

## Specials

PC Keyboard I/F £49.95  
T28 - 28Mhz Accelerator £179.00  
1.44Mb Floppy Drive Kit £59.95  
**The Translator** £49.95  
HD Driver software V5.x £29.95  
ICD Link II £89.95  
**Falcon Tower Kit** £159.95  
Falcon 19" Rack Cases from £149.00  
270Mb Drive inc. Cart. £395.00  
Desktopper & Freekeys £99.95  
ICD ADSpeed for STFM £119.95  
ICD ADSpeed for STE £149.95

## MAIL ORDER

Tel: (01753) 832212

Fax: (01753) 830344

Windsor Business Centre, Vansittart Rd,  
Windsor. SL4 1SE

## SHOWROOM

Tel: (0181) 693 3355

Fax: (0181) 693 6936

17-19 Blackwater Street, East Dulwich,  
London. SE22 8RS

Opening Times: Mon. to Fri. 10am - 6pm

## NVDI 4

Features enhanced Speedo font support, with the ability to use True Type fonts. Up to 9 times faster than Speedo GDOS v4. Works with all TOS versions on all Atari computers. Comes with 8 Speedo fonts. A Hard Drive is required. Includes new Colour printer drivers for Inkjet printers.

NVDI 2.51 (accelerator only) £29.95  
NVDI 4.11 £49.95  
100 Font Pack 1 or 2 £39.95  
500 Font Pack CD £49.95

## MiniS II & EZ Hard Drive Systems

The MiniS II Hard Drive Systems can have drive capacities up to 4.3Gb. This full SCSI system is hardware compatible with all Atari computers, Mac's & PC's. They are unrivalled in size, noise, speed, and style, and come with a thru port for expansion. The On/Off switch is now located at the front.

The SyQuest EZ135 drive has been a real success. Perfect to be a first hard drive or as a backup system to larger drives. It is the quietest drive we have! Check out the new prices.

## ST Mono Monitors

The SM14 High Resolution mono monitor replaces the Atari SM124/5. The 14" FST display has a crisp, sharp image. A Tilt & Swivel stand is included and it is a plug-in-and-go unit, with no adaptors required!

"Essential Buy, 90%"  
ST Review, May 93

SM14 (without audio) £129.95  
SM14s (with audio) £149.95  
See Cubase Special offer for bundle discount!



**LOOK! Amazing Price Reduction**



★ Quiet Fan ★ Internal power Supply 100-240V  
★ 2 year back to base warranty ★ Dual SCSI ports  
★ Small (2.25x6.75x9") ★ Device number switch

	TT/Falcon	ST(FM/e)
SyQuest EZ 135Mb	£129	£199
EZ 135 Cartridge	£18.95	
EZ 135 Cart (3 Pack)	£52.95	
EZ 135 Cart (5 Pack)	£84.00	
540Mb MiniS II	£199	£249
Jazz 1Gb Inc Cart.	£499	
2Gb D2D MiniS II	£599	

STfm and STe drives come with the ICD Link II

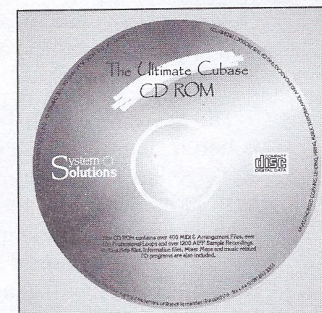
## C-Lab Falcon 030 Systems

The C-Lab Falcon is still the reliable choice for 8/16 track digital recording, with powerful programs such as Cubase Audio, AudioTracker and AudioMaster using it to its full potential. You can combine MIDI, Direct-to-Disk recording, Mixing, Equalising, and writing gold master CD's in your own studio. Only the Falcon can deliver such incredible value for money. We supply systems for Music, Desktop Publishing, Image Manipulation, Animation, Desktop Video, Fax &

Modem use and more. 19" Rack mounted Falcon systems are now available. Please phone us for your personal quotation of a tailor made Falcon 030 System.

C-LAB MK I 4Mb memory	£795.00
C-LAB MK I 14Mb memory	£995.00
Fitted in 19" Rack from	£199.00
C-LAB MK X from	£895.00

Ask for MK X upgrades.



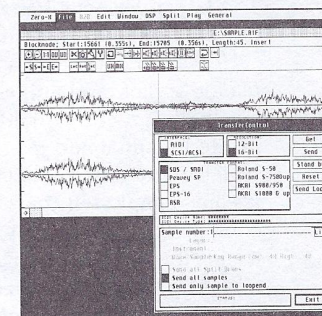
## ZERO X - Digital Sound Processing

ZERO-X is exciting news for anyone using a sampler, sample-player or hard disk recording system. It uses advanced techniques to analyse and alter your samples in a huge number of ways - all with the minimum of human intervention.

ZERO-X will automatically create smooth loops, with gate and Xfade transformations for samples that normally wouldn't loop. With the click of a button it will rip out a drum track from a sample and create a MIDI file,

enabling you to time-stretch almost any drum track to fit your needs. It will let you edit, convert and upload samples to a wide range of samplers. ZERO-X runs on any Atari, from an ST to a Falcon - it's the software you need for all your sampling requirements. Try it before you buy - ask for the Demo Disk.

ZERO-X Software £169.00



## MagiC - Multitasking

"It's like running an accelerator and getting the multitasking thrown in for free."

ST User, Feb. 1994

MagiC is a full TOS replacement, a very fast disk filing system; has accelerated serial, MIDI and printing routines, and is of course, a true pre-emptive multitasking system.

MagiC Desk, a powerful desktop and powerful command shell has been included. MagiC runs on all ST, Mega, TT and Falcon computers with 512kb, but 2Mb is recommended for a useful

working system. New features include background disk access and 3D look colour systems. The MagiC operating system is so well designed it now also works on Macintosh and PC computers (Separate versions available).

"If you want a multitasking system that works simply and reliably, then MagiC is for you."

ST Review, June 1994.

MagiC 4	£69.95
MagiC 4 and NVDI 4	£99.95
MagiC 4 and Kobold	£79.95
add HD-Driver for only	£19.95



## Repairs and Upgrades

All repairs are carried out by qualified personnel. If you would like a quote, please ask for an estimate. Need it back in a hurry? Then ask for our professional next-day service. Call us to discuss your upgrade requirements. We fit all quality upgrade products available. We can collect and deliver by courier.

For collection and delivery by courier phone 01753 832212

**Atari Workshop is  
Atari UK's preferred  
Service Centre.**

All prices include VAT  
For small items, please add £3.95 P&P  
Multiple or large items, please add £10  
courier charge. E&OE

**Call the professionals  
now for your  
personal quote.**

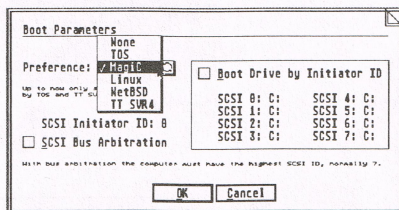
**ATARI  
WORKSHOP**



# HD DRIVER

Jon Ellis takes the latest version of HD Driver for a quick spin...

When you buy a hard disk system for your Atari, it usually comes with a floppy containing the software that allows the computer to talk to the hard disk. You plug in the hard disk, install the driver software, and forget about it while it merrily fill up the megabytes with reams of data. So why do System Solutions want you to part with £30 for another hard disk driver, when you've already got one?

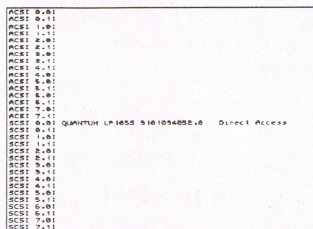


▲ Special boot-up configurations for every machine

The answer is that HD Driver v5.23 is better than what you've got. The package has been around for years, both in its own right and as part of the Outside virtual memory system. HD Driver has acquired a reputation for being fast, reliable and compatible with multitasking operating systems. The latest versions have added yet more functions and a neat interface.

HD Driver arrives in a plastic wallet containing a single disk, a good-quality printed manual and a registration card. Installation is easy- simply tell the configuration program where to put the driver. When updating an earlier version of HD Driver, the software even offers to retain the old configuration settings in the new setup. If you want to reconfigure the package manually, then that's easy too, using a set of slick, well-designed dialogs.

Configuration reveals just how big a difference there is between HD Driver and more basic software like Atari's AHDI. HD Driver supports the latest hardware (magneto-optical

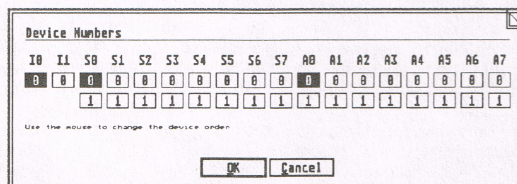


▲ Utility programs include IDCHECK which locates SCSI and ACSI devices in your system

disks) and provides advanced features to work with the most recent operating system developments (MagiC 4). It also includes control options specific to each of the different types of hard disk interface (ACSI, SCSI and IDE), for the ultimate in fine-tuning.

To make for a speedy boot-up, HD Driver allows you to specify the active disks in your system and the order in which they should be checked. No more waiting around while the computer tries to talk to drives that aren't there! Anti-viral protection is also provided in the form of a facility to write-protect key areas of your hard-drive.

As an added bonus, the disk also includes full programming data on the XHDI interface. This allows



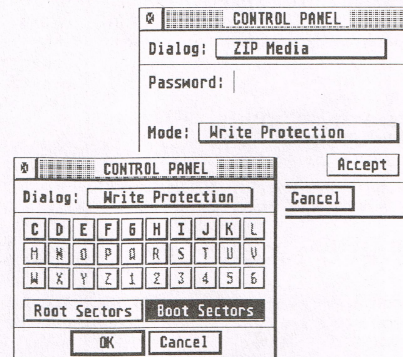
▲ Change the boot-up order by dragging drives around

application programs make use of HD Driver's features. There are also a number of utility programs and patches, together with demos of the disk editor Diskus and the virtual memory manager Outside.

The English documentation is pleasantly designed and presented. Although generally well-written, it's

rather sparse on detail regarding some of the options. For example, when describing the data cache facility that speeds up operation by holding commonly-accessed information in memory; there is no indication of what might be good

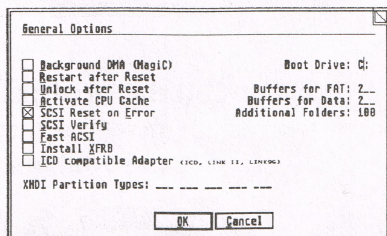
▼ HD Driver supports all the latest hardware



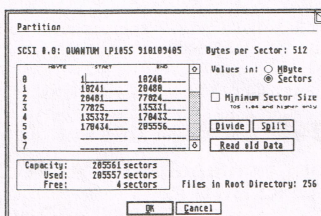
▲ A neat CPX allows write-protection to be turned on or off - anytime

configuration values to get the best performance. Also, the contents of the HD Driver master disk do not tally with the description in the documentation.

In the end though, HD Driver succeeds brilliantly because its author maintains and improves it as an application in its own right, rather than just a little program to keep the hardware working. "Should be on every Atari owner's hard disk". It's a well-worn cliché, that ends many a review of the latest blockbuster application. Well for once, in the case of HD Driver, it's quite true.



▲ Options - we got 'em



▼ Repartitioning disks is easy with HD Driver

**HD DRIVER V5.23**  
**Distributor**  
 System Solutions  
 17-19 Blackwater Street, East  
 Dulwich, London, SE22 8RS  
 Tel 0181 693 3355  
 Email: ssolutions@cix.compulink.co.uk  
 WWW: http://www.ssolutions.com/  
**\$29.95 Upgrades available**

**Pros**  
 Fast, reliable package  
 Excellent configurability  
 Supports latest devices and programs  
 Actively under development

**Cons:**  
 Odd omissions in manual

90%



# **Superb Products Sensible Prices!**

**Gribnif  
Software**

Now available from Titan Designs.  
Suitable for any of the Atari 680x0 range of computers - ST, TT or Falcon. Demo disks available. \* = at least 1MB required.

## **Geneva\* - £59.95**

The best multitasking operating system for the Atari ST/TT/Falcon series. Solid, reliable and affordable.

## **NeoDesk 4 - £59.95**

Original and genuine Desktop replacement! Hundreds of features, including Clipboard, Split Windows, Group Windows, File Filter.

## **Geneva/NeoDesk\* - £99!**

Bundled suite - saves nearly £20!

### **ST Format - 91%**

"Once you've tried this combination, you won't want to be without it"

## **STalker 3 - £39.95**

Fully-featured telecom package. With a modem, STalker lets you connect to any of the electronic services available world wide. Excellent for use with STeno.

## **STeno - £24.95**

Superb text editor which can be used as a Desk ACCessory - ideal when using other programs. Full editing facilities and works great with STalker.

## **Arabesque Pro\* - £99.95**

Bitmap and Vector based program to create, import, edit and save graphics in the Bitmap and Vector formats.

## **Convactor Pro\* - £79.95**

The ultimate auto-tracing software for the Atari. Takes bitmap images and converts them automatically to vector images.

### **ST Format - 91%**

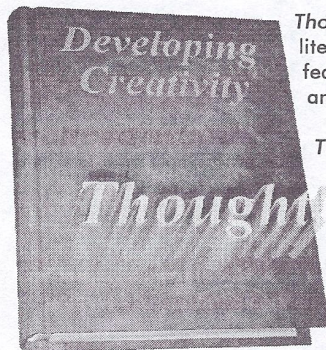
"Someday, all software will be this easy to use"

Demo Disks available!

## **Thought! Ideas Processor**

The ultimate development tool for your Atari

Thought! provides a graphical means to structure complex ideas using easily identifiable Symbols. Each Symbol can be linked to any other program within the Structure, and loaded, along with an associated file. After editing the file, quitting the program will automatically return back to the Thought! shell.



Thought! is a deceptively powerful program that has, quite literally, hundreds of uses and applications. Special features include drag and drop, clipboard, Macro creation, and many more innovative features.

Thought! is suitable for any Atari computer with 1MB memory and is fully compatible with Geneva.

Thought v2.2 - £79.95

Demo disk available

## **Browse our new Web site!**

<http://ourworld.compuserve.com/homepages/TITANWEB/>

For masses of Atari related products, information and up to date, sensible prices.

## **MODEMS - from £79.95**

The need for ever faster data transmission speeds continues to grow - fortunately Titan can supply BABT and CE approved 28.8Kbps and 14.4Kbps modems at low prices! Now you can really browse...

Prices: 28.8K - £149.95  
14.4Kbps - £79.95  
Carriage £5.00

## **MONITORS - best prices!**

Huge range from 14" right up to 21" and including models with Trinitron technology.

Prices from £199 to £999

## **PRINTERS - new HPs!**

Now available are the new HP820 and HP870CXi colour Deskjets featuring 600x300dpi with Colour RET giving incomparable, photo-realism.

## **SYQUEST - from £129.00!**

The ever popular SyQuest EZ range just got larger and cheaper!

The fabulous EZ135 is now an astonishing £129 and the recently announced EZ-Flyer 230MB is an affordable £279.

Coming very soon from SyQuest is the incredible 1.3GB SyJet removable cartridge system with an 11ms average access time!

## **FALCON 14MB MEMORY**

!! ONLY £129.95 !!

All prices include VAT. E&OE. Prices and specifications liable to change without prior notice

For more details contact;

## **Titan Designs Ltd**

6 Witherford Way, Selly Oak  
Birmingham B29 4AX. UK.

Tel: +44 (0)121-693 6669

Fax: +44 (0)121-414 1630

e-mail: [100345.2350@compuserve.com](mailto:100345.2350@compuserve.com)

Web: <http://ourworld.compuserve.com/homepages/TITANWEB/>

See our advert elsewhere in this issue  
fordetails on leading-edge,  
Falcon related products.



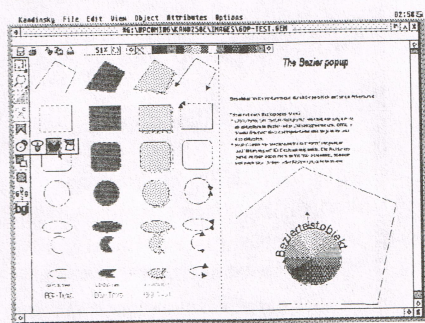
**K**andinsky first surfaced in the UK during August 1993 when Joe Connor described Kandinsky v1.39 as "a commercial quality shareware vector graphics application". Three years later development is still ongoing with Kandinsky v2.5e due for release as you read this.

Kandinsky reached v2 in September 1995 with the introduction of dozens of new features. Although the general thrust of development was aimed at owners of Falcon and other high end machines with new look 3D dialogs and improved colour handling there was still plenty on offer for all Kandinsky users.

The most visible change was the restyled toolbox with new icons but the most significant addition has to be mono Calamus CVG support. For the first time it became possible to convert between GEM Metafile and Calamus CVG format without expensive commercial software. A new multi-copy function made it easy to create complex "Spirograph" designs quickly by entering a few simple parameters and the interruptible screen redraw feature made it easy to abort unwanted lengthy screen redraws. The on-disk documentation was updated and converted to context-sensitive ST-Guide hypertext format. The shareware price also doubled but the previous release (v1.73) remains available as an entry level package.

One year later Kandinsky v2.5 is almost ready for release. Looking at Kandinsky v2 it's not easy to see where improvements can be made but the author has not let the maturity of the package deter him from making significant changes to it in an attempt to make Kandinsky even more intuitive.

▼ Kandinsky v2.5e exhibits Coral Draw tendencies



# KANDINSKY

## Kev Beardsworth takes a retrospective look at the future for Kandinsky... 2.5

The single floating toolbox window has been scrapped! Each drawing window now includes its own toolbox along with an optional horizontal toolbar. This combination is vaguely reminiscent to Corel Draw on the PC platform and if that's the direction Kandinsky is heading I'm all in favour!

**Kandinsky is an endlessly fascinating program to play with yet intuitive enough to get to grips with live projects within minutes.**

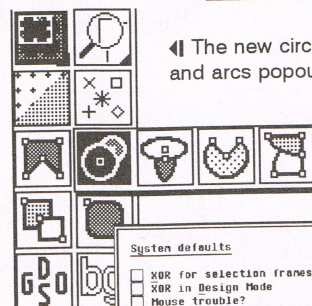
The toolbox has also been rationalised with some functions merged under popout icons and others available via menus and shortcuts - it

sounds long-winded but really does make tool selection much easier.

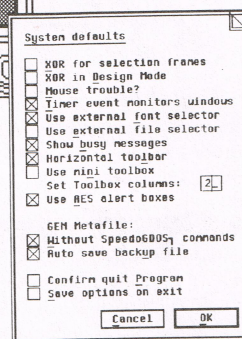
The new toolbar combines visual feedback with convenient selection of common functions including save, print, cut, copy, paste, zoom and colour selection. A scrolling colour palette area offers keyboard shortcuts to set the fill and border colours which dramatically speeds up drawing construction as there's no longer any need to access the colour and fill dialogs.

Other changes are more subtle, for example windowed dialogs include a title line so there's no point duplicating the dialog title inside the dialog, this simple change saves two lines per dialog and in a multitasking environment with lots of open dialogs scattered around the desktop every square millimetre saved helps.

Kandinsky has always supported all the popular protocols and enhanced desktop features and this version is no different with the introduction of iconification under Geneva and OLGA support. OLGA is a new protocol which offers object linking (OL) better programs running in parallel within a multitasking environment, such as MagiC, Geneva or MultiTOS. Using OLGA a bit image displayed in Kandinsky can be edited using Stella (an image editor which also supports the OLGA protocol) and any changes saved in Stella are automatically updated in Kandinsky via the OL link.



◀ The new circles, ellipses and arcs popout



▲ The options dialog, including new options to call external file/font selectors

Other refinements include a new Abandon option in the File menu, which ignores any changes made to a drawing since the last Save operation and a new sub-menu to instantly select between any of the last ten opened files. There have been also been minor improvements and tweaks to the text editor, font and file selectors and enhanced keyboard support for MagiC Mac users, so there's really something for everyone!

My favourite new feature is the ability to temporarily lock cursor movement

horizontally or vertically using the [Alternate] and [Control] keys which takes the guesswork out of aligning objects.

Although I don't have a colour printer I understand colour

output via NVDI and SpeedoGDOS is now working well - there's an enhanced printer dialog and it's certainly working perfectly in mono.

Kandinsky is an endlessly fascinating program to play with yet intuitive enough to get to grips with live projects within minutes. There are many other features I'd like to cover in detail, fitting text to curves and precision object alignment for starters - I feel a tutorial coming on so look out for the release version and stay tuned!



## The Atari A - Z

by Mark S Baines

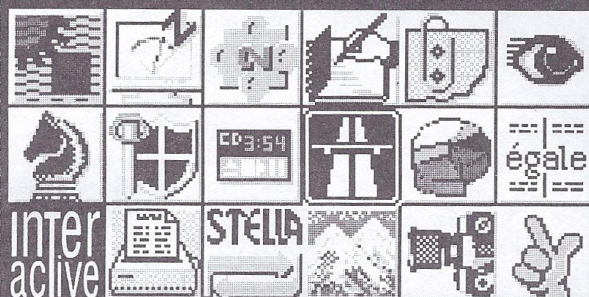
A encyclopedia/dictionary of all that is Atari, a reference book for beginners and experts alike, bought by people all over the world, including most Atari journalists!

This is a high-quality book packed with unique information written by a long-term expert:

- A5 ring folder for convenience
- 340 information-packed pages
- 2,238 entries, some covering many pages
- 101 tables, much of which is unique
- Over 128,000 words

The cost in the UK is £13.50, Europe £15.50, US/Canada £18.50 and Australia £19.50. Cheques should be made out to "Mark S Baines". Money orders, bank drafts are acceptable but ONLY in UK Sterling.

Write with SAE or e-mail for further details:  
Linnhe Computing, Linnhe, Shore St, Ross-shire, IV20 1SF.  
Phone: 01862 871624 E-mail: msbaines@cix.compulink.co.uk



65 Mill Road Colchester CO4 5LJ  
<http://www.cix.co.uk/~inactive/>

## Lottery Companion

### UK National Lottery

Ideal for Personal or Syndicate Use.

Over 8000 Entries Per Date File.

# 4

Random, Hot, Cold, Include, Exclude, Manual, Wheel and Permutation Number Set Selection.

Frequency Value, Hot/Cold, Bar Chart, Lists, History, Pattern, Maths, Colours, Ball Occurrence, Performance and Future Reports.

Syndicate Membership, Credit, Operation and Accounts.

*It's the Best.*

For a Demo send a Disc + Stamp or  
Email: [mark@dwelldemon.co.uk](mailto:mark@dwelldemon.co.uk)  
Web: <http://www.dwell.demon.co.uk>

To Register please send £7.00  
payable to M. Butler to 8 Brookside,  
Hinckley, LE10 2TL



# FIRST STEPS ONTO THE WEB

Chris Good plunges into HTML coding and needed a reference book...

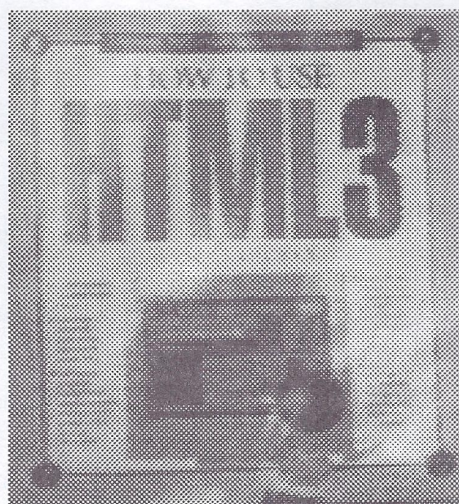
With everybody and his dog producing Web pages these days I thought it was about time I buckled down to some serious HTML coding. After a few sessions I realised I needed an easy to follow quick guide for beginners.

I borrowed "Using HTML

illustrating what the finished code should look like on-screen surrounded by smaller illustrations the sequence in which the code should be prepared. A running "Try it's" tutorial builds into a web page for the imaginary "LawnBirds Inc." and provides an

opportunity to practice the code you've read about in the previous chapter.

The proprietary Netscape and Microsoft Explorer extensions are covered, as are video and sound file handling. There's also a brief mention of JAVA code



by Neil Randall" to knock up the WAG user group pages and went looking for a copy of this or something similar. After browsing (sic) through numerous weighty tomes on the shelves of my local booksellers (some come complete with CD-ROMs/disks and advanced stuff on CGI/JAVA/VRML coding with price tags to match) I plumped for "How To Use HTML3 by Scott Arpajian" - one of the main reasons being it had a £5 off sticker on the front!

Seriously though, compared to some of the other books available, this seemed to include everything I needed, large clear diagrams, easy to follow tutorials and a tag reference section in the back.

The style of the book is easy to follow. Each page includes a picture

applets. Since CAB currently doesn't support JAVA this isn't a problem. Overall an excellent beginners book to Web authoring I'm off to look for something a little more advanced now.

### HOW TO USE HTML3

#### Publisher

By Scott Arpajian, ZD Press  
Ziff-Davis Press Line of Books, 5903 Christie Avenue, Emeryville, CA 94608  
ISBN: 1-56276-390-3  
£22.99

#### Pros

Aimed at beginners

#### Cons

Rather PC/Mac oriented - but they all are!

80%

ISSUE 1 • ATARI COMPUTING



**W**hat's a cache? A buffer? What's the difference?!? Are all these questions related - and do we have to care?

Most of us spend lots of time optimising our systems. There's always the chance the next minor setup change will unleash untold power! One of the areas shrouded in mystery is the use of caches and buffers and now is the time to learn all about caches and buffers which should explain how you can make worthwhile improvements to your system performance.

At the outset, it's worth pointing out caches (of any type), are much more important to PC users than Atari enthusiasts. On a PC, portions of programs are constantly loading and unloading. On our platform entire programs are loaded into RAM in one complete accessible chunk however it's still important to cache the directories and file allocation tables (FATs) otherwise significant hard drive slowdowns occur as the drive fills up - especially if you're older TOS versions.

The following scenarios provide some useful and surprising details...

If you have a large, newish, SCSI hard drive (made after 1993), and if the drive has an onboard cache (or cache buffer) of at least 128Kb, and if the average seek time is faster than 17ms (milliseconds), and if your machine is fitted with TOS v2.05 or higher the chances are you won't gain much benefit from a software cache.

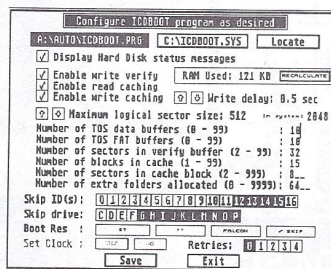
If you're using a TOS v1.62 or earlier with an Atari Megafloppy hard drive or even one of the SCSI drives

# THANKS FOR THE MEMORY!

**Is it worth setting aside memory for caches and buffers? In the first of two articles, Howard Carson takes a look at hard drive management...**

manufactured prior to 1993 (typically with access times in the 20-40ms range) the chances are a medium size software cache will speed up your work considerably.

A combination of a modern SCSI drive and an older TOS version



▲ If dialogs like these bring you out in a cold sweat you need to read this article!

means a small to medium sized software cache is probably worthwhile.

Modern drives boast spectacular seek times and data transfer rates (see the throughput definition) which knock the stuffing out of pre TOS v2

equipped machines. If you're still using TOS v1.0/1.02 you'll need FATSPEED.PRG (or other suitable software) in your Auto folder to obtain reasonable drive access rates. Even TTs and Falcons slow to a crawl when asked to access old drives - the throughput from the older drives leaves the TT and Falcon data and address buses with time to kill. A software cache will help, but often needs to be so large (512Kb or more) that you may be better off upgrading the drive.

For example, with a TOS v4.02 Falcon with 4Mb of memory, and the three year old 65Mb Conner IDE internal hard disk, running Calamus SL a 256Kb software cache works extremely well <but> switching to 640x480x256 colours (occupying around 3Mb of memory plus the 256Kb cache) and adding a few Auto folder programs and desktop accessories will take up most of the free memory - and even that will be fragmented (i.e. broken up into smaller chunks). Calamus SL hates

## HARD AND FLOPPY DISKS

Hard disks store data on thin round aluminium plates, called platters, with a magnetised oxide coating. Floppy disks are similar except the plates are made of flexible plastic instead of aluminium.

When a disk is formatted, the coating is divided into concentric rings called tracks. Each track is divided into sections called sectors. A typical double-sided, double density (DD) floppy is formatted to 80 tracks, nine sectors. Each sector can accommodate 512 bytes of data so 9x80x512x2 sides yields storage space for 737,280 bytes. After allocating a few thousand bytes for the boot sector and the file allocation table (FAT), what's left is typically around 730Kb. High density (HD) floppy disks double the storage capacity by dividing each of the 80 tracks into 18 sectors. Hard disk

capacity is calculated in a similar manner, except the formatting method stores more sectors on the tracks nearest the edge of each platter, which results in a higher storage capacity and more efficient use of the available surface area on each platter.

Data is recorded electrically via a tiny read/write head (similar to, but much smaller than record/playback heads found in audio cassette machines). The location of data (text files, images and MIDI recordings etc.) is maintained in the file allocation table. Every formatted disk has a FAT. If you wipe the FATs, any data on the disk is inaccessible.

The read/write head (in a hard drive) moves in an arc across the platters, from the outer edge to the centre, and back again in much the same way as a tone arm traverses a

record, except the read/write head never actually touches the surface of the disk. The head (or heads, in a multi-platter mechanism), is driven by an actuator motor, so-called because it is actuated by read/write commands. The platters are mounted on a central spindle and spun by another motor. The two way action between the head and the spinning platter makes it possible to quickly access any area of the disk's surface.

Floppy disks spin at around 310 revolutions per minute (RPM) and can be traversed by the head at up to 12 metres per second. Hard drives spin at between 4500 up to 7200 RPM depending on the age and size of the individual models. This spindle (or rotational) speed is measured at the spindle, not at the outer edge of the platters.



fragmented memory and the chances are you'll run out of memory - or into trouble fast.

Before you begin testing cache software consider how your system fits into the overall scheme of things. Hopefully the information here will help you decide whether replacing or upgrading components is worthwhile and help you evaluate cache performance later on. Getting the right combination of hardware and software together can produce some delightful speed increases so it is well worth the effort.

## Caches

Hardware and software caches work in pretty much the same way. Onreceiving a request to read data from disk, the operating system checks to see if the data is already in the cache. If the data is there (called a "hit") the cache sends the data to the program without accessing the disk and it's party time down at the racetrack.

TOS v1.0/1.02 users were left back on the starting grid because TOS didn't incorporate any system calls to automatically look for the presence of a hardware or software cache - this means the software cache utilities have to be smart enough to interrupt calls for data at a low level (i.e. early in the process) to be effective. Such caches are called read (or read-through) and are capable of dramatic performance increases.

Write (or writeback) caching stores data to be written to disk in memory until the disk becomes idle or a preset amount of time has passed without any other input at which point the data is written to disk. Although write caching can improve performance, the results are not as dramatic as read caching and carries some risk! If the computer crashes, locks up or there's a power failure before the data is written to disk the data is permanently lost - even after a save in some cases! If you're going to use write caching invest in an Uninterruptible Power Supply (UPS).

In most ST systems, software caches tend to provide faster system performance, primarily because data transfer is faster across the memory bus than across the data bus. In high end systems such as TT's and Falcons etc. some reliance on hardware caching (found on the larger hard drives), is likely to provide reasonable benefits.

Allocating system memory to a cache is a trial and error process - the objective being a trade off

# HARD DRIVE TERMINOLOGY

## Seek time

The time the drive takes to move its read/write heads across the platters to a requested track. Smaller, older, SCSI drives (between 20-60Mb) typically average seek times of between 20 and 40 milliseconds (ms) which looks poor compared with the current large capacity drives (540Mbs upwards) which are capable of turning in times under 10ms.

## Latency

Specifies the average time it takes to spin the platters until the requested portions of a track are spinning under the head. Typical latency times are around 5.6ms for 540Mb drives dropping to around 4.2ms for drives of 1Gb or larger.

## Average access time

This is derived from the average seek and latency times. Somewhere between 12-20ms is about right for modern SCSI drives. It's worth mentioning most hard drive ads quote the faster seek time instead of the average access time, so be careful when comparing performance figures.

## Data transfer rate (DTR) or throughput

This specifies the rate at which data is read from or written to the drive, once the heads are in position. Applications which mainly read data sequentially (business/graphics

applications) are most affected by the DTR. The rate is specified in either megabytes or megabits per second. There are two main kinds of DTR: Burst DTR (also called external DTR) and sustained DTR (also called internal DTR). Burst specifies the rate at which data is read from the hardware cache (see below). SCSI 1 and SCSI 2 drives have burst DTR of between 8 and 40Mb/sec. Sustained DTR specifies the performance when the hardware cache is not being used. Despite spectacular DTR figures getting data from a drive into system memory is often much slower. The data has to be funnelled into memory across the data bus in your computer. ST's do not operate anywhere near 8Mb/sec although Falcons, TT's etc. have higher capacity buses which can more closely match the DTRs of current drives.

## Hardware Cache

An area of memory (typically between 64Kb to 4Mb) which is integrated with the hard disk controller (HDC) and usually part of the onboard memory buffer of the controller.

## Software Cache

A chunk of your system memory, reserved for disk caching and controlled by utility software (HD Util, TCache, Master Cache, Cachennn, etc.).

between hits and memory. A cache somewhere around twice the size of the largest file you normally load is a good starting point. So, if the largest text file you work with is 50Kb, a 100Kb cache should suffice and isn't too much of a burden on a 2.5Mb system. If you have the luxury of 4Mb memory (or more) you can consider allocating up to one sixteenth of your system memory to a cache (i.e. 256Kb in a 4Mb system, 0.5Mb in an 8Mb system, 750Kb in a 14Mb Falcon etc.) but do carry out some tests.

## Buffers

These are typically found onboard hard drive controllers. In contrast to a cache which stores data that has been read or written, a buffer stores data about sectors adjacent to the data that was requested, in an attempt to anticipate what might be requested next.

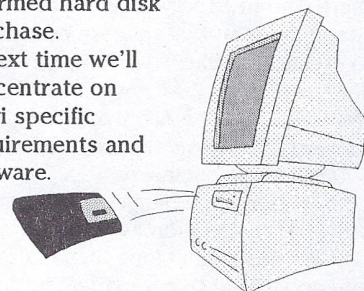
Segmented buffers are divided into smaller sections in order to store more adjacent (or consecutive) sector data in an effort to improve the hit rate and there's also adaptive

segmented buffers which can expand or shrink the number of segments used to store sector information, depending on the average demand during a series of reads. Buffers tend to be smaller than caches, because of the nature of the data they store, and can be effective from 64Kb up to around 512Kb.

Another fundamental difference between caches and buffers is that a cache can differentiate between directories/FATs and data whereas a buffer cannot normally tell the difference.

The information in this article applies across all computer platforms and should help you make an informed hard disk purchase.

Next time we'll concentrate on Atari specific requirements and software.





Thomas Binder previews  
**MagiC v5**, the popular  
 multitasking TOS  
 replacement for the Atari  
 ST and compatible  
 computers...

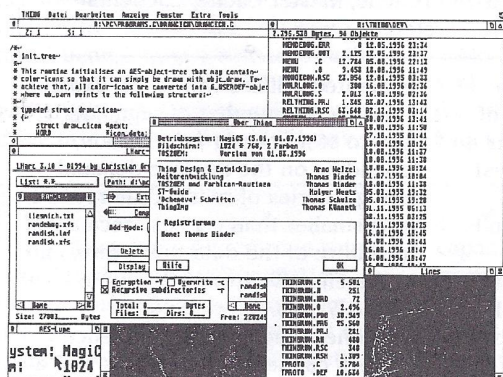
# THE NEXT GENERATION MagiC 5.0

MagiC v5

MagiC has always been a fast and reliable platform for Atari programs, so what can you expect from the new release? Of course, MagiC v5 features all the desirable feature from former versions, including high-speed multitasking, background disk access, loadable filesystems and device drivers, a special "single mode" for problematic programs.

The most important news is the built-in VFAT filesystem which enables long filenames (up to 64 characters) to be used on floppies and hard disks in a Windows 95 compatible format.

With the help of a little tool supplied with MagiC v5, it's possible to decide which drives long filenames should be used on. There's no need to re-partition the hard drive, so there won't be any data loss. You're even able to read from and write to VFAT partitions from normal TOS, although the long filenames will not be usable in this case.



▲ MagiC 5.0 running Thing, Lines, qed, LZHShell and AES-Lupe

Not all programs are able to handle long filenames, but since every file with a long name has a second one conforming to the old 8+3 format there's no need to worry. It may simply happen that you are not able to create new files with long names or see the file "MagiC-Preview.txt" as "MAGIC~1.TXT" while using one of these (typically older) programs.

Despite the backward compatibility, it's dangerous to use low-level tools (such as optimisers) on partitions using long filenames and could lead to complete data loss!

▲ A directory with long filenames, MagiC 5.0 with VFAT-support active

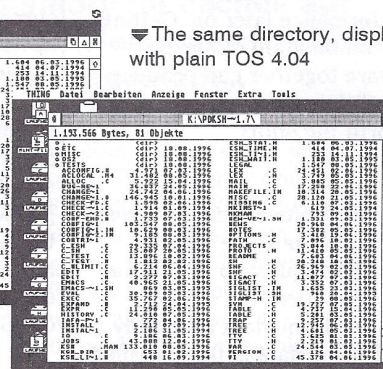
Also note that due to this backward compatibility, VFAT suffers the same drawbacks as the normal Atari FAT filesystem: Hard disks are easily fragmented, making access slow, larger partition sizes lead to loss of disk space due to the larger cluster size required (one cluster is the minimum size of a non-zero length file), maximum partition size of 1Gb, and so on.

MagiC v5 also supports threads (where one process can be split up into several sub-processes) and signals, making it more compatible with MiNT, which is important for programmers. Together with some new operating system calls it's possible to use threads in GEM applications as well. This means programs using this new feature are able to do more than one thing at once (in layman's terms). Currently, only the tools for the MagiC Desk support this.

Although MagiC v5 allows the use of long filenames on hard disks, the programming interface for external filesystems is still incompatible with MiNT, which makes it impossible to use MiNT-Net or Minix-FS with MagiC which seems a pity. Until now, there are only a few external filesystems available for MagiC, and none of them allow real alternative filesystems on hard disks, like Minix does for MiNT.

If you simply want to use long filenames with your Atari and have already used MagiC, the update is well worthwhile. If you're a happy MagiC v4 user happy with the 8+3 format filenames on your hard disk,

▼ The same directory, displayed with plain TOS 4.04



I'd think carefully before ordering the upgrade - you currently don't get much more than the VFAT filesystem, unless you're a programmer.

Single TOS users should take a look at MagiC v5. It's fast (faster than plain TOS when running a single program!), it's compatible, and it has pre-emptive multitasking, which makes work much easier and more comfortable. Although there are alternatives (N.AES, Geneva, or projects such as XaAES and oAESis) MagiC is the best choice for most people unless you need the extra features and MiNT tools, such as almost full UNIX compatibility, MiNT-Net, or the Minix filesystem.

Another pro for MagiC is that it's not only available for original Atari hardware. With MagiC Mac and MagiC PC, you get the ability to work with your favourite programs on Apple Macintosh's and Intel PC's running System 7 or Windows 95/NT. If everything you need under MagiC on your Atari, the chances are you can continue working with your software on a new platform, a remarkable achievement.

**MAGiC v5**

**Publisher**  
 Application Systems Heidelberg

**UK distribution**  
 System Solutions  
 Tel: 0181 693 3355

**£TBA**

**Requirements**  
 Atari ST/Ste/TT/Falcon030 with  
 512Kb memory (2Mb  
 recommended)



# THE ATARI MARKET IS DEAD !!

Well, for some maybe, but certainly not at Goodman International.

We were confident of your support with our Atari Shows 96, and with our established world-wide userbase, we will continue to bring you all the latest and best Public Domain, Shareware, bargain priced commercial software, licenseware and other products for some time to come.

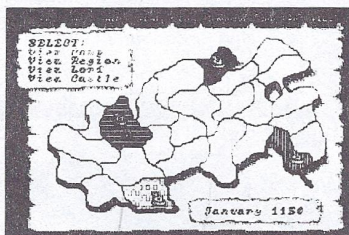
## Commercial Games From £1.95 Each

Backgammon from Atari Mindgames	1.95
Tempest from Atari Action Games	1.95
Badlands Pete from ARC Software	1.95
Defender II from ARC Software	1.95
Nine Lives from ARC Software	1.95
Chronicles of Omega from ARC Soft	1.95
Armada & Borodino from ARC Soft	2.95
Club Dominoes	1.95
Towers 1 for any ST (1 meg)	2.95
Towers II role play (Falcon Only)	9.95
EGO - The arcade puzzle classic Atari World 'BUY ME' March 96	9.95
<b>TEN STAR GAMES PACK</b> Superb value pack consisting of the following games: Asterix, Chess Player 2150, Trivial Pursuit, Drivin Force, Onslaught, Pipe Mania, Rick Dangerous, Rock 'n Roll, SKWeek, Live and Let Die.	14.95

## Productivity Software From £1.95

FirST Basic	1.95
Hyperpaint 2	1.95
The Monulator	3.95
Intro to Personal Finance & Daatafax	9.95
<b>Discovery Xtra Pack</b> 1st Word, Ani ST, 1st Basic, ST Tour, Final Flight, 9 Lives, Sim City, Robot Monsters, Neochrome.	9.95
IMPrint	14.95
<b>Video Supreme 2 Plus</b> (Version 2 to 2 plus upgrade £5.00)	24.95
<b>MasterPlan Spreadsheet</b> Reads and Writes WKS data files, 8192x256 grid, four different graph titles etc.	14.95
<b>TechnoBox Drafter - (High Res Only)</b> Includes perspective module, dimensioning, symbol processing, 9999 layers etc.	24.95
<b>Pro 24 V3</b> The professional MIDI package now available at a home user price. Score, Drum, Grid edit etc.	14.95

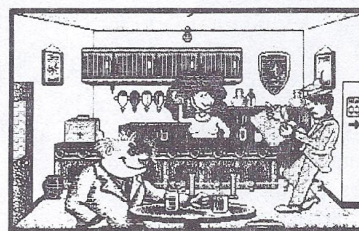
## Thousands of PD & Shareware Programs - Only £1.50 per disk



Lords of Chivalry

### AVAILABLE SOON

A new loose leaf 80 plus pages A4 guide to all the very best current Public Domain and Shareware programs for the ST and Falcon. with regular updates and articles to follow, this will gradually expand into an essential reference for all Atari ST and Falcon owners. (Expected end Oct - Initial Price £2.95, subscription for updates available) Limited stock of existing 250 page A5 Shareware Guide still available



Mobsters City



Tel: 01782 335650

Fax: 01782 316132

Visa, Mastercard & Switch Accepted  
or send your order to

Goodman's

16 Conrad Close, Meir Hay Estate,  
Longton, Stoke-on-Trent. ST3 1SW



UK P&P - Order value below £19 add £1.25, above £19 add £2.50



# ED's JUKEBOX SERIES

If you fancy writing some music but haven't taken the plunge maybe this primer by Ed McGlone will make the difference...

Back in 1988 I was working full time as a musician at around the time recording studios started to use computers for recording and composition. I decided to buy my own and opted for the Atari ST instead of an Apple Macintosh because it was much cheaper, had a similar graphical interface and included the all important MIDI sockets as standard. This combination of features combined with a rapidly expanding software base swept the ST to success around the world and hit records have been made using STs ever since!

Many of the sounds you hear in modern recordings are not real instruments at all but electronic imitations created using synthesizers. The Beatles used this to great effect on the Sergeant Pepper album. The instruments were recorded on multi-track tape recorders which could have 4, 8, 16 or even 24 separate tracks compared to the two tracks available today on most domestic stereo cassette tape decks.

Usually each part, the drums, bass, guitars, piano, voices etc. are recorded separately onto individual tracks. This makes for easy editing and enables one person to play all of the instruments, as pioneered by Mike Oldfield on the Tubular Bells album.

Because many song parts were already created electronically it was a logical step to use a computer to control synthesizers directly. Parts can be played into a computer which records exactly which notes are played, when they were played and how hard the keys are hit. The computer feeds this information via the synthesizers, so the musician can hear it, and the information is also available in computer memory so it

can be saved to disk. This means performances can be recreated by the computer on demand and crucially, using the correct software, can be edited. Apart from correcting mistakes edit features can play the music in different keys and modify the original performance as desired.

The MIDI standard enables the information for 16 different

instruments to be sent down one cable simultaneously and this had a dramatic impact on the way music is recorded and written.

Using an ST, song arrangements can be edited and perfected by the

producer long after the musicians have gone home. On the other hand musicians could record, program and edit tracks at home before buying expensive studio time - everyone benefits.

Today most recording studios still have an ST available for use and many musicians still prefer them because they're reliable and simple to

use. Cubase and Notator, the two most popular pro music packages, were originally developed on the ST and despite switching development to other platforms the sheer number of Atari copies sold over the last decade means probably over half the computers used for music are Ataris.

## Getting started

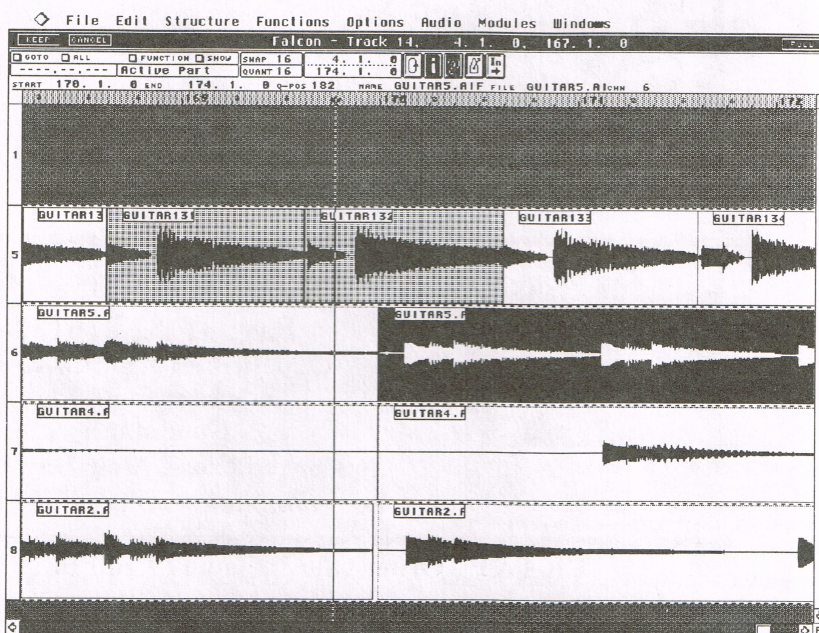
You'll need an Atari machine with 1Mb memory or more. 512K machines can run some of the smaller music packages but since memory is cheap and easy to fit there's no point struggling with less.

A MIDI keyboard. Most keyboards include a MIDI interface. If the manual is long gone look for a pair of five pin DIN sockets and they'll almost certainly be MIDI in and out sockets.

Two MIDI leads. One runs from the keyboard to the computer and the other completes the loop from the computer back to the keyboard.

Software. There's plenty to choose from on old magazine cover disk giveaways and PD/Shareware libraries to get you started. Hold off buying a commercial package until you know your requirements.

▼ Editing audio parts in CAF's Audio Editor





## The Digital age

The introduction of the Compact Disc in the mid eighties changed the way we create and listen to music forever. For most listeners the CD format offers reasonably priced access to snap, crackle and pop free audio.

## How do they do that?

Sound is carried through the air as vibrations and what we "hear" is the air pushing against our eardrums. Virtually all methods of recording and replaying sound, from a wax cylinder phonograph to the conventional tape recorder, maintain a direct relationship between the original sound (vibrations) and the recorded sound. A simplistic model of the recording process goes something like this:

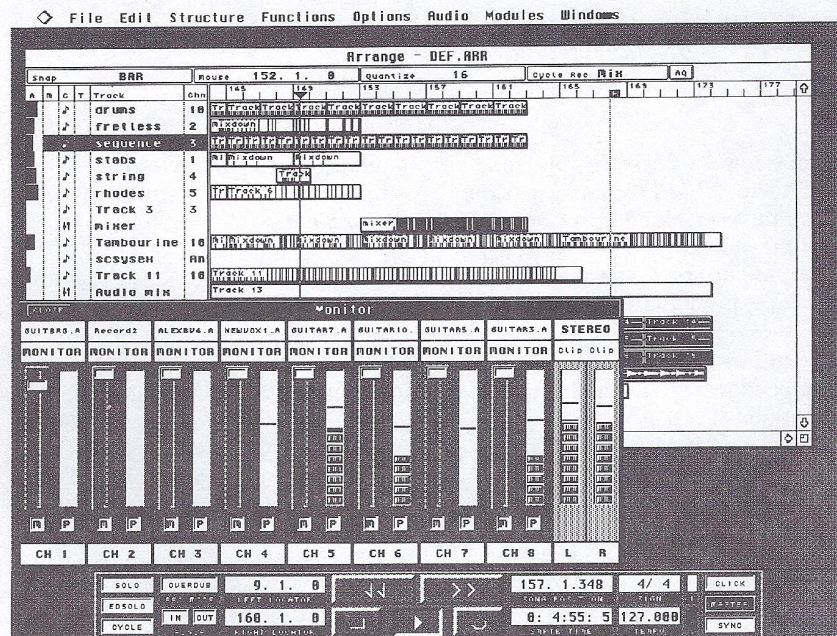
Vibrations in the air are picked up by a microphone and converted into electrical vibrations. These are amplified until they are large enough to cut grooved patterns into the master disk which is duplicated using vinyl. During playback vibrations are converted back into electrical vibrations as the needle is dragged along the grooves and amplified until they are large enough to drive a loudspeaker. The loudspeaker pushes and pulls the air causing sound waves and we're back where we started.

This process is susceptible to degradation, scratches on a record and the background noise on tape are two obvious examples. It's bad enough for the end listener but

during creation with maybe 48 separate tracks all playing back simultaneously the reduction of tape hiss has become an expensive obsession. Digital audio, as the name

loudspeaker, the original sound is reproduced.

The sound quality is dependent on the range of numbers available and the number of samples taken. Sixteen



▲ CAF in full flight, the topped monitor window shows output level meters for each of the eight audio tracks used in the song

suggests, changed this process to handle sound as numbers, so our model changes:

Vibrations in the air are picked up by a microphone and "sampled" many times a second. Each sample is assigned a number indicating the loudness. By converting the numbers back into vibrations, through a

numbers equates to 16 bit resolution and is the accepted standard for CD reproduction. In much the same way our eyes are fooled into seeing continuous motion at 24 frames per second our ears hear continuous sound at 44,000 samples per second (44.1kHz) and this is the standard set for CD quality reproduction.

## QUESTIONS AND ANSWERS

### What computer do I need for MIDI?

Any ST will do. Most modern music software requires at least 1Mb of memory so if you still have a 512K machine, now is a good time to buy a memory upgrade.

Most commercial software such as Cubase and Logic are at their best in ST high resolution (640x400) so if at all possible get hold of a high resolution mono monitor. For casual or emergency use a TV running in medium resolution or ST high, via a mono emulator, will get the job done.

### What does my keyboard need to have?

As a bare minimum, MIDI in and MIDI out sockets. The MIDI out on the keyboard is connected to the MIDI in socket on the side of the ST and this feeds MIDI signals into the computer. The MIDI in socket on the keyboard is connected to the MIDI out on the computer and this feeds MIDI signals from the computer to the keyboard.

### Where does the sound come from?

From your keyboard. Think of the ST as a tape recorder which instead of recording sounds, records exactly how you play the keyboard - in other words, it records your performance. On playback, the computer is telling the keyboard to play notes exactly as if you are playing them.

### Can I record more than one part?

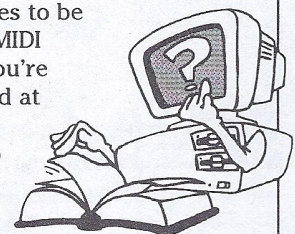
Almost certainly. A better question would be "Can I play back more than one part?" This is entirely dependent on the capabilities of your keyboard. Look for something which says multiplay, multitimbral or similar phrase. You should be able to choose a MIDI channel or part number and define which sound should be used by that channel. For example piano might be channel 1, bass channel 2, and so on.

Not all keyboards have a multiplay section so if yours hasn't, you'll have

to settle for a single sound at a time.

### What do I need to use digital audio?

You'll need a Falcon030. The ST can be upgraded with external audio hardware but this tends to be more expensive than a Falcon030 which can do the job straight out of the box (although for quality work ensure the machine has the latest sound modifications fitted). There's plenty of software to get you started ranging from Atari's Winrec up to commercial software costing hundreds of pounds. There are even a couple of sequencers which allow audio samples to be mixed with MIDI music but you're going to need at least a 4Mb Falcon030 to achieve anything worthwhile.





## FORMATS

Some of the different digital audio formats available for domestic use:

**DAT**

Digital Audio Tape, the professional standard for stereo master recordings, from £500 upwards.

**DCC**

Digital Compact Cassette - Phillips "new" format. Uses file compression and so the reproduction is not quite up to the standard of DAT - but most people will not be able to tell the difference, from about £160.

**CD**

Typically read only, so you can't record, but a new generation of affordable rewritable CDs are just hitting the market.

**Minidisk**

New Sony format which looks like a small CD. Minidisks can record up to 70 minutes or so and uses file compression, like DCC, (above) from around £400.

**Nicam Stereo**

Nicam video recorders record digital

stereo audio tracks. The sound is 16 bit but I'm not sure what the sampling rate is! Early machines were around 24kHz but even so provided excellent sound quality, from about £300.

Incidentally, the first widely available digital audio recording system was an add-on box for the Sony F1 video recorder. This was an exorbitantly priced and highly desirable bit of early eighties technology destined to become a museum piece, you mark my words!

With digital audio the sound is reproduced from a detailed set of instructions, not the original recording, and it's this which makes digital audio so interesting. When copying digital audio, you are merely copying a sequence of numbers so the copy is identical to the original with no degradation whatsoever.

Sounds can be manipulated mathematically. For example, to add two sounds together, the appropriate calculation is performed and the resulting sound is created without degradation.

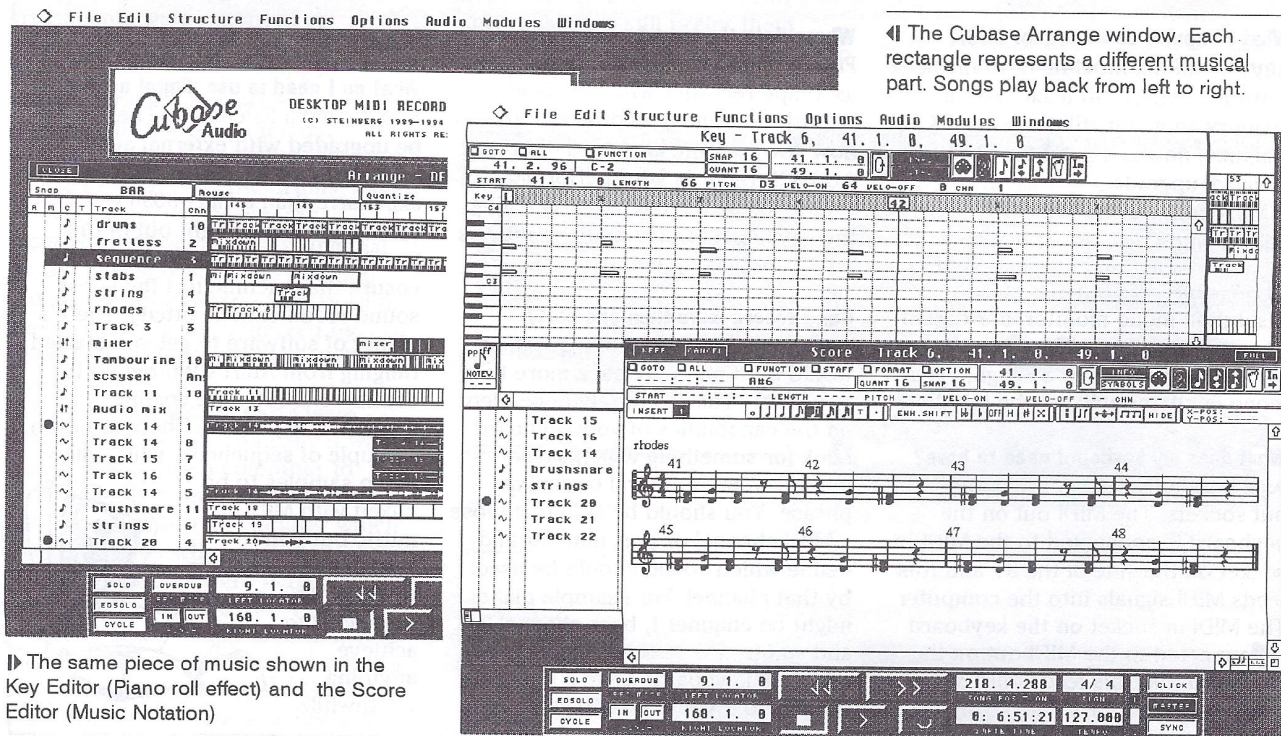
Most early digital audio was recorded onto tape. Because tape is a "linear" format you have to wind through the full length of the tape to get from the start to the end of the tape. Using a hard disk to store the numbers makes it possible to jump to any point in the recording at will, this is called "non-linear" playback.

Cubase Audio, one of the leading music applications, combines the features of a MIDI sequencer and a digital, non-linear, audio recorder. Recordings can be copied, mixed together, processed, cut and pasted without degradation. It's even possible to perform most of these operations in real time while the recording is being played back without affecting the original recording! This is called "non destructive editing" where, if you don't like the changes you've made, you can simply throw them away and the original files remain intact. The resulting audio files can be edited and edited interactively on screen and the computer becomes the heart of a sophisticated recording studio.

This flexibility comes at a price, Digital audio eats storage space for breakfast! CD quality audio (16 bit at 44.1kHz) requires around 5Mb of

storage for each minute of sound. A Falcon030 can process up to 8 tracks simultaneously so a five minute song, using all 8 tracks continuously, requires around 240Mb of storage. Typically musical parts do not last the entire duration of song and repeated sections only need to be stored once so the overall storage requirement can be reduced considerably. The largest five minute song on my hard disk occupies 153Mb in 18 separate audio files.

Only machines like the Falcon030, AV PowerMacs, Silicon Graphics, Next and Sun have the necessary hardware built into the box to cope with this level of audio manipulation but external units are available to extend this capability to STs. Stand alone hard disk recorders are also starting to appear and although tape is not yet redundant the obituaries are being prepared!



► The same piece of music shown in the Key Editor (Piano roll effect) and the Score Editor (Music Notation)

◄ The Cubase Arrange window. Each rectangle represents a different musical part. Songs play back from left to right.



# DEAD OR ALIVE

DEADLANDS

Megalomania forms a very important part of most gaming genres. From SubStation through Sim City to games such as Populous players just love being in a life and death control situation. Lemmings and, more recently, Cannon Fodder, have refined the formula, adding more direct control and a touch of humour to the proceedings.

Deadland has clearly taken a leaf (no, make that a whole chapter) from Cannon Fodder's book in blending arcade action with an element of strategy. Your mission is set on a deep space planet known as Ursula Minor, and the object is to evacuate as many of your small crew as possible. This involves building a new ship and you've only got thirty-one days to get the job done.

Anybody who has played Cannon Fodder will be immediately at home with Deadland's presentation. The action takes place through a large view screen, inhabited by a band of grizzled, gun-toting astros (true, they may be small, but you can tell they are grizzled by the way they walk). Enemy soldiers maraud the planet surface, guarding any useful objects, and mud-holes bubble here and there, threatening to swallow innocent crew members.

Movement is handled via the mouse - just press the mouse button

Nial Grimes dons the tin hat and enters a world where Cannon Fodder aficionados fear to tread. "Oi put that light out!"...

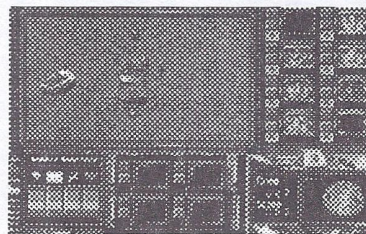
and the whole team obediently march to the pointer. You can explore the planet beyond the boundaries of the screen by clicking on the edges of the window and you needn't worry too much about the guys in the meantime - they automatically deal with any enemy soldiers that stray too close.

Having familiarised yourself with these basics (and probably been killed a few times in the process) you can actually begin to play. The key here lies in building, and the crew are

remarkably adept at throwing together pieces of equipment - they can whip you up anything from a concrete slab to a hovercraft in a

matter of seconds. The number of objects available keeps the gameplay fresh - vehicles are useful for getting around quickly, whereas gun towers are handy for protecting important installations. Your resourceful team can even put together expendable droids that can be sent on missions.

As you've probably gathered, Deadland has no rigid mission structure - you can almost make it up as you go along. "Almost" in that although the overall aim is to set up a shop to construct a new ship, you still need to approach the problem

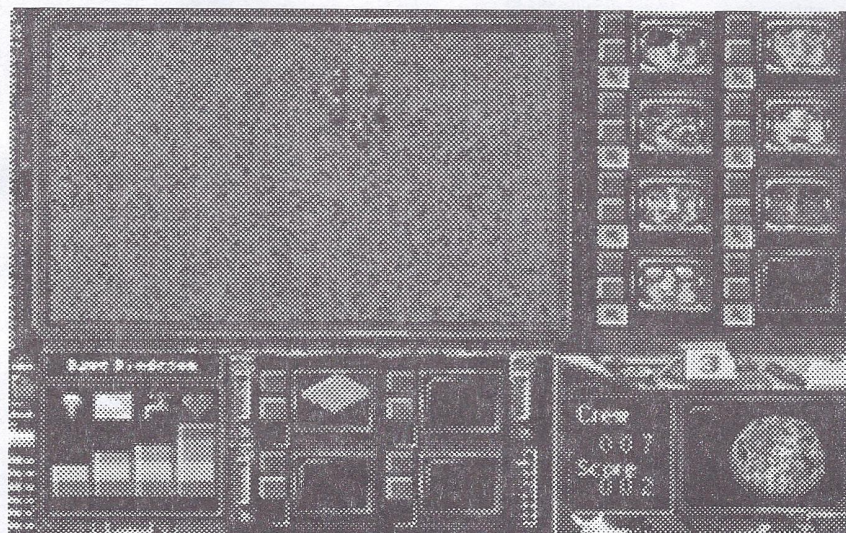


▲ There's little point in getting anything built when enemy installations are nearby

logically. For instance, there's no point in setting up installations if they are going to be instantly destroyed by enemy missile launchers. A far better idea is to send a team out to deal with any local resistance before you start.

To be honest, much of this information has been gathered purely through trial and error - the manual does an almost passable job of describing which button does what, and the role of each buildable object, but it doesn't tell you what each object looks like on screen and would also benefit hugely from some sort of walk-through.

Despite this problem, Deadland is a solid shareware game. You might miss the overt humour proffered by Lemmings and Cannon Fodder, but the free-reign "missions" and new challenges go a long way towards making up for deficiencies in other areas; the price closes the deal. In fact, once you've got a good grip on the controls it's a lot of fun, and that's what this game thangs is supposed to be about, innit?



▲ The interface is fairly easy to use, and the icons are quite well drawn, but the manual doesn't go into enough detail on playing the game

## DEADLANDS



### Publisher

Loftsoft  
51 Vicarage Road, Sutton,  
Surrey. SM1 1QN  
**£5.00 Registration**



### Requirements

Any ST (Falcon compatible)



### Pros

Cannon Fodder-style gameplay, free-reign missions and price



### Cons

Naff manual and humourless graphics

70%

ISSUE 1 • ATARI COMPUTING

29



# THE JOY OF STICKS

Are you about to buy a new joystick for your STe? Do you already own a joystick for your Falcon? If so, Xav might have just the device you need.

## JOYPAD MODIFICATION

With the release of the STe in 1998, Atari seemed to acknowledge many of the shortcomings of their earlier computers. Everyone was impressed by the DMA sound system and, to a lesser extent, the increased range of colours. What many people ignored, however, is what I consider to be one of the STe's biggest strengths - the enhanced joystick ports.

The Mega STe and TT lacked these ports, so they were considered by many to be an interesting curiosity, but with no real potential. With the Falcon the ports were resurrected, though it took the release of the Jaguar for them to be really appreciated. The Jaguar has a pair for its 21 button "joypads" to plug into, and these same joypads can also be used on the STe and Falcon. Admittedly games have to be specially written to support them, but the number that contain the requisite code is continually increasing.

Despite this fact, the number of games that will use a joystick is still minuscule in comparison to those that use a "normal" joystick. At £20 a throw, joypads aren't exactly cheap either, so many STe and Falcon owners haven't bothered to buy one. This, of course, leads to a chicken and egg situation - programmers don't offer joystick support because not enough people own joypads, but people don't buy joypads because not enough games support them. People might be more willing to buy

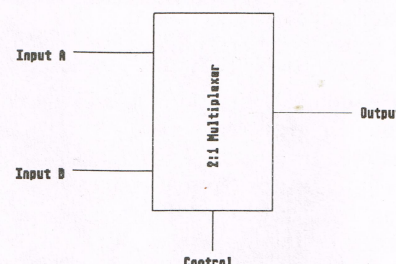
## MULTIPLEXING

A multiplexer is a system with several "signal" inputs, one or more "control" inputs, and a single output. It acts as little more than a glorified switch whereby the control lines select one of the signal inputs to be routed to the output. For example, in the multiplexer shown, the output will be a copy of input A whenever the control input is low, and a copy of B whenever the control input is high.

In the joystick this system is expanded so that a number of outputs are switched simultaneously, resulting in a system with four control lines and six output lines. The inputs themselves are provided by the switches. In order to read from the joystick, one of the control lines must be taken low which will activate six of the buttons. This gives a theoretical maximum of 24 buttons (six output lines multiplied by four control lines), although only 21 buttons are used on the joystick.

The selection of the control line - and hence the five or six switches that may be read - is determined by

writing a value to an address in memory, which corresponds to the eight control lines on the extended ports (four on each). This sets the multiplexer in the joystick accordingly, and the state of the switches may then be read. It is also possible to use these control lines as general purpose output pins, however, and the input lines can be similarly utilised. This is why a number of enhancements for the Falcon - particularly screen expanders such as Screenblaster or BlowUp - have a connection that plugs into one of the extended joystick ports.



▲ A simple multiplexer

joypads if they could be used as normal joysticks on older games, but they can't, can they?

Obviously the answer to this question is "yes they can" - this would be a very boring article otherwise. In order to find out how

and why, it's necessary to look a little more closely at how the joystick actually works, though if you're not interested in the details you can quite safely skip the next section.

## Inside the joystick

The joystick, in common with the joysticks that are used on TOS based machines, is a digital device. It contains little more than a number of switches, which are closed whenever you move the direction pad, or when you press a fire button. The state of these switches is represented by high and low voltages, often referred to as ones and zeros, which the computer can read directly. Conventionally a high, or 1, is also called "TRUE", whereas a low, or 0, is called "FALSE".

This convention is referred to as "positive logic", but there is a converse to this, known as "negative logic". In this case a high, or 1, is FALSE, and a low, or 0, is TRUE.

## NO DOUBLE SIDED STICKY TAPE?

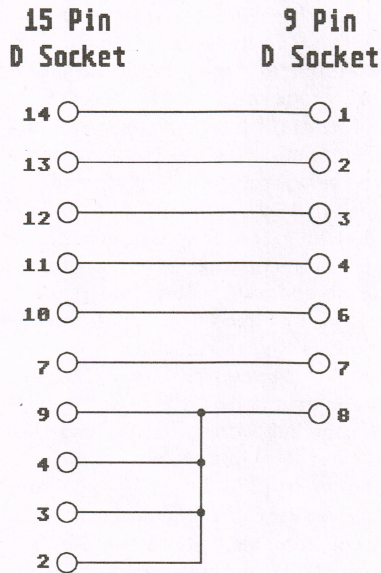
The parts required for this device are quite straightforward, and relatively cheap. The stock numbers and prices quoted here are correct at the time of writing, and are taken from the 1996 Maplin Electronics catalogue, although the 1997 catalogue should have been released by the time you read this. These catalogues are available from many large newsagents, and contain full details on how to order components. Most major cities also have Maplin shops, although any good electronic component supplier should be able to provide similar parts.

Order Code	Description	Price
RK61R	9 pin D socket	£0.72
JW78K	15 pin, high density D socket	£1.75
JM07H	Box	£0.94
BL00A	Wire (10m length, Black)	£0.52
FR21X	Solder (22swg, 10m length)	£0.99



Joysticks and joypads both use negative logic, so with no buttons pressed, all the signals are FALSE (high), whereas with a button activated, the relevant signal will become TRUE (low).

On a joystick, each button has a single wire carrying the signal back to the computer. Since there are four direction switches, one fire switch, and two connections for the voltage



▲ Figure 2: The "circuit diagram" for the adaptor

supply, a connector with seven pins was needed. The nearest "standard" connector has nine pins, and it was this that Atari used for their joysticks. The joypad, on the other hand, has 21 switches, which would normally require at least a 23 way connector. This is clearly impractical, so Atari used a high density version of the 9 pin connector, which manages to fit 15 pins into the same space. In fact, only 12 of these 15 pins are used on the joypad, and the 21 buttons are mapped to 10 of these (the other two being used for the voltage supply) using a system called "multiplexing" (see boxout).

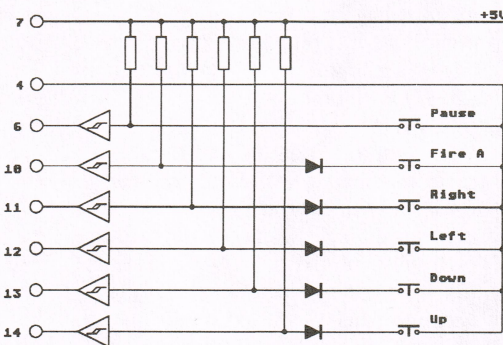
The multiplexer is essentially just an automated switch itself, and is used in the joypad to select which group of buttons are to be read by the computer. In order to read the direction pad, for example, the multiplexer has to be forced into "activating" the right group of switches by pulling pin 4 on the joypad low. This activates the pause button, fire button A, and the right, left, down and up buttons on output pins 6, 10, 11, 12, 13 and 14 respectively. The internal working of

this part of the circuit is shown in figure 1.

A brief explanation of this circuit may be in order: when a switch is left open, the relevant pin on the connector is pulled high (FALSE) by a resistor (the rectangular boxes), through a Schmitt triggered buffer (the triangles with the symbols in). These serve the dual purpose of protecting the computer and "cleaning up" the signals which pass through them. When a switch is closed, the output pin is pulled to the same level as pin four, which is the multiplexer control pin for this group of switches. If pin four is pulled low, then the outputs also go low (TRUE) whenever a switch is pressed - just as they do in a normal joystick. The other triangles are diodes, and are used to isolate the switches from the remainder of the circuit, which is not shown on this diagram.

Clearly, therefore, if pin four is permanently tied low, we can get the direction buttons and fire button A to act like a normal joystick. Anyone who owns a Jaguar, however, will know that most games use B as the main fire button, so it would be nicer if we could do the same. The catch here is that switch B uses a different control line, so activating B also activates several other buttons. In practice this isn't really a problem, since all that happens is that some of the numeric keypad buttons mirror the action of the direction pad.

What we end up with, therefore, is an adaptor which simply ties three of the control lines low, allowing all of the fire buttons to be used, and which connects the output pins on



▲ Figure 1: The direction buttons of a joypad

## THE LEGAL BIT

As usual, neither Xav, nor Atari Computing can be held responsible for any loss or damage that may occur as the result of the information in this article. It is possible that failure to construct this project correctly may result in damage to your computer, so if you are in any doubt as to your abilities in this respect, please do not attempt to make this device.

the joypad connector to their counterparts on a standard 9 pin socket. The circuit diagram, if it can be called that, is shown in figure 2.

### Construction

Although the theory behind this device may seem quite complex, the construction is simplicity itself. The adaptor actually consists of nothing more than a pair of sockets and a handful of wires, although it can easily be fitted into a small box to improve the appearance. The biggest problem comes from Atari's ridiculous positioning of the joystick ports on most STs - in order to use the adaptor on these systems you will either need to reposition the connectors or use one of the short extension leads that are readily available.

The only tools you'll need are a soldering iron, wire cutters and wire strippers, and you just have to connect the pins on each connector using small lengths of wire. Assuming you wish to put the adaptor in the suggested box, simply use lengths of wire a little longer than the box itself. Once the sockets are soldered in place and the adaptor tested, simply twist one end until the wires are pulled to the correct length, then fit everything together.

The soldering itself should present few problems, though experience has shown that it's best to solder the middle row of pins on the high density connector before starting on the outer rows. The only tricky parts are the multiple connections to pins 2, 3, 4 and 9 on the 15 way connector, but provided you don't try to swamp the pins with solder you should be able to "daisy chain" these together.

To test the completed adaptor, simply plug your joypad into the 15 way connector, plug the other end into a joystick port, then load a game which uses the joystick. Ideally you should find that the adaptor works first time - if not then switch your machine off immediately and check the connections. The most common problem is caused by excessive solder bridging the gap between adjacent pins, so look out for that in particular.



A GEM program (a file with the file name extender \*.PRG or \*.APP) is something you are all familiar with. It consists of menus, windows and dialogs through which you and the program communicates. The program uses this input to process various instructions which eventually produces some kind of output which may be characters or images on the screen (soft copy), or control signals to disk drives or the printer to produce a letter (hard copy) or maybe noises through the speakers.

### Low-level languages

These instructions are supplied by the programmer and processed by the Central Processing Unit (CPU). These instructions are sequences of bits (such as 10010011) called machine code and control what the processor does, what you see on your screen and how a program behaves. Each type of processor has its own version of machine code.

These patterns of bits are very hard for programmers to use directly - they are just series of 1s and 0s. So over the years programmers have developed forms of codes that represent these bit pattern instructions that the computer understands. These representations are called programming languages and use characters, words and numbers more familiar to us. There are many languages and many more variations or dialects of them. Some are not far removed from the patterns of bits themselves using very short character sequences and numbers. These are termed low-level languages and assembly language is the most common example. On the whole, one line of assembly language carries out

# RSC FILES

Mark Baines takes a beginner's look at files you use every day...

one machine code instruction.

Here is some assembly code for the 68000 processor chip, the kind that controls the ST.

```
Clr.l -(sp)      Move #32,-(sp)
Move #32,-(sp)   Trap #1
Trap #1          Addq.l #6,sp
Addq.l #6,sp      Clr -(sp)
Move.l d0,-(sp)  Trap #1
Eori.b #1,$484
```

The "trap #1" line, for instance, is a far easier way of remembering this instruction than its machine code bit pattern of 0100111001000001 which the processor itself requires. Getting any one of those 1s or 0s wrong would mean a totally different instruction!

### High-level languages

Even so, many programmers, including myself, don't find assembler language easy to understand and remember and need something a little more like English. These languages add extra layers between what you write and the ultimate machine code instructions it generates so that a word or "phrase" usually brings about many machine code instructions. Such languages are termed high-level languages and include C and BASIC.

Here is an extract from C which more or less does the same as the assembly code above:

```
int click;
unsigned char oldconterm;
volatile unsigned char *conterm = 0x484;
void *save_ssp; save_ssp = Super(NULL);
oldconterm = (*conterm) &~ 0x05;
if (click) Oldconterm |= 0x01;
*conterm = oldconterm;
Super(save_ssp);
```

Immediately you will see that it contains some familiar expressions, an "if" statement, brackets and equals signs, for instance.

These program languages are written in a text editor and the resulting files are called source code. On their own they are useless. What is required is a means of converting or translating these text files into the machine code instructions that the computer needs so that it can execute the program. There are two types of these translators - interpreters and compilers.

Interpreters are programs that enable you to type in programming language instructions and have the computer carry them out one line at a time. No program file is made - your program only exists in the computer's memory at run time and then disappears. The source code only works when run from within the interpreter program.

Compilers are more common and take the source code text file and translate it into a file called object code which are the machine code instructions of your source code. This object code is then joined together or linked with other object code files that come with the compiler that contain the machine code instructions for many of the language key words that you may have used in your source code, such as Super(NULL); above. The program that does this is called a Linker and the resulting single file is the program file which can be run from the desktop by double-clicking on it.

### Resource files

A resource file is a separate file with the \*.RSC filename extender that contains the objects that form the graphic user interface of GEM programs. These objects consist of the menus, dialog and alert boxes, icons, images and text strings that are drawn and manipulated by the resource file's program. Each GEM program has its own \*.RSC file although some programs have the resource data embedded within it rather than a separate disk file. CPXs and most accessories are like this.

To look at the contents of these files you need a Resource Construction Set program such as WERCS, Interface, NRCS or ORCS - the latter being shareware and available from all PD/Shareware libraries. These are graphical programs that enable you to draw and paste the required items on the screen to create the forms and other objects of the GEM program interface (apart from the windows which are supplied by the AES part of TOS itself).

Before you start to investigate resource files for yourself you must work from copies of the files you intend to explore. It is very easy to load a resource file into, say ORCS, and alter it in some way and

ATTRIBUTES	
Can Change	Can't Change
Pattern	Selected flag
Border colour	Exit flag
Border size	Radio flag
Border position	Touchexit flag
Fill pattern	Editable flag
Fill colour	Disable flag
Character colour	Crossed flag
Most text <sup>1</sup>	Checked flag
Text justification	Object index number
Text size	Object positions
Images	Object type
Icons	(BOX to IBOX etc)
Image size <sup>2</sup>	
Icon size <sup>2</sup>	
Shadow flag	
Outline flag	
Hidden flag <sup>2</sup>	
Default flag <sup>2</sup>	
Key	
	<sup>1</sup> Careful with length
	<sup>2</sup> Not always safe



## DEUTSCH

### Some common German computer-related words

Abbruch	cancel or abort
Alles	all/everything
Anmelden	log on
Anzahl	number
Ausführen	export
Auswahl	selection/choice
Bearbeiten	work/process
Bild	picture
Bildschirm	screen
Datei	file
Dateiname	filename
Daten	data
Datum	date
Drucken	print
Drucker	printer
Fehler	error
Fehlerbeseitigung	debugging
Lesen	read
Löschen	delete
nicht gefunden	not found
Pfad	path
Platz	drive
Schreiben	write
Sicherstellen	save
Speicher	memory
Speichern	store/save
Zeichen	character
Zeit	time

accidentally save it in a state that the program file will not recognise. One of the reasons for this is that all the objects in a resource file are strictly ordered and numbered. The program file contains the number of these objects hard coded into it. So, one thing you must never do is to alter this order by sorting, deleting or adding objects. By the way, be careful with ORCS as it does have the nasty habit of sometimes altering the order of objects without your knowledge particularly if you use the Next buttons in the "Edit" dialog. You have been warned!

### Editing resource files

There are several reasons for editing resource files, not least translating German text into English. Another is that the patterns, size of borders and other attributes may not be to your liking. For instance, one thing I have done is to redraw the icons at the bottom of the NeoDesk windows (quite tricky), changed border sizes, changed some text from American to English (Ok to OK), made several dialog buttons the default ones, altered patterns, hidden other objects and generally tidied it up (quite easy). It is best that you have some idea of the different terms used for the various objects and states they can exist in (such as "Default" or

"Radio") to help you understand what you can and can't do and programmers' books and program documentation may help here. However, if in doubt - leave it alone! More than anything, make sure that your efforts do not in any way add to or subtract from the resource file (except text lengths which can be changed). Items can be edited not added or deleted. If you must remove unwanted objects you can use the "Hidden" attribute so that they become invisible but you mustn't delete them from the file altogether.

Another thing I often do is to go through the menus of programs and change the symbol for the [Alternate] key short-cut symbol to my own liking. Some programmers use the Atari character set character 5, others character 7 or the letter "a" or "[Alt]". It is an easy matter to load the resource file into WERCS and edit them.

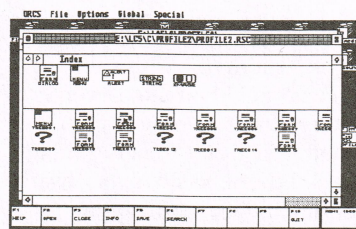
Again, I must stress that the word I keep using is "edit" - not "create". If you edit an object and effectively change its meaning or purpose then the program won't recognise it and act on it. There is no point in changing a menu item short-cut key from ^W to ^U and expect the program to use ^U from there on (although some programmers have catered for this, but this is rare). The key command ^W is coded into the machine code by the programmer, what appears in the resource file is not program code but only a visible reminder to you of what the programmer intended at compile time. You cannot change his intention.

The Can's and Can't's box offers a general guide, some of the "Can" list may cause problems, especially the Hidden and Default flags. It's no co-incidence most of the "Cans" are cosmetic changes and most of the "Can'ts" are functional. You certainly won't be able to change the way a program operates, that was determined long ago by the programmer.

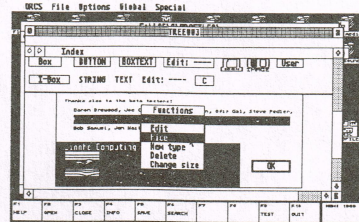
Finally, any changes you make to resource files should be for personal use only. If you intend to pass copies of an edited resource file to anyone you must obtain permission from the programmer. True public domain programs can be altered and redistributed in any state you wish - that's the meaning of public domain - but they are few and far between. Most non-commercial software is released as shareware or freeware and the programmer retains copyright - they're not public domain.

## USING ORCS

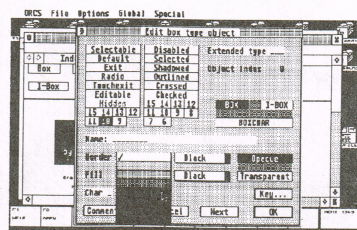
Load ORCS, click on a drive icon and folder until you reach the \*RSC file icon (look for a dog and the letters RSC).



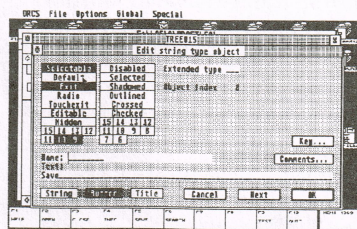
Drag the icon to the desktop and a window appears with five types of object at the top. These are for creating resource files and must not be used here. The forms that make up the resource file are shown before the horizontal line. Double-click on one. As you move the mouse a cursor shows the bottom right corner of the object rectangle.



Single-click on an object to highlight it and a drop-down menu appears. You can Hide the object here, for instance.



Click on 'Edit' to change the object's definition and attributes. Here, a dialog's background pattern is being changed.



Other attributes can also be changed to suit. Here, a button in a dialog is being made the Default one so that it can be activated with the Return key as well as clicking on it.



# STAG NIGHT...

"I didn't know anyone else was still using an Atari, I thought I was the only one left." It was comments like this that spurred Al Goold into action...

I had no experience with user groups at all. I had once been in a multi-platform computer club, but it seemed to me that the only thing anyone did there was copy software. At that time I didn't realise the damage piracy caused to the Atari scene. I didn't stay there long and after that it was just me and some friends.

## Friends with Ataris

I was lucky because I had at least half a dozen friends who all used Atari computers. Occasionally we'd meet in each others houses, but we rarely all got together at the same time. I started to wonder if it would be worth trying to find somewhere we could all meet together and I wondered how many other Atari owning locals would turn up.

Because I was on-line with CiX and NeST I had access to many other Atari users throughout the UK and elsewhere so I knew there were plenty of other Scottish Atari enthusiasts out there.

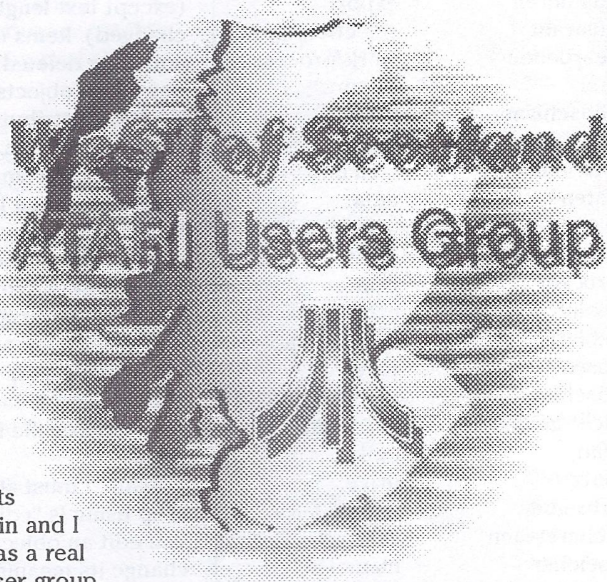
I began chatting to Harry Sideras, who had just taken a key role in the UK Association of Atari User Groups and he gave me lots of good advice. In particular Harry pointed me at a

and computer shops throughout the west of Scotland. I wrote a press release and sent it to the local free paper and emailed the editors of Atari World(RIP), ST Format(RIP) and ST Applications. All 3 publications were very supportive and published some information along with contact details. Following these efforts mail started to flood in and I realised that there was a real demand for a local user group.

## The first meeting

Along with Sandy Thomson we obtained the use of the upstairs lounge of a local pub. The publican agreed to let us use it free of charge - it was closed to the public during the week, and the bar was closed, so it posed no temptation for younger members.

On Tuesday 20th February 1996 we held our first meeting and The WeST



between, Atari Computer owners in the West of Scotland. We strive to provide up to date news and information about products, vendors and servicing. We also seek out solitary Atari computer owners and encourage them to join the group.

## A typical meeting

Meetings are very informal, we usually follow this format:

- **Formal meeting:** Discussion of any relevant business and to allow suggestions to be made - this only takes up a few minutes.
- **Demo:** A short demo by a member or a guest of either some piece of hardware or software. Many members have only ever seen some Atari products in the magazines and welcome the chance to see them in action. So far we have covered RAM upgrades, Cubase, Pagemaster, using a flat-bed scanner and a few others.

## The UK Association of Atari User Groups

series of articles on User Groups by Ron Whittam, which were originally published in Atari Explorer On-line. These articles are included in the user group archive available from Harry and I recommend anyone considering forming a user group reads them. Ron's articles and Harry's enthusiasm for the user group concept finally persuaded me to formalise the group we already had.

## Spreading the word

If the group was going to succeed I had to let people know about it. First of all I created a poster using Pagemaster. I sent copies to libraries

of Scotland Atari User Group (WSAUG) was born. I'd hoped we would get at least 15 people but there were 27 people in total ranging from 12 years old to 60 plus.

Since then the WSAUG has held a meeting every fourth Tuesday with an average attendance of around 25. I publish a four-weekly printed newsletter using Papyrus Gold and get it professionally photocopied by the Erskine Hospital Printing Department (Telephone +(0)141 812 1100) at a very competitive price.

## Aims

Our aims are to provide support for, and to foster communication

## JOINING STAG

If you're interested in joining STAG please write to the membership secretary - include a large SAE if you'd like a free evaluation copy of the newsletter:

Sandy Thomson  
STAG  
41 Mayfield Crescent  
Howwood PA9 1BL  
Email: sandy\_t@cix.compulink.co.uk



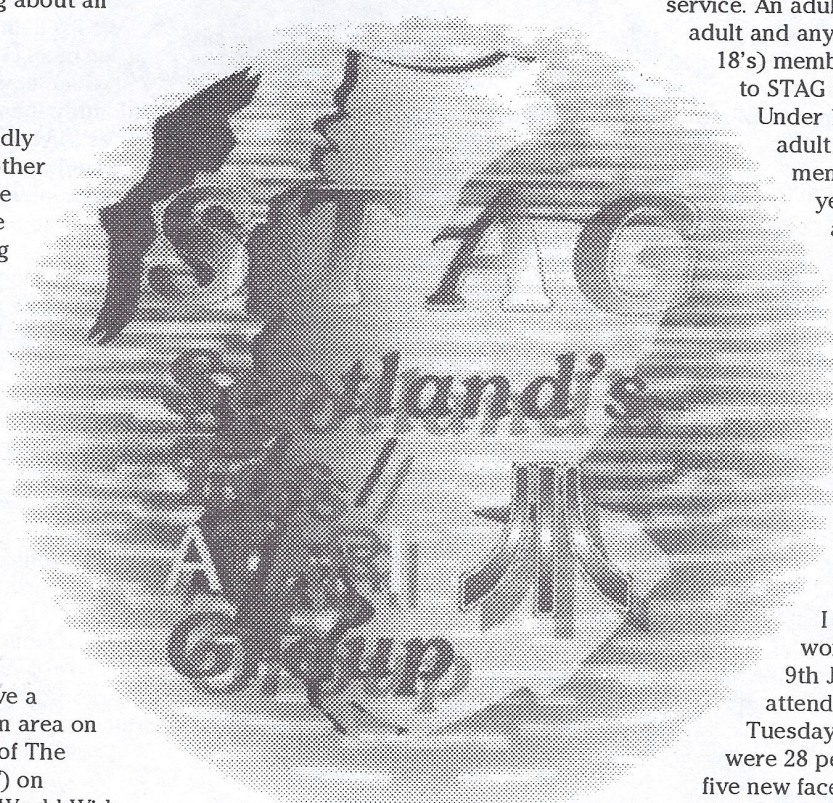
## NO LOCAL USER GROUP?

"Sounds great but I don't have a user group near me"

Then start one! If you'd like to ask me any further questions about setting up a user group feel free to get in touch (please enclose a SAE):  
Alasdair Goold STAG (Scotland's TOS/ATARI Group) "Rois Bheinn", Overton Crescent, Johnstone PA5 8JB  
Email: agoold@cix.compulink.co.uk

- **Random Access session:** A general free for all to allow the members to chat amongst themselves and try out the software on the various machines present - this is usually the most popular bit. It's heartening to see members of all ages breaking off into small groups and talking about all things Atari.

It's an umbrella organisation which collates all memberships under a single heading and subscription. STAG is affiliated to the UKAAUG and it's members are initially formed from the component parts of The WeST of Scotland Atari User Group, the



### We are not alone

The WSAUG now has established very friendly relations with many other groups throughout the UK and the rest of the world. We have strong representation within the CiX atari.user.gps on-line conference, where other local and national user groups and Atari related companies also have a presence. This allows us to bring news and information to our off-line members via the newsletter very quickly.

In addition to the newsletter we also have a local on-line discussion area on 42BBS, the home BBS of The Falcon FacTT File (FFF) on +(0)1256 895106, with World Wide Web page at URL:

<http://ourworld.compuserve.com/homepages/magicka/homepage.htm>

To date we consider the WSAUG as a resounding success. Its growth and the formation of other user groups in Scotland has directly led to the formation of STAG...

### STAG: Scotland's TOS/Atari Group

I was concerned with the sudden explosion of user groups and the apparent dilution and duplication of effort in their operation, particularly given the geographical proximity of the existing groups within Scotland. In that context I believed there was a strong argument for a national Scottish Atari group. I discussed the proposals with the organisers of the other Scottish user groups and as a result STAG has now been formed.

Central Scotland Atari User Group, the TOS Users' Group (TUG) and the Atari User Group (Scotland). We continue to actively seek new members throughout Scotland and elsewhere. The combined membership of STAG is currently hovering around 100.

### STAG member benefits

The current four weekly meetings held by the WSAUG now continue as meetings of STAG(WeST). We hope other regular meetings will be established by more remote members as the group expands. Already there are plans to hold STAG(EaST) meetings to be held on the opposite fortnight to STAG(WeST).

STAG will continue to produce its four weekly, centrally produced and

funded newsletter, with a single subscription for all members. Thanks to Fraser Blacklaws at AUG(S) we now offer an optional "cover disk" containing the latest non commercial software (six times per year) for a small additional subscription.

Informal telephone support between members is encouraged - our large membership base ensures question don't remain unanswered for long!

### Subscriptions

This is always the topic nobody wants to talk about but subscriptions are necessary to provide a quality service. An adult or family (i.e. one adult and any number of under 18's) membership subscription to STAG is £14 per year.

Under 18 members with no adult family STAG member pays £7 per year. For an additional £4 per member (adult or under 18) the optional "cover disks" are included.

My intention for writing this article is to demonstrate anyone can start a user group. All it takes is time and lots of enthusiasm.

I think it has been worth it. On Tuesday 9th July 27 people attended the meeting, on Tuesday 6th August there were 28 people - including five new faces. There is definitely a need. User groups provide a forum for Atari users of all ages and experience. They enable communication, help people to learn and reassure each other we're all still using a computer with plenty of life left in it yet. Finally, if you ever find yourself at a loose end on a Tuesday night in the west of Scotland you know what to do...

### WANT MORE?

For up to date information on all UK Atari user groups, send a blank disk and an SAE to:

Harry Sideras  
(UK Association of Atari User Groups)  
49 Haywood Road  
Tile Cross  
Birmingham B33 0LJ  
Email: [sidcelery@cix.compulink.co.uk](mailto:sidcelery@cix.compulink.co.uk)



# WESSEX ATARI GROUP

Atari user groups are on the increase which demonstrates there's still plenty of life in the Atari platform. Roy Goring explains how the Wessex Atari Group got off the ground...

WAG

The Wessex Atari Group, or WAG as we soon became known, was started in May 1996 by four Hampshire based Atarians. After an initial meeting Mick Lock, Chris Good, Alan Baker and myself felt compelled to start a group to offer support to other Atari Users. We decided recruiting the help of Colin Fisher-McAllum, SySop of 42BBS based in Hampshire, was a priority and happily Colin was very supportive.

## Spreading the word

We soon had a dedicated message area on 42BBS and set about telling other Atarians WAG existed. The message area was used extensively over the next couple of weeks canvassing support. Alasdair Gool, stalwart of the West of Scotland Atari User Group (WSAUG), offered some really useful advice which helped us plan the inaugural meeting. Full of optimism, we organised the meeting for early June, the details were advertised everywhere. Messages were posted on NeST (Network ST is a world-wide Atari BBS network) and CIX (Commercial BBS conferencing system), and cards were placed in computer shop windows to reach as many Atari enthusiasts as possible.

## The first meeting

Eight people turned up for the meeting and we decided participation was the key to success. Doubled in strength we resolved to set another meeting in July to see if we could swell our numbers again! As a group was decided our aim would be: "To provide communication, support and advice to all Atari owners, no matter who, no matter what Atari platform



they use". We elected a steering committee to establish a framework for the Group and appointed a Chairman, Secretary and Treasurer. At the end of the meeting we were treated to a demonstration of the 'WAG on the WEB' pages put together by our 'Webmaster' Chris Good on his Falcon. Everyone was impressed by the quality of the pages, especially since they were put together in double quick time for the meeting.

## The July meet

As the meeting approached we went into overdrive trying to find an easy to get to, and above all, cheap venue. At the time we had no money in the kitty because we still hadn't decided our membership fees. We were lucky enough to be offered a free venue, donated by the Whitchurch Fire Station in North Hampshire, which is only a stones throw from 42BBS, the omens were good! We were delighted to see loads of people turn up and both entertained and bemused by an array of five different Atari computers running various different software. The theme for the evening was 'The Atari 8-bit', demonstrated most enthusiastically by Brenden O'Neil. The assembled throng fell into two camps, those who "Didn't realise the graphics on the 8-bit Ataris were so good - and this was back in 1983!"

and those who relished the nostalgia trip "Cor that takes me back, Boulderdash, Rescue From Fractalus, Batty Builder, can I have a go? - I used to be brilliant at this!"

## The future

WAG is on the map, it has a home and it's committed to success. We're over the worst part of informing people we exist. It's easy to get in touch

with other on-liners but reaching everyone else is the real challenge. If you have any suggestions we'd be delighted to hear them (so would we - Ed).

## The bottom line

We fixed an annual membership fee of £8 (£4 for concessions) which covers the following:

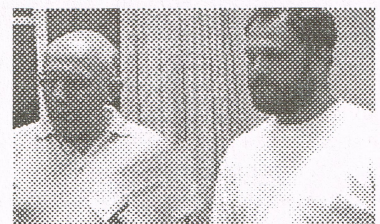
- Monthly themed meetings, and a chance to view other software/hardware.
- Telephone support to all members no matter what Atari platform.
- WAG on the WEB Internet pages, updated twice a month. These cover the latest goings on in the Atari world. If you're on-line check out: <http://www.compulink.co.uk/~mrgs/wag/welcome.htm>
- WAG WEB pages on disk, updates available at each meeting.

## Contact

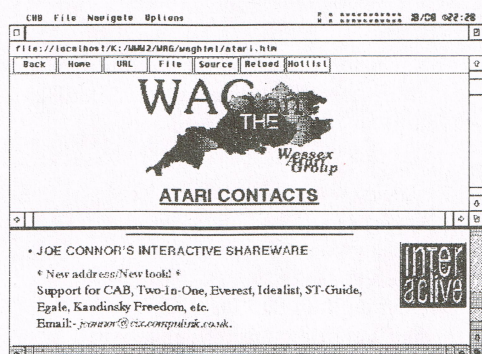
For more details feel free to contact me at any reasonable time and I'll be pleased to help: Roy Goring Goring Grange Brockhampton Road Havant PO9 1NT Tel/Fax: +(0)1705 611847 Email: [rgoring@zetnet.co.uk](mailto:rgoring@zetnet.co.uk) or [rgoring@cix.compulink.co.uk](mailto:rgoring@cix.compulink.co.uk)

## DIY

WAG is now affiliated to The UK Association of Atari User Groups (UKAAUG). If you're not close enough to us there's bound to be one nearby - and if there isn't why not start one yourself? User Groups are simply a collection of individuals, like you & me, who get together to share experiences, problems and triumphs (we don't major on failure - unless it's helpful!) there really is something for everyone and it's also fun!



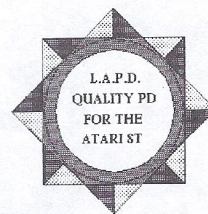
▲ A couple of WAGs. Roy Goring (on the left) and Simon Coward.





# L.A.P.D.

**P.O. BOX 2  
HEANOR  
DERBYSHIRE  
DE75 7YP  
UNITED KINGDOM**



TELEPHONE: 01773-761944 or 01773-605010  
VOICE AND FAX ON BOTH NUMBERS

e-mail: [clive@lapd.demon.co.uk](mailto:clive@lapd.demon.co.uk)  
[leigh@lapd2.demon.co.uk](mailto:leigh@lapd2.demon.co.uk)

## PROBABLY THE BEST RANGE OF LICENCEWARE FOR THE ATARI ST IN THE WORLD!

### STRATEGY GAMES

- L146 BIO HAZARD II (1mb, £5.00) A turn based sci fi strategy game of Space Marine Corp combat.  
L138 EMPIRE STAR (£3.00): Science fiction war-game, similar to Empire' for 1 to 3 players.  
L136 TRADER (£3.00): Sea trading game set in 14th century northern Europe.  
L135 ANNEX (£4.95): 3D role play inspired by Dungeonmaster' and Doom'  
L128 BLUDGEON V.2 (1mb, £3.00): Computer moderated fantasy combat system for one or more players. Includes two free adventure scenarios.  
L129 BLUDGEON ADVENTURES #1 (£3.00): Six additional solo adventures for the above BLUDGEON game.  
L124 THE SANDS OF MARS (£3.00): Govern a Martian mining colony.  
L132 SEA WAR (1mb, £2.50): Hi-tech version of 'Battleships'. Design and fight your own fleet.  
L105 CONQUEST 2 (1mb, £3.00): Rule over a medieval kingdom's economy and armies.  
L104 WAR OVER THE REICH (1mb, £3.00): Plan and execute a campaign of WWII raids against twelve German cities.  
L98 WORLD AT WAR(1mb, £3.00): A game of economic and military strategy on a grand scale for one to seven players.  
L22 GRAND PRIX MANAGER (£2.50): Simulation game of running a Formula One Grand Prix team.  
L79 DARKLYTE II (1mb, £3.00): A sci-fi space/strategy game in which you must destroy the Darklyte forces. Reminiscent of the 'Space Crusade' game.  
L59 ARTHUR OF THE BRITONS (1mb, £3.00): A strategy game with arcade sequences.  
L60 CONQUEST (1mb, £3.00): A 'God' game in which your task is simply to survive for one year.  
L118 THEY SOLD SEVERAL (£3.00): Five games. THE UNMAGNIFICENT 15, CLAN, QUEST KNIGHT, LOGIC PROBLEMS and LOGIC PROBLEMS II.

### ARCADE GAMES

- L147 H.E.A.T. WAVE (£3.00 - STFM, STE, Falcon with STOSFIX): Armoured tank battle.  
L141 SAVAGE SPACE (1mb, £3.00): 3D space combat in the style of Wing Commander'  
L139 BANG & BLASTMAN PLUS (1mb, 2 disks/£6.00): Explosive 2 player Bomberman action (2 joysticks)  
L130 DESERT HAWK (1mb, £3.00): Control a Black Hawk helicopter through different missions.  
L87 STORM (1mb, STE, £3.00): Arcade action clearing aliens from a stricken space-freighter.  
L91 STORM (1mb, STFM, £3.00) : As L87 above but for the STFM.  
L120 ASTEROIDIA (£7.00, STFM version) : Dave Munsie's Asteroids game  
L119 ASTEROIDIA (£7.00, STE version) : Dave Munsie's Asteroids game  
L121 FRANTICK (2 disks/£7.50, STe , 1mb): Fast action Dave Munsie arcade blaster.  
L122 FRANTICK (2 disks/£7.50, STFM , 1mb): Fast action Dave Munsie arcade blaster.  
L123 SQUARE OFF (2 disks/£7.50) : Dave Munsie's tumbling block game.  
L117 FISH TANK (£3.00): A game for younger players who must find food for their fish without getting eaten.  
L126 AERIAL KOMBAT III (£2.50): 2 player air combat game.  
L42 OUTWORLD (£2.50) Take control of a space colony with the sole task of keeping at least one member of your colony.  
L43 SNOTT 93 (1mb or .5mb) (£3.00) Platform arcade game.  
L44 SEVEN GALAXIES (£3.00) Puzzle solving arcade game.  
L45 HUNCHY 1066 (£3.00) Hunchback arcade plat-

### L.A.P.D. LICENCEWARE

Licenceware means that for every copy you buy the author receives a royalty payment from L.A.P.D. This ensures that the authors receive suitable recompense for their hard work thus encouraging them to produce even more excellent programs for the Atari range of computers. It saves you all the fuss and hassle of shareware payments. Licenceware programs are complete and ready to run, there are no hidden fees!

form arcade game.

- L47 GHALFA ONE (£3.00) Arcade exploration of a space ship  
L48 DELUXE NOSTRAM (1mb or .5mb) (£3.00) Arcade platform action.  
L51 POWER CUT 1mb (£3.00): Locate 25 power sources in a subterranean complex  
L53 HOT DOG (£2.50): Greyhound racing game.  
L56 CASTLE CAPERS (£3.00): Platform arcade game in a haunted castle.  
L70 CHRONIC INVADERS (£2.50): Space Invaders  
L80 MUNCHKIN (£2.50): Pacman  
L85 ZUFFERS (£3.00): Rescue the Zuffers from their planet.  
L86 FLUFFIES (1mb, £3.00): Platform game to rescue your girlfriend.  
L93 PROJECT PURIFY (£3.00): Asteroids type game.

### ADVENTURE & ROLE-PLAYING GAMES

- L148 DEGREES OF MAGIC - WEAR EVILS WEAR (£2.50): Adventure in a parallel universe.  
L143 SECRET WEAPON (£3.00): Adventure in a 3D world with a sense of the uncanny.  
L131 WANDERING SCIENCE (£2.50): Solve the puzzles on an alien vessel. A graphic adventure.  
L125 PATHS OF GLORY (£3.00): A sword and sorcery role-playing game.  
L115 DEMON II (1mb, £3.00): A fantasy adventure game with an overhead view and detailed point and click interface.  
L114 TIME MACHINE (£3.00): A classy text based adventure with over 100 locations and over 40 graphic screens.  
L112 CRAGHAVEN (£2.50): High adventure in a fantasy land plus ESCAPE!. A second adventure by the same author.  
L97 STONE COLD SOBER (£4.00): A traditional adventure game but with a point and click interface.  
L69 BIO-HAZARD (1mb, £3.00): A first person perspective game to clear a space freighter of alien creatures.  
L21 DEAD OR ALIVE (£3.00): A large, complex and humorous textadventure game.  
L31 THE CURSE OF AZRIEL (2 disks, £4.00): A graphic fantasy role-playing/trading game.  
L41 MURDER ON THE ORION EXPRESS (£3.00): A murder mystery game with an almost infinite variety of solutions.  
L50 DEMON (£3.00): Trapped in a stone cell, your task is to escape before the resident demon gets back. 3D view.  
L55 LOCATION UNIVERSE 3D (£3.00): Escape from a prisoner of war camp  
L57 LORD RAMSEY IN THE 25TH CENTURY (£3.00): Crash land on a strange planet and help Lord Ramsey escape.  
L65 EE'S LOST HIS MARBLES (1mb) (£3.00): Large 'ageist' adventure  
L97 STONE COLD SOBER (£4.00): A traditional

adventure game.

### PUZZLES

- L149 TRACKBALL (£5.00): Guide rolling balls across 25 levels.  
L140 SEVEN KEYS (£3.00): Increasingly challenging temple exploration game.  
L133 LAZER (£2.50): Use mirrors to direct a lazer around mazes.  
L102 DCS COMPILATION #4 (£3.00): Four puzzle games: BRAIN DAMAGE, SHAPES, LINK, QUIZICAL.  
L101 DCS COMPILATION #3 (£3.00): Four puzzle games: OUTRAGEOUS FORTUNE, MATCH MAKER 2, FRAME OF MIND, CRYPTOGRAM.  
L100 DCS COMPILATION #2 (£3.00) Four puzzle games: QUEST FOR KNOWLEDGE (1mb), REBOUND, GALACTIC FRUIT BOWL, GREY MATTER.  
L66 HEARTBREAK (£3.00): An infuriating and highly addictive puzzle game played on a 7 x 7 grid.  
L88 BIRDS OF TANKS. (£3.00): Guide your tank through a minefield  
L11 PI SQUARED (£2.50) A puzzle game by Tony Martin. Starting with a square of random symbols you are challenged to turn them all to pi symbols within the given time. There are increasing levels of difficulty.  
L67 LOGIC PROBLEMS III (£3.00) : Eleven challenging logic problems.  
L83 ZIGGY (£3.00) : Extra terrestrial puzzle game.  
L96 TILES IN SPACE (£3.00): Sliding puzzle game.

### OTHER DISKS

- L71 ARTIST FREEHAND (£3.00): Complete art package with multiple screens, animation, etc  
L27, L28 TYPE WRITE CLIP ART: 4 disk sets of quality clip art in IMG format. (£10.00 per set).  
L134 FILM DIRECTOR ELITE (2 disks/£4.95: Multi-media language system - slideshows to packages)  
L111 SUPER-HACKER (£3.00) : Put your own picture into demos, games etc.  
L17 ADDRESS BOOK (£2.50): Neat and easy to use database for names and addresses.  
L18 CIRCUIT (£2.50): Easy to use electrical circuit diagram producing program.  
L20 SUPER SPELL (£2.50): Teaching games for the 4 to 9 year old  
L37 SUPER FUN (£2.50): More teaching games for the 4 to 9 year old.  
L01 ROBOT MATHS (£2.95): Maths tutor for children aged 6+.  
L02 MOON LETTERS (£2.95): Spelling game for ages 5+  
L04 ROBOT WORDS (£2.95): Hangman in a modern format  
L08 ALL BLOCKED UP (£2.95): Mathematical puzzles for the young.  
L10 DROP DOWN WORDS (£2.95): Spelling/memory game for youngsters.  
L12 MATHS FUN (£2.95): Maths for children 4 to 7 years  
L113 BBS DIRECTORY (£5.00): Money saving directory of UK BBS's

SEE OUR ADVERT ON PAGES  
58 and 59 FOR DETAILS OF OTHER  
SOFTWARE AVAILABLE

## FREE CATALOGUE

For a free copy of our comprehensive catalogue just send a s.s.a.e. to the address above (26p stamp for a disk catalogue or 39p stamp for a printed catalogue)



# READER DISK

READER DISK



## Déjà vous

I've been dragged out of retirement to carry on the non-commercial software crusade. If you find yourself regularly using any of the software reviewed in these pages do take the trouble to register as this encourages the author to continue development. We've included the Reader Disk contents on this page because most of the content is reviewed within this section. With a few exceptions the Reader Disk software is sourced directly from the authors which means they're bang up to date - and sometimes exclusive to us! There's so much excellent software around making these pages is an achievement! For this reason most of the featured software scores well above average - we can't devote space to mediocre software!

Joe Connor

[jconnor@cix.compulink.co.uk](mailto:jconnor@cix.compulink.co.uk)

## BACKUP!

To make it easy to back up your Reader disks a copy of ACBAKUP.TOS, specially programmed by Ofir Gal, is included each month. Simply run ACBAKUP.TOS and follow the on-screen instructions; the program even formats the disk for you. We recommend you always store your original disks in a safe place and don't use ACBAKUP.TOS for any other purpose.

Each Reader Disk costs \$2.00 inclusive of post and packing - around the same price as a typical PD disk, the choice is yours!

## What's on the disk?

### GEMTrek v1.1e

Atari Computing exclusive!  
Freeware  
Jürgen and Uwe Holtkamp

GEMTrek is a tribute to the Star Trek adventure series in the guise of classic battleships game. There aren't many games which stand the test of time and run under GEM as a desktop accessory or program.

### STD Codes v1.4

Freeware  
Mark Baines

STD Codes is a CPX which makes it easy to find a location from the STD code and vice versa. The database can be edited so it can easily be kept up to date whatever the Telecom companies spring on us... famous last words?

### RS232 Configuration program PD

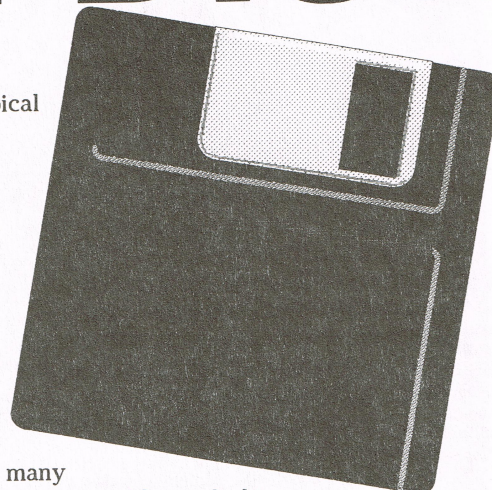
Martin Cubitt

This small Auto folder program eases serial port problems when used together with the Ghostlink Atari<>PC data exchange program. Refer to the Q&A section for more details.

### ST-Guide v1.4e

Fairware  
Holger Weets

ST-Guide is a hypertext viewer which enjoys widespread support from commercial and non-commercial developers and is one of the essential utilities all Atarians should have available. This release now includes complete up to date English documentation. ST-Guide runs as



either a desktop accessory or program by renaming the file extender.

### Appline v2.1e

Fairware  
Holger Weets  
Requires MagiC

Appline displays a button bar which automatically displays a button for each application along with the remaining free memory. Applications can be selected, closed, configured (hide, hide others, freeze etc) and passed parameters via the AV protocol. ST-Guide hypertext documentation included.

### CoSTa - Exclusive version

Shareware  
Gary Priest

Use CoSTa with comms programs including OASIS2/ICE, CoNnect, CixComm, MINTnet and STiK to keep track of your phone bills.

### Start Me Up! v1.10e

Freeware  
Thomas Much  
Requires MagiC/MultiTOS

Add a Windows95 style Start button to your desktop - or use as the world's smallest alternative desktop. ST-Guide hypertext documentation included.

## READER DISK PROBLEMS

In the unlikely event that a Reader disk won't load or gives you any other problems, disconnect all peripherals, switch off your computer for at least 20 seconds and try again. If this doesn't solve the problem, return the disk to Atari Computing clearly labelled Faulty disk enclosing a SAE. Your disk will be tested and replaced or returned as quickly as possible.



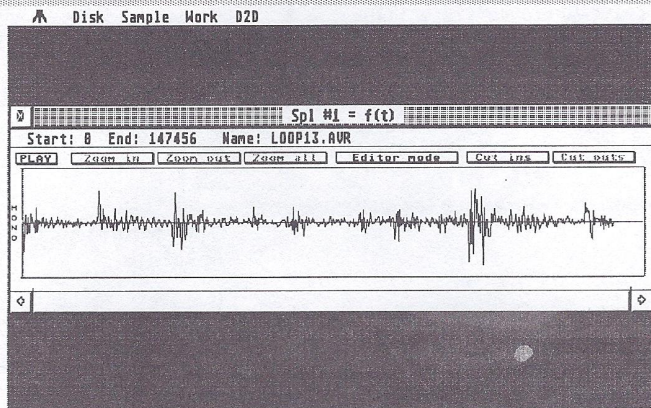
# SHAREWARE AND PUBLIC DOMAIN

## AUDIOCREATE v2.6

**Shareware**  
**All Ataris**

AudioCréate is a sample editor for all TOS compatible computers. It's written by Simon Dehaese from France. The editor allows you to edit the samples in a number of

ways. You can copy, mix, merge and even draw samples! It also shows off with a couple of useful effects, such



as echo, amplify, fade in/out and mute. The latest version supports several sample formats including

❏ Edit your samples with French AudioCreate

important ones such as AVR and WAV. Most of the program is in English, but some dialogs are still untranslated. AudioCreate is Shareware and costs a fiver to register. If you are looking for a sample editor in the Public Domain, maybe AudioCreate is something for you. AudioCreate won't start a revolution, but it works as advertised.

*Carl Lofgren*

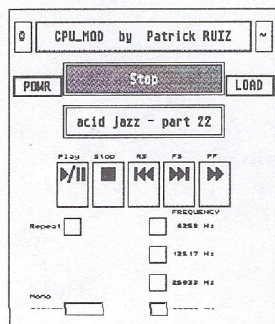
**AudioCreate**  
**MIDI/Music**

**45%**

## CPU MOD

**Freeware**  
**STe and Falcons only**

CPU MOD is written by French programmer Patrick Ruiz, and yes... it's another module player - but one with a difference this time! The author claims the sound quality is far better than the other popular module players such as Protracker, Paula etc. This is due to a totally



❏ CPU MOD claims to be one of the best sounding trackers non commercial trackers available

re-written replay routine. CPU MOD supports the following frequencies: 6258, 12517, 25033 and if your CPU is clocked at 16MHz (or higher) modules are replayed with crystal clarity at

50066Hz. The usual play, stop, rewind and fast forward buttons are present, as you'd expect, but there's also a repeat and mono/stereo switch. CPU MOD is easy to operate and there's also a 512Kb and TTP versions available. Programmers should be interested in the source code which is provided in both assembler and Omicron Basic.

*Carl Lofgren*

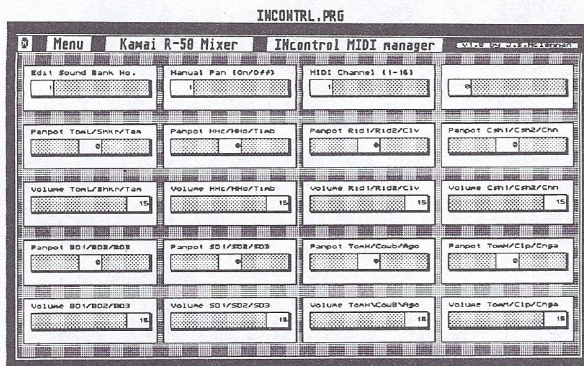
**CPU MOD**  
**MIDI/Music**

**70%**

## INCONTROL v1.0

**Freeware**  
**All Ataris**

Ever wanted to write your own synth editor? If so, read on! INcontrol is a user definable MIDI controller. It provides the user with 20 sliders which can be programmed to control your MIDI device. It can be used to create anything from a simple MIDI mixer to a basic synth editor. To program a slider you must have some basic knowledge about System Exclusive messages. Consult your



▲ Create a basic synth editor within minutes!

System Exclusive Implementation

Guide that came with your device. If it's your first time dealing with SysEx messages, don't be afraid to experiment. However, it should be wise to make a backup of the memory contents first, in case anything unexpected happens. INcontrol is not as comprehensive as the MixerMap feature in Cubase for example, but hey, it's freeware. INcontrol can be very useful if you want to try some SysEx control messages, or if you want to create a simple editor. It's not beautiful, but it works!

*Carl Lofgren*

**INcontrol v1.0**  
**MIDI/Music**

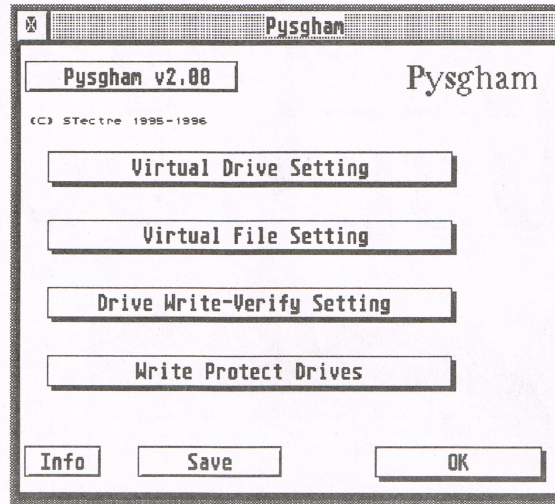
**58%**



## PYSGHAM v2.0

**Postcardware**  
**All Ataris**

Pysgham creates virtual drives from folders which can then be seen by TOS or any application as a real drive. It enables you to access deeply nested folders and files quickly and easily. For example if you keep all clipart in the path  
H:\IMAGES\CLIPART\  
BITMAP\IMG\ then you may assign it the virtual drive M: so that all the image files will appear in the root directory of drive M. The benefits are a faster route to your often used files and a less cluttered desktop. You can install up to



Set up virtual drives and files using the simple configuration program

eight different virtual drives on your hard disk. Similarly, virtual files can be set up where you only need to enter two characters corresponding to the original. Additionally, write protect and verify for each drive, virtual drive and partition can be set individually. Pysgham is postcardware - if you use the program send the authors a postcard.

Denesh Bhabuta

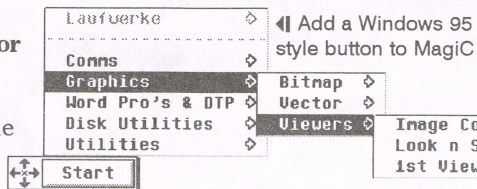
**Pysgham v2.0**  
**Utility**

**64%**

## START ME UP! v1.10e

**Freeware**  
**All Ataris running MagiC 3. N.AES or MultiTOS**

Start Me Up! places a single, movable "Windows 95" style button on the desktop from which all drives, folders, files and programs may be accessed. Using Start Me Up! a file can be dragged from any open window and dropped onto the Start button then directed to a program or location via the Start Me Up! menu system; holding down the [Control] key during the drag operation switches from copy to move operation and holding down the [Alternate] key allows files to be renamed en route. Unfortunately Start Me Up! is laborious to set up.



However using the excellent, detailed documentation in ST-Guide format you should be able to configure your START.SET file using any ASCII text editor - but watch out for the confusing use of tab characters. Once setup you'll really begin to feel your efforts were worthwhile. There's even an option to enable Start Me Up! to keep track the AppLine button bar and position the Start Me Up! button neatly at the end of the bar. I don't like the look of the Start Me Up!

button - the drag box seems ungainly but even this can be edited in a resource file editor. For a quick look copy XMEM\_MGR.PRG (bundled with MagiC) into your MagiC APPS folder, reboot and run START.APP

from the desktop - it comes with its own START.SET file so, although it won't be customised for your system you'll get a good idea of what's possible. Start Me Up! can even be used as an alternative desktop "The world's smallest desktop!" and is one of those seemingly trivial utilities you won't be able to do without once it's set it up and working.

Neil Martin

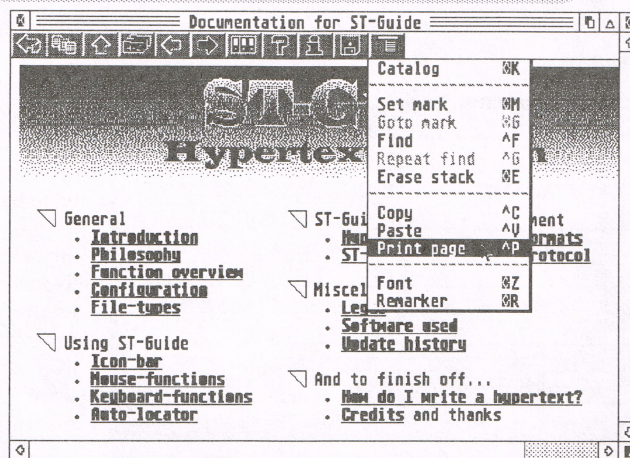
**Start me up!**  
**Utility**

**84%**

## ST-GUIDE v1.4e

**Fairware**  
**All Ataris**

ST-Guide is the de-facto standard hypertext system for the Atari platform and is one of the utilities found on nearly every Atari system. ST-Guide format hypertexts are always in HYP format and include links to related topics, indicated using bold underlined text. Hypertexts are commonly used to provide context sensitive on-line help within applications but there are hundreds of other hypertexts available. ST-Guide can pass



Icons replace the earlier text buttons and offers more features

desktop accessory rather than running it occasionally from the desktop - it only occupies around 42kb of memory! It's taken nearly a year to get the latest ST-Guide hypertexts into English but finally with this release everything is anglicised and up to date so upgrade to this release and trash any older versions you may have around.

Joe Connor

**ST-Guide v1.4e**  
**Utility**

**80%**



# Special Offers from Floppyshop

## Positive Image v1.1

THE image processing and retouching package for Atari computers. Retouch 24-bit True Colour graphics on an ordinary ST without loss of image quality. Print out your masterpiece to almost any printer (including colour). Positive Image is brimming with features, many of which are a first on Atari computers. What's more, it's under continuous development. Package includes enhanced version for TT and Falcon users. Fully compatible with all graphic cards, it even runs on PCs and Macs under any of the available ST emulators! Recently upgraded to v1.1, introductory price held at £65 (normal price £79) plus P&P (£2 UK, £5 Europe, £10 rest of world). Minimum Requirements: 1 megabyte.

## EZ-Art Professional

Is the leading paint package for the Atari ST. It offers a fast friendly icon driven interface with a vast array of drawing tools and block manipulation facilities. Supports the use of up to 10 workscreens, makes use of the STE's extended palette (even on an STFM!), allows multiple fonts and has lots of special FX. Complete with a fully illustrated 60 page manual. It even runs on a 520! Special price just £10 (normally £19.95) plus P&P (£1 UK, £2 Europe, £3 rest of world).

## Family Roots II

The leading genealogy package for Atari computers. Currently in use by hundreds of Atari users worldwide. Features a nice easy to use graphical interface where you create individuals by placing blocks on a grid and link them up with each other using a few simple mouse clicks. Includes easy access to each individual's database record and a powerful search facility. Supports printout of both the individual database entries and the graphical tree structure. Special Price just £15 (normally £24.95) plus P&P (£1 UK, £2 Europe, £3 rest of world).

## Easy Stitch

Allows you to design your own cross stitch patterns. These can be created from scratch or existing graphics may be imported. Easy Stitch allows you to generate patterns of any size up to a maximum of 10 feet by 8 feet! Using a grid, the pattern is designed on screen. Areas can be easily copied, rotated, reduced or enlarged. You can even edit individual stitches! Special Price just £10 (normal price £19.95) plus P&P (£1 UK, £2 Europe, £3 rest of world).

## Other Products

**Easy Text Professional** - DTP package, needs 1 Mb

**Easy Text Pro Vector** - DTP package, needs SpeedoGDOS or NVDI 3/4 plus 2.5 Mb

Either of the above for just £19.95 plus P&P (UK Free, Europe £3, rest of world £5)

**Oases** - Cross platform multi-tasking operating system - Only £22 plus P&P (UK Free, Europe £2, rest of world £4). Also available **Oases Software Development Kit** (for use with Oases) - Only £14 + P&P (as per Oases).

**DegasArt 3** - Leading graphics tutorial package. Teach yourself to draw and paint. Features lots of tricks of the trade. Three disk set. An ideal companion to EZ-Art Professional at just £5 plus P&P (UK £1, Europe £2, rest of world £3)

## What else do we do at Floppyshop?

Quite a lot actually! We run one of the largest and longest established Shareware libraries in the world, offering a fast and efficient service on the newest releases. If we don't have what you want, it probably doesn't exist! Whatever your Atari software needs are, it's highly likely that Floppyshop can satisfy them. Here's a few (we could think of many more) reasons why you should buy from Floppyshop:-

- Established in 1987, we have a proven track record second to none.
- Fast efficient turnaround on orders ensures that your goods go out the same day.
- Over 3,200 ST disks full of PD and Shareware all at just £1.50 each (plus P&P see below). Every single program is detailed in our extensive ST catalogue. Send us TWO blank disks for a free copy of the ST catalogue or £1.00 and we'll supply it.
- The ST catalogue program comes complete with its own built-in ordering system. You don't even need to write out your own order! This has been a real hit with customers.
- World's largest collection of PD and Shareware for the Falcon, over 700 HD disks, all at just £1.50 each (plus P&P see below). Our Falcon catalogue contains comprehensive descriptions of every program. Just send us ONE blank disk for a free copy of the Falcon catalogue or £1 and we'll supply it.
- We source the very latest releases and go out of our way to obtain the very best software from around the world on your behalf. Nobody's collection is more up to date than ours!
- We are happy to accept payment by credit card. Phone before 2pm for same day despatch.

## So What's New In PD?

The listing below represents a selection of ST titles (we also had many new Falcon releases) from our last catalogue update. A new catalogue will be released to coincide with this advert, so don't forget to order one along with your goods. All regular customers get the latest catalogue updates mailed free every two months. All you have to do to qualify is become a regular customer! What other company offers this level of service?

All items in the listing below cost £1.50 per disk plus P & P. The P&P on Public Domain and Shareware disks is on a per order (not per disk!) basis and is a fixed charge regardless of the number of disks purchased. P&P is £1.25 per order for UK, £2.25 for Europe and 15% of order value (minimum charge £3) for rest of world.

**IMPORTANT NOTE:-** Disk numbers ending in M are for mono systems (eg; ART.73M). Those ending in C (eg; EDU.5627C) are for colour systems. Others are suitable for all systems.

## COMMUNICATIONS

S-COM.5566 & S-COM.5567 OASIS 2 - Fully integrated on/off-line package for email, ftp, usenet access on the Internet. Needs 1 Mb & a hard drive. Two disks £3.

S-COM.5551 & S-COM.5552 WWW v1.31 - Another integrated Internet access package. Surf the Web too with this one! Needs 1 Mb & a hard drive. Two disks £3.

COM.5633C TAZ - Comms package which supports 16 colour ANSI emulation in medium res! Full featured with lots of extras.

## DISK MAGS

DMG.5556 ATARIPHILE #1 - New well written disk mag with a host of top writers. The next best thing to Atari Computing!

S-DMG.5628 & S-DMG.5629 THIRD DIMENSION #24 - Second birthday edition of this popular disk mag for 3D Construction Kit users. Double disk set, £3.

DMG.5631C STOSSER #26 - Leading disk mag for STOS Basic programmers from beginners to advanced.

DMG.5647 ATARIPHILE #2 - Even better than issue 1. Buy it!

S-DMG.5656 & S-DMG.5657 ST NEWS - THE FINAL ISSUE - STN closes its doors with a bumper issue full of news, reviews, tributes and more. Two disk, Needs 2 Mb and a hard drive, £3.

THIRD DIMENSION ISSUES 26 (DMG.5655) & #27 (DMG.5665) now available

STOSSER #27 (DMG.5664C) just released.

## GAMES

S-GAM.5572C & S-GAM.5573C SQUARE OFF by Dave Munsie - The best Tetris game ever written. STE ONLY, Needs 1 Mb. Two disks, £3.

S-GAM.5584C & S-GAM.5585C FIREFORCE - Arcade adventure drawing influences from Dungeon Master and Alien but with a sort of DOOM feel to it. Needs 4 Mb and a hard drive. Two disks, £3.

GAM.5596C THE ORIGINAL - The best Boulderdash game ever. Needs 1 Mb.

GAM.5601C ISLAND STRIKE - Helicopter based military style search and rescue operation from the author of HERO. Needs 1 Mb.

GAM.5602C MICHIGAN MIKE - Arcade adventure with giant wasps, worms, frogs, traps, switches, hidden doorways and more. Fast and furious action.

GAM.5603C SUPER CHICKEN - Fast action platforms and ladders game.

## MISCELLANEOUS

DEM.5635C DBE TRACKER - Cut down version of a 32-track soundtracker which understands most Atari, Amiga and PC MOD formats. STE, TT or Falcon ONLY.

DEM.5636C COMPUTER HISTORY - Cut down version of package which details 1500 computer systems. Includes articles on well known personalities.

EDU.5627C STORY OF THE TITANIC - From the placing of the construction order to that fateful day. Historic account with over 50 digitised photographs.

S-LAN.5575, S-LAN.5576, S-LAN.5577, S-LAN.5578 & S-LAN.5579 GNU C/C++ V2.33 - The complete GNU C and GNU C++ programming languages including extensive docs. Needs 4 Mb and a hard drive. Five disks, £7.50.

## UTILITIES

S-UTL.5559, S-UTL.5560, S-UTL.5561 & S-UTL.5562 GHOSTSCRIPT V3.53 - PostScript emulator which lets you view or print PostScript graphics or text to non-PostScript printers. Now supports Portable Document Format (PDF) too. Needs 4 Mb and a hard drive. Four disks, £6.

S-UTL.5587 & S-UTL.5588 NOIDISK 3 - Impressive Shareware replacement Desktop from top programming team. Needs 1 Mb and a hard drive. Two disks, £3.

S-UTL.5592 & S-UTL.5593 TOS PATCHES - There are bugs in every version of TOS! This is a collection of the most significant of the various patch programs written to fix them. For TOS versions 1.0 to 2.06. Two disks, £3.

UTL.5639 EGALE 3.4 - File comparison program (highlights differences between files). Now supports comparison of up to 16 pairs of files simultaneously, editing of binary files, word counts, generation of patch files for upgrading etc.

## Ordering from Floppyshop

Please make cheques/POs payable to Floppyshop and ensure that you add the required amount for postage. Credit card orders welcome. Overseas customers not paying by credit card must make payment in UK pounds sterling by way of a cheque drawn on a British bank, International Money Order or Eurocheque (made out in sterling).

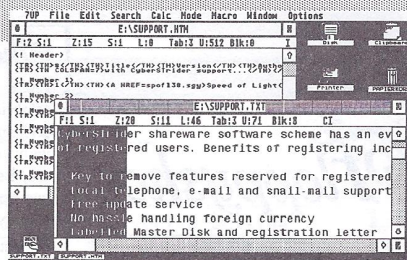
**Floppyshop, PO Box 273, Aberdeen, AB15 8GJ.**  
**Credit Card Orderline Tel/Fax: 01224 312756**



## 7UP v2.32

Shareware  
All Ataris

Word processors are overkill for creating text files, be they short notes or pages of a story to be desk top published as you don't need any fancy fonts or typesetting options. This is where text editors come in, giving you fast text entry with some useful text utilities. 7UP is aimed at those who spend a lot of their time editing text documents however small or large. It is thus perfect for programming and word processing alike, not least because of the powerful formatting and checking facilities it offers. 7UP has all the features found in other text editors and more. You can set up macros



easily using the 'Record' feature and up to 7 different files can be loaded in at one time. The edit and search functions also offer powerful options. Text can easily be toggled between upper and lower case. Particularly impressive is the highly flexible block manipulation where you can highlight whole lines, or just columns of text. The string search and replace facility is second to none with UNIX-like wildcard searching. You can even

7UP features independent windows and flexible block manipulation

compare differences between two files. 7UP is wrapped in a slick GEM shell with all dialogues in windows. Keyboard shortcuts are fully configurable as are the names of the menu options. Each of the text windows is completely independent of the other and you can have different fonts in each. There is also a text preview facility where you can see how the text is laid out on the page. Documents are in German but the program itself has been translated to English. It costs £25 to register.

Denesh Bhabuta

7UP v2.32  
Utility

70%

## APPLINE v2.1e

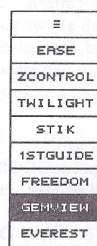
Fairware  
All Ataris running MagiC 3 or later

AppLine is another Windows 95 type utility for MagiC users. It provides an AV protocol aware button bar which dynamically grows and shrinks to display a button for each program in memory. The at a glance display makes it easy to switch between programs. Files can be dragged and dropped to the button of any program which supports the AV protocol and the file is passed to the program. Double clicking on any button brings up a menu offering the same functions as the MagiC popup menu.

AppLine should be installed in the MagiC Applications folder but runs

fine from the desktop. The button bar can be configured to appear anywhere on screen and can even be offset to avoid iconified programs. The documentation, in ST Guide format, is concise and easy to follow but the APPLINE.INF file is so well structured and commented which makes it easy to edit. I used AppLine for weeks before reading the documentation - and discovered some features I'd missed!

If you install Start Me Up! alongside AppLine you have a Windows 95 clone (only neater!) and the only other icon needed is a trashcan.



AppLine looks like the Windows 95 application bar...

... but it's more flexible

Access and control of programs is as quick as clicking on an icon - and much faster than diving into deeply nested folders without the hassle of juggling windows around the screen.

All I need now is some interesting wallpaper or a background picture - I've never seen so much bare desktop!

Neil Martin

AppLine v2.1E  
Utility

90%

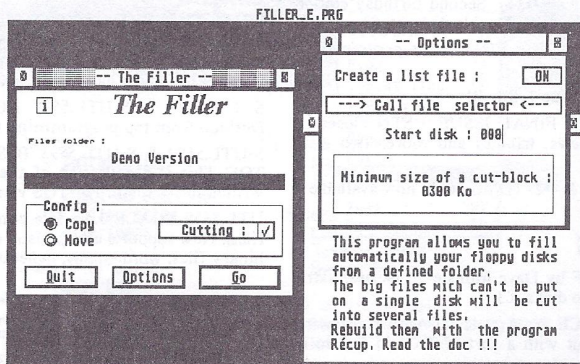
## THE FILLER v1.05

Shareware  
All Ataris

The Filler is a simple but extremely useful program for hard drive users. How many times have you tried to back up your hard drive onto floppy disks and found that 100Mb of files on a hard disk takes up around 130Mb on floppies? Or a file is just too large to fit on a disk even when it is compressed?

The Filler is a basic hard disk backup program which fills up floppies to their maximum at the same time as splitting files over various disks. As with most current

If you want no-frills hard disk backup try the Filler



utilities, The Filler runs from a single GEM dialogue box with further options a single click away. The program can also be run as an

accessory. It is very easy to use: select a folder or file to be copied and off you go. Options include the ability to create an ASCII file which contains a list of the copied files. You can also specify the minimum size of files that you want split over different disks. Copying back to hard disk is a simple matter of manually doing it. Split files however need a special program included in the package. Registration is well worth the \$5 (FF30) removing the 2Mb limit. Looks can be

deceptive!

Denesh Bhabuta

The filler v1.05  
Utility

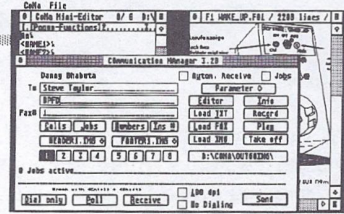
75%



## Shareware All Ataris

CoMa, or Communication Manager is a commercial quality fax program. It is fully multitasking friendly, sports a GEM interface and can also run as an accessory. CoMa works with fax-modems which support Class 2 and 2.0 and is extremely fast at coding and decoding fax pages. You can view incoming and outgoing faxes: incoming ones are displayed line by line during transmission. Features such as auto-receive, print, fax-number directory and fax management are also implemented. You can create simple faxes using the internal editor. Header and footer images can be imported. More

complicated faxes can be created using Calamus or any program which supports QFax drivers. I did miss the simple DTP features for creating faxes found in other fax programs. CoMa turns your Atari into a powerful answering machine letting you record up to seven different messages. You can also set up the program to act as a voice-mail box where messages are stored for people to listen to upon entering their personal pin number. Admittedly you will need a special voice-mail compatible modem to use this - these tend to be a bit on the expensive side. Finally, CoMa lets you set up a mini BBS. You can log in to your computer from somewhere like your office. You may also create a password for friends to have access



▲ CoMa - A full communications suite in one small package!

to the certain data! CoMa is impressive to say the least. It competes well against the commercial offerings. The shareware fees is a bit high at \$45 for just the fax part of the program going up to \$110 for all three parts. Compare it to similar priced commercial ones and CoMa wins hands down.

Denesh Bhabuta

**CoMa v3.20**  
Comms

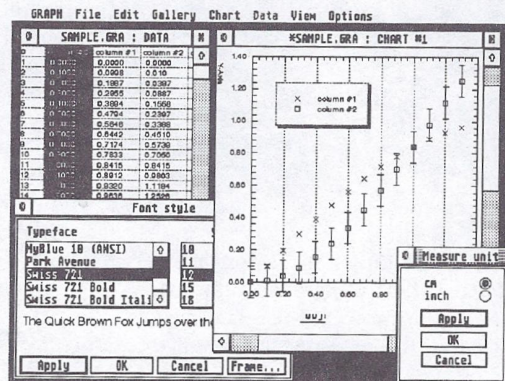
**70%**

# GRAPH v1.20

## Shareware All Ataris

Graph is capable of creating graphs from ASCII data which can either be entered directly into the program or imported in ASCII format. The program comes in two flavours, a special version for Falcon/TT users with an maths coprocessor and an ordinary version for mere mortals running other machines. Graph uses outline fonts to generate graphical output in GEM

Metafile format so either SpeedoGDOS or NVDI 3/4 is required for optimum results. Without GDOS graphical output is not possible. Most of the program dialogs are non-modal which makes Graph perfect for use



► Dialogs provide comprehensive control over all aspects of graphical output

under a multitasking OS such as MultiTOS, Geneva or MagiC. Graph can display up to fifteen plots on the same graph in various formats including the entertaining 'Camembert' format, which didn't take long to figure out is the French equivalent of pie chart format! However Graph is a complex program with dozens of options I couldn't explore because no documentation apart from a brief readme was included in the archive I received. The unregistered version is fully functional and if you fancy aflutter registration costs £12 directly with the author.

*Joe Connor*

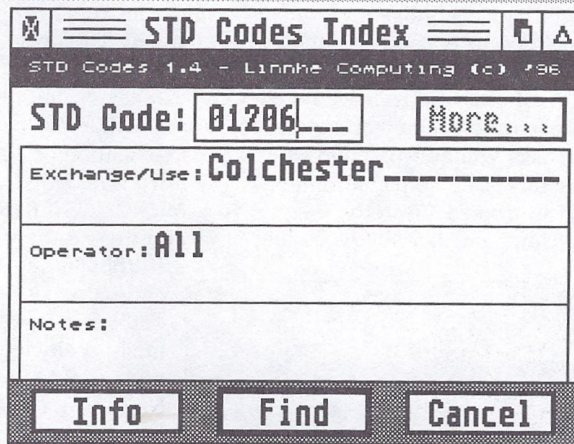
**Graph v1.20**  
**Business**

**58%**

## STD CODES v1.4

## Freeware All Ataris

This handy CPX, programmed by Mark Baines, can find a location from an STDcode or the STD code for a location. Simply enter the number or location in the appropriate field and select Find, it really couldn't be easier. There are a few things to be aware of, some STD codes apply to several towns so get into the habit of checking whether



▲ The 0800 Freephone and other special services are also recognised

the More button is selectable, if it is further pages become selectable as required. If both the location and number fields contain data the number field takes priority so if you're entering a location make sure the number field is clear. Installation involves copying the CPX, two index files and the data file to your CPX directory and activating the CPX. Best of all the data file is ASCII comma delimited file which means it can be edited and recompiled at any time using the included TOS utility so it should be easy to keep up to date whatever the telecom companies spring on us.

*Joe Connor*

## STD Codes v1.4

**75%**



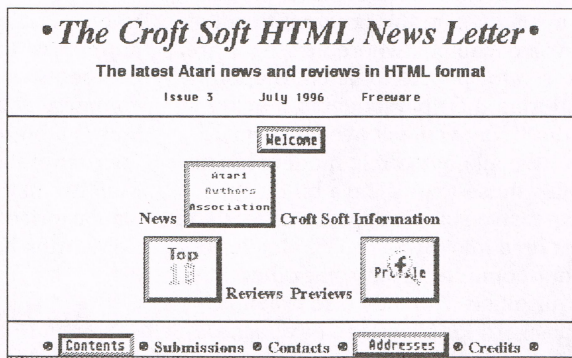
## THE CROFT SOFT NEWSLETTER 3

## All Ataris

This is the third issue (July '96) of the Croft Soft Newsletter from three man team Colin and David Polonski and Kevin Wilcox. They've been producing Atari games software since 1994, including Mole Mayhem and Trader 2. They have recently formed the Atari Authors Association (AAA) and also produce a Star Trek Newsletter called Trek Talk. The CSNL is in HTML format and while not filled with stunning graphics the style is simple and

effective. This issue is double the size of the last one and is packed with news, including lots of Atari info, a top ten of Atari simulations, reviews of the latest Kandinsky, MenuInfo and

▼ CAB displaying the main contents page



the Warp disk magazine. Their top ten simulations although good should surely include Sim City, Jimmy White's Snooker and Micropose Golf? Profile is a new section about well known Atari personalities. In this issue Harry Sideras spills the beans on his Atari history and current setup - I wonder who's next? Each issue should be inserted into your CS folder where it links up with the other issues via a menu, a neat idea. This issue is certainly an improvement over the previous two and although not as slick as AtarPhile it's well worth a read, may there be many more.

Chris Good

Croft Soft  
Disk Mag

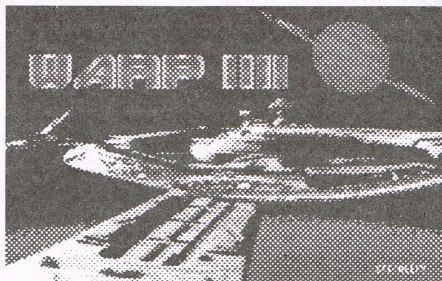
73%

## WARP ISSUE V4

Freeware  
Any ST

The Warp disk magazine, edited by Keefy, is a real treat for fans of the Star Trek adventures. The opening screen hands over to the main screen which features a Star Trek the next generation style control panel with background atmospheric sounds. Articles can be selected using the cursor keys, which changes the planet displayed on the view screen and plays a random sound sample culled from the original and next generation series. Pressing the space bar selects the article, plays a 'standby for an incoming transmission' sample then the text is loaded and displayed in

the custom file viewer. There's plenty to read with 40 articles to navigate including on-line interviews with stars from the original, TNG and Voyager



series including Patrick Stewart (Picard) Kate Mulgrew (Janeway), Leonard Nimoy (Spock), Tim Russ (Tuvok), Robert Duncan McNeill

(Paris) along with chat from conventions, Treknology - which explains Warp speed in frightening technospeak and the usual contacts, letters and editorial pages. I was itching to select the various buttons on the control panel but there doesn't appear to be any mouse control at the moment. The shell, created by the STOS maestro Tony Greenwood, is probably still under construction so I'll just mention I'd like Falcon and a more Star Trek like text displayer screen. These are however minor niggles in an otherwise excellent magazine which boldly gets my approval.

Joe Connor

Warp Issue 4  
Disk Mag

70%

## MAGGIE 20

Freeware  
Falcon (ST version available)

Maggie fills an entire HD disk and has to be unzipped to your hard disk before running. With other magazines adopting the HTML format Maggie stands out thanks to its slick custom interface specially designed for the Falcon by the Reservoir Gods. There are 16 colourful icons across the top of the screen from which you select the articles and the inevitable scrolling text along the bottom. There's a rather annoying starfield displayed by default behind text articles which makes it hard to concentrate on the text but thankfully this can be turned off as can the music - sorry

boys, I'd rather choose my own music! Content is up to the high standard set in previous issues with a mixture of news, interviews, reviews, letters, features and even a quest which asks you questions on what you've just read, so pay attention! There are reports from the Symposium and Adrenaline coding



parties to keep demo freaks up to speed. The programming section includes a list of 32 Falcon STOS extensions, an interview with Tony "STOSSER" Greenwood and an explanation of how the Maggie 18 intro was coded. The MAGGIE MUSICAL EXPRESS has Underworld and there's the usual selection of silly stuff including The Atari Cheese Shop, Poetry Corner, Gus Spank, Taff's bottom and an interview with me to really lower the tone. On the serious side there's a review of NeoN and a surprising comparison between a PC and a Falcon - well worth a disk of anyone's money.

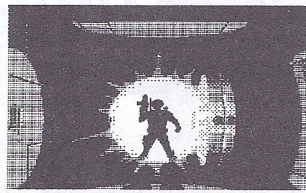
Chris Good

Maggie 20  
Disk Mag

90%



## 999 Software



**ALIEN THING.** Awarded 84% in ST Format issue 79. Complete with expert levels and the version of the game supporting the Jaguar joypad. Now only £9.99 including (UK) post & packaging.. (If ordering from outside the UK, please add £1.) All purchasers of Alien Thing will be offered attractive discounts on future games released by 999 Software.

Coming in the next few months:- The Director's Cut. The sequel to Alien Thing. 3D perspective, more samples, more levels, more puzzles, tracker music. To receive a demo of the game, send £1 to cover the cost of disk/postage, etc. Also coming in the next 12 months will be

Megamines, (a minesweeper game with several differences), Solar War 2, (a space shoot-em-up for the Falcon) and Potholer, (a graphical adventure game set in a real cave, also for the Falcon.)

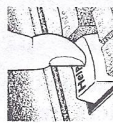
For more information point your web browser at <http://www.compulink.co.uk/~999sw/999sw.htm>

Write to:-

**999 Software**  
1 Portland Avenue  
Burton on Trent  
Staffs.  
DE14 3GD  
England

Tel:- 01283 500944

**Atari Helpline**  
Free to all Atari users  
Mon-Fri 2pm-9pm and Tue 7.30pm-9pm  
**0115-945-5250**



## ST Applications

We launched our Atari magazine back in 1986 and it is still going strong! The latest

version of ST Applications combines a traditional paper magazine with reviews and articles on disk in World Wide Web format pages. You can buy the latest copy of ST Applications (magazine plus disk) for just £1.75. A 12-issue subscription costs £19.95

We also run a comprehensive PD and Shareware library - disks cost from £1 each - as well as publishing a wide range of sensibly priced commercial software and books. Some of our best sellers are: Imagecopy, Fonty, Address, Calamus Assistant, First Word and Timeworks Publisher Users' Guides, Fontkit Plus, Ultimate Virus Killer, UIS, View II, Warp 9, and Gemulator 4.

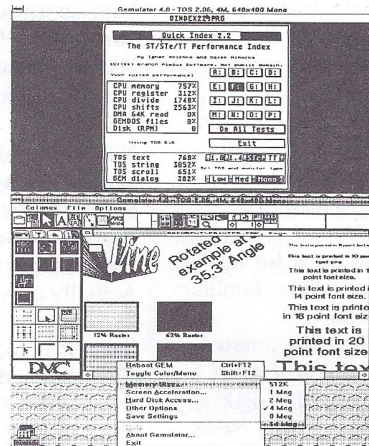
For a free copy of our catalogue write or phone (24hrs). Or send £1, or a disk and SAE, for a copy of our full length on-disk PD and Shareware Guide.

## FaST Club

For users of Atari ST & Falcon computers  
PO Box 101 - Nottingham - NG2 7NN  
Tel: 0115-945-5250 - stclub@clx.compulink.co.uk

### Gemulator 4 - the Atari ST emulator for Windows

Prices start at just £49.95 - write or phone for details.



Knocks spots off your slow Atari ST or STE.

Use Quick ST, Warp 9, or NVDI for maximum speed.

Multitask two or more Gemulator windows.

Run Calamus SL and PageStream on your PC.

Configuring is easy. Just point and click.



**Open Software Environment**

A graphical software system that runs the same OASES software on

**Atari Macintosh and other computers**

No more software porting!

**Esquimalt Digital Logic, Inc.**

820 Dunsmuir Rd.

Victoria, B.C.

Canada V9A 5B7

Phone: (604) 384-0499

Fax: (604) 384-0575

E-mail: [omen@oases.com](mailto:omen@oases.com)

Web:

<http://www.oases.com/~omen>

## OASES: THE SYSTEM

Software written under OASES.PRG on the Atari ST/TT/Falcon will run as is, without modification, under OASES on the Apple Macintosh, and on OASES for PC, now under development.

OASES has a modular structure with a compact core of 37K bytes.

OASES has all the contemporary features such as pre-emptive multitasking, graphical interface, drag and drop transfers, outline fonts, multi-media drivers.

OASES system includes a Text Editor/Document Processor, graphics utilities and an Authoring System for creating interactive multimedia literature. Structured 68K assembler & software development tools are available.

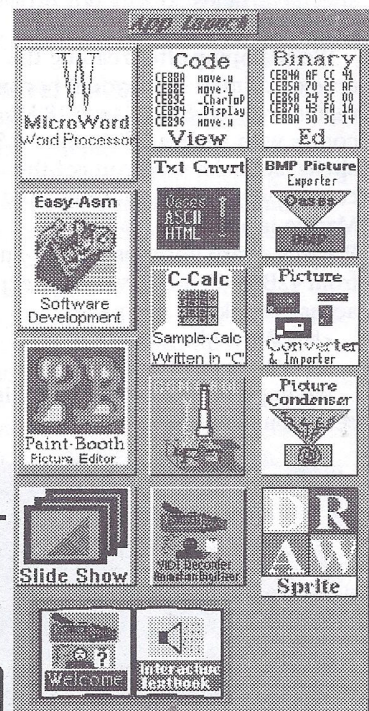
**OASES-for-Atari** \$44.95 CDN or \$33.95 US

**OASES-for-Mac** \$69.95 CDN or \$52.95 US

(Includes Power Macintosh)

Please add \$7 for shipping

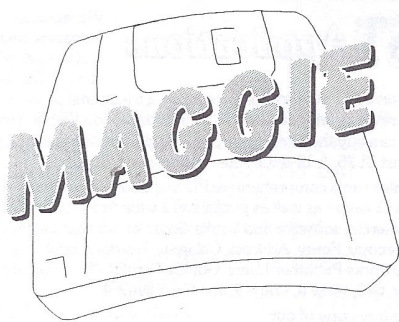
To estimate Pounds Sterling, divide \$CDN by 2.2



**UK Dealers:**  
**Floppyshop**

PO. Box 273, Aberdeen, Scotland, UK AB15 8GJ  
Tel/Fax: 01224 312756





Some of you will be familiar with disk magazines on the Atari platform, having seen them on sale in various public domain libraries. This section of Atari Computing is going to feature the best of the articles that have been included in Maggie over the last six years or so that this disk magazine has been in existence.

Disk magazines have a chequered history, and Maggie is no exception, however, more recently, we have featured better articles as more experienced people from the Atari scene have started to write for us.

Some of our writers will be familiar to you, including: Richard Karsmakers, the author of Ultimate Virus Killer (UVK) and editor of ST News, Sietse Postma, ex-DBA disk mag) and Michael Noyce of ST News.

We all have interests outside the Atari scene and Maggie has diversified to include reviews of movies, CDs and so on. Naturally in these pages we're only featuring Atari specific articles so why not browse a copy of Maggie at your leisure?

We're hoping after reading the articles printed here, you'll become a regular reader. Since issue 18 Maggie comes with separate Falcon and ST shells, so make sure you get the correct version for your machine. Maggie is available from most PD/Shareware libraries and on-line from 42BBS. If you have internet access check out our pages:

<<http://www.cybercomm.nl/~spostma/maggie/maggie.htm>>

We hope you enjoy reading this selection of articles.



Richard Spowart and Chris Holland  
Maggie Team

# AN INTERVIEW WITH LAZER

The Lazer coding crew are arguably the best Falcon demo coding crew around. Maggie is delighted to present an interview with Harald Riegler, aka "Energizer" from Lazer...

**First of all thanks for squeezing this interview in between your studies, to kick off please tell us a bit about yourself and your role within Lazer?**

I am Energizer, and I am one of the two coders. In real life my name is Harald Riegler, I'm 22 years old, studying electrical engineering in Austria.

**Not all members of Lazer live in the same country. How did you manage to create the marvellous "Lost Blubb" demo - it seems to me you would need to meet occasionally ...**

Actually only Dan (our graphician) lives outside Austria. Everyone else lives near to each other around Vienna. We do get together often, even when we're not doing computer stuff. During the period when we were finishing Lost Blubb all of us, except Dan, "lived" at Photon's place for a couple of weeks!

**How long did it take to create Lost Blubb and whose idea was it in the first place?**

It took about 9 months and it was Martina's idea. Then we all tried to design it, but Martina wouldn't let us. I'm sure you heard Lost Blubb was shown on American television in a show called "World of Demos".

**Some of the people who saw this show were very impressed with your production. Apart from being fun, was Lost Blubb intended as a promotional demo, maybe with a view to getting a job?**

No, it was made purely for fun. We're still waiting for the tons of mail from companies offering us jobs to come in ;) Of course, every line of code you write helps you to improve your skills, so if you look at it that way, demo coding can be seen as some sort of investment for your own future.

**I know that your Falcon broke down a while ago and understand you intend to buy a new one... What attracted you to the Falcon in the first place?**

I like the concept behind the machine, the fact of having a good

operating system which doesn't require 20Mb on a HD and the rest for swapfiles, and being able to program a Motorola processor.

**What do you dislike?**

The Falcon should have had a 32Mhz clock, the stupid mouse connectors, the lack of ongoing support...

**The Atari demo scene is regarded as relaxed and friendly. Is this your experience?**

I always enjoy meeting the people on the Atari scene, as there are only a few guys that are arrogant towards newcomers.

**And what do you think of the PC scene?**

I can't really say anything about the PC scene as all I've seen is a few 2 year old demos.

**Are you currently working on new projects? Fancy telling us about them?**

You (hopefully) just saw the intro for this disk mag. We're discussing plans for the next big demo, but still arguing over the concept. As for other projects, it depends on how fast I get a working Falcon. When I get my Falcon back, I can finally release the Music Compile 3 it was 99% finished (I couldn't copy the sources from my HD before it went for repair). Other ongoing projects includes Indypaint 2.

**Can we look forward to another megademo at the next Fried Bits party?**

We really don't know yet, there are some serious time problems we have to solve (mostly university projects). Due to Lost Blubb we all are a bit behind schedule. Give us a few months to decide...

**The Fried Bits party is without any doubt THE major event on the Atari demo scene. It is organised by "The Independent". This organisation was very active over the last couple of years but now we see a decline in new productions by them. Is "The Independent" slowly dying?**

The whole Atari scene is slowly dying and naturally this includes The



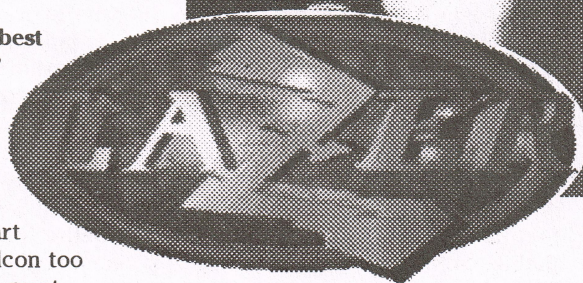
independent as well. The active groups list includes (as far as I know): Aura, Absence, Inter and Lazer. If any other group should release anything it would be a big surprise. We're still in contact though...

### Who do you think are the best groups on the Atari scene?

Hmmn, probably Eko, Inter and Avena. Although the new demos by Exa, Hydroxid and Therapy were very good too. It is good to see new groups start doing something for the Falcon too (I just realised we forgot to greet Hydroxid in the intro - sorry!) In general I would like to encourage unknown groups to release whatever they're coding. Many groups put a lot of work into coding but never release anything, I find that very sad.

**Do you think that disk magazines contribute to a better scene environment? Are they as useful to you as printed magazines or merely a collection of amusing text files?**

I do think that they contribute to the



▲ From left to right: Dan, Energizer, Stax, Martina and Photon

scene but I don't read them much. Mostly only the scene rumours and demo reviews. I never read CD tests and similar stuff.

### Are you taking reviews of your productions in disk and printed magazines seriously?

For the most part yes, but I always keep in mind reviews are (usually) just one persons opinion. Sometimes the reviewer lacks the knowledge to review technical matters, but still

doesn't hesitate to tell the world that something could have been done much better! The reviews in Maggie, compared to other mags, have always been quite good. Besides it's very good to read a critical opinion about your efforts, naturally I'm very fond of my own work.

**Thanks very much for taking time out from your studies to talk to us. The interview was conducted by Sietse Postma (Slimer) on behalf of the Maggie Team.**

RANT

## ATARI - WHERE DO WE GO FROM HERE?

**Del Stables, former Blackpool Atari shop owner issues a call to arms in the platform wars...**

### The Atari platform is dead

Who says so? Usually magazine and trade papers written by journalists who never owned Atari machines. Does their opinion count? Not with me it doesn't. For anyone new to computing, Atari machines are an excellent choice, you don't need any expensive addons and they are the easiest to get to grips with computer ever manufactured - it really is as simple as point, click and go!

There are literally thousands of programs available (and contrary to what some folks believe this is NOT the case with all computers) covering every aspect of computing you can imagine. In any area of interest you'll find a selection of PD, shareware and commercial packages aimed at different audiences from absolute beginners right through to seasoned professionals.

### Where did all the games go?

Games publishers are so busy providing for the PC market I'm convinced they've forgotten just how many STFM/E's there are out there. I understand Atari sales of 'Street Fighter 2' have topped 25,000 which surely proves well produced and

marketed good games can sell.

Games crackers are largely responsible for games manufacturers and programmers leaving the Atari scene and don't start screaming 'look at the exorbitant prices of games!' because Nintendo and Sega owners regularly pay crazy prices for the latest games,

The comparative difficulty of finding illegal copies must be one of the reasons the console games market is flourishing and attracts the leading game coders away other platforms.

And what do you do when you look around a computer shop and see very few, if any, Atari games? I'll bet most of you gaze in silence for a few minutes then leave. You do, don't you? Wrong!

You should tell the shop owner that you came in to look at Atari games, preferably telling him also of the particular game(s) you specifically came in to buy and let him know that you have the money for the game/s in your pocket. If enough Atari owners across our land did this the now customary reply "We don't stock Atari games, they don't sell" could be answered politely with "I can't buy them if you don't stock them". Go on, give it a try, and keep on trying until something changes!

It's a fact of life that if you silently nurture a grievance then no-one will do anything about it. You don't have to sit silently, if something directly affects me I do something - put pen to paper and write to ANYONE who can make a difference.

### The silver lining

I run a PD library which has a specialist demo section and am in touch with coding and packing crews who work on both the Atari and PC platform. My mailbox continues to fill up with superb Atari demos from all over Europe and provide fine examples of what the Atari is capable of. I would like to take this opportunity to send greetings to all these individual members of these groups in Britain, France, Belgium, Germany, Switzerland, Sweden, Norway, Denmark and others. I recently counted some 200 active demo coding crews for the Atari in Europe alone. If each crew has around five coders that's around 1000 talented and dedicated Atari coders. Now try telling me the Atari PD/shareware scene is "gasping its last breath!"

*Del (D.W Stables) Contributor  
Maggie Team.*

Email: [dwstables@rushden.demon.co.uk](mailto:dwstables@rushden.demon.co.uk)

MAGGIE

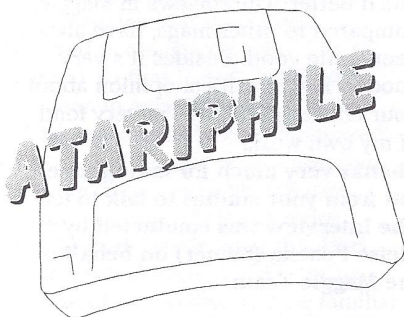


# PLAY IT AGAIN SAM

I think I'm right in saying the first thing people do when connecting a CD-ROM drive to their Atari is play an Audio CD, even if there's a perfectly good Hi-Fi designed specifically for the purpose not three feet away.

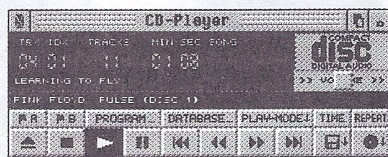
With this in mind software to handle Audio CDs has become quite popular. This review covers one of the best, written by a programmer who has produced some outstanding

CD-PLAYER



Although AtariPhile is the official disk based magazine of the Falcon FacTT File its content is aimed at all Atari users whatever hardware you're using. The three articles chosen for inclusion reflect this and were all first published in AtariPhile Issue #2. Stewart, reviewed by FFF co-founder Kev Beardsworth, was part of a round-up of MagiC specific utilities which included AppLine and Win Commander. CD Player, also reviewed by Kev Beardsworth is complemented by a review of ExtenDOS Pro, the commercial CD-ROM driver software, which is a lot less hassle to set up than the non-commercial MetaDOS driver. Finally you're treated to edited highlights of my E-Copy review - there wasn't room to include the entire review - just one of the constraints our HTML based disk magazine doesn't have to worry about! By the time you read this AtariPhile #3 will be available, along with back issues, from: FFF, 11 Pound Meadow, Whitchurch, Hampshire RG28 7LG You must send a DD disk and two stamps for (one for the return postage and one towards our costs) for each issue ordered. Don't forget to include your address and a clear indication which issue(s) you want. AtariPhile is also available from our home, 42BBS on 01256 895106 and all good PD/Shareware libraries. If you have www access check out our web pages at: <http://www.walusoft.co.uk/>

Colin Fisher-McAllum

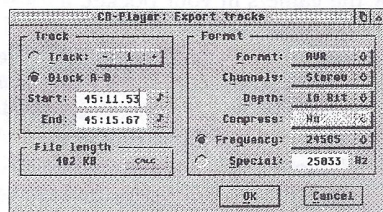


applications, CAB and OCR are among his creations. Called simply CD-Player it's currently up to version 1.3f. The first thing to say about CD-Player is that it's Freeware but I'd encourage anybody using it regularly to make a donation to InterActive. By doing this we can be sure of continued development, not only for CD-Player but for the other great software Alexander Clauss produces. Anyway enough of my waffling, back to the review.

CD-Player plays CDs! No surprises there I'm sure, but it also carries out many extra operations to keep you away from your Hi-Fi's player which is not nearly as useful.

CD-Player can carry out all the usual functions associated with a typical CD player including skip track, shuffle, scan, pause and program, time display which can be toggled through total time of disc or track and time remaining of disc or track. Nothing unusual so far, in fact, pretty much everything a standard player offers so let's get to the extras.

Included in the play-mode functions you'll find a play block operation. This is great for playing sections of your favourite tracks over and over again. Using the mark block keys you select the section of the track you wish to listen to, or dare I say, record [tut, tut, tut - FFF]. When the player starts to play the section in question left click on the 'A' button, at the end of the section you're marking as a block left click on the 'B' button. CD-Player then keeps the block details in memory for you to manipulate as you see fit. The block, once selected can be played back as we've already mentioned or,



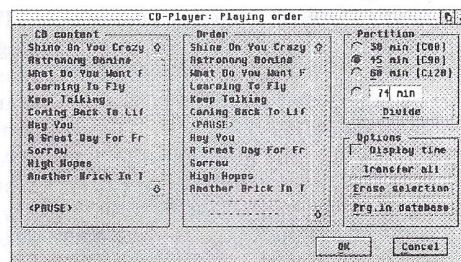
more usefully, using a built in export track function recorded to your hard drive (Your CD-ROM has to support this function, most up to date CD-ROM drives do).

The export track function allows you to pick the file type used - DVS, AVR, WAVE, SND or AU - when the track is saved as well as selecting between Stereo/Mono, 16/8 bit or whether you want the saved file compressed or not and its frequency. The frequency can be picked from a pre-defined list or you can enter your own value. CD-Player will then calculate the file size from the track picked or the block marked so that you can see what hard disk space you require. It's a very simple procedure and is idiot proof. This will prove to be just a toy to some but musicians will find it very useful indeed. Now you can get all the samples you want.

The average everyday user will find CD-Player's database facility and its cassette calculator far more useful.

Put a CD in the drive and CD-Player allows you to enter Artist and track titles. The next time this CD is used it will display the CD and track titles in its window. There's also a popup which allows you to pick tracks by name.

The cassette calculator is a really handy little feature. CD-Player will calculate for you how many tracks from the current CD will fit onto one side of a C60, C90, C120 or a custom size that you can enter. No more



running out of tape before you get to the end of the track. [Not that Kev would record the above CD - FFF]

CD-Player can be run as an accessory under normal TOS and works well as a program under Geneva and MagiC 4. I haven't tested it under MultiTOS but I'd assume it would work well there too. It can be used in conjunction with MetaDOS or ExtenDOS without problems. In fact in many months of use it hasn't crashed once. CD-Player is a truly excellent piece of software, you won't go far wrong with this.



# E-COPY

## THE ULTIMATE FLOPPY DISK UTILITY?

**E**-Copy is yet another German product translated into English and distributed in the UK by System Solutions. Packed in the usual A5 plastic wallet is a DD disk and spiral bound manual.

Following the installation procedure as printed in the manual I was surprised to see the installation had failed! You are asked to enter the serial number from the disk followed by "A keycode, which you have to invent, this is a private and personal code" - wrong! There's a keycode in addition to the serial number printed on the disk. Installation complete.

E-Copy is a disk copying utility which can run as a program or accessory and is multi-tasking aware. The main interface is sensibly organised with the commonly needed features on view and the rest tucked away in drop down menus. The interface is both attractive and functional with keyboard shortcuts for most actions.

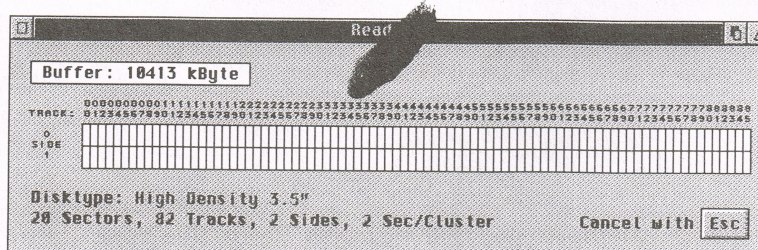
### The main display

Most of us have seen manual disk parameter settings in other programs such as Fastcopy 3. By increasing the number of sectors and tracks on a disk it's possible to squeeze every last extra byte of storage space from a floppy. Clicking on one of the preset format buttons you will see the disk parameter settings change to indicate

the relevant number of sectors and tracks. It's a shame E-Copy does not display the bytes each of these settings would create.

When copying E-Copy can be set to check the destination disk and only

copy to you disks. You can set up a GEMDOS hard drive partition as a buffer where data is written as a file during a copy action - useful if memory is tight. To protect against writing over valuable data there is an



format it if needed which is a good time saver. If used in conjunction with the Get Disktype option the destination disk will be formatted to the same settings as the source disk. If a standard sector size is selected (9, 15, 18 or 36) the Fast Format option can be used to speed up formatting of unformatted disks. Multiple Jobs is useful if you a pile of disks to work on - it's much more than a multi-copy option and can be used for writing, formatting and erasing disks. During copying, if the source disk is too large to fit into memory, E-Copy will read and then write the first portion of the disk to as many disks as your require. Pressing Read On will read the next portion of the source disk ready to

Analyse option. If enabled E-Copy scans disks for data before carrying out any destructive process (format, write or clear disk).

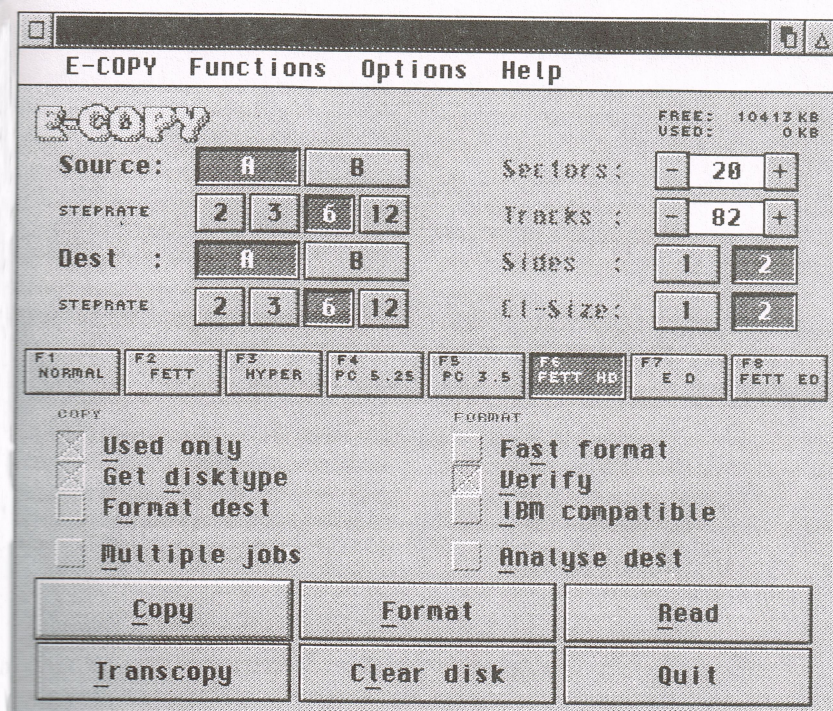
If you have a DD disk of data to copy onto a HD disk you'll like the Transcopy option. This reads the used sectors of the source disk into memory where the calculations are made to compensate for the new boot sector and FAT directory size before writing the data to the new disk. This also comes in handy to copy disks of the same density with different formats.

The quickest way to delete data from a disk is to erase its File Allocation Table (FAT) which acts as an index to what's where on a disk. It's much faster than deleting the files or re-formatting the disk.

During all functions a window containing an action bar is displayed to let you know how things are progressing. If E-Copy encounters an error - a bad sector for example - you will be warned, and depending on the task you are carrying out be allowed to take the appropriate action.

### E-Copy Action bar

Using the Read option you can read the contents of a disk into a buffer ready for copying. At this stage it's no different to using the Copy option. However once the data is in memory you can get E-Copy to create and save a 'DiskImage' file. This is a powerful feature because if the image is saved to a hard disk you can keep a \*.DIM library of all the disks you need to copy. Depending on your TOS version you could launch E-Copy by drag-and-dropping an image file, or install E-Copy as an application to





run when you double click on a DIM file.

The Boot Sector area is well covered with the ability to write an anti-virus to your disks. E-Copy will also check each disk you put in your drive for 15 of the most common viruses. Saving and loading of boot sectors is also available.

So there we have had a little stroll through some of the easy and useful E-Copy functions. I haven't mentioned E-Copy can handle Extra High Density [ED] disks - so long as you have a suitable floppy drive or investigated

user defined formats because most of it went way over my head!

Running E-Copy as an accessory on a single-tasking system you cannot run or quit other applications. You can however load an application like Papyrus and continue to write your masterpiece (or E-Copy review...) while the accessory is creating multiple copies of a disk in the background. All works well - the screen updates are a tad behind my non-professional typing speed but it is not obtrusive. From time to time you are prompted to insert the next

disk. I even managed to save this document to my hard drive while the floppy was being written. Excellent!

Using the 'Starter' utility which comes as part of the Window Commander package you can get E-Copy to be automatically launched and run a job. It's well worth writing the simple script required for each job you regularly have to carry out.

Overall a fine and professionally produced product well worth the asking price of £29.95



# STEWART v1.03

And now for a bit of fun! Sometimes software comes along which serves no real purpose but adds something to your system you no longer wish to be without. Stewart is such a program. Stewart was inspired by the Mac Copland interface (Get it? Stewart Copeland).

Stewart alters the way MagiC looks and I love it. It runs from MagiC's APPS folder and is configured from a dialog called by holding the [Alternate] key down and left clicking in the menu bar.

From here you can alter various parameters. For starters you can have the menus appear with a grey background with 3D text and Nicelines (similar to the Let'em Fly utility program or Geneva, the dotted lines normally found between menu items are replaced with more aesthetically pleasing solid lines. You can even alter the colour of the menu cursor so long as you're running 256 colour (or higher) resolution. Mac screen displays always have rounded, instead of square, corners so naturally Stewart gives you a

similar effect - I personally don't like this feature but the choice is there.

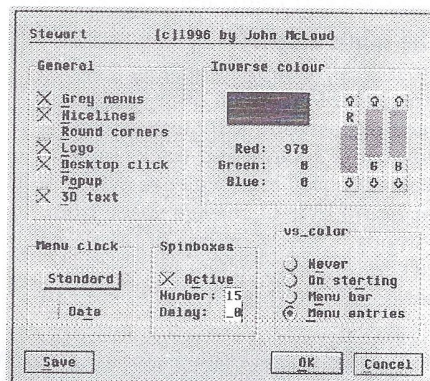
If you've ever been in the position where your desktop's been covered in windows from all your running applications you'll find the desktop click feature handy. A left click on any visible part of the desktop background and it's instantly topped.

You don't like the MagiC logo? Stewart can switch it off for you easily, no more getting your hands dirty in the MAGIC.INF file.

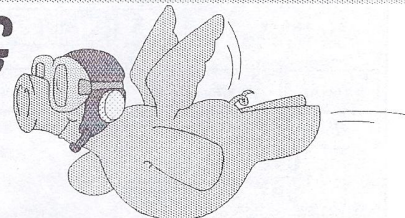
There are a few predictable incompatibilities - most menu clocks cannot cope with the grey menu background so Stewart provides a clock of its own. This can display the time digitally or using text - like the Fuzzy clock utility. Left clicking on the clock displays the current date.

Last but not least - and this is the feature that sold Stewart to me - are spinning dialogs. Forget the boring grow/shrink boxes supplied by Atari and replace them with Stewart's sexy spinning grow shrink boxes. These are fully configurable so they can be

made to roll onto the screen sedately or at high speed. I guarantee these will have you switching on your grow/shrink box options again - I was amazed to discover how few applications still support grow/shrink boxes these days. So come on programmers put 'em back.



Stewart offers a welcome injection of class and in the process transforms MagiC making it look even more professional - that's a recommendation in case you're in any doubt!



And pigs might fly!

As this is the first issue, we know it isn't perfect. You can help us get it right by completing the reader survey. We also welcome general feedback at any time.

Contributions, tips and even problems for our experts to answer, are always welcome.



# INTRO

Welcome to the cut down issue of Calamus User. In this two page taster we have included several segments which appear in the latest issue, just to whet your appetite.

For anyone who may not have come across our publication before, let me enlighten you. As the name suggests, Calamus User is a magazine dedicated to those using what must be the most widely used DTP package on the Atari.

Produced on a quarterly basis, each Issue includes a number of regular sections such as News, Question & Answer forum and Hints & Tips. In addition, there are two series of articles, with the first taking a look at Calamus Related PD, whilst the second entitled Creative Calamus demonstrates how to produce some innovative ideas.

Naturally, no magazine would be complete without a review section and we are happy to oblige with a series looking at the current set of add-on modules for SL.

In addition to the magazine, Calamus User also offers a large number of other services including our own collection of fonts and vector clipart; support for our subscribers via our telephone help line or Email, and there is much much more.

For anyone who wishes to subscribe to the magazine please send a cheque or postal order for £10.00 for 4 issues or £3.00 for the latest issue to:

*Calamus User, PO Box 148, Deal, Kent, CT14 7QN.*

Alternatively, please send a SAE if you require more information on all our services.

Regards

*Steve Llewellyn,*

EDITOR.

# Q & A

## Colour Printing?

Q From Bob Yates, Radcliffe-on-Trent

My setup currently consists of a pair of STE's (4Mb), an H-P Laserjet III, a mono monitor (Atari SM125 hi-rez)

I have recently obtained a second hand Canon BJC-600 colour printer; I have also located a printer driver suitable for outputting from Calamus SL to the printer. The only thing that worries me slightly is whether it is practical to print in colour without being able to see colour on the monitor? I have a feeling I'm overlooking some vital factor.

A Reply From Mike Hosking.

The important ingredient in these circumstances is your printer driver. Provided that is compatible (in colour) with your printer, the paper will output from your printer in colour despite the fact that you see the image in monochrome. This happens to me frequently, when I am running SL on my machine (Falcon030) in mono and, at some stage, need to output from the printer, in my case a

Stylus Color II, in colour. Provided I load the correct driver (I do, on occasions, forget!) the printed output is in colour.

## Outline Art 3 and SL Colour tables.

Q John Nicholls, Birmingham.

Whilst using the latest version of Outline Art 3, I have experienced a problem loading some colour (.CFT) tables.

Whilst some update the colour list, others do not appear to load at all. Can you help?

A

I think I know what the problem may be. Whilst Outline Art 3.0 can load colour tables generated from SL, it can only handle those which have been saved from earlier SL versions.

When the DMC programmers updated SL in 1994 to include spot colour, they not only changed the document format but also that of the colour tables. So I suspect that the Colour Tables you are having problems with are generated from a later version of SL.

# HINTS & TIPS

## Diagonal Headlines. 1.09/1.09n/S/SL/Win 95 /NT.

Whilst playing with Calamus one evening we discovered a simple way of producing diagonal Headlines by using the kerning option. So here is how it is done:

Step 1. First, Create a Text Frame (FBC/DEF).

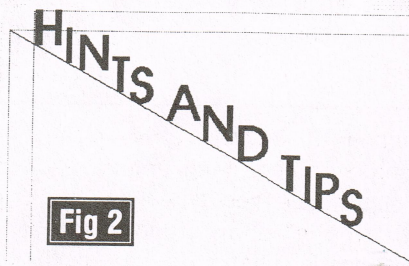
Step 2. Then type in the required text for the headlines and set the font attributes, such as size, colour, style.

Step 3. Next, create a Line Frame (L) using a diagonal line which should start from the first character (see Fig 1 opposite) within the Text frame. This will act as a guideline which will ease the kerning procedure.



Step 4. Activate kerning (ESC), Now using the Shift or Control and the Arrow keys you can now start kerning each character. Remember to stop at the guideline!

Once you have completed the headline it should look similar to that in fig 2 below, don't forget to remove the guide line before using the headline.



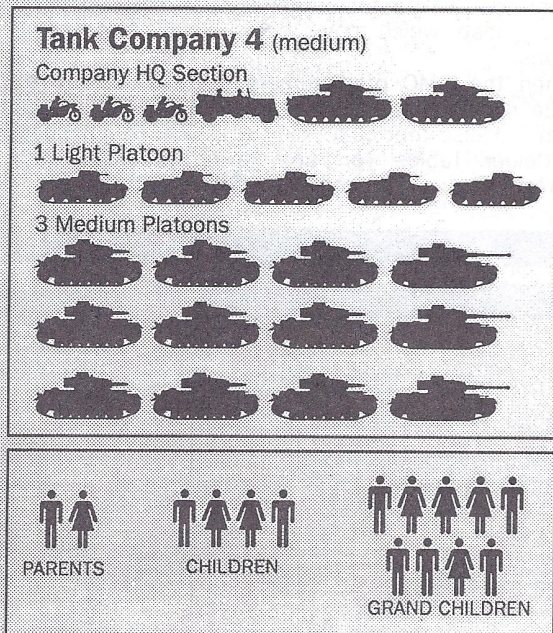


## IDEAL USES FOR SPECIALIZED FONTS

Every Calamus user has his favorite collection of type fonts, and the available supply continues to grow daily. For this reason many of us wonder why anyone would want to go to all the trouble of designing their own fonts. To be honest, unless you understand type design, you can get pretty frustrated using a font editor.

However, there is an alternate use for that vector font editor that does not require the expertise of a type designer. Since each character in a font is an outline drawing of that specific letterform, there is nothing to say it has to be type oriented. Draw a chicken if you want, or better yet, some sort of logo or dingbat that you are lacking. Above and beyond this, I would like to suggest a practical use for specialized fonts which may appeal to people with specific interests, such as bird watching, dog breeders, family tree researchers, etc.

As for myself, my interest in military history led me to design a "Tank Font" which held all the vehicles required to portray Rommel's panzer divisions on paper using Calamus 1.09N. These were eventually incorporated into a book on the North African campaign of WW2. Seen here is a small clip showing a single tank company which was typed in line



by line as: mmmF33, 11111, 4444, 4444, 4444. The heads and subheads were then set in regular type and added. Using this specialized type font (at 30 pt.) I was able to literally "type in" all my graphics on over 80 pages of divisional organization charts.

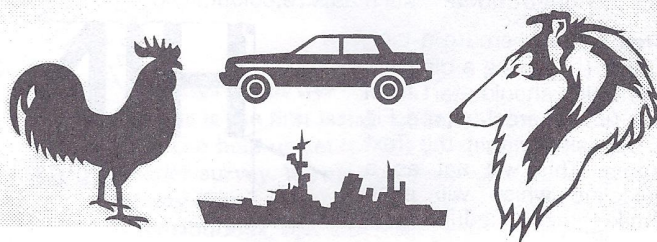
PARENTS	PROGENY
I PS + PS = PS	PS
II PS + TRS = PS M	PS M
III TRI + PS = M TRS	M TRS

The speed, uniformity and ease of altering sizes gave this method a great advantage over other options. The big joy was the ease with which you could go back into the font editor and alter any vehicle at any time if required. Each vehicle was given a key position and then I spent an hour building a chart showing which vehicle was on each key. With this chart in front of me I had no problem at all typing in what I wanted.

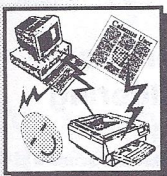
For those not interested in professional type design, a low priced Calamus font editor like FONTY or GENUS would suffice. Actually, you will be using the font editor as a simple draw program, where you can create key-oriented illustrations rather than type characters. Shown below, at about 100 point size, are samples of what kind of detail can be achieved within a simple font editor. Naturally, if you already own a quality font editor you have the best of both worlds, and will be able to achieve even finer detail.

If you don't have a scanner, you might consider tracing a screen sized representation of your object on cling film any clear acetate and adhering it to your screen. You can then use this as a template from which to trace your shape.

Once you have your basic shape and proportion correct you can then move into a larger zoom screen to clean up the finer details. Another great feature is that since there may not be too many character/illustrations in the fonts you build, they will hardly intrude on your available memory.







**£15.00**

### Productivity Pack one for SL.

The Calamus Productivity Pack comprises of a selection of Document Templates, Raster Settings, Colour Curves, Fonts, Document Setups, Reference Text files and Vector Clip Art, all of which have been designed to provide a valuable reference to any SL, Win 95 or NT user.

Whilst the original templates were produced in US Letter format, UK users will be please hear that Calamus User have re-formatted many of these documents into the more favourable A4 format. These Templates include documents for Business, Personal, Music, Invoices, Purchase Orders and much more.



**£ 10.00  
Per Volume.  
£ 25.00  
all 3 Volumes**

### USER to USER Hints Vol 1,2 & 3.

The USER to USER programme has been highly successful in both the USA and Canada, and is now available to European Users of Calamus SL through the Calamus User Magazine.

USER to USER files are written by Calamus SL owners like yourself. The authors have presented their work to assist other users and, at the same time, have earned discounts on their own future purchases from MGI Software in Canada. This is hoped will be continued throughout Europe. Each volume contains lots of useful hints, tips and tutorials, and are highly recommend to everyone, regardless of their experience with Calamus SL.

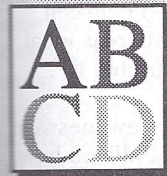


**£ 3.00  
Per Disk.**

### Mix 'N' Match PD Fonts.

CALAMUS USER is at present building a definitive library of Calamus PD fonts and have at present over 650 fonts listed on our database which is growing every day. An ascii text file containing the current list of fonts in our library can be obtained from us directly by send a blank disk and 2 x 1st class stamp.

Any of the listed fonts can be purchased from us on a Mix 'N' Match basis. All there is to it. You pay £3.00 and choose any 20 fonts.



**£ 3.00  
Per Disk.  
£ 20.00  
Any 8 Disks.  
£ 64.00  
All 32 Disks**

### SERIOUS TYPE Font Collection.

If you are looking for new fonts for use with Calamus, but don't want to pay a fortune, then look no further than our Serious Collection. The Serious Type Collection includes over 330 Calamus fonts available on 32 disks and offer quality fonts at an affordable price.

These fonts can be used to give any document the look that will stand out from the crowd. Many of the fonts in this collection are included as whole families, something that other collections tend to neglect.



All Cheques or Postal Orders should be made payable to:

**Calamus User**

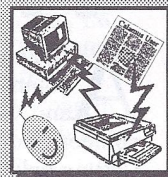
✉ PO Box 148, Deal, Kent, CT14 7QN.

☎ Helpline:01304-369364

All prices include postage and Package within the UK,  
Europe and the rest of the world add £5.00 (except for subscriptions).

### Productivity Pack one for 1.09.

For those using Calamus 1.09 and 1.09n who may feel left out by the release of the SL Productivity Pack. We are pleased to announce the release of the 1.09 and 1.09n compatible version. This unique pack comprises a selection of Document Templates, Fonts and Vector Clip Art.



**£15.00**

### The Definitive Calamus PD Font Guide.

With the large quantity of Calamus fonts currently available within the public domain and the great interest shown in our own Mix 'N' Match PD font collection, we at Calamus User have endeavoured to produced a definitive guide which, we hope, includes most of the PD fonts currently available. This A4 Guide has been designed so that each entry shows all the characters available within that font, thereby making it easier for the user to choose the right font for any job. Also included is a list of duplicated, incomplete and fatally damaged (i.e they won't load) fonts. Furthermore as more PD fonts become available, we will be releasing an upgrade, to update this definitive font guide.



**£10.00**

### The Outline ART 3 Guide.

For anyone using DMC's Outline ART 3.0, our printed guide will be a welcome addition to this vector art package. Originally produced by Calamus user Mike Hosking, this disk-based guide was available as a Calamus SL (94 version) document. This format caused problems for some potential user.

Firstly, the user would require the latest version of Calamus SL (94 or 95 version) to load and output this document to their printer, thereby restricting it's output to those with the later versions. Secondly, the printed output would only contain a single sided page per sheet thereby making the final printed guide rather sizeable. So to overcome these problems, we at Calamus User have re-produced this guide in a A5 hard copy format which is ready to be placed into any standard A5 binder, thereby offering a useful reference to all OLA 3 users.



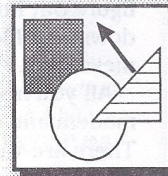
**£10.00**

### SERIOUS ART Vector Clipart Collection.

The Serious ART Collection at present includes over 100 disks of Black & White and Colour images in Calamus CVG format (with more to follow). All of these have been designed to add impact to any Calamus document, and because they are in vector format you will be able to scale them to any size without losing their original quality.

Each disk has been Categorised for ease of use and at present Include;

Aircraft(5), Animals(8), Banners(1), Birds(3), Borders(2), Business(6), Cartoons(15), Cats(3), Celebrations(4), Children(3), Computers(1), Design(8), Dogs(3), Education(2), Fantasy(22), Food(8), Headlines(2), Household(4), Insects(1), Landmarks(9), Law(4), Leisure(3), Men(62), Medical(6), Military(4), Music(3), People(9), Religion(4), Sealife(), Ships (3), Signs(6), Space(4), Sport(11), Travel(2), Tools(3), Transport(11), Xmas(4). (No of Disks)



**£ 3.00  
Per Disk.  
£ 20.00  
Any 8 Disks.  
£ 64.00  
All 32 Disks**

### Magazine Subscriptions and Back Issues.

#### Annual Subscription (4 issues)

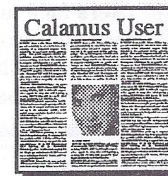
UK £10.00, Europe £12.00,  
Rest of the world £14.00.

#### Single current or Back issues

UK £3.00, Europe £3.50,  
Rest of the world £4.00.

#### Five Back issues

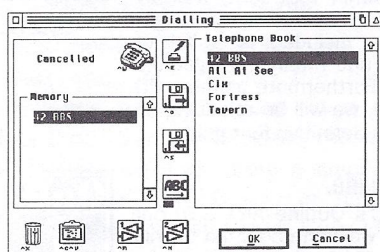
UK £12.00, Europe £14.00,  
Rest of the World £16.00.





# THE 42nd PROTOCOL

Atari enthusiasts are a rare commodity. If a PC goes wrong and you shout loud enough someone you'll get plenty of help. Getting help setting up an Atari isn't so easy. Magazines are a vital source of news and reviews and user groups have their role to play but if you need help urgently by far the best way of getting is to ask on-line. Modems have never been cheaper with state of the art modems costing less than £200 and perfectly adequate 14,400 modems changing hands for around



▲ Dial options in Connect

£50 second hand. Messaging in the local or networked areas is one of the easiest ways to make contact with people who have a common interest.

Despite the techie image comms has most newcomers don't seem to have much trouble logging on to a BBS using one of the terminal programs given away on cover disks or supplied by PD libraries. Once connected most everyone seems to figure out how to find and download files but only a few get into messaging.

All you need to get started is a modem and some terminal software. There are various alternatives to choose between, ConNect, STalker, Teddy Term, Freeze Dried Terminal and many others. Most people seem to find Teddy Term easy to setup and use and it supports the Zmodem transfer protocol which is the de-facto standard transfer protocol these days so why not give it a try first?

Time spent reading the documentation saves time on-line. The most common problems new users face are setup errors in the terminal program. Leave the defaults unchanged but make sure the upload and download paths point

Area	Area Name	Total	Year
0	42BBS	686	184
1	42BBS	325	325
2	42BBS	18	18
3	42BBS	599	599
4	42BBS	62	62
5	42BBS	58	58

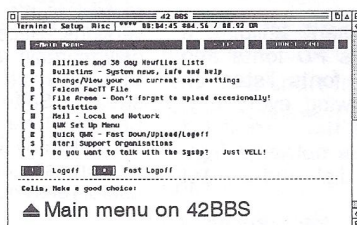
▲ Message area selection in Kivi

**Colin Fisher-McAllum, SysOp of 42BBS, offers some encouragement and advice for anyone considering their first logon...**

somewhere sensible. Select an appropriate baud rate (19,200 is a safe bet), screen emulation (VT52) and make sure the transfer protocol is set to Zmodem. It's worth jotting these down because the first time you logon to a BBS you'll be asked some questions about your terminal settings. While most SysOps are happy to help new users make sure you read the terminal program manual/readme.

## First contact

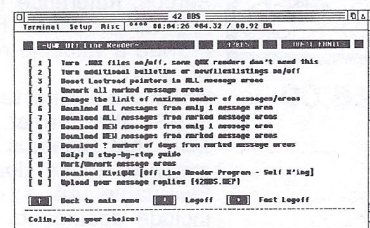
Just like learning any new application it takes time to find your way around a BBS - don't expect to run before you can walk. The first screen after the logon procedure usually contains all the options to navigate the board and access other areas. Look for the Bulletins or Information options, these usually contain text files to help you get the best out of the BBS.



▲ Main menu on 42BBS

The single biggest mistake people make is to read messages live on-line and it's one of the main reasons people believe being on-line is expensive. Almost everyone these days uses an off-line reader (OLR) to keep the telephone bill under control. Basically you select message areas you fancy reading and the BBS packs the messages into an archive which you download and then log off. Off-line your OLR extracts and files the messages in the appropriate areas ready to read and reply to.

The most common OLR system in use today is called QWK. All Atari BBSs support this system so you'll need a QWK compatible OLR. KiviQWK is the most popular OLR, it's actively supported and works in a multitasking environment. The older MT-QWK is still very good for use on single-tasking STs so the choice is yours. Setting up a QWK session with a BBS is straightforward if you follow the on-line prompts and remember to



▲ QWK Setup menu on 42BBS

read any help texts the SysOp has made available.

I'd recommend anyone new to comms "lurks" for a while before posting messages. Lurking gives you a chance to familiarise yourself with the conversations, the other participants and how things are done. This should ensure your first comments are "on topic", relevant and welcomed. Every message area has its own "Echo rules" which must be obeyed and these are posted regularly. People paying to download a DTP area are likely to get upset if you start wibbling about the National Health Service. There's an appropriate message area for every imaginable topic so there's really no excuse.

After writing your first replies they are archived into a reply package with a REP file extender and this is uploaded to the BBS next time you log on. Your messages are posted into the message areas where everyone taking the areas can read them. Some message areas are networked and bounced between BBSs on the network whereas local message areas are restricted to callers to the BBS.

Restrict yourself to a few message areas until you get a handle on how the system works, some areas can be huge and you'll be in for a lengthy wait while your messages are packed and downloaded if you're not careful. Some BBSs offer an off-line packing option which means you don't have to hang around on-line while your QWK packet is archived and it's worth investigating this when you become a regular on a particular BBS.

With a little thought and planning using a BBS is not expensive. Remember you're a guest of the SysOp and other callers may well be waiting to logon so look after your BBS and it will prove an invaluable resource.



# Q&A

**You supply the questions - our team of experts sets about solving them!**

## Mac to ST

**Q** At school I use an Apple Mac Performa 460 with the following software, At Ease, Finder, Photoshop, Brush Strokes and PC Exchange. I created a lot of good art work on the computer for my exam and now I want to know how I can view these pictures on my own STe computer. My STe has 2.5Mb of RAM. One method I used was to use Fastcopy III and format a disk to 10 sectors and 81 tracks. Then on the Mac from Brush Strokes, saved the pictures as a TIFF compressed picture. Then using Photoshop I loaded the pictures in and saved them out as TIFF files with LZW compression in a PC byte order. But when I tried to load the pictures up on my STe, the programs wouldn't load it, not even Imagecopy 3. What can I do?

**M Redina**

**A** TIFF graphic files are a very popular cross platforms format which can support many different types of graphic from monochrome to true colour images. TIFF images can be compressed in several formats. The two most popular are RLE and LZW and the latter is the most commonly used. Some programs give you the option of saving TIFF files in either Intel format or Motorola format. If you are saving a TIFF file for viewing on an ST you should select Motorola format if you are given the choice. You will also be able to view these files on Macs, Amigas and NeXT computers. If you want to view the TIFF on a PC, select Intel format.

Imagecopy 3 handles most types of TIFF file - in both Mac and Intel formats - but some programs don't always follow the rules when saving TIFF files. For maximum compatibility with your Atari, save the file uncompressed in Motorola format. If you find that the files are now too large to fit onto floppy use the LZW compression option. Hopefully you will now be able to view your artwork on your STe using Imagecopy 3.

One thing that does occur to us is

that a disk formatted to 10 sectors and 81 tracks won't be read by a Mac but as you seem to have got the TIFF files across, we're a little puzzled by that one. Also be careful with Photoshop generated TIFFs, as they sometimes contain a preview image for the Mac's operating system. Turn this option off and you might have better luck. Alternatively you could look for a different format - GIF for 256 colour images, JPEG to reduce the size or even Windows BMP

## Outside in

**Q** Please could you help me with some advice on two queries I have, the first concerns getting Outside v3 memory manager to work with Papyrus Gold. My system is a Falcon 030 4Mb with an external SCSI drive, I have set up a 40Mb virtual memory partition and set outside FLAG.PRG to force Papyrus to use fast load and alternative memory, but when I load a document into Papyrus it locks up and crashes with memory problems. And secondly how can I tell if my DSP chip is working properly, because when I use Brainstorm's JPEG decoder with Imagecopy, the decoder loads correctly but when it comes to viewing a picture all I get is the busy bee icon and that's it. Plus when using Falcon CPX DSP functions (DSP stop and wait) a DSP error occurs. My computer originally had TOS 4.02 in it, but I upgraded to TOS 4.04 from Compo and profile shows DSP not in use.

**T Yusuf, London**

**A** Outside and Papyrus don't get along I'm afraid. We've tried on several occasions to persuade the two to work together. If there are any readers out there who know different please let us know. You may have trouble having 40Mb as virtual memory. We've found that keeping to the 14Mb maximum memory limit of the Falcon makes Outside far more reliable. It certainly sounds as though your DSP chip is faulty. We would test the chip using Audio Fun Machine. The DSP sound manager that came with your Falcon. If you still have trouble, contact your local Atari repair shop. Someone like System Solutions on 0181 693 3355 should be able to help.

## Medium res muddle

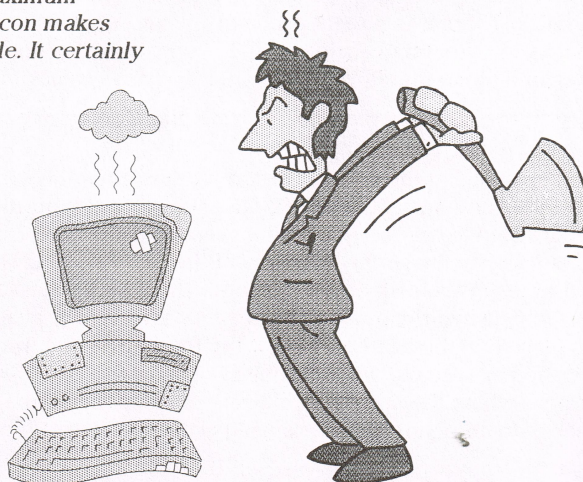
**Q** I remember reading somewhere how to edit the DESKTOP.INF file so TOS 1.6 will boot into medium res. The info stated that by carrying out the editing the computer tries to load in High and because no High resolution monitor is available medium resolution is used instead. Can you throw any light on this?

**R S Clewer, Peacehaven**

**A** You don't have to get your hands dirty and edit the DESKTOP.INF file. There's a program called STE\_FIX.PRG you can copy it to the Auto folder of your boot disk. Once your STe has started change to medium resolution and save the desktop. This will write your current desktop configuration into the DESKTOP.INF file correctly. It should now boot up into medium res.

If you really want to edit the DESKTOP.INF file manually here's how to do it. Load the file - it's found on the root directory of your boot disk - into a text editor such as Everest etc. If you haven't got a text editor a normal word processor will do providing it can save ASCII files. In the file menu of your word processor it will say either save as ASCII, save as text or export. Don't save the file from your word processor normally as it will add control codes to the file and the DESKTOP.INF will not work.

Once you've loaded the file look for a line starting with #E. At the very end of this line there will be a 1 or a 3. The whole line looks something like this: #E 18 11, as you can see here we have a 1 at the end. Simply change this 1 to a 2, meaning medium res. The line should now look like this: #E 18 12. Save the DESKTOP.INF file as ASCII and reboot your computer. Remember if you don't use STE\_FIX.PRG when you next save the desktop this line will be changed by





the infamous TOS bug and you'll have to start back at square one.

## DTP

**Q** Having tried many desktop publishing programs, I always come back to WordFlair which I find does everything I want with ease. I have an STe with 2Mb of memory and a Star LC24-100 printer. Using SpeedoGDOS on one disk, with a file containing about six fonts and the printer driver, this file loads into a RAM disk (automatically set up in the Auto folder) of about 600k. Then on a separate disk, I load the Word Flair program with the ASSIGN files etc edited to show where the fonts and drivers are (RAM disk). I then have a very good quality word processor/DTP which works fine. Problem! When I'm printing, the output is painfully slow. Question - would it be significantly faster using NVDI? PS Not all Atari people are youngsters, I am enjoying my retirement!

**P M Lavin, Newport**

**A** It would be faster but not significantly so. The minimum system requirements for NVDI 3 are 1Mb of memory and a hard drive, if you want to use vector fonts. For NVDI 4 the recommended memory increases to 2Mb with a hard drive. Both versions of NVDI can work in 512k of memory if vector fonts are not used. For your current system we would advise you to stick with your working SpeedoGDOS setup - it might be slow but at least the quality is good. The great thing about the Atari computer is that it appeals to all age groups. May you go on enjoying your retirement and your Atari for many years to come.

## Shared misery

**Q** I have the misfortune of having to share my STe (2Mb) with two teenage games fanatics. There was no real problem, thanks to parental over-ride, until I bought a mono monitor (SM124) and

a hard drive (Mini-S with Translator). We now find that we have to unplug the monitor and the drive, otherwise the games will not run. We use a colour TV for the games. What causes this and is there any way round avoiding the inevitable wear and tear on the terminals? I also use Pro 24 and Masterscore, which both use dongles. Is there a way of connecting both of them to the cartridge port?

**I Clabburn, Daventry**

**A** There is a partial solution to your first problem. You can use a device known as a monitor switch box. This will allow you to switch between your colour TV and SM124 monitor without unplugging the leads. To do this though, your TV must be equipped with a SCART socket so that it can use the ST's monitor port. The leads from your TV's SCART socket and monitor plug into the switch box and this plugs into your Atari's monitor port. You can then switch between the two before switching on your computer. A few Atari users may have had some success using a switch box with the TV plugged into the RF port. As a rule though this tends to cause interference and is not recommended. In our experience most games work with the hard drive connected but switched off. Try each of the games in turn to see which

ones take a dislike to your hard drive. This should reduce the number of times you need to disconnect it. System Solutions sells a device called a Cart Master. It plugs into your ST's port and provides a further four cartridge plug in points. It is provided with a small piece of software so that you can switch between cartridges easily. As you only need space for two extra cartridges its baby brother, Cart Master Lite, may be more use. Cart Master costs £119.96 and the Lite versions costs £59.95. Both prices include software. System Solutions can be contacted on 0181 693 3355 and will also be able to help you with the monitor switch.

## Game over?

**Q** I'm concerned the supply of games for my Atari 520STFM is drying up. I would very much appreciate it if you could give me information about obtaining budget games such as North and South, Double Dragon and any other new and old games for the ST. I would be very grateful if you could help me out with info on obtaining this software.

**D Owen, Anglesey**

**A** Getting hold of games for the Atari can be a problem especially if you rely on the main high street suppliers. Walking into a high street computer shop these days is only likely to cause a great deal of merriment to the smug-looking PC owners who hang around them. Car boot sales are a good source for old Atari classics but don't despair. We've spoken to a few suppliers and most have many old classics in stock complimenting their newer inventory. 16/32 Systems (01634 710788) can supply Cool Croc Twins, Bonanza Brothers, Die Spy and Exile to name but a few in the classic range. Cannon Fodder, Premier Manager and the Ishar series are

## TACKY TIP

When changing the internal disk drive it is often the case that tutorials or instructions specify the shielding around the circuit board should first be removed. I guess that the main reason for this exercise lies in the tendency of the three spacing washers underneath the disk drive to fall into the darker recesses of the machine when the new drive is being positioned. If a small blob of blue tack is placed on the head of each of the three drive securing nuts which are then pushed or screwed gently through the spacing washers, they will retain their places whilst the new drive is being positioned and the only shielding that needs to be removed is the small part at the rear of the drive.

**M L Stean, Islington**



among the more up to date games available but they require 1Mb of memory. We also suggest you try Goodmans (01782 335650) which has released Ego. The company also has a few copies of Lemmings left, among others. Merlin (01452 770133) has Badlands, Strider, Shuffle Puck Cafe and Z Out in the old classic stable. Its newer games are again 1Mb. These include League Manager, Alien Thing and The Power and Gory. You are slightly restricted in the games you can play by your available memory. To play the most recent releases you really need an upgrade to 1Mb or beyond. You don't mention whether your floppy drive is double-sided or not. All new games and many old classics require a double-sided drive. All these suppliers have many other games available, too many to list here, so it's worth ringing the suppliers I've mentioned to see what else you can find.

### Falcon memory

**Q** I have a 4Mb Falcon030 but I've no idea what memory board is installed because I've never opened the machine. I'm considering upgrade the memory and wonder if I can use the same memory board, taking out the 4x1Mb chips and replace them with 4x4Mb chips? If I can't do this and need a replacement memory board what am I likely to need and how much is it going to cost me and where can I get one from? I'm also confused by all the different descriptions of memory (30 pin, 72 pin, 3 chip, 9 chip, 60, 70, 80ns, parity and non-parity etc) and would appreciate any explanation...

**Dale Wright, dale1@CIX**

**A** The memory board is likely to be the original Atari 4Mb board or, if you're lucky, either the 'Falcon Wing' or 'Actionsoft' boards. If you have an Atari 4Mb board the memory chips soldered on board and your best option is to sell this and buy either of the alternative memory boards.

The Falcon Wing has four 30 pin (Single Inline Memory Module) SIMM sockets which can optionally be filled with four 1Mb 30 pin SIMMs or four 4Mb 30 pin SIMMs, in which case you can easily upgrade either by trading in or selling on your 4x1Mb SIMMs and replacing them with 4x4Mb SIMMs. The Actionsoft board has a single 72 pin SIMM socket which can take either a 4Mb 72 pin SIMM or a 16Mb 72 pin SIMM. Due to the Falcon hardware design both boards 'waste' 2Mb when filled with 16Mb, taking

your Falcon to 14Mb. The speed of the memory, measured in nanoseconds (ns) isn't important on standard pre Falcon Atari machines but on the Falcon use SIMMs rated at 80ns or faster otherwise you may experience intermittent crashes. System Solutions supply both the Falcon Wing and Actionsoft boards at £49.95 each.

Another alternative, is to keep your existing board, and add an FX030 card, this allows you to add fastRAM. You can have combinations of 1Mb or 4Mb 30 pin SIMMs on the FX card. For example you could install 2 x 4Mb plus 2 x 1Mb SIMMs on the FX card giving a total of 10Mb fastRAM in addition to the 4Mb standard RAM already on your memory card. Although this is a more expensive approach it offers various acceleration and resolution options.

### Rescue

**Q** First I would like to produce artwork for small colour posters and flyers. Is there any software suitable for this purpose? Second, if I obtain a font cartridge for a Star will I be able to get extra fonts? If so what software will I require? Any other advice regarding software (DTP, WP, etc.) will be gratefully accepted. Next I am thinking of upgrading to 2Mb - is this over the top? Finally I am not a complete duffer but I am a beginner and do not understand all the terminology yet. Please can we have explanations especially for some of the abbreviations. I'm sure you do not want to lose prospective Atarians due to our lack of knowledge.

**T Berry, Merseyside**

**A** Firstly, the ST is quite capable of running in 16 colours without any further hardware add-ons. With a colour TV, you can change between low and medium resolutions. ST low resolution has 16 colours at 320 by 200 pixels, while medium resolution has only 4 colours but runs at 640 by 200 pixels. A monitor will give you a fresher,

sharper picture but no more colours. There's oodles of software you can use to create documents in colour and we advise you to get hold of Imagecopy. This marvellous utility will drive your printer to the limits and produce spectacular output from almost any colour graphics file. Fitting a font cartridge to your Star printer will allow you to access extra fonts but not easily on your Atari - it's not a cost-effective way of adding font capability. Timeworks 2 is a good introduction to DTP and it will run nicely on your present system, and you could also look at Papyrus which can do coloured text. For both of these packages, and for DTP in general, at least 2MB of memory is recommended.

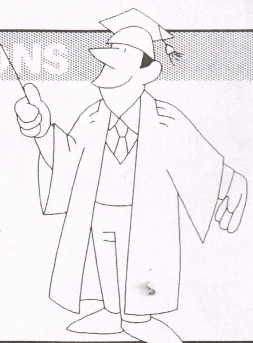
You can incorporate colour graphics in your work using Imagecopy 4 (from Fast Club on 0115 945 5250) which fully supports your colour printer and can be set to print pictures anywhere on the page. In conjunction with your DTP package you can design a poster or flier leaving gaps for your colour work. You can then use Imagecopy's page layout function to add the colour pictures. Textstyle is supplied with Imagecopy 4. This program uses Calamus fonts to create fancy headlines which can be printed using Imagecopy. Calamus fonts are of the vector variety and this means they can be resized with no loss of definition. Calamus fonts are available from all good PD/shareware libraries. You could even colour the headlines using a simple art package such as Degas or HyperPaint. It will run in lower resolutions but some dialog boxes may not appear on screen correctly.

Finally we don't want to put beginners off but we'd annoy other readers intensely if every time we used the acronym "RAM" we put "Random Access Memory" in brackets afterwards. We have to assume a certain level of knowledge but it is a problem to know where to draw the line.

**Brian Robson, brobson@CIX**  
**Barry Wilson, wilsonbjb@CIX**

### SEND US YOUR QUESTIONS

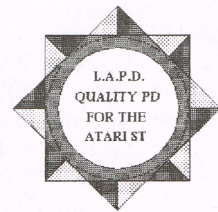
Our team of experts are on hand to investigate and solve almost anything you can throw at them. Send your letters to: Atari Computing Q&A, 65 Mill Road, Colchester, Essex, CO4 5LJ, England. Alternatively, email them to: [acg@inactive.compulink.co.uk](mailto:acg@inactive.compulink.co.uk) While we will do our best to answer your question within the pages of Atari Computing we cannot enter into individual correspondence.





# L.A.P.D.

P.O. BOX 2  
HEANOR  
DERBYSHIRE  
DE75 7YP  
UNITED KINGDOM



TELEPHONE: 01773-761944 or 01773-605010  
VOICE AND FAX ON BOTH NUMBERS

e-mail: clive@lapd.demon.co.uk  
leigh@lapd2.demon.co.uk

Public Domain, shareware and licenceware software library  
QUALITY SOFTWARE AT SENSIBLE PRICES

ALL DISKS BELOW ARE JUST **£1.50** EACH UNLESS OTHERWISE STATED

## GAMES

### ARCADE

G.469 ASTRO 2000: A re-working of the classic Asteroids' arcade game  
G.473 BLUDGUSH: Blast enemy soldiers that dare to appear on your monitor screen  
G.474 ISLAND STRIKE - THE ULTIMATE CONFLICT (1mb). An eight way scrolling, joystick controlled game of helicopter combat.  
G.466 ZAPTASTIC 2 (S/W): A fast action arcade blast in the style of Llamatron.  
G.467 BANG & BLASTMAN (1mb): Explosive two player Bomberman action (2 joysticks)  
G.468 SUBAQUA (S/W, Falcon compatible): Highly rated underwater shoot'em up.  
G.449 MICHIGAN MIKE & THE LOST CITY OF ZOROG: Super new platformer in the rain forest  
G.454 TRAPPED II: Ten levels of fast Light Cycle' action (1mb, STE, S/W) (Order G455 for STFM)  
G.448 H.E.R.O.: Human Extraction & Rescue Operation: One time commercial platform game  
G.450 THE ORIGINAL: Colourful Boulderdash' type diamond mining puzzle game  
G.457 DEADLAND: Search and rescue mission Cannon Fodder' style.  
G.460 SKYDUEL: A single or multi-player air combat game; ballistic missiles, dogfights and ground attacks.  
G.433 GENOCIDE (1mb, STE, S/W): Fast space 3D shoot'em up  
G.417 STAR VOYAGE (2 disks/£3.00, 1Mb) : Intergalactic action - requires 2 joysticks (Ex Star Trek - TNG).  
G.413 COMBAT: Fast action military shoot'em up in style of Operation Wolf  
G.410 PACMAN ON E: One or two player classic 'PacMan' with sampled music(1mb, STE)  
G.405 ULTIMATE ARENA(STE, 1Mb, S/W): Beat 'em up in the style of 'Mortal Kombat'.  
G.403 SQUARE OFF (STE, 1Mb) (2 disks/£3.00): The ultimate tumbling block 'Tetris' game.  
G.398 ASTEROIDIA (STE) (1Mb, S/W): Classic asteroid blasting action - order G399 for STFM version  
G.395 DYNABUSTER: Bomb laying and dodging arcade game (STE, 1Mb).  
G.366 DAVE MUNSIE GAMES: 9 games from the master programmer, including Frogger (1Mb).  
G.355 WING LORD: Aerial duelling game in the style of the classic 'Joust'.  
G.380 STARBALL: Pinball game - arguably the best PD game on the ST!  
G.286 ROCKFALL - SPECIAL EDITION: Tunneling/diamond collecting puzzle game.  
G.80 TETRIS & PILE UP: Two very good versions of the 'Tetris' arcade game.  
G.171 HACMAN II: 1 megabyte version of PacMan, 100 new levels!  
G.110 LLAMATRON: 100 levels of fast arcade action with wicked sound FX.  
G.201 BLAT!: 'Tetris' style three in a row, falling blocks with many added features.

### FANTASY/ROLE-PLAY

G.425 ANORAKS OF DOOM (2 disks/£3.00) :First person view fantasy role-playing game  
G.172 HERO II: Detailed graphic role-play adventure (1mb)  
G.416 DANGIMERE (1Mb, 2 disks/£3.00) Detailed fantasy role-playing game.  
G.412 NISHIRAN (1Mb) (2 disks/£3.00) Classy sci-fi, first-person view role-playing game..  
G.198 OMEGA: A large and complex wilderness and

dungeon adventure with hours and hours of play (1mb)  
G.431 REALMS OF REALITY (1mb): First-person view dungeon exploration and monster-bash.  
G.351 TOWERS (2 disks/£3.00): First-person view role-playing fantasy adventure game(1Mb)  
G.452 LAP OF THE GODS (1mb, mono, 2 disks/£3.00): Complex German language fantasy role play game  
G.308 WALLS OF ILLUSION: The ultimate 'Dungeonmaster' clone with English instructions (1Mb).  
G.5 MORIA: A complex fantasy D&D based role-play game. (1Mb).  
G.370 MINDMELT: Fantasy adventure with an overhead view.  
G.288 DARKLYTE: 'Space Crusade' type droids wargame.  
G.237 CHAOS: Madcap game of battling wizards by Martin Brownlow (1Mb or 0.5Mb - state which).  
G.262 ALIENS!: Space Marines v Aliens strategy combat game.  
G.115 MYSTIC WELL: Complete 'Dungeonmaster' style adventure game.

### PUZZLES

G.469 ASTROQUEST: A quiz program with over 500 astronomy related questions  
G.461 SHAPE UP (1mb, STE): A puzzle game of placing coloured squares on a grid  
G.436 SHRINKING WALL SOLITAIRE (1mb): Challenging and addictive Match it' type game.  
G.443 WORD QUEST: Construct and play word squares. Over 50 puzzles on disk  
G.446 THE FRENCH COLLECTION: Three puzzle games; MANCIOLA, QUINZAIN & MOLECULE.  
G.387 SPACESWEEPER: A challenging 'Mine-sweeper' game in three dimensions!  
G.311 JIGSAW: A computerised jigsaw puzzle (1Mb).

### TEXT ADVENTURES

G.158 LOTTERY: Adventure in the red light district of San Francisco  
G.411 ROBOT REVOLT: A sci-fi text adventure.  
G.162 AROUND THE WORLD IN EIGHTY DAYS: Try to emulate Phineas Fogg.  
G.184 HEATHER'S EASTER EGG HUNT: Adventure for 7 to 12 year olds.  
G.394 THE SECRET PARK: A text adventure with graphics for children 8 years upwards  
G.225 CAILYNVORN: D&D type fantasy adventure set on a far earth-like planet.  
G.140 A NIGHT ON THE TOWN: An adventure with the opportunity to meet the girl of your dreams and ...well, the rest is up to you.  
G.91 QUEST FOR THE HOLY GRAIL: Pythonesque madcap humour.  
G.202 UNNKULIAN UNDERWORLD: Highly rated large scale text fantasy adventure.

### GRAPHIC ADVENTURES

G.383 MOBSTERS' CITY: Track down twelve gangsters.  
G.246 HYSULA: 3D virtual reality fantasy adventure  
G.217 THE MAZE: 3D adventure game loosely based on 'The Crystal Maze'.  
G.321 INVESTIGATION (2 disks/£3.00) Graphic adventure in the style of Sierra On-Line  
G.200 ANARCHY ACADEMY: 3D graphic adventure to blow up the school!  
G.222 GRANDAD AND THE QUEST...: 3D graphics adventure by Ian Scott. Shareware (1Mb).  
G.303 GRANDAD AND THE SEARCH FOR THE SANDWICHES: (1Mb, 2 disks/£3.00).Graphic adven-

ture

### STRATEGY & OTHERS

G.437 BINGO! (1mb): Simulation of the seaside game with voice.  
G.432 MIDI-WIZ: Fantasy war game with similarities to 'Civilisation'. (1Mb, S/W).  
G.131 STAR TREK - THE GAME: Defeat the Klingon threat to the galaxy (1Mb).  
G.427 AIR TRAFFIC CONTROLLER: Control comings and goings at a busy international airport.  
G.386 STAR TREK - KLINGON WARS: A Starship Enterprise battle simulation (1Mb).  
G.421 WAR: A wargame construction kit. (1Mb).  
G.390 INTERNATIONAL MANAGER: European Nations/World Cup management game.  
G.391 ANCIENT GAME OF GO: Two computer versions of the Oriental game (Gnugo, Amigo).  
G.344 CHESS-MATE: A chess/draughts game analysis tool.  
G.332 CAESAR: Strategy game set around the Mediterranean in 200BC (S/W).  
G.330 GNU CHESS: French chess playing program for all levels.  
G.388 STRATAGEM (2 disks/£3.00) Two player strategy world war game.  
G.329 PEGASUS (1Mb, 2 disks/£3.00): Space strategy game. Seek out and colonise planets.  
G.287 THE COARSE ANGLER: Angling simulation game (1Mb).  
G.324 IMPERIAL CONQUEST: Complex ancient Mediterranean game of conquest (S/W).  
G.325 SOCCER MANAGEMENT: A complex simulation of soccer management (S/W).  
G.173 PENGUINS: Move your penguins around the screen 'Lemming' fashion.  
G.10 VEGAS: Roulette, poker, blackjack and slots... without the Nevada sand!

### BUDGIE UK

BU.119 FOOTBALL TACTICIAN 1: The original £19.95 Premier League version of the soccer management game!  
BU.111 INTERNATIONAL CRICKET II: Animated 3D game (1Mb).  
BU.90 MATCH IT: Possibly the most addictive game ever devised.  
BU.89 HORSE RACING SIM: Quality sim from the sale ring to the track.  
BU.71 DARK WARS: Role-playing adventure with a 3D view.  
BU.70 PACMAN ST: The definitive version by Robert Leong.  
BU.50 SPACE INVADERS: Classic arcade action by Robert Leong.  
BU.30 QUEST FOR GALAXIA: The "Galaxians" return to your ST.  
BU10 MONEYSPINNER: Slot machine action with nudges, holds, gambles and more.  
BU.8 SPECULATOR: True to life futures market simulation.  
BU.5 PRO DARTS: Mouse controlled 501 match play.

### ART & GRAPHICS

A.99 MINIPICS II: All resolution picture converter and catalogue (1Mb).  
L.77 AUTO-STEREOGRAM (1Mb) (£3.00): Create your own 3D 'Magic Eye' pictures.  
L.71 ARTIST FREEHAND (£3.00): Complete art package with multiple screens, animation, etc.  
A.107 ASCII ART: Hundreds of images rendered in ascii



characters

A.95 VISUAL ILLUSIONS: A collection of 24 'Magic Eye' 3D pictures.

A.36 KOZMIC 4: Complete version of the stunning psychedelic pattern creator.

A.1 ANI ST: Commercial quality animation program (once cost £60.00 to buy!).

A.84 GEMVIEW: Load, view, convert just about any picture format (1Mb).

A.75 POLYFILM by Martin Brownlow. Make films from multiple 3D polygon objects.

A.44 FANTASY SLIDESHOW: Spectrum 512 pictures on fantasy theme

## CLIP ART

(Where PCX and IMG formats are offered you must state which you require.)

A.110 CHILDREN (3 disks/£4.50 PCX/IMG): Over 90 quality clip art images of babies and children.

A.103 OFFICE CLIP ART: 33 IMG or PCX images of office related items.

A.107 HANDS CLIP ART: Over 70 IMG images of hands; pointing, waving, writing, etc.

A.100 ANIMALS CLIP ART (5 disks/£7.50): Over 170 IMG or PCX images of animals.

A.101 ASTROLOGY CLIP ART (3 disks/£4.50): 36 IMG or PCX images of zodiac signs.

A.102 SPACE CLIP ART: 38 images of the final frontier in PCX or IMG format

A.106 CHRISTMAS CLIP ART (3 disks/£4.50): Over 150 images in PCX or IMG.

L.26, L.27, L.28 TYPE WRITE CLIP ART (£10.00 per set): 4 disk sets of quality clip art in IMG format.

## MUSIC

S.4 YAMAHA PSS: Patch editor and facility to print tablature music.

S.156 FINAL SCORE: A music score printing program (mono only)

S.144 EKSEQ 1: A 100 track, 240ppqn sequencer with many features.

S.145 OPTRONIX MUZAK: Rip and play music from other programs.

S.8 NOISETRACKER: Soundtracker .MOD player with eight starter tunes.

S.7 ACCOMPANIST: 16 Voice Henry Cosh sequencer

S.19 ALCHEMIE JR: Impressive Swiss multi-window, multi-task sequencer (1Mb).

S.158 SWEET 16 LITE: An easy way into MIDI sequencing

## UTILITIES

U.89 AUSPACK: A useful archive extraction program for uncompressing ARC, ZIP, LZH, ZOO and LHA files.

U.86 BLITZSCHNELL (S/W): A hard drive defragmenter and optimizer from Germany.

U.80 ZORG: A 'Disk Doctor' type organiser.

U.77 THING: Alternative desktop (1Mb).

L.111 SUPER HACKER (£3.00): Replace a picture in almost any game or demo with your own!

U.67 ST TOOLS: An exhaustive collection of Atari ST utilities.

U.53 TERADESK V1.36: Replacement desktop for the ST/STE (1Mb).

U.20 FASTCOPY 3: Excellent disk copier for cover disks.

U.48 PREMIER PACKERS: 13 of the best program packers, plus a de-packer.

U.42 PICTURE HUNTER: Rips picture screens from other programs.

U.47 PROBE ST: Handy utility. Grabs music/graphics, disk/memory editor, etc.

## MISCELLANEOUS

U.52 VAULT & TURTLE: Hard disk back-up utilities.

M.202 LEAGUE TABLE MANAGER: Maintain up to 8 soccer type league tables.

M.199 COSMOLOGISTS'S EQUATIONS: Calculate age of universe, etc. Experts only!

L.145 SIX PACK (£3.00): Weight and measure converter, financial future planner, useful formulas, etc.

M.189 NATIONAL LOTTERY SIMULATOR (1Mb, 2 disks/£3.00). The fun way to pick your numbers.

M.177 LOTTERY COMPANION: Valued statistical assistance with your lottery entries.

L.134 FILM DIRECTOR ELITE (2 disks/£4.95): Multi-media language system - slideshows to packages

M.193 OUT OF THIS WORD: A fun typing tutor - type the tumbling letters before they crash.

M.183 HOUSE EXPENSE MANAGER: Daily household expense management program.

L.103 LEXICON (£3.00): The ideal program for word game fanatics. Solve crosswords, anagrams etc

L.111 SUPER-HACKER (£3.00): Put your own

\*\*\*\*\*

Visit us at

<http://www.lapd.demon.co.uk>

\*\*\*\*\*

picture into demos, games etc.

M.146 AWARD MAKER: Design and print awards certificates.

M.155 ROUTE FINDER (1mb): Route finding program for England, Wales and Scotland.

M.161 THE GARDENER (1mb): A special database for gardening enthusiasts.

M.175 FISHERMAN'S DATABASE: The ultimate record program for the keen angler.

M.19 AIR WARRIOR: Flight sim with World War II aircraft.

L.17 ADDRESS BOOK (£2.50): Neat and easy to use database for names and addresses.

L.18 CIRCUIT (£2.50): Easy to use electrical circuit diagram producing program.

M.93 STITCH MATRIX: Pattern making program for knitting machines.

M.77 THE BIBLE (3 disks/£4.50) King James authorised version.

M.76 FORM-FINDER: Proven horse race analysis and prediction program.

M.81 NEWSDISK: Construct your own newsletters and magazine disks.

M.100 GERMAN TRANSLATORS: Three programs to translate German text to English.

M.26 GENEALOGY: Two programs for the family historians to trace their forebears.

M.5 YOUR SECOND ATARI ST MANUAL: Text files to supplement the official manual.

M.17 WORD PUZZLE: Stuck with word games? Then this disk may help.

M.30 EXTRA WORD LIST: 70,000 extra words to use with disk

M.17. M.111 NORTHERN & EQUATORIAL STAR ATLAS: Superb serious astronomy program S/W.

M.1 PLANETARIUM: Excellent, easy to use, astronomy program.

M.173 THE BIBLE: (3 disks/£4.50) Complete King James, old and new testaments.

L. 89 GOLF (£3.00) A database for the golfing sportsperson.

## PROGRAMMING

P.57 68000 PROGRAMMERS INTRO TO DEMO TECHNIQUES: Set of help documents

U. 85 EXTRA v3.21(S/W): A powerful extension for the STOS language, 60+ extra commands.

F.53 STOSTESTERONE: A magazine disk devoted to programming STOS on the STE (issues 1 to 3 available).

P.53 IMAGINARY WORLD: Easy to use language to write your own role-play adventures.

P.55 STOS CYBER EXTENSION: An extension to the STOS programming language.

P.44 GFA V.2: Full version of language with tutorial & compiler! (N.B this disk is not PD - L.A.P.D. have permission to distribute it.)

DSP.1 SOZOBON C: A complete C compiler with documentation.

P.24 MENU-MAKER: Make your own menus with music, sprite and scrolling message.

P.33 ZX SPECTRUM EMULATOR: Emulate the old Speccy on your ST/STE (1Mb).

P.17 68000 PROGRAMMING COURSE: 10 'How to do it' document files.

P.19 GFA EXPERT: Massive text file and help routines for GFA-Basic 3.0

## BUSINESS

M.182 ST DIARY: A computer diary for the busy executive.

W.25 EASY TEXT: Easy desktop publishing program.

W.21 MARCEL: Super word processor with built in spell checker.

M.106 ACCOUNT-ABILITY: Fully featured accounts program. 10 accounts, 2,000 transactions!

M.148 INVOICE MASTER: Excellent invoicing system for small businesses.

M.13 OPUS 2000 (1mb): A superb spreadsheet program

M.83 INVENTORY PRO: A stock control system.

U.23 DOUBLE SENTRY: Impressive accounts package for the small company

U.33 FAST BASE: A powerful and flexible database.

W.3 FIRST WORD: Word processor that set the standard for others to follow.

W.24 GDOS FONTS (2 disks/£3.00) A large assortment of fonts.

## EDUCATIONAL

L.144 TEACH YOURSELF (£3.00): Geography tutor for U.K., Eire, Africa & U.S.A.

M.188 G.C.S.EMATHS & CHEMISTRY TUTOR: Two study aid programs.

M.20 G.C.S.E. STUDY AIDS: Help with Algebra, Trigonometry and Geometry.

M.204 LET'S SPELL - FIRST 500 WORDS: Spelling tutor for youngsters

M.187 TYPING TUTOR: Several courses to improve your skills.

M.186 KIDZ EDUCATIONAL: Nine learning programs for youngsters.

L.20 SUPER SPELL (£2.50): Teaching games for the 4 to 9 year old.

L.37 SUPER FUN (£2.50): More teaching games for the 4 to 9 year old.

G.266 WITCHES, MICE & FAIRY TALES: Games for younger users.

G.83 NOAH'S ARK: Collect the animals, two by two - addictive for adults too!

M.95 ABOUT THE HOUSE: Excellent collection of programs for young children.

M.28 KIDZ EDUCATIONAL: Alphabet, Maths Test, Numerical-Go-Round & Number Maze.

M.37 KIDZ DISK #1: Colouring Book, Spell Pic, Word Pic and Flash Card.

M.42 KIDZ DISK #2: Dot to Dot, Keyboard Capers & Matching.

M.67 BODY SHOP: Graphic quiz-type human anatomy tutor.

M.104 SOLAR SYSTEM GEOGRAPHY: Effects of the sun & moon on tides, seasons, etc.

M.16 KIDZ COMPILATION Kid Graph, Grid, Music, Notes, Piano, Publisher, sketch and story.. all on one disk!

PRO.26EARLY LEARNING MATHS 1:A collection of teaching programs for youngsters

PRO.27EARLY LEARNING MATHS 2: A collection of teaching programs by Philip Rankin for 9-12 years.

L.01 ROBOT MATHS (£2.95): Maths tutor for children aged 6+

L.02 MOON LETTERS (£2.95): Spelling game for ages 5+

L.04 ROBOT WORDS (£2.95): Hangman in a modern format.

L.08 ALL BLOCKED UP (£2.95): Mathematical puzzles for the young.

L.10 DROP DOWN WORDS (£2.95): Spelling/memory game for youngsters.

L.12 MATHS FUN (£2.95): Maths for children 4 to 7 years

M.7 HISTORY FILE (3 disks/£4.50): Investigate a historical murder in Scotland.

M.86 DEATH OF A PRESIDENT (3 disks/£4.50): Investigate the Kennedy assassination.

M.114 FRANGLAIS 3 & 4: French language tutor programs.

M.123 C.I.A. WORLD FACTBOOK (4 disks/£6.00): Facts and figures on countries

W.22 HOMEWORK: A word processor for the younger user.

## COMMUNICATIONS

C.27 OASIS: Complete replacement for KA9Q internet software.

C.28 INTERNET ACCESS PACK (3 disks/£4.50): WWW access for the Atari.

C.25 JUNIOR OFFICE: Fax software for Class 2 modems (best with hard drive)

L.113 BBS DIRECTORY (£5.00): Money saving directory of UK BBS's

C.22 TEDDYTERM: A superb multi-function communications program.

C.7 VANTERM V4: Excellent multi-function communications program.

SEE OUR ADVERT ON PAGE 37 FOR  
DETAILS OF OUR LICENCEWARE  
RANGE OF SOFTWARE

## FREE CATALOGUE

For a free copy of our comprehensive catalogue just send a s.s.a.e. to the address above (26p stamp for a disk catalogue or 39p stamp for a printed catalogue)



# FALCONRY

## The Art of Mastering the Bird

### Afterburner

The definitive accelerator for the Atari Falcon. Can produce a speed increase of at least 8 times that of a standard Falcon, and 9 times when used in conjunction with Nemesis.

- 68040RC processor producing 16/32/64MHz
  - Provision of up to 128MB RAM
  - Expansion through port
  - Wide software compatibility
- Afterburner040 - £539.00  
Advanced Buffer Mod - £10.00

### Nemesis

Inexpensive Falcon accelerator to boost the Falcon's performance.

- 24MHz Bus and CPU
- 48MHz DSP and FPU
- Optional 60MHz DSP upgrade
- Ability to produce rock-steady 640x480 true-colour VGA resolutions

Particularly useful when used with any of the APEX Series of programs and equally beneficial for virtually all Falcon software.

Nemesis - £49.95

### Exposé

The ever-popular video digitiser. Allows high-resolution, true-colour, real-time image capture direct from VCR or camcorder.

- Capture stills up to 1024x768, 24-bit with FalCAM Tripod utility (supplied).
- Animation up to 512x256 @ 6fps
- 25fps animation capture @ 128x80

Utilities include FalCAM Desk ACCessory, FalCUBE demo program and VGA-TV.

Exposé - £279.00

### Falcon 14MB

Our 14MB Falcon upgrade is supplied as a complete "plug 'n go" fitment - no soldering, simply replace your existing memory board.

Price - £129.95!!

Correct going to press - call for latest price!

### APEX 3

Stunning new image processing development from Black Scorpion Software, incorporating the ultimate, real-time Windowing system, while delivering an unbelievable level of performance.

Apart from the standard drawing tools found in any art program, APEX 3 includes:

- Full 24-bit image editing.
- Fast real-time operation.
- Real-time zoom to any level of detail.
- Anti-aliased (MIP-mapped) real-time block operations.
- Alpha channelled paste operations (8-bit masking).
- Real-time alpha-channelled tools.
- Variable alpha on gradients and masks.
- Analog chroma-key range masking.
- Compound (multiple) filtering using a real-time brush.
- Quick & easy cloning of pages for backup / editing.

In conjunction with Nemesis, APEX 3 can produce VGA resolutions up to 640x480 in 24-bit true-colour.

### APEX Audio

Superb new development from Black Scorpion Software. APEX Audio allows Direct-to-Disk recording, wave modification and many more exciting features.

APEX Audio and APEX 3  
are due out later this year  
Prices - t.b.a.

### BSS Debug

An essential utility for the dedicated Falcon programmer. A host of features.

BSS Debug - £39.95

### MK.X Cases

Superby engineering Desktop-style cases which accept the Falcon motherboard. The essential accessory!

Price - £199.00

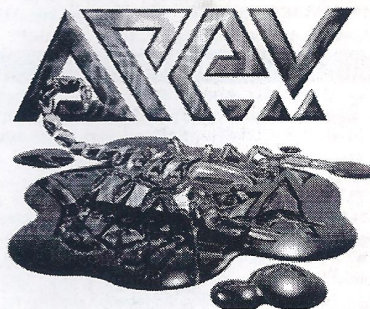
### APEX Media

The incredible art & animation program that took the Falcon market by storm. Now being shipped as v2.2, which is fully compatible with Afterburner040.

What more can be said about the program with a feature list as long as your arm?

APEX Media: £99.00

© Black Scorpion Software - the leading developers of Atari software



See our advert elsewhere in this issue, for details on all types of ATARI hardware. Browse our Web site for more detailed info.

Details from:

### Titan Designs Ltd

6 Witherford Way, Selly Oak  
Birmingham B29 4AX. UK.

Tel: +44 (0)121-693 6669

Fax: +44 (0)121-414 1630

e-mail: 100345.2350@compuserve.com

Web: <http://ourworld.compuserve.com/homepages/TITANWEB/>

All prices include VAT. E&OE. Prices and specifications can change without prior notice.