THE WORLD'S BIGGEST SELLING ST MAGAZINE

ISSUE 70 ■ MAY 1995 ■ £3.99

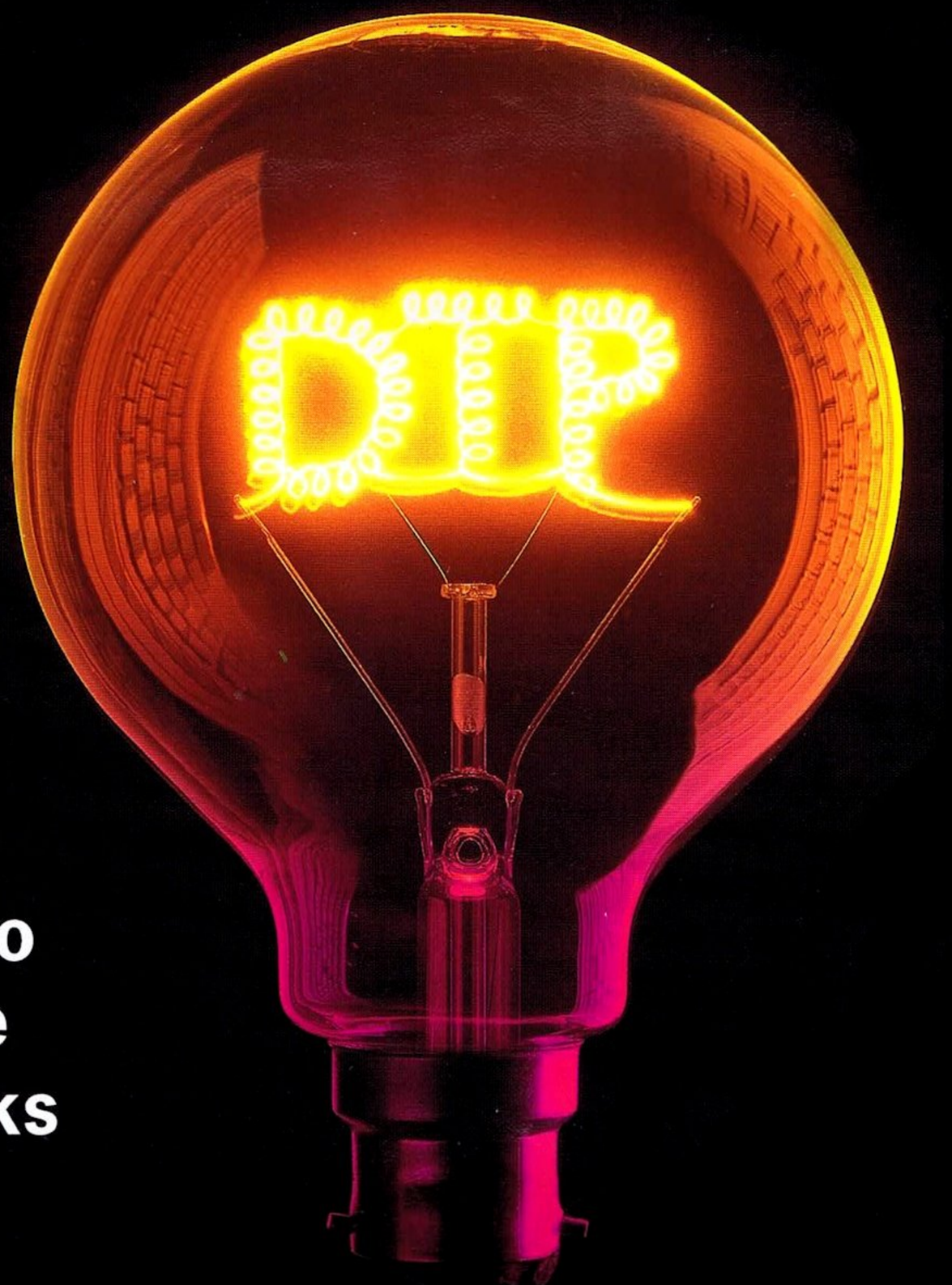
ST FORMAT

INCORPORATING ATARI ST REVIEW

MORE ST ANSWERS & SOFTWARE GUIDES

PAK 68/3 hardware accelerator – the crucial speed factor? We clock the results!

SubStation – the Doom beater for the STE and Falcon? We bring you the first pics...



Bright ideas for Desktop Publishing!

Give your DTP the power to impress with our extensive guide to the hints and tricks of professional publishing!

REVIEWED THIS MONTH:

MAXIS HARD DRIVE ● HD DRIVER ● PAK 68/3 ● VIDEO SUPREME 2 ● PRIMA CD/HD COMBO ● UNIVERSAL INTERFACE ● BITZCOPY ● TOS UPGRADE ● TUS MONITOR ● ISHAR 2 ● CHAMP MANAGER ITALIA '95 ● TOWERS 2 ● WARP DISKMAG ● CALAMUS FONT UTILS ● LEXICON ● LOTTERY & POOLS PREDICTORS ● FALCON DEMOS ● DATACHESS 2 ● ALIENS ● MAD & POTHOLE 2

PABLO PAINT

Exclusive! Colour by numbers!

We give you all the software and creative techniques you'll ever need to create your very own modern art masterpieces Don't miss it!

Future PUBLISHING
Your guarantee of value

9 770957 485083 05

Late Night Opening Wednesdays & Thurdays till 7.30 PM

OPEN SUNDAYS 11 AM TP 4 PM

FIRST COMPUTER CENTRE

HOW TO ORDER

Order by telephone quoting your credit card number. If paying by cheque please make payable to: *"FIRST COMPUTER CENTRE"* In any correspondence please quote a phone number & post code. Allow 5 working days cheque clearance

SHOWROOM ADDRESS: DEPT. STF, UNIT 3, ARMLEY PARK COURT, STANNINGLEY RD, LEEDS, LS12 2AE.

SWITCH VISA MasterCard DELTA AMERICAN EXPRESS

1% surcharge on Amex

DELIVERY TARIFFS

- Standard delivery £1.95
- 2-3 Week Days £2.95
- Next Week Day £4.95

Delivery subject to stock

- All prices include VAT @ 17.5%
- Large showroom with parking
- Multi-million pound company
- Overseas orders taken
- Educational purchase orders welcome

OPEN 7 DAYS A WEEK

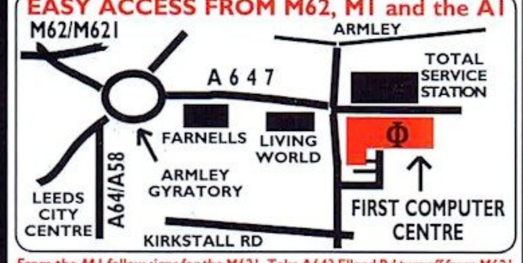
Prices are correct at the time of going to press. Please check our latest prices before ordering. All sales are subject to our standard terms & conditions (copy available upon request). E&OE.

10 LINES! **Telephone 0113 2319444**

24 HOUR MAIL ORDER SERVICE FAX: 0113 2319191

NEW! **BBS Modem sales & technical line Tel 0113 2311422**

EASY ACCESS FROM M62, M1 and the A1



From the M1 follow signs for the M621. Take A643 Elland Rd turnoff from M621. Follow signs for A58. This merges with Armley gyratory.

From the A1 take the turnoff for the A64. This merges with the A58 (by-passing Leeds town centre) which meets the Armley gyratory.

Thinking of buying a Printer?

Whether you're buying your first printer or upgrading your old printer, you need the facts to decide which best suits your needs. Call for the definative guide of First's entire printer range. Whether it's an Inkjet, Dot-Matrix or Laser, we provide the facts and print outs for you to make your decision.
At a cost of only £1.99 its a cheap price to pay to make sure you are buying the right printer that meets your needs.

HARD DRIVES & CD-ROMS

PRIMA TECHNOLOGIES

This new range of hard drives can be purchased just as a hard drive or can have the capability to be combined with a built in CD-ROM drive or other SCSI devices. The ICD Link II controller can link up to 7 separate SCSI devices.

These drives are fully auto booting and auto parking. They have a very small footprint , fast access (approx 11ms) and are VERY QUIET.

The PRIMA range come with a built in disk cache as standard that can reduce disk accessing time by 50%. Standard warranty 1 year.

	STe	Falcon
PRIMA 264	£294.99	£264.99
PRIMA 340	£329.99	£279.99
PRIMA 540	£384.99	£335.99
PRIMA 1GIG	£639.99	£614.99

Removable HD option add £40.00

PRIMA ST-COMBOS
260Mb Hard Drive and Dual Speed CD-ROM only £469.99
Call for other configurations

PRIMA CD-ROM

	STe	Falcon
Dual Speed	£299.99	£269.99

ICD Link II ScSi Controller £89.99
includes CD-ROM Driver

BARE SCSI DRIVES

264Mb	£149.99
352Mb	£164.99
528Mb	£229.99
1 Gigabite	£529.99
2 Gigabite	£1049.99

ADD £25.00 FOR FITTING

SUPRA MODEMS

SupraFAXModem 288
Super fast V34! 28,800 bps + 14,400 Fax
only £233.99
90% Amiga Computing

SupraFAXModem 144LC
V.32 bis (14400 baud !)
Low cost version of the classic V32Bis Fax modem. Features as below but class 1 fax only and LED di
only £122.99
93% GOLD

Supra modems are not BABT approved, however they perform as well & often out perform BABT approved modems. Supra Modems have a 5 year limited warranty

SupraFAXModem V.32bis
This modem has full 14400 baud. includes V.32bis, V.32, V.22bis, V22, V21, MNP2-5, V.42, V42bis, Class 1 & 2 commands, 9600/14400 Group 3 Fax. Includes free modem comms (not Fax)s/w & cable
only £167.99

SupraFAXPlus
Get on line using this great value fast modem with auto dial & receive. 2400 baud Hayes comp, V22 BIS. Includes free modem comms s/w & cable!!
£86.99

STRAIGHT FAX SOFTWARE only £72.99

US Robotics®

Sportster 288 only £234.99
features V34, 28,800 BPS, BABT approved
If you thought V32bis was fast try V 34 (28,800 bps).
Sportster 2496 +Fax £104.99
Sportster 14400 Fax £138.99
Modem cable for Sportster and Courier £9.99
USR modems come with a 5 year warranty
& are BABT Approved

Amazing price reduction on Courier Dual Standard V34 Fax
Now only £327.99

SCANNERS

The Power Scanner
only £99.99
This scanner comes with the latest version 2 sofware. With bright & sharp grey scale performance & flexible scanned image display manipulation options. Options include Clean up, embolden, resize & flip.

Alpha Scan Plus
only £119.99
New version of this famous 400 DPI scanner. Includes Touch up and Merge-it software enabling you to alter and manipulate high resolution images. Needs 1 Mb of RAM and runs in mono only. add £20.00 for OCR software

Migraph Colour burst Scanner
only £399.99
This hand scanner is available only for the Falcon . Spec includes 256k colours, 50 to 400 Dpi.

SOFTWARE

BUSINESS

Home Accounts 2	£37.99
K-Spread 3	£45.99
K-Spread 4	£79.99
K-Data	£34.99
K-Graph 3	£44.99
LDW Power 1 Spreadsheet	£24.99
Superbase Pro	£89.99

MUSIC/SOUND

Concerto	£34.99
Clarity 16(Falcon only)	£84.99
Cubase Lite, 16 track, score printing capability	£85.99
Cubase V3, Midi record, score printing capability	£439.99
Cubase Audio Falcon	£729.99
Integrated digital audio midi with score printing capability	
Musicom By Compo	£43.99
Quartet	£39.99
Replay 16 Digitiser	£109.99
Stereo Master	£34.99

PUBLIC DOMAIN

Archivers	£1.50
Astronomy Programns 1, 2 or 3	each £1.50
Astronomy Programns (Hi Res)	£1.50
First Falcon Utils Disk	£2.00
Easytext	£1.50
Midi Sequencers	£1.50
Speccy Emulators	£1.50
Packers	£1.50
Virus Killers	£1.50
Databases	£1.50
Databases Collection 1 or 2	each £1.50
Opus 2.2	£1.50
Noisetracker 1.5	£1.50
Screen Savers	£1.50
Geneology Programs	£1.50
Kids Games	£1.50
Archiver Shells	£1.50
Archiver Utils + Bits	£1.50
Games Pack 1, Blox, Centipede, Cloud Kingdoms demo	£1.50
Games Pack 2, Grav, Grav2, Maz	£1.50
Games Pack 3, Llamatron 1/2 + 1Mbversion, Revenge of the Mutant Camels	£1.50
Games Pack 4, Cybernetix, Daleks, Entombed, Happy Worm etc	£1.50
Games Pack 5, Tetris, Downfall, Kubes etc	£1.50
Games Pack 6, Asteroids, Astropack, Atax, Ballzone, Bellum, Blaster	£1.50

UTILITIES/PROGRAMMING

Datalite 2	£44.99
Devpac 3	£65.99
Devpac DSP	£49.99
Diamond back 3 backup utility	£44.99
High Speed Pascal	£84.99
Lattice C 5.6	£139.99
Multi Tos	£44.99
Speedogdos	£34.99
ST Straight Fax 2.1	£72.99
ST Basic	£5.99
Turbo ST	£21.99

VIDEO AND GRAPHICS

Colour Master	£59.99
Flexi Dump II	£38.99
True Paint	£34.99
Video Master	£59.99
Video Master (falcon only)	£79.99
Video Master RGB	£109.99

WORD PROCESSING & DTP

Calamus 1.09n	£59.99
Papyrus Gold *NEW!*	£109.99
Thats Write V.2	£109.99

CALAMUS

Calamus 1.09n	£59.99
Calamus SL	£199.99
Outline Art v3	£199.99

PRINTERS

All our printers come with ribbon or toner, paper & cables!!

Canon

Canon BJ10sx £189.99
Laser quality output. Large buffer, AUTO S/FEEDER £49.99.
NEW! CanonBJ200ex £269.99
New High speed Mono Inkjet, 100 page sheetfeeder, 720 dpi.
Canon BJC600 Colour £434.99
Canon BJC4000 Colour £345.99

CITIZEN COMPUTER PRINTERS

Citizen printers have a 2 year guarantee
ABC Colour printer £154.99
simple (as easy as ABC) to use 24 pin printer. Comes as standard with 50 sheet auto sheet feeder. Tractor feed optional at £27.99
only £134.99 if bought without the colour option.
NEW! Projet II Colour £254.99
New inkjet printer with built in auto sheet feeder.
Swift Auto Sheet feeder £79.99

HEWLETT PACKARD

HP 320mono £234.99
HP320 auto sheet feeder £69.99
NEW! HP540mono £279.99
HP 320/540Colour upgrade £36.99
NEW! HP 660Colour £429.99
All HP printers come with a 3 year warranty

THE star COMPUTER PRINTERS NEW! RANGE

The *NEW!* Star Range of dot matrix printers are here, featuring a built in 55 sheet auto sheet feeder
Star LC909 pin mono £109.99
Star LC24024 pin mono £125.99
Star LC240C24 pinColour £144.99
Tractor Feed for the new range only £15.99
Star SJ144Colour £239.99
Stunning affordable colour printer. 3 PPM, low running costs

Special offer
Papyrus Gold only £99.99 or Flexidump II only £35.99, if bought with printer.

CONSUMABLES

QTY	DS/DD DISKS	Branded DS/DD
10	£4.49	£5.49
30	£12.99	£14.99
50	£20.99	£22.99
100	£37.99	£42.99
200	£69.99	£79.99
500	£168.99	£190.99
1000	£324.99	£365.99

All disks are guaranteed 100%. All branded disks come with labels
Disk labels 500 £6.99 1000 £9.99

Ribbons

Citizen Swift/ABC mono ribbon	£4.99
Citizen Swift/ABC Colour ribbon	£13.99
	£4.99
Star LC10/20/100 mono	£3.69
Star LC10/20/100 colour	£7.99
Star LC240C mono	£8.49
Star LC240C colour	£13.99
Star LC240 mono	£5.99
Star LC24-200/300 Colour	£11.99
Re-Ink Spray for mono ribbons	£11.99

COVERS

Star dust cover	£5.99
Citizen dust covers	£5.99
Hewlett Packard dust covers	£5.99
Canon dust covers	£5.99

PREMIER Ink Refills

save a fortune in running costs with your ink/bubble jet. Compatible with HP, Canon, Star,Citizen & many others.

Single refills	(22ml)	£6.99
Twin refills	(44ml)	£12.99
Three colour kit	(66ml)	£19.99
Full colour kit	(88ml)	£27.99
Bulk refills	(125ml)	£24.99

Cartridges

Canon BJ10sx/SJ48 cart.	£19.99
Canon BJ200/200ex mono cart.	£19.99
HP520/540 D/life mono cart.	£24.99
HP550/560/660 Col.cart.	£24.99
Star SJ144 mono or colour (3 pack)	£21.99

Miscellaneous

Printer Switch Box 2 way	£12.99
Printer Switch Box 3 way	£17.99
Printer Stands (Universal) save on space.	£4.99
3 Metre printer cable	£6.99
5 Metre printer cable	£8.99
10 Metre printer cable	£12.99

OTHER PERIPHERALS

The Zy-Fi Stereo System
only £36.99
This is a powerful speaker system with built in stereo amplifier. It will plug into an Atari STE, Commodore Amiga or Acorn Archimedes. Complete with its own power supply the Zy-Fi system can also be powered by batteries

The Zy-Fi Pro Stereo System
only £57.99
Higher spec ification version of above

Forget-me-Clock 2 only £19.99
Real time clock that plugs into cartridge port. Software for setting time & date. 2 year guarantee.

ROBOSHIFT MK-I
Automatic Mouse/joystick switcher
now only!! £9.99

Monitor Switcher Box £17.99
switches between mono & colour monitors, such as SM144 & 8833 MK2

MISCELLANEOUS

Quality Mouse Mats	£3.99
10 Capacity Disk Box	£0.99
20 Capacity Disk Box	£2.99
40 Capacity Lockable Disk Box	£3.99
100 Capacity Lockable Disk Box	£5.49
*90 Capacity Stackable Banx Box	£9.99
*150 Capacity Stackable Posso Box	£17.99

*add £3.00 delivery if purchasing just one Posso or Banx box. Normal delivery when purchased with other product or when buying 2 or more.

14" Monitor cover	£6.99
Keyboard Membrane Covers	£14.95
Atari to Scart Cables	£9.99
STD 1.8 MTR printer lead	£4.99
Modem/null modem cables	£9.99
STFM/STE Power Supplies	£39.99
Key Boards	£49.99
Internal Disk Drives	£49.99
STe or STFM Cases	now only £4.99
2 way Parallel port sharer	£19.99
Joystick/mouse extension leads	£4.99
Atari 520/1040 dust cover	£3.99
DMA chip	£POA
MMU chip	£POA
Video Shifter chip	£POA

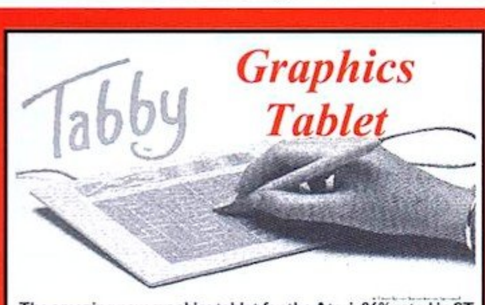
VIDI 12 ST BY ROMBO

As official dealers for Rombo, we are able to offer this excellent package at a great price. Vidi 12 ST replaces the famous Complete Colour Solution with a higher specification but a lower price!
£69.99

Contents include multimedia digitiser, software, manuals and phono cable

Main Features:

Both colour & mono image capture, no separate RGB splitter or filters required, fully functional animation workstation, mix images to almost any resolution, all Atari colour modes are supported, many image processing effects, file formates include IMG, ART, IFF, IFF, SPU, SPC, NEO, BMP, TIFF.



The amazing new graphics tablet for the Atari. 86% rated in ST Format January issue!

NEW LOW PRICE!
now only £49.99

MONITORS

All our monitors are UK spec. All monitors come complete with a free Amiga lead*

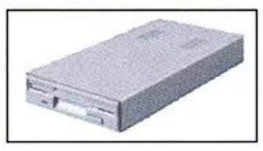
PRIMA *Trust* Hi-Res
High resolution 14"mono monitor. 640 * 400 resolution. Stable image and razor sharp quality. Comes with built in tilt & swivel monitor stand.
Now Only £99.99!

Atari 1438 colour monitors
We now have a limited supply of original Atari 1438 colour monitors, full 12 month warranty.
only £199.99 very similar to CM8833 MK2

NEW! **Philips 8833 MK2**

This famous Stereo, colour monitor is back. Complete with 12 months on site maintenance
only £239.99
tilt and swivell stand only £9.99 with monitor

DISK DRIVES



Zydec 3.5" Drive
only £59.99
1 meg external drive, high quality low noise drive. Inc PSU

Power 720B 3.5" Drive
only £69.99
This 1 meg external drive comes with Virus checker, built in Blitz turbo and boot switch for drive B. Includes PSU

ATARI REPAIRS

We offer a FREE quotation on your Atari or any peripheral (monitors, printers etc). A delivery tariff of just £5.00 is charged for return delivery or alternatively you can visit our showroom. We can also arrange a courier pickup at an additional cost of £11.00.

All work is carried out by our highly qualified engineers in custom built premises. We will also install any upgrade/software or accessory from our main advert.

All repairs are covered by a 90 day warranty.

Tel. 0113 2319444

MEMORY MODULES

1 Mb 72 Pin SIMM	£39.99
2 Mb 72 Pin SIMM	£99.99
4 Mb 72 Pin SIMM	£149.99
8 Mb 72 Pin SIMM	£284.99
16.Mb 72 pin SIMM	£439.99
1Mb 30 pin SIMM	£24.99
4 Mb 30 pin SIMM	£145.99
256 by 4 DRAM (DILs)	(each) £5.99
1 Mb by 4 ZIPS(1/2 Mb)	£32.99
256 by 4 ZIPS	(each) £5.99

Part Ex. available on your old memory, Call for pricing.

Falcon 2.5" Hard Drives & Kits

60 Mb	£129.99	Hard Drive bracket
80Mb	£139.99	£15.00
130Mb	£169.99	IDE Cable
240Mb	£249.99	£9.99

GENLOCKS

HAMA TRI-LOCK
VHS VHSC SVHS SVHSC Video8 Hi8
£349.99
NTSC/PAL COMPATIBLE, CALL FOR DETAILS.

Marpet RAM

STFM *Deluxe* SIMMS modules

4 Mb unpopulated	£24.99
4 Mb populated to 512k	£34.99
4 Mb populated to 2 Mb	£74.99
4 Mb populated to 4 Mb	£114.99

Marpet products come with a 12 month warranty.

***Prima* RAM expansion**

512K STe	£9.99
2 Mb STe	£42.99
4 Mb STe	£84.99
14 Mb unpopulated for the Falcon	£49.99

The Falcon board uses 72 pin SIMM modules, so just add the cost of the SIMMS to get your populated price.
Prima products come with a 2 year guarantee

MICE & TRACKBALLS

Alfa Data Mega Mouse
£13.99
90% rating for 400 Dpi version

Zydec Trackball	£29.99
Alfa Trackball	£34.99

THE OFFICIAL ANALOGIC ANALOGIC ANALOGIC REPAIR CENTRE

SPECIALISTS IN AMIGA AND ATARI COMPUTERS & MONITORS

Atari 520/1040 ST/STM/STF/STFM/STE	£59.95
Including delivery back by Courier	
Atari Mega ST/Mega STE/TT/Falcon	£Quotation
Atari Monochrome High Resolution Monitors SM124, SM125	£59.95
Atari Colour Monitors SC1435, SC1224	£59.95
Philips CM8833 and Protar Colour Monitors	£59.95

★ We pick up computers for repairs and upgrade for next day delivery to us by Courier Service for only £6.00 + VAT.
★ All monitors repair charges exclude CRT & Lopt.

The only leading repair centre in the UK providing a professional, high quality, while-u-wait repair & upgrade service on Atari computers without any surcharges

MANY REPAIRS ✦ DISK DRIVE UPGRADES ✦ TOS UPGRADES ✦ MEMORY UPGRADES

RING NOW 0181 - 546 9575
WHILE - U - WAIT !

COMPUTER/DISK DRIVE SERVICING WITH ANY REPAIR/UPGRADE

FREE

High Density 3.5" Internal Drive & Module.....£54.95

NEW LOW PRICE FOR A LIMITED PERIOD

MEMORY UPGRADES
MARKET DEVELOPMENTS OFFICIAL XTRA-RAM DELUXE INSTALLERS

520 STF/STFM to 1 Meg	£34.95
520/1040 STF/STFM to 2.5 Meg	£59.95
520/1040 STF/STFM to 4 Meg	£99.95
520STE to 1 Meg	£9.95
520/1040 STE to 2Meg	£49.95
520/1040 STE to 4 Meg	£99.95

HARD DRIVES

PROTAR PROFILE SERIES II HARD DRIVES
COMPATIBLE WITH ALL ST/STF/STFM/STE/MEGA ST/FALCON

Profile 170DC	£269.95	Profile 365DC	£349.95
Profile 270DC	£299.95	Profile 540DC	£369.95

P.O.A. FOR HIGHER RANGE OF PROFILE SERIES 2 OR BARE HARD DRIVES

BARE SCSI Hard Drives

170MB	£169.95
270MB	£199.95
365MB	£249.95
540MB	£269.95
1GB	£499.95

2.5" IDE Hard Drives for Falcon

60MB	£99.95
80MB	£119.95
120MB	£149.95
250MB	£199.95
Hard Drive Bracket	£14.95
IDE Cable	£9.95

FALCON MKII COMPUTERS

FALCON MK II with 14MB + 500MB Hard Drive	£2299.00
FALCON MK II with 14MB + 500MB Hard Drive + FDI + Cubase Audio	£3499.00

STE/STFM 2.06 TOS SWITCHERS
With Hardware Switch

THE ONLY SOLDERLESS DIY KITS AVAILABLE

STE TOS 2.06 ROMS	£44.95	STE/STFM TOS Switcher Including Roms	£54.95
STE TOS Switcher	£24.95		

MONITORS

AMITAR £129.95
HIGH RESOLUTION MONOCHROME MONITOR

ACCESSORIES

STE/STFM Scart lead	£14.95	290 Dpi Mouse	£14.95
STE/STFM lead to Philips CM8833	£14.95	Blitter Chip + Socket	£44.95
Twin Joystick/Mouse Port ext lead	£5.95	Mouse Mat	£4.95
		10 Blank Branded Disks	£5.95
		Forget Me Clock	£21.95

POWER SUPPLIES

STFM/STE Power Supplies (Service Exchange)	£24.95
NEW STFM/STE Power Supplies	£44.95

FLOPPY DISK DRIVES

1 Meg 3.5" Internal Drive	£39.95
High Density 3.5" Internal Drive	£44.95

HEWLETT PACKARD PRINTERS

HP320	£229.95	HP540	£269.95
HP320 with colour kit	£264.95	HP540 with colour kit	£304.95
HP 56C Colour	£439.95	HP1200 Colour	£1249.95

● All prices include VAT ● Fixed charge for Repair does not include Disk Drive replacement & keyboard ● All prices subject to change without notice ● We reserve the right to refuse any repair ● Please allow 5 working days for cheque clearance ● P&P £3.50 by Royal Mail or £6.00 + VAT by Courier

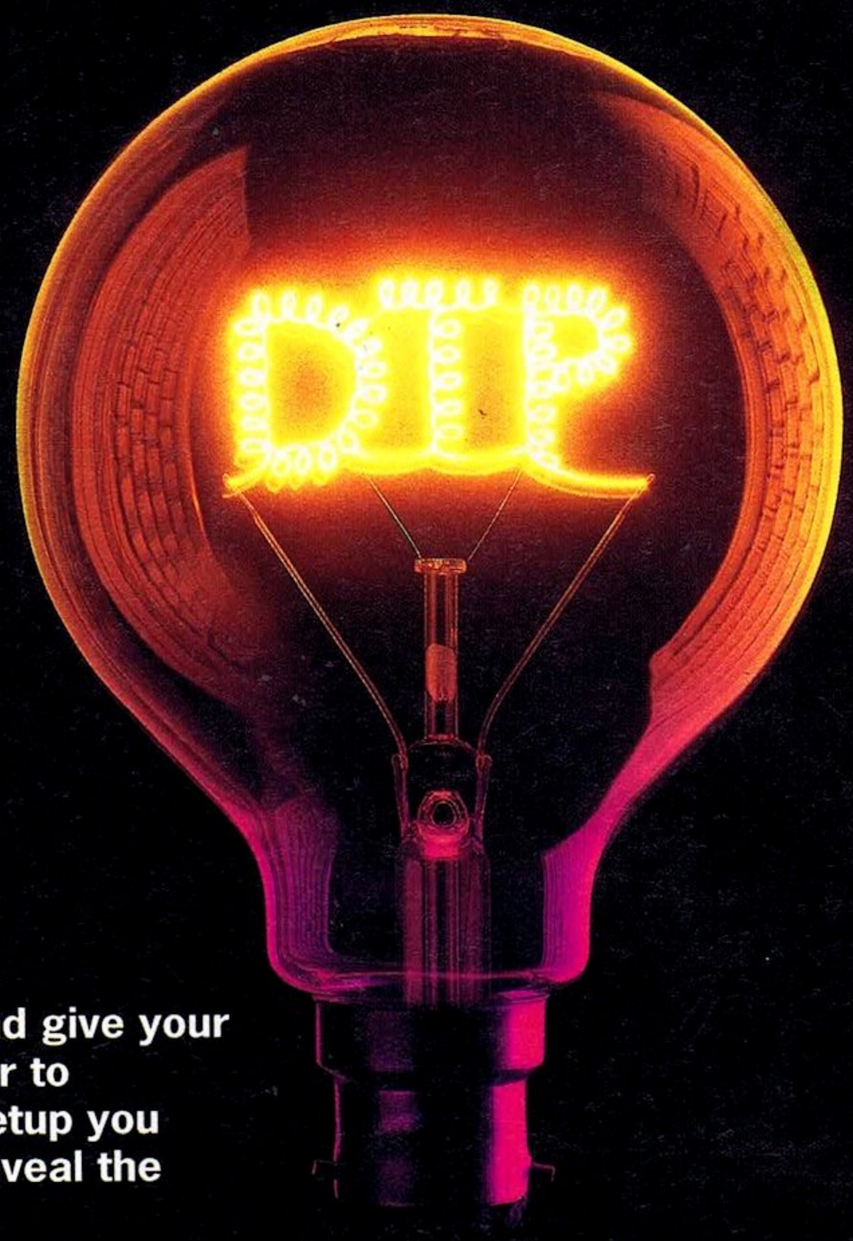
MasterCard Access VISA DELTA

Analogic Computers (UK) Ltd
Unit 6, Ashway Centre,
Elm Crescent,
Kingston-Upon-Thames
Surrey KT2 6HH
Tel: 0181 - 546 - 9575
Fax: 0181 - 541 - 4671
Mon - Fri 9am - 6.30pm Sat 9am to 5pm

CONTENTS

ISSUE 70 ■ MAY 1995

ST FORMAT

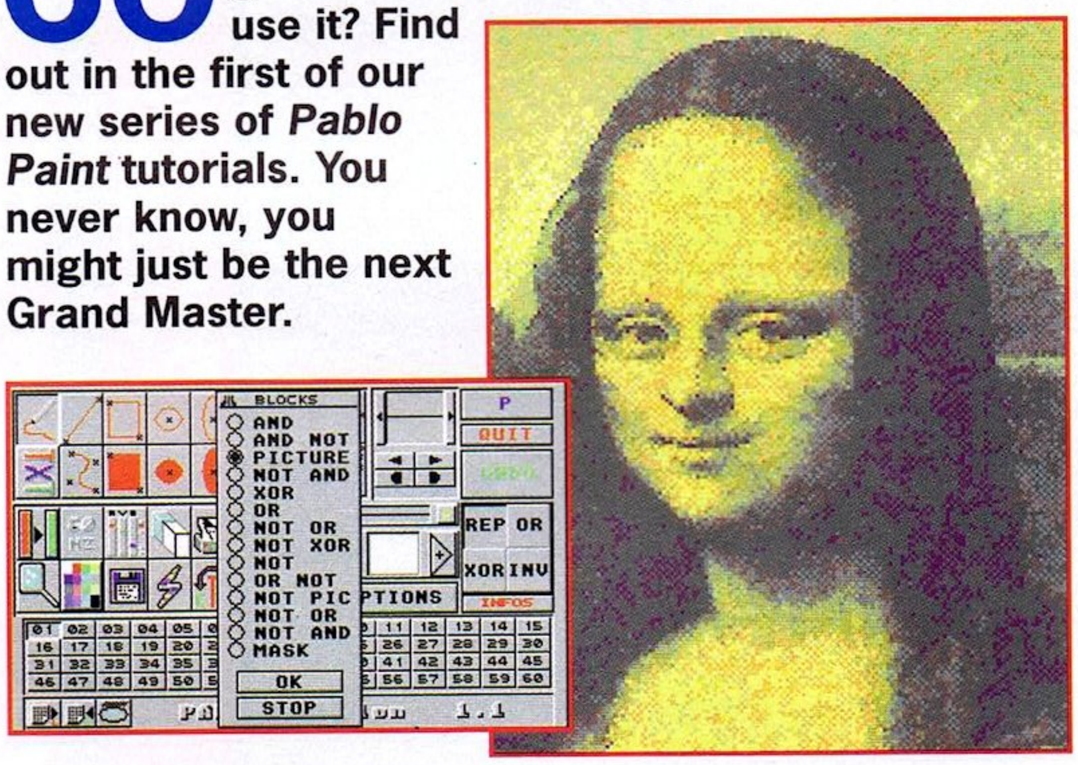


Bright ideas for desktop publishing

16 Get your message across and give your desktop publishing the power to impress. We show you the setup you need, the best packages to use, and reveal the secrets of professional publishing.

Pablo Paint

60 This commercial-quality paint program graces the Cover Disk, but how do you use it? Find out in the first of our new series of *Pablo Paint* tutorials. You never know, you might just be the next Grand Master.



SubStation

32 Exclusive behind-the-scenes preview and interview. Will *SubStation* be the STE's *Doom* beater?

FEATURES

15 LEMMINGS SPECIAL OFFER
Another chance to get your hands on *Lemmings* and *Lemmings 2*, the cult Psygnosis puzzlers. Fun with your cute, furry, manically suicidal friends.

16 BRIGHT IDEAS FOR DTP
Turn those reams of boring, dull text into pretty, lively and readable pages with our extensive guide to desktop publishing on the ST.

46 FINE-TUNING YOUR ST
This month Nick shows you how to tweak your ST and take all the hassle out of floppy disk drives, with a round-up of the best utilities.

60 TUTORIAL: PABLO PAINT
In the first in a new series, Frank Charlton takes you through what all those blasted icons actually do. The definitive guide starts here.

62 TUTORIAL: WORLD WIDE WEB
You can access the wired world of the World Wide Web to some extent, y'know. Frank Charlton explains how, slowly and surely.

64 TUTORIAL: THE SCORE
The first part of a new series aimed at all you ST musicians out there. News, reviews, questions, jargon busters – it's all here.

66 TUTORIAL: ICD HARD DRIVE UTILITIES
Get your hard drive running at its optimum efficiency with the aid of ICD's *The Link* software and the guiding hand of *ST FORMAT*.

That's right – you can even use your drive as a real-time clock.

ST FORMAT
ABC Jul – Dec 1995
23,223
Member of the Audit Bureau of Circulations

Printed in the UK

EDITORIAL
30 Monmouth St, Bath, Avon BA1 2BW ☎ 01225 442244
Fax: 01225 465982, AdLib BBS ☎ 0191 370 2659
Internet: **klevell@futurenet.co.uk**
ST FORMAT is also on-line on the Internet as part of FutureNet. To access it, just point your Net browser software at **http://www.futurenet.co.uk/**
Editor Karen 'Frankenstein's monster' Levell
Art Editor Andy 'Igor' Ounsted
Production Editor Jillian 'Magenta' Werb
Disk Editor Nick 'Jason' Peers
Staff Writer Simon 'Freddy' Forrester
Contributors Frank 'Riff-Raff' Charlton, Andy 'Rocky' Curtis, Clive 'Pugsley' Parker, Don 'Werewolf' Maple, Mac 'Creature from the Black Lagoon' Marsden
Photography Rob Scott, Rick Buettner

ADVERTISING
Alison 'Hell-hound #1' Morton ☎ 01225 442244
Darran 'Hell-hound #2' Ward ☎ 01225 442244

DISTRIBUTION
UK and Overseas Newsstand Distribution – Future Publishing Ltd ☎ 01225 442244
SUBSCRIPTIONS AND MAIL ORDER
FUTURE PUBLISHING, Somerton, Somerset TA11 6TB ☎ 01225 442244 Fax 01458 274378
Subscriptions ☎ 01225 822511
Customer Services ☎ 01225 822510
PRODUCTION (fax 01225 337530)
Group prod'n manager Judith 'Judith' Middleton

REVIEWS

24 MAXIS HARD DRIVE & HD DRIVER SOFTWARE
System Solutions are renowned for the quality of their hardware and software. Here are just a couple more examples...

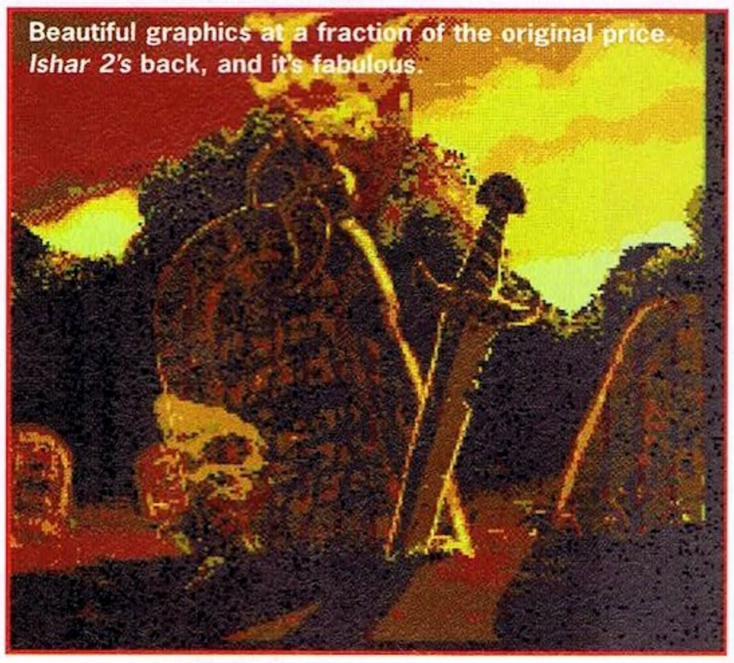
25 PAK 68/3
Turbocharge your ST with System Solutions' new hardware accelerator. With this installed you'll even beat a Falcon to the draw.

26 VIDEO SUPREME 2
Liven up your videos or even create your own demo with Goodman's excellent graphical, musical and textual display system.

27 PRIMA HD/CD COMBO
It was a matter of time before someone did it! A CD-ROM drive and a hard drive in one box, courtesy of First Computer Centre.

28 D 'N' C UNIVERSAL INTERFACE BOARD
Wire your household (no, not your pets!) to your ST, using InterFX's Universal Interface. But is it worth the cost of the wire?

29 BITZCOPY 1.4
Frank Charlton tests Bitz's new disk copier and asks: "But does the world really *need* another?"


Beautiful graphics at a fraction of the original price. *Ishar 2*'s back, and it's fabulous.

30 TUS MONITOR & TOS UPGRADE
Hardware offerings from The Upgrade Shop – a monochrome monitor and a solderless TOS upgrade. What's the score?

31 BOOKS
Short on reading material? We look at two books you might want to take to bed with you.

32 PREVIEW: SUBSTATION
Obsession may have been great, but Unique Development aren't stopping at that. Check out their forthcoming 3D extravaganza!

34 ISHAR 2
Ishar 2 is on budget-price re-release. How has time treated it? We spill the beans (and a few guts).

35 CHAMP MANAGER ITALIA '95
Can't afford to go and see the 1995 Italian footie season? Stay at home and manage the teams with this new version of a classic management sim.

37 TOWERS 2
Loads of 3D RPG fun in the dungeon with the beautiful sequel to *Towers*. Do you feel up to a bit of an adventure?

39 PUBLIC DOMAIN
Nick and Simon sift through the best the public domain world has to offer.

REGULARS

6 COVER DISK
What would the world be without Nick Peers, eh? You wouldn't have a clue how to use your Cover Disk, that's for sure. This month, Impact's *Team* demo, and the usual bundle of handy utilities.

11 NEWS
All the latest gossip on HiSoft, PD libraries, earthquakes, printers, *Cubase*, MEMS and a really, really big button. And the latest EuroNews.

49 ST ANSWERS
Clive Parker answers yet more of your problems and queries, ably assisted by Don, Mac, Andy and Frank, our ST Answers panelists.

68 GAMEBUSTERS
Sensible Soccer, Cisco Heat, Speedball 2, Mean Streets, Doom, New Zealand Story and *Lotus Turbo Challenge* hacked to pieces in our regular cheat-fest.

70 GAMEBUSTERS SPECIAL
We take *Obsession* apart piece by piece to show you how to get those high scores even higher.

72 SUBSCRIPTIONS
Have *ST FORMAT* delivered to your door for a year. Not only do you get an extra disk and newsletter, but you also save money!

74 READER ADS
Get in touch with the rest of the ST world in our monthly forum for buying, selling and swapping. You could even find yourself a penpal.

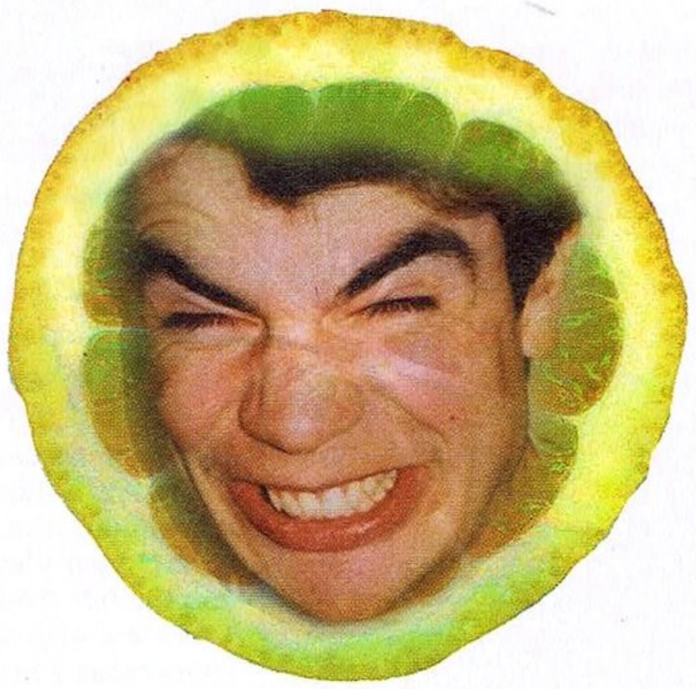
75 ST DIRECTORY
Can't find the phone number you want? Let your fingers do the walking...

76 BACK ISSUES
Fill the gaps in your *ST FORMAT* collection. You can still get hold of some of those classics here.

77 READER OFFERS
Massive savings on some of the best ST software available. *Stardust, STOS 3D, UVK 6* and *GFA Basic* and *The Best of ST FORMAT* could all be yours.

79 FEEDBACK
Some people like us, some people hate us, and some people are completely mad. Most of them seem to have written in to Feedback this month.

82 TWILIGHT ZONE
Some of the prettiest pixel paintings ever, as well as all the hot news from the Ad.Lib bulletin board.



You think you've already seen bitter and twisted? You ain't seen nothing yet! Turn to Feedback for more...

COVER DISK 70

THIS MONTH...

TEAM: The *ST FORMAT* demo of this long-awaited STE/Falcon-only footie sim. Come on you Blues!
Size: 344K

PABLO PAINT: Full colour version of this unmissable paint package, all the way from France! Packed with options and features to free your creative spirit.
Uncompressed size: 208K

525 2.02: Converts almost all your sound samples effortlessly. Now you can produce samples for use on Macs and PCs!
Uncompressed size: 98K

CHAIN REACTION: Full-blown strategy game for up to six players. Fast, furious and addictive fun.
Uncompressed size: 152K

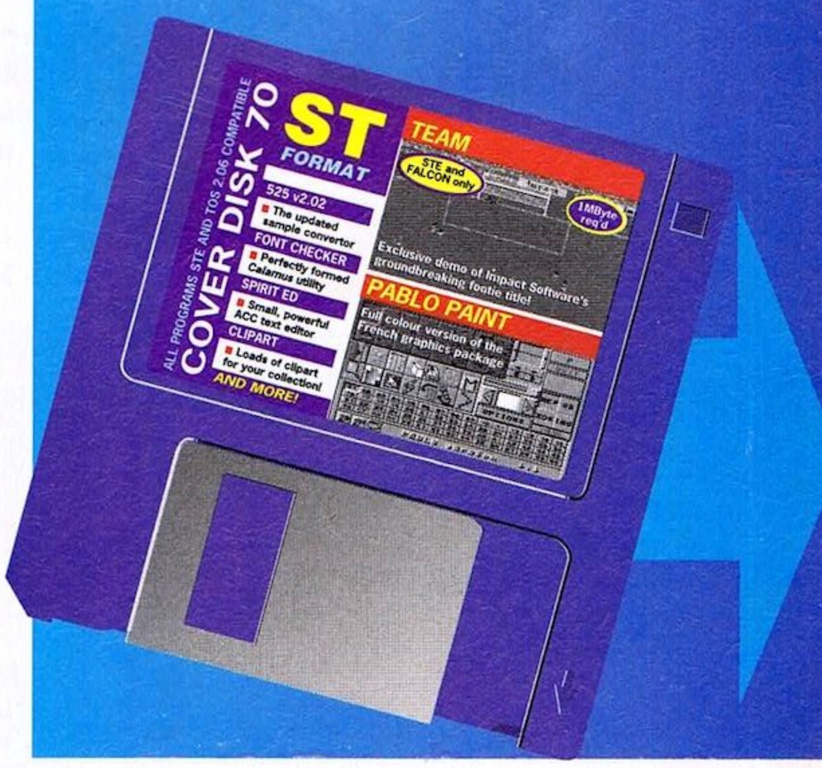
CALAMUS FONT CHECKER: Now you can easily view, print and catalogue all your *Calamus* fonts.
Uncompressed size: 78K

SPIRITED: Accessory-based text editor for producing text-files quickly and effortlessly. Features Mac-like editing tools.
Uncompressed size: 82K

CLIP-ART: Loads of great clip-art images, which you can use in your DTP software.
Uncompressed size: 109K

MENU: Dearchive all that scrummy Cover Disk software with the minimum of fuss.
Size: 13K

BACK UP: Keep your Cover Disks free from harm and stay in Nick's good books. Hurrah!
Size: 12K

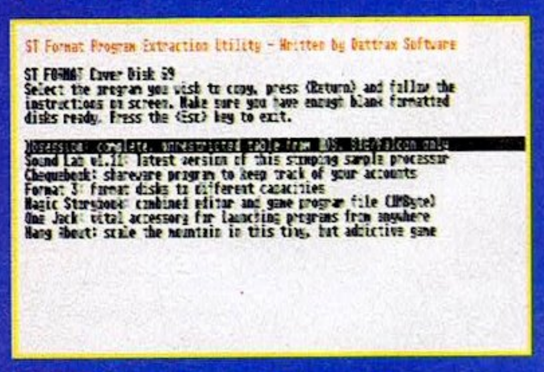


Production coordinator Emma 'She-Vampire #1' Woodward
Production controller Claire 'She-Vampire #2' Thomas
Paper controller Fiona 'She-Vampire #2' Deane
The Lino Lads 'Whitesnake' Simon Chittenden; Mark Glover; Jon Moore; Chris Stocker; Simon Windsor; Jason Titley; Ollie Gibbs
Printed by TPL, nr Kidderminster, Worcestershire
Circulation Manager Pete 'Jack the Ripper' Walker ☎ 01225 442244
Publisher Simon 'Frankenstein' Stansfield
Lord of the Flies Greg Ingham
Annual subscription rate: UK £45, Europe £59.88, ROW £69.83

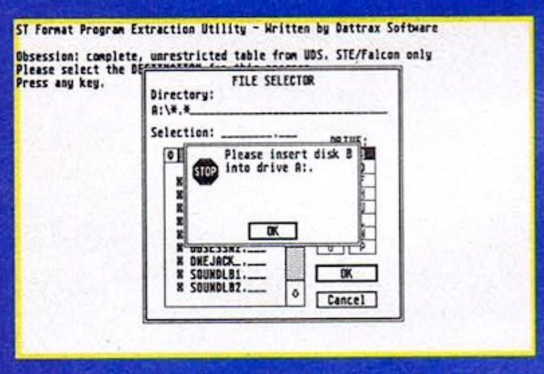
COPYRIGHT NOTICE
ST FORMAT recognises all copyrights in this issue. Where possible we have acknowledged the copyright holder. Please contact us if we have failed to credit your copyright – we'll be happy to correct oversights.
■ We assume all letters sent are for publication unless otherwise stated, and *ST FORMAT* reserves the right to edit contributions.
■ If you contribute, full copyright comes to Future Publishing.
■ We cannot reply to any letters personally, even if you include an SAE.
■ *ST FORMAT* © 1995 Future Publishing.
■ No part of *ST FORMAT* may be reproduced or resold without the permission of our publisher.
■ *ST FORMAT* cannot be held responsible for any mistakes/misprints.

Your guarantee of value
Future PUBLISHING
ST FORMAT ■ Amiga Format ■ PC FORMAT ■ Amiga Power ■ Sega Power ■ PC Plus ■ GamesMaster ■ Commodore Format ■ Super Play ■ Amstrad Action ■ Edge ■ Amiga Shopper ■ Total! ■ PC Gamer ■ PC Answers ■ MacFormat ■ Ultimate Future Games ■ .net
This magazine comes from Future Publishing, a company founded just nine years ago but now selling more computer magazines than any other publisher in Britain. We offer:
BETTER ADVICE. Our titles are packed with tips, suggestions and explanatory features, written by the very best in the business.
STRONGER REVIEWS. We have a cast-iron policy of editorial independence and our reviews give clear recommendations.
CLEARER DESIGN. You need solid information fast. So our designers highlight key elements by using charts, diagrams, summary boxes, annotated photographs, and so on...
GREATER RELEVANCE.
At Future, Editors operate under two golden rules:
■ Understand your readers' needs ■ Satisfy them
MORE READER INTERACTION. We draw on readers' contributions, resulting in the liveliest letters pages and the best reader tips. Buying one of our magazines is like joining a nationwide user group. More pages, more intelligent staff, better quality – magazines you can trust.

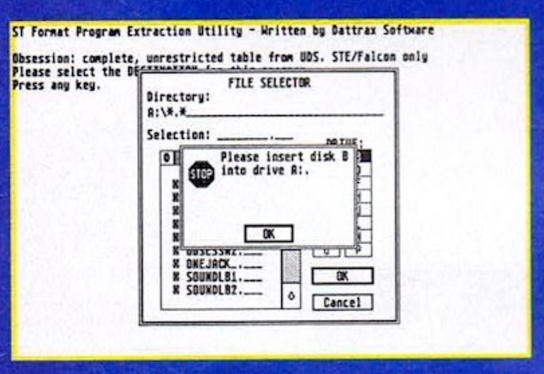
GETTING STARTED WITH THE ST FORMAT MENU GUIDE



1 Put the Cover Disk in Drive A, and double-click on the STF_70.PRG icon. Once the *ST FORMAT* logo appears, press any key and you're faced with an Options screen not unlike this one.

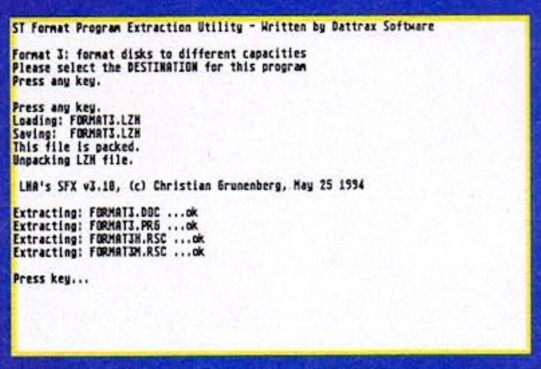


2 Once you've made your selection, you're faced with your file selector. Select Drive B (TOS 1.02 owners should click on A:/ and replace it by typing `B:/` before clicking on the Close Box icon).



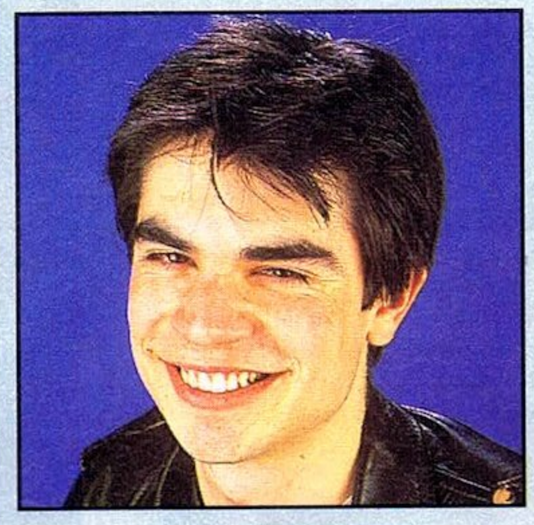
3 If you have a single drive you'll be asked to insert disk B (your blank disk) into Drive A. Do so, and once your file selector displays the information concerning Drive B, click on OK.

4 Once you've clicked on OK, you'll be faced with another dialog box telling you to insert disk A (your Cover Disk) into the disk drive. Do so, before clicking on OK to start transferring the program.



5 Once files are loaded into memory, insert disk B (the blank disk). Click on OK to save the files to it (if the file is compressed, it unpacks). Once you've returned to the Menu, press [Esc].

Cover Disk



You can e-mail Nick Peers with your Cover Disk problems as well as your comments on football, *Star Trek* and being bitter and twisted. Just contact him at nick@stformat.demon.co.uk

TEAM

BY: Impact Software
MACHINES: STE/Falcon
MEMORY REQUIRED: 1MByte
RESOLUTION: Any colour resolution
SIZE: 344K

Getting started

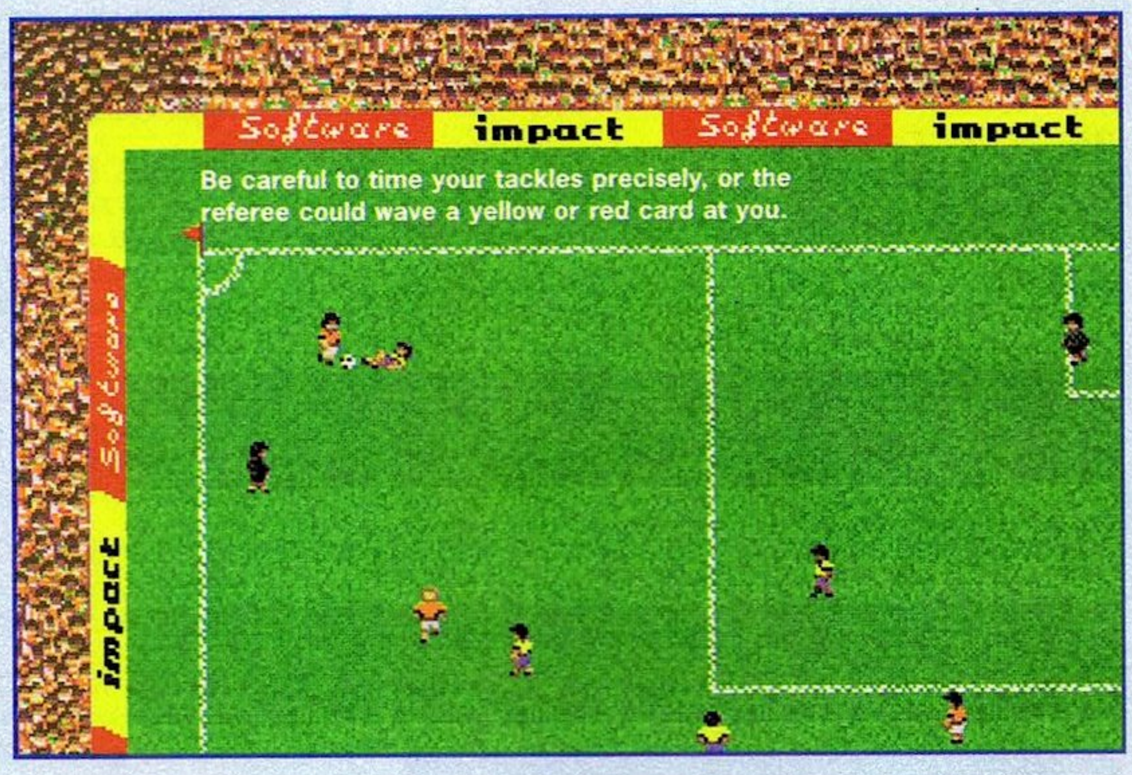
Once it has transferred to a blank disk using the *Menu* program, open up the TEAM folder and run TEAM.PRG.

About the program

At last, the *ST FORMAT* demo of the most realistic football game for the STE/Falcon, ever, has arrived. *Team* runs on any 1MByte STE or Falcon with a colour display. This long-awaited demo enables you to play three 90-second games, in which you control Holland, while your ST controls Columbia.

As in *Sensible Soccer* and the *Kick Off* series you control your team from an overhead viewpoint. When chasing the ball, press [Fire] to tackle (if the ball is on the ground) or to head the ball (if it's in the air). Once you have the ball, dribbling is simply a case of moving the joystick in the direction you wish your player to go.

It's important to note that you can't just run around the pitch with the ball, turning 180 degrees to avoid a tackle – that will result in your player losing possession. To practise fine ball control, make sure you don't turn the joystick in more than 45-degree increments.

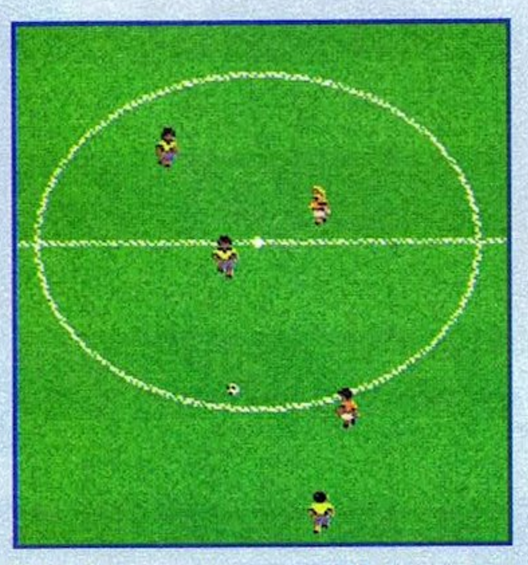


You can attempt some spectacular and powerful headers by using your wingmen to get the ball across into the opponents' area.

As your control improves you'll find this increasingly easy, and Ryan Giggs (or Jose Dominguez) will soon be making an appearance in your team.

Route One football

Of course, no team can survive unless it passes the ball about. In *Team*, you have a remarkable amount of control over where you place the ball. When in possession, pressing [Fire] releases the ball, and the longer you hold it, the more powerful the kick. Quick, short passes are possible by pressing [Fire] very quickly and moving the joystick in the direction of the intended recipient. Pulling the



Team features Overscan, which expands the screen area to increase your screen space by 40 per cent.

BALL CONTROL

Team can be controlled either with a joystick, a Jaguar powerpad or a keyboard. Use the arrow keys to control your player's direction, and the left [Shift] key to fire.
There are also a number of other keypresses you can use.
[Esc] quits the current game and returns you to the initial screen
[P] pauses the game.
[O] toggles Overscan on and off, reducing the screen size.
[Control] toggles between human and computer control, enabling you to watch the computer battle it out with itself.
[C] enables you to swap two players' positions. Just select the two players you wish to swap using [Up], [Down] and [Fire].
[S] enables you to make substitutions. In the full game, you can also change your team's tactics, but this has been disabled in the demo.
[Undo] returns you to the game and cancels any changes that you've made.

FULL GAME

Team costs £24.95 and is available from Impact Software at the address given in the demo. Here's a rundown of some of those impressive features that the full game offers.

1 Pick your team from any of the current FA Premier League (with the latest transfers included) or World Cup '94 teams. If you're a Doncaster Rovers supporter, you can design your own team, with its own strip and 22 players of varying skill, speed, hair and skin colour and even shirt number.

2 Choose your team's tactics from a wide selection. You can even change tactics during the game itself – useful should you want to defend a slender lead with only nine men, or push forward in a desperate attempt to equalise.

3 Create league and knockout cup competitions, determining features such as two-leg ties, replays, extra time and penalties. You can save and reload your positions to disk.

4 Replay facility enabling you to build up sequences of your best (and worst) moments in *Team*. Comes complete with fast-forward, rewind, slow-motion and frame-advance.

5 Variable weather, pitch type and referee all affect the outcome of games, just like they do in real life.

6 Future updates and data disks planned. Also, a Falcon-specific version with better graphics and sound is planned. Falcon owners can upgrade from the original *Team* for just £5.

DON'T FORGET

Write-protect your Cover Disk. Slide the black tab so you can see through the hole.

Make a backup using the *Back Up* program on the Disk. NEVER ever run software directly from the Cover Disk except *Back Up*. And we mean never!

Many Cover Disk programs are compressed to fit them on the Disk. Use the *Menu* program to copy and extract them to your blank disks. Step-by-step instructions are given over there, on the left.

Read the instructions in these pages and in any document file that is on the disk.

If you have any general problems with your ST, consult your manual. If you're still stuck write to: ST Answers, *ST FORMAT*, Future Publishing, 30 Monmouth Street, Bath, BA1 2BW.

joystick in the opposite direction while holding down [Fire] sends the ball through the air rather than along the ground – vital for all those lower division stars whose idea of one-touch football consists of heading on a long ball in the vague direction of the goal.

Shooting works along a similar principle. *Team* replaces the 'aftertouch' system of *Sensible Soccer* (which enables you to bend the ball after shooting it) with what's known as 'directional control'. To determine where the ball goes, keep [Fire] held while you move the joystick, then release it to see what happens. This technique also enables you to chip players, by pulling back on the joystick before releasing [Fire]. You can also chip the goalie, which results in some spectacular goals when you get it just right.

Realism

Your games start off scrappy. Your players receive numerous yellow and red cards, because your desperate lunges for the ball are so horribly mistimed. Your control leaves a lot to be desired and your passes go nowhere. Your best chance is to pump long balls forward and hope that the Columbian defence can be hassled into putting the ball into their own net.

If one of your players is sent off, you can swap the rest of the team around.

As you get the hang of things, however, you notice how easy it is to produce quality football. Your passes become more accurate, and snake along the ground rather than floating aimlessly through the air. Dribbling becomes easier to control, and your goal shots start to force saves rather than sail harmlessly wide. The net (sic) result is some sparkling moves which, when you look back on them, amaze you.

That's the beauty of *Team*. It's grounded in reality. The game takes place in a realistic 3D environment with all the latest laws of football incorporated (with ref and linesmen to match). So, for example, you can head or throw the ball safely back to your keeper, but pass it back to him and he's activated like another player, unable to pick up the ball.

General hints and tips

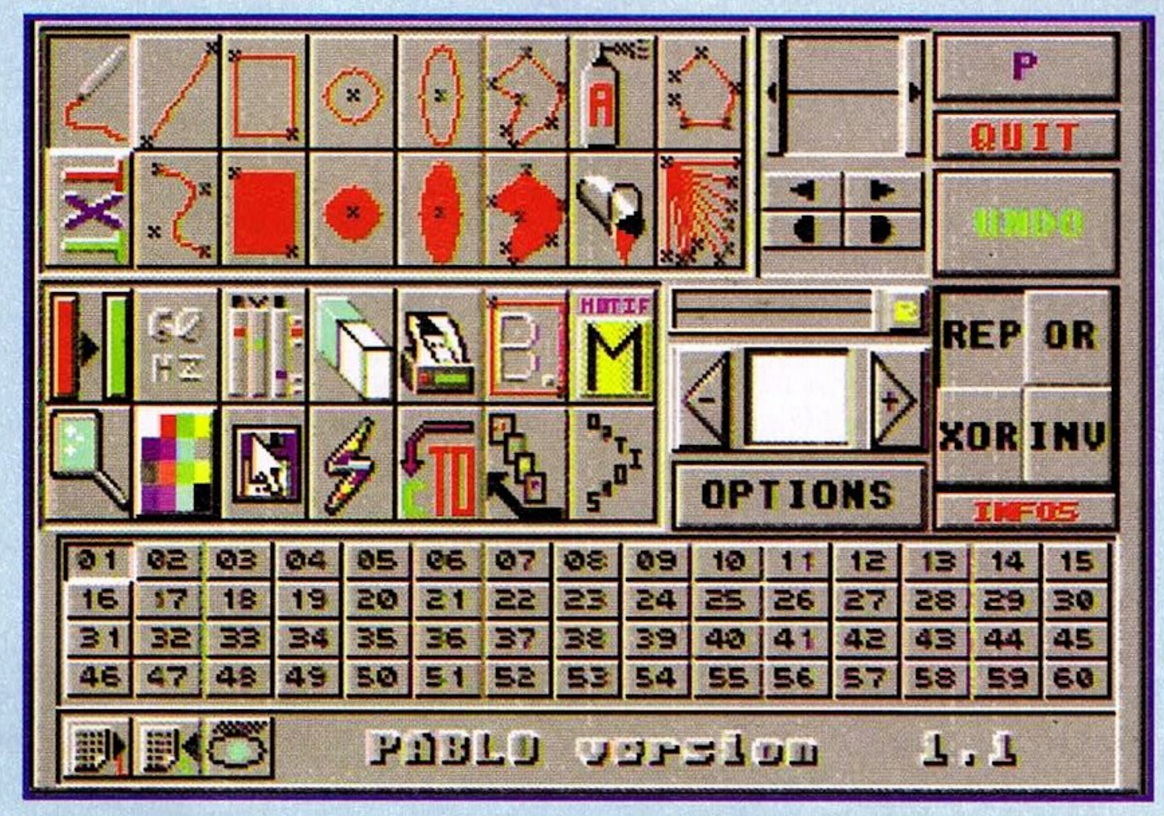
Ralph Lovesy, *Team's* author, has one hint that sums up the game: think in terms of real football. *Team* is so realistic that once you've mastered the controls, anything goes. In real life footie, timing, positioning and accuracy are of paramount importance, and the same is true of *Team*. So look out for players in space when passing (there's nothing like an accurate pass for splitting open the Columbian defence) and don't blast the ball when you're in a one-on-one situation with the opposing keeper. Remember that subtly and accuracy are the name of the game.

Spectacular strikes can produce goals in *Team*. It's a game that'll grab you from start to finish.

One feature unique to *Team*, the ability to chip the goalkeeper, is something Ralph's keen to boast about, and why not? It's just so satisfying, spotting the keeper slightly off his line and chipping him for a goal to remember. You've seen it happen in real life, and you can emulate it in *Team*.

I want more!

The demo gives you an excellent taster of what is to come, but the full version enables you to play longer games against different standards of opposition, and with loads of other extras – just see the 'Full Game' panel above.



You could use *Pablo* to create low-resolution Degas pictures, which you can then import into *Jumble Up*, the game we gave away on Cover Disk 68. Creative, huh?

PABLO PAINT

BY: IEBC Design Concept
MACHINES: All STs
FALCON-COMPATIBLE: Yes
MEMORY REQUIRED: 1MByte
RESOLUTION: ST Low only
UNCOMPRESSED SIZE: 208K

Getting started

Use the *Menu* program to decompact *Pablo Paint* to a blank disk, then run the program by double-clicking on PABLO.PRG.

About the program

Pablo Paint is the complete colour version of a paint package that for many years was commercial software in France, but now, thanks to an exclusive deal with *ST FORMAT*, you can sample its delights as shareware (registration costs just £15). A demo of the original monochrome version appears on this month's Wonder Disk (it's also available as PD).

This excellent package offers so many different options that it's impossible to cover in any depth in the Cover Disk pages. Instead, Frank Charlton starts the first in a series of *Pablo* tutorials on page 60. Note that although the program itself only runs in low resolution, you can still load medium and high resolution Degas and Tiny files and play around with them.

To register, send a cheque for £15 to: Claude Boulanger, 1 Rue De Metz, 57690 Fletrange, France.

525 2.02

BY: Harald Schonfeld and Bernd Spellenberg
MACHINES: All STs
FALCON-COMPATIBLE: Yes
MEMORY REQUIRED: 512K
RESOLUTION: Medium/High
UNCOMPRESSED SIZE: 98K

Getting started

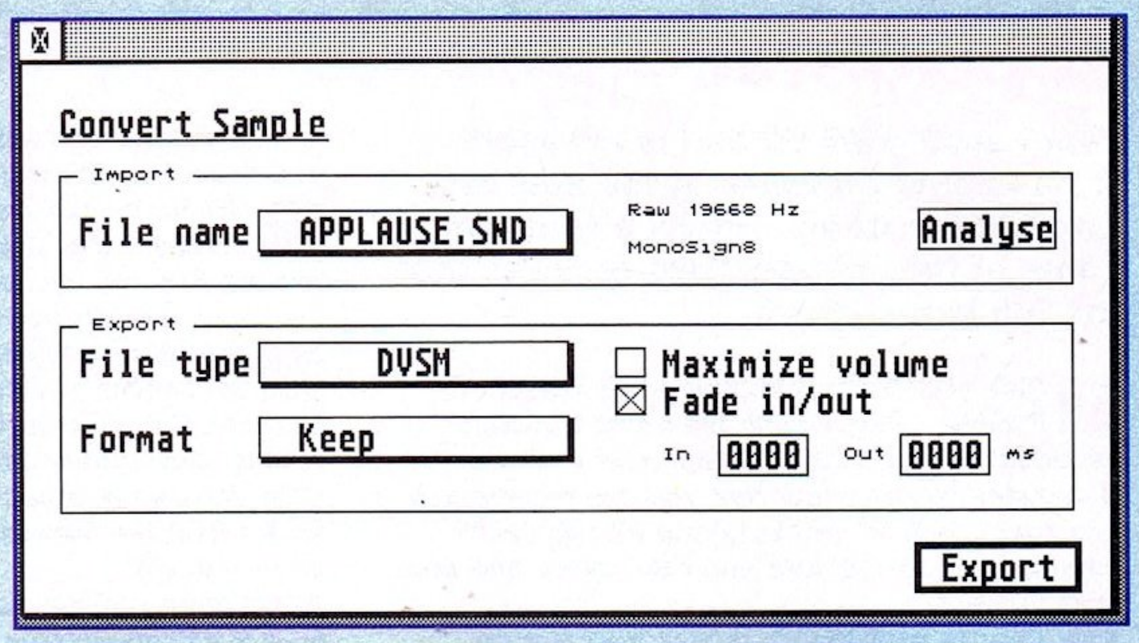
Once decompressed to a blank disk, double-click on 525E.PRG to run the program. Full details are enclosed in the README file. A German version is also available – see the LIESMICH.TXT file.

About the program

525 enables you to convert sound samples between different formats, some of which can then be used on different platforms, such as the PC and Mac. It's the ideal companion to last month's Cover Disk offering, *Sound Lab*, which could only export samples in the AVR format.

Once loaded, a shareware message flashes up for a few seconds before the main menu appears. Clicking on the empty 'Import Filename' box brings up the file selector. Select a file to import, and the program loads it in, then asks whether you want to change any of its attributes. Clicking on 'Analyse' gives you useful information about the imported sample: its type, format, length (in kilobytes) and frequency. Once you've looked at it, you can export your sample as another file type (see the panel for more details), and alter its format between different mono and stereo types. Although this can't improve the quality of a sample, it does ensure maximum compatibility between sample types (for example, a 16-bit AVR sample is not necessarily compatible with an 8-bit AVR sample).

Registering the program is well worth the cost, and you receive a key enabling you to automatically register for future updates. Registering also helps ensure that *525* continues to be updated regularly, with future plans including the support of more sample formats as well as the ability to convert a sample between different frequencies.



With **525, you can also maximise the volume of weak samples, or fade them in and out.**

SUPPORTED FILE FORMATS

The latest version of 525 supports the following sample formats:

AVR the most common sample format found on the ST
SND/AU a format that's commonly used on the Mac
WAV a sample format found specifically on the PC
HSN *Crazy Sounds:* a German program which is used to assign samples to specific functions, such as formatting a disk, or deleting a file
FORTUNE/DVSM both of these are Falcon file formats
AIFF *Cubase* file, which is also Mac compatible
Raw Data an unsigned file, which makes it easy to import into other sample conversion programs

CHAIN REACTION

BY: Stephen Taylor and Colin Whitehead
MACHINES: All STs
FALCON-COMPATIBLE: No
MEMORY REQUIRED: 512K
RESOLUTION: Low
UNCOMPRESSED SIZE: 152K

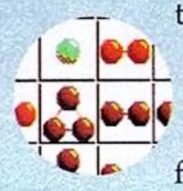
Getting started

You must dearchive *Chain Reaction* to the root directory of a blank disk (it isn't hard-drive compatible). The *Menu* program does this automatically for you.

About the program

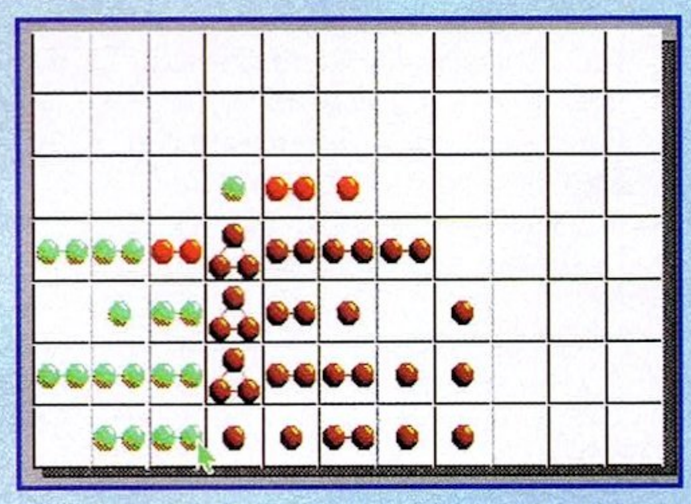
Chain Reaction is a thoroughly absorbing strategy game, which sees up to six players (human, ST or both) competing to ensure their atoms are the last left on the playing board. You take it in turns to place atoms on a grid, but each cell, depending on whether it is a corner, side or middle cell, can hold only a certain number of atoms before reaching critical and exploding outwards.

In this explosion, the affected atoms explode one atom into each adjacent cell. If your opponents' atoms are in that cell, they become your atoms (they change colour) and if that cell now becomes critical it also explodes outwards. This results in some catastrophic chain reactions that can wipe other players from the board completely.



And it's shareware

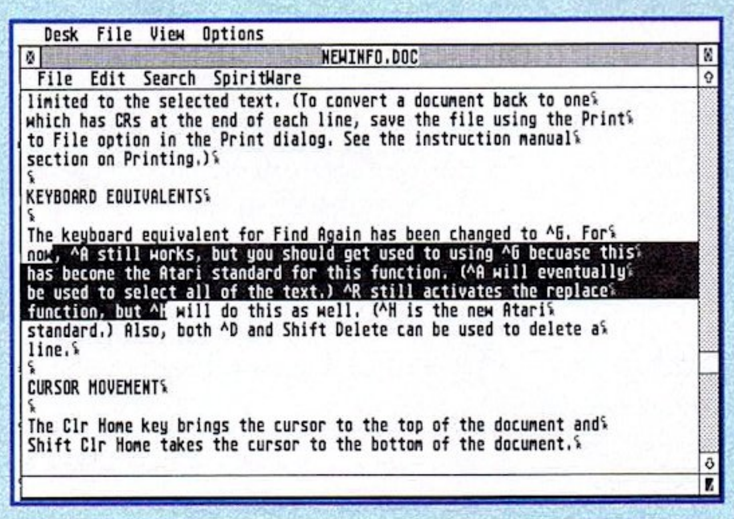
Chain Reaction features colourful graphics and neat little sound samples to give it real atmosphere. Full instructions on how to set up the game are contained in the REACTION.DOC file, where you'll also find a justifiable plea to register the program for £5. If you want more games of this quality on your Atari, you'd do well to respond.



Chain Reaction **offers multi-player action that'll knock your socks off (before blowing you off the board).**

SPIRITED

BY: Fifteenth Avenue Bible Church
MACHINES: All STs, TTs
FALCON-COMPATIBLE: Yes
MEMORY REQUIRED: 512K
RESOLUTION: Any
UNCOMPRESSED SIZE: 82K



SpiritEd **supports Macintosh-like block tools. To highlight text, you just drag the mouse over the area required while holding down the left mouse button.**

Getting started

The *Menu* program copies SPIRITED.ACC and its three accompanying textfiles to the root directory of your disk. Rebooting the machine with that disk in the drive installs *SpiritEd* as an Accessory, which is run from the Desk menu.

About the program

SpiritEd is a superb text editor program that can be called from within other programs – especially useful in DTP packages such as *Calamus* or *Papyrus Gold* where it's much quicker to use a text editor to type in or alter text.

Despite its relatively small size, *SpiritEd* boasts a number of impressive features. It's been designed to emulate Macintosh applications as closely as possible, which means that you highlight text to be deleted, moved or copied just by dragging the mouse over the area you want to manipulate. You can also search your text for specific keywords, and there's an option enabling you to strip all character returns from the text to make it easier to use in other programs. Every option can also be accessed through keyboard short cuts: for example, [Clr Home] takes you to the top of the document, while [Shift] and [Clr Home] move to the end.

Spiritware

It's important to realise that *SpiritEd* is designed as a text editor and not a full-blown word processor. Its formatting capabilities are non-existent, but it's still excellent for knocking up quick files (such as letters or notes) which you can either print there and then or import into another program later.

The program is Spiritware – no, we've never heard of it either! Once you've accessed it from the main Desktop read the three textfiles from within it. This version, 1.3, is fully TT and Falcon compatible and runs with all TOS versions, including MultiTOS.

CALAMUS FONT CHECK

BY: Peter Hibbs
MACHINES: All STs
FALCON-COMPATIBLE: Yes
MEMORY REQUIRED: 1MByte (2MBytes to print fonts)
RESOLUTION: High
UNCOMPRESSED SIZE: 78K

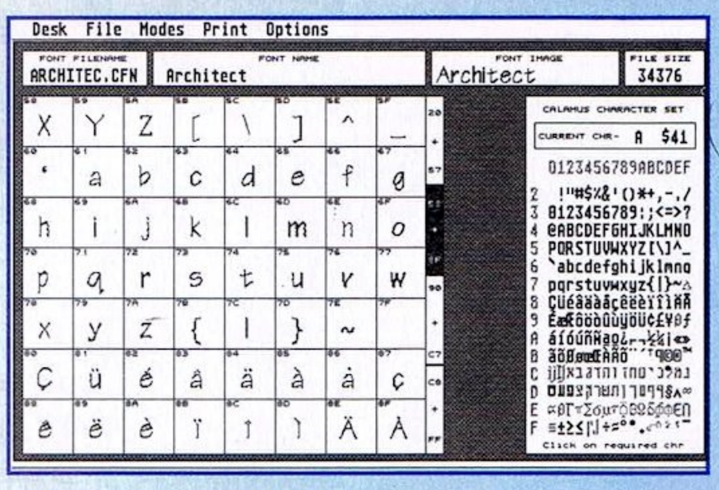
Getting started

Just run CFN_CHCK.PRG once you've decompacted the program using *Menu*. Full details about how to use the program are contained in the CFN_CHCK.DOC file.

About the program

This has to be the first program available that makes it possible to easily view and print *Calamus* fonts without resorting to *Calamus* itself. There are several built-in printing options, which enable you to produce a permanent record of your font collection. You can choose to display each font's complete character set separately on each page, or you can opt to display six fonts per page – which is especially useful if you have a large collection of fonts.

Once loaded, the font's filename, actual name, image and file size are displayed at the top of the screen. You can view your fonts in three ways. The first displays them as individual characters, which also enables you to view each font as an outline, with guidelines, bezier points and/or kerning lines, all useful pointers to its construction.



***Calamus* is a powerful DTP engine, as our feature starting on page 16 demonstrates, and *Calamus Font Check* is an indispensable aid.**

If you're after a quick overview, you can elect to view the font in banks of 56 characters, then cycle between the four screens by clicking on each of the four panels that lie adjacent to the fonts themselves. The final option enables you to view the fonts as text or hexadecimal, which will be of interest mainly to programmers interested in the internal structure of the fonts themselves.

Printing

You need 2MBytes of RAM and a HP deskjet or laser printer set to 300dpi to print the fonts. You can print them as text or multiple characters, or as an entire character set. Using this last option, you can alter which letters are printed – choose 'Select Chr Set' from the Print menu. The 'Options' menu enables you to set the pathname for where you keep your fonts – useful if you keep a large number of fonts on your hard drive. You can also determine whether your font list is sorted alphabetically or not, if you select 'no' to this option the fonts are displayed according to their date stamp.

This isn't strictly shareware, but you could still send the author a small donation. He might even then program a version that supports Epson printers, for example.

PROBLEMS?

If you can't load, copy or back up your Cover Disk then you may have a faulty disk. Send the disk and a padded self-addressed envelope to:

***ST FORMAT* May Disk Returns, PO Box 21, Daventry, NN1 5BU. We pay the return postage for you.**

Please don't send faulty disks to our Bath or Somerton offices. We don't keep stocks of Cover Disks there.

If you are having problems with a Cover Disk program, reread the instructions and any DOC files. If you still have problems, call the *ST FORMAT* Cover Disk Hotline on ☎ 01225 442244 on Wednesdays between 2pm and 6pm only.

Cover Disks are double-sided. If you have an old STFM and you can't read the Cover Disk then you need to upgrade your ST to a double-sided drive.

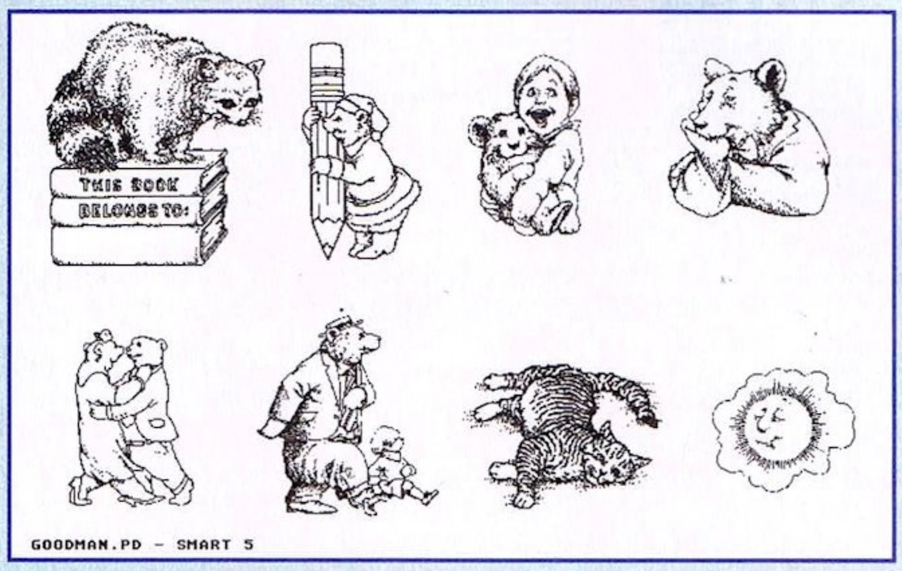
If you have other hardware or software queries, contact the manufacturer or publisher. Or ring the official Atari Helpline on ☎ 0131 332 93233 between 6pm and 11pm Monday to Saturday and 8pm and 11pm on Sundays.

CLIP-ART FILES

BY: Goodmans International
MACHINES: All STs
FALCON-COMPATIBLE: Yes
MEMORY REQUIRED: 512K
RESOLUTION: Any (Medium/High recommended)
UNCOMPRESSED SIZE: 109K

Getting started:

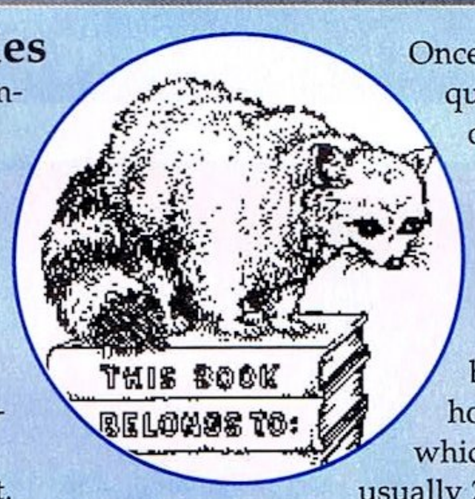
The *Menu* program automatically dearchives seven IMG files to your blank disk. Details on how to get hold of other clip-art from Goodmans can be found in the READ.ME file.



Loads of cutesy animal images, similar to these, make up the varied delights of these clip-art files.

About the files

Seven files, just brimming with clip-art, make up this disk. They centre largely around animals, although CLIPART4.IMG and CLIPART5.IMG include some attractive images based around the alphabet. *PicSwitch*, which we gave away on Cover Disk 68, is suitable for viewing these files.



Once you've seen the quality of images on offer, you'll doubtless be desperate to get hold of some more. Goodmans, who kindly gave us these files for distribution, have a whole host of disks, all of which are packed with usually 20 or more clip-art files, featuring a wide range of topics, including sports, Christmas and yet more animals.

BACK UP

Getting started

Just double-click on BACKUP.TOS to run the program and follow the on-screen instructions from there.

About the program

Let's be reasonable here. You can't expect to keep backups of all your *ST FORMAT* Cover Disks. After all, many of the programs on each disk are archived, so once you've transferred them on to blank disks your Cover Disk is effectively your back-up copy. Nevertheless, when you first eagerly remove the Cover Disk from its plastic sleeve, it is the only disk you have containing all those programs, so it's a good idea to back up the disk to a special *Current Cover Disk Back Up* disk before you start fiddling around with it. That way, you save on disks and postage stamps as well as tears when it all goes wrong!

And apart from all that, if you don't back up your Cover Disk we'll send the Hairy round to find out why. Not pleasant. ***stf***

WE WANT YOUR PROGRAMS

We pay for your software – so if you have anything that's good, original and preferably short that you think really deserves to go on *ST FORMAT*'s Cover Disk, send it with this form and full documentation to Nick Peers, *ST FORMAT*, Cover Disk, 30 Monmouth Street, Bath, Avon BA1 2BW

Name _____

Address _____

_____

Daytime phone _____ Program title _____

_____ Total size in K _____

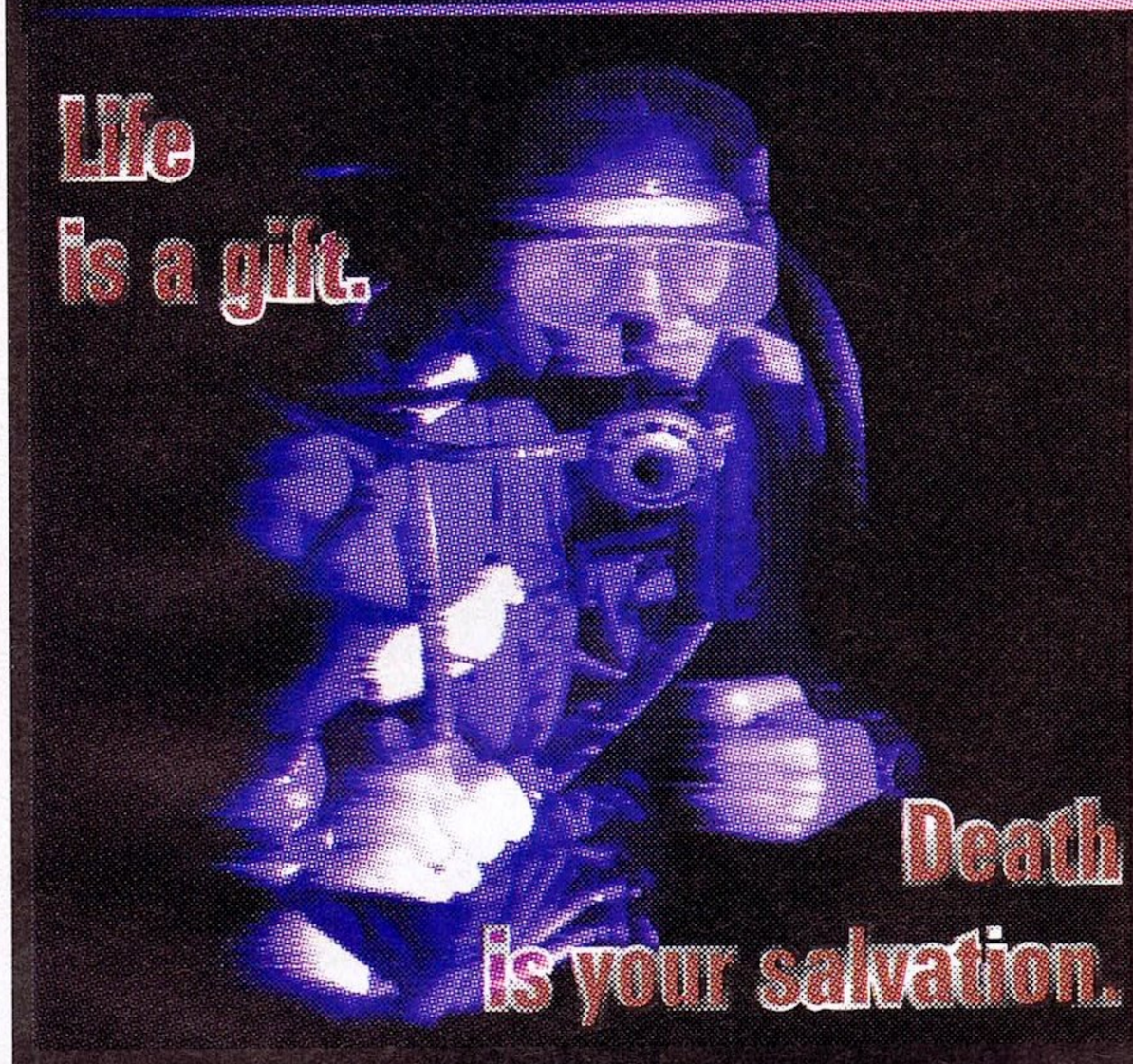
On a separate sheet, explain concisely what the program does and why you happen to think it's so brilliant.

Remember to: ■ Include on-disk and paper documentation ■ Write your name and address on the disk ■ Use a virus-free disk ■ Keep a copy of your program, contributions are non-returnable ■ Enclose an attractive bribe. A Birmingham City 1995 season ticket, perhaps ■ Not that it makes a difference

Please sign the following declaration: This program is submitted for publication in *ST FORMAT*. It is wholly my own work and I hereby agree to indemnify Future Publishing against any legal action should copyright problems arise. **STF70**

Signed _____ Date _____

SUBSTATION



From the makers of Obsession
Showing now at a computer near you

© Unique Development Sweden 1995

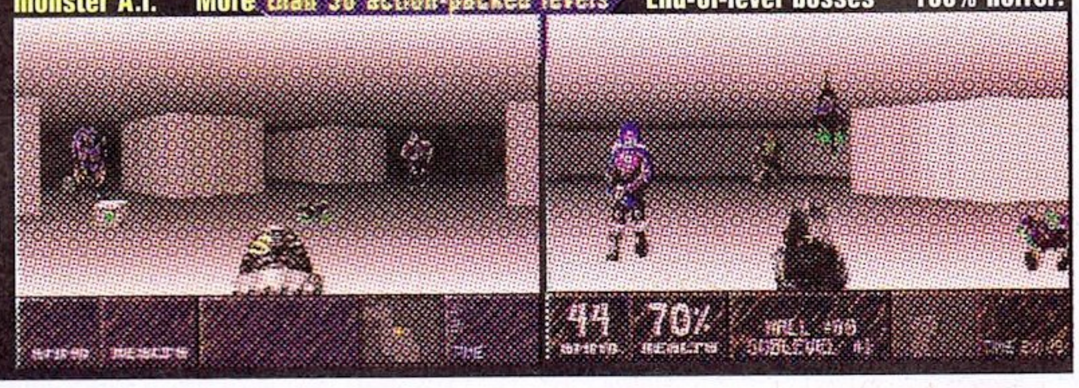
SUBSTATION: In 1996, Mitushi Industries Corp. reveals the greatest innovation in search of alternative energy sources.

By cooling the lava streams inside the mantle they create electric power through large underwater turbines.

Two years later, Mitushi's "IEE" (Inside Earth Energy) base SubStation, at 2500 metres below sea level, is fully operational and provides Japan's two largest cities with all their power needs.

June 6th, 1999, 11:15 am. Contact with SubStation is lost. In panic, Mitushi's board of directors pay the U.S government an unknown amount of money to lease an "M.E.M"-squad to explore the secrets of the ceased contact with SubStation. Secrets that should remain hidden, deep down at the bottom of the sea...

SubStation features: True 3D world More than 2000 different locations A vast number of horrifying enemies Real time Gouraud shaded walls Advanced DD-Audio sound 6 different weapon types Multiplayer mode Secret rooms & booby traps Real-time lightsourced sprites 25 kHz sound More than 30 colours "Trial and error" monster A.I. More than 36 action-packed levels End-of-level bosses 100% horror!



ATARI
ST/ST-E/TT/FALCON 030

calamus®

Calamus 1.09n £59

1Mb Ram, Hi-Res Monitor & Double Sided Disk Drive
Calamus 1.09n is the only choice for those who want to get into serious desktop publishing on a budget. Other programs have come and gone but Calamus 1.09n still remains to be the market leader.

Calamus 1.09n will create professional documents using a multitude of construction tools. A fast text editor contained in its own window simplifies the inputting and editing of documents, placing Calamus 1.09n in a class of its own. Calamus 1.09n is easy to learn and use with its pull down menus, icons and on-line help functions, plus a complete and easy to follow manual.

Calamus SL £199

2Mb RAM, Hi-Res Monitor, Double Sided Disk Drive & Hard Disk
Calamus SL allows you to expand your DTP ideas into colour production work and with new commands, create a more flexible working environment for your ideas.

Outline Art v3 £99

2Mb RAM, Hi-Res Monitor & Double Sided Disk Drive
Another addition to complement the Calamus family is Outline Art v3 which is a vector graphics package with which you can add tinted shades to fonts and also create your own graphic objects for inclusion into Calamus.

JCA EUROPE LIMITED

30a School Road
Tilehurst, Reading
Berkshire RG3 5AN

Telephone +44 (0)1734-452416
Fax +44 (0)1734-451239

Stereo CAD £29.95

Any Atari with Colour TV/Monitor
Create your own stunning 3D Stereogram images. Let your mind loose with the drawing tools to create excellent 3D graphics. Your only limitation is your mind!!

Rainbow £29.95

Falcon with Colour TV/Monitor
A True Colour art package that expands the Falcon. With its quick choice colour palette and icons you can create stunning graphics quickly. With its built in Photo Studio there are over 80 tools and effects to choose from.

Obsession £24.95

ST-E & Falcon 1Mb Ram & Colour TV/Monitor
The best Pinball game ever for the Atari!!

Zero-5 £24.95

ST-E & Falcon 1Mb Ram & Colour TV/Monitor
Save the Earth from the Morphons in this amazing 3D Shoot em Up game.

Access EUROCARD MasterCard VISA

All prices include VAT & Delivery within the UK.
VAT Regd. No: 363437155
Please make all Cheques/Postal Orders payable to "JCA EUROPE LTD"

RIVERDENE PDL

PUBLIC DOMAIN & SHAREWARE
for the Atari ST series of computers including the Falcon.

Send a blank disk and S.A.E. for our catalogue on disk which contains text files in detail of all our pd/shareware disks.

STF News...

Keep yourself fully informed about what's going on in the ST world. If it's happening, it's here.

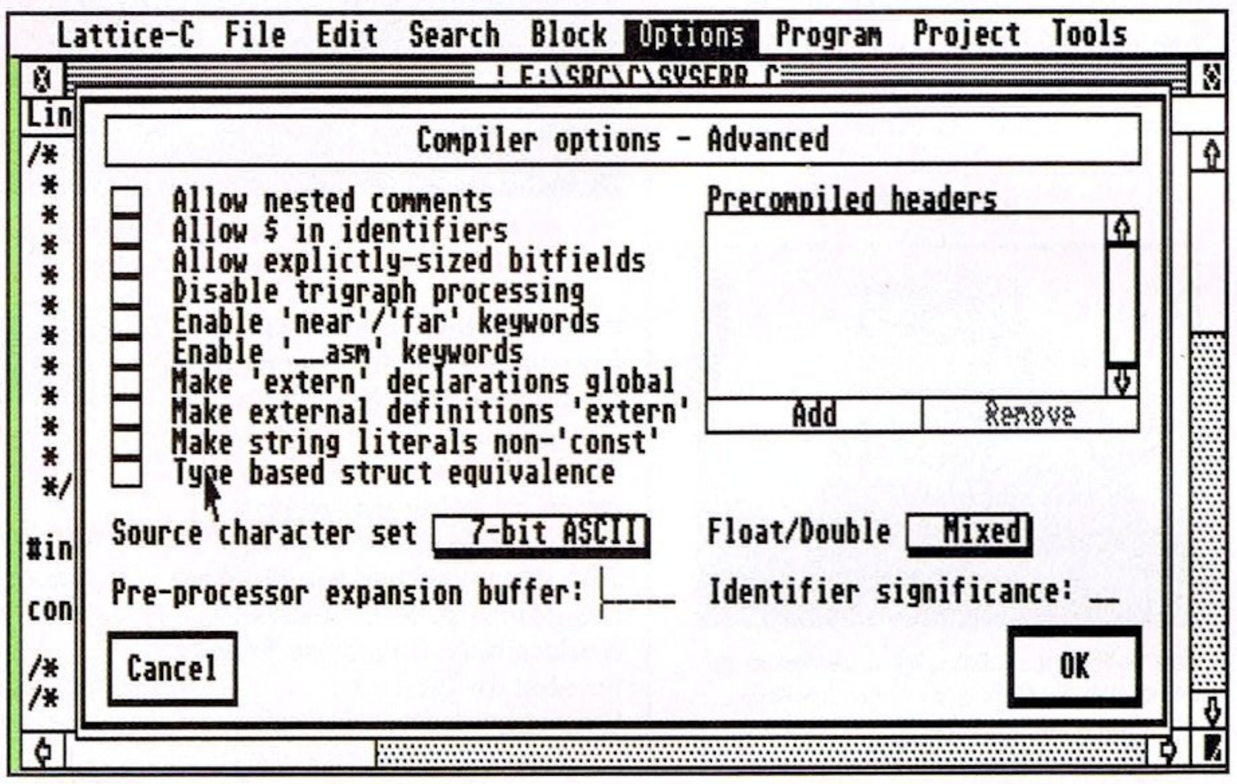
HiSoft remain loyal

A small storm was unleashed recently when long-time ST supporters HiSoft announced on the CiX on-line conferencing system that they were effectively stopping all in-house development for the Atari market. One small message generated a flurry of replies, with the Atari-owning CiXen showing their concern about this news.

We spoke to HiSoft's David Link to find out what was happening, and he told us: "We're a commercial company – we have costs and salaries to pay. At the moment, the Atari platform doesn't bring in enough revenue to pay in-house development costs, and so we have to look to putting in-house development elsewhere. We've actually done this for a few years now – most software that people think of as a HiSoft in-house product was actually developed out of the premises. We're not abandoning the Atari – we'll continue support and fix any major bugs if we can. Our support for third-party products will continue, with major releases like *Papyrus 4* and *Twist 3* on the horizon."

David assured us that all HiSoft were doing was announcing a situation that had existed for years. After all, other than *Clarity Falcon*, nothing has been developed in-house for close to two years. So there's no reason to panic – HiSoft aren't jumping ship, they're just being honest. And development of software will continue, elsewhere.

FRANK CHARLTON



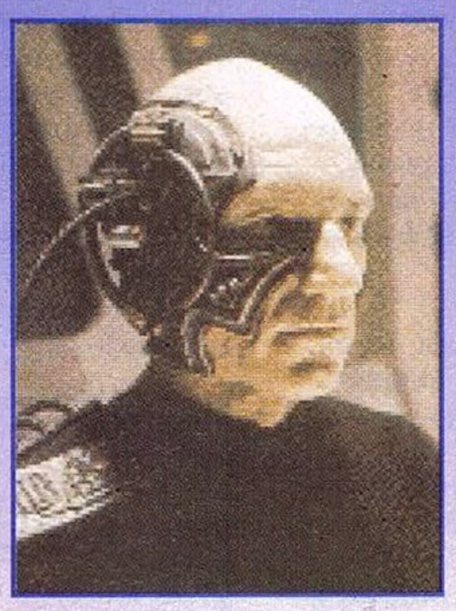
HiSoft have had a history of strong releases for the ST, but for the last couple of years they haven't actually done any development themselves. They've just announced it recently, that's all.

RESISTANCE IS FUTILE

DID THEY NAME IT SPECIFICALLY to get a gratuitously big picture every time they were mentioned, or what? Locutus PDL is a new public domain library aimed specifically at the Atari ST. Based in Manchester, the library offer disks at £1.50 each, or £1.25 each when you order over five at a time. Locutus also offer a friendly help service, whether you purchase PD or not.

As a special introductory offer, Locutus are offering any five PD disks for a mere £6 in total. For details or info, contact Locutus PD at: 49 Summerfield Road, Wythenshawe, Manchester, M22 1AE ☎ 0161 498 0716.

It's good to see concerns like this growing. And how they're growing. Over recent months we've seen user groups, fanzines, PD libraries and commercial software houses form, all producing software, enthusiasm and support for the ST. If you have a similar venture to tell us about, write to: The Newsdesk, *ST FORMAT*, Future Publishing, 30 Monmouth Street, Bath, Avon, BA1 2BW or phone ☎ 01225 442244, and we'll give you some free publicity.



Look, we're sorry, okay? Nick slipped this one through before any of us could stop him.

MEMS show

YOU FORGOT, DIDN'T YOU? The MIDI, Electronic Music and Recording Show is happening at London's Olympia 21-23 April. Tickets are £8 on the door, or £5 if you call ☎ 01369 707888 now.

There are, however, some people who won't shell out £8. They're the ones the have missed out on demos from Fame, Steinberg, Soundcraft, Novation, and Vestax to name but a few. And if you're one of them, you'll also miss out on seminars, demonstrations and talks by the big names in the music business.

If you go armed with the photo on page 82, you'll also be able to track down our Andy and Frank and ruin their weekend.

SNIPPETS

Philip Jones, Cheadle Hulme's own PD librarian, has started PAJ Software, which takes a new approach to 'being a PD library'. PAJ's main interface with you, their disk catalogue, contains more than just lists of PD software. It incorporates reviews of new PD as well as charts. Their PD costs £1.35 per disk, along with a £1 charge for disks, postage and packing. Alternatively, you can save money by providing your own disks and SAEs.

Contact PAJ at: PAJ House, Shaftesbury Ave, Cheadle Hulme, Stockport, SK8 7DB. We wish them the best of luck with their efforts.

Mark Nobes, head of the STellar Atari Club, has announced several changes within the organisation. Firstly, the disk magazine they publish will become bimonthly from issue 15 (released on 2 April). This is to make sure the authors "can donate more time to running the library and also produce a better quality diskzine". STellar are also keen to see new members. So keen, in fact, that they're offering free membership to all *ST FORMAT* readers – although you'd better hurry, the offer closes 31 May 1995. Enclose a disk and an SAE, and they'll mail you back a catalogue and membership form, and you can order any PD disk for 90p.

STellar will also be taking on distribution of several commercial titles, including Impact and Top Byte software, so they'll soon be able to sell you Impact's *Team*. Contact STellar by writing to: Newholme, Ashton Road, Chipping Campden, Gloucestershire, GL55 6HR.

The more experienced Neterans (sorry) among you should remember *Shades*, the multi-user dungeon, run by Prestel. Having signed a new deal with Prestel, *Shades* is back. Multi-user dungeons are on-line adventure games in which the characters are played by other players. It's as close to a textual cyberworld as you're going to get.

The system now supports scrolling ASCII as well as the older Videotex, so anyone can log on using standard comms software. And there are extra activities such as fight nights, quiz nights, puzzles and even schools to help you survive the harsh world of Shades. Prestel are offering a *Shades*-only account at £5 per month and 1p per minute off-peak, on a local call from anywhere in the UK. Prestel ☎ 0171 591 9000.

Kobe on-line through disaster

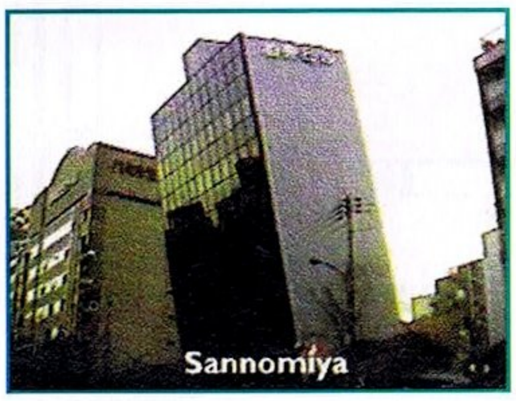
Few will forget the Kobe earthquake of mid-January, Japan's biggest natural disaster for 60 years. As the city crumbled, telecommunications were either cut or jammed solid, except for the Internet link at the Kobe University of Foreign Studies.

Within hours of the disaster, residents, students and the university alike took it upon themselves to replace the telephone system with the Internet. With many people concerned for loved-ones who were in the disaster area at the time of the earthquake, lists of the dead were posted as they were broadcast, and made available by return of e-mail to anyone who needed information.

As time went by, details and pictures of the level of destruction the earthquake had caused found their way on to the Kobe University site, providing the most up-to-date information service in that district at the time.

What surprised the Kobe authorities the most (except possibly the earthquake itself) was the response they got from the Net. Almost instantly, users from around the world were offering their support and services in any way they could, whether it involved translating names or calling relatives on behalf of those caught incommunicado. Taisuke Matsuzaki, the mayor of Kobe, sent messages of thanks to participants.

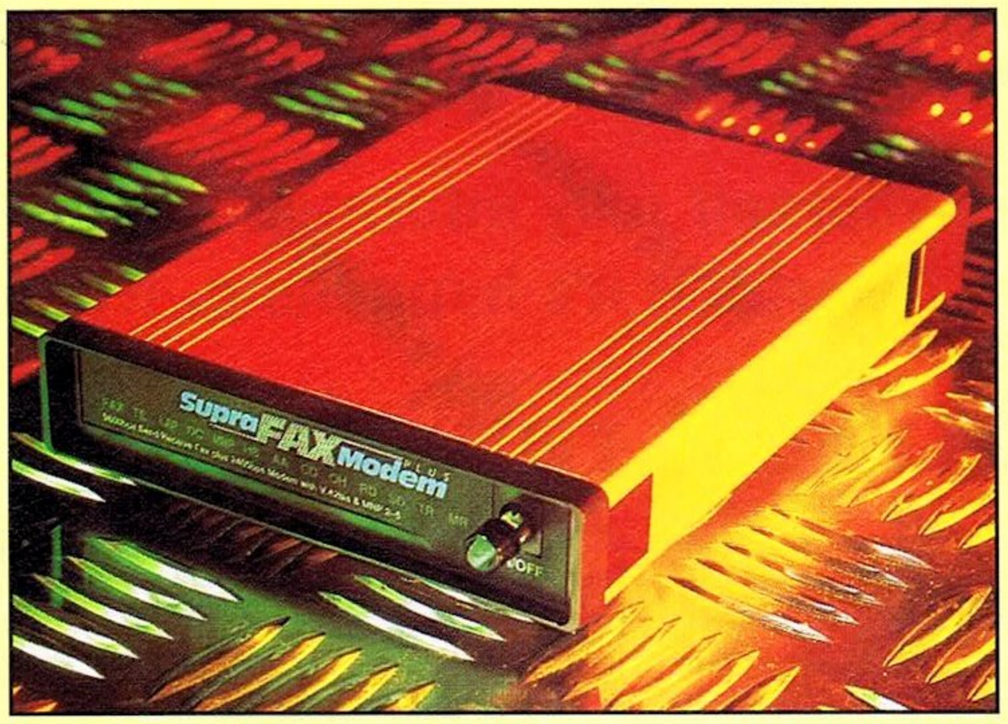
SIMON FORRESTER



The buildings of Kobe were designed to withstand earthquakes. Unfortunately, they weren't expecting this magnitude.

Batman Forever Judge Dredd
Doctor Who Star Trek: Voyage
r The Avengers Terry Pratche
t Waterworld Babylon 5 Red D
warf Aliens Blade Runner X-F
iles The Prisoner Blake's 7 Sta
r Wars Village of the Damned
Tank Girl Thunderbirds Deep S
pace Nine Clive Barker The Hi
chhiker's Guide to the Galaxy
Johnny Mnemonic Godzilla Aki
ra Spiderman Mission Imposs
ible Stargate Space:1999 Plan
et of the Apes Dune Lost in Sp
Future PUBLISHING
Coming soon

NET NEWS



You mean you need to go even faster? First Computer Centre should be able to help you out, and save you a pretty penny in the process.

Bigger, better, more. First Computer Centre in Leeds have announced their latest offer for Internetters – to upgrade users of Supra VFast modems to V34 (while retaining the original VFast protocol) for a mere £74.99. If you feel the need for even more speed, send your modem only, packaged heavily, to: Modem Upgrade Department, First Computer Centre, Unit 3, Armley Park Court, Stanningley Road, Leeds LS12 2AE, and they'll do the rest for you. If you'd like more details, give FCC a ring on ☎ 0113 231 9444.

APT Data are in the process of launching *Multimedia Futures*, a subscription-only fortnightly journal that will offer clear, complete, global picture of multimedia. Given APT's track record, the journal should follow in the footsteps of its sister journal *Computergram International*, the world's only daily newspaper for computer professionals.

It's more than just a newsletter, though. *Multimedia Futures* will eventually become the base for a Web site called Multi Media Village, located at www.globalnews.com/MMV. There you'll be able to find financial, marketing and technical coverage of television, video, multimedia, telephony, virtual reality, CD-ROM and the Internet. Nip along and take a look, why don't you?

Barclays offer yet more. If you read this column last month, you'll have learnt that you can now get turned down for a Barclaycard on-line instead having to spend several days waiting to be refused. This is only the start of the company's move on to the Net, though. Users can now access travel insurance and information through the web site,

BARCLAYS

It's not like they don't have the cash, seeing as they have most of ours.

http://www.barclays-insurance.barclays.co.uk and http://www.barclaycard.co.uk.

The Barclaycard pages will contain several new services for customers, enabling them to carry out standard banking procedures (requesting new cards, PIN numbers, address changes, that sort of thing) with the minimum of fuss. The insurance service will supply information on the various travel insurance policies that Barclays offers, and the site will also offer travel information, from road routes and port details through to European driving laws and general travel tips. If you're planning to go abroad, give the site a visit – it could help you no end. You could even win tickets to Paris or £750 in cash, with the on-site competitions.

"One can say that the Really Big Button doesn't do anything, but even that's not entirely true. I mean, it really doesn't do *anything*. It doesn't even doesn't do anything. I've seen things that do nothing before, but at least they actually do nothing; the button doesn't even do that. It just... it can't even be explained in words, really."

Want to know more? http://www.wam.umd.edu/~twoflowr/button.htm

Oh, go on – do it. Do it today.

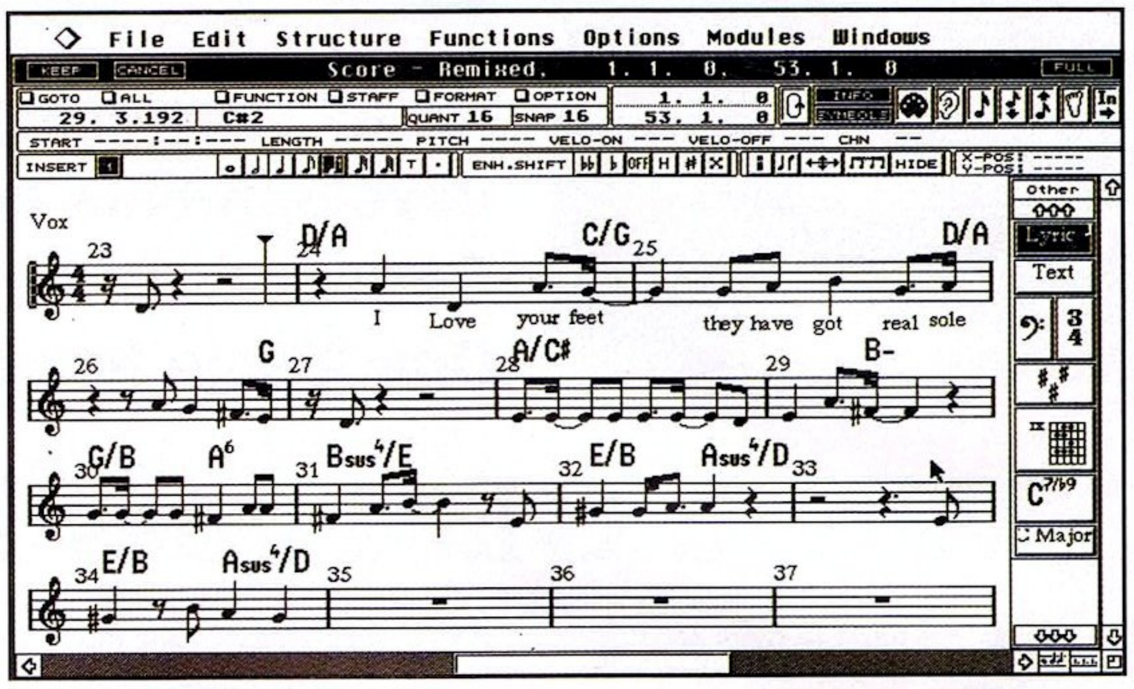
Music for beginners

Steinberg have had nothing but success with their excellent, world-beating *Cubase Score* software. The Atari, Mac and PC versions have proved so popular that Stephanie Sobey-Jones, Steinberg's International Education Co-ordinator, has introduced two new educational *Cubase Score* packages for those who are just starting out in computer music.

Schools, colleges and other establishments have a choice of two packages, both of which offer excellent savings. The first package comprises five copies of the software, a manual and an educational tutorial, while the second comprises ten programs, two manuals and two tutorials. The tutorials have been proven successful and are used by teachers, students and education departments in over 40 countries worldwide – not surprising considering the standard of Steinberg's work.

To find your nearest dealer, call Steinberg at Harman Audio on ☎ 0181 236 7250 or fax them on ☎ 0181 207 1662.

SIMON FORRESTER



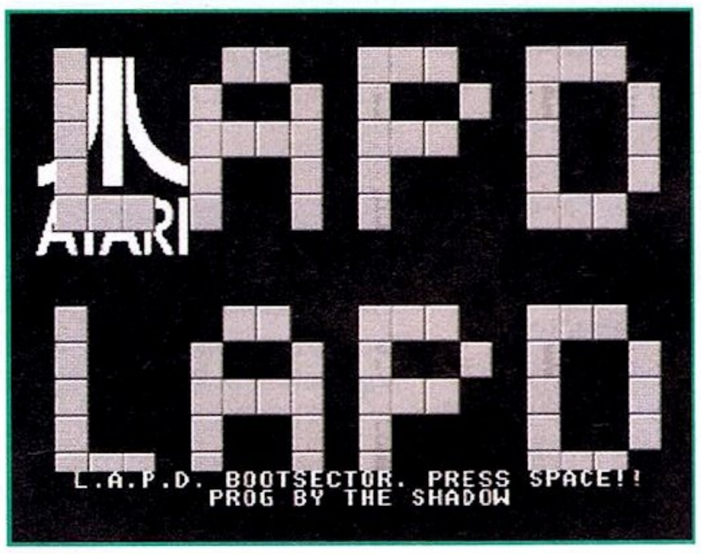
***Cubase Score*, an excellent package made more accessible by a new bundle for educational establishments..**

LAPD digitised

READERS WITH access to Teletext may have noticed a recent Amiga PD section entitled LAPD. Regular *ST FORMAT* readers will also have noticed a PD company by the same name, although they deal exclusively with the ST and STE.

LAPD have objected to the use of their name in the Teletext PD section on three counts: it was their trading name, it was used in specific relation to Amiga PD, and the software shown contained copyright infringement (digitised film stills and animations).

The popular ST library felt they should do something when they received calls from Amiga owners wanting PD for their machines. In the end, Digitiser apologised to the library and stopped using the name for the section. So is it true that all publicity's good publicity?



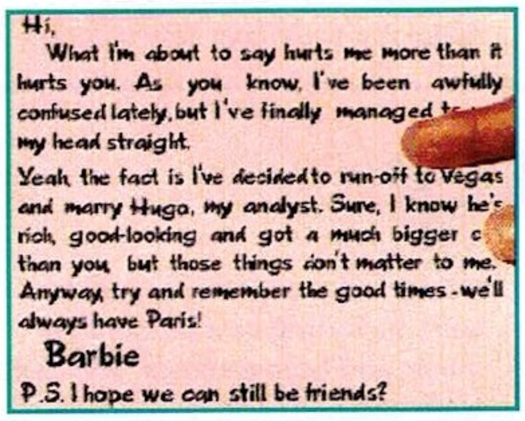
There's nothing like a PD library that cares about getting virii in your boot-sector.

STFM Hustler

DUE TO VARIOUS GREMLINS, A bad case of numerical dyslexia and the sun entering Pisces during the month of February we managed to completely cock up the price and availability details of the game *Hollywood Hustler* when we reviewed it last month. The game actually costs £24.95, and is compatible with the STFM and STE alike, not to mention the Falcon. Simon Forrester, author of the review, leapt from a fifth storey window earlier today, to the terror of everyone below.

Desert Star can be contacted in the UK on ☎ 01482 871210. Incidentally, if you call that number between 6.30 and 8.30 in the evening you'll be able you to listen to a montage of samples taken from the game. Whether Toad Computers, *Hustler's* US distributors (☎ 00 1 410 544 6943), have similar plans, remains to be seen.

We know what you're thinking. We thought exactly the same thing ourselves. We can now exclusively reveal that it's 'car'. Everyone got that?


Hi,
What I'm about to say hurts me more than it hurts you. As you know, I've been awfully confused lately, but I've finally managed to get my head straight.
Yeah, the fact is I've decided to run off to Vegas and marry Hugo, my analyst. Sure, I know he's rich, good-looking and got a much bigger c than you, but those things don't matter to me. Anyway, try and remember the good times - we'll always have Paris!
Barbie
P.S. I hope we can still be friends?

...and the TUS 100c hard drive

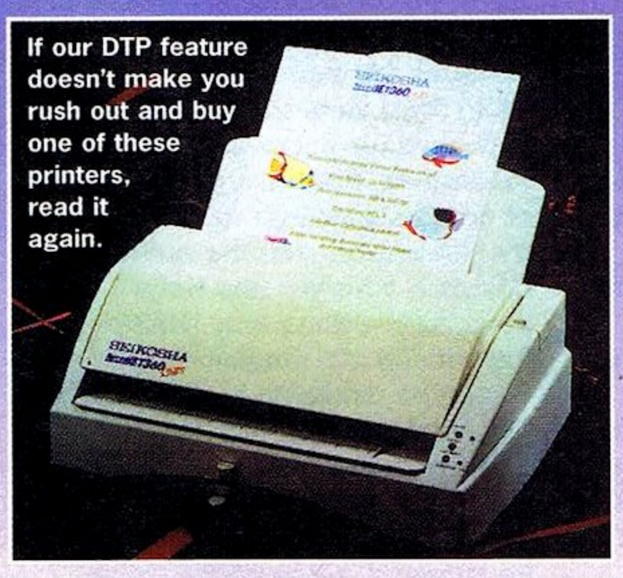
AFTER LAST MONTH'S REVIEW, there are a few things we'd like to clarify. Although you can get the 234MByte unit for £264, this comes with the GE-Soft adaptor. The ICD Link version sells for £294. The drive is actually made out of steel and just employs a plastic coating. Further, our criticism about hard drives not warming up quickly is a problem common to all drives, and *ST FORMAT* is in no way implying that this is a fault specific to the 100c. Matter of fact, we think it's lovely, which is why it scored 85%. The Upgrade Shop ☎ 01625 503448.

Footnote: In response to a number of complaints received by *ST FORMAT*, we are no longer accepting advertising from Midland Software.

THE TRADITIONAL PRINTER STORY

SEIKOSHA, MANUFACTURERS OF high quality printers, have announced the launch of two additions to their range.

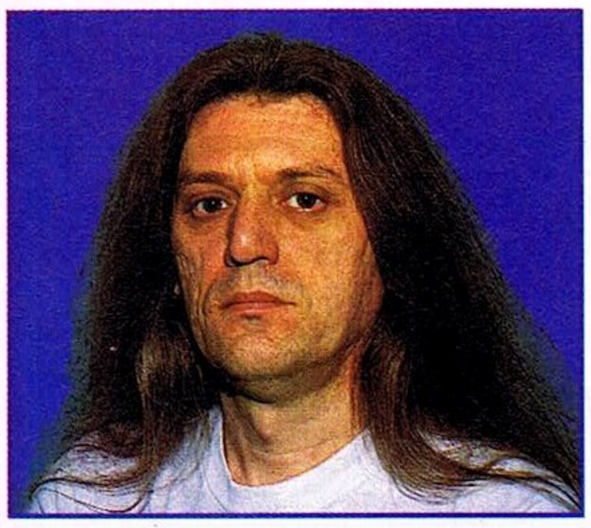
The SpeedJET360 Colour is a viable alternative to more costly equipment, offering five scalable fonts and fitting 300 dots into an inch for that extra-fine resolution. The SpeedJET can print up to three pages per minute, buffering excess data with its 128KByte print memory. The 51-nozzle, 3-colour 'Long-Life' head also copes happily with monochrome output. The whole unit comes at just £279.



If our DTP feature doesn't make you rush out and buy one of these printers, read it again.

Meanwhile the MP-5450 follows the more traditional line of printers. It's a dot matrix printer with a 9-pin head. It boasts 300 characters per second, and a reasonable set of effects to apply to its five fonts, including double width and height, as well as sub and super script. The MP-5450 costs £349.

Both printers are available from Seikosha at: Unit 14, Poyle 14, Newlands Drive, Colnbrook, Slough, Berkshire, SL3 0DX. Alternatively, call them on ☎ 01753 685873 for more info. The best way to buy either, though, is to travel to your nearest computer shop, where they'll doubtless have them in stock.



EuroNews...

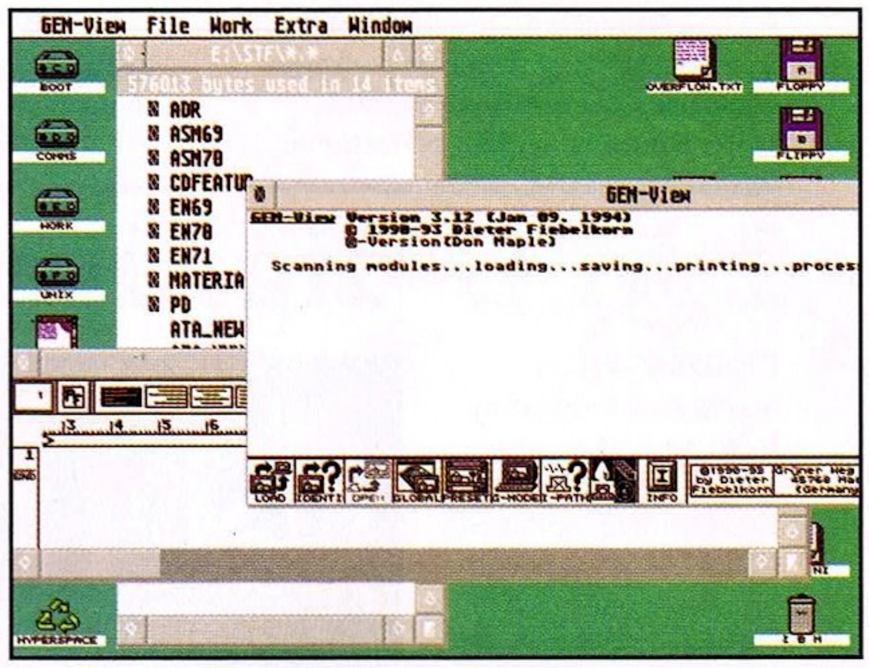
It's all happening on the European Atari scene. New developments of MiNT, coding convention parties in Germany, and a rather impressive new file selector. Don Maple has this evening's news.

MiNA: GEM goes PD!

A project to write an AES compatible user interface library to eventually work in concert with MiNT has just been started in Germany.

MiNT, Eric Smith's PD operating system, is still being developed by devoted fans outside Atari, because Eric has put the sources into the public domain. However, MiNT contains no graphical user interface... yet. Although Atari originally developed MultiTOS, which added a GUI to MiNT (in the form of GEM), in their rush to release the Jag Atari have abandoned all operating system development. Unfortunately for developers who wish to take the MiNT operating system further, they have also ignored repeated calls to release GEM program sources into the public domain. This means that if developers want to develop the operating system any further, some kind of replacement for GEM is needed.

Enter MiNA. Martin Osieka, a German developer who wrote *WINX*, is writing an AES replacement library called MiNA. AES is the major portion of GEM, controlling windows, dialog boxes and the like. What's more, he's putting the sources into the public domain. This will enable other developers to write their own GUIs, which they can then add to MiNT to make it a truly user-friendly and powerful operating system. MiNA, which stands for 'MiNA is not AES', will contain no desktop because there is a plethora of them already.



MultiTOS 5.0, which never saw the light of day outside registered developer circles. MiNA promises all this and more.

To date over 50 enthusiastic German developers are joining in. Should you wish to participate or just want to offer encouragement write to: **martin_osieka@of2.maus.de.** But remember, please do keep your message short due to the limitations of the Maus network.

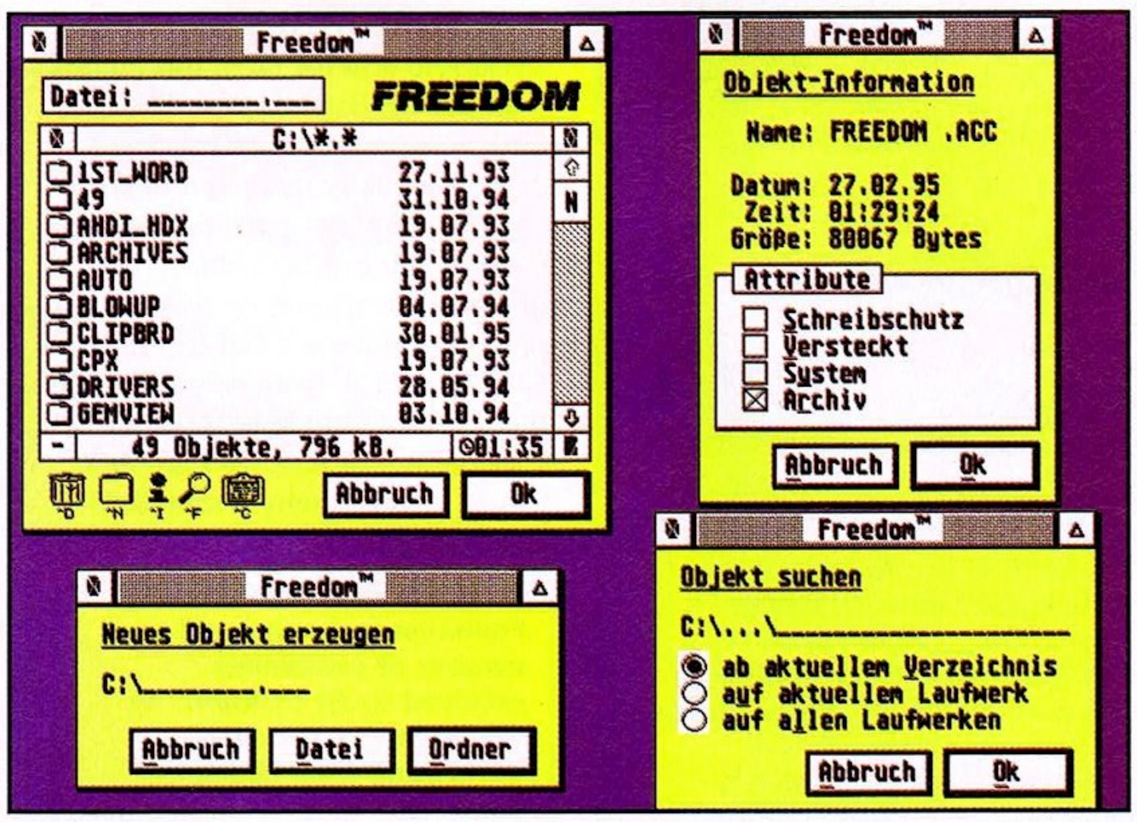
Demo party

"FRIED BITS EASTERN CODING Convention 3" (that's what it says here) is a party where a number of demo coding groups across Europe come together for an orgy of programming. The focus is on Atari, but Archimedes and Amiga coders will also be present. A number of competitions will be held, including best demo, best music and best graphics, with software and hardware prizes totalling around £3,000.

So far, over 50 groups and individuals have shown an interest, and if you'd like to join them, bring DM30 (about £13) with you to Buergerhaus Obervieland in Bremen, Germany between 14 and 17 April. For more info write to: Frank Kurpiela, St-Moritz-Str 8, 28325 Bremen, Germany.

HAVE A BREAK...

THE FRENCH MAGAZINE *START Micro* reports that Richard Miller, the Atari computer hardware wizard, is to take a year off and go on a sabbatical. Richard is a British lad who worked for Sir Clive Sinclair before taking off for the States. Even if Atari have plans for new computers, which is doubtful, nothing's going to happen now, until Richard returns in 1996.



Freedom is the latest, ultimate file selector from Germany, soon to be available in the UK.

PD of the month

FILE SELECTOR REPLACEMENTS in the Atari world are a dime a dozen, but *Freedom* is different. While the others focus on correcting shortcomings of the Atari original, *Freedom* does all that and goes a step further. It's a non-modal file selector, which makes it perfect for multitasking.

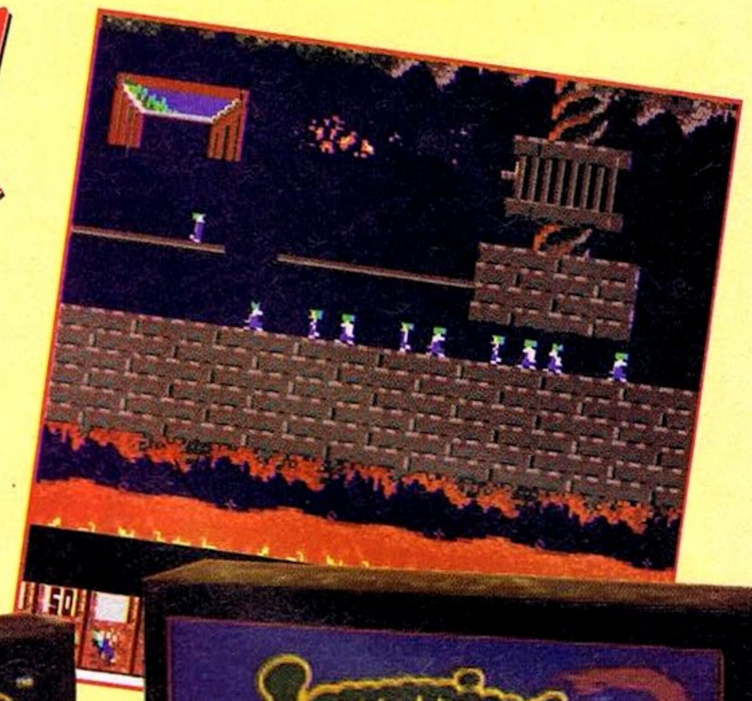
Normally, when you open a file selector all other processing is suspended until you've made your choice, even though this has nothing to do with other programs currently running. *Freedom*, however, enables you to carry on with other applications even when one of them opens a file selector. In fact, you can open up to eight file selectors simultaneously.

***Freedom* achieves all this using legal programming techniques, so as not to interfere with anything.**

***Freedom* also offers a slew of other improvements over the anaemic *(do you mean crap? – Nick)* Atari version: short cuts, a clipboard for paths and file extensions, file management, and, of course, a search function. And it's shareware, with the authors Christian Krueger and Kolja Koischwitz asking only DM30 for a full version. An English version should be available by the time you read this – e-mail Joe Connor on jconnor@cix.compulink.co.uk. Have £15 ready, and ask him for a list of other German programs he supports, while you're there.**

ST FORMAT

Special Offers



They're so well-known, they need no introduction. *Lemmings* and *Lemmings 2* are still available for just £9.99 each. But hurry – the offer can't last!

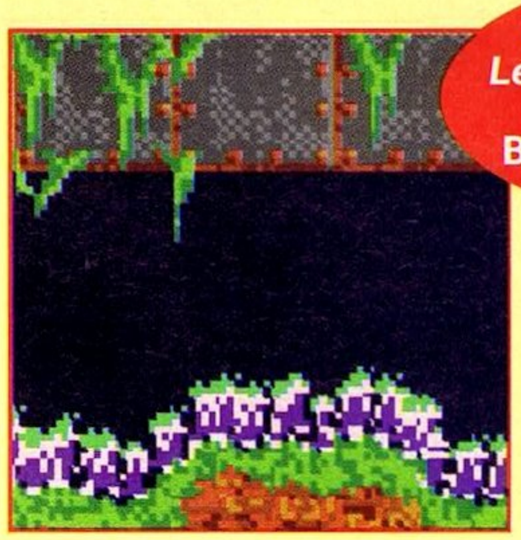
The world will never know how we did it – *Lemmings* and *Lemmings 2* are on special offer for another month! If you missed out last time (and they're selling fast), stop kicking yourself. You can still get these two top Psygnosis puzzlers for £9.99 each or £17.99 for the pair. The prices are almost as stupid as the furry critters themselves, and they've dropped almost as far.

Both the original and the sequel caused such a stir when they were first released that we gave them a *FORMAT* Gold award each, and the world hasn't stopped playing them since. If you haven't already spent endless hours boggling over our cute, cuddly and disturbingly suicidal rodent friends, then you can't possibly know what you're missing out on.

ST FORMAT takes no responsibility for what these games do to your brain, your social life, your exam results, or your career prospects. Nor can we take responsibility for the bruises we had to inflict on a Psygnosis boss to bring you this offer. ***stf***

"Get into the world of *Lemmings* and you'll never want to come out again"

Ed Ricketts



***Lemmings 1*: Any ST**
***Lemmings 2*: Any ST with 1MByte of RAM**
Both Falcon-compatible

Yes, I want to blow up suicidal rodents...

Please send me...
(Tick appropriate box)

Lemmings **(STFLEM1) for £9.99** ❑
Lemmings 2 **(STFLEM2) for £9.99** ❑
Lemmings **and**
Lemmings 2 **for £17.99 (STFLEM1&2)** ❑

Name .....

Address .....

.....

.....

Postcode .....**Telephone** .....

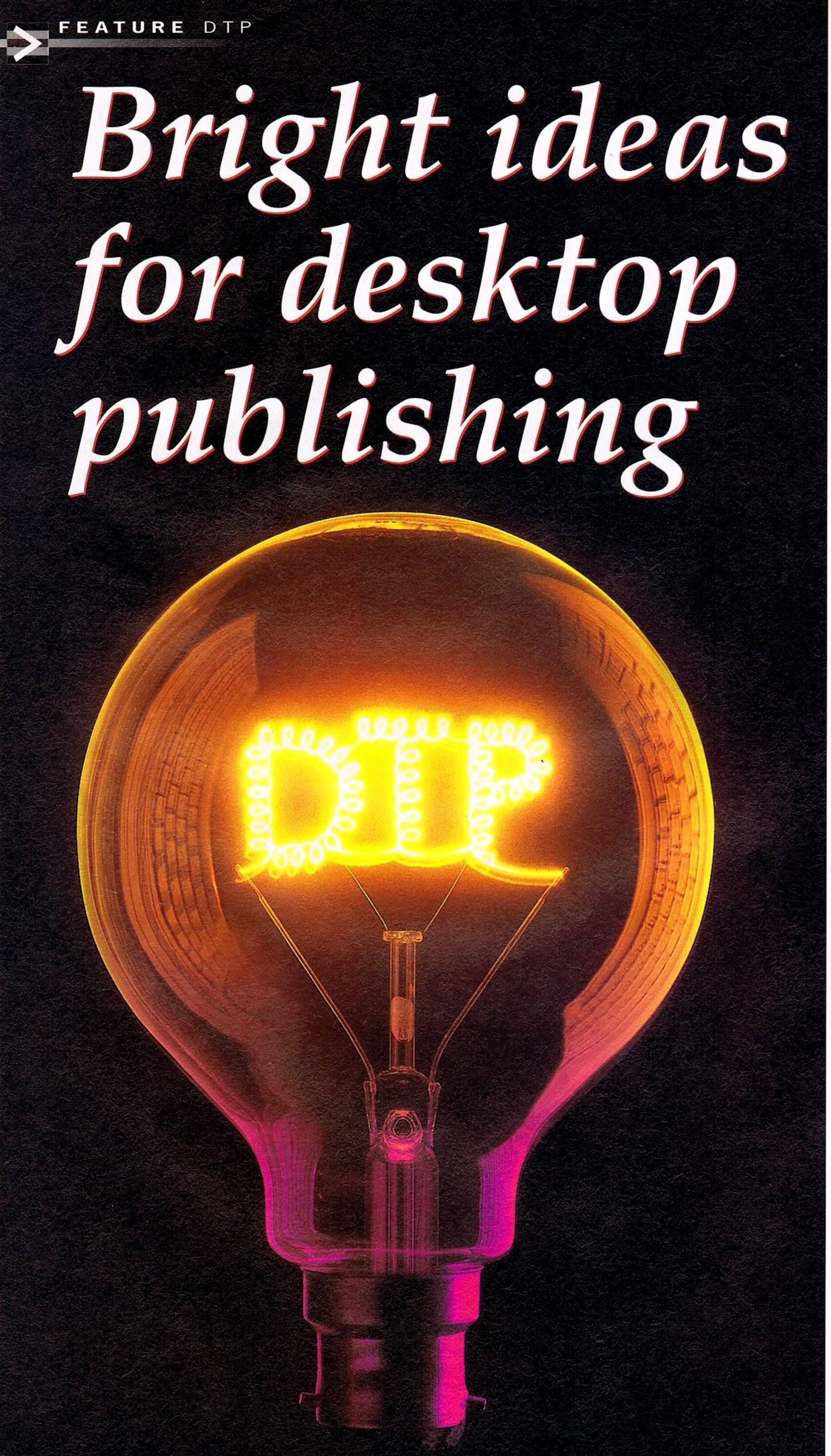
Method of payment – please tick appropriate box
❑ **Access** ❑ **Visa** ❑ **Cheque** ❑ **Postal Order**

Credit card number .....**Expiry date**.....

Please make all cheques payable to Future Publishing Limited. Customers outside the UK please add £4 for overseas delivery. Send this form (or a photocopy) to: *ST FORMAT* Mail Order, Future Publishing, FREEPOST (BS4900), Somerton, Somerset YA11 6BR. (You don't need a stamp if you're posting it in the UK.) Or, if you prefer, you can call our order hotline on 01225 822511 and order it directly.

Tick here if you do not wish to receive direct mail from other companies ❑

Bright ideas for desktop publishing



Unless you've been living on Mars for the past few years, you'll have heard of desktop publishing. If you haven't, look at any piece of paper with something other than straight text printed on it. Desktop publishing is the way to present your work, and it isn't just confined to paper – take a look at the side of a bus or a British Rail sign and you'll see examples of layout and design.

A DTP package enables you to take straight text and do virtualy anything with it – you can flow it in columns, increase the text size, change the lettering style, and throw in pictures, boxes, titles, and any other design element you can reproduce on paper.

A DTP package gives you the means to produce business cards, posters, flyers, newsletters, CVs, memos, faxes, invitations, books, manuals, or even magazines. You can use a DTP package to spice up just about anything.

Rather than sending a handwritten invoice, or even producing one with a word processor, you could be really impressive and spend a few mintues creating a professional invoice, complete with a logo, address, tabulated text and as many boxes, dotted lines and unintelligable 'ref' numbers as you like. The same applies to CVs. Think how much better you'll be represented by a beautifully arranged page with neat, tabulated columns and perhaps even a few examples of your own work (if you're an artist or architect, perhaps). You could even include a photo of yourself – if you think this will improve your prospects, of course.

Your ST is perfectly capable of all this, with a plethora of DTP packages, utilities and resources at its fingertips. *(Do STs have fingertips? – Karen)*

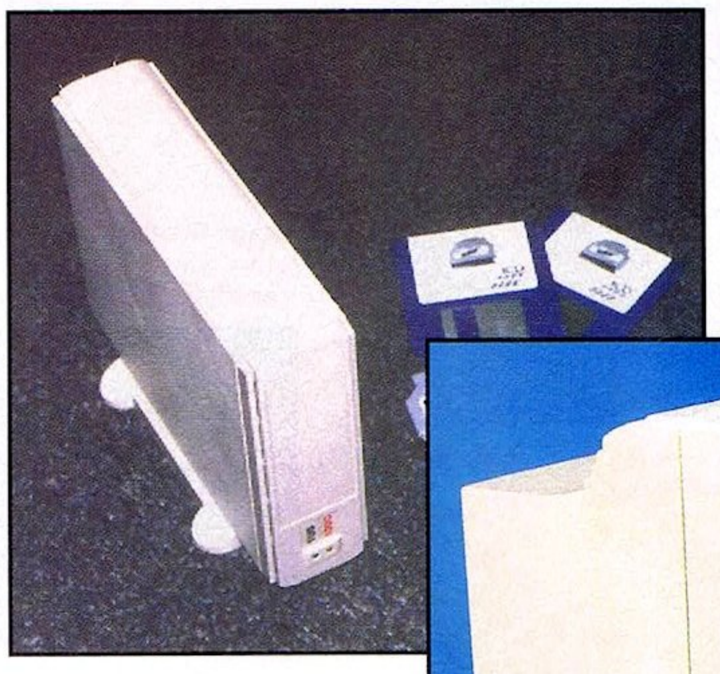
Let's do it

Of course, you can't just turn on your ST and get on with it. You're going to need a DTP package such as *Calamus* (our recommendation), and a good idea of how to use it, to start with. Then you'll need some basic knowledge of how to bolt a page together, utilising your program's most powerful features at the click of a mouse.

You'll also need a few hints and tips on how to get your work looking professional – how to make sure your fonts don't clash, your pictures don't overlap, and your text boxes don't reflow. Over the next few pages, Nick Peers and Simon Forrester will turn you from a cut and paste amateur to a design professional.

Getting set up

A good DTP setup consists of more than just the DTP package itself. There are a few other things you'll need. Simon Forrester takes you through the vitals.



The Upgrade Shop's 100c hard drive is one to go for, as are any System Solutions or Gasteiner hard drives.

Monochrome monitors give a much higher resolution and reduce eye strain. Shop around and get yourself a bargain.

Hard drive

Yup – I'm afraid you really will need a hard drive to produce that fanzine. The only thing more annoying than having to limit your pages to a certain file size is finding out that the page you've just spent four hours designing is too big to fit on a floppy disk, and will have to be scrapped.

It's also a good idea to keep your DTP software on a hard disk. You never know when you may need to drop out and work on text in a word processor, and having all of your software easily available on a hard drive makes for easier use and faster loading.

Of course, the size of the hard drive is important. If you're a serious fanzine editor then you really shouldn't be using less than 100MBytes, whereas if you're designing fairly simple leaflets, you could get away with 40MBytes. If you shop around, a 100MByte drive should be somewhere between £100 and £200. Look through the advertisers in this magazine and see if there's anything that takes your fancy.

Monitor

To get the best possible representation of the page you're producing, and to reduce eye strain, you'll need a monochrome monitor. Because monochrome monitors require fewer colours to be sent to the screen, they can work at double the resolution colour monitors can manage. Indeed, some packages refuse to run in anything other than monochrome, so it's definitely a good investment. Check out our review of The Upgrade Shop's new monochrome goggle-box on page 30 for an idea of what to look for.

Having said all that, if you're planning to produce any colour images then you'll also need a colour monitor just to check how your colours are going to come out. You could get by without one, but if you're planning to include any ST screenshots or other colour images then it's essential.

Scanner

Of course, before you can view your images, you need to get hold of some. This is where a scanner comes in handy. Being able to scan a photo and use it in your DTP package gives you the power to cover any topic in a lively way. Unless you want to go to the massive expense of a desktop flatbed scanner, you should look into getting a hand-held scanner from Gasteiner or Ladbroke computing. It'll cost you around £100, and will effectively provide you with an unlimited source of pictures.

Printer

The type of printer you choose depends almost entirely on the amount of money you've got to spend. If you're using a 9-pin dot matrix, your printouts won't really be good enough to photocopy – so if the quality of your printout matters then you should go for at least a 24-pin printer, if you're sticking to dot matrix.

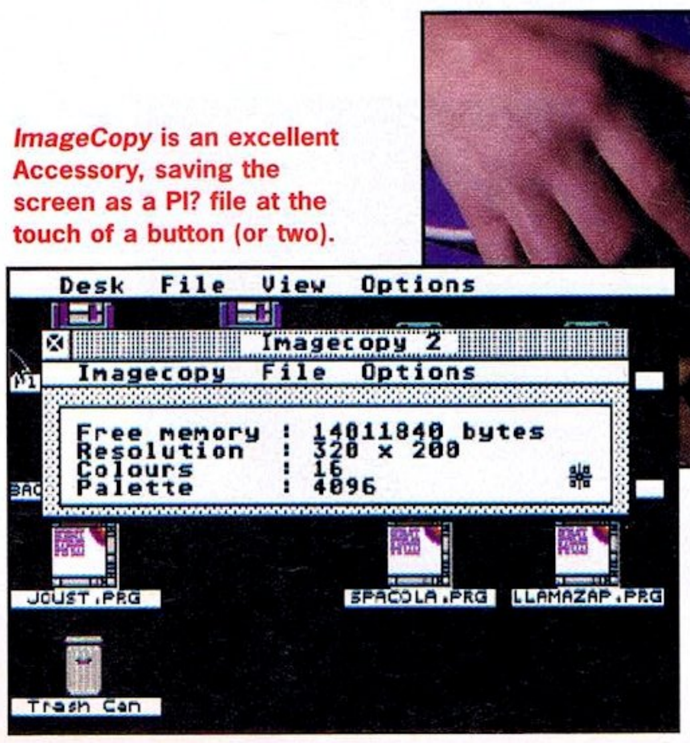
Then there are bubblejet printers. These work in a completely different way to a dot matrix machine – they squirt the ink on to the page instead of hammering it on with pins. These produce a much higher quality of printout, and are noticeably faster. If you can afford it, and you need high quality, a bubblejet is definitely worth it. Laserjets, meanwhile, produce dreamy quality, but are expensive both to buy and run. If you do see a second-hand one, snap it up.

Should anyone approach you trying to sell a second-hand daisy-wheel printer, run away, fast.

Screenshots

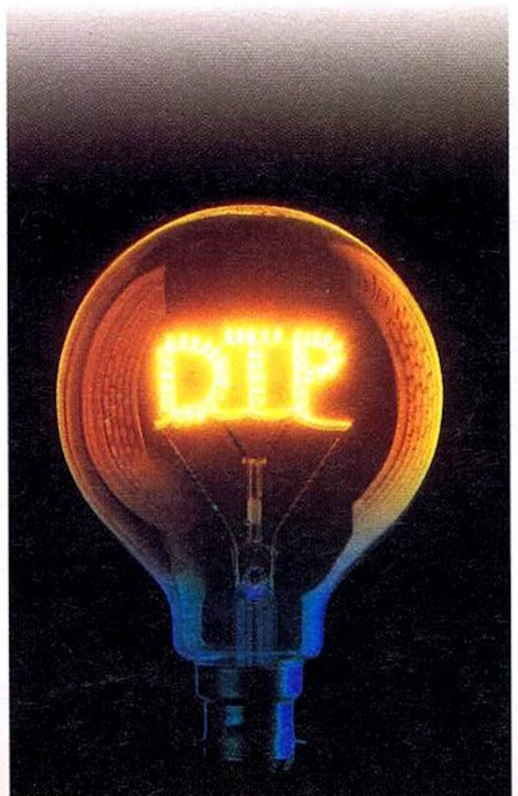
There are two ways of producing screenshots of ST software. The first is to use *ImageCopy 3.5* (from FaST Club ☎ 0115 945 5250 for £29.95). *ImageCopy 3.5* is an Accessory that enables you to save the screen in part or whole as an image file that you can then load into your DTP package as clip-art.

There will always be software that simply won't let *ImageCopy* run. Most games take such total control of the memory that Accessories are deleted when the software is run. To get past this problem, use a camera with a shutter speed of 1/50th of a second, and your scanner, of course.



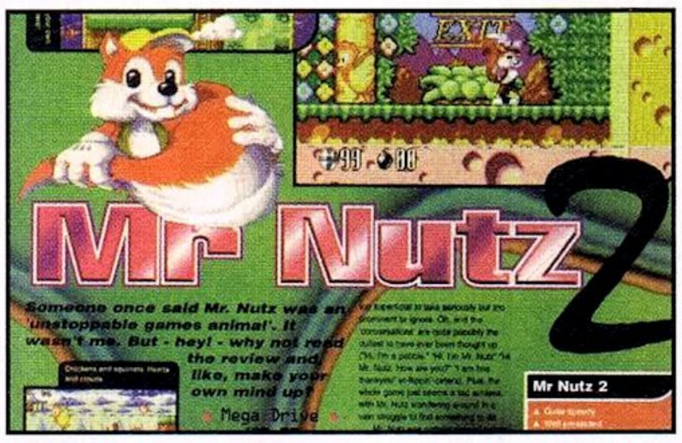
ImageCopy is an excellent Accessory, saving the screen as a PI? file at the touch of a button (or two).

Scanners enable you to convert printed material into digital images – but remember to respect the holder's copyright.



If you want to print your work out to paper when you've finished, you'll need a reasonably high-quality printer.

STRAP



By simply placing a picture over the edge of the title, you can brighten up the most boring headline.

Boxes like these are page furniture. They appear on every review page, so keeping them the same shape and style throughout gives your magazine continuity.

As you can see, you don't always have to use square picture boxes, and they don't always have to be exactly horizontal.

DTP: the professio

Simon Forrester shows you how to turn your fanzine into a magazine, with a short lesson in page layout.

COPY

You've got the ultimate DTP setup for your machine, and you've decided exactly what you want to publish. Now you could do with a few hints and tips on how to lay your work out.

Let's say you're laying out a fanzine. How is it going to look? The information you've spent so much time gathering may be enough to carry the page, but unless you present it clearly and attractively no one will want to read it. You want your readers to be drawn into the page, but it's all too easy to scare them off with large chunks of text. You could go to the expense of paying an artist to lay out your pages (like our Andy Ounsted), or you could follow the definitive *ST FORMAT* guide to publishing beauty.

BODY

Text and styles

The text (or copy) on your pages is the reason people buy your fanzine, which means that no matter how detailed and artistic your page looks, the text has to be clear and legible without looking either too fussy or too sparse. There are various ways to achieve this:

- Use sans-serif fonts for headlines, preferably. A headline must be clear, bold, and instantly legible. If your reader can't instantly see what the page is about, you've failed. However, you might notice that on *ST FORMAT* we use a serif font for headlines and body (main) copy, but it's broken up with a strap (or intro) in a sans-serif font.
- Use a serif font for your body copy. Your reader has decided to read the page, and a serif font will be easier to read in flowing text. It also looks a lot better.
- Never use more than five fonts on your page. The more lettering styles you use, the more confused your page will look. *ST FORMAT* uses Palatino for its main copy, crossheads and panel headings, and News Gothic for straps, captions and panel text. The mixture of two fonts keeps the pages interesting, while ensuring that they remain simple and uncluttered.
- Break text up. Use crossheads to give the reader a pause, and to provide a reference point for him to look back to.
- Try to keep columns of text fairly short to make the page easier on the eye. Use pictures, crossheads or boxouts (boxes of text) to break up columns. A quick glance at any *ST FORMAT* page will prove this – you'll never see a column of unbroken text running the length of the page.
- Use bullet points to illustrate points. The bullet is the ● at the start of these points.
- Any DTP package that's worth its salt should have the ability to set up paragraph or text styles. So, for example, your main text style could be 8pt plain Palatino, with 10pt leading, 100% horizontal scale and a tab of 7mm. You can then quickly and easily apply this text style with a keystroke to all the main text you've imported. This not only saves you time and effort, but also help to keep your pages consistent throughout.

Grids

What exactly is a grid? Well, if you look through the pages of any magazine, you'll notice that although each page has its own character depending on the subject, the magazine as a whole has continuity. This is achieved using what we call a grid, which comprises the basic page without pictures, text, headings or colour.

An *ST FORMAT* grid consists of a four-column text box, a header and a footer. The header is the small title at the top outside edge of each page, and the footer is on the bottom outside edge, containing the page and issue number. Headers and footers give editorial pages a feeling of continuity, as well as acting as a reference.

- When you set up your main text box, you have to decide the column width. This will depend on two things: the width of the page itself, and the font you're using for your main copy. You should be able to fit one and a half lowercase alphabets into the width of one column. If your columns are too narrow, they'll be a chore to read, while if they're too wide, the reader will get lost every so often! Let's give it a try:

Serif

Sans-serif

Can you see the difference yet? A serif is the 'tail' on a letter, while 'sans' is latin for 'without'. Sans-serif.

CAPTION

Pictures don't always have to be relevant, as demonstrated here (and, indeed, througout the pages of *ST FORMAT*).

If you want to liven up the background that your text is printed on, try using a faint picture as a backdrop. Be careful to avoid those clashing colours, and make sure the text is still readable.

Your pages don't have to be packed to overflowing. The white space down the side of this page helps lighten the overall tone.

HEADING

nal approach

abcdefghijklmnopqrstuvwxyzabc-defghijklm
Aahh! Well, rules are made to be broken, you know.

- Leave a gap around the edge of your page (about 12mm for an A4 page) to stop your text running too close to the edge of the paper. You should also think about how it's going to be bound. For example, on *ST FORMAT* we use a wider inside margin to allow for the binding of the magazine.
- As soon as you lay out your first page, calculate exactly how many words you can fit on it, and stick to that figure when writing. If you don't, your pages will look either sparse or overcrowded.

Pictures

Visuals serve two purposes. Whether they're screenshots from software, or photos, they provide important information to the reader, and usually need a caption to explain them. They also help break up columns of text and lift boring pages. Bear in mind...

- Pictures don't always have to sit squarely on columns. They can sit across two columns, partly intrude on to columns with the text wrapped around, be slanted, clustered together in corners or even act as backdrops.
- Flow text around pictures. Images don't always have to use up entire areas, and you can make some interesting shapes with text if you allow it to flow around strangely-shaped pictures.
- Give pictures captions. Unless they're meaningless (sprites cut out from games for decoration, for example), the reader will want to know what that picture is.

Bear in mind also that pictures and captions are often the first thing that the reader looks at on a page, which means they should be explanatory as well as interesting, and make the reader want to read on.

- Don't feel that you have to keep things like screen grabs, photographs or illustrations at a standard, rectangular proportion. If it's boring, try zooming in on to a particularly interesting part of it and make it a different shape. Be creative with how you use pictures.

GUTTER

This is a call-out, which quotes a short passage of text from the main copy to entice the reader

Illustrations

There's a difference between a picture and an illustration in magazine terms. The Gamebusters headline that we used until recently, for instance, was an illustration rather than a piece of text. It made for a more interesting headline that was instantly recognisable for its style.

Illustrations can be used for more than headlines, though. If we didn't put the Feedback heading on our letters pages, regular readers would still have no trouble finding these pages on sight because of the postmarks we put behind the text in a faint colour.

You can knock illustrations up in an art package, get hold of PD clip-art or design your own in a package like *Outline Art* (reviewed last issue). Use them regularly, and they'll give your pages an identity without words.

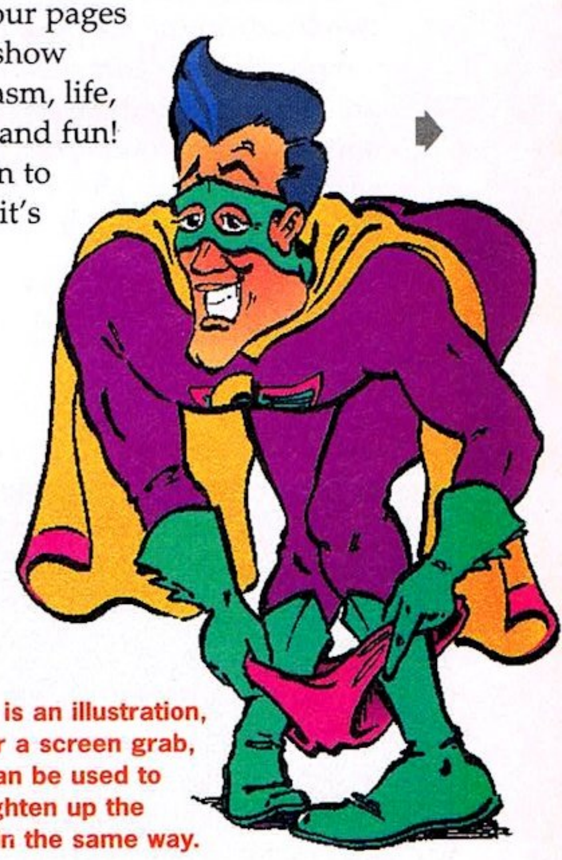
How about...?

And then, of course, there's a whole encyclopedia of tips for making your pages look that little bit more professional...

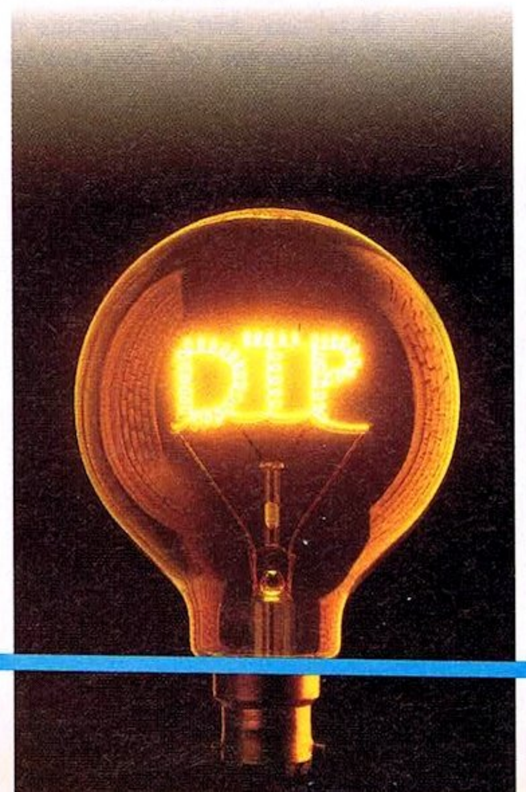
- Tints are most noticeable when boxouts start out as one colour at one edge, and turn into another shade or fade out completely.
- Shadows – behind headlines, boxouts, pictures and cut-out graphics – make things jump out of the page at the reader.
- Flashes. To draw the reader's attention to text, put a circle, star, explosion or flash behind it.
- Statistics. If you can find even the slightest excuse, use charts, tables, graphs and diagrams to explain your point. They'll help with the text, and they'll do no end for your final page.

And finally

- Look at other magazines. Just because it's *Cosmo* doesn't mean it hasn't got style points you can stea... be influenced by.
- DTP is fun. If you're doing it right, your pages should show enthusiasm, life, interest and fun! If it's fun to look at, it's fun to read.



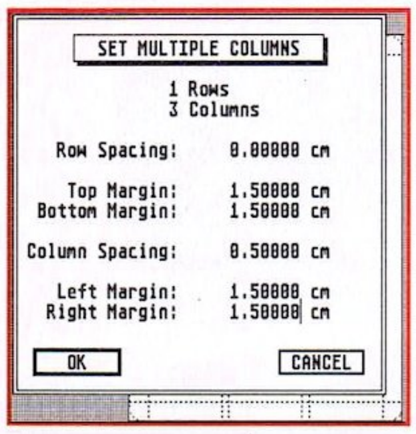
This is an illustration, rather a screen grab, but it can be used to brighten up the page in the same way.



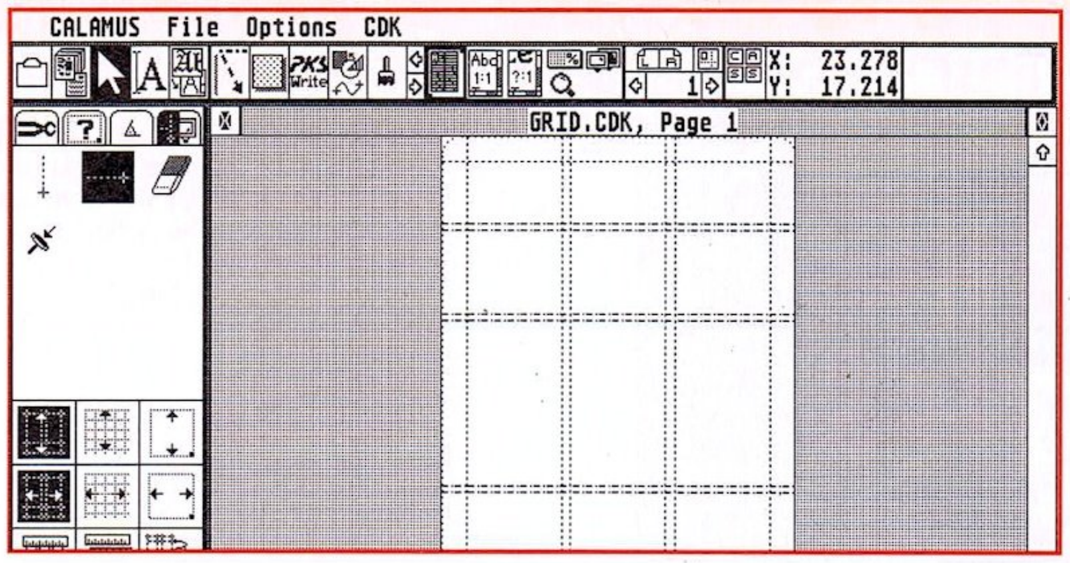
BOXOUT

This is a boxout. It's simply a separate box of text on the page, covering a topic relevant to the main subject. Why bother? Well, boxes like these help draw the reader in, presenting them with short, convenient chunks of text they can quickly read, and help to break up the body copy. Having said that, you shouldn't necessarily put them on every page. They're especially handy for things like jargon explanations and snippety bits of information. Like this one.

FOOTER & FOLIO



Ad.Lib News will be based around three columns of text. Access 'Set Columns and Rows' and configure it like this.



The framework document, GRID.CDK, from which you could construct *Ad.Lib News* every issue. This would keep it consistent from page to page, issue to issue.

Calamus: the expe

You want to create a newsletter, and you've got the copy and pics, but where do you start? Nick Peers takes you through the process, step by step, using *Calamus SL*.

Believe it or not, it's easy to create a newsletter or fanzine with *Calamus SL*.... once you're familiar with the basics of the program, that is. For the purposes of this tutorial, we're going to show you how to produce a dummy newsletter for Ad.Lib, designed to keep its 750 users up to date with what's happening on the BBS.

It's vital that you have an idea of what's going into your newsletter and how it might look before you go anywhere near *Calamus* itself, which means you need to have written the text and got hold of pictures and logos. *Ad.Lib News* will need a logo at the top of the page and a list of credits at the bottom, which leaves about two thirds of the A4 page free for the newsletter's contents. We're going to include three sections: an editorial from yours truly, a massive news section and a couple of PD reviews to round it all off.

Before you get to the design stage, you need to have your text files on a disk ready to import into *Calamus SL*. Ad.Lib News comprises EDITORIAL.TXT (about 100 words), REVIEWS.TXT (150 words) and NEWS.TXT (a whopping 500 words). You should also have three to four pictures per A4 page to break up the text and make your newsletter look more attractive. *Calamus SL* supports a wide number of formats, which is a good thing – our pictures ranged from a TIFF to an IMG file.

Planning

Once you have the component parts of your newsletter assembled, you need to make some rough sketches on paper to get an idea of how you're going to lay it all out on the page. After much fiddling around we plumped for the format shown to the right.

Once that's done, you're ready to load up *Calamus SL* and start translating your ideas on to screen, and ultimately, into print.

Once you've created your new document, the first thing to do is set up guidelines, which make it easier to initially place your main text frames. You can find these options in the 'Frame Guidelines Command Group' submenu from within the Frames Module.

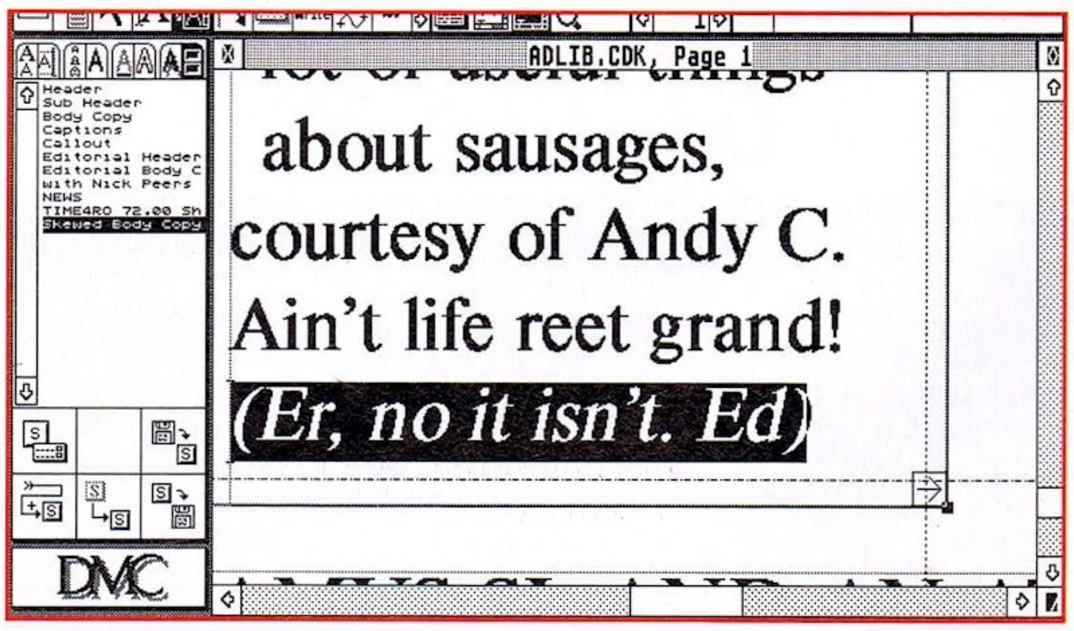
A rough sketch of how your page will look makes it much easier to lay out correctly.

Next, break up your text into columns – you're going to flow it from one column to the next. Open the 'Set Columns and Rows' dialog and configure it to three columns as shown in the screenshot above left. This also sets up the document's outer margins.

To make it easier to break the page up into its component parts (news, reviews and editorial) you next need to place horizontal guides across the document. The top fifth of the screen will be reserved for the Ad.Lib News logo, so you need to mark off that area by placing a couple of guides at 5.2 and 5.6cm respectively (use the Y guide in the top-right corner). You'll probably need to zoom in using the magnifying glass icon.

Next, place a guide at 28.3cm (about 1.5cm from the bottom of the screen) to cordon off the area reserved for the *Ad.Lib News* credits. This leaves you roughly 21cm in which to fit all of the body copy. To help divide up news from reviews and editorial, you need to set four more guidelines, grouped in twos, to make it easier to place the frames precisely where you want them. Position them so that the remaining 21cm of space is divided up three ways, not necessarily equally.

By highlighting the two 'Snap to... Guides' icons you ensure that any frames you now create automatically 'snap' to the nearest guidelines. This makes it

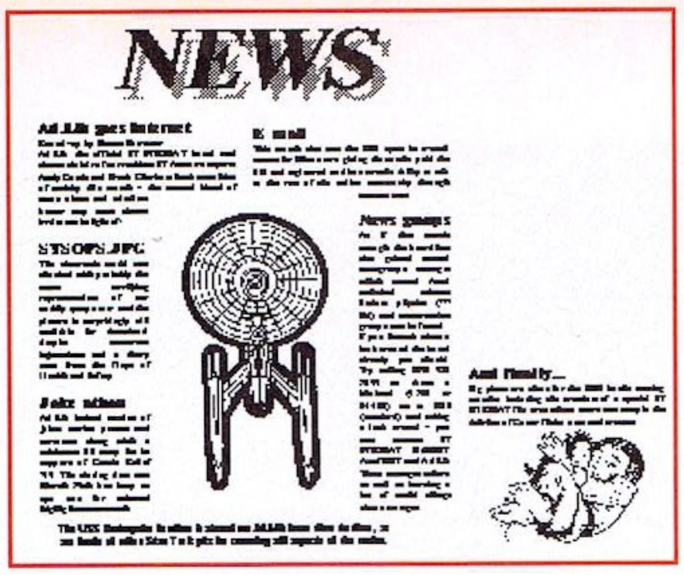


Altering text styles within *Calamus SL* is easy. Just highlight the text and click on the text style required.

GETTING IT RIGHT

Once you've set up your guides, you don't have to stick religiously to them. In the case of *Ad.Lib News*, they're there to make it easy to cordon off the newsletter into its component parts.

As soon as you've flowed your body copy into the relevant text frames, switch off the 'Snap to... Guides', and you'll be able to place your picture, caption and header frames without having to conforming to any guides you've created. It also means you can move your text frames slightly, to align them as well as possible with each other.



'News is now finished, with a couple of pictures added to brighten it up. *Calamus SL* supports colour graphics, but you can't display them in colour on an ST.

rt's guide

possible to create text frames of equal width and, where needed, equal height. You now have your own framework (or grid), from which all future editions of your newsletter can be based. Save this as GRID.CDK.

Text styles

Before laying out your text, it's a good idea to set up a number of predefined styles, which enable you to separate headings, subheadings and captions from the main body text. You do this from within the 'Text Style List Command Group'. Click on the 'Add Text Style to List' icon to create a new text style.

When creating a text style, you have control over the actual font (for *Ad.Lib News* we stuck to two Times Roman variants and a Casual loose font), its size, style, colour and other attributes. Spend some time experimenting – you can create a wide variety of text styles from just a few fonts. When you've found a few you like, save them for future use. You may find it easier to create a large number of variants on a particular theme – for example, normal body copy and skewed body copy for acerbic editorial comments.

Creating a section

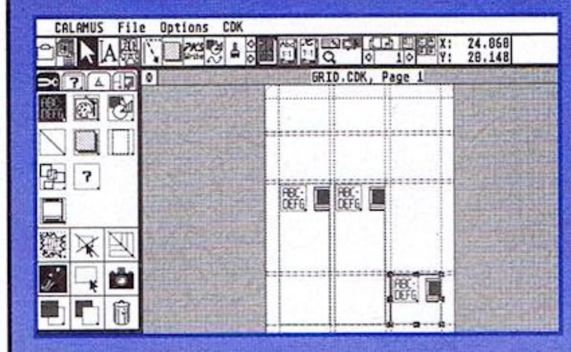
Next, you need to create the frames into which your body copy will be flowed. The theory is the same for editorial and reviews, as well as news. The walkthrough to the right shows you exactly how to import and correctly format your text as required. Don't worry about filling up the frames, though – you've yet to include pictures and headings within the section.

To import pictures into your copy, you must first create a Raster Graphic Frame to import the picture into. Once you've done this, highlight the graphics frame and click on Import. Select (or load) the relevant import driver, then you can import your picture, which should appear in the highlighted graphics frame.

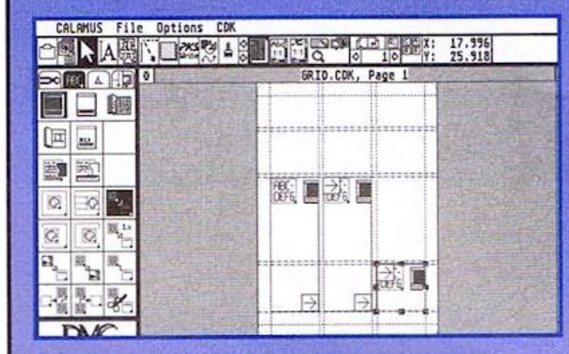
Click on 'Optimize Frame Size for Screen' from the 'Frame Special Functions' submenu and the frame will resize to display the picture in proportion, which prevents the image being distorted by squashing or stretching.

You can now move and resize the graphics frame as you wish. If you de-select the 'Snap to… Guides' at this point you can then place the frame anywhere on the page – which makes your life easier. It's also a good idea to select 'Proportional Sizing' to prevent the frame from being distorted by future alterations. You can now also place the picture frame over other frames, like we've done with the *Star Trek* picture.

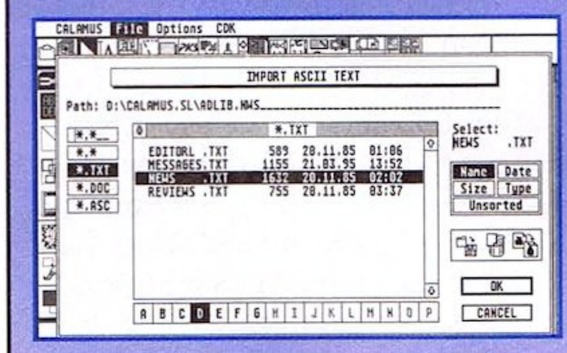
IMPORTING AND LAYING OUT YOUR BODY COPY



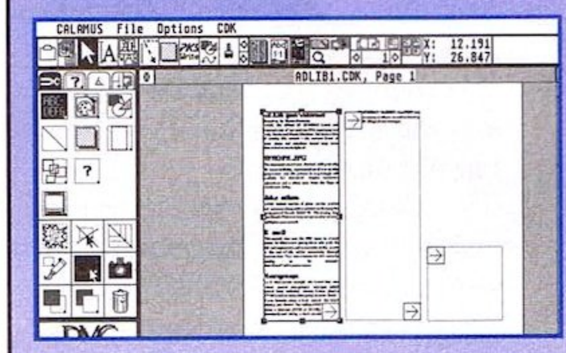
Create three text frames. Remember, *Calamus* will automatically fit them to the guidelines. Once done, click on the 'Modify Frame' icon (it's next to the 'Create Frame' icon) so that you can alter the frames' characteristics.



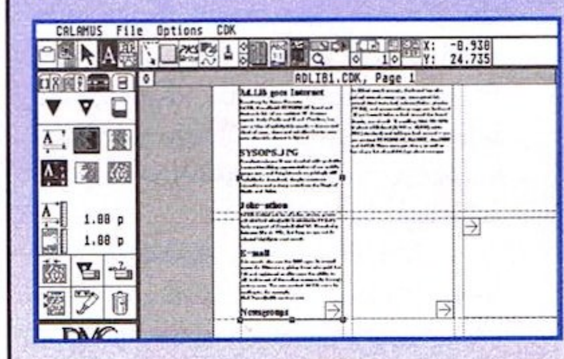
To ensure that the text flows from one frame to the next, access the 'Frame Special Functions' submenu. Ensure the left text frame is highlighted before clicking on the 'Piping from Frame to Frame' icon and then highlighting the other frames in turn.



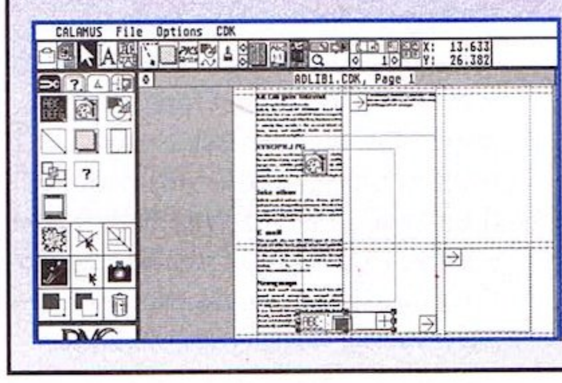
To import your text, highlight the left frame again and select 'Import' from the File menu. Load or select the relevant text module (ASCII in this case) before clicking on 'Import' and loading in the file.



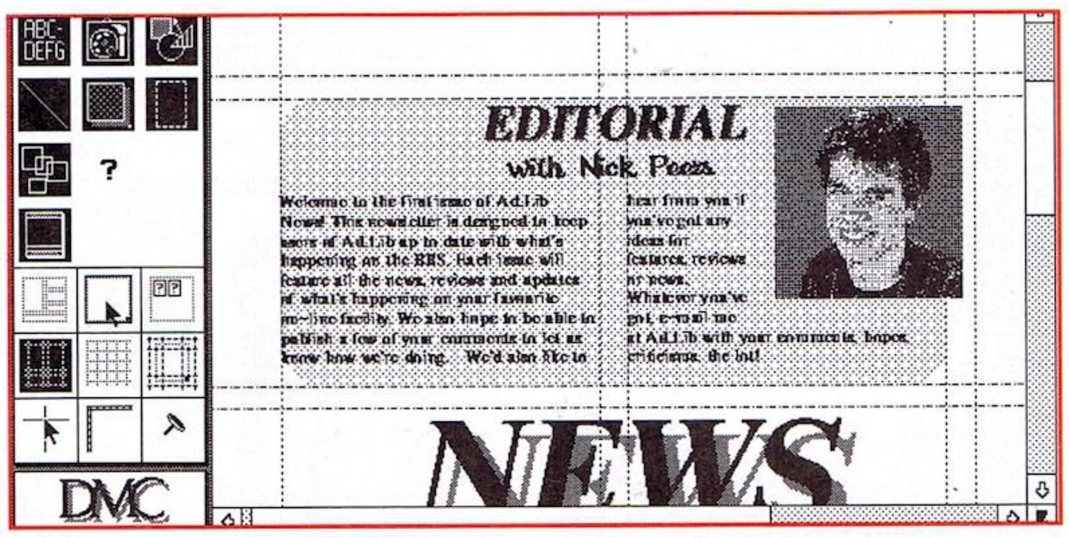
The text now flows into the frames. To make it more presentable, highlight any subheadings (crossheads) and give them teh appropriate subheading text style to break the text up a little and provide a reference for the reader.



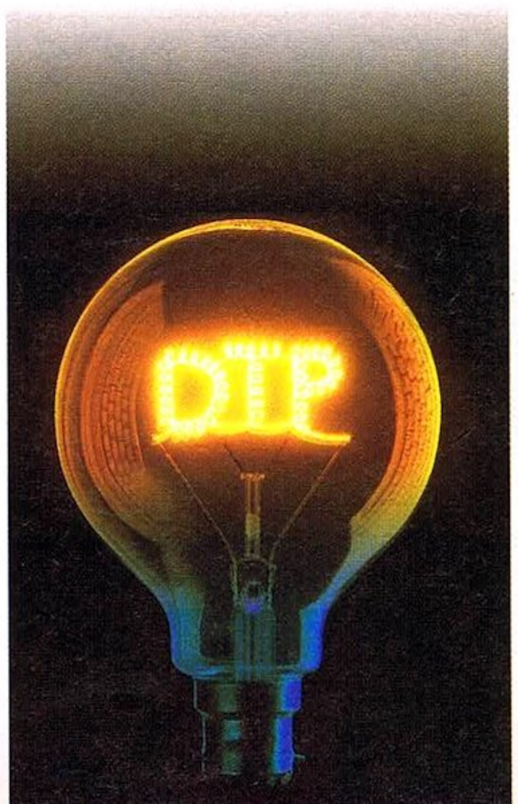
This text is justified, and we want it ranged left. Access the 'Text Ruler Command Group' submenu from the Text module, then highlight the first text frame. Select 'Text Left Justified', then click on 'Insert Text Ruler'.



Now that all the text is imported and correctly formatted, you can move on to the next stage: placing more frames on the page to improve its design. Back to the main text then, you young scallywag!



You can quickly and easily translate the skills that you've developed in laying out news to the reviews and editorial sections of the newsletter. Here we've added a background to make editorial stand out from the rest of the page.



Once you've flowed the reviews text in, the main text for *Ad.Lib News* is all there. Now you can tidy it up a bit.

TROUBLESHOOTING

In the course of creating Ad.Lib News, we came across a number of problems, which might trip you up as well.

Q I can't seem to view any guidelines or frames.

A Holding down [Control], [Shift] and [_] together toggles between 'Guidelines Visible/ Invisible'. This makes it quick and easy for you to switch them on and off when wanted.

Q Why doesn't my text align properly?

A You need to ensure that you vertically align the text according to its flow, and not by individual frames. This is achieved quickly and easily in *Calamus SL* via the 'Vertical Text Alignment' dialog, found in the 'Text' module. Note that you'll need to do this after every alteration you make to that body copy.

Q I keep getting confused by all these frames.

A You'll certainly find moving around your document gets difficult after a while, because it's so cluttered with frames. Ad.Lib News has nearly 20 frames over its single page!

Grouping frames enables you to link sections of the newsletter together, which protects them from inadvertent changes, and makes it possible to move and resize them as one.

Q I'm using a dot matrix printer, and my text keeps getting chopped at the bottom of the page.

A Simply alter the top and bottom margins of your document respectively via the 'Set Columns and Rows' dialog. Make the top margin smaller and the bottom one bigger respectively.

***Calamus User* is an independent publication produced by the Calamus User Group. It's packed with news, reviews and useful tips, and the User Group offers a number of other services. We'll be featuring them in more depth next issue. Contact them at: PO Box 148, Deal, Kent, CT14 7QN.**

Flowing text

If you do place any picture frames over frames containing text, you'll notice that the text initially flows behind the picture. Before you reflow the text around the picture frame you need to create two more text frames: one for the header at the top of News and the other to be placed directly below the picture, for its caption. Once you've done this, you can type in your heading and caption text, using *Calamus SL's* built-in text editor (look out for the typewriter icon inside the Text Module) which is perfect for small-scale insertions and amendments to your text. Once you're happy with the text, style it up as required.

Flowing text around other frames, such as picture boxes or headings, is a cinch in *Calamus SL*. Simply select 'Text Frame' from the 'Frame Tools Command Group' and ensure you're in 'Modify Frame' mode. Highlight the frame containing your free-flowing text and click on one of the three 'Text flow' icons, depending on how you want your text to flow. Next, select the frame, or frames you want the text to flow around (in the case of News, you'll want the text frame to flow around the header, picture and caption frames). Then click on the 'Text flow' icon again to produce the result, and there you go.

Moving on

Take your time, and position the frames exactly as you want them. Don't be afraid to experiment on screen. Once you've finished, you need to align the text so that it runs attractively across the page. Access the 'Text Ruler Command Group' submenu and select the first text frame in your piping chain. Click on the 'Vertical Text Alignment' icon, select 'Activate for Text Chain' and click on OK. The changes will now be made and the text will align along the top of your frames.

Finally, select all the frames inside the section that you've been working on and click on the 'Group Frames' icon from inside the 'Frame Command Tools' submenu. This groups all the frames together (they can be ungrouped later if required), which makes it easier to move the section as a whole if you need to.

Once you've finished the news section, you can lay out the other sections of the newsletter. Editorial fills just two text columns, so you'll need to create a text frame for each. Once you've done that, create three extra frames. One of these will provide the shaded background that makes editorial stand out from the rest of the newsletter – to do this, just create a Raster Area frame and alter its parameters (which include its shading and shape) from within the Raster Module. The other two frames will contain a picture of yours truly and a section heading. In this case we've chosen to format the header text centrally, to make it stand out.

The final section is the most straightforward. Because it's only running down one column, there's no need to create a separate text frame for the heading. Just highlight 'Reviews' and give it a Small Header text style. Create two separate frames for the picture and accompanying caption text, and place them below the main body text to fill the remaining gap.

And finally?

No newsletter is complete without an eye-catching logo and credits list to keep the people that created it happy. For *Ad.Lib News*, you should have already reserved a small strip at the bottom of the page for the credits. This bit is designed to be as unobtrusive as possible – after all, this information will appear every month, so it's not necessary to flag it.

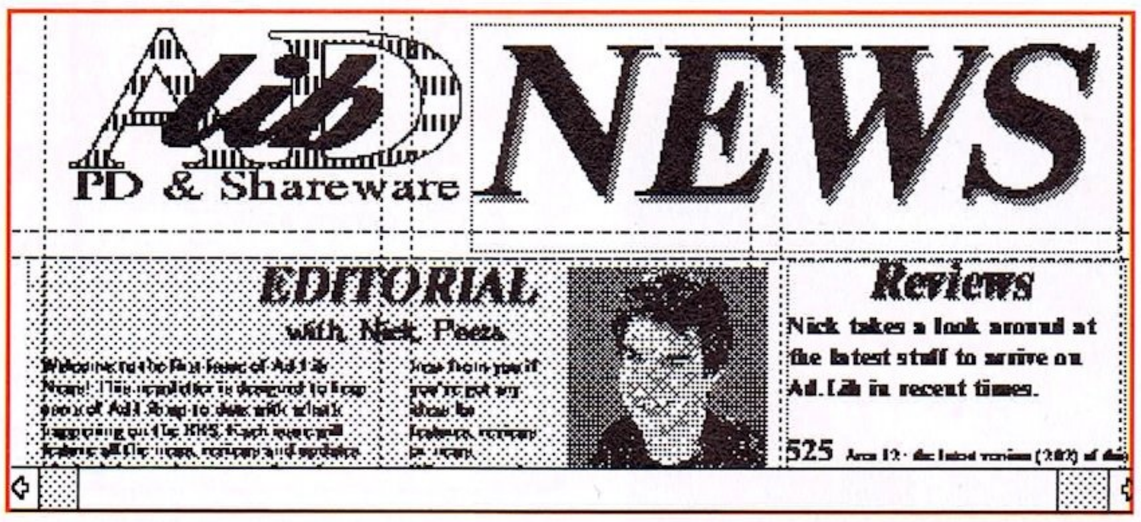
The logo is made up of two frames. The Ad.Lib logo itself is an imported IMG graphic, while the 'NEWS' part of the logo is a text frame that's been stretched to cover the remaining width of the page. You'll probably find that you have to position the frame off the guides, so that the base of 'NEWS' lines up with the Ad.Lib logo.

Further changes

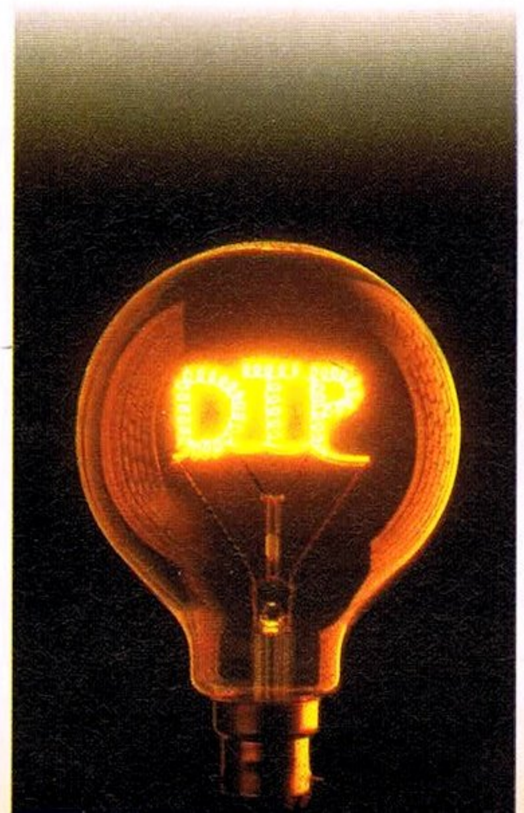
Your first printout will reveal all kinds of mistakes. If it doesn't, we'd like to offer you a job... In our first version, the heading for the news section clashed with the newsletter's title, so we changed it to 'Updates', having ungrouped that section's frames. We also drew a right-angled line using *Calamus SL's* powerful Line module to clearly distinguish between the reviews and news sections. Lines of all thicknesses and shapes (including diagonals and curved lines) are also supported by this particular module.

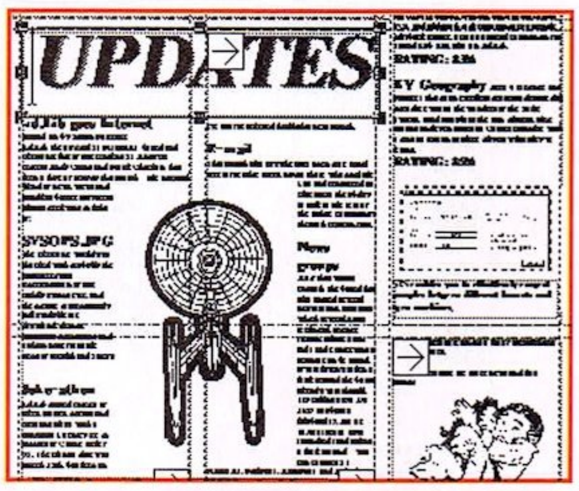
The other changes you're likely to find yourself making at this stage are more minor, involving resizing and moving frames. You may find yourself having to trim or pad your copy to fill space or fix overflows (using the text editor)s. We employ a production editor for this very job. Several printouts will no doubt be necessary, and will ensure that you achieve the best possible result.

Once you've finished, regroup the various sections together and the net result should be a newsletter that looks packed, accessible and informative all at once. That's still a dodgy photo of Nick, though. ***stf***



As the *Ad.Lib News* logo demonstrates, simple logos can be striking and effective, without being over-complicated. Shame about the photo below it, though.





We changed the heading for the news section from 'News' to 'Updates' so it didn't clash with the newsletter's name.

Presented in association with AMIGA COMPUTING, ST FORMAT
and enthusiastically supported by GASTEINER

IF IT'S 1995 THAT MUST MEAN ANOTHER BREATHTAKING

ATARI AND AMIGA SPOTLIGHT SHOW!

THE ONLY PLACE TO BE...

SPOTLIGHT '95 SHOW

★ GREAT SHOW OFFERS ★
OVER 30 EXHIBITORS INCLUDING AMIGA COMPUTING AND ST FORMAT

SEE, TRY AND BUY FROM A WIDE RANGE OF THE LATEST AND BEST PRODUCTS AND SERVICES FROM AMIGA AND ATARI MANUFACTURERS, DEALERS AND DISTRIBUTORS

"NOW IN ITS THIRD GREAT YEAR AND GROWING FAST"

PLACE: NOVOTEL HOTEL, HAMMERSMITH, LONDON.
DATE: 10th & 11th JUNE 1995
TIME: 10AM TO 6PM
TICKETS: £5.00 CHILDREN UNDER 5 FREE

For advanced booking phone Gasteiner on 0181-345-6000 or Fax on 0181 345 6868

MaxiS hard drive

Following their MiniS drives, System Solutions have released another deeply impressive hard drive, this time with space for a second drive mechanism.

MaxiS – the latest in a long line of fast, reliable drives from System Solutions.

System Solutions' MiniS hard drives score consistently high marks for being small, fast, and good value. The MaxiS drives are the latest in the series: "the small case for large drives". MaxiS comes in a smart but small case, which can fit a second drive mechanism. System Solutions will fit another drive for you, which can be a SyQuest drive. The rear of the case is a masterpiece of careful design, with the mains switch, fan outlet, ID switch and double SCSI ports nestling in a compact panel.

MaxiS drives are based around the Quantum Lightning drives, and they're well named. The MaxiS is probably the fastest drive we've seen, yet whisper-quiet, the tiny fan keeping the drive cool. The build quality is excellent, and it's smartly designed.

The MaxiS we tested was fitted with a 540MByte drive mechanism – a range of larger sizes are available. Connection is via a SCSI socket, using an external host adaptor (System Solutions' own Translator). This means that it can also plug straight into the Falcon, and can be used if you ever decide to move to another platform.

The driver software supplied is the excellent *HD Driver* – see below – which outperforms all other drivers in terms of raw speed. We ran the drive in daily use over a few weeks and had no problems at all. The whole package is superb – System Solutions drives have amazed us every time, and this is no exception. A solid product with a corking turn of speed, you won't do much better at this price.

FRANK CHARLTON

STF VERDICT

MaxiS 540MByte HD

£379 (plus £40 for Translator) System Solutions
☎ 01753 832212

HIGHS
- We're talking *fast*
- Takes up hardly any desk space
- Excellent value

LOWS
- We're still looking...

In short...
Fast, reliable, and you can have a second drive fitted. What more could you ask?

97%

HD Driver

You'd be surprised how powerful HD drivers can be. Particularly the new set of utilities from System Solutions.

HD Driver is a replacement hard disk driver system designed to be compatible with the Atari *AHDI* utilities while providing a much-needed speed injection and greater future support. A driver is a piece of software that handles communication between your ST and the hard drive, which means it needs to be reliable. *HD Driver* has been been thoroughly tested by System Solutions, and they supply it with their own MiniS and MaxiS hard drives.

Installing *HDD* is simple. A custom program takes care of everything, and warns you if you're about to do anything drastic. If your drive has been formatted using *AHDI*, everything is straightforward. If you used the *ICD* software you'll have no problems, unless you switched *AHDI*-compatibility off at the time of formatting, in which case you'll have to reformat the drive. *HDD* doesn't come with a formatter, but *AHDI* is available from most PD libraries and BBSs. And if you have a TT, MegaSTE or Falcon, you can also tell *HDD* to switch the CPU cache on at boot-up.

A configuration program enables you to fine-tune your setup, including switching write-verify on or off, and write-protecting individual partitions. Also supplied is an Accessory and XControl CPX module to change write-protection status 'on the fly'. *HDD* is fully Falcon-friendly, and you can configure it for use with internal IDE or external SCSI drives. You can set the cache size to speed up disk access, and allocate buffers to cure the notorious 40-folder bug. *HDD* even enables you to use odd partition types to work with Mac emulators or MiNT's Minix file system. And while *HDD* also provides a utility to repartition your drive, remember that this deletes all data on the disk, so you need to back up first.

Modern drives 'park' the disk heads automatically when the drive is turned off, but *HDD* comes with a utility that does this manually, even if your drive is autoparking. After the drive has been inactive for a specified length of time *HDD* shuts the drive down, parking the heads and stopping the motor. Then when the drive is next accessed, *HDD* simply restarts everything for you, with only a slight time lag. If you leave your drive on for long periods of time – if you're running a BBS, for example – then this is an excellent facility.

In use, *HD Driver* is amazingly fast – it outperforms *AHDI* and even the fabled *ICD* software with no trouble at all, and we ran it for ages without a single problem. *AHDI* users should fork out for this now, and any *ICD* users should take a good look too. *stf*

FRANK CHARLTON

STF VERDICT

HD Driver

£19.98 System Solutions
☎ 01753 832212

HIGHS
- Fast!
- Easy to set up
- Very reliable

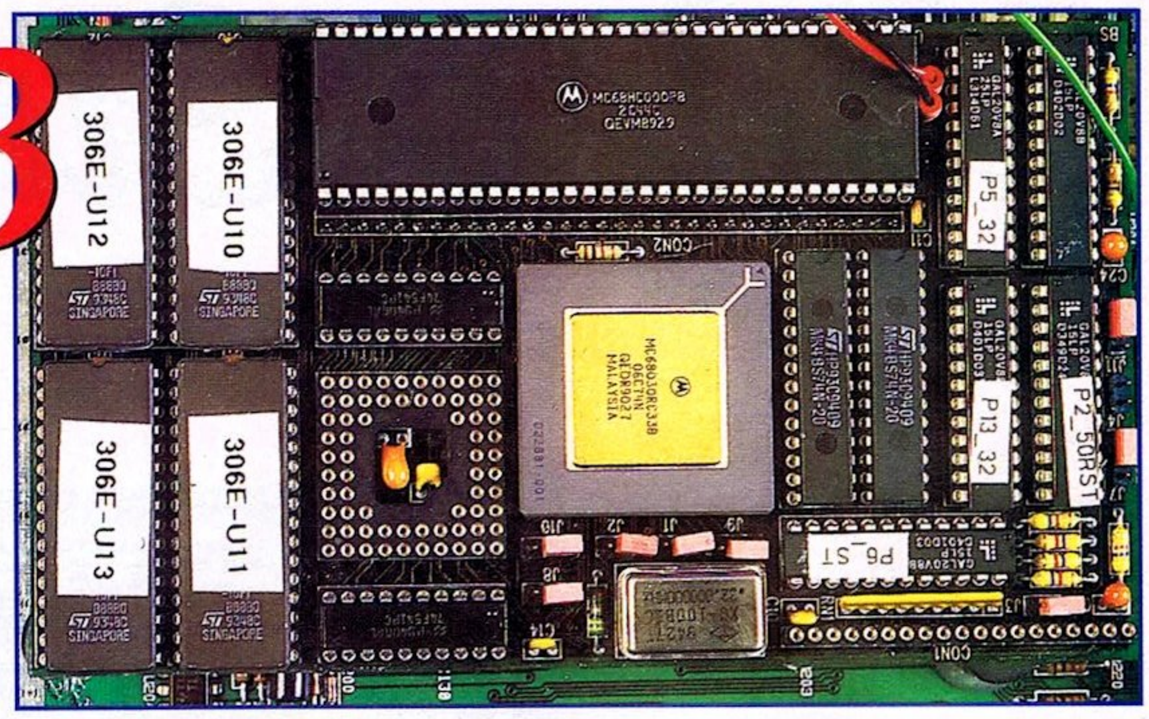
LOWS
- No *AHDI* formatting software, but that's a minor niggle

In short...
Fast, powerful, easy to use, and full of handy options. Got a hard drive? Get this, now!

93%

PAK 68/3

Ever fancied running your ST at speeds faster than the TT and Falcon can achieve? Well, now you can, using System Solutions' new hardware accelerator. It's not cheap, but it's certainly impressive.



This compact yet packed circuit board gives the PAK its unrivalled processing power. And this is only the 32MHz version – you should see the 40 and 50 MHz versions go!

The PAK 68/3 is a 32-bit hardware accelerator designed to run ST applications at fantastic speeds. It actually enables your ST to outperform TTs and Falcons with ease, and that's just with the basic 32MHz version installed – you can also get 40 and 50 MHz versions of the board.

PAK 68/3 comes with a 68030 processor, as found in the TT and Falcon. This makes it far superior to the T28 and T36 accelerators, which are 16-bit. To install PAK you need to have TOS 2.06 already installed in your ST; if you don't then you should go for the custom version of TOS 3.06 that accompanies the accelerator and further boosts its performance (at an extra cost, obviously).

It's important to note that the PAK won't turn your ST into a TT or Falcon. You can run all ST software as long as it's also compatible with the TT and Falcon – which means it must have been programmed to run with the 68030 processor. Don't worry, though – this includes most serious ST software. In fact, it's serious software that will really benefit from installing an accelerator like this.

If, however, you want to improve other elements of your ST – its graphics palette, for example – you need to buy an add-on graphics card separately. The PAK has one role in life – it makes your common-or-garden 8MHz ST shift at speeds that even Jean-Luc Picard would blanche at. Just take a look at the panel below to see how much faster.

So you're saying...

You'll be stunned by how effectively the PAK 68/3 works. Even after you've used it for just a short time you'll find that you just can't go back to your standard ST – everything, from the manipulation of GEM windows to screen updates and even drive accesses, seems almost lethargic. If you have the money to spare, and a desire to see what your ST can do with the right hardware installed, you need look no further. *stf*

NICK PEERS

WHAT PRICE SPEED?

The bog-standard ST's case isn't large enough to house the PAK 68/3 board on its own, which means you need a new casing. You can get away with just removing the keyboard and placing it in Freekeys (£39.95 from System Solutions), but a more aesthetically pleasing option is the Desktopper, which weighs in at around £99.95 (including Freekeys).

For the PAK 68/3 board itself, prices start from £299 for the board with a 32MHz clock, but you must have TOS 2.06 already installed. If you have an older version of TOS, System Solutions supply the same board with a customised version of TOS 3.06 for a total of £359. STE owners also need a special adaptor and buffer in order to get complete stability from the PAK – another £49.95

The installation isn't particularly easy, and involves clipping the legs off the existing 68000 chip to remove it and make space for the new processor. If you're at all worried about doing this, you can pay System Solutions an extra £50 to do the job for you, which is significantly less than you'd pay for a new machine should your own installation go horribly wrong.

There's also a switcher option enabling you to switch between the 68030 system, and your old 8MHz 68000 processor, ensuring complete compatibility. This costs just £20 (plus another £20 for fitting) and is well worth the extra cost.

Add all this together, and include the latest version of *NVDI* (£49.95, System Solutions) to really speed things up, and the total cost is around £650, including installation. Not at all bad when you consider that PCs and Macs with similar specs weigh in at quite a bit more.

MEEP MEEP (*how* fast?)

If you have *NVDI* (which is a software accelerator) installed in your system, you'll immediately notice how well it performs in speeding up screen updates. This is because *NVDI* concentrates on the graphical representation side of your ST's processing. PAK 68/3, meanwhile, works on improving the speed of your ST's number-crunching operations – rendering (rather than displaying) graphics, for example. Combine the two, and you'll find it impossible to believe how you ever survived in the past with the relatively slow updates of *Calligrapher*, *Calamus* and other such programs.

GEM Bench v2.5 © Ofir Gal 24.5.93

Test	Time	Ratio
GEM Dialog Box:	1.035	516%
VDI Text:	0.450	1254%
VDI Text effects:	0.790	1957%
VDI Small Text:	0.635	994%
VDI graphics:	1.320	1402%
GEM Window:	1.760	225%
Integer division:	1.075	538%
Float math:	1.280	607%
RAM Access:	1.595	353%
ROM Access:	0.920	426%
Blitting:	1.410	130%
VDI Scroll:	1.400	307%
Justified Text:	1.105	445%
VDI Enquire:	0.540	497%

Statistics
Graphics: 772%
Math/Memory: 481%
Average: 689%

Hardware: ST B, STE B, MegaSTE B, TT F, Falcon B, Blitter
Test All, Print, Save, Quit
TOS 3.06

The results you can achieve with the PAK and *NVDI*. Add MagiC to the equation and you'll be agog at what you can achieve!

Statistics
Graphics: 284%
Math/Memory: 100%
Average: 231%

NVDI has no effect on mathematical and memory routines, because it's designed to speed up screen displays, not deal with number-crunching.

GEMBench is a shareware program that performs a number of tests that investigate just how fast your ST is currently running. As a benchmark, a standard STE scores around 100 per cent per test. In our tests, an STE with NVDI installed took over 50 seconds to perform all the tests asked of it, but under the same conditions with the PAK 68/3 it took just 16 seconds.

STF VERDICT

PAK 68/3

£299 upwards
System Solutions
☎ 01753 832212
Minimum system: all STs

HIGHS

- Massive speed increase
- Good compatibility with old software
- Ability to switch back to your old config to run stubborn games

LOWS

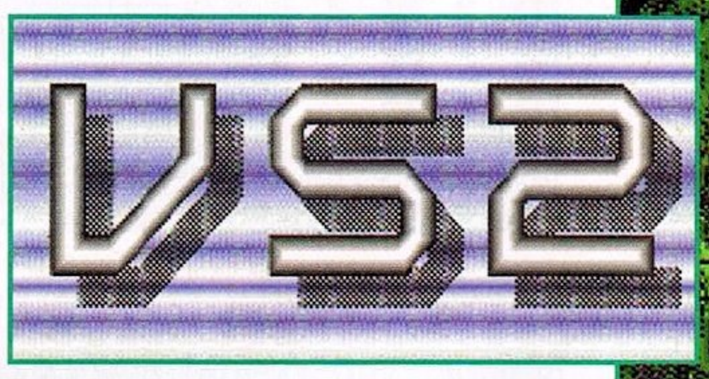
- Awkward installation
- High initial outlay

In short...

By far the most impressive hardware accelerator we've seen. Your ST will really shift **93%**

Video Supreme 2

Looking for software that can mix images, music and titles in a variety of weird and wonderful ways on your STE? Goodman have just the package for you.



Palette cycling – an easy way to achieve impressive results without resorting to silly hardware tricks or blitter chips.

When it's moving, this waterfall looks excellent, and it's an easy effect to achieve.

You can draw great pictures and create excellent music on your ST, but if you want to combine them to create slide shows, rolling demos or information screens, for example, you'll need a package like *Video Supreme*. It enables you tag together sequences of images, scrolling text messages, music and effects to create these rolling demos – all you have to provide is the text, music, pictures and creativity. You could use it for shop displays, meetings, video titles and disk intros – or whatever else springs to mind.

Using *Supreme* you create a script that your demo will follow, which defines what pictures to display, how they merge, what music to play in the background, and what text moves over the top.

See no evil...

The image system doesn't allow you to create pictures – you import images obtained elsewhere, in a variety of formats including PI1, NEO, MBK, PC1 and TNY. But the range of effects you can apply to these pictures is deeply impressive. They fall into three groups. The first sets how your images are displayed. You could simply slap the picture on the screen, but *Supreme* also enables you to weave alternate lines together from any end of the screen, scroll your picture on to the screen from any direction, add random blocks and lines one by one until the image is complete, drop the picture so it bounces when it lands or even zap it on to the screen with lightning bolts.

Clean, quick and easy to use, yet packed with all the effects you could possibly want

You can then animate your images. Once a picture has been displayed, it doesn't have to remain static. You could, for instance, load five different frames and animate them, break your image into sections and shuffle them about, or even use a countdown cut out from the image. Finally, you need to state how your images leave the screen. *Supreme* can fade them out, melt them off the screen, destroy them in a whirlpool, or enclose them in a shrinking shape.

And this is only a selection of the effects *Supreme* offers, most of which you can employ at any stage of your display.

The main editor screen. Although *Video Supreme* uses a script system, the closest you actually get to it is a few click-boxes.

...and hear new evil...

You can either import music files created elsewhere, or you could use samples to add sound effects to your images. *Supreme* uses MUS music files and SAM sample files, and you can freely mix the two with minimal fuss.

You can also add a set of meters on screen, which portray the volume output through any (or all) of the sound channels on your ST. You could choose a graphical meter, or even link it to a set of colour patterns, enabling you to palette-switch in time to the music. Good stuff. Well, we liked it, anyway.

Then there are the text functions. *Supreme* offers a 'scrolline editor', which creates scrolling messages that whizz about the screen. You can create scrollies in any font, move them at any speed, and you can stop them, scroll them around, reverse them off the screen or even go for a vertical passage scroll, to really make those end credits realistic.

All of this sounds like it should be incredibly complicated – surely things get messy somewhere along the line? Wrong. Although what you're creating is essentially a script, you use a mouse interface to do it, editing each sequence frame by frame, effect by effect, with all the interfaces working the same way. You simply flick through each stage in the sequence, selecting effects and setting the occasional value to define how that effect should work. And if you do have any troubles with the interface, a comprehensive on-line help system is easily brought up, and explains the package's workings with clear, concise and friendly instructions and, wait for it, annotated diagrams. Probably the best help system the ST has ever seen.

Video Supreme is an excellent package: clean, quick and easy to use, yet packed with all the effects you could possibly want to get your shop window display, video titles or any other presentation looking wonderful. Your friends and family will soon be clustered round your ST. *stf*

SIMON FORRESTER

STF VERDICT

Video Supreme 2

£29.95 Goodman International
☎ 01782 335650
Minimum system: STE upwards

HIGHS

- Loads of effects
- Easy to use
- Fabulous interface

LOWS

- Sits in several sections on the disk

In short...

An excellent video titling system – packed with filters and effects, yet simple to use

90%

Prima HD/CD

You can hardly pick up a PC mag without a silver disk containing up to 650MBytes of data sliding off the cover. But what does CD-ROM have to offer for your ST?

CD-ROM is starting to become much more accessible for ST owners. CD-ROM isn't new technology, but prices have fallen to the point where it isn't just the movers and shakers that can afford them. And with companies like System Solutions selling CDs full of ST software, there's something around to make the investment worth considering.

The Prima CD/HD Combo is a small box stuffed with big storage. It contains a hard drive and a CD-ROM drive in the same package, plus everything else you need to plug in and go, whether you have an ST or a Falcon030.

Haaard drive...

The drives are housed in a smart casing, the back of the case revealing a power switch and socket, fan outlet, SCSI-ID switch and twin SCSI sockets. The hard drive itself is a Fujitsu mechanism, weighing in at 260MBytes, and tests showed it to have a speedy average access time of about 12ms. The drive comes ready-formatted, and partitioned into sensible sizes, and with the *ICD* driver software installed as auto-booting. The full set of respected *ICD* utilities are supplied on the hard disk and on floppy, with everything other than the CLEANUP utility included (you have to purchase *ICD Pro* for that). The software is easy to use – turn to the *ICD* tutorial on page 66 for an introduction to the utilities and an idea of what they can do.

The excellent ICD Link 2 is supplied, which is capable of controlling up to seven SCSI devices, and sells on its own at £89.99. A SCSI-to-Falcon cable is provided.

Seedy rom

Like hard drives, CD-ROM drives need a set of software drivers so the ST can recognise and use them. The Prima comes with the *ICD* drivers which, unfortunately, need MiNT or MultiTOS to be present to work. They're MiNT extended device drivers, so if you boot with normal TOS you won't be able to access your CD-ROM drive. However, MultiTOS is supplied pre-installed on the hard disk, which pre-empts any problems. The drivers aren't spectacularly fast, but third-party systems that don't need MiNT, such as *ExtenDOS Pro* from System Solutions, should improve the situation immensely.

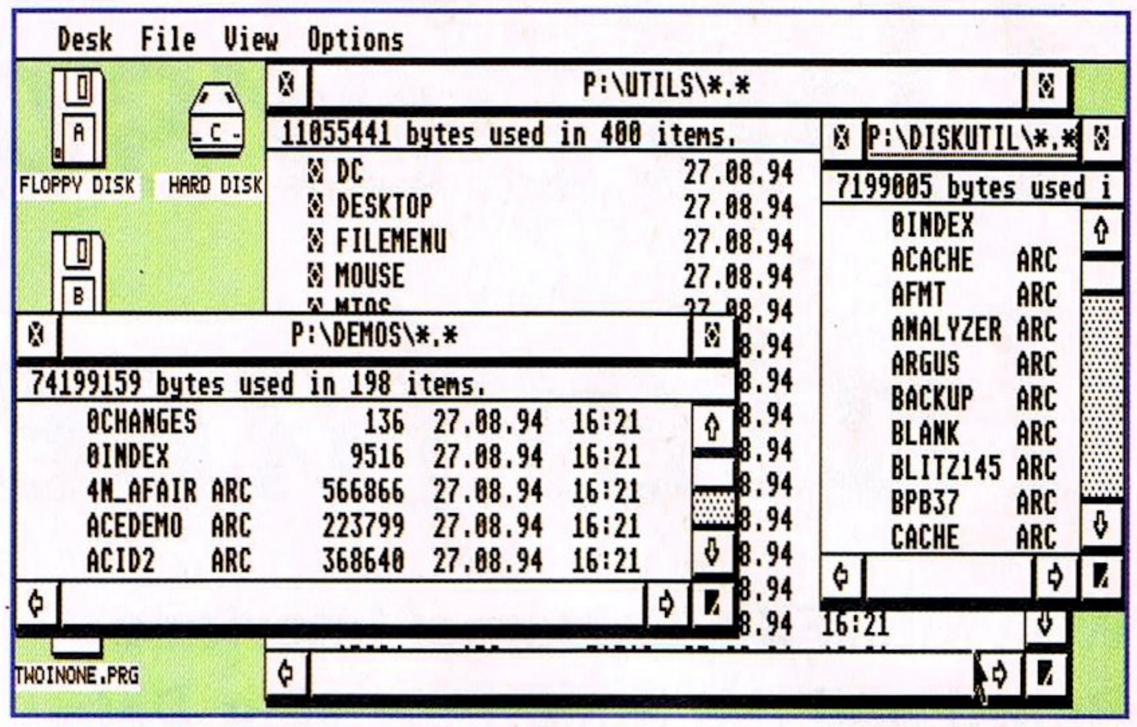
CD-ROMs with more shareware and PD than your average PD library cost about £30

The CD-ROM mechanism fitted is the respected Panasonic 503-B, a double-speed system. That might sound fast, but it's considered standard these days, since triple and even quad-speed drives have arrived in the PC market. The drive's also PhotoCD-compatible, which means you can have your films developed at a photographic bureau, then access them at high resolutions in art packages with a Falcon. The package doesn't include any software capable of reading PhotoCD images though, so you'll need to buy something like *ImageCopy 3.5 CD* (£34.95 FaST Club ☎ 0115 945 5250).

In testing, the CD-ROM drive coped with a wide collection of discs, even scratched CDs (although the driver often had to read the directories a few times). The CD-ROM drive has an access time of 320ms and a data transfer speed of about 300KBytes per second, which is about normal for a double-speed mechanism and should be perfectly adequate for your needs. The drive itself has only two controls – an Eject button and a volume control – and, yes, it can play normal audio CDs too. You'll need your own software to play them, though, because the drive itself doesn't have any controls. We tried quite a few of the PD and shareware players, but none of them seemed to work with the drive, probably because they didn't like the MiNT driver (the same mechanism works fine on the PC). *ExtenDOS Pro* – watch for a full review soon – comes with a player, and that should work without problems.

If you don't have a hard drive, take a good look at this. CD-ROMs with more shareware and PD than your average PD library cost about £30 – cheaper than buying them on floppy. If you're in the market to upgrade your HD this is a great buy, too. While 260MBytes isn't massive, First Computer Centre will happily discuss fitting larger mechanisms. This is the first drive to have both storage types in one box. We like it. *stf*

FRANK CHARLTON



CD-ROMs hold positively silly amounts of data. This one is actually compressed, and would hold 1.9GBytes if you extracted it all!

Hidden within this unassuming interior is a respectably speedy Fujitsu hard drive and a double-speed Panasonic CD-ROM drive. Imagine all the software it enables you to access!

STF VERDICT

Prima HD/CD Combo

260MByte hard drive £479.99 First Computer Centre ☎ 0113 231 9444
Minimum system: All STs, TTs and Falcons, 1MByte of RAM

HIGHS

- Neat all-in-one solution
- Everything you need supplied in one package

LOWS

- Needs MiNT/MultiTOS to access the drive

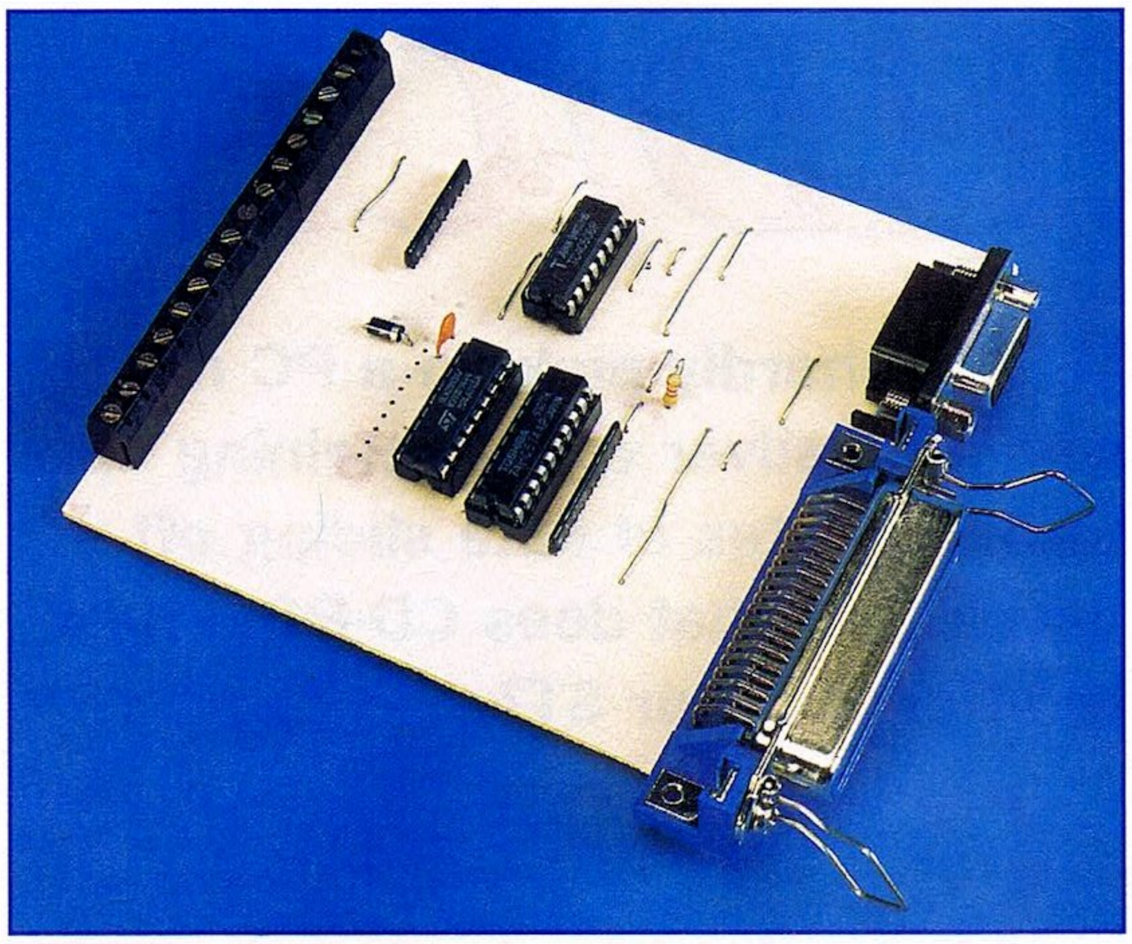
In short...

An all-in-one hard disk and CD-ROM drive solution, with everything you need to get started

85%

Universal Interface

With InterFX's Universal Interface Board and the accompanying *Data 'n' Control* software you could, theoretically, wire your whole house to your ST. Cat might squeal though.



This slightly aesthetically challenged piece of hardware might just be the answer to your dreams of a home of the future. Alternatively, you could build yourself the most sophisticated model railway the world has ever known.

Breathe deeply. Close your eyes, and let yourself slip back through time. Aim for around 1980 and walk into a bookshop, where you can buy books on computers, showing what they'll be like in the future. You'll see pictures of houses controlled completely by computers, with curtains opening at a set time in the morning, and lights automatically switching on when people enter rooms. Now open your eyes.

Back in 1995 those visions couldn't be further from the truth. Your ST still sits on a desk on its own, isolated from the rest of the house by the barrier of communication. Your ST can't talk to the curtains, and they can't listen. InterFX want to change all that with their Universal Interface Board, which comes bundled with their *Data 'n' Control* software.

It does what?

The package provides you with an interface through which your ST communicates with other electronic devices. You could try building your own robotic components and use your ST to control them, or go for something simpler like timing the power into a washing machine, microwave or light switch.

The Universal Interface Board itself consists of a piece of circuit board, which communicates with your ST via the ST's printer and joystick ports. On the other end of the board are eight output and five input connections, and a ground on each set to make a connection. The output also has a facility for a power supply, up to 12V at 0.5A, so you can send a reasonably powerful current through the output, rather than the weak signals computers normally use.

The *Data 'n' Control* software works as a *STOS* Extension, adding the commands that control the board itself. This means you need *STOS* installed on your ST before you start, although InterFX are working on a standalone program for possible release in April. The Extension provides a wide range of commands, which give *STOS* the power to deal with the ports in a variety of ways. It can treat them as bits of a byte, or communicate through them in a serial fashion, or treat them as a set of individual, separate channels. With some clever work on your part, you can even use the board to read analogue signals (such as temperature) as well as digital (on or off). To do this, you'll need an analogue-to-digital convertor of some kind, and a bit of clever programming to read the signals.

Your ST can't talk to the curtains, and they can't listen. InterFX want to change all that

All of this can be controlled in relation to a software clock as well, enabling you to time actions. You can then create automatic sequences of functions, using an extra Accessory, for even easier control of the interface. The software side of the package, comprising these commands and a few other programs that monitor input and control channels for test purposes, is powerful and flexible, although it has to work within the confines of the interface board.

Cor, that's clever

The *Data 'n' Control* software is powerful, but this isn't the kind of package anyone can use. It throws you in at the deep end as far as the electronics side of projects goes, and gives you few clues as to what you can use the project for and how you actually go about rigging devices to the interface. A lot of other electronic components come into the equation, which means you need to understand what you're doing from the outset. This is a package for people who regularly spend hours leafing through Maplin catalogues and getting hot and bothered about zener diodes and the ohmage of capacitors.

The manual doesn't really explain what's going on, either. The commands are well-documented, and occasional wiring diagrams are given for things like analogue-to-digital convertors and BCD displays, but there's nothing to help you learn about what you're doing. But it's not the manual's job to explain the theory and practice of electronics to beginners.

If you have dreams of an automated home, but lack the ability to wire it all up yourself, you might find yourself going white around the gills on opening this package. If, however, you can handle the technical side and you have the electronics knowledge to make use of the board, you'll find it as good as any system any you could build yourself. *stf*

SIMON FORRESTER

Uses & abuses

If you do survive the technicalities long enough to come up with an original yet practical use for an interface like the UIB, write in and let us know. It's *ST FORMAT*, Future Publishing, 30 Monmouth Street, Bath, Avon, BA1 2BW.

STF VERDICT

UIB

InterFX ☎ 01535 211914
£25 (full kit)
£15 (board only, built and tested)
£5 (circuit board only, with instructions for assembly)
Minimum system: Any ST

HIGHS
- Comprehensive *STOS* Extension
- You could do really great things with it

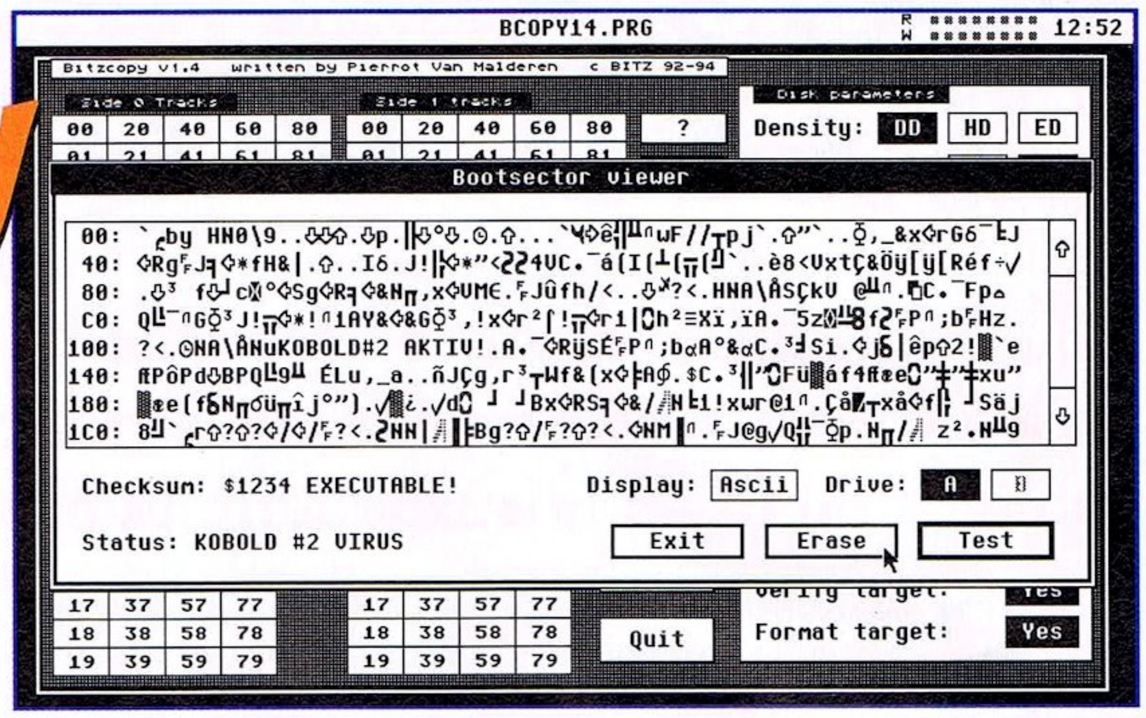
LOWS
- Not for beginners
- The manual could be much more useful

In short...
Good two-way interface with well-written software, but it's a little too complex for beginners

65%

Bitzcopy

Another commercial disk copier emerges to challenge *Fastcopy 3*, and it has some impressive new features, including the ability to create compressed disk images.



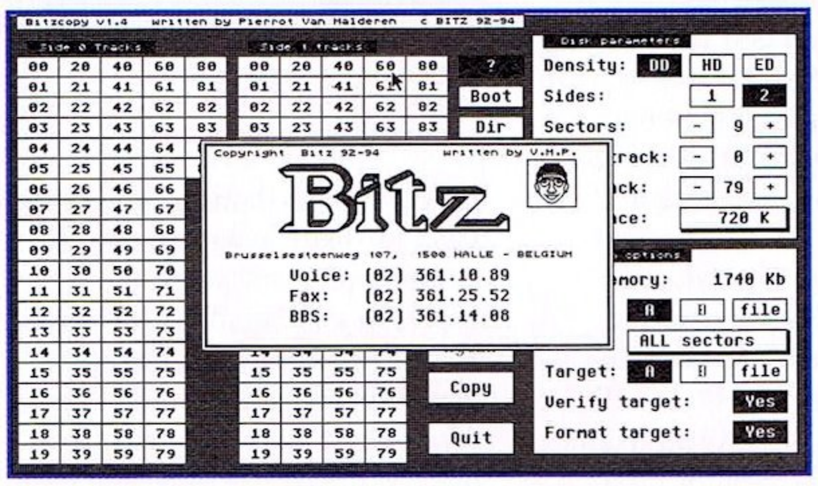
A virus on this disk! Time to hit the Erase button. *Bitz* includes a virus checker.

Bitzcopy 1.4 is a disk copying and formatting utility from Belgian software house BITZ, famous for their TOS 2.06 upgrade among other things. We gave away a demo version of *Bitzcopy 0.5* to our subscribers on Wonder Disk 58, but the latest version boasts new features like the ability to create compressed disk images.

With the emergence of *Fastcopy 3* a few years ago, ST users have come to expect more from a copier than the ability simply to duplicate floppies. *Bitzcopy* doesn't disappoint, coming with the full range of copying and formatting tools.

Duplication station

You can copy an entire disk or just the tracks that have been used, which makes copying much faster on most disks because you aren't wasting time copying empty space. Formatting is supported right up to high density (as used on the Falcon) and 2.8MByte enhanced density. Previously formatted disks can be erased in a couple of seconds using the Soft Format function, which simply deletes all records in the FAT (file allocation table). Both copying and formatting can be performed with or without write-verify switched on, and disks can be copied without having been formatted first, since *Bitzcopy* can format as it copies. Copying isn't faster or slower than any other copier, and its error-handling is excellent, but *Bitzcopy* lacks *Fastcopy's* 'best match' ability to guess the contents of a damaged track or sector. A simple virus checker is also present, and offensive disks can be cleansed with a mouse-click.



Everything in *Bitzcopy* – disk copying, formatting, and image creation – is controlled from this simple, easy-to-use screen.

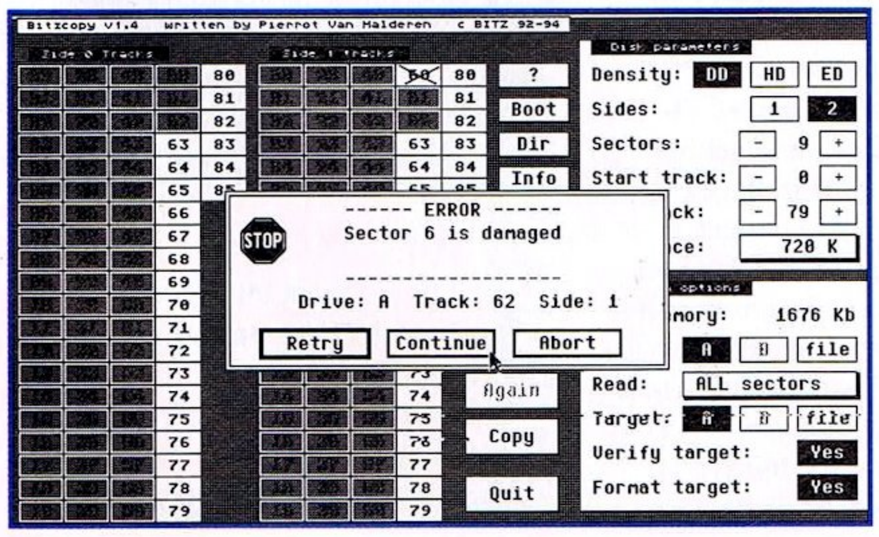
The biggest new feature is *Bitzcopy's* ability to create 'disk images'. A disk image is a file stored on hard drive or another floppy, which contains a snapshot of the exact contents of a disk – format details, boot sector, the lot. *Bitzcopy* uses a compression technique to store the disk's contents in a much smaller form, which makes backing up those important floppies much less space-hungry. Images are also handy for transferring an entire disk via modem, since it packs everything into one tight file.

> **ST users expect more from a copier than the ability simply to duplicate floppies**

Compressed images have been used for quite a while, and the excellent *Magic Shadow Archiver* – available from PD libraries and BBSs – is widely used. The problem with a commercial program like *Bitzcopy* is simple: if you send someone a *Bitzcopy* image, they need to buy a copy of the program itself to decompress it. *MSA*, on the other hand, is widely available and free.

We ran a quick test comparing *Bitzcopy* to *MSA*. Using some disks plucked at random from our collection we timed the two utilities, and compared how efficient the compression process was. First we used one of the master disks supplied with *ImageCopy 3.5*. *Bitz* took 1 minute 28 seconds to pack it into a 524K file, while *MSA* produced a whopping 710K file in 1 minute 13 – not much compression there. Next we used a PD disk full of IMG pictures, which were already compressed. *Bitz* took 1 minute 20 seconds to spit out a 488K image, and *MSA* took just over a minute to save a 676K file. A few more tests revealed that *MSA* was always slightly faster, but *Bitz* always won on compression, sometimes by almost 300K.

If you're sending files to another *Bitzcopy* user, or compressing little-used disks to save space, *Bitz* is the best bet. For transferring things like demo disks that need the full disk details stored, *MSA* is the best choice, as almost everyone has a copy (or you could send one).



Bitzcopy has fairly basic error-handling routines in comparison to other copiers.

New features for old...

Bitzcopy 1.4 has lost some features since version 0.5. Previously, pressing [F7] popped up a dialog which enabled you to create a custom boot sector, complete with your own message including a TOS version and available RAM display. Where's it gone? We liked it! Also, the old *Bitz* worked with those nefarious Blitz Turbo cables for ultra-high-speed disk copying, which also seems to have vanished. It's a shame to see simple utilities become overly complicated, but why take more features out than you add? Strange...

Bitz is good at what it does, but the introduction of yet another disk image format lets it down when *MSA* is the accepted standard. Useful for backing your own disks up – although it doesn't work with protected commercial disks – but otherwise we've seen it all before. ***stf***

FRANK CHARLTON

STF VERDICT

Bitzcopy 1.4

£10 BITZ Computers Belgium
☎ 00 32 2361 10 89

HIGHS
- Highly efficient Image compression
- Easy to use

LOWS
- Why take old features out?
- Non-standard compression format

WHAT ELSE?
- Fastcopy Professional £14.95 FaST Club ☎ 0115 945 5250

In short...
An excellent copier, but it offers nothing that you can't already do using PD disk copiers

68%

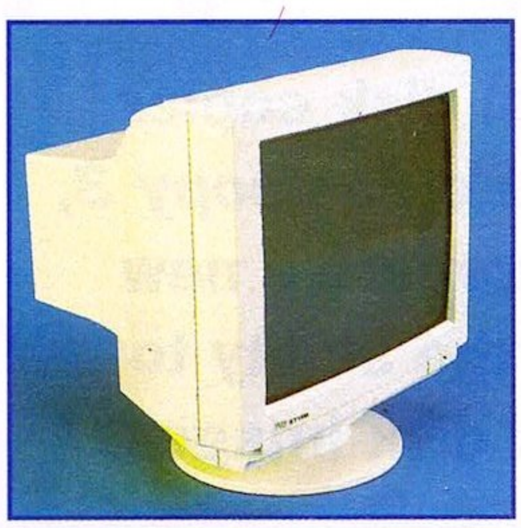
TUS monitor

The Upgrade Shop have unleashed a new 14-inch, dedicated monochrome monitor on to an unsuspecting public.

Since Atari discontinued their highly successful SM monitor series, there's been an influx of 14-inch VGA monochrome monitors that have been converted by third party developers to fill the gap. This type of monitor is vital when you're working in high resolution. Although you can emulate high-res on colour displays using programs like *Sebra*, the display just isn't good enough to prevent eye strain after lengthy use.

The Upgrade Shop's monitor features a special connector that enables you to plug the monitor directly into your ST's monitor port. You can alter the brightness, contrast, horizontal aspect and the vertical size of the display with four controls from the front of the machine, and it also features a tilt-and-swivel stand, which enables you to position it exactly as you want it – invaluable for reducing eye strain. The version we received for review didn't come with the optional audio speakers (which cost an additional £10), but if you want sound from your monitor they'll be vital.

The display is good and steady, although it does suffer slightly from ghosting – but this criticism could be levelled at all converted VGA monitors, not just TUS's. While this monitor might not be as good as a dedicated Atari one (now only available second-hand), it beats damaging your eyesight through sustained use of a monochrome emulator.



The Upgrade Shop's monochrome monitor in all its glory. Well worth it if you use a lot of serious software that only runs in high resolution.

For any detailed work, such as DTP, score editing, draughtsmanship, and even word processing, there's no real alternative. As the advert says, you only get one pair of eyes.

NICK PEERS

STF VERDICT

TUS 14-inch monochrome monitor

£89 (£10 extra for speakers)
The Upgrade Shop
☎ 01625 503448
Minimum system: All STs, TTs and Falcons

HIGHS
- Good, steady display
- Excellent value for money

LOWS
- No in-built sound as standard

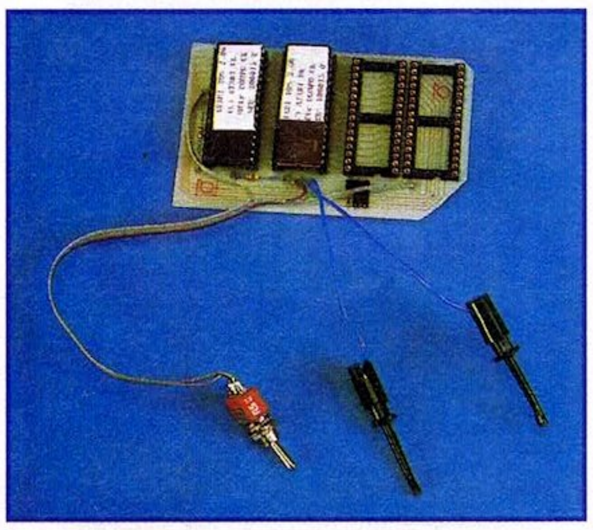
In short...
Not quite as sharp as the dedicated Atari monitor, but better than risking eye strain

80%

Solderless TOS switcher module

The Upgrade Shop's STE-only TOS upgrade might be solderless, but does this translate to 'easy to install'?

Until TOS 2.06 came along, TOS remained criminally under-developed. There's no room here to list TOS 2.06's impressive features – just dig out issue 61 and read our complete beginners' guide to getting the most from TOS 2.06 for a few reasons why you should upgrade. However, some TOS upgrades involve soldering, which can be fiddly and risky. The latest upgrade, from The Upgrade Shop, is solderless, but does this make it any easier to install?



You can switch between old and new TOS versions for maximum compatibility.

The main problem with this upgrade is its manual. It starts off as an easy-to-follow guide to installing the board, and it shouldn't take you too long before you have your old TOS chips snugly connected next to their newer cousins and the whole thing securely placed on the mother-board. However, everything starts to go downhill from here. Fitting the two flying leads is fiddly, because you have to fit them into a cramped space under the disk drive. Analogic's switchable upgrade (£59.95 ☎ 0181 546 9575) has just one fly lead, which is placed a long way away on the motherboard – more convenient and much easier to fit.

The next problem you encounter comes when the manual calmly mentions something called the link, which isn't indicated on the diagram. It's actually above the old TOS chips on the module and you need to move its cover, according to whether your old chips have 28 or 32 pins.

In fitting the switcher, the manual instructs you to trail the wires to the back of the machine and "cut a small hole in the case for the switch to fit". For such a delicate yet vital task, the manual should really offer a far more comprehensive explanation, and it should have indicated in the 'Tools Required' section that you'll need a cutting implement for this job (such as a hacksaw or drill).

If you intend to fit the TUS upgrade you'll need patience and a stable hand. TOS 2.06 is easily worth the time and money, but the Analogic upgrade is much easier to fit, if £10 more expensive. ***stf***

NICK PEERS

STF VERDICT

TUS TOS 2.06 switcher

£49 The Upgrade Shop
☎ 01625 503448
STE-only

HIGHS
- TOS 2.06 is a winner
- Great value for money

LOWS
- Manual is too vague
- ...making it fiddly to install

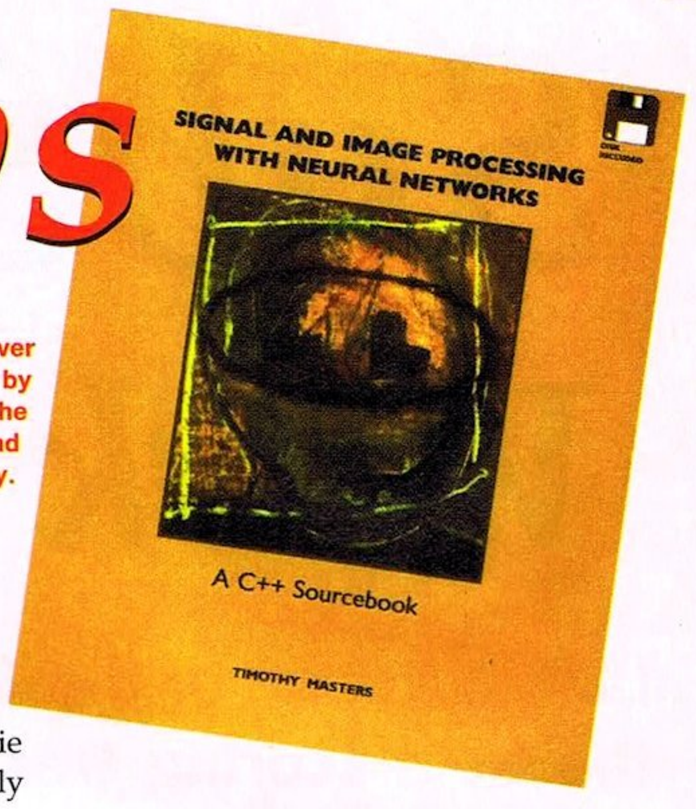
In short...
TOS 2.06 at this price shouldn't be missed, but installation is very fiddly

80%

Book reviews

Signal and Image Processing with Neural Networks

by Timothy Masters



Second prize for oddest book cover ever, losing only to *Psychology* by Richard D Gross, who takes the award for spookiness above and beyond the call of duty.

One of the major advances in computing and mathematical science over recent years has been the development of artificial neural networks (ANNs), and the exploration of their workings.

This textbook covers just one small area of ANNs: their uses in electronic signal and image processing. Signal processing is a subject that's as old as the hills, but Masters has worked to incorporate and utilise neural network technology into the process, pointing out the advantages and extra features of neural networks which conventional algorithms fail to offer. For example: "Neural networks are quite tolerant of unusual noise distributions. It may well be that when they are used on real-life problems, they outperform their "mathematically optimal" counterparts. Life would be much smoother if all physical phenomenon were linear, with Gaussian error. The author is not acquainted with any such phenomena." The book goes on to demonstrate the practical advantages of ANNs with quiet confidence, and includes a comprehensive library of C++ source (provided on a high density disk, which means lots of typing for double-density drive owners). The subject itself is broad, and the library matches it, covering most practical applications – from linear signal processing (such as doppler filtering) through correlative problems (time and frequency) to more complex operations (tone and texture filtering).

This is not a leisurely book; it's an academic textbook. But, just as Stephen Hawking created a public following without watering down the academic content of his work, this book makes the science of ANNs accessible. If you're interested in artificial neural networks, this book is as good and as palatable a way to get into a more practical application of it as any. It's not easy to read and it doesn't give you a gentle introduction to the terms and models used, so if you're a newbie to the subject you should probably get hold of a beginners' guide to support you while you're learning. If you're already equipped with a basic knowledge of ANNs, though, and you don't want to study it in a purely theoretical form, this is an excellent way to start. It doesn't patronise you, and it certainly doesn't protect you from the harsh rigours of complex mathematics.

The EC should put a health warning on this book. It reduced our production editor to a slumber, but I learnt a lot about a subject I hadn't considered before. If you'd like to get into some alternative, intelligent programming, you should give it a try. If you wouldn't, you'll find it deathly dull. Like most textbooks.

SIMON FORRESTER

STF VERDICT

Signal & Image Processing with Neural Networks

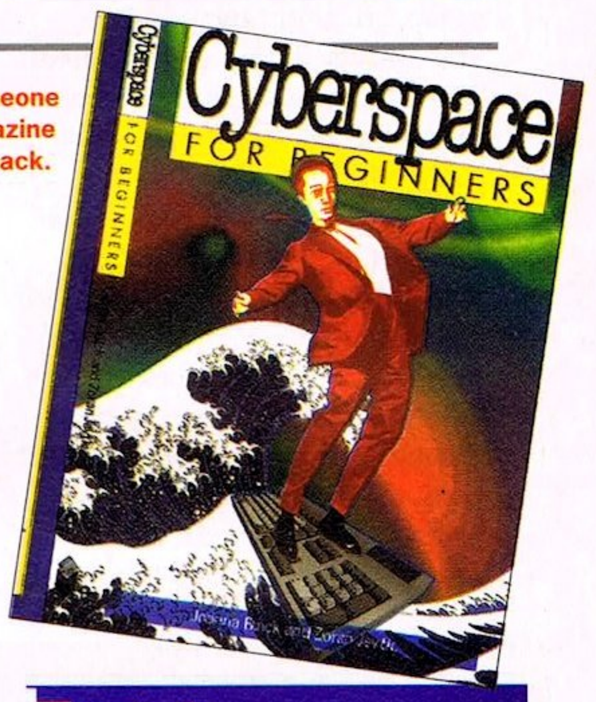
£36.95 John Wiley & Sons
☎ 01243 779777
417pp, ISBN 0-471-04963-8

In short...
Packed with interesting ideas, source code and info. Heavy going but very rewarding

80%

Cyberspace for Beginners

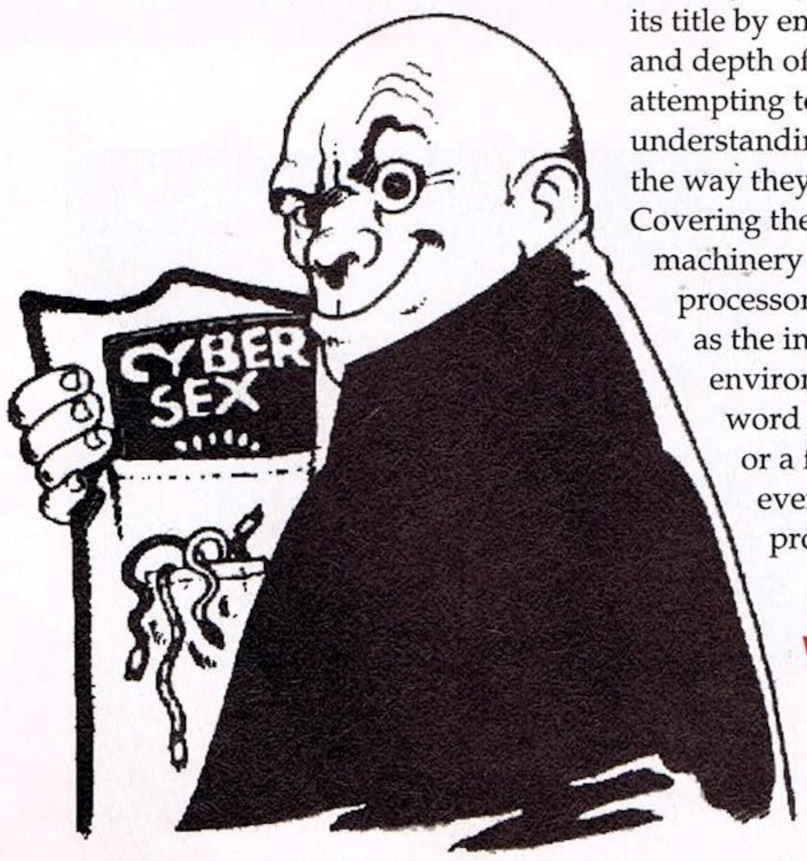
by Joanna Buick and Zoran Jevtic



Another of those images of someone 'cybersurfing', as seen on magazine covers a few years back.

In a complete change of pace, *Cyberspace for Beginners* offers a gentle introduction not only to the world of the Net, but to the world of computers in general. Recognising that cyberspace is about much more than fibre-optic networks, *Cyberspace* starts with the roots of language and understanding, following mankind's progression into the electronic era, and the philosophies involved.

Cyberspace for Beginners belies its title by emphasising the breadth and depth of the whole subject, attempting to provide an understanding of computers and the way they fit into our society. Covering the historical invention of machinery leading up to the processor, it views cyberspace as the inhabitable electronic environment of a desktop, a word processor, a database or a floppy disk, before it even thinks about progressing down the phone lines to start talking about cyber-communities.



Well, it's one way to use cyberspace. There's a lot of it on the Net as well, but then again, there are also samples of ferrets fighting. You can use cyberspace for anything.

If you have a computer-illiterate relative they'll doubtless find this book an exciting hook into the world of computers and communications, and it'd be the perfect gift were this only Christmas. At the same time it contains enough to keep veterans happy, and gives a refreshing slant on the appeal of computing, although you'll find yourself skipping the irrelevant stuff you already know, like the sections on databases and word processors.

The writing style is clear and concise, broken into small chunks of explanation, snippets of information and useless facts. This is complemented well by the book's layout – it's packed with images, both functional and decorative. If you know someone who needs a gentle nudge into the Twentieth Century, this could be the perfect way. *stf*

SIMON FORRESTER

STF VERDICT

Cyberspace for Beginners

£7.99 Icon books, 52 High Street, Trumpington, Cambridge CB2 2LS
175pp, ISBN 1-874166-24-2

In short...
Takes a philosophical and sociological approach to the subject. Good for newbies

85%

SubStation
Work in progress

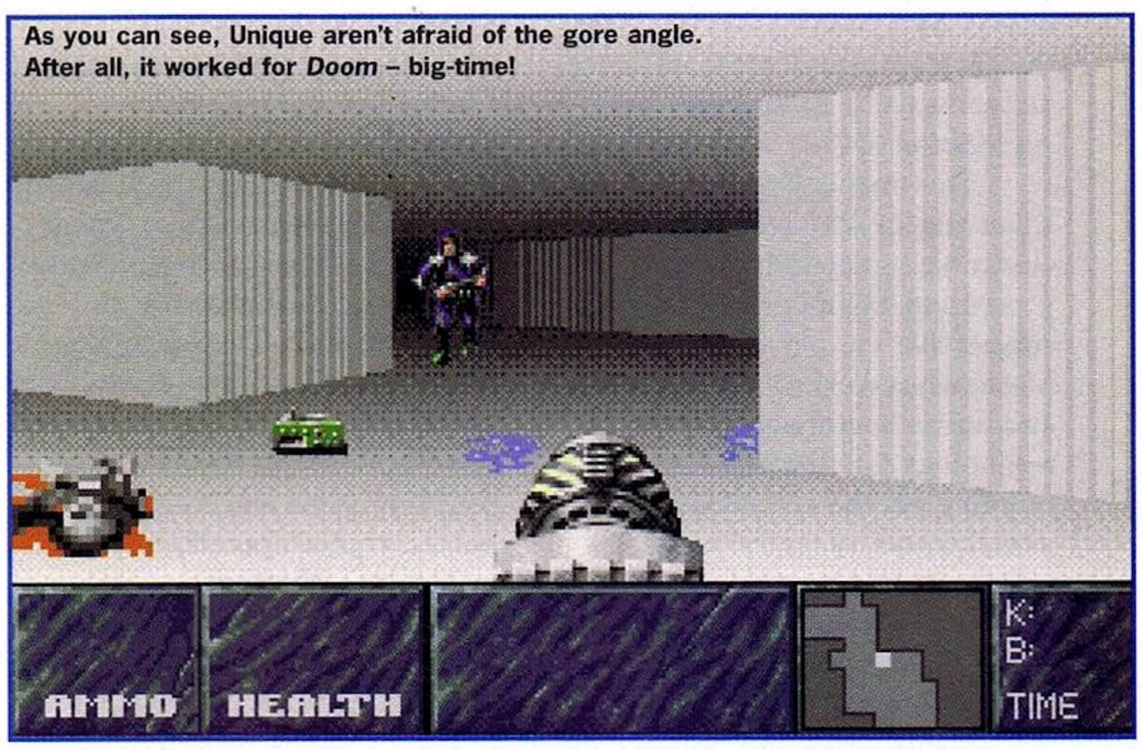
UDS burst on to the ST scene with the Gold-scoring *Obsession*. Now they're developing a *Doom* clone called *SubStation* for the STE and Falcon. Simon Forrester takes a closer look, and gets all excited.

Not all that long ago id Software unleashed *Doom*, a shareware 3D exploration and mutilation game for the PC. Even if you haven't seen it in action, you probably know that it was massively successful on the PC before finding its way on to the Jaguar. Apart from its violence, *Doom* was notable for its use of a first-person perspective and incredibly smoothly-scrolling environment. Now UDS have announced the imminent release of *SubStation*, which uses a similar engine.

SubStation follows the fortunes of a diver attempting to recover an undersea power plant, overrun with... well, you'll find out. Its first-person perspective means that you see everything through the eyes of the diver as he explores corridors, discovers rooms, and uses some seriously heavy weaponry. This takes place in a free-3D environment that's similar to *Freescape*, although, judging by the non-playable demo of the game, UDS' system is faster, smoother, prettier, and more realistic than earlier 3D games.

We mugged Peter Zetterberg, *SubStation's* project leader, for more information...

Peter Zetterberg, nipping down to the Post Office yesterday.



As you can see, Unique aren't afraid of the gore angle. After all, it worked for *Doom* – big-time!

How long has the game been in development, and when do you hope to have the finished version ready for release?
SubStation has been in development since April 1994, and we'll have it finished by late April this year. *SubStation* will be available all over Europe and the USA by the first of May.

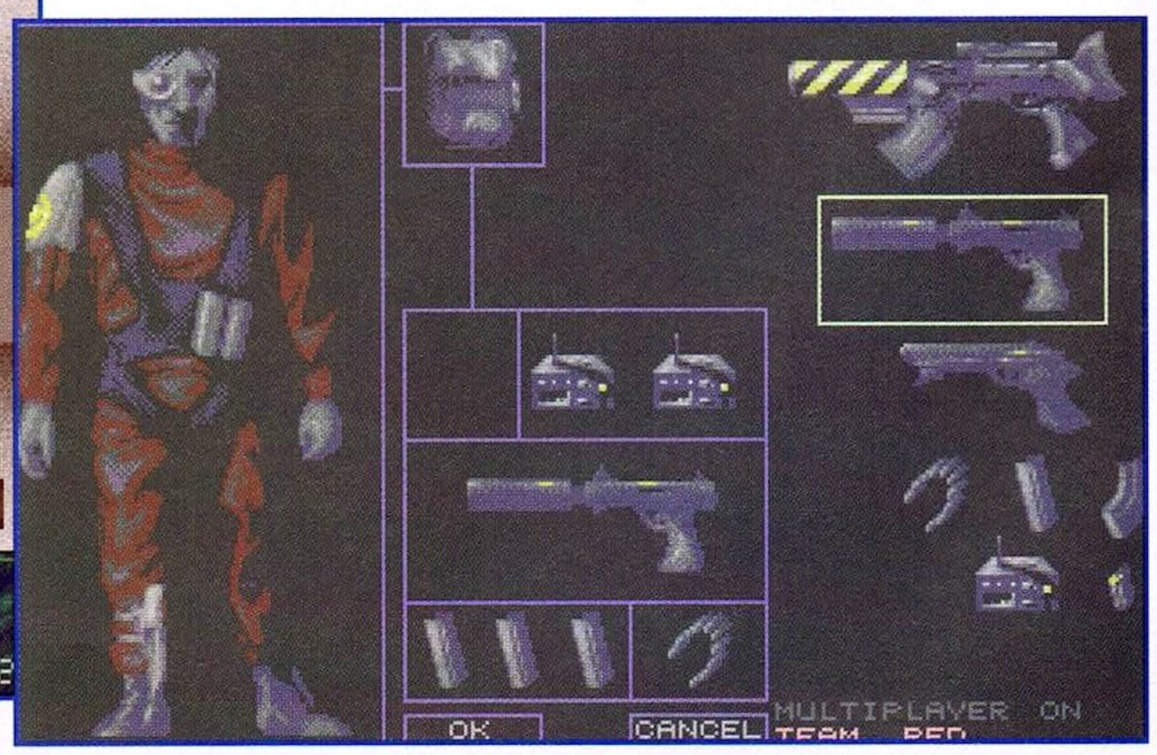
Do you plan to distribute the game yourself overseas, or will you use other PD libraries and software houses as you did with *Obsession*? And what price is planned?
JCA Europe and Merlin will distribute *SubStation* in the UK. The price tag will be approximately the same as for *Obsession*.

Was *SubStation* influenced by id Software's *Doom* in any way?
Definitely not, it was they who stole our idea! Seriously though, we had all played *Doom*, and were

WHAT A LOOKER!

Visually, *SubStation* should break new ground on the STE. The player moves around in real-time rendered 3D, with 25 frames per second at a resolution of 320x160.

The system, written by Mikael Emtinger and Oskar Burman, will combine Gouraud-shading for the walls with a mixture of bitmapped graphics for other game features. Graphically, we're talking about one of the most impressive systems you've seen on the Atari to date.



TECHNICALITIES

● **What are the minimum system requirements?**
PZ: *The same as for Obsession: a 1MByte STE. SubStation will also work (and run much faster) on a Falcon, and it will, of course, also run on a MegaSTE. It will take up three disks, but one disk will contain the intro and on-line instructions.*

● **What problems did you face with getting the STE to run the game?**
PZ: *Above all, making the game both look appealing and run smoothly. We put an enormous amount of work into making the 3D engine run as fast as possible. UDS' highest ambition has always been to put playability as priority one. A tricky thing indeed is the fact that a modern PC is 10 to 20 times more powerful than an STE – hence for example the walls are Gouraud-shaded instead of (as in Doom) texture-mapped.*

What we lose in raw computing power, however, we compensate for with atmosphere. One example is the DD Audio system, with which we can build a very realistic sound environment. We discovered while playing Doom that the sound is at least as important as the graphics when it comes to building a trustworthy environment in which to play.

● **Will the Falcon version contain any extras over the STE?**
PZ: *No specific ones, but the sheer speed of the Falcon makes the game run a lot smoother, which makes it even more playable.*

● **Would it have been possible to program *SubStation* to run on the STFM?**
PZ: *Every game is possible on any computer, but with restrictions. SubStation takes advantage of nearly every piece of STE-specific hardware, and as it stands wouldn't have been possible to make for the STFM.*

SOUNDING OFF

Part of the atmosphere and feel of the game will come through the sound system, created specifically for *SubStation* by Tord Jansson. After a lot of research on the way hearing actually works, he formulated DD Audio (Distance and Direction). This systems means that if you have stereo speakers fitted to your system, you'll be able to determine the distance and direction of any in-game sounds.

To complement this, there'll be an extensive range of effects, screams, footsteps, gunfire, engines, ventilation fans and emergency horns to name but a few, running in three separate channels under this system.

very impressed. We discussed whether it would be possible to do something similar on the STE, and eventually Project *SubStation* was born. *SubStation* is not meant to be a total rip-off of *Doom*, though – it would probably not even be very funny if it were.

How did you formulate the original idea for the game?
Mikael Emtinger and Oskar Burman came up with the idea to make a game of this kind, and myself and Mikael Emtinger then built the story and everything around it. Instead of aiming at the stars, as almost all science fiction games do, we dived into the mind-boggling depths of the mostly unexplored seas that cover most of this planet's surface. The environmental aspect of the discovery of a new energy source in the future is carefully considered, too.

Does *SubStation* mark a new era in ST gaming from Unique Development?
Each game we make is a project of its own. Our ambition is not to produce any certain kind of games, but purely top-quality ones in each game's respective niche. *Obsession* was such a game, and we aren't planning on stepping off this path with *SubStation*. ***stf***

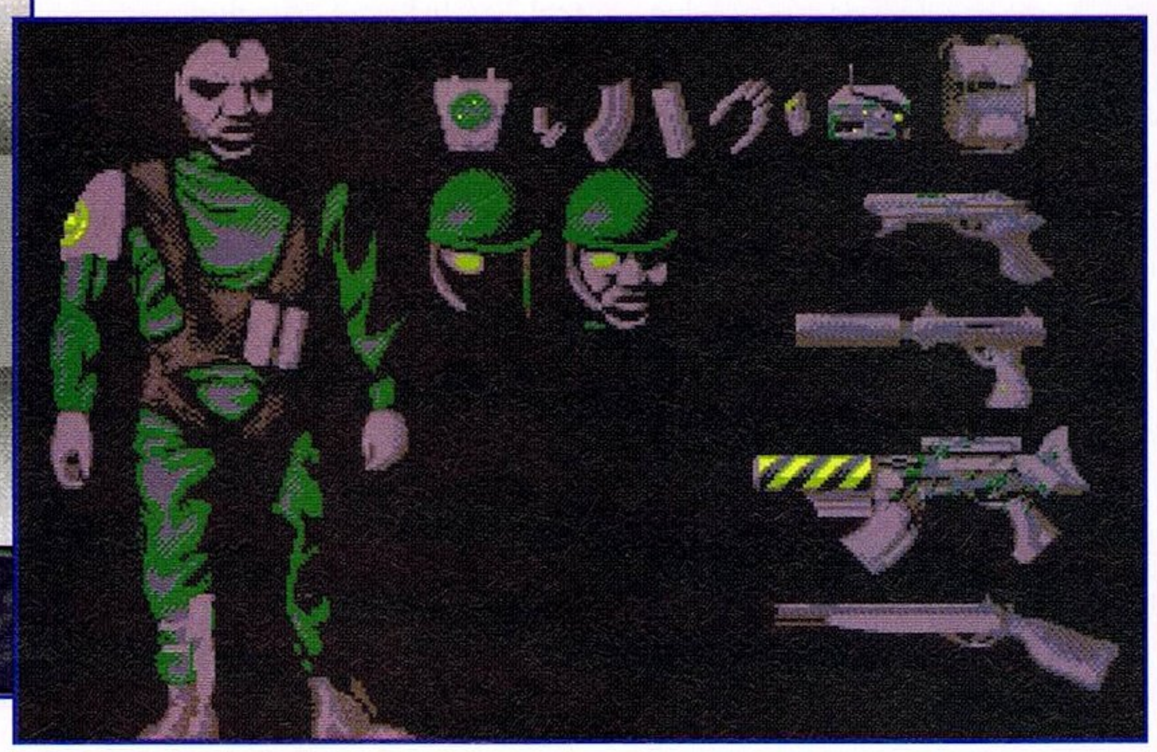
FUN FOR ALL THE FAMILY

Using the STE's built-in MIDI capabilities you can link machines and have up to four people playing *SubStation*, either in teams or in an all-out battle. In MIDI-link mode you gain credits, which you can spend on ammo, health, food and weaponry. The game won't come with MIDI cables for this task, but during spring UDS will release the combat pack, consisting of MIDI cables, a level designer and a hints and tips booklet.

CREDITS

Oskar Burman AI engine, 3D engine, design
Mikael Emtinger Main code, 3D engine, group leader, design
Olov Johanson Additional code, map editor, MIDI linking, design
Tord Jansson DD Audio system, music playback code
Hans Härröd Sprite code
Kalle Lundqvist Intro code and research
Rikard Hultman Graphics
Erik Tilleby Music and sound effects
Jimmy Gustavsson Graphics
Peter Andersson Music
Christian Åkerkielm Music
Peter Zetterberg Project leader, design, story line
Magnus Zetterberg QA assurance, map design

Mikael Emtinger models a pen and discusses the 3D engine with Oskar Burman, while Tord Janson works on the DD Audio system.



The *Ishar* series is one of the few that could be described as true computer RPG. Daze have released the second episode on budget.

Hey – it's not in here!

The medieval period was fraught with danger, catastrophe and evil. *Ishar* 2 (originally released in 1993 for £29.99) introduces you to an evil society of wrongdoers, filling the land with their corrupt politics and drugs. Your mission: to smite, and when you've finished, smite some more.

The game opens with the disturbing scene of a young girl being attacked by a trio of hardy villains. As a single traveller you're hopelessly outclassed, which brings home the fact that strength in *Ishar* 2 comes in numbers.

A quick stroll to the nearest village reveals a host of people ready to join your team. Recruitment is a major part of *Ishar* – each member of your party being an individual, with his own beliefs and personality, and it's up to you to manage them the best you can. While you're recruiting you come across obvious personality differences, with party members voting against others joining. Still, the occasional assassination settles any major differences of opinion, and you soon have five hardy nutters ready to be insanely violent at the drop of a hat.

Your chance to buy all sorts of lethal metalwork, which you'll probably push through someone violently, later in the game.

It rapidly becomes clear that *Ishar* is a powerful game. The elegant 3D graphics complement the map perfectly, portraying the bleak loneliness of moors, the cramped, dark terror of forests and the cosy ramshackle villages and towns. But there's more to *Ishar* 2 than just scenery...

The natives

You walk through an environment that clearly hasn't been designed around you and your needs. *Ishar's* islands bustle with activity, full of people going about their daily business until you interfere. This is part of what makes *Ishar* so realistic. Talk to them, or push your sword through one of their mates, and they'll pay you attention, but the majority don't particularly care who you are or what you want.

Hit 'im!

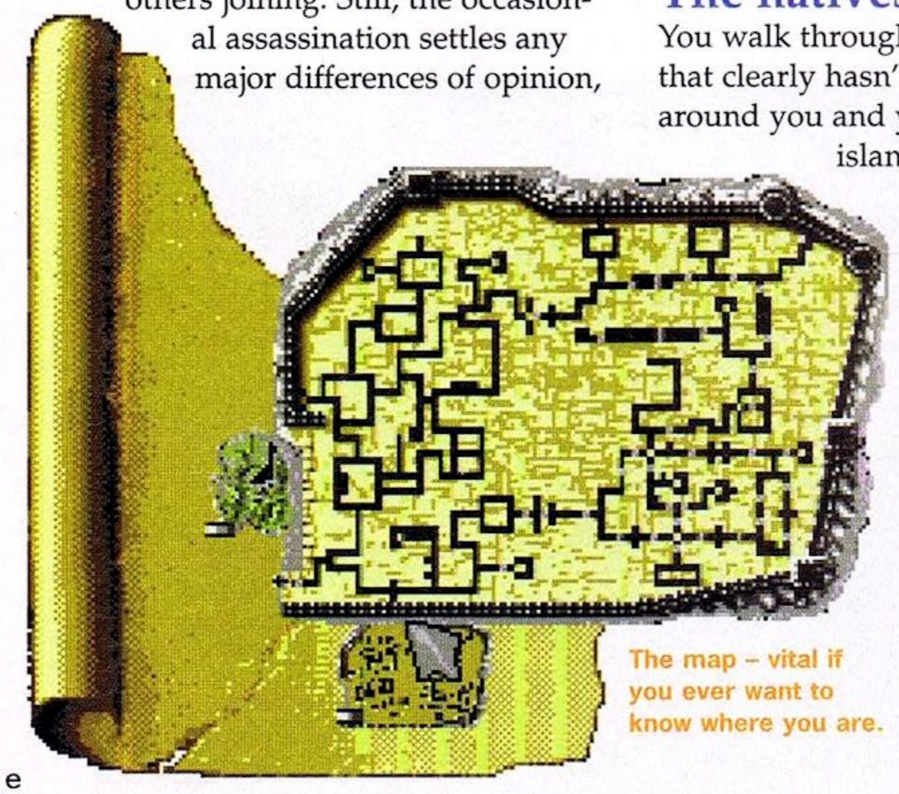
Control in *Ishar* is via icons that are permanently displayed on screen, enabling you to direct your group in any direction except up. Your band of merry men is represented by a set of faces across the bottom of the screen, each branching off into a small profile covering actions, stats, possessions, and magic (turning people into frogs, tearing rents in hillsides, that sort of thing). As the game progresses these character functions become more important, and you find yourself having to structure the marching order of your team to preserve weaker characters.

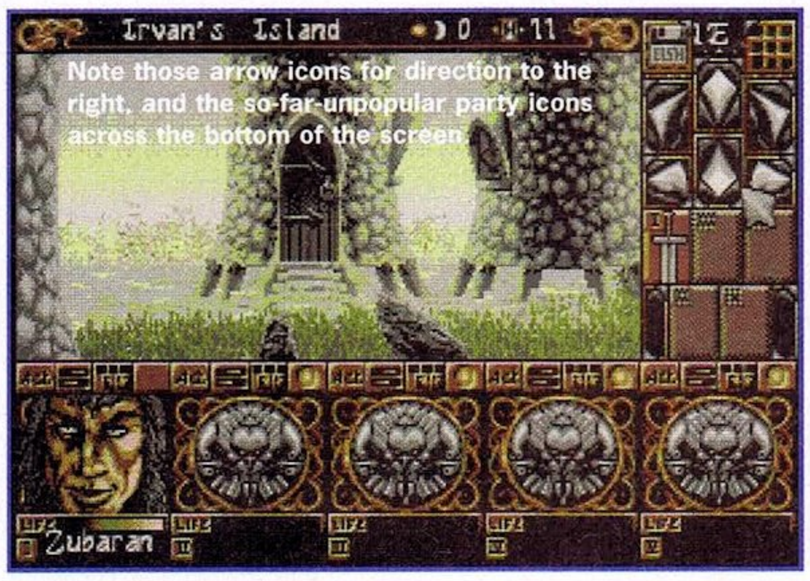
It's this balancing act that makes *Ishar* 2 more like an RPG than the likes of *Dungeon Master* (*STF* 31, 92%). *Ishar* explores depths unplumbed by other games in the genre, with characters, psychology, relationships and plots all set in a large world offering more scenery than just your typical dungeons.

With such an enormous playing area it's easy to get confused about where you are. The maps help, but don't manage to dispel the disorientation you feel throughout. It's all too easy to get hopelessly lost, and it's not easy to find spots you've visited before without endless wandering.

If you've been looking for a game that requires thought, you'll be pleasantly surprised. *Ishar* 2 takes 3D adventures to a new dimension, and the combination of puzzles, scenery, people and plot easily match the rest of this excellent series of games. ***stf***

SIMON FORRESTER


The map – vital if you ever want to know where you are.



STF VERDICT STFVE

Ishar 2

£9.99 Daze
☎ 0171 372 7435
System requirements: 1MByte

HIGHS
- Wonderfully scenic
- Deeply involving

LOWS
- Sometimes disorientating

In short...
The classic text adventure brought into the '90s and now out on budget. A bargain

90%

Championship Manager Italia '95

If you don't like to get too involved in sports, preferring instead to contribute from the safe distance of a cosy ST, you're probably eagerly anticipating Domark's latest release.

The team's playing strategy, changeable at the click of a mouse. Personally, I prefer the 'find the person with the ball and kill him' tactic. It isn't covered here, though.

The home computer market sees a lot of sport management sims, each claiming to be as realistic as you can get, and short of players being arrested for drug abuse or corruption, and a special option to coax the monitor into emitting enough radioactivity to make your hair fall out (for that Bobby Charlton look), just about every management sim has lived up to its claim. *Champ Manager Italia '95* is yet another game in a long line of similar titles, concentrating on the players, statistics and events of 1995's Italian football season.

As with the previous *Championship Manager* title, you don't play the game from the perspective of the team. Instead you act as a free agent, which means you can resign one post and take up employment with another team should you choose. For this reason, your management history is an important part of the game, team diving, player swapping and resignation being the way to get ahead in football management.

One of those big, chunky menus that makes *Italia* such a pleasure to stroll around.

Sounds familiar? Yup, this game is essentially the same as *Championship Manager*, except that the statistics involved are based around Italian players and the Italian leagues.

You train your team, buy and sell players, and slowly make your way through the weekly matches of the season.

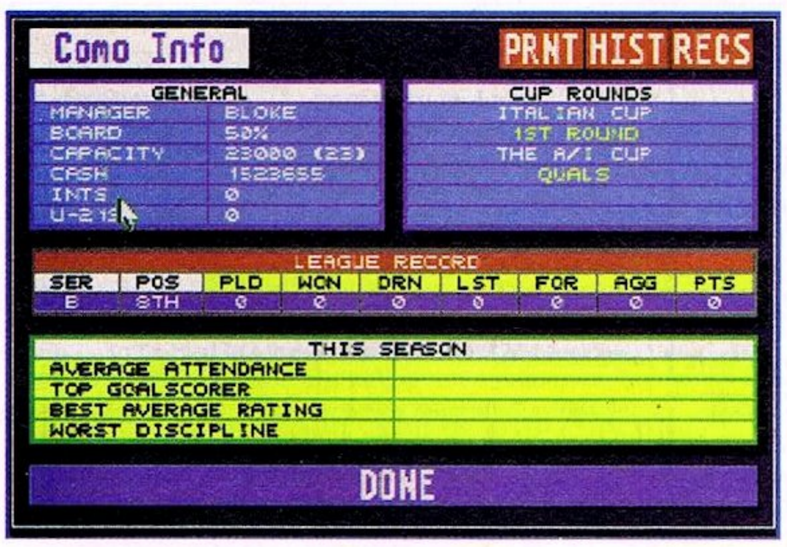
An excellent statistical strategy game, with a system to learn and techniques to master

This being a management sim, there are no action sequences – instead your attention is turned to the statistics side of football management. You can study any player in any team, or any team as a whole. The stats are extensive, covering the players' personal details as well as their performance over the past season. This is essential information in your race to assemble the best team possible.

Your control doesn't end there. You also have to manage backroom staff, coaches and talent scouts, and their happiness affects the performance of your team. In this respect, *Italia* is an excellent statistical strategy game, with a system to learn and techniques to master.

Italia does have its downpoints. The first is that its appeal is limited to footie fans only. A deep knowledge of the game isn't exactly necessary, but unless you're a fan you probably won't enjoy it.

However, as footie games go it is a comprehensive representation of the Italian football season.



Now Trenton's gone, I'd just like to say that Bristol Rovers are rubbish. They've done nothing but lose consistently this year.

I am Alan Partridge

The game is played using the mouse – at no point do you have to resort to arduous keyboard clicking or joystick waggling – and the on-screen options are presented in nice big click boxes that you couldn't miss if you tried, which makes life easy. And *Italia* is particularly well structured, working from a simple menu system and enabling you to get to any option or action with minimal fuss. This hassle-free interface isn't ugly, either – *Italia* is stuffed with pretty graphics and nice backdrops adding to what would otherwise be a visually dull game.

If you're a footie management sim fan, you'll like this. *Championship Manager Italia '95* doesn't contain anything new for its genre, but if you followed the Italian season you'll find an accurate reproduction here. *stf*

SIMON FORRESTER

STF VERDICT

Champ Mgr Italia '95

£24.99 Domark
☎ 0181 780 2222
Min system: Any colour ST

HIGHS
- Accurate statistics
- Comprehensive management sim

LOWS
- Only appeals to footie fans
- Doesn't add anything new to the genre

In short...
If you're into footie, this is great. The Italian players, clubs and fixtures are all here

70%

Premier Mail Order

Please Send Cheques/PO's (made out to Premier Mail Order) or Access/Visa/(Switch + Issue No) & Expiry Date to:
Dept: STF05 9-10 THE CAPRICORN CENTRE, CRANES FARM ROAD, BASILDON, ESSEX SS14 3JJ.
Telephone orders: 01268-271172 Fax your order on: 01268-271173 Mon-Fri 9am-7pm Sat&Sun 10am-4pm. We are open 364 days a year
P&P and VAT included for all UK orders. Please add per item £2 P&P for Europe and £3.50 for the rest of the world. Next day service available UK only @ £4.00 per item.
Please note: Some titles may not be released at the time of going to press. Most titles are despatched same day, but can take up to 28 days. E&OE

A320 Airbus (USA)	22.99
AV8B Harrier Assault	22.99
Action Service	7.99
Addams Family	8.99
Addictaball	6.99
Alien Storm	9.99
Alpha Waves	5.99
Another World	12.99
Back to the Future	8.99
Badlands	6.99
Battle of Britain	12.99
Battlehawks 1942	10.99
Beach Volley	6.99
Blue Angels	8.99
Board Genius	12.99
Bonanza Brothers	9.99
Booly	6.99
Brat	6.99
Bubble Bobble	6.99
Bully's Sporting Darts	8.99
Cadaver	12.99
California Games	6.99
CANNON FODDER	**19.99**
Carl Lewis Challenge	12.99
Castle Master	6.99
Championship Manager 93	16.99
Championship Manager 94	7.99
Champ Manager End of Season	11.99
CHAMPIONSHIP MANAGER ITALIA 95	**16.99**
Chaos Engine	16.99
Chase HQ	6.99
Chicago 90	5.99
Cisco Heat	6.99
CIVILISATION	**25.99**
Cluedo/Risk/Screabble	12.99
Cohort 2	19.99
Colonels Bequest	12.99
Conflict in Europe	7.99
Count Duckula	6.99
Count Duckula 2	6.99
Cruise for a Corpse	12.99
Cybercon	6.99
Cybercon III	10.99
D Day - Dare You Relive It	22.99
Dalek Attack	8.99
Dragon Ninja	6.99
Dynasty Wars	7.99
Elf	7.99
ELITE 2 - FRONTIER	**19.99**
Epic	12.99
ESWAT	7.99
European Champions	19.99
European Football Championship	10.99
European Superleague	8.99
EXILE	**19.99**
EXTERMINATOR	**17.99**
F1	17.99
F15 Strike Eagle II	14.99
F16 Combat Pilot	8.99
F19 Stealthfighter	12.99
F29	10.99
Fallen Angel	6.99
Fantasy World Dizzy	6.99
Fast Food Dizzy	6.99
Final Assault	12.99
Flight Sim 2 Great Britain Scenery	26.99
Flight Sim 2 Hawaiian Scenery	13.99
Flight Sim 2 Japan Scenery	13.99
Flight Sim 2 USA No 7 Washington	13.99
Flight Sim 2 USA No 9 Chicago	13.99
Flight Sim 2 USA No 11 Detroit	13.99
Flight Sim 2 USA No 12 New York	13.99
Flight Sim 2 Western Europe	13.99
Frenetic	12.99
Fusion	7.99
G Loc	9.99
Gauntlet 3	9.99
Gazza 2	6.99
Ghouls & Ghosts	6.99
Gomoku	6.99
Graham Gooch Cricket	19.99
Graham Gooch Second Innings	11.99
Gunship	10.99
Hard Drivin	8.99
Hard Drivin 2	8.99
Hard Nova	8.99
Hardball	6.99
Harley Davidson	7.99
Heroquest	7.99
High Steel	6.99
Hook	8.99
Hoyles Book of Games 1 or 2	12.99
Huckleberry Hound	8.99
Hudson Hawk	6.99
Impossible Mission 2	6.99
Indiana Jones & Last Crusade Action	6.99
Ivanhoe	6.99
Jack Nicklaus Greatest 18 Holes	6.99
Jahangir Khan Squash	6.99
James Pond	6.99
Jaws	6.99
Jimmy White's Whirlwind Snooker	12.99
John Barnes Football	6.99
KICK OFF 2	**9.99**
Kids Rule OK	12.99
King of Chicago	7.99
Kings Quest 1 or 2 or 3 or 4	12.99
Knights of the Sky	12.99
Last Ninja 2	6.99
Leisure Suit Larry 1 or 2 or 3	12.99
LEMMINGS 2 - THE TRIBES	**17.99**
Lemmings Double Pack	19.99
Lethal Weapon	8.99
Liberator	4.99
Line of Fire	9.99
Lombard RAC Rally	6.99
Lotus Esprit Turbo Challenge	7.99
LOTUS TRILOGY	**19.99**
Lure of the Temptress	12.99
M1 Tank Platoon`	12.99
Manchester United	6.99
Merchant Colony	8.99
Mercs	8.99
Metal Mutant	8.99
Microprose Soccer	6.99
Midwinter	10.99
Midwinter 2	14.99
MIG 29	10.99
Moonfall	7.99
Moonwalker	6.99
Munsters	7.99
Narc	6.99
Narco Police	5.99
Navy Moves	6.99
New Zealand Story	6.99
Nigel Mansell's World Championship	19.99
Nightbreed	6.99
Night Shift	10.99
Operation Harrier	8.99
Operation Neptune	5.99
Operation Stealth	11.99
Operation Thunderbolt	6.99
Operation Wolf	6.99
Oriental Games	8.99
Outcast	5.99
Outrun Europa	8.99
PACIFIC ISLANDS	**9.99**
Parasol Stars	8.99
Pictionary	6.99
PINBALL MAGIC	**8.99**
Pirates	10.99
Pitfighter	6.99
Pixie & Dixie	8.99
Platoon	6.99
Police Quest 1 or 2	12.99
Pop Up	5.99
Popeye 2	6.99
POPULOUS 2	**12.99**
Populous and Promised Lands	12.99
Postman Pat	6.99
Postman Pat 3	6.99
Powerdrome	7.99
Powermonger + WW1 Data Disk	12.99
Predator 2	7.99
Prince of Persia	6.99
Pro Tennis Tour	6.99
Puffy's Saga	6.99
Pushover	8.99
R-Type	6.99
Rainbow Islands	6.99
Rambo 3	6.99
RBI Two Baseball	7.99
Reach for the Skies	12.99
Renegade	6.99
Rick Dangerous	6.99
Rick Dangerous 2	8.99
Risky Woods	8.99
Robinsons Requiem	19.99
Rocket Ranger	7.99
Robocod	8.99
Robocop	6.99
Robocop 2	6.99
Robocop 3	10.99
Rubicon	9.99
RUGBY LEAGUE COACH	**19.99**
Run the Gauntlet	6.99
SCI	6.99
Scrambled Spirits	6.99
SDI	6.99
Scrabble	20.99
SECRET OF MONKEY ISLAND	**12.99**
Sensible Soccer 92/93	16.99
Shadow Dancer	7.99
Shadowlands	8.99
Shinobi	7.99
Shufflepuck Cafe	6.99
Shuttle	12.99
Simpsons	8.99
Skychase	7.99
Smash TV	6.99
Snowstrike	6.99
Sooty & Sweep	6.99
Space 1889	12.99
Space Crusade	8.99
Space Quest 1 or 2 or 3	12.99
Spellbound Dizzy	6.99
SPEEDBALL 2	**8.99**
Spherical	5.99
Storm Master	8.99
Streetfighter	8.99
Streetfighter 2	12.99
Strider	7.99
Strider 2	8.99
Striker	8.99
Strikefleet	6.99
Stun Runner	6.99
Stunt Car Racer	6.99
Super Hangon	6.99
Supercars	8.99
Superleague Manager	19.99
Super Monaco Grand Prix	8.99
Super Space Invaders	8.99
Supremacy	10.99
Switchblade 2	8.99
Swiv	8.99
TACTICAL MANAGER	**19.99**
Terminator 2	6.99
Test Drive 2	6.99
Tetris	14.99
The Adventures of Robin Hood	12.99
The Games	10.99
The Godfather	8.99
The Patrician	19.99
The Sports Collection	12.99
Their Finest Hour	12.99
Their Finest Missions	9.99
Thomas the Tank Engine	9.99
Thunderstrike	7.99
Timeblaster	4.99
Time Race	6.99
TNT Combat Mission	7.99
Toki	8.99
Total Recall	6.99
Toyo Tee	5.99
Tracksuit Manager	6.99
Transarctica	17.99
Trauma	6.99
Trivial Pursuit	6.99
Turbo Outrun	6.99
Turrican	6.99
Turtles	9.99
Turtles World Tour	9.99
Tusker	6.99
Ultimate Golf	8.99
UN Squadron	6.99
Utopia	8.99
Victory Road	7.99
Voyager	6.99
Warlocks Quest	7.99
Windwalker	7.99
Winter Gold	12.99
Wizball	6.99
Wizkid	10.99
WRECKERS	**19.99**
WWF	8.99
WWF - European Rampage	8.99
Xenon II	8.99
X-Out	6.99
Z-Out	6.99
Zak McKraken	10.99

SPECIAL OFFERS

Chaos Strikes Back	5.99
Charge of the Light Brigade	5.99
Kick off 2 Winning Tactics	5.99
Psycho Selection Soccer Compilation	9.99

EDUCATIONAL

Better Maths (12-16)	13.99
Better Spelling (8+)	13.99
Cave Maze (8-12)	9.99
Fraction Goblins (8-13)	9.99
Fun School 2 (-6) or (6-8) or (8+)	6.99
Junior Typist (5-10)	10.99
Magic Maths (4-8)	13.99
Maths Dragons (6-13)	10.99
Maths Mania (8-12)	13.99
NODDY'S PLAYTIME (3-7)	**16.99**
Picture Fractions (7-10)	9.99
Playdays	16.99
Reasoning with Trolls (5-12)	10.99
Sooty's Fun with Numbers	13.99
The Three Bears (5-10)	13.99
Thomas's Fun with Words	13.99
Tidy the House (6-10)	9.99

3.5" Blank Discs

	Verbatim	Precision	Unbranded	Recycled
10	5.99	3.99	3.50	2.99
20	11.50	7.50	6.50	5.50
50	27.50	17.50	16.25	12.50
100	52.50	32.50	29.99	22.50

JOYSTICKS & ACCESSORIES

10 Capacity 3.5" Disk Box	1.99
40 Capacity 3.5" Disk Box	4.99
50 Capacity 3.5" Disk Box	5.99
80 Capacity 3.5" Disk Box	6.99
100 Capacity 3.5" Disk Box	7.99
Cheetah 125+	7.99
Cheetah Bug	11.99
Competition Pro Extra	14.99
Disk Drive Cleaning Kit 3.5"	1.99
Freewheel Steering Wheel	24.99
Gravis Advanced Switch Joystick	22.99
Gravis Gamepad	15.99
Joystick Y Splitter	4.99
Joystick Extension Cable	6.99
Logic 3 Delta-Ray Autofire - JT156	10.99
Logic 3 Quattro GT Autofire - JT155	10.99
Logic 3 Quatro - JT154	8.99
Logic 3 Logipad - JT160	11.99
Mouse	10.99
Mousehouse	1.99
Mousemat	1.99
Quickjoy Topstar	17.99
Quickjoy Jetfighter	10.99
Quickjoy Pedals	17.99
Saitek Megagrip II Autofire - MX220	10.99
Screenbeat 3 Speakers - SB203	12.99
Screenbeat 4 Speakers - SB204	11.99
Screenbeat 5 Speakers - SB205	11.99
Screenbeat Mains Adapter	7.99
Suncom Tac 2	7.99
Suncom Slik Stick	5.99

MONKEY ISLAND 9.99 | CHAMP MGR 14.99 | FRONTIER 14.99 | PREM MGR 2 14.99 | CANNON FODDER 17.99 | LEMMINGS 2 9.99 | ISHAR 2 8.99

IMPORTANT PLEASE NOTE
1 MB = requires at least 1 mb RAM
D/S = requires double sided disk drive
• = new item

ATARI ST GAMES

ANOTHER WORLD	11.49
ARCHER MACLEAN'S POOL D/S	11.99
CANNON FODDER D/S	17.99
CHAMP MANAGER 93/94 (1 MB) D/S	8.99
CHAMP MANAGER 94/95 DATA DISK D/S (1 MB)	12.99
CHAMP MANAGER COLLECTION (93/94 + UPDATE DISK) D/S (1 MB)	14.99
CHAOS STRIKES BACK	3.99
CIVILISATION D/S (1 MB)	24.49
CORRUPTION	4.49
CRUISE FOR A CORPSE (1 MB)	11.49
ELITE 2 (FRONTIER) D/S (1 MB)	14.99
F1 (DOMARK) D/S	19.99
F19 STEALTH FIGHTER D/S (1 MB)	12.49
FINAL COMMAND	2.99
FLAMES OF FREEDOM D/S (1 MB)	12.49
FUTURE WARS D/S	10.99
GRAHAM GOOCH CRICKET D/S	20.99
HARLEQUIN	9.49
ISHAR D/S (1 MB) •	7.99
ISHAR 2 (1 MB)	8.99
ISHAR 3 D/S (1 MB)	21.49
JIMMY WHITES SNOOKER D/S	11.49
JINXTER (M/SCROLLS)	4.49
KNIGHTS OF THE SKY (1 MB)	12.49
LEISURE SUIT LARRY 1 •	11.99
LEISURE SUIT LARRY 2 (1 MB)	10.49
LEISURE SUIT LARRY 3	11.99
LEMMINGS 2 D/S (1 MB)	9.99
LURE OF THE TEMPTRESS D/S (1 MB)	11.99
MANIAC MANSION D/S	10.49
NODDY'S PLAYTIME	19.99
ONE STEP BEYOND D/S	9.99
PICK 'N' PILE	2.99
PIRATES D/S	10.49
POPULOUS & PROMISED LANDS D/S (1 MB)	10.99
POWERMONGER + WW1 DATA DISK D/S	11.49
PREMIER MANAGER 2 (1 MB)	14.99
PRINCE OF PERSIA D/S (1 MB)	7.99
REACH FOR THE SKIES D/S (1 MB)	11.99
RORKE'S DRIFT D/S	7.99
SCRABBLE (US GOLD)	20.99
SECRET OF MONKEY ISLAND D/S (1 MB)	9.99
SENSIBLE SOCCER - INTN'L D/S (1 MB)	15.49
SHADOWGATE	3.99
SHADOWORLDS D/S (1 MB)	5.99
SLEEPWALKER (STE)	8.99
SPACE QUEST 1	12.49
SPEEDBALL 2	8.99
STREETFIGHTER 2 D/S (1 MB)	11.49
TACTICAL MANAGER - ENGLISH D/S (1 MB)	18.49
TROJAN - FIRESTAR (PHAZER GAME)	4.99

ATARI LYNX GAMES

APB •	14.99
BASKETBRAWL	8.99
BILL AND TEDS EXCELLENT ADV	8.99
CALIFORNIA GAMES •	14.99
CASINO	12.99
CHECKERED FLAG •	10.99
CHIP'S CHALLENGE	8.99
CRYSTAL MINES 2	8.99
DESERT STRIKE •	24.99
DINO OLYMPICS	12.99
DIRTY LARRY - RENEGADE COP	14.99
DOUBLE DRAGON •	19.99
ELECTRO COP •	14.99
GATES OF ZENDECON •	14.99
HOCKEY	11.99
HYDRA •	9.99
KUNG FOOD •	14.99
LEMMINGS	24.99
MS PACMAN •	14.99
NFL FOOTBALL •	14.99
NINJA GAIDEN •	14.99
PAPERBOY •	14.99
PINBALL JAM	11.99
PITFIGHTER •	24.99
QIX •	8.99
RAMPAGE	11.99
RAMPARTS •	24.99
ROBOTRON 2084 •	12.99
S.T.U.N. RUNNER •	9.99
SCRAPYARD DOG	9.99
SHADOW OF THE BEAST	8.99
SHANGHAI	11.99
SLIMEWORLD	11.99
STEEL TALONS	9.99
SUPERSQUEEK •	14.99
SWITCHBLADE 2	11.99
TOKI •	24.99
TURBO SUB	8.99
ULTIMATE CHESS CHALLENGE •	16.99
VIKING CHILD	14.99
WARBIRDS •	14.99
WORLD CLASS SOCCER	11.99
XENOPHOBE	11.99
XYBOTS •	9.99
ZARLOR MERCENARY	11.99

ATARI JAGUAR GAMES

AIR CAR WARS	45.99
ALIEN VS PREDATOR	50.99
BUBSY BOBCAT	37.99
CANNON FODDER	35.99
CHEQUERED FLAG	50.99
CLUB DRIVE	42.99
CRESCENT GALAXY	32.99
DEMOLITION MAN •	37.99
DOOM	49.99
DRAGON •	45.99
EVOLUTION DINO DUDES	34.99
INTERNATIONAL SENSIBLE SOCCER	51.99
IRON SOLDIER	47.99
KASUMI NINJA (AGES 17+)	49.99
PINBALL FANTASIES •	41.99
RISE OF THE ROBOTS •	45.99
SYNDICATE •	45.99
TEMPEST 2000	46.99
THEME PARK	45.99
TINY TOON ADVENTURES	46.99
ULTIMATE BRAIN GAMES	47.99V
AL D'ISERE SKI-ING •	45.99
WOLFENSTEIN 3D	46.99
ZOOL 2	37.99

SWIFT TP200 JOYPAD WITHTURBO FIRE & AUTOFIRE **9.99**

SLIK STICK JOYSTICK **6.99**

KONIX SPEEDKING JOYSTICK WITH AUTOFIRE **11.99**

COMPETITION PRO EXTRA CLEAR BASE, MICROSWITCHED WITH AUTOFIRE **11.99**

QUICKSHOT 137F PYTHON WITH AUTOFIRE **9.99**

CHEETAH BUG MICROSWITCHED WITH AUTOFIRE **13.99**

SAITEK MEGAGRIP 2 WITH AUTOFIRE **11.99**

EKLIPSE MOUSE, MICROSWITCHED 290 DPI **10.99**

MOUSE MAT WITH SPONGE BACKING **4.99**

LYNX 2 HANDHELD

29.99 WITH BATMAN RETURNS

POWERFUL 16BIT HANDHELD AT AN UNBEATABLE PRICE.
MAINS ADAPTOR ... **11.99**
FOR LYNX 1 OR 2 (RECOMMENDED AS BATTERY LIFE IS SHORT)
COMLYNX CABLE ... **6.99**
CONNECTS TWO CONSOLES FOR MULTIPLAYER ACTION

ATARI JAGUAR 64-BIT CONSOLE WITH JOYPAD AND CYBERMORPH GAME 179.99

STATE OF THE ART CONSOLE WITH 16.7 MILLION COLOUR CAPABILITY AND A PROCESSOR WHICH IS CLAIMED TO BE 55 TIMES FASTER THAN THE MEGADRIVE OR SNES. GENUINE UK VERSION
CONTROL PAD FOR ATARI JAGUAR ...22.99

EXTERNAL 3.5" DISK DRIVE 720K FORMATTED CAPACITY, LONG CONNECTION CABLE **59.99**

SCART LEAD ST TO TV WITH SCART INPUT ...**9.99**
FOUR PLAYER JOYSTICK ADAPTOR **7.99**
JOYSTICK SPLITTER CABLE ALLOWS TWO JOYSTICKS TO BE CONNECTED TO ONE PORT **7.99**

CITIZEN ABC 24 PIN COLOUR PRINTER
144.99
24 PIN, 80 COLUMN, 192CPS/64LQ, 5LQ/1 DRAFT FONT, 2 YEAR WARRANTY, FREE PRINTER CABLE, THE EASY TO USE PRINTER
FOR DETAILS OF RIBBONS AND CABLES, CALL SALES

PACK OF 50 SPECIAL RESERVE 3.5" DSDD DISKS WITH LABELS ... **19.99**
PACK OF 10 SPECIAL RESERVE 3.5" DSDD DISKS WITH LABELS & FREE PLASTIC FLIP TOP DISK BOX ... **6.99**
PACK OF 10 TDK 3.5" DSDD DISKS WITH LABELS ... **7.99**
3.5" DISK HEAD CLEANER ... **5.99**

DELUXE DISK BOX HOLDS 120 3.5" DISKS, WITH DIVIDERS **9.99**

HEAVY discounts
HUGE range
10am to 8pm Daily
Special Reserve The Discount Club
01279 600204
Order by fax on 01279 726842 - we'll fax back to confirm receipt

WE ONLY SUPPLY MEMBERS BUT YOU CAN ORDER AS YOU JOIN
Special Reserve Members receive our 48-page Colour Club Magazine bi-monthly. Each issue carries a huge range of products and includes at least £30 worth of XS Savers for additional savings on top products. Members are under no obligation to buy anything.

MEMBERSHIP FEES	UK	EC	WORLD
ONE YEAR (6 MONTHS)	7.00 (4.00)	9.00 (6.00)	11.00 (7.00)

One year price includes 6 issues of Special Reserve magazine with £180 of XS Savers

All prices include VAT and 2-3 working day carriage to UK mainland. Allow one or two days for processing and despatch of stock items. We issue confirmations of all orders received

Overseas orders must be paid by credit card Hardware items (battery or mains) are only supplied to the UK mainland **Overseas surcharge £2.00** per software item or **25%** on other items

Orders accepted by post, phone, fax or visit on of our Special Reserve shops in Chelmsford and Sawbridgeworth **MAIL**

(BLOCK CAPITALS please)
Name & Address
Postcode
Phone No Machine
Enter membership number or **NEW MEMBERSHIP FEE**
item
item
item
item
Please use this box to add any **optional** fast delivery charge
1st Class Post 40p per posted item or **£10 hardware**
ALL PRICES INCLUDE UK POSTAGE & VAT
Cheque/P.O./Access/Mastercard/Switch/Visa £
CREDIT CARD SWITCH
EXPIRY DATE SIGNATURE (ISSUE NO)

Cheques payable to: **SPECIAL RESERVE at**
P.O. BOX 847, HARLOW, CM21 9PH

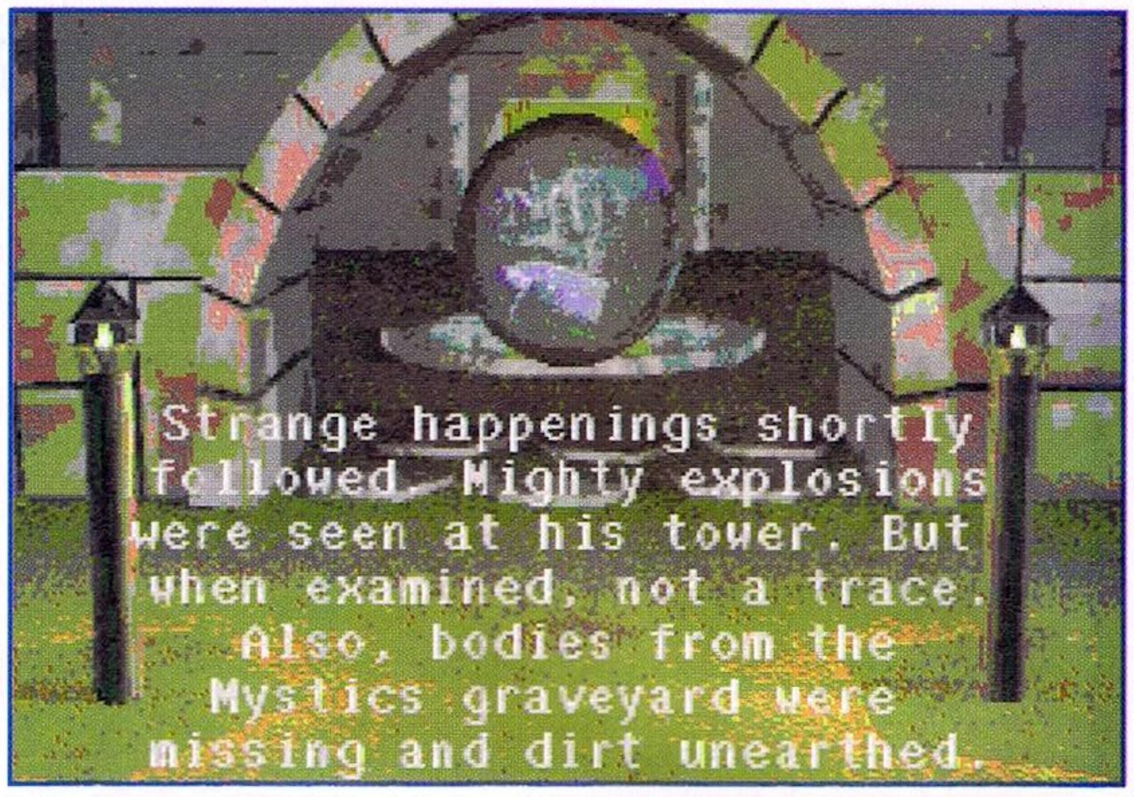
Inevitably some games listed may not yet be available. Please phone to check availability. Prices and offers may change without prior notification. SAVE = Saving off full retail price. PRICES CORRECT AT TIME OF GOING TO PRESS. 17.03.95 E .& O.E.
Inter-Mediates Ltd, 2 South Block, The Maltings, Sawbridgeworth, Herts. CM21 9PG.

ST FORMAT

Towers 2

Plight of the Stargazer

Dark, spooky rooms of dank, slimy stone, full of mutant zombies and marauding armies. And we produce a magazine from here, every month.



From the outset, and right the way through, *Towers 2* looks absolutely gorgeous.

Back in issue 61 we reviewed *Towers*, an impressive American RPG that used a dungeon theme throughout. It faithfully followed the style set by *Dungeon Master*, a 3D RPG that took the 16-bit gaming world by storm.

This Falcon-only sequel to *Towers* follows much the same theme as its predecessor, calling on stats, exploration, doors, mazes and puzzles, but it's the changes to the game's engine that make this an entirely new experience. *Towers 2* offers a free-moving 3D experience, previously unseen even on the STE and Falcon.

It's a thrilling experience to see texture-mapped walls flying past in true, real-time 3D. Whereas the original had you moving forward whole squares and turning in 90-degree steps to keep to the grid style of the map, *Towers 2* lets you move about simply by sliding the mouse around the screen, controlling not only direction, but also movement and speed.

This is a powerful graphic engine, around which has been built a classic and attractive role-playing game.

It's pretty...

Thankfully, the authors have resisted the temptation to include a gun and call it *Doom*. Although *Towers 2* has a new, fresh pace, this is still a role-playing game in the classical sense. There are people to fight, dungeons to explore, objects to find, spells to learn, food to eat, and all the other features that made *Towers* such a good game. What's different is the way you play. Movement is easy and fluid, enabling you to explore large areas without getting bored or lost. And it's much easier to keep track of where you are and which way you're facing, because you can see yourself turning rather than just having a different view click into your vision.

Movement is easy and fluid, enabling you to explore large areas without getting bored

And the amount of work you have to do has been decreased dramatically. Fighting is simply a case of walking up to someone and clicking your mouse to lunge or defend, and object manipulation is carried out in a similar way. You only need to use the keyboard very occasionally, because the game's dual operation system enables you to toggle between movement and object manipulation without having to go through the lengthy process of icons, menus or stat boxes.

Game engine aside, *Towers 2* excels graphically. All the objects are rendered in full 3D, so you can walk around them and view them from several angles. The artwork, from the intro sequence to the illustrations, is of a high quality, and full use has been made of the Falcon's colour and speed abilities.

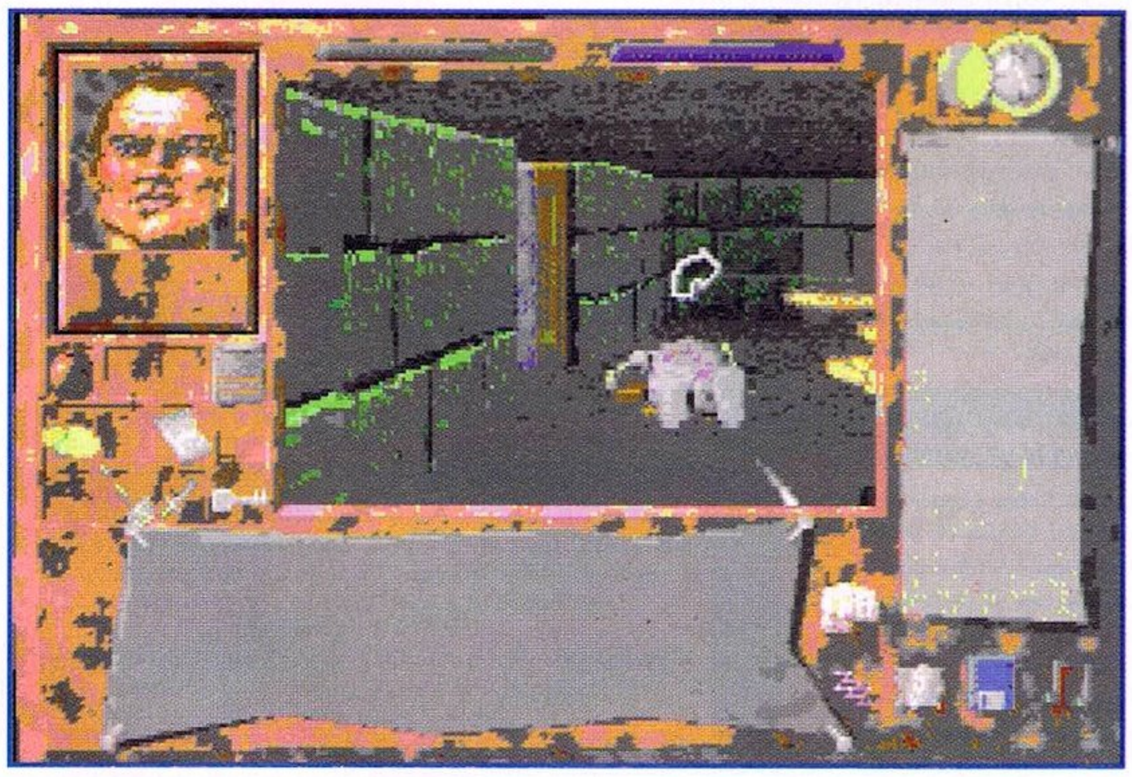
Towers 2 also features atmospheric tunes, which play unobtrusively in the background, and samples to mark most events in the game. And it's in stereo, so you can plug in a pair of headphones to get an extra a sense of direction and some idea of where that arrow just came from.

...but flawed

Towers 2 has a downside, though. No real advances have been made on the original plot – you still wander around, killing people, collecting things and solving puzzles. Take a look at the *Ishar 2* review on page 34 to see how much could have been added in the way of characters, psychology and plot. The majority of the characters have only one line to their names, and while they have the good sense to run away when you pick on them too much, that's about all they have. A *Dungeon Master*-style interaction box, which would give you a choice of what to say as well as a range of responses from the people you talk to, would certainly have improved the game.

Following in the classic role-playing game theme, but introducing a highly effective game engine that gives the game style a whole new lease of life, *Towers 2* dispenses with the traditional problems RPGs face (they can often be slow, confusing and irritating) and enables you to explore the dungeon as though you were really there. Unfortunately there's no option to cower in a corner and cry. *Towers 3*, perhaps... ***stf***

SIMON FORRESTER



That's right. He's dead, and it's because I killed him. Me. This is a deeply satisfying game. Me. I did it. *(Simon sometimes misses the point of games like this – everyone else)*

STF VERDICT

Towers 2

£2.75 trial version
£19.95 complete version
Goodman International
☎ 01782 335650
Minimum system:
Falcon030 only
2MBytes of RAM minimum

HIGHS

- New, improved 3D engine
- Looks and sounds beautiful
- Classic RPG gameplay

LOWS

- Gameplay lacks depth

In short...

A classic RPG with beautiful graphics and a game engine to make your granny die of shock

93%

L.A.P.D.

Software at realistic prices

PD Disks: £1.50 each

Budget range PD Disks ONLY £1.00 Same day service, quality virus free disks.
PLEASE ADD 50p P&P ON ORDERS UNDER £5.00 Overseas customers (outside Europe) please add 50p per disk

P.O. Box No. 2. Heanor
Derbyshire, DE75 7YP
Telephone or Fax: 01773 761944
or 01773 605010

24 hour despatch on all orders
No waiting around for disks to arrive!!

ALL DISKS BELOW ARE ONLY £1.50 UNLESS OTHERWISE STATED

GAMES

ARCADE

G.395 DYNABUSTER: Bomb laying and dodging arcade game (STE, 1Mb).
G.393 GRAND PRIX CHAMPION: Compete in the Formula One racing championship.
G.366 DAVE MUNSIE GAMES: 9 games from the master programmer, including Frogger.
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.381 MAX (1Mb): Help Max find his girlfriend. A 'cute' arcade platform game.
G.333 SUPER PSYSCHO KART: High speed platform game to rescue piglets (1Mb)
G.316 H-MEC 2: The ultimate Pc-Man? (1Mb STE or Falcon)
G.286 ROCKFALL-SPECIAL EDITION: Tunneling/diamond collecting puzzle game
G.281 PSYCHO PIG: Platform shoot'em up with Rambo-esque pig. (2 disks/ £3.00)
G.279 OPERATION GARFIELD: Frantic 'Operation Wolf' type shoot'em up action. (STE)
G.250 CYBERNETICS. Good, challenging 'Defender' type arcade 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.221 GRAV 2: Follow up to highly praised 'Oids' type rotate and thrust arcade game.
G.110 LLAMATRON: 100 levels of fast arcade action with wicked sound FX.
G.150 COLUMNS: An impressive relative of the Tetris tumbling block game (1Mb).
G.201 BLAT!: Tetris style three in a row, falling blocks with many added features.

FANTASY/ROLE PLAY

G.351 TOWERS: First-person view role playing fantasy adventure game (2 disks/£3.00)
G.308 WALLS OF ILLUSION: The ultimate Dungeonmaster clone with English instructions
G.370 MINDMELT: Fantasy adventure with an overhead view.
G.343 BLUDGEON: Solo fantasy adventure using the Bludgeon combat system.
G.288 DARKLYTE: 'Space Crusade' type droids wargame
G.262 ALIENS! Space Marines v Aliens strategy combat game.
G.115 MYSTIC WELL: Complete Dungeonmaster style adventure game.

PUZZLE

G.387 SPACESWEEPER: A challenging 'Minesweeper' game in three dimensions!
G.315 SKULLS: Addictive up to date reworking of Landmines/Minefield (1Mb STE)
G.306 LOGIC PROBLEMS II: Three more logic problems from Ben Weston
G.311 JIGSAW: A computerised jigsaw puzzle (1Mb)
G.280 COLOUR CLASH: Adventure/Maze game with puzzles by Animalsoft
G.269 QUIZMASTER: Multi-choice answer general knowledge quiz (STE).

ADVENTURES

G.394 THE SECRET PARK: A text adventure for children.
G.356 ENDURANCE: A futuristic 'virtal reality' adventure.
G.321 INVESTIGATION (2 disks/£3.00) Graphics adventure in the style of Sierra On-Line
G.200 ANARCHY ACADEMY: 3D graphic adventure to blow up the school!
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.222 GRANDAD AND THE QUEST...3D graphics adventure by Ian Scott. Shareware (1Mb)
G.303 GRANDAD AND THE SEARCH FOR THE SANDWICHES: Graphic adventure (1Mb 2 disks/£3.00)
G.156 THE AWE CHASM: An adult adventure featuring Snatch and Crunch (over 18's only)
G.167 SUSAN: An adult adventure (over 18's only)
G.91 QUEST FOR THE HOLY GRAIL: Pythonesque madcap humour.
G.202 UNNKULIAN UNDERWORLD: Highly rated large scale text fantasy adventure.

STRATEGY & OTHERS

G.131 STAR TREK - THE GAME: Defeat the Klingon threat to the galaxy (1Mb)
G.386 STAR TREK - KLINGON WARS: A Starship Enterprise battle simulation (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: Two player strategy world war game (2 disks/£3.00)
G.329 PEGASUS: Space strategy game. Seek out and colonise planets (1Mb, 2 disks £3.00)
G.287 THE COARSE ANGLER: Angling simulation game (1Mb,
G.237 CHAOS: Madcap game of battling wizards by Martin Brownlow (1Mb or .5Mb)
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.217 THE MAZE: 3D adventure game loosely based on 'The Crystal Maze'
G.173 PENGUINS: Move your penguins around the screen 'Lemming' fashion.
G.10 VEGAS: Roulette, poker, blackjack and slots..without the Nevada sand!

LICENCEWARE GAMES

L.115 DEMON II: Super fantasy adventure game with an overhead view. (£3.00)
L.114 TIME MACHINE: Travel through time to save the Earth. Over 100 locations
L.112 CRAGHAVEN: High adventure in a fantasy world (£2.50)
L.105 CONQUEST II: Bigger, Better sequel to the best PD God game (1Mb, £3.00)
L.104 WAR OVER THE REICH: Take over the British Bomber Command in WWII (£3.00)
L.98 WORLD AT WAR: Economic/military strategy world war game (1Mb £3.00)
L.69 BIO-HAZARD: FULL version of the sci-fi 'Dungeonmaster' clone (1Mb £3.00)
L.22 GRAND PRIX MANAGER: Grand Prix management sim. Employ drivers, mechanics, etc, test cars, then race in a full grand prix season! (£2.50)
L.87 STORM 94: (STE) Aliens meets Gauntlet for superb blasting action! (order L91 for STFM version) (£3.00)
L.79 DARKLYTE II: Sequel to the highly-rated Space Crusade type game (1Mb £2.50)
L.41 MURDER OF THE ORION EXPRESS: Murder solving game set on an interstellar cruiser (£3.00)
L.21 DEAD OR ALIVE...?: Large, complex and challenging text adventure (£3.00)
L.97 STONE COLD SOBER: An adventure game with graphics (£4.00)
L.84 WORD WIZARD: Word puzzle game with a gamble feature from Nice Bytes (£3.00)
L.101 DUNCES CAP #1: Four super puzzle games: Outrageous Fortune, Matchmaker, Frame of Mind and Cryptogram (£3.00)
L.110 QUICK-FLIP BY Nice Bytes. Mind -bending tile flipping game (£3.00)
L.66 HEARTBREAK: Highly addictive and challenging arcade puzzle game. (£3.00)
L.31 THE CURSE OF AZRIEL: Fantasy trading/adventure game (2 disks £4.00)
L.60 CONQUEST: A god game in the style of Populous (£3.00)
L50 DEMON: Fantasy game with 3D view, monsters, magic, teleports, traps, secret walls, etc (£3.00)
L.52 ENERGETIX: Puzzle game from Nice Bytes. Save the nuclear reactor (£2.50)

BUDGIE U.K. (only £1.50 each)

BU.119 FOOTBALL TACTICIAN 1: The original £19.95 Premier League version!
BU.111 INTERNATIONAL CRICKET II: Animated 3D game (1Mb)
BU.50 SPACE INVADERS: Classic arcade action by Robert Leong
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.30 QUEST FOR GALAXIA: The "Galaxians" return to your ST
BU.70 PACMAN ST: The definitive version by Robert Leong
BU.71 DARK WARS: Role playing adventure with a 3D view

MUSIC

S. 4 YAMAHA PSS: Patch editor and facility to print tablature music
S.144 EKSEQ 1: A rack, 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. 70 MAD MAX CHIP MUSIC: 35 pieces of sound chip music from Mad Max.
S. 7 ACCOMPANIAST: 16 Voice Henry Cosh sequencer (full instructions on disk)
S. 19 ALCHIMIE JR: Impressive Swiss multi window, multi-task sequencer (1Mb)

PROGRAMMING

P.44 GFA BASIC V2: Full version of language with tutorial & compiler! (N.B this disk is not PD - L.A.P.D. have permission to distribute it)
L.68 SPRITE WORKS: New commands for games writers using GFA V3+ (2 disks/£7.00)
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
P.16 C ADVENTURE TOOL KIT: Write professional quality adventures in C.

UTILITIES

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. 62 MENU-HACKER: Replace a picture in almost any menu/demo/game/intro
U. 42 PICTURE HUNTER: Rips picture screens from other programs
U. 66 BEFORE DAWN: Animated screen saver that will use your own animations
U. 47 PROBE ST: Handy utility. Grabs music/graphics, disk/memory editor, etc
U.52 VAULT & TURTLE: Fast hard disk back-up utilities.

ART & GRAPHICS

L. 77 AUTO-STEREOGRAM: (1Mb) Create your own 3D Magic Eye pictures (£3.00)
A.95 VISUAL ILLUSIONS: A collection of 24 magic eye 3D pictures with displayer
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.79 FRACTAL ENGINE 2.1: Multi-functional fractal image generator
L.71 ARTIST FREEHAND: Excellent art package, multiple screens, (£3.00)
A.45 CRACK ART: Demo version of the excellent German art program
A.75 POLYFILM by Martin Brownlow. Make films from multiple 3D polygon objects
A.62 ART OF DUNGEONS & DRAGONS: Superb collection of pics from Dragonlance
A.44 FANTASY SLIDESHOW: Spectrum 512 pictures on fantasy theme (over 16's only)
L.26 L.27, L.28 TYPE WRITE CLIP ART: 4 disks sets of quality clip art in IMG format. £10 per set

MISCELLANEOUS

M.175 FISHERMANS DATABASE: The ultimate record program for the keen angler.
L.103 LEXICON: Ideal program for word game fanatics. Solve crosswords, anagrams etc (£3.00)
M.155 ROUTE FINDER: Route finding program for England, Wales and Scotland.
M.161 THE GARDENER: A special database for gardening enthusiasts.
M.19 AIR WARRIOR: Flight sim with World War II aircraft.
L.17 ADDRESS BOOK: Neat and easy to use database for name and addresses (£2.50)
L.18 CIRCUIT: Easy to use electrical circuit diagram producing program (£2.50)
M.93 STITCH MATRIX: Pattern making program for knitting machines.
M.111 NORTHERN & EQUATORIAL STAR ATLAS: Superb serious astronomy program S/W
M.77 THE BIBLE: King James Authorised version. 3 disks (£4.50)
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.98 FILOFACT: Electronic filofax - diary, calendar, alarms, addresses,etc
M.26 GENEALOGY: 2 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 M17.
M.84 ASTRO 22: Calculate position of planets, cusps and zodiac for astrology.

BUSINESS

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: A superb spreadsheet program (1Mb)
M. 83 INVENTORY PRO: A stock control system
U. 23 DOUBLE SENTRY: Impressive accounts package for the small company (no VAT)
U. 33 FAST BASE: A powerful and flexible database.
W. 3 FIRST WORD: Word processor that set the standard for others to follow.

EDUCATIONAL

L. 20 SUPER SPELL: Teaching games for the 4 to 9 year old (£2.50)
L. 37 SUPER FUN: More teaching games for the 4 to 9 year old (£2.50)
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 Cord
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!
M. 31 SHIPWRECK: Sace the stricken mariner by answering maths questions.
PRO.27 EARLY LEARNING MATHS 2: by Philip Rankin for 9-12 years
L. 01 ROBOT MATHS: Maths Tutor for children ages 6+ (£2.95)
L. 02 MOON LETTERS: Spelling game for ages 5+ (£2.95)
L. 04 ROBOT WORDS: Hangman in a modern format (£2.95)
L. 08 ALL BLOCKED UP: Mathematical puzzles for the young (£2.95)
L. 10 DROP DOWN WORDS: Spelling/memory game for youngsters (£2.95)
L. 12 MATHS FUN: Maths for children 4 to 7 years. (£2.95)
M. 20 G.C.S.E. STUDY AIDS: Help with Algebra, Trigonometry and Geometry
M. 1 PLANETARIUM: Excellent, easy to use, astronomy program
M.153 WORLD WAR II: Home front study pack for Sec. school work (3 disks £4.50)
M. 7 HISTORY FILE: Investigate a historical murder in Scotland (3 disks £4.50)
M. 41 GEOGRAPHY TUTOR - EUROPE: Facts and figures on European countries S/W
M. 86 DEATH OF A PRESIDENT: Investigate the Kennedy assassination (3 disks £4.50)
M.114 FRANGLAIS 3 & 4: French language tutor programs
M. 101 ROMAN MYSTERY: Teaching programs on Roman times. (3 disks £4.50)
M.123 C.I.A. WORLD FACTBOOK: Facts and figures on countries. (4 disks £6.00)
W.22 HOMEWORK: A word processor for the younger user.

COMMUNICATIONS

L.113 BBS DIRECTORY: Money saving directory of UK BBS's (£5.00)
C.22 TEDDYTERM: A superb multi-functioncommunications program
C.7 VANTERM V4: Excellent multi-functions comms program
M.138 MORSE CODE TUTOR: Practise and perfect your skills
C.24 OFF-LINE READERS: Four off-line reader programs

BUDGET PRICE DISKS - ONLY £1.00 each!

B. 45 FIGHTING SAIL: Naval Battles
B. 39 ASTEROIDS: A loving restoration
B. 20 HACMAN: Pacman action
B.27 FROGGY: The arcade classic
B. 51 COLOSSAL CAVE: Original adventure
B.15 ROLL N NUDGE: Fruit Machine
B. 36 8 BALL POOL: bar game simulation
B.50 STAR TREK: Save the Federation

AUTHORS

As a leading P.D. library for the Atari ST and Falcon computers we are always seeking to maintain a catalogue of the very best and newest titles around. If you wish to get maximum distribution for your work either as PD, Shareware or Licenseware then please send us a copy to the address above. We respond to ALL submissions and enquiries.

FREE CATALOGUE

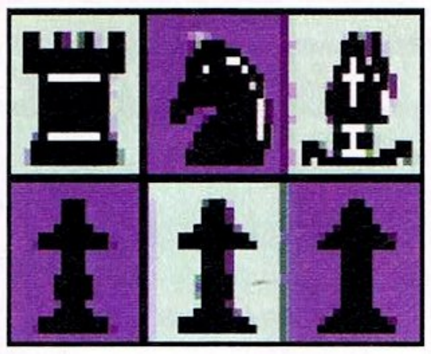
For a FREE copy of our latest, user friendly, catalogue disk just send a blank disk and s.s.a.e. to the address above and we'll send you one by return complete with a selection of quality PD.
Alternatively send us £1.00 and we'll send you the same catalogue and free programs on one of our disks. (Please quote STF5)

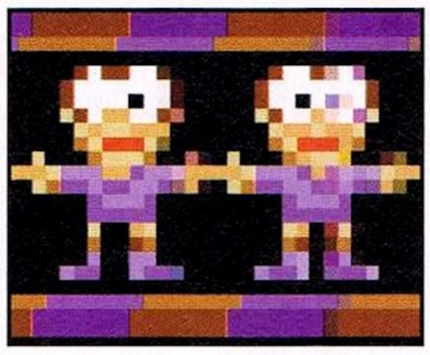
PRINTED CATALOGUE

Now available, listing hundreds of PD/Shareware/ Licenceware titles. Only £1·00 including P&P or 50p if ordered with disks. Please state if you have a Falcon.
Please make all cheques/postal orders payable to L.A.P.D.
Credit cards welcome

Access VISA

PD Action





Nick Peers and Simon Forrester investigate a mixed bag of PD strategy games.

GAMES

DATACHESS 2

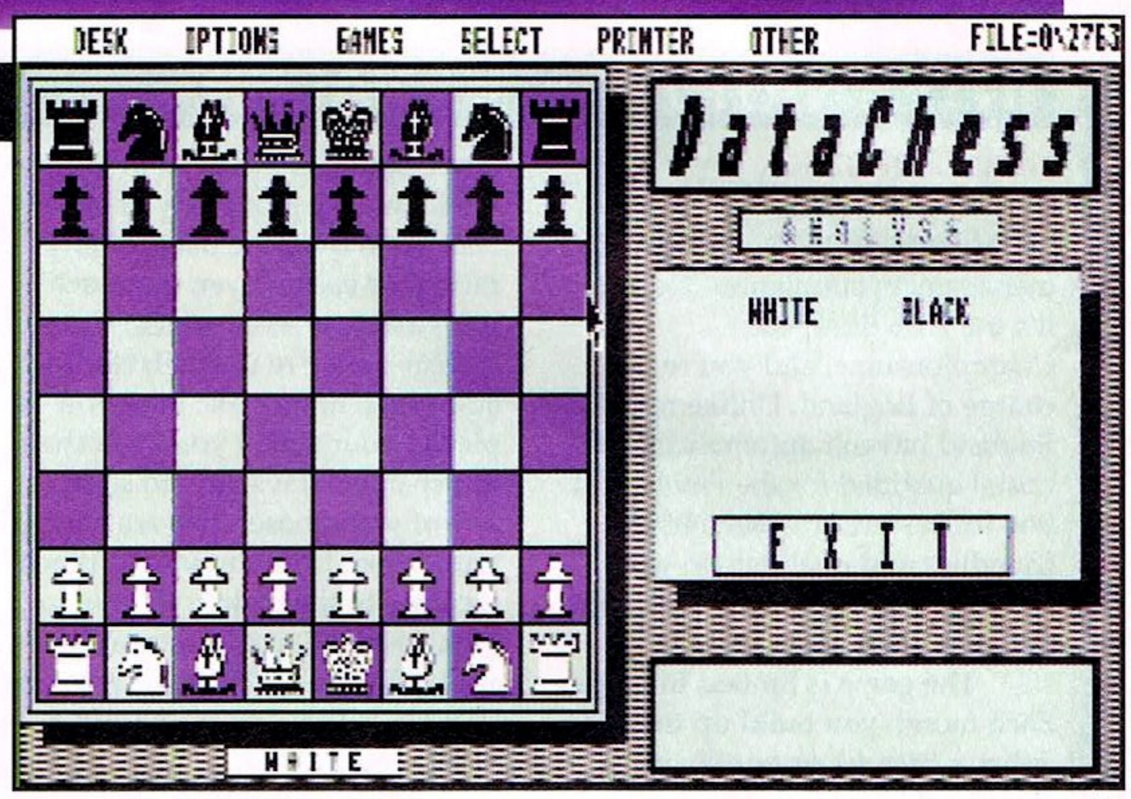
FLOPPYSHOP
DISKS 4505 & 4506

THE TITLE MIGHT suggest otherwise, but this isn't a chess game. It can't play chess, and it can't teach you chess. *DataChess 2* is a package designed to help you evaluate pre-played games. It provides valuable information, statistics and viewpoints of the game at each stage, and enables you to follow the action at your own speed.

For the budding chess player this is an invaluable tool. You'll soon get to the stage where you want to revise your games and work out exactly why you keep losing to intelligent-looking people. Being able to project future moves is an invaluable skill, which this helps develop.

While chess games look better when represented in 3D, *DataChess 2* represents both the set and lots of other information perfectly effectively on a 2D screen. This is an invaluable tool to the budding chessman.

***STF* RATING: 85%**



DataChess 2 may look deceptively like a chess game, but it isn't – it's far more useful than that. It helps you to analyse your games. Or at least, it tries.

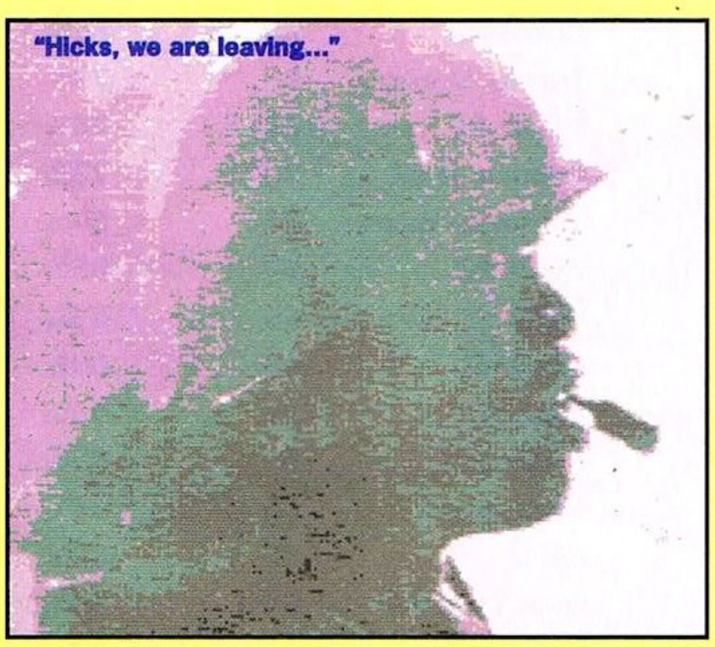
ALIENS

GOLDEN DAWN DISK 28

YOU CAN ALWAYS RELY ON BEING ABLE TO find strategy games in the PD world. They may not always take the 'typical' form, involving armies, hillsides and the French, but they all swap fast reflex action for studied thought.

In *Aliens* you follow the adventures of Ridley Scott's team of space marines, who wander around their spaceship being attacked by shiny black insectoids. In typical strategy game style, the playing area is divided into squares, each containing one of your team, some scenery, or an alien. You go through each of your team members, one by one, assigning moves, attacks and actions, and then they take it in turns to move and hit each other.

"Er, when I said 'leaving', I meant slowly. One person and one square at a time."



Strategy games like this don't rely on you being fast enough to beat the computer to the draw, or clever enough to think ten moves ahead of it – there's no time limit. The intro sequence, involving digitised pictures and samples from the film, sets the game's style (the samples continue throughout), but the emphasis remains purely on thought. Imagine playing chess with aliens, and you're about there. But is a PD author somewhere being sued for copyright infringement?

***STF* RATING: 85%**

Pothole 2 is an excellent rendition of an old classic – *Boulderdash*. Which is probably why it's already appeared on Cover Disk 59.

MAD AND POTHOLE 2

CHAOS PD DISK PD37

TWO *BOULDERDASH* CLONES, ONE of which, *Pothole 2*, featured on Cover Disk 59. *Pothole* is by far the best, and although devoid of any animation, it does feature detailed graphics. Each level is much bigger than the screen and it scrolls smoothly. If you're looking for a *Boulderdash* clone with no frills, this is it.

Mad, on the other hand, would look more at home on the ancient BBC Micro than the 16-bit technology of the ST. The only vague challenge it offers is that you're up against a time limit, but the controls are so unresponsive that you'll struggle to get any enjoyment out of it. However, (blatant plug time here) rather than buying either of these, you'd be much better off getting Cover Disk 63, which includes *Herman*, the greatest *Boulderdash* clone ever. Back issues are on page 76, folks.

***STF* RATINGS: POTHOLE 2 75% and MAD 20%**

INTERNATIONAL MANAGER

LAPD DISK G390

Apart from the odd digitised grab, *International Manager* has nothing going for it.

YET ANOTHER PD FOOTBALL management simulation. This time it's the 1996 European Championships, and you're in charge of England. Unlike real life, England haven't automatically (as hosts) qualified for the Finals, and you must start in 1994 combining friendlies and qualifiers in your bid to do the impossible and make England great again.

The game is limited in scope. Each month you build up towards either a friendly or qualifying match, which involves manfully picking your squad one by one from the lists available. Fortunately an automatic option is included to reduce the inevitable monotony of this task. As well as the usual ability rating for each player, they each have a fitness score which, if zero, indicates they're unavailable. To add to the dreariness, once you've picked your squad you must then return a few days later to see if any of your chosen players have withdrawn from the squad. When it comes to the match, all you do is pick a formation and a team, and wait a few seconds for the result to spew out. Then, do it all again a month later. Great.

There's no real hands-on action apart from picking your team, and having to do this twice per match is annoying. The game isn't helped by its unfriendly interface, which makes the chores twice as choresome. Only recommended for die-hard International fans who thirst to manage England to a possible Championship win.

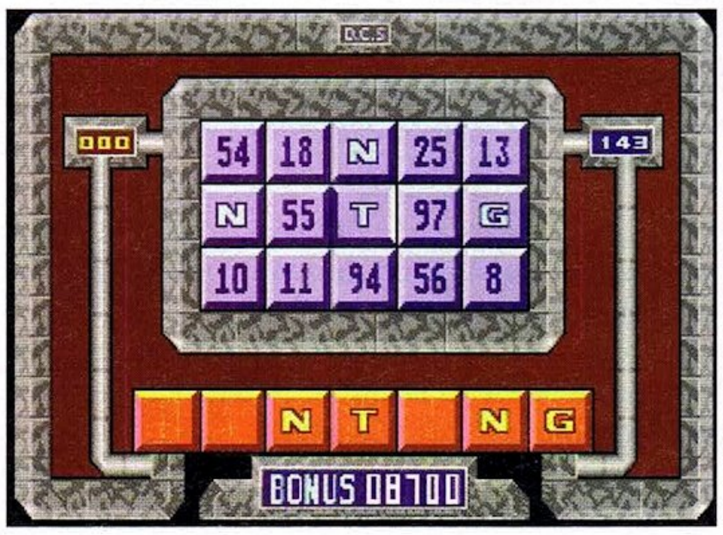
***STF* RATING: 49%**

CRAZY LETTERS

LAPD DISK L106

THE ST COMMUNITY FELT A pang when Dave Cobbledisk announced his departure to pastures new in issue 67, but he did write one more game before he went – *Crazy Letters*.

Following the style of its predecessors, *Crazy Letters* uses a simplistic graphical interface which keeps your concentration on what's going on within the game itself. And, being a Cobbledick game, you can guarantee that what's going on consists of letters or numbers, which form words or maths on the screen.



Dave Cobbledick made a valuable contribution to the ST world. It's just a shame his last game isn't the most exciting.

The game takes a simple form. Letters are randomly hidden underneath numbered squares. You turn over squares, looking for hidden letters to form a word. If you find a letter, the square's value is added to your score; if you're wrong, it's subtracted. And the whole procedure is totally random – there's no skill involved in it, whatsoever. Zero challenge.

The second and third levels are based on the same type of gameplay, although the third section adds a gambling element to the game, just to spice things up a little. But you can't help feeling that it would have been nice to see Dunce's Cap Software leave the ST scene with a bang, or at least with a game that's not so reminiscent of racehorses. Oh well.

***STF* RATING: 35%**

PD ACTION ROUND-UP

We review a lot of PD games each month, and it's easy to forget what was reviewed when. Thank goodness, then, for this list which collates every single PD game reviewed in the past four issues.

GAME	PD LIBRARY	ISSUE	RATING
Pacman on Es 2/Tomtar	Power PD	68	90%
Conquest 2: The Viking Hordes	LAPD	69	87%
Golden Dawn Menu 15	STellar PD	66	85%
Serenade Menu 17	STellar PD	68	84%
PD Pack Eight	Chaos PD	69	82%
Fruity/Match It	Transp. Dreams	68	78%
Noughts and Mad Crosses	Power PD	68	76%
Frantick	Goodmans PD	66	73%
Violent Death	Transp. Dreams	66	68%
ST Vegas	Who's PD	67	65%
Project Purify	LAPD	69	63%
Zuffers	Power PD	66	60%
Overscan Invaders	Floppyshop	67	55%
Max	Power PD	69	55%
Grand Prix Manager	Floppyshop	68	54%
Pop!	LAPD	69	51%
Lindemo and War	Goodmans PD	67	50%
Starburst	Power PD	69	20%

ATARI INSIDE

All NEW GASTEINER Hard Drive for Atari ST, STFM,STE,MEGA ST,MEGA STE & the formidable FALCON 030.

Award winner for BEST HARDWARE 1993 - ***ST Review***

The All NEW GASTEINER Hard Drive has all the following features.

1, Auto Booting and Auto Parking
2, Front On/Off switch
3, Power indicator (LED) light
4, SCSI icon selector switch
5, Sleeve bearing Fan (17CFM)
6, Dual SCSI Port
7, Internal 5% Tolerance P.S.U. (90-260 VAC)
8, Top Quality Formatting and Partitioning Software
9, New Compact Case (4.00x4.64x9.00) (HxWxD)
10, 12 Months back to base guarantee

A SERIOUSLY BIG DRIVE FOR A SERIOUSLY SMALL PRICE - ST FORMAT GOLD AWARD AUGUST 1994

GASTEINER HARD DRIVES

		ATARI ST	FALCON 030
GHD	40MB	£149	£149
GHD	120MB	£199	£199
GHD	170MB	£219	£219
GHD	270MB	£249	£249
GHD	540MB	£299	£299
GHD	1.2GB	£449	£449

all above drives comes with our award winning TOP-LINK controller & software with ST & SCSI 2 CABLE with falcon drives

BARE SCSI HARD DRIVE

40MB	£69
120MB	£99
270MB	£199
340MB	£239
540MB	£249
1GIG	£399

AV drives please phone

DTP SOFTWARE

TIMEWORKS	£39
CALAMUS 1.09	£60
CALAMUS SL	£179

MUSIC SOFTWARE

CUBASE LIGHT	£89
CUBASE SCORE 2	£319
CUBASE AUDIO	£519
CUBASE FA8	£319
CUBASE AUDIO + SDI	£599
Emagic Notator SL	£185
Logic	£329
logic audio for falcon	£159

word processors SOFTWARE

1st Word plus	£39
Papyrus	£119
Atari works	£99

ATARI COMPETENCE CENTRE

ALFA DATA

HiSoft High Quality Software

JAGUAR

CITIZEN

EIZO Professional Display Systems

MITSUMI

PHILIPS

Steinberg

rombo

MONITORS

Hi res mono monitor	£129
Philips colour	£229
Microvitec mutisync	£289

MEMORY FOR ST STFM & MEGA

0 mb boards	£25
1/2 mb boards	£29
2mb boards	£80
4 mb boards	£125

MEMORY FOR STE & MEGA STE

1/2MB TO 1MB	£5
1MB TO 2MB	£50
2MB TO 4MB	£100

MEMORY FOR FALCON 030

4MB with board	£99
14MB with board	£599
32MB with board & 32mhz	£1299

EAGLE 32Mhz ATARI COMPUTER

NEW 32Mhz 68030 TT COMPATIBLE COMPUTER COMING SOON

FALCON 030 COMPUTERS

FALCON 030 4MB	£499
FALCON030 16MB	£899

Limited Stock 1st come 1st Served

INTERNAL 2.5" DRIVES FOR FALCONS 030

85MB	£129
120MB	£159
240MB	£249
400MB	£349

ATARI SPARES SHOP

POWER SUPPLY	£34.95
INTERNAL DRIVE	£45.00
KEYBOARD FOR ST	£65.00
TOS 2.06 STE	£45.00
TOS 2.06 STFM	£59.00
ATARI MOUSE	£9.99
400 DPI MOUSE	£14.99
DMA CABLE	£6.99
SCSI CABLE	£6.99
TRACKBALL	£29.99
OPTICAL MOUSE	£29.99

NEW PRODUCTS

IDE interface enabling external Sony & Mitsumi CD-ROM drives to be used with the ST & Falcon 030 £69

CD-ROM SCSI

APPLE CD-ROM 2 SPEED EXTERNAL CASED & PSU

FOR ST	£299
FOR FALCON 030	£279

comes with all the cables

DMA TO SCSI

TOPLINK award winning DMA TO SCSI converter £40.00

External SCSI case with 45 watt power supply £79.00

BLANK DISKS

	DSDD	DSHD
10	£3.50	6.00
50	£15.00	£25.00
500	£145.00	£245.00
1000	£280.00	£480.00

DISKS WITH LABELS BRITISH MADE ERROR FREE

SCANNER

SCANNER FOR ST	£99
SCANNER FOR FALCON	£99

DISK DRIVE

1MB EXTERNAL DRIVE	£50
1MB INTERNAL DRIVE	£45

CABLES

PRINTER CABLE	£6.00
S VGA TO FALCON 030	£12.00
ST TO FALCON 030	£12.00
SCART CABLE	£10.00
MULTISYNC SWITCHBOX	£29.95
MODEM CABLE	£10.00
NULL CABLE	£10.00

PRINTERS

HP 320	£230
HP520	£269
HP560	£399
CITIZEN ABC COL	£155
SWIFT 200 COL	£185
SWIFT 240 COLOUR	£229
EPSON STYLUS COLOUR	£449
CANON Bj10sx	£189
CANON Bj200	£249
CANON Bjc600	£459

REPAIR CENTRE

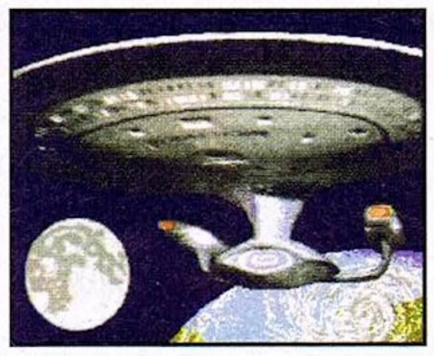
New service centre for most Atari computers. We offer a quotation service of £10 for which we will examine your computer and report back with an exact quotation price for the repair. If the repair is carried out is then deducted from your bill.

GASTEINER
126 Fore Street, Upper Edmonton
London N18 2XA
Tel: **0181-345-6000**
Tel: **0181-345-6868**

Small consumables and software items under the value of £50 please add £3.50 p+p. Other items except lasers, next day delivery service £10 per box, Morning next day, normal rate plus £10 per box. E&OE Prices subject to change without prior notice. All trademarks acknowledged.

All prices include VAT.

PD Choice



Nick and Simon savour yet more choice cuts from the world of serious PD software.

DISK MAGS

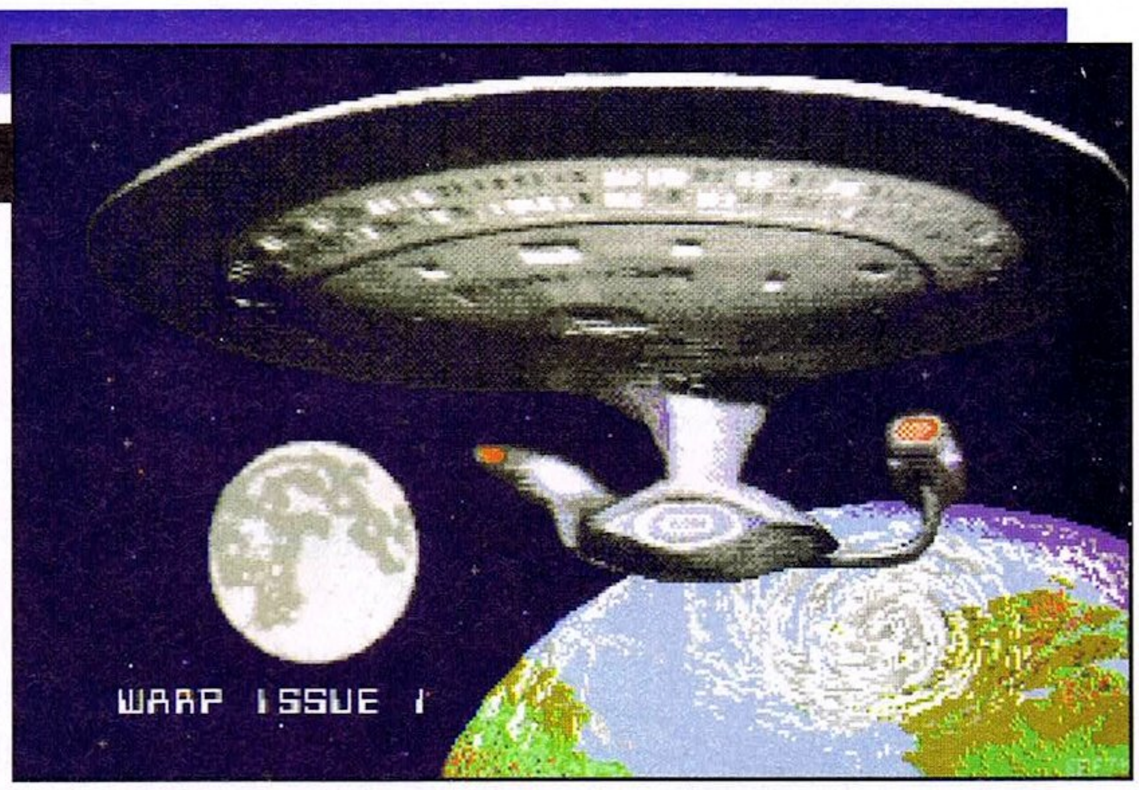
WARP ISSUE ONE

KEEFY'S PD ☎ 01203 715921
OR AGPD, DISK MAG15
512K compatible (1MByte recommended)

ANOTHER STAR TREK diskzine hits the shelves and it's flippin' gorge! *(Nick slips into a strong Bristolian accent when he's excited – Karen)* *Warp* opens with atmospheric graphics accompanied by a well-produced if slightly muffled soundtrack that combines the various *Star Trek* themes. You then proceed to an imaginative menu screen in which you make your selection from the many available text-files by cycling through the planets of the *Star Trek* universe, including Romulus and Vulcan.

The content of issue one is heavily geared towards *The Next Generation*, although Keefy hopes to attract articles covering all four series of the show. It's well up to date, featuring reviews of the last few episodes of the series as well as the seventh *Star Trek* movie itself. The news section contains some juicy gossip surrounding the film, coupled with a preview of the latest *Star Trek* series, entitled *Voyager*. The rest of the mag is packed with interviews, information (including an introduction to the Klingon language), quizzes, contacts and even short stories – literally hours of material that should satisfy even the most ardent appetite.

The displayer program itself was coded by Tony Greenwood, the man behind the *STOSSER Document Displayer* from Cover Disk 68. It's well thought out and features attractive graphics coupled with a few sound samples (including an agitated Picard shouting "Engage" to accompany the loading of a new file).



"The Dilithium crystals canna handle it Captain!" While Scotty saves the universe yet again, you get to feast your eyes on this superb addition to the disk magazine industry. And it gives us an excuse for a *Star Trek* piccie that isn't gratuitous!

This is an excellent disk magazine, packed with loads of information and with a user interface to die for. If you're a Trekkie (like me), or even a Trekker (people who don't like being called Trekkies, apparently), you'll love this. Get it now, and start thinking up contributions for the next issue.

If you're a 512K user, you can still access all the files using a separate document displayer – one is provided on the disk. Nevertheless, true Trekkies will need 1MByte of memory to get the full effects – another good reason for upgrading your machine!

***STF* RATING: 92%**

UTILITIES

CALAMUS FONT UTILITIES

LOCUTUS PDL DISK LW015

THREE STANDALONE UTILITIES, WHICH enable you to keep a track on all your *Calamus* fonts, make up this good-value disk from Locutus, with 14 fonts and a beginners' manual thrown in for good measure. The most versatile program by far is CFN List 2, a German shareware program that enables you to easily collate a number of fonts into a single *Calamus* document, which, when loaded into *Calamus* itself, gives you an idea of what the fonts themselves look like on screen. The results are excellent and enable you to easily build up a paper catalogue of what fonts you possess, and where they are to be found.

Although a little slow, with a German interface to match, *CFN List 2* makes the cataloguing of your font disks a relatively straightforward process. If you're more interested in viewing fonts on screen, *JC CFN View* enables you to load fonts one at a time and view them on screen, without having to fiddle around in *Calamus* itself. Like *CFN List 2*, *JC CFN View* gives you details about each font, such as who it's created by and any other information that the author of the font might have included (such as the font's origins, for example).

The third program is a demo of the *Calamus Font Editor Helper*, which enables you to convert fonts between different styles, although only bold and compressed are supported in the demo. Register, and you'll be able to produce many more different effects, and several are also planned for future release (such as sphere, explode and triangle).

The inclusion of 14 extra PD fonts (including two personal favourites, Study and Celtic) add extra value to a disk that provides some useful if not indispensable aids to using the *Calamus* series of programs.

***STF* RATING: 79%**

The *Calamus Font Utilities* disk is essential for those of you who want to have more control over the fonts you use in Calamus.

ABCD....	abcd....	123.. £$%..	ßã«á...?	LOAD	QUIT

MISCELLANEOUS

LEXICON

LAPD DISK L103 (£3.00)

LEXICON IS A WORD SEARCHER, its main use being for word puzzles such as crosswords, where you only possess some of the letters making up the whole word. It offers several different types of search. One looks for words containing a set string. For example, 'abl' would come up with all the words containing 'abl', regardless of length or where in the word 'abl' appeared, so both 'table' and 'useable' would be printed.

A more useful search, as far as crosswords are concerned, enables you to include wildcards in your search. Looking for the string '*ight' would produce 'right', 'light' and 'might' among others. *Lexicon* can even search an anagram for possible solutions.

The usefulness of any program of this ilk depends entirely on the accompanying word list. As it currently stands, 46,000 words are contained in *Lexicon's* list, which is fairly limited. However you can add your own by loading LEXICON.DOC into a word processor, and for £3 you can't complain. However, the program accesses the disk every time you perform a search, which slows it down (even with a hard drive it can take time). Despite this, though, *Lexicon* is a useful addition to any word puzzler's collection.

***STF* RATING: 79%**

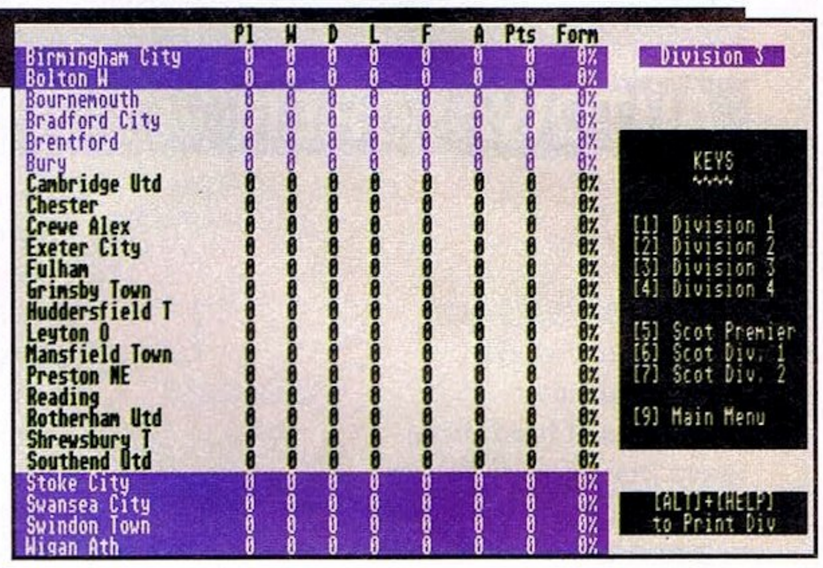
LOTTERY AND POOLS PREDICTORS

POWER PD DISK PWR932

IF YOU'RE LOOKING FOR 'GET rich quick' programs, this is the place to start. Marcus Platt's *Lottery* program (from Cover Disk 67) is a small but neat random number generator. *Lotto* and *Lottery 2* enable you to store the National Lottery numbers each week, and compare them to your own selection – great if you're a miserable git like Nick.

Finally, *Pools* is no match for *Dr Fox's Football Annual*, the demo of which was featured on Cover Disk 65. The demo of *Pools* dates back to 1990, and is restricted so that you can't update the divisions to take promotions and relegations over the last five seasons into account in the current division.

While registering the program brings you a hefty update, the demo really gives you no idea of what the full program might be capable of, with the likes of Derby, Luton Town and Sunderland still in the Top Flight. And on top of that, changes to the Divisional structure since 1990, such as the introduction of the Premier League and Scottish League Division Three, haven't been included either.



Hmm. This Division definitely needs updating. After all, Birmingham City will be out of it by the end of the season.

Although the full program's no doubt an improvement on the demo, the *Dr Fox* demo gives you a much better indication of what the full program can do.

***STF* RATING: 62%**

MUSIC

STELLAR MODULE COLLECTIONS

STELLAR PD
DISKS MOD071 AND STEL45
MOD071 requires 1MByte

MOD071 CONSISTS OF THREE MOD tunes, all of which are so big that you'll need 1MByte to play each back. What you make of them, as ever, depends on your individual taste, but at least they're well put together. *Acid Jazz 2* is a throwback to '70s cabaret, with clear samples and some funky hammond organ solos. *Rain* takes you into the '80s, with synth music that's strongly reminiscent of TV shows like *Miami Vice*. *Eclipse*, unfortunately lets the side down, becoming far too repetitive in places, but featuring a few atmospheric bursts. A mixed bag.

STEL45 is the latest (volume 14) in a long line of dance compilations. If you're anything like us you'll have the taste to dismiss such tat as repetitive twaddle, and cringe at the sound of it. With titles like *Break Into Ambience*, *Let's Paaarty* and *Tomorrow*, you'll either hate it or love it. We all loathed it.

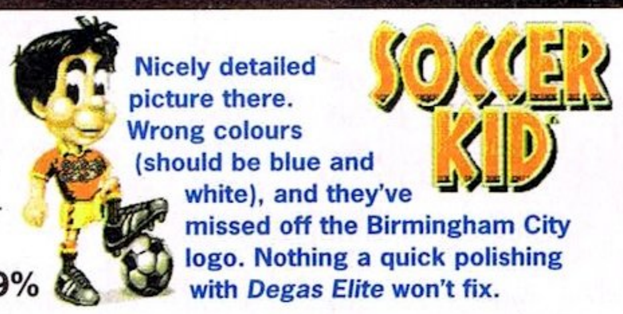
***STF* RATINGS: 65% (MOD071) and 50% (STEL45)**

SOCCER KID MUSIC DEMO

AGPD DISK D072

THESE TUNES, RIPPED FROM the PC version of the game and skilfully ported across to the ST platform, range from funk to Calypso and are undemanding forays into the world of bubblegum pop. You might enjoy this, particularly if you're desperate to see any form of *Soccer Kid* on the ST even without animated graphics or game.

***STF* RATING: 59%**



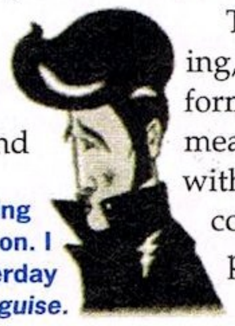
Nicely detailed picture there. Wrong colours (should be blue and white), and they've missed off the Birmingham City logo. Nothing a quick polishing with *Degas Elite* won't fix.

ART

1995 DIY CLIP-ART AND LENART MIXED 2

STELLAR ATARI CLUB
DISK CLIP6/CLIP7

THIRTY SCANNED IMAGES, showing DIY implements, ranging from power tools to showers and timer switches, grace the first disk. The second contains more of an assortment, with 47 pictures covering the zodiac, tools, cartoons from *The Sun*, Power Rangers and other themes.



Yep, Elvis is alive and well opening supermarkets in Twerton, Avon. I know, I saw him there yesterday singing *The Devil in Disguise*.

The term 'clip-art' is confusing, as the pictures are in PC1 format (Degas, low res), which means they aren't compatible with many DTP packages. To convert them to the more palatable IMG format you'll need something like *PicSwitch* (Cover Disk 68). The first disk is a better demo of the excellent quality of the scans, but both serve as good examples of the kind of scanned images the author can produce. Send him the return postage and a disk of PD, and he promises to scan any images you send him (but remember copyright). Worth the time and effort.

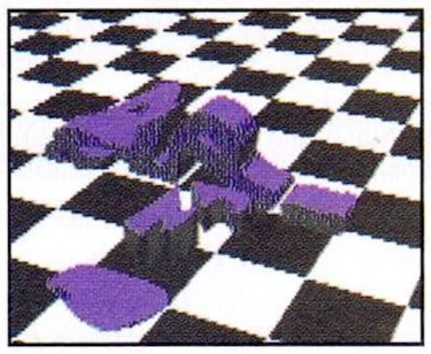
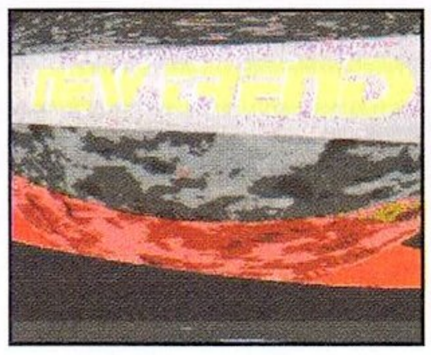
***STF* RATINGS: LENART 61% and DIY CLIP-ART 70%**

POWER PD'S TOP TEN

1 Grandad and the Quest for the Holey Vest (Disk PWR7)
2 Grandad in Search of Sandwiches (Disks PWR901/902)
3 Towers (Disks PWR288/289)
4 Aliens (Disk PWR506)
5 Power Disk Magazine 23 (Disk PWR705)
6 Fullscreen Construction kit (Disk PWR491)
7 Dynabusters+ (Disk PWR302)
8 Psycho Pig 2 (Disks PWR24/25)
9 CIA World Factbook (Disks PWR904-7)
10 The STOS Cyber Extension (Disk PWR825)

Power PD can be contacted at: 3 Salisbury Road, Maidstone, Kent, ME14 2TY, or on ☎ 01622 763056. Prices are just 99p a disk, and cheques/POs should be made payable to Power PD.

PD Falcon

Simon Forrester discovers some demos that really display what the Falcon can do.

DEMOS

AUTOWASCHEN VERBOTEN

FLOPPYSHOP, DISKS F 4669 & 4770

IF YOU HAPPEN TO be a follower of the rave scene, have 8.5MBytes of hard drive space free on your Falcon and enjoy having your sense of perception messed with, we can now officially recommend a great way to spend several days of your life. Although it arrives on only two disks, *Autowaschen Verboten* expands to such a size that you'll have to start trashing software just to fit it on your hard drive. It's worth it.

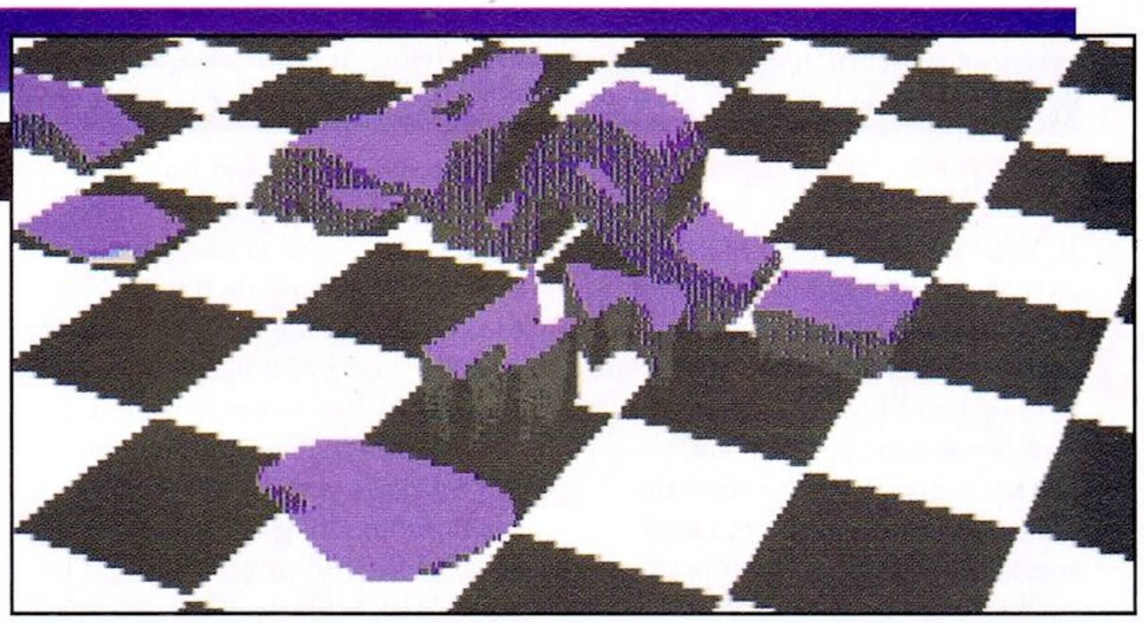
Opening with a pre-rendered 3D sequence in which the title melts down to a pool of blue gloop, *Verboten* then switches to a futuristic desktop communications runthrough, showing a mystery operator downloading the main part of the demo through some odd server.

He then runs the demo he's downloaded, and things start to get very strange indeed. The programmers have made use of just about every graphic effect they could think of, including kaleidoscopes, colour filters, dot scrollies, and even ripples. And the whole thing carries on for hours, with only the one obligatory scantily clad female shot (no European demo is released without one).

All demos have to have 3D shapes, and *Verboten* uses all sorts of different, original special effects to create them. But it takes the 3D aspect a little further, though. *Verboten* also features a pinball game, in which your viewpoint is that of one of the balls, bouncing around the table. Most worrying.

Autowaschen Verboten is quite simply the best Falcon demo so far. If every aspiring coder were to take a look at this, well, the Isle of Wight would probably sink, or something. It's *that* good.

***STF* RATING: 90%**



If you can keep your head when all around are losing theirs, you're obviously looking at the wrong monitor. Particularly if you're watching *Autowaschen Verboten.*

STRANGE CIRCUMSTANCE

FLOPPYSHOP DISK F4619

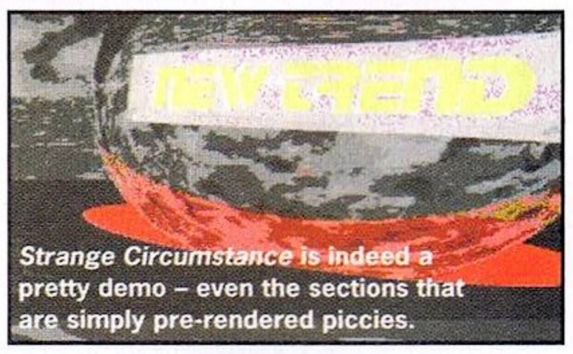
WITH A HORIZONTALLY scrolling pre-rendered backdrop, *Circumstance* is both visually and sonically pleasing, its moody cityscape made darker and more foreboding by a soundtrack that's undoubtedly influenced by Jarre.

Circumstance is more than just a set of scrolling pictures, though. The emphasis here is on coding skill, with New Trend showing just what they can do with motion and light distortion. It begins with a starfield tunnel that leads off the screen and is made up entirely of waving, pulsing dots – an original effect if nothing else.

The delights continue with spheres that are created first from dots, then broken down to scroll lettering over them, then the effectiveness of light sourcing on the surface is demonstrated. This isn't necessarily a difficult effect to reproduce, but it displays a certain level of thought and planning, as well as a large dose of creativity on the part of the programmers. To complement this the programmers have used a pleasing text effect, in which the letters are dropped as individual pixels on to an uneven surface, making the letters bounce and fold off the screen, almost as if obeying the (albeit loose) laws of gravity. Er, weird, man.

This isn't a demo to astound, but it's enjoyably original and neatly executed. A worthwhile addition to your library. *stf*

***STF* RATING: 75%**



Strange Circumstance is indeed a pretty demo – even the sections that are simply pre-rendered piccies.

PD CHOICE ROUND-UP

Missed a back issue? Want to know when we reviewed a particular piece of PD software in the last few months?

TITLE	PD LIBRARY	TYPE	ISSUE	RATING
Award Maker Plus	Tumblevane	Utility	66	91%
Selectric 1.10E	Ad.Lib	Utility	69	91%
Speed of Light 3.5	Floppyshop	Art	67	90%
Falcon Utilities	Floppyshop	Falcon	68	89%
Clip Art Collection	Floppyshop	Art	67	88%
Route Finder 2	Cover Disk 66	Utility	66	86%
Third Dimension 10	Floppyshop	Diskmag	69	85%
Oh No!! More Froggies	Floppyshop	Demo	67	83%
525 v2	Ad.Lib	Utility	69	83%
STellar	Diskzine 14	Diskmag	69	83%
Kozmic 4	Goodmans	Utility	66	81%
Ultimate STE Megademo	Floppyshop	Demo	66	81%
Compact Office Mgmt Sys	Chaos PD	Utility	69	81%
Modest	Ad.Lib PD	Music	68	80%
BoxKite	FaST Club	Utility	69	80%
Cycdelic Knockout Demo	Floppyshop	Falcon	67	79%
Chinese Horoscope/I Ching	Goodmans PD	Misc	68	79%
Ozbornz Modules 3	Transp. Dreams	Music	68	78%
Scorewriters	Tumblevane	Music	66	76%
The PD Collection	Transp. Dreams	Utility	67	76%
RAE Tutor	Floppyshop	Misc	68	76%
JPEG Pictures	Floppyshop	Falcon	67	75%
Visual Illusions	LAPD	Misc	69	75%
Psion-ST Transfer S'ware	Goodmans PD	Utility	67	71%
Even More Falcon Utilities	Floppyshop	Falcon	68	71%
Archivers	Goodmans PD	Utility	67	70%
Intro Maker 1.5	Floppyshop	Utility	67	68%
Big Top Type	Floppyshop	Education	67	67%
Text Help Files and Utils	Merlin	Utility	69	66%
STellar MOD Collection	STellar PD	Music	66	65%
Magnet 9/Gullbach	Floppyshop	Falcon	68	65%
Falcon MOD Files	Floppyshop	Falcon	67	61%
Trannies 1	Transp. Dreams	Diskmag	69	54%
Club Culture Mix Pack 2	STellar PD	Demo	66	51%
UFOlogy	STellar PD	Misc	68	38%
Fly Over Fantasy	Floppyshop	Demo	66	25%

LEARN HOW TO MAKE MUSIC ON YOUR COMPUTER AT

FUTURE MUSIC'S MEMS '95

THE MIDI, ELECTRONIC MUSIC & RECORDING SHOW

21st-23rd April 1995 — Olympia 2, London

BOOK NOW AT OUR SPECIAL ADVANCE PRICE AND SAVE £3 PER TICKET
£5 IF YOU BOOK NOW
£8 ON THE DOOR

Priority Order Form

Please specify the day you are most likely to attend

Friday 21st April ☐ Saturday 22nd April ☐

Sunday 23rd April ☐

Please reserve the following tickets for me:

	On the door	In advance	Number Rqd	Total £
Adult	~~£8~~	£5		
GROUP BOOKING OFFER (10 or more people - £4.50 each)				

TOTAL £_____

Tick method of payment:

☐ Cheque (Please make payable to: *"MEMS"*)

☐ Postal order ☐ Visa ☐ Access

Credit card number ☐☐☐☐ ☐☐☐☐ ☐☐☐☐ ☐☐☐☐

Expiry date ☐☐☐☐

Please fill in this coupon in block capitals

Name _____

Address _____

_____

Post code _____

Telephone _____

Signature _____

Date _____

☐ Please tick if you do not wish to receive direct mail from other companies **MEMS STF3**

Please return form and your payment to:
MEMS, PO Box 9, Dunoon, Argyll, PA23 8QQ

TEST DRIVE THE LATEST EQUIPMENT FROM TOP COMPANIES

Manufacturers, distributors, developers and retailers all showing their latest gear.

GET KITTED OUT

Buy your first set-up. Upgrade or replace existing equipment.

FREE SEMINARS – INCLUDING

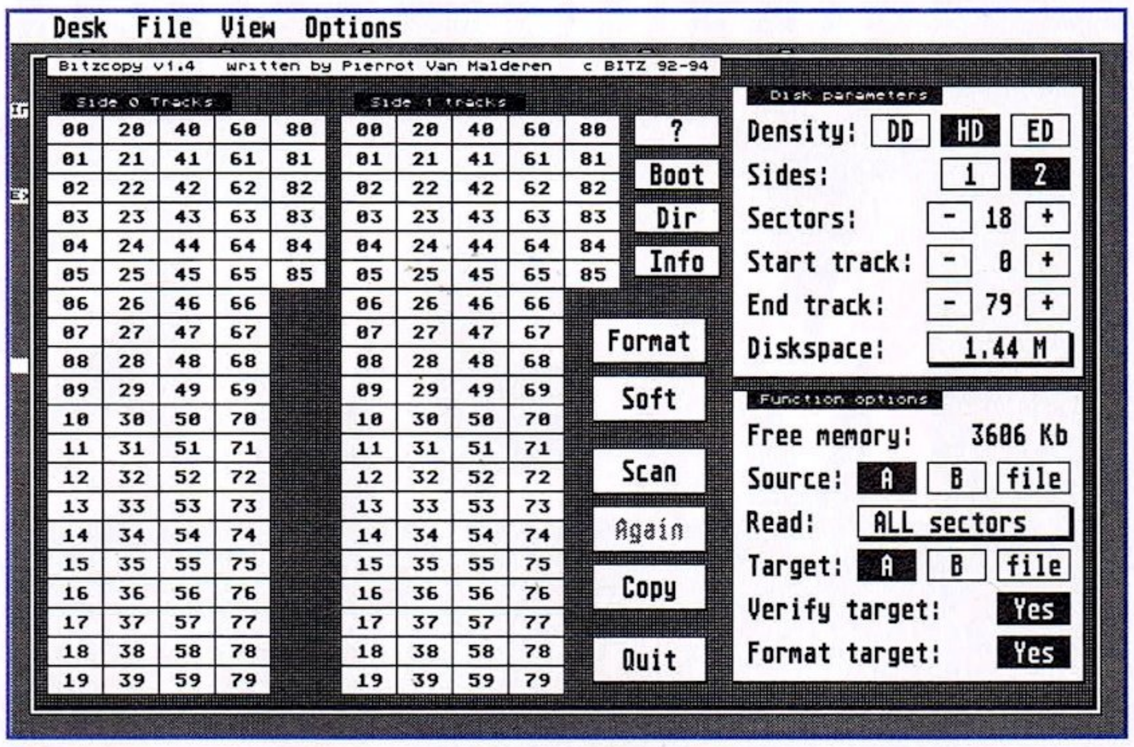
- **Making music on computers.**
- **Find out how to seriously upgrade your set-up. World of MIDI session musicians Peter Stone Keyboards, Gary O'Toole Electronic percussion and Nick Cooper Guitar will be showing off some of the very latest technology.**
- **You get to grill the hardware manufacturers and software writers.**
- **Daily Q&A session for Steinberg users.**
- **Jo Ortiz gives the low down on how to produce a great MIDI File.**

TICKET HOTLINE

01369 707888

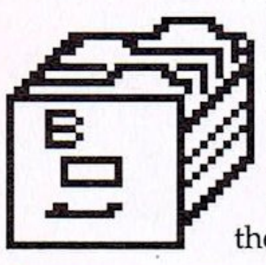
Fine-tuning your ST

Floppy disks, who needs 'em? Slow, unreliable, a nightmare to back up. Nick Peers shows you a few disk utilities that could save your life.



The excellent *Bitzcopy*, which is also reviewed in full on page 29.

Floppy disks are an integral part of your ST's life. In fact, if you don't own a hard drive, there's virtually nothing you can do without floppies. And your ST's built-in disk functions are best described as limited. You can format disks, but only to a fixed, and paltry 720K. You can copy files between disks, but the older your ST, the more hassle this is. There's no built-in tool for analysing disks for faults, and worse, the viruses are most commonly transferred via floppy disks – and your ST has no built-in way of checking for them. It's been left to third-party developers to rectify these annoying faults and omissions – a task they've tackled with their customary vigour and enthusiasm.

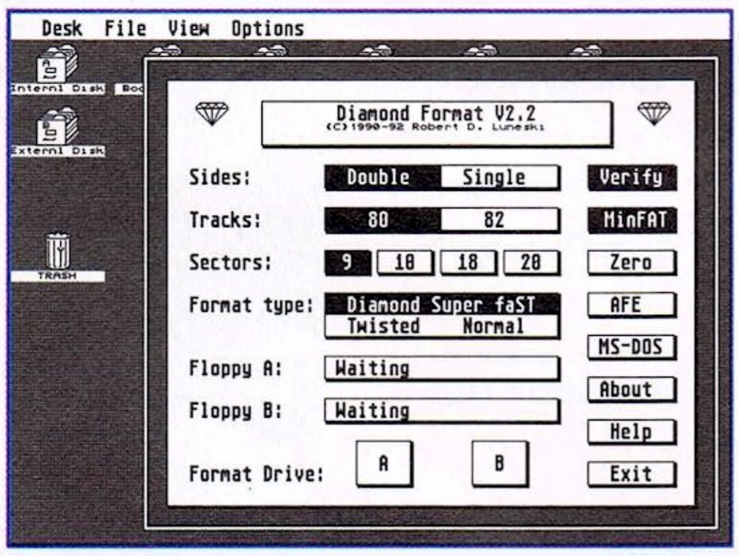


There are too many disk utilities in the public domain to list here, so we've selected only the best for inclusion. We've also mentioned a few commercial efforts that take disk manipulation to new levels of excellence, although often you'll find that PD utilities meet your needs perfectly adequately and for virtually no outlay.

Formatting

Double-density floppies can be formatted for up to 82 tracks and 10 sectors safely, which equals 820K. Your ST, however, is only designed to format them to 720K, which translates to 80 tracks and nine sectors on the disk. The benefits of a disk formatting utility are obvious – apart from anything else you can reduce the number of disks you need to store files. A cost cutting exercise if ever there was one!

Diamond Format is the standalone shareware version of the formatter used in HiSoft's *Diamond Back* hard drive utility series. Not does it enable you to make any disk PC-compatible, but it also supports high-density disk formatting, making it an essential purchase if you have a Falcon or an ST with a HD drive. Because *Diamond Format* is also a Desk Accessory, you can call it from within GEM programs – a function that comes into its own when you've just run out of blank, formatted disks on which to store your 8,000-word dissertation. However, it's unbelievably slow at its task, taking around twice as long as many other programs to format disks.



***Diamond Format* is easily the best of the select band of shareware and PD programs that deal specifically with the formatting of disks, although it is rather slow at its task.**

Other shareware formatters that deserve an honourable mention include *Disk Kit*, a Clive Parker creation, which graced Cover Disk 66; *AB Format*, which enables you to format two disks simultaneously (assuming you have two disk drives); and *Format 3*, a no-frills but effective formatter that supports up to 82 tracks and 10 sectors, and appeared on last month's Cover Disk.

Copying

While early versions of TOS are capable of copying individual files between disks, they fall down when you want to back up an entire disk. You can only copy entire disks a file at a time, which means a lot of tedious disk-swapping. There are two solutions: either get hold of a better disk copier or buy another disk drive. I think you know the answer.

If you own TOS 1.04 or greater, life isn't quite so bleak, as it includes an option enabling you to copy the disk in more manageable chunks, depending on the amount of memory you have installed. However, this is still a restricted version of the capabilities you can get elsewhere.

The public domain is full of dedicated disk copiers, many of which also offer formatting facilities. Without a doubt the best is *Fastcopy 3*, a cut-down version of its commercial big brother, *Fastcopy Pro*. If you have a TT or Falcon you should go for the latest version of *Pro*, which is fully compatible and enables you to format and copy high density disks using extended capacities.

Bitzcopy is another commercial offering, which has all the features you'd expect (including the ability to format HD disks), plus an interesting extra: it enables you to store compressed backups of your floppy on hard drive, which can then be restored to floppy at a later date. An interesting twist on the concept of backups there! *Bitzcopy* also features an attractive user interface, which makes the process straightforward. Turn to page 29 for the full review.

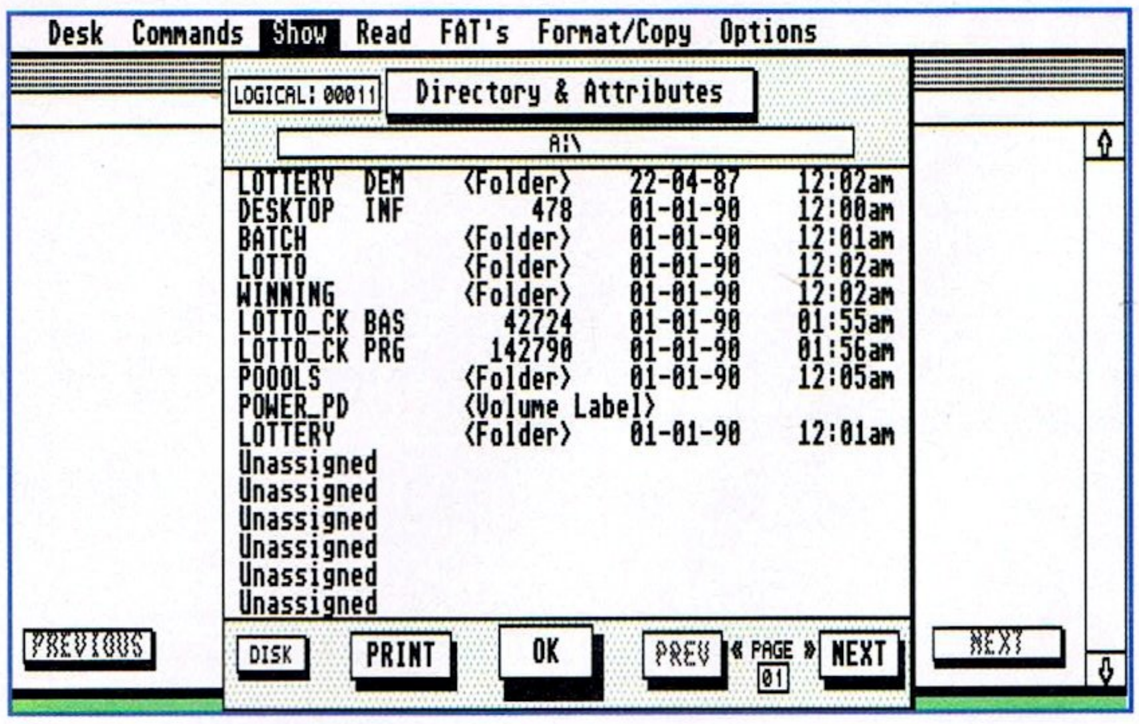
Analysing

The fact that floppies are so easily corrupted has negative implications for the security of your data. One minute floppies work, the next they don't. The reason is often that particular sectors or tracks of the disk have become corrupted. While in many cases these can be cured by reformatting, in others they are irreversibly damaged. If this is the case, you should stop using them straight away to guarantee the security of your data.

There are several programs that can scan disks and check their general health. If you're talking shareware, you really should be talking *ST Tools*, which even enables you to scan specific sectors

KOBOLD?

***Kobold* (*STF* 61, 90%) is a high-speed file manager – and while this means that it doesn't strictly fit in this feature, dealing as it does with the copying of individual or selected files rather than complete disks, nevertheless it has a good formatting section, and the file manipulation it offers is impressive. For example, you can instruct it to automatically copy files with a specified file extension to disk every 30 minutes – useful for creating secure backups of files. It's from Systems Solutions ☎ 01753 832212 for £59.95.**



***KnifeST* is such a powerful a tool for manipulating disks that we put in on Cover Disk 42. A few copies of this issue are still available, so rush to page 76 now!**

or tracks for any faults. And once you've found problems on a disk, you need a program that can fix them. *KnifeST* not only offers a fully comprehensive disk and memory monitor, but will also try to salvage corrupt data from disks. It enables you to view hidden files, and even tries to recover files that you've just accidentally wiped, either by 'undeleting' them or by building them up from scratch.

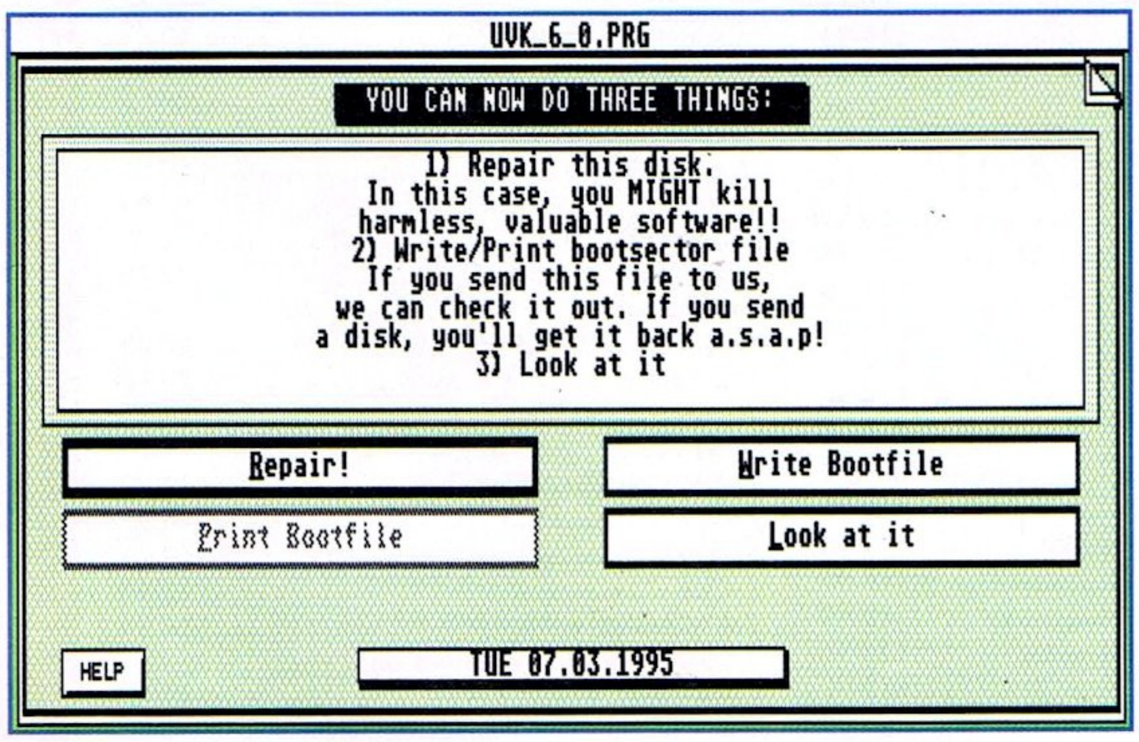
Even more powerful is *KnifeST's* big brother, *Diamond Edge*. Although mainly used in the world of hard drives, it's also floppy-compatible and enables you to 'optimise' your disks to improve their capacity and speed of data access, while offering an 80-page manual that goes beyond the program itself and offers an excellent grounding in the working of your various disk drives.

Once you've tried a few of these utilities, your floppies should work like a dream

Virus killing

As you should be aware, floppies are extremely susceptible to viruses. These are bits of data that attach themselves either to individual files or, more commonly, to the actual boot sector of the disk. They move into your ST's memory, then copy back on to any disk placed in your drive that's not write-protected. Resetting your ST doesn't remove the virus, and the only answer is to switch the machine off for a good 30 seconds, so the memory can clear and the virus is destroyed from memory.

Nevertheless, you're still left with the problem of your infected disks. You have two choices. First, run to your local PD library and get a virus killer from there. The best, without a doubt, is *Sagrotan*, because it can store boot sectors, which enables you to back up all your disks' boot sectors should they have become corrupted. The serious virus killer is *UVK 6*, a commercial program that's fully up to date with all the latest ST viruses and is a bargain at £9.95. It could prevent a catastrophe that would otherwise cost many times as much to recover from.



***Ultimate Virus Killer 6* is one program your ST will forever thank you for installing.**

Caching

Drive accesses can be painfully slow, particularly when you're running a program that continually accesses the drive, instead of loading all the available data into memory and accessing it from there in a fraction of the time.

If you want to improve your disk's performance you have two choices, both of which depend largely on the amount of free memory you have installed in your ST. You can create what's known as a 'disk cache', a portion of memory that's never used and is therefore free for you to store information from the disk. The program looks at which disk sectors are most frequently accessed and stores them in RAM, accessing them when required. The best shareware program for doing this is *Cold Hard Cache 4*, which makes an appearance on this month's Wonder Disk.

RAMdisks

The other method of speeding up disk accesses, which again is dependent upon how much spare memory you have, is a RAMdisk. This works on a similar principle to disk caching, but instead creates a virtual disk drive in your ST's memory. You copy your disk to the RAMdisk, then you can access it completely from RAM, making all accesses virtually instantaneous.

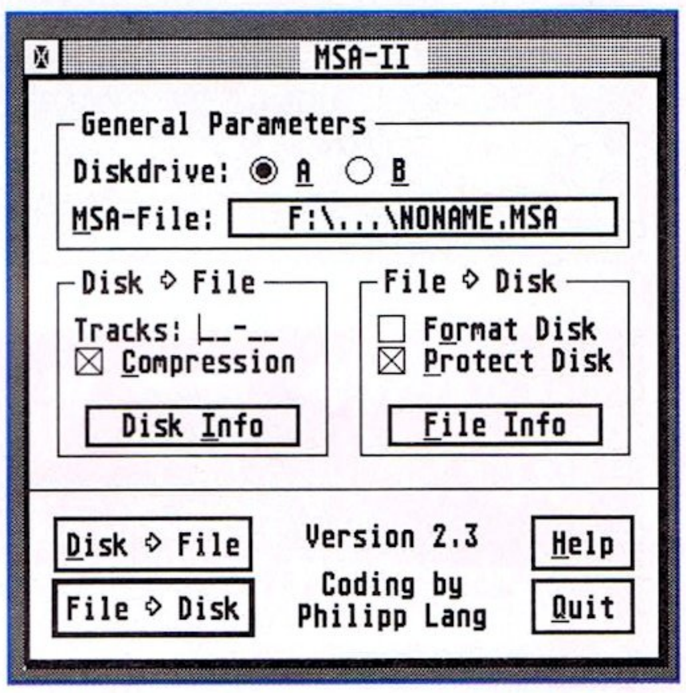
Once again, there are too many RAMdisk programs to mention here, although you might like to check out *AutoRAM*, which we included on Cover Disk 60.

And finally...

There's a lot more you can do with disks. For a start you can catalogue them all with the shareware *ST Disk Cat* (the latest version of which appeared on Cover Disk 66, coupled with an in-depth tutorial in issue 68). This saves you the time, energy and frustration wasted wading through your disks looking for a single file.

Bitzcopy enables you to compress entire disks into a single file, which can be stored elsewhere (on a floppy or hard disk) as a backup that can be restored to a disk in its entirety. A few PD programs also offer this capability: *Chaos Disk Compacter* (getting on a bit now but still does the job), and *Magic Shadow Archiver.*

Once you've tried a few of these utilities, your floppy disks should work like a dream. Next month we take a look at ways you can cram more data into less disk space with the help of archivers and file-packers. Book your seat now, before they all sell out! ***stf***



If you're keen on backing up your disks, but reluctant to waste valuable disk space, *Magic Shadow Archiver* is the program that you're looking for.

FEATURED SOFTWARE

You've read the feature, now where do you get all these goodies?

Cover Disk software

(issue number in brackets)
KnifeST (42), *AutoRAM* (60), *Fastcopy 3* (62), *Disk Kit* (66), *ST Disk Cat* (66), *Format 3* (68), *Magic Shadow Archiver* (70)
All of these issues are still available if you missed them – leap to page 76 now!

PD/shareware

(available from all good PDLs)
Diamond Format, AB Format (also on Wonder Disk 67), *ST Tools* (also on Wonder Disk 63), *Sagrotan 4.17, Cold Hard Cache 4* (on this month's Wonder Disk), *Chaos Disk Compacter.*

Commercial software

Fastcopy Pro 1.2
£14.95 FaST Club ☎ 0115 945 5250, *STF* 62, 90%
Diamond Edge
£49.95 HiSoft ☎ 01525 718181
STF 45, 90%
Bitzcopy
£10 Bitz Computers (Belgium) ☎ 00 32 2361 10 89
Review on page 29
Ultimate Virus Killer 6
£9.95 *ST FORMAT* Mail Order (page 77)
STF 57, 92%
Kobold
£59.95 Systems Solutions ☎ 01753 832212, *STF* 61, 90%

COLOUR KITS for MONO PRINTERS

Ever wished you'd bought a colour printer instead of a mono one? Wouldn't it be nice to print out pictures in colour? Now you can with Amiga "FlexiKolor Kit". Each Atari FlexiKolor Kit comes complete with everything you need to print in colour, including superb software. The colour kit is simple to use, the ribbons fit exactly the same way as your black ribbons so it will not affect your guarantee. Also on all models listed below paper alignment is automatic, you do not have to manually align. PRINTS AS GOOD AS COLOUR PRINTER. If your printer is not listed below then please phone. Atari FlexiKolor kits for Star LC10, LC20, all Star 24 Pin, Panasonic 1080/81/1123/1124. Epson FX80, LQ100, LQ400, LQ800 etc. Citizen 120D+, NEC P6, P6+, Seikosha 1900+. Please note colour kits come complete with coloured ribbons and software. **COMPLETE KIT £39.95**

FLEXIDUMP PLUS 3

THE COLOUR SOFTWARE FOR YOUR COLOUR PRINTER

NO MORE BANDING!
NO MORE WHITE LINES!

Yes, it's true, the new Plus 3 will remove banding & white lines from dot matrix & bubblejet printers. Now you can have laser quality on dot matrix and bubblejet printers.

★ Balance control for picture enhancement
★ Select area to be printed
★ Select size to be printed
★ Page control
★ Colour sieve
★ Ink correction
★ Automatic poster mode for larger than A4
★ Gamma correction (fully adjustable and saveable)
★ Spooler for colour letterheads etc
★ Imports a large range of file types including (IMG) larger then screen size, tiny, Spectrum 512, IFF, Degas, Neo, IFF (Amiga), HAM (Amiga). Yes, you can even print Amiga pics.
★ Colour separation (Print colour on your Bubblejet/Deskjet)
★ Ideal for T-shirt printing
★ Now with anti aliasing, to get rid of those jagged edges
★ Large range of dithering (dot pattern) modes
★ Run in any resolution, view, manipulate and print in any other resolution
★ Colour catalogue function will print a miniature of each picture configurable between 1 to 8 across
★ Will drive 9 or 24 pin Star, Citizen, Swift, Panasonic, NEC. Epson, Canon, HP Deskjet 500C, 550C, Laserjet etc

STILL ONLY £39.95 inc

T-SHIRT PRINTING RIBBONS

PRINT ON NORMAL PAPER IRON ON T-SHIRT

4 Colour Citizen Swift	£29.95
4 Colour Citizen Swift (Reload)	£14.95
4 Colour Star LC10	£14.95
4 Colour Star LC200 9 Pin	£19.95
4 Colour Star LC200 9 Pin (Reload)	£12.95
4 Colour Star LC200 24 Pin	£29.95
4 Colour Star 24 Pin (Reload)	£14.95
4 Colour Seikosha SL95	£29.95
4 Colour Seikosha SL95 (Reload)	£14.95
1 Colour Citizen 120D/Swift	£11.95
1 Colour Star LC10	£11.95
1 Colour Star LC200 9 Pin	£11.95
1 Colour all Star 24 Pin	£11.95
1 Colour Epson FX80/LQ400/MX80	£11.95
1 Colour Epson LX80	£11.95
1 Colour Epson FX100	£11.95
1 Colour Panasonic KXP 1080	£11.95
1 Colour Taxan/Canon 1080A	£11.95
Heat Transfer Pens 5 large red/orange/yellow/green/blue. Large pens have a marker size nib	£14.95 a set
Heat Transfer Pens 5 small red/orange/yellow/green/blue. Small pens have a fine nib	£12.95 a set

"This is only a small part of our range.
Please phone for other printer types

How to order. Enclose cheques/PO made payable to: CARE ELECTRONICS or use Access/Visa
ALL PRICES INCLUDE VAT AND CARRIAGE

Order Line 01923 894064

CARE ELECTRONICS

Dept STF, 15 Holland Gardens, Garston, Watford, Herts WD2 6JN
Tel: 01923 894064 Fax: 01923 672102

HP DESKJET CARTRIDGES

HP Deskjet Cartridge (double capacity)	£24.00 each
HP Deskjet Tricolour Cartridge	£26.95 each
HP Thinkjet/Quietjet/Commodore MPS 1270 Cartridge	£12.00 each

PRINTER RIBBONS

Don't throw away your plastic printer ribbon cases when the ribbon wears out. Just take the top off, take out the old ribbon and reload it with a new one. It's simple.Full instructions supplied. Black reloads from as little as 99p each

COLOUR PRINTER RIBBONS

Reloads for most colour printers including

Star LC200 9 Pin 4 Colour (Normal Ink)
1 Reload £5.99 — 5 Reloads £23.95

Star 24 Pin 4 Colour (Normal Ink)
1 Reload £6.99 — 5 Reloads £29.95

Citizen Swift ABC 4 Colour (Normal Ink)
1 Reload £6.99 — 5 Reloads £29.95

Panasonic KXP2180/2123 4 Colour (Normal Ink)
1 Reload £6.99 — 5 Reloads £29.95

Seikosha SL95/96 4 Colour (Normal Ink)
1 Reload £6.99 — 5 Reloads £29.95

Ink ribbons also available in Gold, Silver, Magenta, Orange, Purple, Brown, Green, Blue, Red for a wide range of printers.
Special re-ink for Panasonic printers, Star LC200 9-pin, Epson LQ100, OKI 182-390, black bottle will re-ink 100+ ribbons £9.95

NO MESS INK REFILLS FOR HP DESKJET PAINTJET AND CANON BUBBLEJETS

"CARE THREE PACK" will refill HP51608A Cartridge 3 times. The Canon BC-01/SJ48 Cartridge 3 times. Three pack available in yellow, magenta, cyan, red, green, brown, purple, black £14.98 each

"TRI-COLOUR PACK" 3 yellow, 3 magenta, 3 cyan refill £17.95
"CARE SIX PACK" will refill HP51608A Cartridge 6 times, the Canon BC/01 Cartridge 6 times
6 PURE BLACK REFILLS ONLY £24.95
Refills for a wider range of inkjets & bubblejets available.
Please state type when ordering
Print Head Recovery Fluid for unblocking inkjet/bubblejet cartridges, 18ml bottle £5.95

Tel: 01463 240168

EVERGLADE

Tel: 01463 240168

68 TELFORD ST, INVERNESS, IV3 5LS

Atari ST Budget Software

D/S= Double sided Disks

3D Pool D/S	£8·75
Action Fighter	£6·99
Alien World	£4·99
Another World D/S (1Mb)	£12·95
Battlehawks 1942	£11·49
Battle of Britain (1Mb)	£12·99
Battle of Britain F.Mission Vol 1	£9·99
Beyond the Ice Palace	£3·99
Cadaver/Pay Off D/S (512k)	£12·95
California Games 1 Skateboarding/Foot Bag/BMX Bike Racing/ Surfing/Roller–Skating/Flying Disk	£6·99
Captain Dynamo	£6·95
Chaos Engine (1Mb)	£15·99
Championship Man. Comp. (1Mb)	£22·95
Championship Run	£4·99
Colonel's Bequest	£12·95
Continental Circus	£4·99
Crackdown	£5·99
Cruise for a Corpse D/S (512k)	£12·95
Cybercon 3 D/S (1Mb)	£10·95
D–Day (1Mb)	£9·99
Defenders of the Earth	£4·95
Dizzy Prince of the Yolk Folk	£6·99
Doc Croc's Outrageous Adventure	£4·95
Dragon Spirit	£4·99
Elite II Frontier (1Mb)	£19·95
Epic (512k)	£12·95
F1 (1Mb)	£20·95
F–19 Stealth Fighter	£14·99
F–29 Retaliator (1Mb)	£10·95
Final Assault	£4·99
Future Wars D/S	£10·95
Gauntlet III	£9·99
Gemini Wing	£4·99
Graeme Souness Vector Soccer	£4·95
Gunship (512k)	£11·49
Heroquest	£7·99
Hoyles Book of Games Vol 1 D/S	£11·49
Hoyles Book of Games Vol 2 D/S	£11·49
Impossible Mission 2	£6·95
Indiana Jones & Last Crusade (Arcade Game) D/S	£6·95
Inspector Hecti in the Interchange	£4·95
Kings Quest 4	£14·95
Knight of the Sky (XL) D/S (1Mb)	£14·95
Last Ninja III	£9·95
Leisure Suit Larry 2 D/S	£12·95
Leisure Suit Larry 3 D/S	£12·95
Lethal Weapon (1Mb)	£8·99
Loom (XL) (512k)	£12·95
Lotus Esprit–Trilogy. Lotus 1,2 & 3	£14·95
Manchester Utd	£5·95
Manhunter in New York	£12·99
Manhunter in San Francisco	£14·95
Maniac Mansions	£10·95
Matrix Marauders	£4·99
Midwinter	£10·95
Midwinter 2 Flames of Free (1Mb)	£14·95
Neigbours	£4·95
Obsession (Demo)	£2·99
Obsession (Full Game) (1Mb)	£24·95
Operation Stealth	£12·95
Parasol Stars (1Mb)	£8·99
Police Quest 1	£12·95
Police Quest 2	£13·95
Populous II (1Mb)	£12·95
Reach for the Skies	£12·95
Realms	£10·95
Robocod – James Pond 2	£8·99
Secret of Monkey Island (1Mb)	£14·95
Seven Gates of Jambala	£4·99
Simpsons Vs The Space Mutants	£8·95
Skidz	£7·99
Smash T.V.	£6·99
Shuttle	£12·95
Space Quest (1Mb)	£12·99
Space Quest III	£12·95
Speedball II D/S (512k)	£8·75
ST Dragon	£6·99
Streetfighter	£8·99
Streetfighter 2 (1Mb)	£12·95
Stunt Car Racer	£6·95
Striker D/S	£7·99
Sub Station (1Mb)	£22·95
Super Monaco G.P.	£8·75
SwitchBlade II	£6·95
Tennis Cup 2 D/S (512k)	£8·75
The Jetsons	£4·95
Treasure Island Dizzy	£4·95
Windwalker	£4·95
Winter Gold (512k)	£12·95
X–Out	£6·95
Xenon II	£8·75
Z–Out	£6·95
Zak Mckraken & Alien Mindbenders D/S	£10·95

MOUSE MATS

Colour Blue, Red or Black	£1.99

ACCESSORIES

Atari ST Replacement TV Cable	£3.95

DISKS

10 Ex Cover Disks	£2.99

ITEMS SUBJECT TO AVAILABILITY. PRICES SUBJECT TO CHANGE WITHOUT NOTICE.
UK POSTAGE IS FREE. EUROPE £2 PER TITLE. REST OF THE WORLD £3.50 PER TITLE.

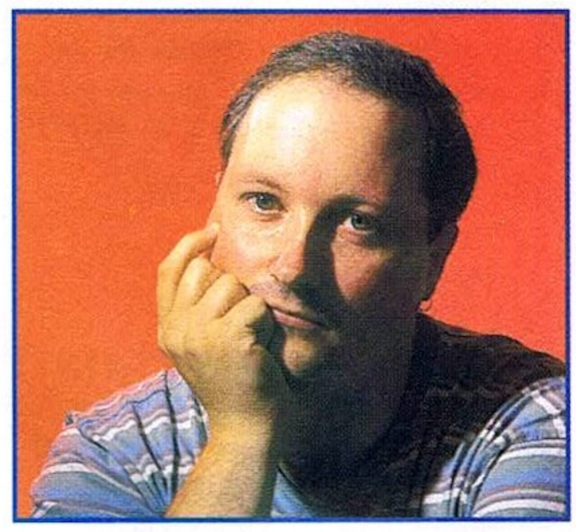
Access VISA

Atari ST Budget Software

Atari ST Budget Software

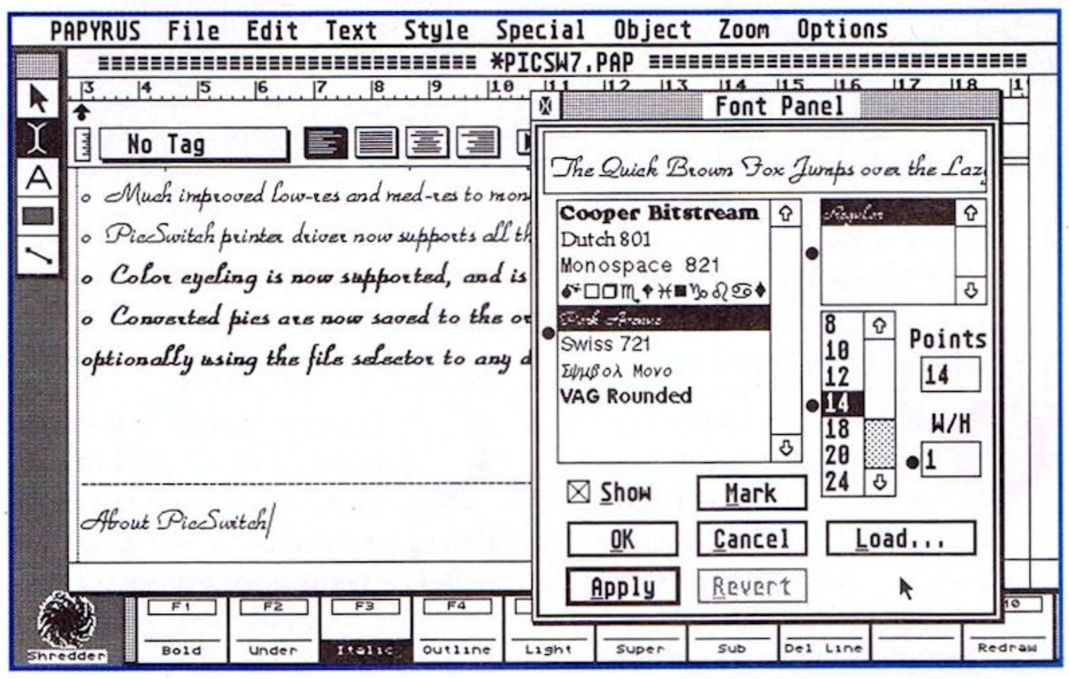
ST Answers

Once again Dr Clive Parker dons his white coat and tours the wards of the ST hospital. What an angel of mercy.



PAPYRUS GOLD

Q I was so impressed with the review of *Papyrus Gold* in *ST FORMAT* 63 that I'm going to buy the program. I want to know if it's possible to run *Papyrus* (with SpeedoGDOS) on a 2MByte STE with twin floppy drives and the *Sebra* mono emulator? Or should I get a mono monitor for optimum quality?
Edward Cooke, Stafford



You *can* use *Papyrus*, SpeedoGDOS and a mono emulator on a 2MByte, twin-floppy disk system, but you'd certainly be pushing your ST right to the limit.

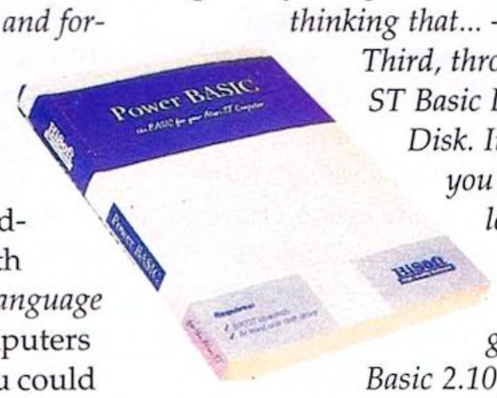
A *It is possible to run Papyrus Gold and SpeedoGDOS on the system you describe... just. Using twin floppy drives will seriously slow down your productivity rate, especially if you are using several fonts or using a lot of images in your documents. As always, I recommend that you invest in a hard drive. They're not that expensive, and they really make your system easier to use.*

For a top quality display, and less chance of eye-strain, you should seriously consider getting a high-resolution monitor. Although mono emulators like Sebra are an excellent temporary solution, you are only viewing half of the 400 vertical lines of the high resolution screen. This inevitably leads to a false idea of the actual image on the screen – it's a very good approximation, but that's all it is. If you are working on a document where vertical accuracy is important, using a mono emulator could lead you slightly astray. My definitive answer would be to get a high-resolution monitor.

If you don't need sound output from your monitor, the System Solutions SM14 is the perfect solution, and only costs £129.95. If you do need sound from your monitor (don't forget, your STE has separate audio outputs) the SM14s monitor has built-in speakers. Both versions of the monitor have a top-quality crisp 14-inch display. You can order the monitor from System Solutions on ☎ 01753 832212. You should also consider getting a Gasteiner (☎ 0181 345 6000) 120MByte hard drive for £199, or a 270MByte drive for £249, including the Top Link host adaptor and formatting software.

BLATANT PLUG

Q I've bought a second-hand Atari STE, with manual and *Basic Language Disk*. I'm totally new to computers and would be grateful if you could tell me where to get informative and instructive manuals. I'm keen to learn how to use my STE.
Paul Saint, Derbyshire



A *Glad to help, Paul. The first thing you should do is place an order for ST FORMAT at your newsagent, or turn to page 72 to subscribe. ST FORMAT always brings you the best tutorials and reviews for the Atari ST.*

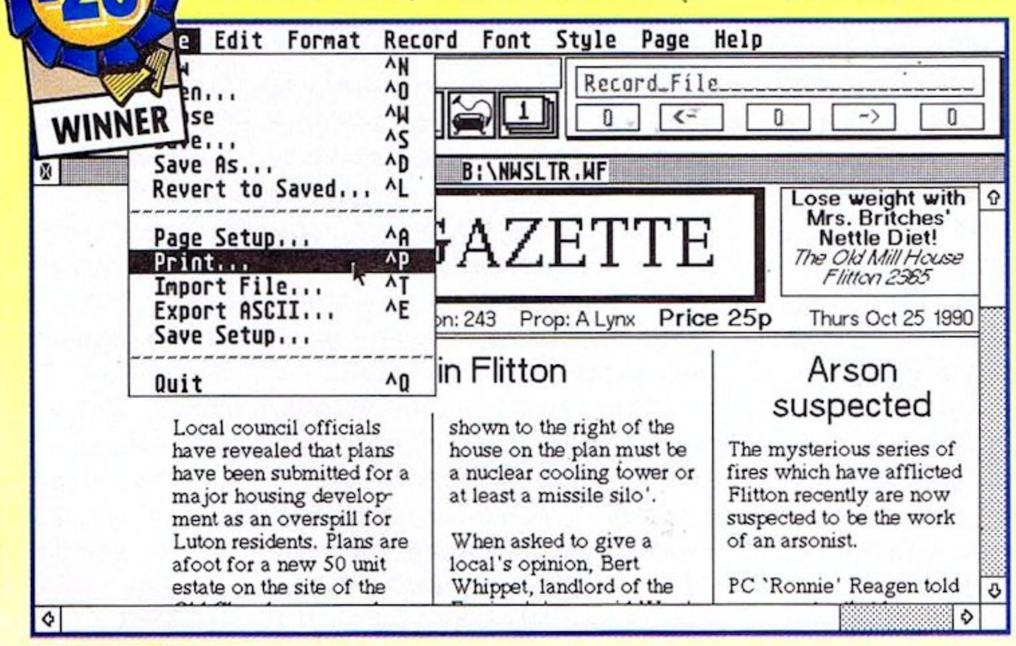
Second, you should consider buying a book called Getting the Most Out of your ST 2 by some bloke called Clive Parker. It costs £9.95 and you can get hold of it by calling Future Publishing ☎ 01225 822511. It guides you through the intricacies of setting up and using your ST, has a wide selection of recommended commercial, shareware and PD software, and includes an extensive reference section, including company directory and a glossary. It's great. (Fancy you thinking that... – Karen)

Third, throw away the ST Basic Language Disk. It's crap. If you want to learn programming you should get HiSoft Basic 2.10 from

WORKING WITH FLAIR

If your ST has a single-drive system, you've probably come across problems when trying to use *Wordflair* (which we gave away on Cover Disk 52) with GDOS. *Andrew Teggert from Durham* has come up with a solution, and we liked it so much, we're sending him a crisp £25 note *(eh? – Karen)* as a reward. You'll need 1MByte of RAM at least, and while you may be restricted to just a couple of fonts on 1MByte systems, there should be no problems on STs with 2MBytes or more.

You can use *Wordflair* on a single-drive system without GDOS, but you won't be able to print, and you'll be restricted to using the system font. The answer is to use GDOS from *ST FORMAT* Cover Disk 54, where it's supplied for medium and high resolution systems in easy to install, self-extracting files. Here's what you do.



***Wordflair*, in stunning high-res action. Now you can use it with GDOS, even if you have a single-drive system.**

1 Copy the version of GDOS for your system (medium or high) to a blank, formatted disk. Use an extended format of at least 80 tracks and 10 sectors to give you more room on the disk. Run the GDOS file – it will unpack, revealing all the files required. This is your GDOS boot disk.

2 Delete the self-extracting file from the GDOS boot disk – it's called either GDOS_MED.TOS or GDOS_HI.TOS depending on which system you have on your ST.

3 Now copy the files WF.PRG, WF.RSC and WF.SET to the root directory of the GDOS boot disk that you have just created. There should be enough room, so longs as you used an extended disk format, as the *Wordflair* files only take up about 400K.

4 Now boot up your ST from the GDOS disk you've just created. Once you've loaded *Wordflair*, you can remove the disk and start creating documents on data disks.

HiSoft/AVR. It costs £99.95 but it's worth every penny, because it's the best version of BASIC you can get for the ST. Call HiSoft/AVR on ☎ 01525 718181 to order a copy.

WRONG CONNECTION

Q I'm using a ViewTek 12-inch greyscale monitor with my Atari STFM, and the display is fine, but I've lost the sound from my games. The lead that connects to my STFM has a 13-pin DIN plug for the picture and two phono plugs, red and white, which I presume are for the sound. Unfortunately, there are no sound output sockets on my STFM.

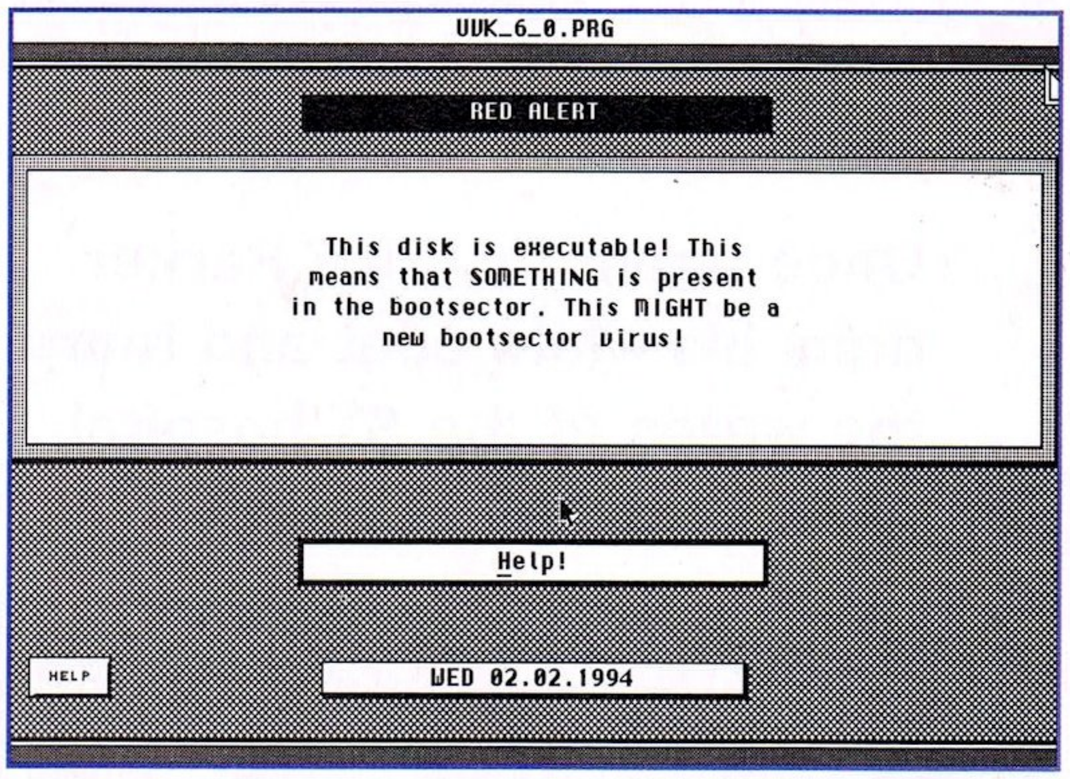
When these two plugs are disconnected, there's a loud humming noise from the monitor. If I plug the white plug into the TV port the humming stops.

The cable is in two parts, with the computer end removable. I presume this is to enable different computers to be used with the monitor. Where can I get the correct cable?

Pat Rooney, County Down

A *Ha. I expect everyone is waiting for me to trot out the usual 'contact Meedmore for all your cables' routine. Well, I'm not going to, this time.*

What you should do is contact the suppliers of your ViewTek monitor and ask them for the correct lead. You've been supplied with a lead for an STE, whereas you need a lead for an STFM. If your supplier doesn't have the correct lead, although they should have both, you can order one from Silica Systems for £9.95. The part number for the STFM version is CAB 5912, and you can contact Silica Systems on ☎ 0181 309 1111.



If you have virus problems with your ST, you need to get hold of *The Ultimate Virus Killer* from Douglas Communications. It only costs £9.95 and you can order it from Reader Offers, on page 77. Whichever way you look at it, it's well worth the cost.

NOT A VIRUS

Q I have a virus in my STE. The Desktop doesn't appear when I switch it on – all I get is a line of bombs with a bee icon over one of them. Once I had a message on screen telling me I had the ghost virus in memory, but I can't use my virus killer disks because I can't get any disk to load. Please can you help?

T H Nott, Leeds

A *This isn't a virus problem. Your ST has a physical problem. Viruses are programs, made up of code just like any other software. When your ST is running they're stored in memory, and when you switch off your ST they're erased.*

Contact First Computer Centre on ☎ 0113 231 9444 – they're not far away from you. They'll take a look at your ST and tell you what's wrong with it, and they don't charge for the quotation, so you can't lose, really.

SUCH A GEM

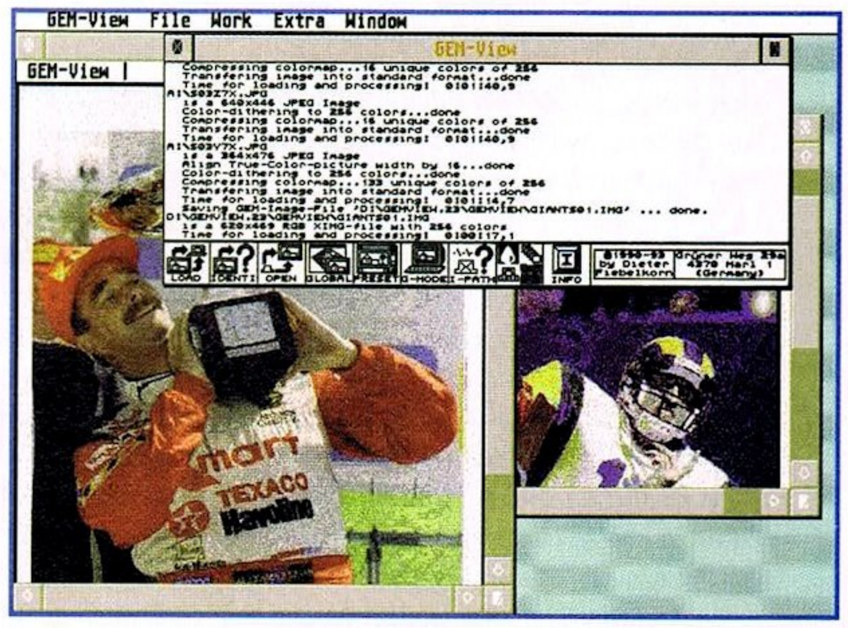
Q I've just bought a second-hand Atari ST and I'm looking for an art package that saves in GEM Image (IMG) format. I can only afford to spend about £25. And can you tell me where my nearest PD library is?

Philip Poole, West Midlands

A *Believe it or not, you're looking for Hyperpaint 2, the art program we cover in more detail later, which appeared on Cover Disk 54. Unfortunately, this issue is no longer available from our back issues service – it was so popular it sold out. You could try placing an advert in our reader ads section (page 74), and hopefully someone will be only too happy to help you out.*

Alternatively, you could use a program that converts other picture formats to IMG format. Try GEM-View 3.1 (available from any PD library) which converts almost any picture format to any other format. It's shareware, and if you don't register within 30 days many of the functions become disabled. It only costs £18 to register, and full instructions are included with the program.

If you want to find your closest PD library, take a look at the ST Directory on page 75. I'm not too good at geography, but it looks like Highlander PDL near Stafford is your closest library – give them a call on ☎ 01782 48735.



GEM-View, one of the finest image conversion programs, covering over 30 image formats. It's the conversion utility of champions (and Clive Parker).

DEAD SCANNER

Q I've just bought a second-hand MegaSTE with 4MBytes of RAM and TOS 2.06. After using the MegaSTE for a while I found that my Golden Image hand scanner didn't work properly with *Touch Up 1.65* or

SCANNER SETUP

The hand scanner very nearly became outlawed in the late '80s, and not only because it produced wobbly, distorted images in the hands of beginners. Billy Turpentine, aged 7, spent four painful days having one removed.

I have a 1MByte STE with an external floppy drive. I'm thinking of getting a hand scanner to add diagrams to my essays. Can you recommend any models and tell me what kind of quality I can expect with my setup?

C C Kee, London

stf: Exactly the same quality as you would get with a single-drive setup and a 512K STE, to be honest. Memory and number of floppy disk drives don't affect the quality of a scan, although you can make bigger scans with 1MByte of RAM than you can with 512K. On the other hand, the scanning software and the resolution of your monitor can affect the scan quality.

You normally get a much better-looking scan (on screen) using high resolution than you get with medium res, because medium resolution screen images are stretched vertically. Practically, this means that while the scan may have been made at a resolution of, say, 100dpi horizontally by 100dpi vertically, the medium resolution rendering of this image is 100dpi horizontally by 50dpi vertically. When you copy the image, perhaps in Degas format, into your document processor, the image is stretched vertically. So I'd recommend a high resolution monitor for scanning work.

Almost all ST hand scanners use the same hardware but have different scanning software. Probably the best we've seen is the Zydec Hand Scanner, which is supplied with the Daatascan Professional scanning software. You can get the Zydec scanner for £99.99 from Ladbroke Computing International ☎ 01772 203166.

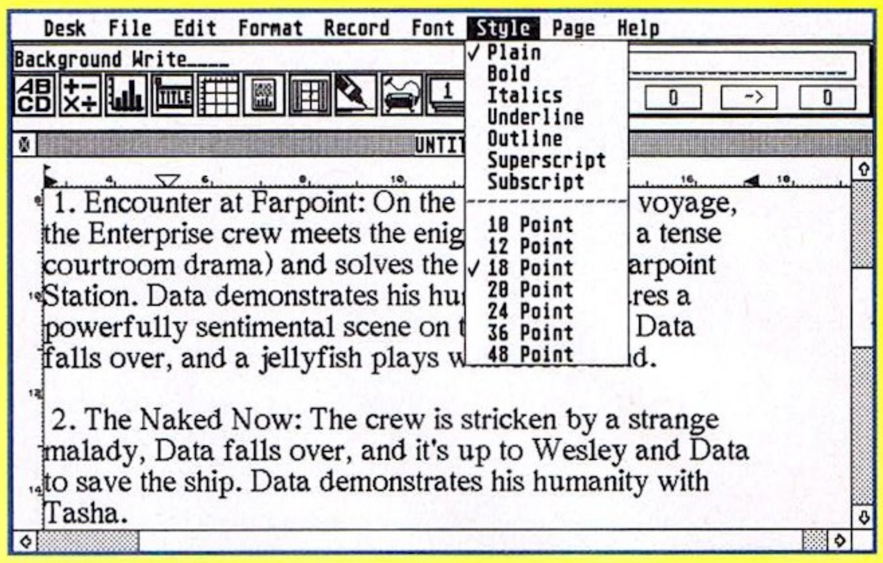
MORE JOY OF GDOS

In a fit of generosity, we gave away *Hyperpaint 2*, complete with GDOS, on Cover Disk 54 of *ST FORMAT*. Although we printed full instructions in the Cover Disk pages at the time, *Dave Borg (Borg!) of Faversham* and several other readers want to know how to install GDOS and *Hyperpaint 2*, because they've lost their copies of the mag. As long as they didn't throw it away...

We supplied two different GDOS setups on the Cover Disk. These were rather fetchingly named GDOS_HI.TOS and GDOS_MED.TOS, and were the product of several days experimentation to find the easiest way to install them. In contrast to other Cover Disks featuring GDOS, all you had to do to install the *ST FORMAT* versions was double-click on them. Skill and judgment, eh?

Install that sucker

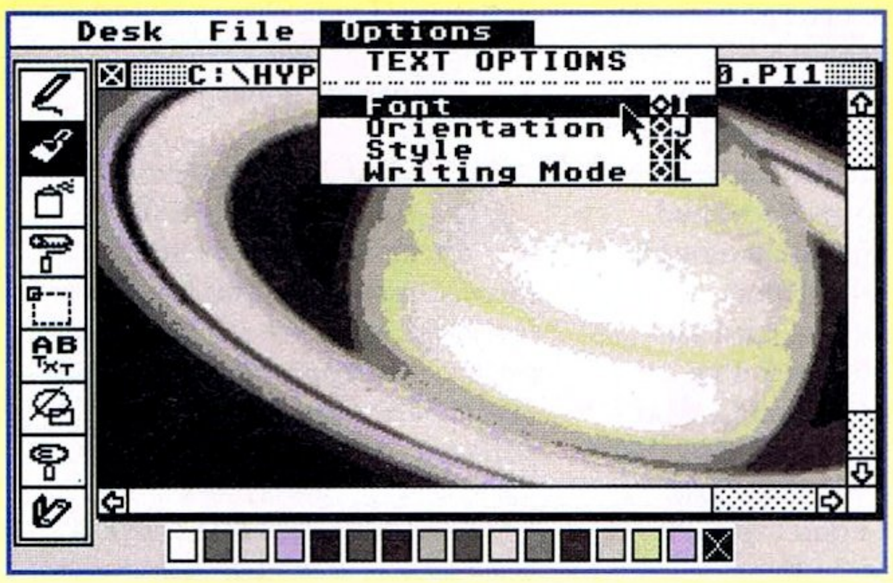
If you use a high resolution monitor, or if you want to use GDOS fonts in low resolution colour, you have to install the GDOS_HI.TOS file. The fonts and drivers included in the GDOS_MED.TOS only work in medium resolution colour, which means that if you want to use GDOS on a colour system in low and medium resolutions, you must set up a separate GDOS boot disk for each resolution.



See? You can use GDOS in lots of software. Here we are in *Wordflair*. That's two *Wordflair* piccies already this month.

Hi-ho, hi-ho...

Because GDOS files take up loads of disk space, you must format your work disks to 10 sectors and 80 tracks. If you don't, you won't be able to fit everything on the disk. Copy GDOS_HI.TOS to your work disk and decompress it. After it has decompacted, delete GDOS_HI.TOS from the work disk. Next, copy the HYPERPNT.TOS file to the disk and double-click it to run it. When all the files have decompacted, erase the HYPERPNT.TOS file from the work disk. Now all you have to do to install GDOS into memory is press the reset button of your ST. GDOS cleverly installs automatically when your ST boots up.



..it's off to work we go

If you're using a medium resolution setup, the installation procedure is exactly the same except that you copy the GDOS_MED.TOS file instead of the GDOS_HI.TOS file to the work disk.

Using GDOS with *Hyperpaint 2*, or any other GDOS-compatible software, enables you to use loads of fonts and styles in your text.

Not much memory, huh?

If you only have a 512K ST then you may have to disable some of the fonts because of low memory problems. The easiest way to do this is to edit the ASSIGN.SYS file using a text editor. Load the ASSIGN.SYS file into your text editor and make the following changes.

Disable a specific font by placing a <;> before the name of the font listed in the ASSIGN.SYS file. This changes the line from a GDOS command to a GDOS comment, and the program won't try to find the font and load it.

In the same way, you can disable any of the other fonts by inserting a <;> before the font name in the ASSIGN.SYS file. When you have edited out the fonts, save the ASSIGN.SYS file back to the GDOS boot disk in ASCII format. If you want to add extra fonts to your setup from a PD library, simply add their names to the ASSIGN.SYS file and copy the fonts to the GDOS.SYS folder.

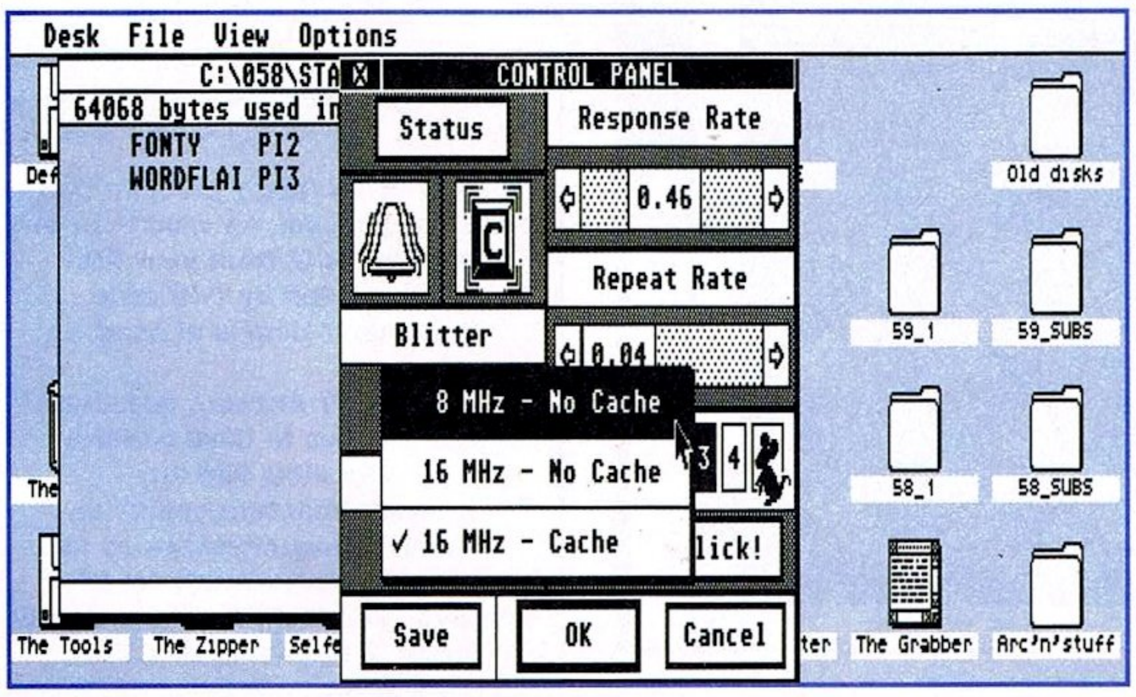
Touch Up 1.8. All the drawing functions work, but the scanner doesn't light up. The hand scanner works perfectly with my STE using TOS 1.62, and the cartridge port on my MegaSTE works with the Spectre GCR Mac Emulator cartridge and software. I think this shows that it is not the cartridge port that's causing the problem.

Mr P H Finch, Morden

A *There could be a couple of reasons why the scanner doesn't work with your MegaSTE. First, it may not work with TOS 2.06, but with so many people upgrading their STs to TOS 2.06 using TOS switchers, this reason seems to be the least likely – particularly as we haven't had any reports of upgraded STs failing to work with the Golden Image hand scanner so far.*

Second, and more likely, the scanning routines built into Touch Up don't work with the processor running at 16MHz, which is the default running speed of the MegaSTE. Another factor may be the processor cache – some software only works with the cache disabled.

It's dead easy to alter the processor speed on the MegaSTE using the XControl panel. Select the General CPX from the XControl menu, and click on the option labelled either 16MHz – Cache or 16MHz – No Cache. Select the 8MHz – No Cache option and click on the OK button. If you want your MegaSTE to run at 8MHz whenever you boot up, select the Save button instead. Your scanner software should now work.



Slow your MegaSTE down using the General CPX to enable non-compatible software to work with it.

FRIENDLY ADVICE

Q I've just got a second-hand STE with 1MByte of memory with the *Family Curriculum Pack* and *Steinberg Pro 24 v3* bundled with it. I bought the STE so that I could use it with my Casio and Yamaha MIDI keyboards and for word processing.

I'm not familiar with ST software – how would you rate *Pro 24* and *ST Word*, the word processor that's bundled with the *Family Curriculum Pack*? I don't want to spend more than £50 on new software, but I'd like a WYSIWYG word processor. Should I bin either of the programs?

Michael S Bowles, Bristol

A *Well, ST Word isn't that good, so you may consider chucking it in the bin. There are a couple of replacement options you could consider. Protext 4.3 isn't a WYSIWYG word processor, but it is very powerful and enables you to control your printer's built-in fonts using control codes embedded in the text of your documents. You can get hold of Protext 4.3 from Arnor ☎ 01733 68909 for just £29.95.*

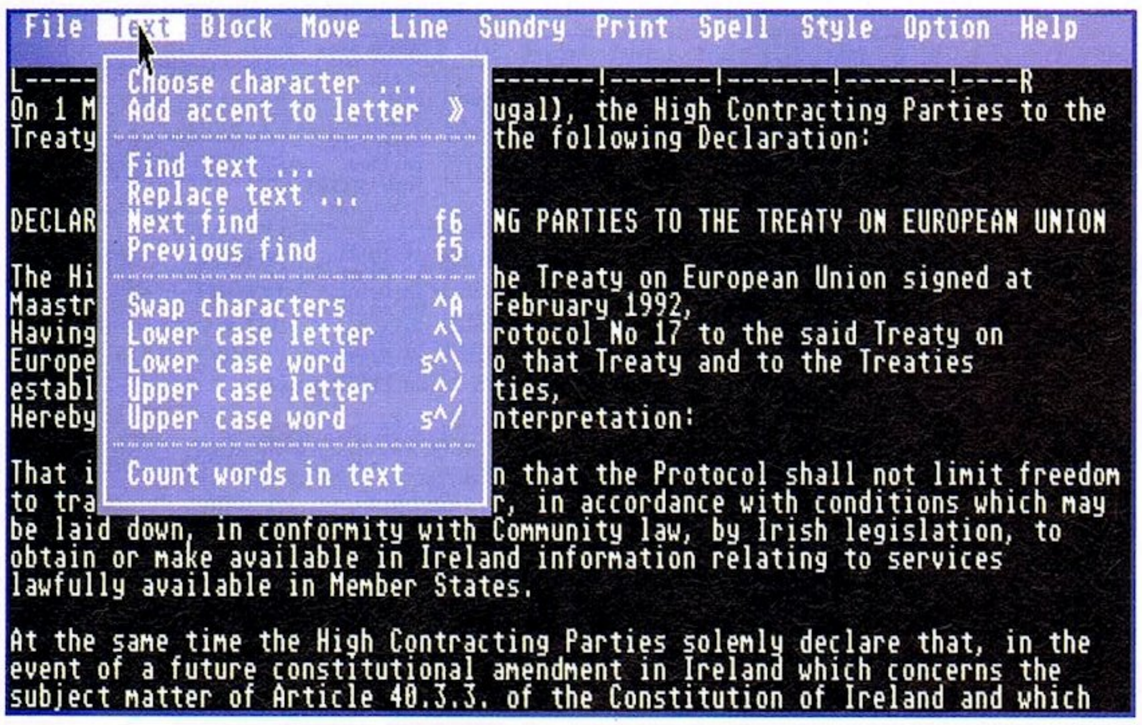
Because of your limited memory, the main word processors that use SpeedoGDOS fonts won't work on your system. Why not consider upgrading to 2MBytes or 4MBytes of RAM? This would be helpful for your MIDI work, too. You can get memory upgrades from Compo Software ☎ 01487 773582 – they're £50 for 2MBytes and £99 for 4MByte.

Compo are still selling copies of Write On for about £29.99. It's an excellent word processor offering WYSIWYG and has its own font system. Give Compo a call for more info.

Pro 24 v3 is an excellent MIDI package that was used by professional musicians before Cubase came along. If you're using MIDI at home as a hobby then Pro 24 will cover your needs perfectly adequately. Remember that you need a high resolution monitor to get the best from it.

LOST RECORDS

Q I've been using a MegaST since 1987 to help run my practice. I have *Superbase*



This month's gratuitous *Protext* picture is in colour and shows the impressive range of text options in this powerful and inexpensive word processor.

Professional and a Triangle Turbo Drive. Unfortunately, my ST has stopped reading the hard drive and tells me that the partitions are not available. I no longer have the original software, which a local repair shop says I need to recover the drive, and Triangle are no longer in business. I've lost over 3,000 records of my patients and I don't have a backup – not entirely my fault because none of the back-up software I have tried has ever worked. Do you know where I can get the Triangle software?

Richard Harris, Dublin

A Bad news for you, Richard. It's unlikely that you can get the data back even if you found the correct Triangle software. All you'd be able to do is reformat the disk.

This problem illustrates that you should always back up important information. Even if you can't get your back-up software to work, you could still use the Save option in Superbase to save records to floppy.

You may be able to save your drive using software like Diamond Edge and Knife ST from HiSoft/AVR ☎ 01525 718181, but you should resign yourself to the fact that the information is probably gone forever. For backing up hard drives, Diamond Back 3, also from HiSoft, works with all hard drives, and you should make a backup at least once a week.

READING CD-ROMS

Q I'm using a 1040STE with 1MByte of RAM and I want to use a CD-ROM drive. I thought about using my Top Link host adaptor, but do I need special software to read CD-ROMs? If so, where can I get it? There is nowhere in Malaysia that supports Atari; do you know of any suppliers in Asia?

Joseph Wang Hsiu Yu, Kuala Lumpur, West Malaysia

A You do need extra software drivers to read CD-ROM discs. The best drivers we've seen are the ExtenDOS and ExtenDOS Pro software. They are both simple to install, and work with all CD-ROM drives. ExtenDOS is no longer available from System Solutions, but you can order ExtenDOS Pro, using your credit card, for £39.95. Contact System Solutions on ☎ +44 1753 832212, but remember the time difference before you call! Unfortunately, I'm unaware of any Atari dealers in the Far East.

WHICH WORD?

Q I'm a Kenyan student at Manchester University. I want to buy a good word processor to take back to Kenya to use on my Atari STFM. I'm also taking a hard disk when I go back. My STFM has 4MBytes of RAM. I can't spend too much, and I don't want something too sophisticated, but I want a good word processor that will enable me to produce good quality documents containing pictures and a variety of fonts.

Up till now I've used *1st Word*, but I'm tired of it. I've looked at *Write On* from Compo and *Redacteur* from FaST club, but I can't make up my mind as to which is better. I don't want to get one and discover in Kenya it's not the best one. Please help me and advise me to make a good selection. Namaste!

Anand Buddhdev, University of Manchester via e-mail

A Write On from Compo Software is probably the least expensive option for you to take. You can get Write On direct from Compo Software for £29.95, and it has 14 fonts supplied as standard and enables you to import images into documents. It would be a good idea to let Compo know the printer you are going to use with Write On, as you may need an extra disk with the correct drivers.

You can contact Compo Software on ☎ 01487 773582 for the latest details of all their products.

SPEAK TO ME

Q I'm confused. Having recently purchased a second-hand Atari STE for MIDI sequencer use, I would like to add a hard drive. Now the confusion: what is a Top Link Controller? What is the Translator? Which should I choose?

My setup comprises an Atari STE upgraded to 4MBytes, *Emagic Notator SL 3.21* and *Unitor2*.

Tim Cooper via e-mail

A Okay, Tim. Pay attention now. Both the Top Link and the Translator are SCSI (Small Computer Systems Interface) host adaptors, plug-in connectors that enable you to connect any SCSI device to your STE via the DMA (direct memory access) port. To be honest, there's not much difference between the two different devices. Both devices look like standard hard drive leads with an extra large plug at the business end that plugs into the SCSI device. This can be a hard drive, CD-ROM drive or any other kind of SCSI drive like magneto-optical drives.

*Gasteiner supply the Top Link with their hard drives and System Solutions supply the Translator with their hard drives. Formatting and driver software is supplied as standard with both types of host adaptor. So really, you need to choose your hard drive and just accept whichever adaptor they supply with it. You can buy the adaptors on their own if you already have a SCSI hard drive. The Top Link costs £40 from Gasteiner on ☎ 0181 345 6000. The Translator, from System Solutions ☎ 01753 832212, is £69.95 without driver software, or £79.95 with software. **stf***

You can use superb images from Kodak PhotoCD when you run *ExtenDOS* on your ST.

ANY TROUBLE?

Is there some niggly problem that's been worrying you for months? Can't tell your SCSI from your IDE? Freaked out by TOS error messages? Help is at hand...

Send your ST Answers questions, hints and tips to Clive either by e-mailing him at: cparker@futurenet.co.uk or clive@netmag.cityscape.co.uk or post them directly to: ST Answers, *ST FORMAT*, 30 Monmouth Street, Bath, Avon, BA1 2BW.

THE UPGRADE SHOP
TEL 01625 503448

All prices include VAT @ 17·5% but exclude delivery. 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 stated.

SPECIAL OFFERS

HARD DRIVES

New Series 100c hard drives from T.U.S Developments. Superb metal case (vertical or horizontal mounting), very quiet cooling fan, internal power supply, Device selector, dual SCSI parts and interface for ST or Falcon.

✷ Introductory Offers ✷

234Mb system for the ST series .....£264·00
234Mb system for the Falcon .....£249·00

TOS 2·06 SPECIAL

STE KIT
Solderless installation, with switcher and Tos manual .....£49·00
STF/STFM
Fitted with switcher and Tos manual .....£59·00
HIGH DENSITY DISK DRIVE
HD Module & 2 Mb Drive.....£58·00
HD Module .....£25·00
STE SPECIAL
Tos 2·06 + HD Module + Drive.....£99·00

HIGH DENSITY EXTERNAL DRIVES

Quality 'metal-cased' external Disk Drive with power supply.
High Density drives read/write to both normal DSDD and DSHD disks with fully automatic switching.
High Density (2Mb) Drive with controller.....£79·99
High Density (2Mb) Drive, no controller .....£59·99
Double Density (1Mb) .....£59·99

PARTS

NEW PLUG IN POWER SUPPLY
Includes power socket, switch and pedestal - no soldering .....£32·99
INTERNAL REPLACEMENT DRIVE KIT
1 or 2Mb Drive supplied .....£39·99
KEYBOARD .....£49·99
MOTHERBOARDS (call for availability)
290 DPI replacement mouse .....£9·99

MEMORY UPGRADES – LOW, LOW PRICES

MARPET XRAM DELUXE

STF/STFM. Same day fitting £15.
XRAM UNPOPULATED .....£24·00
520 to 1Mb .....£32·99
520 to 2Mb .....£69·99
520 to 4Mb .....£109·99
1Mb XRAM and DOUBLE SIDED DRIVE .....£72·00

STE KITS. With instructions and test software. Same day fitting £7·00
520 to 1Mb .....£8·99
520 to 2Mb .....£45·99
520 to 4Mb .....£89·99
FOR OTHER VARIATIONS ON UPGRADES PLEASE CALL

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 overscan 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.

FITTING SERVICE AVAILABLE ON ALL UPGRADES FOR £15·00

MONITORS

All monitors include a Tilt and Swivel stand

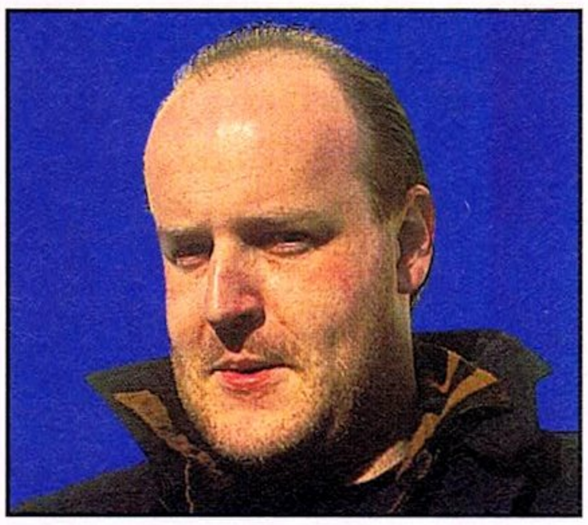
TUS 14" Mono Monitor for ST Series without sound £89.99
TUS 14" Mono Monitor for ST Series with sound £99.99
TUS 14" Colour for Falcon .....£229·00

SPECIAL OFFER PRICES

DELIVERY: Small items under £60 please add £3 p&p. Large items and orders over £60 add £7 courier charge. Courier pickup for Upgrades and Repairs £7.
Monday-Friday 9am-6pm. Saturday 9am-5pm.
Technical support: Tues, Wed, Thurs 6.30pm-8pm
Same day service available for upgrades and most repairs. Please ring before you bring.

The Upgrade Shop
37 Crossall Street, Macclesfield, Cheshire SK11 6QF

Access VISA



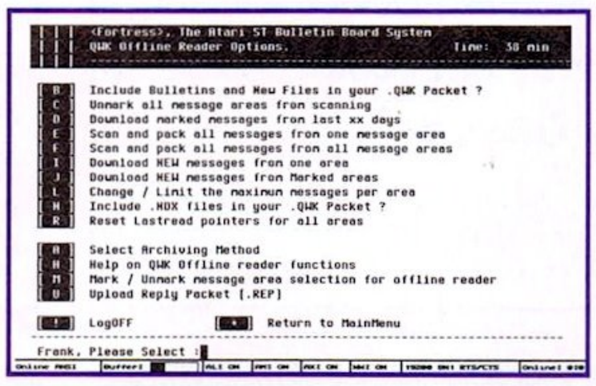
Frank Charlton chortles and chuckles childishly, as complex comms conundrums constantly cause concern... *(Oh stop it! – Karen)*

alt.comms.stf@

Having looked at the off-line mail readers available last month, this month we give you a rough guide to setting things up at the BBS end and downloading your first packet of mail

The most common BBS programs used on Atari systems are *QBBS*, *RatSoft* and *Octopus*. Each has its mail system, but all support the QWK standard mentioned last month. *Octopus* has the facility built-in; the others use separate 'door' programs.

When you use the system for the first time, there are several settings you'll have to deal with before you go any further. Each system is slightly different, but in the panel below you'll find the generic stuff that applies to all of them. If you can't find the options mentioned, ask your SysOp to point you in the right direction. Your package may have other options – newer mail doors can do all sorts of funky things. *HoloQWK* on QBBS systems is very advanced, and can even compress your mail while you're off-line to save time. Ask the SysOp, or better still, read the on-line help file.



All mail systems are alike, and most have an on-line help file. Make sure you read it!

Off-line mail enables you to explore areas that you wouldn't normally have time for.

Don't let millions of options faze you, when you're using mail readers. Ask the SysOp if you get stuck.

If you aren't Net connected, ask your SysOp if he's a member of the excellent NeST BBS network. You can reach me in the NeST Comms area, or by direct mail to 90:100/309. Your SysOp will help you with advice on direct netmail if you're unsure.

Time for action!

It's time to get your first packet. The BBS will have an option labelled Pack and Download, or just Download. Set this in action, and you will see a status display as packing commences. When it's done (presuming you're using ZModem) the file is transferred to you without you doing anything else. If you're using YModem, you'll have to start the transfer when the BBS tells you to – check your comms package for how to do this. With old protocols like XModem, you even have to specify the filename you want to save to disk.

Once off-line, you can fire up your QWK reader. Each reader differs in operation, so make sure you read all of the documents supplied. Off-line readers may seem like complex beasts, but actually reading the manual demystifies things. Remember, we were all beginners once, and comms users are the friendliest guys around. Just ask around if you need help, and you'll get it!

Contact Frank at the ST Answers address (page 52) or at the following on-line addresses:
frank@tachyon.demon.co.uk
stformat@cix.compulink.co.uk
Frank.Charlton@adlib.centron.com

GENERIC SETTINGS

Upload/Download Protocol: the method used to send and receive the files over the modem. ZModem is by far the fastest and most efficient – if your comms program doesn't support ZModem, get a better one! That may sound harsh, but ZModem has an important advantage: it's the only protocol with the ability to resume an interrupted transfer from the point you left off. If you're near the end of a 200K download and the connection is cut, you don't have to start all over again from the beginning when you call back – you just download the remaining part of the file.

Archiver: the system used to squeeze all of the mail files into a single, tightly compressed bundle. All BBS QWK doors should support LZH or ZIP compression formats, and you'll find the software you need in the BBS file areas. Look for *STZip 2.6* or *LHarc 3.1*. It's up to you which you use, the difference between them is minor.

Select Conferences: here you tell the mailer the message areas or conferences you want to keep tabs on. It's worth bearing in mind that some areas are echoed across the world, and can bring in vast amounts of mail. Experiment with a few areas until you get the hang of things. It's also worth sticking with local areas, which don't go any further than the BBS they're on, until you're confident that your message posting is going well. This way people all over the globe aren't paying for the dubious privilege of seeing you say 'Hello? Testing...' or other equally important messages for the 40th time in a week...

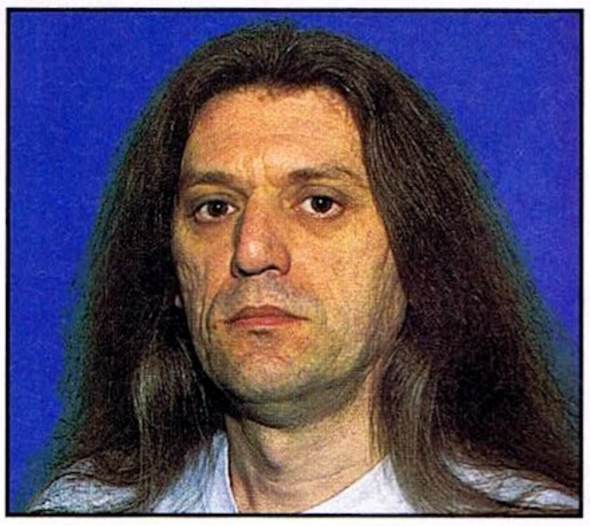
Bulletins: some doors send you any bulletins written by the SysOp, or lists of new files. Disable this if you don't want them sent to you.

Index Generation: Some mail readers can work without an index file being sent. If you don't know whether yours does, just leave it enabled.

From You: specifies whether or not you want copies of your own messages sent in the next download. Don't just assume your messages went through without problem – leave this option switched on for a few sessions to make sure.

Limit Messages: using this you can stop the mail door from packing more than a certain number of messages per packet. This is particularly handy if you want to keep file sizes down when running from floppy disk.

Reset Lastread: the BBS keeps a set of pointers so it knows which messages are new for you. Some doors will enable you to set these, either to the last call, or manually to a certain point. You need to use this carefully, but it's useful if you lose some mail and want to get it again.



This month Don Maple treats you to a couple of secret Falcon tips, because assembly hackers like to poke around and discover things not apparent to other, mortal programmers.

Assembly Line

First a word of caution. Fooling around with secret registers or NVM can do very rude things to your Falcon – going as far as locking you out or even blowing up your monitor – so please be careful when experimenting. You have been warned!

The 'secret' Falcon registers at $FFFF8006 and $FFFF8007 do some impressive but undocumented things. Take a look at Panel One for what is known so far. Naturally, you only access these registers in the supervisor mode.

Not very much

NVM actually stands for Non-Volatile Memory but not very much is known about it. These 50 bytes of RAM reside within the real-time clock chip. Since this memory – like the clock – is powered by a battery it 'remembers' even when the computer is turned off, so it's used to save various defaults. Take a look at Panel Two.

To read from or write to NVM, you would use the XBIOS function provided for this very purpose. Take a look at Panel Three.

Bear in mind that 'op' can be one of the following:

0 read NVM and confirm checksum
1 write NVM with new checksum
2 initial NVM

In case of NVM trouble you can still boot with a monochrome ST monitor, because NVM settings are then ignored.

Dear Don

Thanks to long lead times I'm yet to received any feedback from you. So let me remind you that if you have any 'Dear Don' questions about assembly please do write. If you have suggestions and nifty code snippets – so much the better! I might even rustle up a small reward for the best offering from the powers that be – right, Ed? :-)

So I bid you farewell with yet another (feeble) assembly pun... RTE until next exceptional column!

If you have any questions about assembly programming, send your queries to Don Maple at the usual ST Answers address (page 52) or on-line to: donm@ucon.gun.de

PANEL ONE

```
$FFFF8006 (byte)

bits 1&0 - monitor select
    %00: ST monochrome monitor
    %01: ST colour monitor
    %10: VGA colour monitor
    %11: RGB monitor (TV)

$FFFF8007 (byte)

bit 5 - STe bus mode: %0=on, %1=off
bit 2 - blitter speed: %0=8MHz, %1=16MHz
bit 0 - CPU speed: %0=8MHz, %1=16MHz
```

PANEL THREE

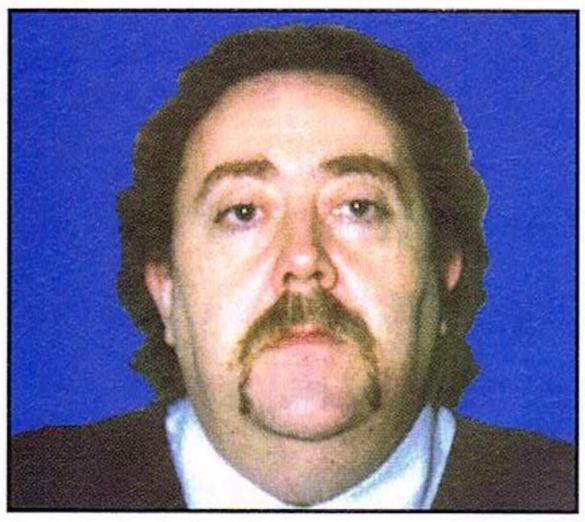
```
pea buffer              ;where to read/write
move.w count,-(sp)      ;number of bytes to do
move.w start,-(sp)      ;offset to first byte
move.w op,-(sp)         ;type of action
move.w #$2e,-(sp)       ;XBIOS 46, NVM access
trap #$e
lea $c(sp),sp           ;restore stack
```

PANEL TWO

```
$00 - B, boot after reset (TT)
    $00 - no preference (default)
    $40 - Unix
    $80 - TOS

$06 - B, Desktop language
    $00 = English
    $01 = German
    $02 = French
    $04 = Spanish
    $05 = Italian

$07 - B, keyboard layout
    $00 = USA
    $01 = German
    $02 = French
    $03 = UK
    $04 = Spanish
    $05 = Italian
    $07 = Swiss French
    $08 = Swiss German

$08 - B, time and date
    bits 0&1 are date mode
      %00 = MMDDYY
      %01 = DDMMYY
      %10 = YYMMDD
      %11 = YYDDMM
    bit 4 is clock mode
      %0 = 12 hours
      %1 = 24 hours

$09 - B, ASCII character of date separator

$0A - B, memory test on boot
    $20 = test memory
    $00 = skip memory test

$0E - B, line doubling ($00 = off, $01 = on)

$0F - B, video
    bit 7 = compatibility (%0 = off, %1 = on)
    bit 6 = overscan (%0 = off, %1 = on)
    bit 5 = frequency (%0 = NTSC, %1 = PAL)
    bit 4 = monitor (%0 = TV, %1 = VGA)
    bit 3 = columns (%0 = 40, %1 = 80)
    bits 2-0 = number of colours
      %000 = 2
      %001 = 4
      %010 = 16
      %011 = 256
      %100 = TC

$10 - B, SCSI information
    bits 0-2 are SCSI-ID (range 0-7)
    bit 7 is arbitration flag (%0 = off, %1 = on)

$11 - B, reserved, must be $00

$30 - W, checksum
```

HURRAY FOR OMIKRON!

Omikron are a German ST company with many an excellent program under their belt. Now they're doing something unique. All registered owners of their *Mortimer DeLuxe* program can receive the original assembler sources of version 3.10 – in Turbo Assembler and with some German comments – for free! If only more companies would do that instead of leaving orphaned products that they have no intention of supporting simply to gather dust. Just send a stamped addressed envelope with a proof of purchase (or an order) and a written pledge that the sources are only for your personal use. However, if you should get *Mortimer* to run on some new graphic card or under MagicMac, Omikron will be happy to distribute the program and cut you in! Requests from the UK should include a couple of international reply coupons with the SAE in lieu of stamps. Write to: Omikron, Mortimer sources, Sponheimstrasse 12, 75177 Pforzheim, Germany.



Mac Marsden, *GFA* expert and unblemished young lad, opens his workshop and answers a few more of your *GFA Basic* queries. He's good like that.

GFA Workshop

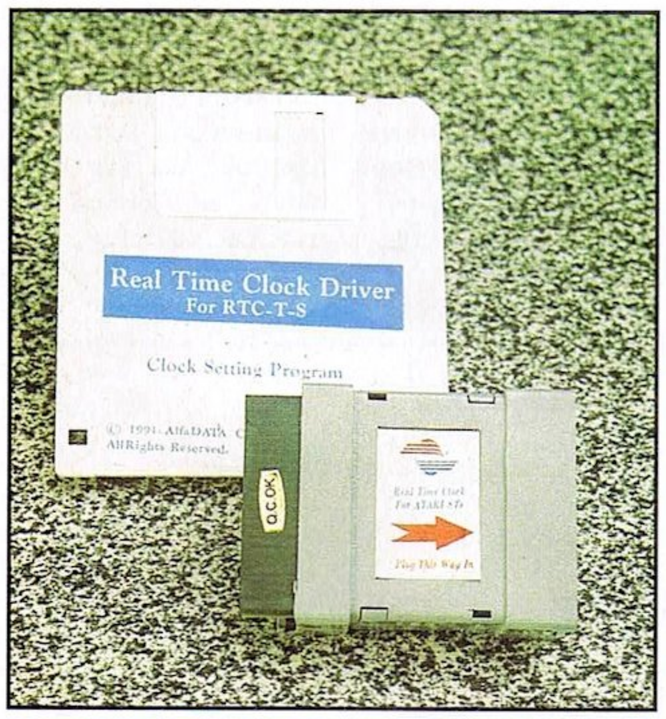
TIMES THEY ARE A-CHANGIN'

Q I've written a time/date changer program in *GFA Basic 3.5*. I'd like to know whether it's possible to protect the time/date from a reset.
Chris Teague via e-mail

A *The answer to your question is no, unless you have an additional cartridge clock that passes the correct time/date to the machine on start-up, or after a reset. The information is then held in Random Access Memory (RAM), which is cleared after either a hard or soft reset.*

EXECUTE ME!

Q I'm having a few problems with the EXEC command. In the manual it states that you can load a program into *GFA* and call it later using the executable address. How can you load it and call it when you require it? I can load it and execute it immediately, but not at a later time. If I use EXEC 0,.... and the program is assembled machine code (M/C) then it usually works, but if the loaded program is a compiled *GFA Basic* program then it loads and then stops. Having said that, I loaded an M/C program the other day and it ignored it.
Paul via e-mail



A real-time clock attachment – invaluable if you're running an on-line service, collecting e-mail at a specified time, running hardware projects, keeping your files up to date, sending professional faxes, or, even, wanting to know the time, I s'pose.

A *Paul, my first and only thought is that you haven't reserved sufficient memory for the application to work in. This doesn't just include enough memory to load it into the ST, but also enough memory to enable it to 'do its stuff'. Its a bit like parking a large car in a small garage – it can be done, but how do you get out of the car? I suggest you increase the amount of memory you've allocated for the application and use the code in Panel One, which appears to work.*

The variable r% contains a value returned by the program (it holds '39' if there is insufficient memory available). Using this method and repeating r% = EXEC(4,"",cmdl$,"") you're able to run the program held in memory as many times as you require. It may be worth your while examining other methods of reserving memory, like MALLOC, INLINE.

PANEL ONE

```
RESERVE n%                                reserve memory (must be a
                                          multiple of 256)
base% = EXEC (3,file$,"","")              LOAD but don't start -
                                          file$=your program name
base$ = STR$(base%)
cmdl$ = CHR$(LEN(base$)+1)+base$          CREATE command line
r% = EXEC(4,"",cmdl$,"")                  RUN the program
REM rest of your program here
RESERVE                                   CLEAR reserved memory
```

PANEL TWO

```
PROCEDURE attached
  r% = BIOS(10)
  r$ = BIN(r%)
  counter=1
  FOR f = LEN(r$) TO 1 STEP -1
    IF (MID$(r$,f,1) = "1"
      PRINT "Drive "; CHR$(64 + counter);" is attached."
    ENDIF
    counter += 1
  NEXT F
RETURN
```

If r$ = "10011" then drives A, B and E would be connected.

AM I ATTACHED?

Q How can I check for an installed hard disk? The code IF EXIST "C:*.*" doesn't always work.
Dieter Marfurt, Switzerland

A *This is a commonly asked question. To determine what drives are attached (this will also show if 'A & B' are there) you need to initiate a BIOS call. Bios(10) returns a binary number from which you can see what is connected (don't forget, binary numbers are read from the right). The short routine in Panel Two should help.*

LOGICAL OPERATOR

Q Having recently been introduced to computers, and especially to *GFA Basic*, I have gained a new lease of life (being 62 years old). But I can't get the hang of logical operators. Could you explain what they are and how you would use them.
Derek Hutchinson, Yeovil

A *Logical operators link two logical expressions together to produce a logical result. I know it's a mouthful and a half, but put simply they are looking for a TRUE (1) or FALSE (0) statement. Once again we're using (binary) base 2 mathematics here. For example, I'll take the logical operator 'AND'.*

If Clive has an Apple (1) 'AND' Mac has an Apple (1) then the result would be TRUE. Put into GFA Basic we would have:

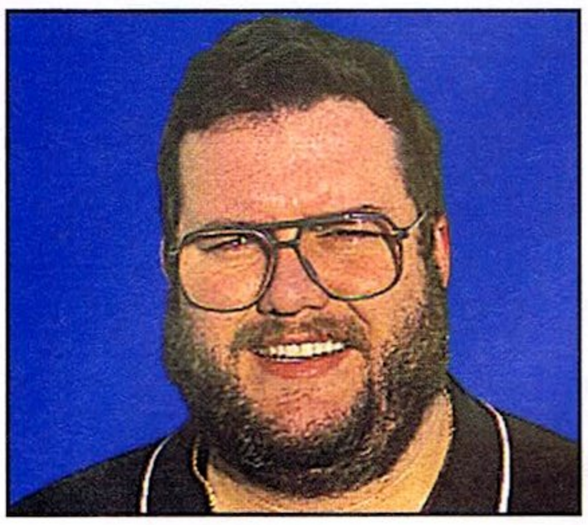
```
Clive = 1
Mac = 1
IF Mac = 1 and Clive = 1
     ' execute code here
ENDIF
```

Other logical operators are OR, NOR, XOR, NOT, IMP and EQV. For a more detailed explanation examine Chapter 3 in the *GFA Basic User Manual*.

Don't forget!

If you're getting in touch with Mac about *GFA*, please ensure you include your *GFA Basic* question or query! It's very interesting to read what you are doing in *GFA Basic*, but if you don't include a question, you won't get a reply, and your chance to have your name in lights disappears until the next time you write.

If you'd like Mac to look into a *GFA Basic* problem in more detail, drop him a line at the ST Answers address (page 52) or e-mail him at: mac@mentor.demon.co.uk



We had to drag Andy Curtis, kicking and screaming, away from his sausages to bring you Everything You Ever Wanted To Know About *Cubase*, But Were Afraid To Ask...

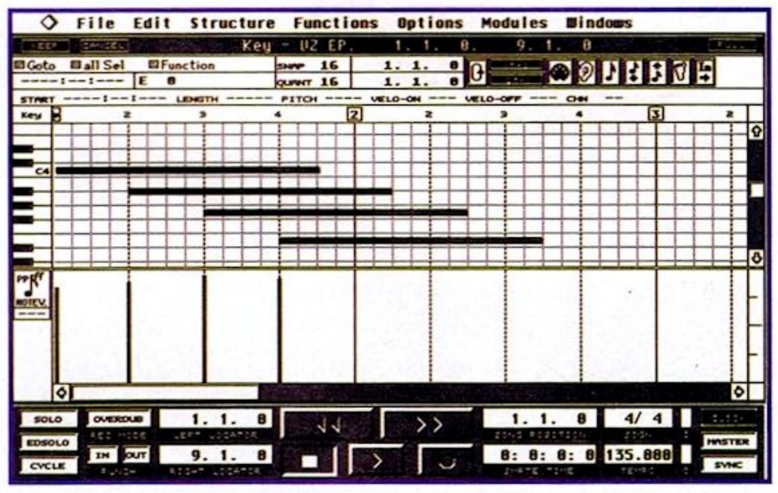
Music & MIDI

LOGICAL EDIT

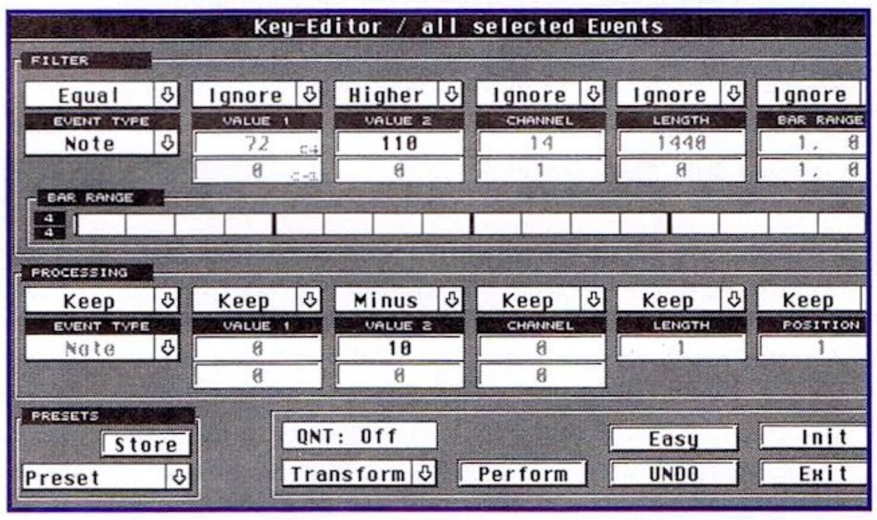
Q I've been a *Cubase* user for some time now. I enjoy the program and have found it very useful for a variety of functions over the years. Recently I realised I had been avoiding a few sections of the program because they seemed so frightening. The main one is Logical Edit. I use the other editors with ease, but this one seems to be unnecessarily complex and unwelcoming. If you could offer some help and advice with this section of *Cubase* I would be most grateful, and so would, I suspect, a great many other *Cubase* users out there.

Linda Hill, via e-mail

Logical Edit has two manifestations. The simple version pictured here has limited options but is less frightening. The FILTER line has 'Ignore' set for all its options, so every note will be acted on. The PROCESSING line has 'Fix' set for Value 2 (Velocity). Click on 'Perform', and all selected notes will be set to velocity 10.



Logical Edit can work on any portion of your music that you specify. It can be the whole thing, a group of parts, a single part or even, as here, a few notes selected within a part that is already being edited. It's certainly flexible.



This is the full Logical Edit page. On the FILTER line, only notes with a velocity higher than 110 will be acted on. On the PROCESSING line, these notes will be decreased in velocity by 10 steps. Easy really.

A We'll have a look at Logical Edit this month and see if we can dispel your confusion. In common with all the Cubase Edit pages, Logical Edit simply takes a selection of MIDI events and processes them according to parameters that you define. In Key Edit this is done graphically, which is simple to work with. Logical Edit requires a little more thought but is very powerful indeed for complex repetitive tasks.

The first job is to tell Logical Edit which MIDI events you want it to process. You can choose while you're in any of the other Edit pages, or from the Arrange page. Feel free to work on groups of parts, individual parts or even just a few notes within a part – of course, you should realise that when you select a whole part from the Arrange page you are selecting all the MIDI events in it and not just the notes.

After you've selected your notes to be edited, you need to call Logical Edit. On the keyboard select [Control] and [L] or use the Edit drop-down menu as shown here.

Once you've selected the events you wish to edit, switch to the Logical Edit page by pressing [Control] [L], or using the second-to-last entry in the Edit drop-down menu. There are two manifestations of the Logical Edit page: Easy and Expert. If your display has four columns, it's the former; if it has six columns it's the latter. Both are functionally the same, and the explanation here applies to each.

First of all, relax. All those boxes are far less intimidating than you think. There are basically two lines to be dealt with.

***Filter**: this first line controls which events from your selection will be acted upon. The first column is event type. If you only want to work on the notes, select Equal in the top half and Note in the bottom half. The next column is cryptically named Value 1 – in effect this is the pitch of the notes. The next column is Value 2, which is the velocity of the notes (how hard each note is hit on the keyboard). The other columns are Channel, Length and Bar Range. On many occasions you will simply want to work with all the notes you have selected, so setting the first column is all you need to do.*

***Processing**: The second line governs what is done to the notes that you have selected. Here are four of the available actions in each pop-up menu:*

KEEP	*Leaves the value as it is*
FIX	*Fixes it at a new set value*
MINUS	*Subtracts a set value*
PLUS	*Adds a set value*

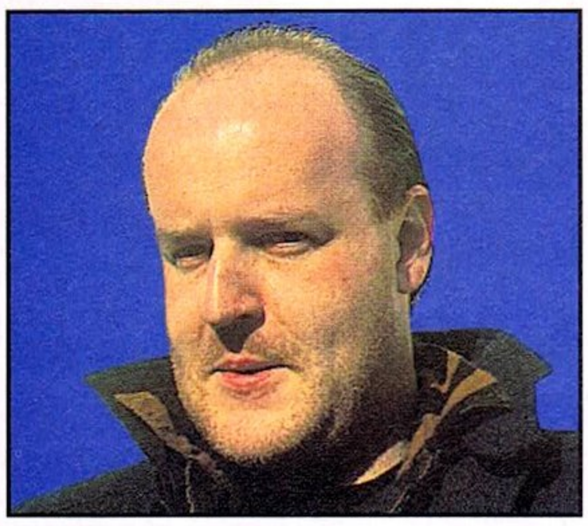
So if you set Value 2 (Velocity) to 10 and select MINUS, you'll be decreasing the velocity on all the selected notes by ten steps from the original.

Suppose you wanted to quieten the left-hand section of a piano part. It would take hours to decrease all those velocities by hand. Using the skills you have (hopefully) picked up here, you can select that part, filter out all notes below middle C, set a MINUS value for velocity and then hit the Perform button. Hey presto! You just saved yourself no end of time, which you can now spend being creative rather than going goggle-eyed staring at your monitor (like we generally do).

And next month...

In part two of our guide to *Cubase* we face up to the fearsome Interactive Phrase Synthesizer, and do our Levell best to tame it. *(Yes, very funny, Andy – Karen)*

If you have any MIDI & Music queries or information, you can e-mail Andy Curtis at: acurtis@theshack.demon.co.uk or send your queries by snail mail to ST Answers (page 52).



Having recovered from the shock of having Clive's wallet fall on him last month, Frank Charlton bounces back to deal with your *STOS* problems.

STOS Corner

THAT'S MAGIC!

Q I don't have my ST any more because I couldn't afford the repairs when it died. My brother has an Apple Mac, and I've heard about using this new MagicMac to run ST software. Do you think *STOS* will run on it so I can carry on with writing games?
Billy Smithwick, Cheshunt

A *I very much doubt it. MagicMac is a wonderful piece of programming, but it's not a miracle. STOS does not even behave very well under MagiC on the ST. We did try using STOS under MagiC, and although it seems to work at first, it throws a wobbler as soon as you try a simple command like printing to the screen! It isn't the fault of MagiC or MagicMac at all, it's just that STOS itself doesn't obey the ST programming rules correctly. That's why there are STOS fixes for each new TOS version. Only correctly written GEM programs will work under MagicMac, which leaves STOS right out of the running. Sorry about that.*

We gave you the *BBS Directory* on Cover Disk 68. Now take a look at routines used in the future version.

MagicMac will run well-behaved ST software on a Mac... Unfortunately *STOS* isn't all that well-behaved.

If you're on-line, you can contact Frank at the following addresses:
frank@tachyon.demon.co.uk
NeST 90:100/308.2
AtariNet 51:6/208.2
FidoNet 2:256/502.28
Or write to the address on page 52.

ANY PORT IN A STORM

I mentioned Mark Westguard's *BBS Directory* last month, and the trials of controlling the serial port from within *STOS*. Mark was kind enough to send me the routines he's using to configure the port. These aren't using any *STOS*-specific commands, but use the TRAP and POKE statements to access routines held within TOS itself. Be careful about fiddling with these, as careless use of TRAP commands can crash your ST. Make sure you save your work before you run it!

First, set the speed at which the serial port operates – the baud rate. We've created a variable called BAUD, and given it the value we need as follows:

Baud rate	Value	Baud rate	Value
19200	0	1200	7
9600	1	600	8
4800	2	300	9
2400	4		

Then use the command:

```
trap 14,15,BAUD,-1,-1,-1,-1,-1
```

Flow control is the way your ST tells a modem to hold back for a while, until it clears its buffer. For speeds of 9,600 and above, flow control of some sort is essential to prevent errors. In the same way as BAUD, use a variable called FLOW, and set the value as follows:

Method	Value	Method	Value
None	0	RTS/CTS	2
XON/XOFF	1	Both	3

Then use the following TRAP command:

```
trap 14,15,-1,FLOW,-1,-1,-1,-1
```

For the next few parts, just remember, 99 per cent of BBS systems are configured to use a system known as 8-N-1, which means 8 databits, no parity, 1 stopbit. This defines the way data is sent over the modem link. Starting with databits, use a variable called DATL

Databits	Value	Databits	Value
8bits	0	6bits	2
7bits	1	5bits	3

Then, do the following:

```
OUSART=peek($FFFA29)
```

which stores the old port register in the variable USART.

```
NDATL=DATL*32
USART=(OUSART&%10011111)+NDATL
```

These shift the data to bits 5 and 6, and mask and replace the original value with the new one.

Finally, the command: `poke $FFFA29,USART` **does the job.**

Setting Parity is very similar. Use the variable PARITY as follows:

Parity	Value
Off	0
On	1
Odd Parity	2
Even Parity	3

The code looks like this:

```
OUSART=peek($FFFA29)
NPARITY=PARITY*2
USART=(OUSART&%11111001)+NPARITY
poke $FFFA29,USART
```

Again, stopbits is similar, this time using a variable called STB:

Stopbits	Value
1 Bit	1
1.5 Bits	2
2 Bits	3

The code:

```
OUSART=peek($FFFA29)
NSTB=STB*8
USART=(OUSART&%11100111)+NSTB
poke $FFFA29,USART
```

Now, if you're wondering why we used sensible names like PARITY for some variables and cryptic ones such as STB for others, remember that your variable names mustn't clash with in-built *STOS* commands. So, if we'd used STOPBITS instead of STB, the command:

```
STOPBITS=3
```

is be read by *STOS* as:

```
STOP bits=3
```

This would halt the program and cause terrible problems. Always check your variable names against *STOS* keywords very carefully. *stf*

ASCIILUM PDL

34 Earlswood Gardens, Clayhall, Ilford, Essex IG5 0DF

STOCKISTS OF STELLER & POWER

For a fast, efficient and friendly service, join the growing band of customers who have been *committed* to the *Asciilum*.

STOCKISTS OF SERENADE & GOLDEN DAWN

DISK PRICES
1–5 disks £1·25
6+ disks £1·00
Any 12 disks for £10·00 –
only 83p each!

CATALOGUE
Please send two 25p stamps for disk catalogue complete with free P.D Software

STAMPC PDL

01256 814549

£1.25 per disk (inc P+P) 90p per disk when ordering 8+

We are a fast efficient service
Our aim is to please
MIX AND MATCH
Select your own programs from our huge catalogue
Guaranteed 650k + per disk

Catalogue with free PD £1.00 or S.A.E. + disk

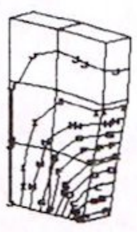
1 KEATS CLOSE, POPLEY, BASINGSTOKE, HANTS RG24 9BS

DESIGNERS/ENGINEERS

Are you sure your new design will work?
Save money and avoid embarrassment...
Build a Finite Element computer model with new

FEM DESIGNER

To check it won't break, burst or bend out of shape!



Features:
- Simple menu–driven interface.
- Preprocessor for easy model building.
- Elastic, plastic and thermal analyses of the model.
- Beam, plate, shell, 2D plane and 3D solid elements.
- Postprocessor for graphical display of results.
- Built–in text editor.
- Output to picture file, text file or printer.
- Suitable for beginners and experts alike.

Atari ST version introductory offer – only £95(demo disk £1·50)

exclusively from:
JG Design Services
PO Box 14856, Falkirk SCOTLAND FK1 5EP
Tel: 01324 638815

JG DESIGN SERVICES

FAX MODEMS

Our top of the range low cost modems come complete with software, cables and instructions for immediate use. All models are fully compatible with the ST/STE/FALCON/TT as well as the PC and Amiga

FREE
RS232 cable and Comms software with every modem.

FEATURES

- ❑ V.42bis & MNP 5 Data Compression
- ❑ V.42 & MNP 2, 3 and 4 Error Correction.
- ❑ Group 3 fax class 1 & II compatible
- ❑ Full duplex
- ❑ Extended HAYES command set
- ❑ Auto Answer
- ❑ Adaptive rate negotiation
- ❑ Automatic speed negotiation upon connection
- ❑ 12 month guarantee

PRICES

Speedcom V32bis 14400	£119.99
Speedcom V32 terbo 19200	£149.99
Speedcom V34 28800	£199.99
BABT APPROVED MODEMS:-	
X-LINK V32bis 14400	£134.99
X-LINK V34 28800	£224.99

All prices include VAT. Please add £3.50 for 48 hour delivery or £7.30 for 24 hour delivery.

FREEPHONE 0500 340548 to order

Access, Visa, Switch, Connect, Delta etc accepted for immediate despatch. Please send cheques or Postal Orders (made payable to Siren Software) to:-

Siren Software, 178 Bury New Road, Whitefield, Manchester M45 6QF. Personal callers welcome.
Open 9am-6pm Monday-Friday,
Saturday 9am-noon

fantaSTic prices

Games

3D POOL	7.95
ADI ENGLISH (12-13)	13.95
ADI ENGLISH (13-14 OR 14-15)	17.95
ADI FRENCH (11-12 OR 12-13)	17.95
ADI FRENCH (13-14)	17.95
ANOTHER WORLD (1MB)	11.95
BATTLEHAWKS 1942	11.95
BETTER MATHS (12-16)	9.99
BULLYS SPORTING DARTS (1MB)	7.95
CADAVER + THE PAYOFF	11.95
CALIFORNIA GAMES II	7.95
CANNON FODDER	19.95
CHAMPIONSHIP MGR END SEASON DATA	10.95
CHAMPIONSHIP MANAGER ITALIA '95	16.99
COLONEL'S BEQUEST (1MB)	11.95
CROSSBOW - THE LEGEND OF TELL	6.99
CRUISE FOR A CORPSE	11.95
CYBERCON III	9.95
CYBERSPACE (1MB)	22.95
DALEK ATTACK	7.95
DEMON BLUE	6.99
DIZZY PANIC	6.99
DREADNOUGHTS (1MB)	22.95
DREADNOUGHTS - BISMARCK	11.95
DREADNOUGHTS - IRONCLADS	11.95
ELITE II - FRONTIER (1MB)	19.95
EPIC	11.95
ESPANA - THE GAMES '92	9.95
EUROPEAN FOOTBALL CHAMP	9.95
F-15 STRIKE EAGLE II	11.95
F-19 STEALTH FIGHTER	11.95
F-29 RETALIATOR	9.95
FANTASY WORLD DIZZY	6.99
FLIMBO'S QUEST	7.95
FOOTBALL MANAGER 3	17.95
FUTURE WARS	9.95
GHOULS 'N' GHOSTS	6.99
GRAHAMS TAYLOR'S SOCCER	7.95
GUNSHIP	9.95
HARDBALL	7.95
HOYLES BOOK OF GAMES - VOL 1	9.95
HOYLES BOOK OF GAMES - VOL 2	9.95
IMPOSSIBLE MISSION 2	6.99
INDIANA JONES & FATE ATL (ACT)	7.95
INDIANA JONES & L. CRUSADE (ADV)	11.95
INTELLIGENT STRATEGY GAMES 5	17.95
INTERNATIONAL SOCCER CHALLENGE	7.95
ISHAR 3	21.95
ITALIAN TUTOR	11.95
ITALY 1990	6.99
JIMMY WHITE'S WHIRLWIND SNOOKER	11.95
KIDS RULE OK	11.95
KINGMAKER	23.95
KINGS QUEST 1	11.95
KINGS QUEST 2	9.95
KINGS QUEST 3	11.95
KINGS QUEST 4	11.95
KNIGHTS OF THE SKY (1MB)	11.95
LAST NINJA III	7.95
LED STORM	6.99
LEISURE SUIT LARRY 1	11.95
LEISURE SUIT LARRY 2	11.95
LEISURE SUIT LARRY 3	11.95
LOOM	11.95
LURE OF THE TEMPTRESS	11.95
M1 TANK PLATOON	11.95
MANIAC MANSION	9.95
MEGA TWINS	7.95
MERCS	7.95
MICRO ENGLISH (8-GCSE)	14.95
MICRO FRENCH (BEGIN-GCSE)	18.95
MICRO GERMAN (BEGIN-GCSE-BUS)	18.95
MICRO MATHS (11-GCSE)	18.95
MICRO SCIENCE (8-GCSE)	18.95
MIDWINTER	9.95
MIDWINTER II (1MB)	11.95
MOONWALKER	6.99
MURDER	7.95
NIGHT SHIFT	9.95
NINJA REMIX	7.95
NODDY'S PLAYTIME (3+)	16.99
OPERATION STEALTH	11.95
ORIENTAL GAMES	7.95
OUTRUN EUROPA	7.95
PANZA KICK BOXING	7.95
PINBALL MAGIC	7.95
PIRATES	9.95
PLAYDAYS (3-8)	16.99
POLICE QUEST 1	11.95
POLICE QUEST 2	11.95
POPEYE 2	6.99
POPULOUS II (1MB)	11.95
POSTMAN PAT	6.99
POSTMAN PAT 3	6.99
PREMIER MANAGER 2 (1MB)	17.95
REACH FOR THE SKIES (1MB)	11.95
REALMS	9.95
RICK DANGEROUS 1	6.99
RICK DANGEROUS II	7.95
ROBIN HOOD (1MB)	9.95
ROBINSON'S REQUIEM	21.95
ROBOCOD	7.95
ROBOCOD III	9.95
RODLAND	7.95
SAVAGE	7.95
SECRET OF MONKEY ISLAND (1MB)	11.95
SENSIBLE SOCCER INT'L EDITION	13.95
SHADOWORLDS (1MB)	17.95
SHUTTLE	11.95
SIMPSONS: BART VS THE WORLD	17.95
SOOTY & SWEEP	6.99
SOOTY'S FUN WITH NUMBERS (UNDER 7)	6.99
SPACE QUEST 1	11.95
SPACE QUEST 2	9.95
SPACE QUEST 3	11.95
SPEEDBALL 2	7.95
STARDUST	17.95
STARGLIDER II	7.95
STREET FIGHTER	7.95
STREETFIGHTER 2 (1MB)	11.95
STRIDER	6.99
STRIDER 2	7.95
STRIKER	7.95
STUN RUNNER	6.99
SUPERLEAGUE MANAGER (1MB)	19.95
SUPER MONACO G.P.	7.95
SUPREMACY	9.95
TACTICAL MANAGER - ENGLISH (1MB)	17.95
TACTICAL MANAGER - ITALIAN	17.95
TACTICAL MANAGER - SCOTTISH	17.95
TENNIS CUP 2	7.95
THE MUNSTERS	6.99
THEIR FINEST HOUR	11.95
- FINEST MISSIONS VOL 1	8.95
THOMAS FUN WITH WORDS (UNDER 7)	6.99
THOMAS THE TANK ENGINE	6.99
THOMAS' BIG RACE (4-8)	9.95
TOKI	7.95
TRACKSUIT MANAGER	6.99
TURRICAN	6.99
TURRICAN II	6.99
TUSKER	6.99
WINTER GOLD	11.95
X-OUT	6.99
XENON II	7.95
Z-OUT	6.99
ZAK MCKRACKEN	9.95

3.5" Disks

Qty	DSDD	DSHD
10	4.25	5.95
20	7.95	10.95
50	14.95	21.95
100	25.99	39.95
200	49.95	76.95
500	124.95	164.95
1000	239.95	319.95

All our disks are fully guaranteed and include labels

Disk Boxes

10		0.94
40		4.95
50		5.60
80		6.30
80	Stackable	12.95
100	6.80	
110	Stackable	13.95
120		8.75

OPENING HOURS MAIL ORDER & SHOP

Mon-Fri	10am-7pm
Saturday	10am-4pm
Sunday	Closed

WHAT YOU SEE IS WHAT YOU PAY – NO HIDDEN CHARGES

Miscellaneous

Workcentre	19.95
Head Cleaner (3.5")	3.75
Mouse	14.75
Mouse House	2.95
Mouse Mat	2.95
Parallel port extension cable	6.80
Parallel printer cable (5m)	10.95
Roboshift (auto Mouse/Joystick switch)	14.75
Joystick & Mouse Extension Cable (6") Extends the two ports from under the ST so you can see where to plug them in!	4.95

Dust Covers

Atari	3.65
Monitor	6.99
STAR LC10 printer	6.99
STAR LC24 printer	6.99

Joysticks

125+	9.00
Competition Pro 5000–black	13.75
Freewheel–digital	27.00
Gravis Gamepad	23·95
Maverick 1M AF (QS138F)	13.75
Megastar A/F (SV133)	22.00
MegaGrip II	12.50
MegaStick II	9.99
Navigator A/F	13.75
Python 1M (QS137F)	9.75
Quickjoy I Turbo (SV121)	7.95
Quickshot I	4.95
Quickshot II turbo	7.95
Speedking A/F	11.00
Starfighter 1 pad	7.95
Supercharger (SV123)	9.00
The Bug (black or green)	13.50
Topstar (SV127)	21.50
Zipstick A/F	13·50

Printer Ribbons

STAR LC10/20/100 black (LC9)	4.50
STAR LC10/20/100 colour (LC9CL)	6.80
STAR LC200 black (ZX9)	6.25
STAR LC200 colour (ZX9CL)	12.30
STAR LC24 series black (Z24)	6.50
STAR LC24–200XB–24 series colour (X24CL)	13.75

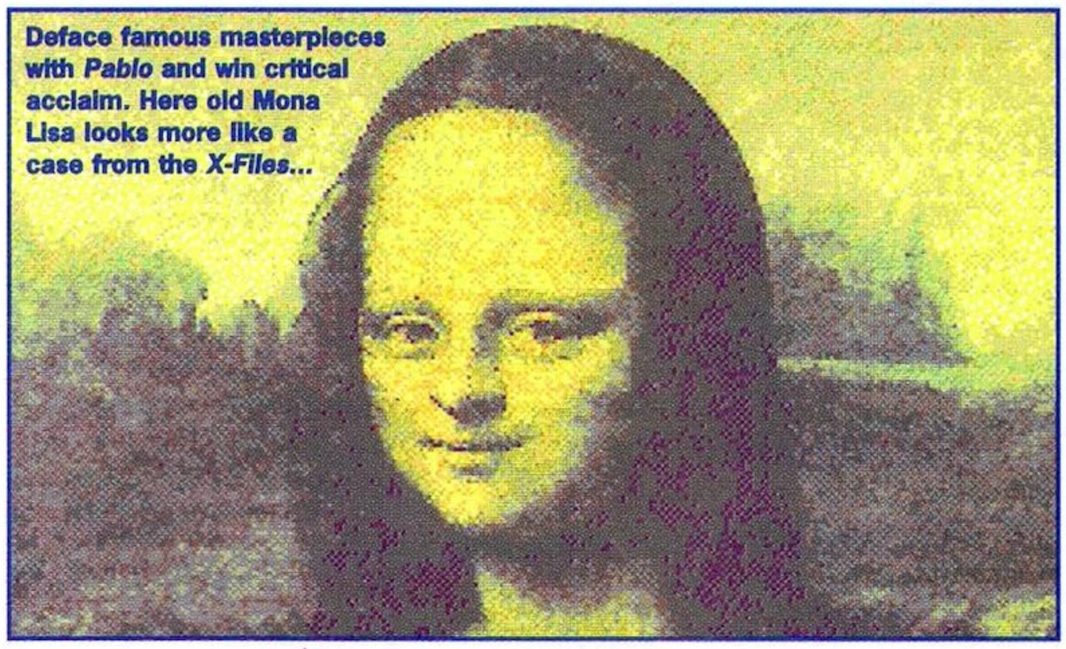
0171 608 0624

Cheques & Postal Orders to:
DataGEM Retail Ltd Department STF 23 Pitfield Street, London N1 6HB

ALL PRICES INCLUDE UK POSTAGE AND VAT AND ARE EFFECTIVE UNTIL 31ST MAY 1995 Orders against cheques with valid guarantee card numbers will be despatched immediately, otherwise upon cheque clearance. On overseas orders, postage is charged at cost. New titles will be sent as released and are subject to manufacturers' price reviews. All orders taken subject to our standard terms and conditions. E.&O.E.

Pablo tutorial

You're all excited. You've flipped straight here from the Cover Disk pages, and you want to know exactly what *Pablo Paint* has to offer. And while you're at it, what are all those funny icons for? Frank Charlton has the answers.



Deface famous masterpieces with *Pablo* and win critical acclaim. Here old Mona Lisa looks more like a case from the *X-Files*...

This month on the Cover Disk, we've given you the full, colour version of *Pablo Paint*, a commercial quality paint package by Claude Boulanger. It has more icons to play with than Clive's had free lunches, though, so starting this issue we're going to go through what you can do with it.

To begin with, we'll take you on a guided tour of the main Tools Menu, and show you how to get started. Next month we'll delve deeper and explore *Pablo's* powerful functions.

Drawing Toolbox

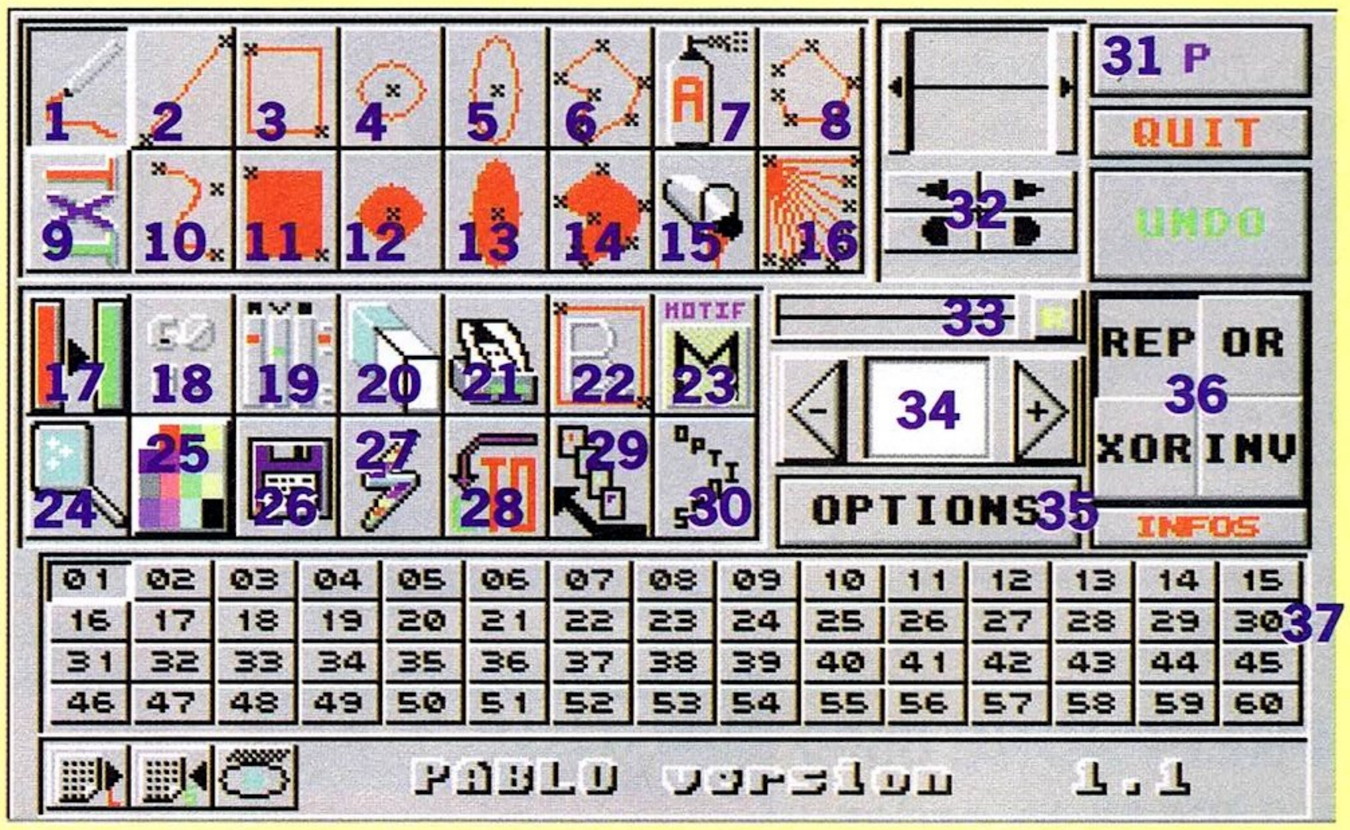
A lot of the drawing tools in *Pablo* can be used in more than one way by clicking the icon again while it's already selected. For instance, re-selecting the 'Line Draw' icon changes the icon from a diagonal line to one with a vertical and horizontal line. You can use this tool to draw perfectly straight lines without worrying about jiggling the mouse just as you let go – well, we've all done it, and we all cursed when it happened. Just play with the various tools on offer. They aren't radically different from most art packages, and they're fun to use. Take a look at the Main and Drawing Toolbox panel, numbers 1 to 16, to see what all the tools do.

Main Toolbox

This is where the maintenance tools live – which you'll need regardless of which mode you're working in. Take a look at the Main and Drawing Toolbox panel again – this time numbers 17 to 37 show what tools are included, and their functions.

MAIN AND DRAWING TOOLBOX

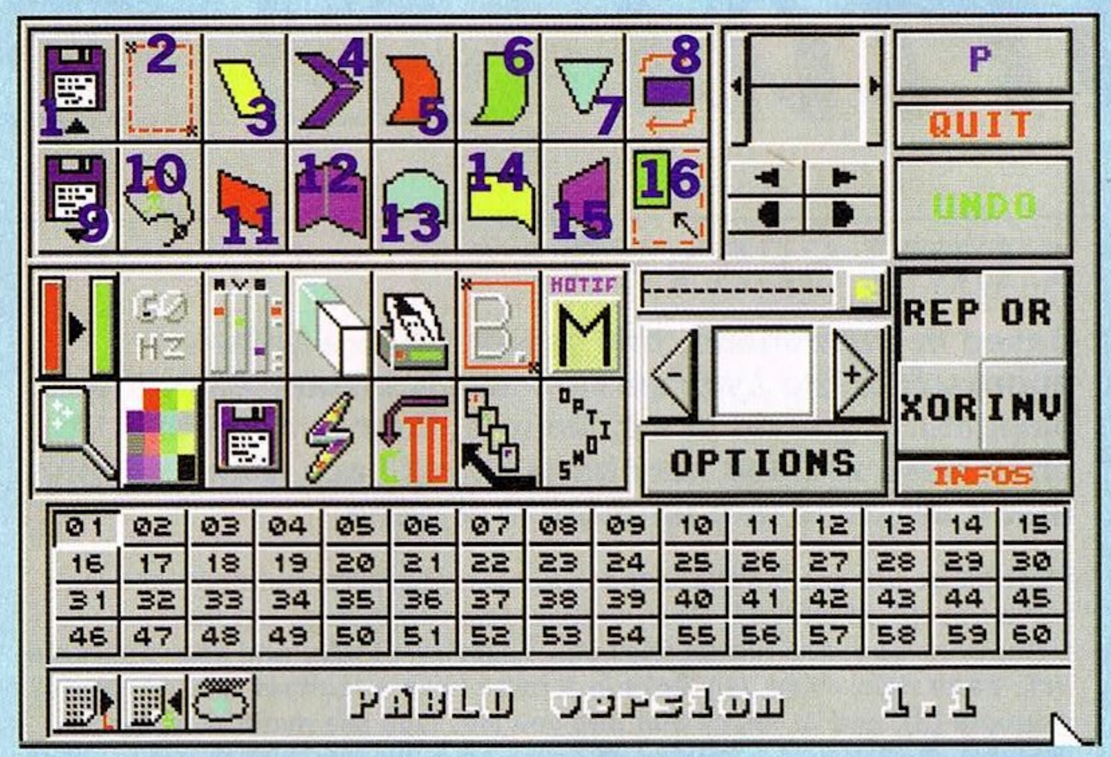
1 Freehand draw.
2 Line drawing.
3 Frame drawing.
4 Circle drawing.
5 Ellipse drawing.
6 Irregular shapes. Clicking the right mouse button when finished will connect the start and end of the shape for you.
7 Airbrush.
8 Irregular shapes. This is like (6), but *Pablo* doesn't automatically connect the beginning and end of the shape for you.
9 Text mode. Click this again and you can configure lots of parameters from text size to which font to use.
10 Bezier curves. Nice for drawing those irregular objects without them looking too unnatural.
11 Filled Box.
12 Filled Circle.
13 Filled Ellipse.
14 Filled Irregular Shapes.
15 Fill Area. Click on this again and you can choose whether you want to fill with a solid colour, pattern, gradient, or even a precut block.
16 Rays. This draws rays (yes!) out to random points from the point where you click the mouse. Hold the button down to repeat the effect.



17 Replace Colour. Used carefully, this is a powerful tool. If you wanted to swap all occurrences of white in a section of your image for a nice shade of blue, you'd use this. *Pablo* asks you which colour you want to replace by clicking on it. Next, click on the colour you want to use as a replacement. You can now define an area of your pic to work on. You can impose the effect on the whole screen, or just the part you want.
18 Toggle display between 50 and 60 Hz. 60Hz gives a bigger display, but some older monitors and TV sets can't cope with it. If yours doesn't, just switch it back.
19 Colour Editor. Use this to set up the palette for your work.
20 Eraser. The eraser has a variable size, and you define it using the first mouse-click to set the top right corner, moving the mouse until you're happy with the size, and clicking again. If you want to change the size, flick back to the Tools menu, then back to the image screen.
21 Print current picture.
22 Switch the drawing toolbox into BLOCK mode.
23 Fill Patterns. Here you can design your own colour fill patterns, load and save them, and grab a small chunk of your image to use too.
24 Zoom mode. Magnifies an area of the pic for detailed work.
25 Colour Selector. Click here to pop up a box of all 16 colours to select from.
26 Disk operations.
27 Clear current screen.
28 Copy one screen to another. Your current screen is used as the source, and *Pablo* prompts you for the destination screen.
29 Mini Preview. A click here brings up a screen full of thumbnail-sized previews of all images in memory.
30 Unused.

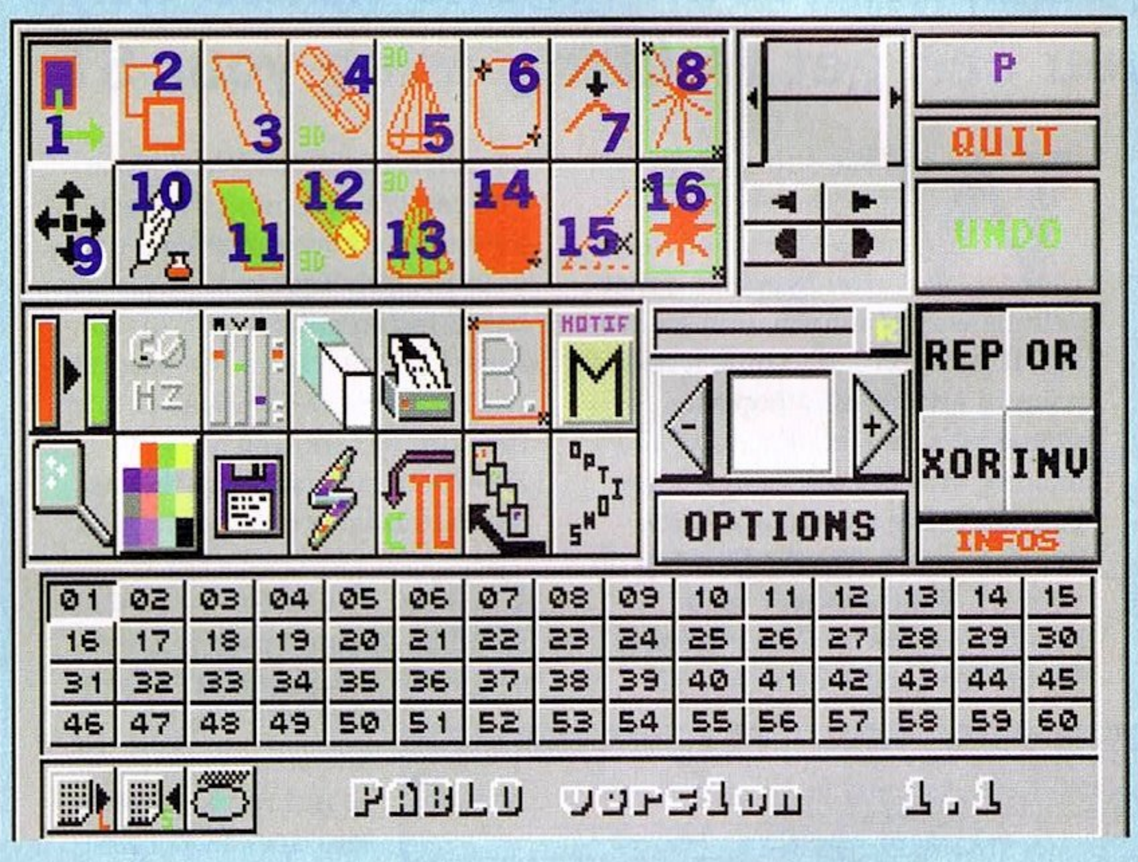
31 Parameters menu.
32 Set whether your lines have pointed, rounded or square (that is with no buttons selected) ends.
33 Alter line thickness for line draw mode, and design your own custom line style.
34 Fill Patterns. Use the + and – buttons to step through the current set of patterns. If you click on the square containing the pattern, you can also load and save whole pattern sets to disk.
35 Switch main toolbox to secondary one. This does nothing if you're in the Block toolbox.
36 Set how new drawings should interact with what's already on screen. Experiment with these for different effects.
37 Change current workscreen. How many screens you have depends on how much RAM you have in your ST.

BLOCK AND SECONDARY TOOLBOXES



1 Save block to disk.
2 Define square block.
3 Skew block horizontally.
4 Sharp horizontal bend. This produces an effect as if you'd sharply creased the image and bent it over.
5 Circular horizontal bend. Distorts the image as if you'd gently flexed it without actually creasing it.
6 Horizontal edge bend. Like 9 but at one edge rather than across the whole pic.
7 Vertical perspective. Imitates the perspective effect you'd get if you tilted the image away from or towards you in 3D.
8 Rotate block. Spin the square frame with the mouse until the readout changes to the angle of rotation you want, then right-click to change the block itself.
9 Load Block from disk.
10 Define irregular block. Draw the shape you want using a series of lines (as if you were drawing a shape), and press the right mouse button to connect the first and last points.
11 Skew block vertically.
12 Sharp vertical bend.
13 Circular vertical bend.
14 Vertical edge bend.
15 Horizontal perspective.
16 Resize block. Adjust the square frame until you reach the desired size, then right-click.

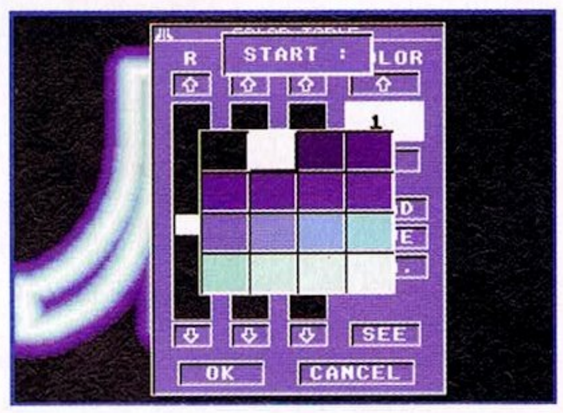
1 Enables you to restrict operations to a small area of the screen.
2 Outline. Define a segment of the screen with the mouse, and *Pablo* will thicken any edges it finds.
3 Rhombus. Draws a hollow rhomboid shape to your specifications.
4 3D Cylinder. Produces a hollow wire-frame cylinder to your design.
5 3D Cone. As above.
6 Rounded Box. Like a standard box, but *Pablo* smoothes the four corners for you.
7 Splines. Draws a series of connected lines. When you right-click it rounds off the sharp corners to produce a smooth curve.
8 Rays. Sounds familiar? Like the ray icon on the Main drawing tools, but this one draws rays outwards from a central point for a 'starburst' effect.
9 Move screen. Scrolls the entire image, using the mouse and wrapping it around at the edges.
10 Quillpen. Just like a real quill, this starts off thin and applies more ink the longer you hold the button down.
11 Solid-filled rhombus. See icon (3).
12 Solid-filled 3D-Cylinder. See (4).
13 Solid-filled 3D-cone. See (5).
14 Solid-filled rounded box. See (6)
15 Enables you to draw lines at precise angles. Right-click the icon first to set the angle you want.
16 Splatter. Produces a weird effect which looks as if you've thrown a blob of paint at the screen, creating a random splash. We like this one.



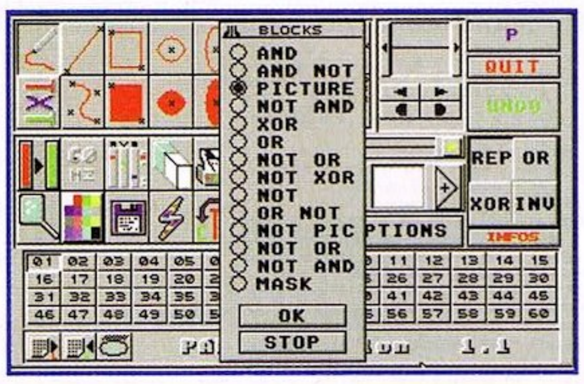
Block Toolbox

Cutting a block is simple. Clicking the 'Block' icon takes you to your image – the first mouse-click starts the top left of the block, and moving the mouse encloses the area with a dotted 'rubber-band' line. Click again to define the bottom right corner, and you're taken back to the menu screen. If you want to paste it straight away, just switch to the image screen with a right-click, or you can process it using the Block tools.

With the Block tools, *Pablo* will carry out the specified effect, then display it on screen. At this point, right-clicking the mouse aborts and gives the original block back, and a left-click accepts the change and moves you back to the menu screen. Next time you move back to the image, the distorted block is ready to paste. Don't forget, if you define a new block, the one you changed will be lost. Look at the Block and Secondary Toolboxes panel to see which Block tools do what and for an explanation of more tools and options offered by *Pablo*. Then watch out for more next month! *stf*



The palette editor can automatically select hues that fit between two colours, so a palette which fades from red to black is easy, for example.



From the P icon at the top-right of the screen, you can define how a block interacts with the image when you paste it. A lot of these effects produce similar results, but try playing with them until we cover them in more detail.

FILE FORMATS

The full version of *Pablo* can load and save pictures in lots of formats. Some of them use compression techniques to squeeze more pics on to a disk, so use those if you're short on space. Let's have a look at them all...

P?? Degas or compressed Degas Elite images in any resolution. *Pablo* looks for anything with an extension beginning with P, so it could be PI1/2/3 (uncompressed) or PC1/2/3 (compressed).

NEO Images from the old favourite *NeoChrome*. NEO pics should always be low resolution in 16 colours, and aren't compressed.

TN? Compressed images saved by a PD utility called *TinyStuf*. Some early versions of *TinyStuf* saved all pics with the extension TNY no matter what resolution they were. Later versions used a similar convention to *Degas*, with extensions of TN1/2/3 for low, medium and high resolutions. Tiny pics are quite well compressed, and can save lots of disk space.

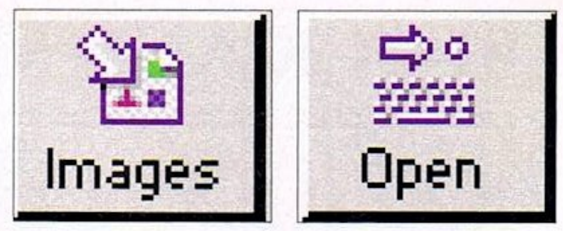
RGH Images saved by the French package *ZZRough*, which sadly never saw the light of day in the UK. Shame really, 'cos I loved it.

SD? These files look much like NEO pics. A few programs thought they were, and loaded them without problem, but the palette was screwed up. Hmmm...

ART Files from Ye Olde program *Art Director*. You won't see many files in this type any more.

SP? *Spectrum 512* pictures, with anything up to 512 colours. SPU and SPC files are uncompressed and compressed respectively. *Pablo* loads them, but only seems to extract the first 16 colours rather than dithering the image. This is the one format that *Pablo* won't save images in.

Web tutorial

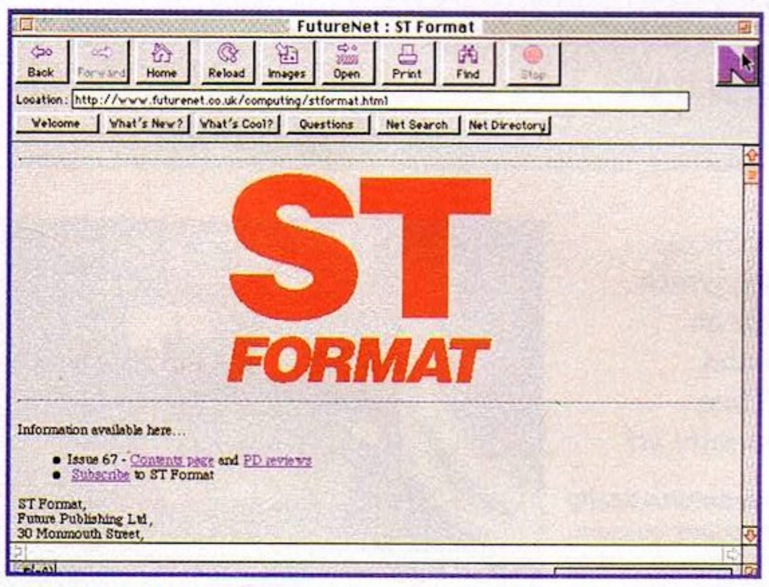


There's been a lot of fuss made about the World Wide Web recently. Although there's no Web browser for the ST just yet, Frank Charlton gives you the lowdown on alternative ways you can get Webbing using your ST.

What's this World Wide Web business? If you believe the hype, it's a marvellous way of information gathering. If you don't, it's some hideous scam to give us all whopping phone bills. In fact, it's a way of making Internet access much less painful, using a point-and-click interface much like the Desktop on your ST. But there isn't yet a browser for the ST (like *NetScape* for the Mac and PC), so are ST users left out of the Web? Nope. You can crawl around the vast amounts of info on the Web using your ST, although in a limited text-based fashion at present. Make sure that you have a Net account with a provider like Demon, and that you've followed Simon's *AtariNOS* tutorials from the last two issues before you get started

Public Access servers

A Public Access server is a Net-connected machine that enables you, if you have Internet access, to call in and run a text-only browser called *Lynx* without having to have the program installed on your own machine. Although *Lynx* runs on the remote machine, while you're connected the display appears on your monitor. Servers like this can be slow and erratic, but they're a good way to get started, saving you the expense of buying and installing *Lynx* yourself. Take a look at the two panels, which show two different approaches to getting on to Web pages.



The *ST FORMAT* Web page in all its graphical glory. Hopefully we'll see a browser like this for the ST very soon.

There are other more complex ways of Web browsing, such as setting up *Lynx* itself on your ST, using the MiNT multitasking system and the MiNTnet extensions. However, they're too complex to cover here, but drop us a line if you'd like to see something on it. And, of course, as news comes in on graphical browsers for the ST we'll cover it in our ST Answers comms column. ***stf***

CERN SERVER

Based in Switzerland, this server takes a different approach to the *Lynx* servers and is initially easier to navigate. If you do use it, though, bear in mind that it's often busy and you may have to call back later, and also that it operates in a different time zone.

Start off as per the instructions for the *Lynx* servers, but don't use the 'echo accept' command. Open a connection by typing: `telnet telnet.w3.org` and hitting [Return]. There's no login, and you're given a Help page right away. Any links in a page have a number after them, for example [3], and to follow that link you just type the number and hit [Return]. Typing `help` explains all commands for you, and to get to other pages, type: `go http://whatever` and hit [Return]. Bear in mind the fact that there's a slight time lag from Switzerland, and that this server is often very busy, so you may have to try again later.

```
WWW Alert:  Can't save data to file -- please run WWW locally
                                                    Atari on the Web!
                        NEW ATARI PAGE FOR THE WEB!


   ---------------------------------

Miscellaneous!

   Various Atari related links, interesting documents, FAQ's and news letters
   will also be included in here.

   Thankyou to everyone who has mailed me and keep up the good work.  A special
   thanks goes to Denesh[1] at HENSA for his prompt replies and to Clive
   Parker[2] at ".net : The Internet Magazine" for his invaluable help.  Also I
   would like to give a special thanks to Frank Charlton, and Andy Curtis at ST
   Format for their support and submissions.  Also a big thanks has to go to
   Christer Gustavsson for all his help and contributions.

      Documents, FAQ's, Newsletters and Atari related links[3]

      Questions and Answers[4]

      Reviews[5]
1-13, Back, Up, <RETURN> for more, Quit, or Help:
```

The CERN server is a doddle to use and is one of our favourites. Give it a try.

LYNX SERVERS

***Lynx* is a basic but capable text-mode browser. You don't get to see any of the flashy graphics for which the Web is famous, but you can follow any of the hypertext 'links' to other pages easily, and there's a lot of fun to be had even in text-mode.**

Make sure you're on-line, using *AtariNOS*, then, at the blank NET> prompt, type:

```
echo accept
```

and hit [Return]. This tells *NOS* to allow single keypresses to be registered at the other end without having to hit [Return] after each one. If you don't do this you can't progress past the first Web page you encounter. Next, you use the 'telnet' command, which connects you to a remote computer as if you were sat in front of it. There are quite a few Web servers dotted around, but the one we've found to be reliable is at the University of Birmingham. To get to it, at the NET> prompt, type:

```
telnet acsis.bham.ac.uk
```

and hit [Return]. After a while you'll see a login screen. When the system asks you for a login name type `lynx` and hit [Return]. *Lynx* starts up, and you're presented with a welcome page. To follow any links in the page, use [Shift] and the arrow keys: if the cursor is on a link, pressing the right arrow takes you to that document, while the left arrow moves you to the one you read last.

No doubt you've seen Web addresses in *.net*, looking something like: http://blah.blah/wibble.html. To move to one of these pages – wherever in the world it is – press [G] while in *Lynx* and it prompts you for the address of the page. Type the address as shown above – so to get to ST FORMAT's own Web page you'd type:

```
http://www.futurenet.co.uk/computing/
stformat.html
```

all on one line, followed by [Return], and after a short delay you'll be reading the page! The only other key you really need to know is [Q], which quits *Lynx*, ends the connection to the server, and dumps you back to the NET> prompt. Don't be afraid to experiment though. You can't do any harm, and if you get stuck, on-line help is available simply by following the on-screen prompts.

```
                    WELCOME to THE
              UNIVERSITY of BIRMINGHAM
            ACADEMIC COMPUTING SERVICE
                INFORMATION GATEWAY

          acsis - ACSIS System
            cis - Campus Information Service
             de - Directory Enquiries
         gopher - Gopher Client
        jughead - The Birminghan Jughead Server
           lynx - World-Wide Web Line Mode Browser
         mosaic - World-Wide Web X Window Browser
       newsread - Gopher News Reader
         status - Status of ACS Hosts and Networks
        telgate - Telnet Service for X29 PAD and Gandalf Users
       veronica - University of Manchester Veronica Server
        x29gate - X29 Service for Telnet Users

  Please login using the service name required. No password is needed.
  Type clear if you need to clear the call to the Information Gateway.
login: lynx
```

Birmingham University have kindly provided this Web server for you all to play with, and it's free!

TUMBLEVANE PDL

(Dept 1), 6 West Road, Emsworth, Hampshire PO10 7JT
Telephone: Emsworth (01243) 370600

GAMES AND ADVENTURES

GM 027:	Monopoly	**GM 135:**	Dave Munsie Game Collection – 9 great games on 1 disk
GM 097:	Fatemaster		
GM 101:	Psycho Pig 2 (2 disks)	**GM 136:**	HMEC Pacman Clone
GM 111:	The Glass Buttock of Tharg	**GM 137:**	MAX – a mad platform game
GM 114:	Course Angler	**GM 138:**	Darts 180
GM 119:	Insectroid	**ADV 028:**	A Night on the Town
GM 115:	The Obscure Naturalist	**ADV 009:**	PORK 2
GM 124:	The Klingon War (Star Trek™) 1Meg	**ADV 032:**	Christian Adventure
GM 133:	Snacman (Pacman clone)	**ADV 052:**	Heavy Bunch/Investigation
GM 134:	Starball	**ADV 035:**	Deena

MUSIC AND MIDI

MUM 24:	Alchime Jr, Sequencer + 200 tracks mono
MUM 53:	Kawai K1<>K2, Hi-res, 1 Mb
MUM 55:	Yamaha SY22 Editor, Hi-res, 1 Mb
MUM 56:	Guitar Professional, learn those chords
MUM 58:	Roland 'D' series Sound Banks
MUM 63:	Score Perfect - At last a score writing programme which works in all resolutions 1 Meg

SPECIAL STARTER PACK OFFER
ANY 5 DISKS £6.99
HELPLINE FROM 8.30am - 11.30am
PLEASE PHONE FOR DETAILS

ART AND GRAPHICS

AAG 29:	Paintpot, best half meg package	**AAG 54:**	Cosmic 4 Pyschedelic Art
AAG 31:	Metafile Format Objects	**AAG 55:**	Cosmic Slide Show
AAG 35:	Creative Titles, Video titler	**AAG 57:**	Photochrome Version 3
AAG 39:	Atari Image Manager V1.96, 2 disks	**AAG 58:**	Clipart, Judo & others
AAG 38:	Crackart V1.36 Full English Manual 1Mb		3 Disk Set - Wedding Clipart £4.00
AAG 60:	Creative Titles 2 – 1 Meg Version	**AAG 61:**	HP Chrome – print pics on HP deskjet

EDUCATIONAL

EAC 01:	Maths Test for the under 10's	**EAC 21:**	CIA World Factbook, Info on over 240 countries, 4 disks
EAC 11:	Maths Made Easy	**EAC 06:**	Shipwreck (Maths Cartoon)
EAC 02:	Body Search, Basic Human Anatomy	**EAC 29:**	Workout. A learning aid
EAC 18:	The World (Quiz)	**EAC 09:**	Chunnel (French/English)
EAC 20:	Telltale chemistry, GCSE Levels A, B, C	**EAC 37:**	GCSE Maths
EAC 19:	Planetarium		

WORD PROCESSING & DTP

WPD 01:	ST Writer Elite	**WPD 22:**	Printing Press extras
WPD 19:	Printing Press + 15 new fonts	**WPD 24:**	DB Writer support disk
WPD 23:	DB Writer	**WPD 35:**	Marcelle – The Word Processor
WPD 03:	Typing Tutor		

UTILITIES

UTA 28:	Award Maker, now with 286 listed awards awards and instructions, create your own certificates	**UTA 53:**	German Translate, 27,000 words
		UTA 06:	Fastcopy III + 3 more
UTA 34:	DB Master, create your own database	**UTA 48:**	Sagrotan Virus Killer
UTA 38:	5 Databases, one has got to do the job	**UTA 57:**	Astubank (Personal accounts)
UTA 51:	70,000 word spell checker	**UTA 01:**	Hitchhickers Utils with Dock Displayer 3

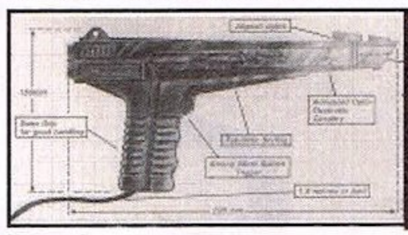
Please pay by cheque or postal order only, payable to: Tumblevane PDL.
Latest Update December 94
Full catalogue disk for £1.00 or 50p with order
Disk prices: £1·75 each. Postage included

The December Catalogue is now available

Warehouse Clearance!

THE TROJAN PHAZER GUN (FOR THE ATARI ST/STE)

Enter a new phase of computer entertainment with the Trojan Lightphazer. Unleash your imagination and take up the challenge of the two action-packed games included in the pack:-



Enter a new phase in computer entertainment with the Trojan Phazer. A challenge of skill and accuracy for all ages. Unleash your imagination!!!

RRP ~~£39.99~~
OUR PRICES £12.99
+ £2.50 P.P

Skeet Shoot: Travel the world and attempt to complete "The International Pro Skeet Shoot". Try to better your score, or compete against a friend in your bid to become World Champion

ORBITAL DESTROYER: Reach for your Pulse Laser and blast the aliens as you fight to save the planet Earth! Be careful, your ammunition supply is limited - if you run out the Earth will be doomed

ADDITIONAL PHAZER GAMES:- FIRE STAR RRP ~~£19.99~~ OUR PRICE £7.99
ENFORCER RRP ~~£19.99~~ OUR PRICE £7.99

ATARI ST/STE DISK SOFTWARE

GFA RAYTRACE (Create your own animated 3D world)	£12.99
STOS THE GAMES CREATOR (with manual)	£12.99
STOS COMPILER (with manual)	£12.99
GAMES GALORE (4 great games written using STOS plus free disk compressor)	£12.99
STOS 3D (with manual)	£12.99
STOS SPRITES 600 (with manual)	£12.99
STOS MAESTRO (with manual)	£12.99
HOTWIRE (allows you to assign 'Hot Keys' for up to 54 programs)	£9.99
THAT'S FUN FACE (5,576,787,923,200,000 possible faces!)	£9.99
VIRUS KILLER (kills 20 ST viruses)	£3.00
TIME (space, magic & mystery. The epic journey in time)	£6.99
HEREWITH THE CLUES (murder, mystery & suspense)	£6.99
PREMIER COLLECTION (Exolon, Netherworld, Zynapps & Nebulus)	£9.99
MOONSHINE RACERS (action packed chase thriller)	£7.00
HOME ACCOUNTS (you'll wonder how you ever managed without it)	£9.99
STF GRAPHICS COLLECTION (disk and book)	£3.99
STF ANIMASTER (disk and book)	£3.99
MAXIFILE (file management supertool!)	£9.99
GFA BASIC 3.5 INTERPRETER	£14.99
STORMBALL (sports sensation of the 21st century)	£9.99
GAZZA 2 (the official Paul Gascoigne soccer simulation)	£6.99
INTERPHASE (dreams of the future)	£9.99

PRICES INCLUDE POSTAGE, PACKING ETC

All orders sent by return: Cheques/Visa/Access/POs

TRADING POST
Victoria Road, Shifnal, Shropshire TF11 8AF
Tel/Fax (01952) 462135

Access VISA

WIZARD GAMES

1 NORTH MARINE ROAD, SCARBOROUGH, NORTH YORKSHIRE YO12 7EY
TEL: 01723 376586/01723 503299

CHAOS ENGINE	8·99	PACIFIC ISLANDS	8·99
CHAMP MANAGER 93/94	14.99	POPULOUS 2	£10.99
CHAMPIONSHIP MANAGER END OF SEASON DATA DISK 94	9.99	POPULOUS/PROMISED LANDS	9·99
CHAMPIONSHIP MANAGER ITALIA	£16.99	POWERMONGER WWI	10·99
CRYSTAL KINGDOM DIZZY	8.00	PREMIER MANAGER 2 (NOT BOXED)	12.00
D DAY (1 MEG)	9·99	QUATTRO SPORTS	3.99
DRAGONS LAIR 3	6.00	REACH FOR THE SKIES	10·99
F1 (DOMARK)	£12.99	ROBINSONS REQUIEM	10·99
GRAHAM GOOCH WORLD CLASS CRICKET + 2ND INNINGS	15.00	RUGBY LEAGUE COACH (1 MEG)	18.99
GUY SPY	6.00	SHOE PEOPLE (EARLY LEARNING SOFTWARE) 4-6 YEARS	1·99
HERO QUEST + WITCH LORD	6.00	SPACE 1889 (1 MEG)	8.99
INT RUGBY CHALLENGE (1 MEG)	9.99	STREETFIGHTER II (1 MEG)	8·99
KID GLOVES 2	7·99	STRIKE FLEET	6.99
MCDONALD LAND	6·99	SUPREMACY	10·99
MIG 29 FULCRUM	5.99	WAR IN THE GULF	9·99
NODDY'S PLAYTIME 3YRS+	16.99	WIZ KID	5.99
		THOMAS THE TANK ENGINE 1&2	12·99
		PLAYDAYS 3-8 YRS	9·99
		FUN SCHOOL 2 UNDER 6/6-8/OVER 8	6·99

COMPILATIONS

ACTION MASTER
F16 COMBAT PILOT, WELLTRIS, TURBO OUTRUN, ITALIA 1990, DOUBLE DRAGON II 9.99

BIG BOX 2
BACK TO THE FUTURE 3, ISS, R–TYPE, SINBAD, PREDATOR 2/TV SPORTS FOOTBALL, BOMBUZAL, RAMPAGE, KING OF CHICAGO, DEFENDERS OF THE EARTH ..... 10·99

BOARD GENIUS
CLUEDO,SCRABBLE,RISK ..... 10·99

CARTOON COLLECTION
TREASURE ISLAND, CJ'S ELEPHANT ANTICS, SPIKE, SLIGHTLY MAGIC, SEYMOUR GOES THE HOLLYWOOD 9.99

HIGH ENERGY
NORTH & SOUTH, TIN TIN ON THE MOON, FIRE AND FORGET, TEENAGE QUEEN, HOSTAGES ... 10·99

KID PACK
POSTMAN PAT, COUNT DUCKULA, THE MONSTERS ... 6·99

KIDS RULE OK
POSTMAN PAT 3, POPEYE 2, SOOTY & SWEEP ..... 9·99

MAGNUM
RVF HONDA, ORIENTAL GAMES, PRO TENNIS, SATAN AFTER THE WAR 5.99

MAX
TURRICAN II, ST DRAGON, SWIV, NIGHT SHIFT ..... 9·99

SOCCER MANIA
FOOTBALL MANAGER 2, GAZZA, MICROPROSE SOCCER, FOOTBALL MANAGER WORLD CUP 5.99

SUPER ALLSTARS
ROBIN HOOD LEGEND QUEST, MAGICLAND DIZZY, CAPTAIN DYNAMO, CJ IN THE USA, STEG THE SLUG 9.99

THE DIZZY COLLECTION
FASTFOOD DIZZY/QUICKSNACK, FANTASY WORLD, TREASURE ISLAND, MAGICLAND 9.99

THE GREATEST (Not boxed)
JIMMY WHITE, LURE OF THE TEMPTRESS, SHUTTLE ... 11.00

LOTUS TRILOGY
LOTUS 1-2-3
£10.99

CHOOSE ANY 3 OF THE FOLLOWING FOR £10·00

PLEASE GIVE 1 ALTERNATIVE

ACTION SERVICE
ADDAMS FAMILY
ADVANCE RUGBY
ALACATRAZ (NOT BOXED)
BEAST LORD
BIG NOSE
BIG RUN
BLUE MAX
BMX SIMULATOR
BUBBLE DIZZY
BULLY' SPORTING DARTS
BUMPER PACK
(JAWS, GRAND PRIX, HIGH STEEL, CROSSBOW)
CAPTAIN PLANET
CARRIER COMMAND
CHAMPIONSHIP RUN
CHESS SIMULATOR
CJ IN THE USA
CJ'S ELEPHANT ANTICS
COOL WORLD (1 MEG)
CYBERBALL
DALEK ATTACK
DEJA VU 1 AND 2
DIZZY PANIC
DOUBLE DRAGON
DRAGONS LAIR
DRAGON SPIRIT
FIRE HAWK
G–LOC
GOLD OF THE AZTEX
GOLDEN OLDIES
HERO QUEST
HOOK
HOVER SPRINT
HUCKLEBERRY HOUND
IMMORTAL
JAHANGIR KHAN SQUASH
JAMES POND
JIMMY CONNORS
KAMIKAZI
KID GLOVES
KING OF CHICAGO
KWIK SNACK DIZZY
LASER SQUAD
LETHAL WEAPON
LORDS OF CHAOS
LOTUS ESPRIT
MANCHESTER UNITED
MANIX
MEAN MACHINE
MIG 29
MINDBENDER
MOONFALL
NEIGHBOURS
ONE STEP BEYOND
OPERATION HORMUZ
PACMANIA/PACLAND
PIXIE & DIXIE
POPEYE 2
POSTMAN PAT
POSTMAN PAT 3
POTSWORTH & CO
PRO BOXING SIM
PUB TRIVIA QUIZ
QUICKSNACK DIZZY
RESOLUTION 101
RISKY WOODS
ROBIN HOOD LEGEND QUEST
RODLAND
SCRAMBLED SPIRITS
SEYMOUR GOES TO HOLLYWOOD
SHADOW GATE
SIM CITY TERRAIN EDITOR
SIMPSONS
SKYHIGH STUNTMAN
SOOTY + SWEEP
SPACE ACE
SPACE CRUSADE
SPELLBOUND DIZZY
SPELL FIRE THE SORCERER
SPIKE IN TRANSYLVANIA
SPORTING TRIANGLES
STEG THE SLUG
STORMBALL
STUNT CAR RACER
SUPER SEYMOUR SAVES THE PLANET
SPELL FIRE
SWITCHBLADE II
TEAM SUZUKI
THE SORCEROR
TETRIS
THE GAMES (1 MEG)
THE WINNING TEAM
(APB, KLAX, CYBERBALL, VINDICATORS, ESCAPE FROM THE PLANET OF THE ROBOT MONSTERS)
TIMES CROSSWORDS
TOKI
TREASURE ISLAND DIZZY
TUSKER
UNINVITED
UTOPIA
VIDEOKID
VIOLATOR
WARP
WILLOW
WORLD CHAMP BOXING MANAGER
WWF
WWF 2
XENON

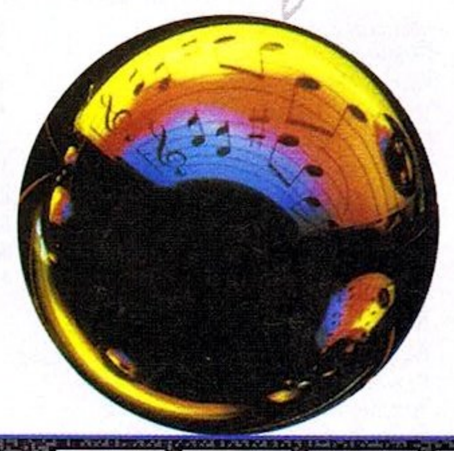
RAVE
Midi Music Recording Studio
£14.99

COMPETITION PRO 5000
£5.00 EACH

Access VISA

GAMES SUBJECT TO AVAILABILITY. PLEASE NOTE - A PHONE CALL RESERVES YOUR ORDER. ORDERS UNDER £5.00 ADD 50P POSTAGE + PACKING.
CHEQUES + POSTAL ORDERS MADE PAYABLE TO WIZARD GAMES. PLEASE ALLOW 7 DAYS FOR DELIVERY. OVERSEAS ORDERS PLEASE ADD £2.00 PER ITEM. EEC OR WORLD.

The Score

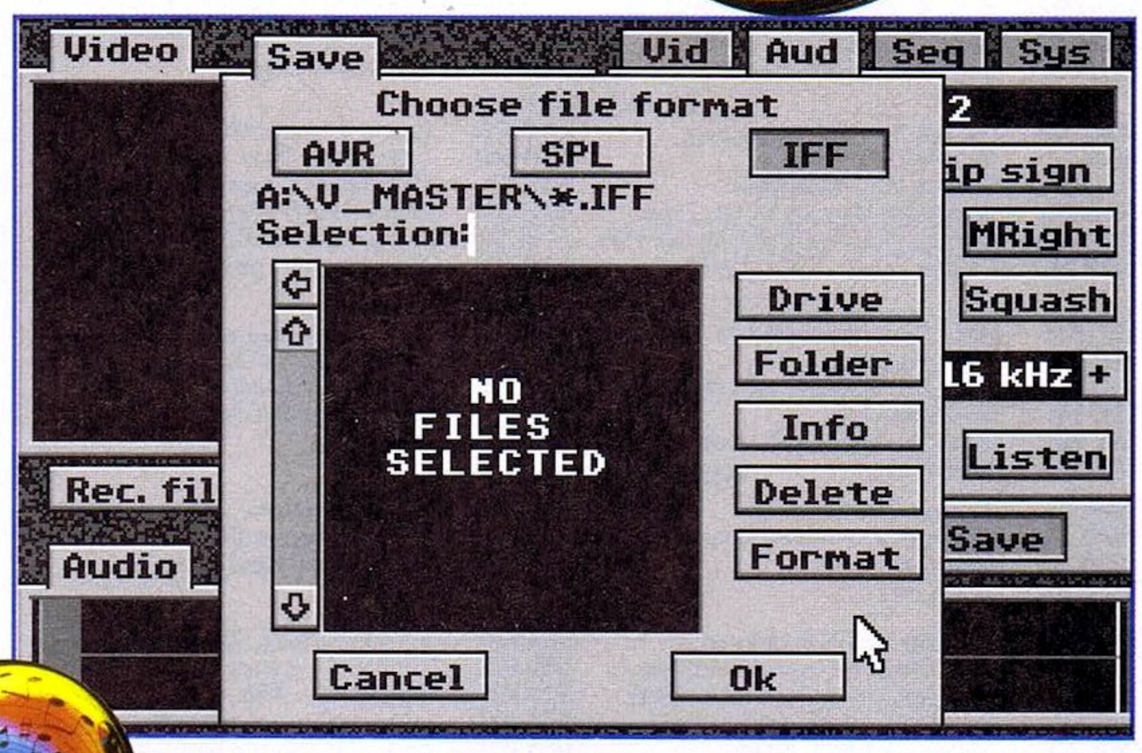


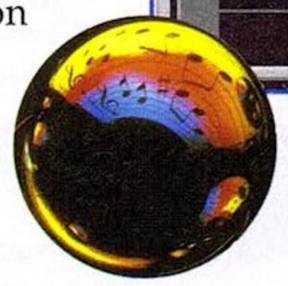
Calling all musicians! Andy Curtis hosts a new musical extravaganza each month to keep you in touch with all things music and MIDI.

What's 'The Score'?

Each month, The Score brings you the latest ST-related MIDI news, your MIDI and music queries are answered and one area of MIDI and music is addressed in a little more detail. And as well as all that, we'll also bring you useful facts and figures, like our definitive MIDI 'jargon buster' series starting this month.

But for The Score to meet your needs, we need to hear from you. Tell us what you'd like to see, and we'll do our best to satisfy your needs. Mail and e-mail details are at the bottom of the next page.





The excellent *Videomaster* software, which we gave away on Cover Disk 59, doubles up as a nifty little sample converter for the oh-so-tricky IFF sample format, which *Sequencer One* uses.

Quick Questions

IFFs and buts...

My girlfriend wants to get into creating music, so I'm considering giving her my *Sequencer One* Cover Disk, as I now use *Breakthru* and have no need for it. However, is there a way of converting AVR samples into the IFFs that *Sequencer One* uses? My *Replay 16* software will read IFFs, but won't write anything that *Sequencer One* will read. None of the shareware I have tried (*525, Sound Lab*, etc) will do the job. Any ideas?

A Seabrook via e-mail

The Score: If you speak nicely to the guys at Software Technology, they should be able to supply you with a program to convert samples to IFF format. Alternatively, you can use the Videomaster software that we gave away on STF Cover Disk 59, which also saves in this format. Far be it from us to suggest that you spend any money, but if you upgraded to Sequencer One Plus you would benefit from multi-format sample handling and much improved overall performance.

MIDI JARGON-ULTRA-BUSTER PART ONE

The Score delivers the ultimate 'cut-out-and-keep' MIDI jargon guide.

MIDI, like any fairly techie area of computing, surrounds itself with a plethora of terms and abbreviations. To make it easier for you when reading articles about music and MIDI, we've compiled a guide to the most commonly-used terms. It doesn't cover everything – that would be impossible – but most of the important areas are covered in this A to Z of MIDI terminology.

Aftertouch

Some keyboards are fitted with this feature – certainly the more modern ones. It enables each key to be pressed down further than normal activating a switch. In a solo part, for example, a vibrato effect may be added by pressing down harder on the key and halted by lifting off a little. Aftertouch is one of the standard MIDI controllers and you can also add it using software if your keyboard doesn't feature this capability.

Arrange

Most sequencers have an Arrange page – it's often the main sequencing screen. This enables you to move around the music you have recorded to get the required effect. Your music may well be in sections (chorus, verse etc) so you can use the Arrange page to copy, move or delete sections of your music.

Bank

Often refers to the General MIDI Bank system. This is an attempt to enlarge the range of sounds available to GM. While on the same program number, many similar sounds can be accessed on related banks. Many sequencers enable you to specify which bank is to be used.

Breath controller

Instead of a keyboard, interesting MIDI effects can be gained using a device similar to a clarinet. This enables you to generate MIDI data by blowing into a controller and fingering the notes on the controller itself, as if it were a standard wind instrument. Other breath controllers are associated with a keyboard and you blow into a small device, using the keys to specify pitches.

Cables

Always use good quality MIDI cables. Generally speaking, those old DIN cables from the loft are not good enough!

Channel

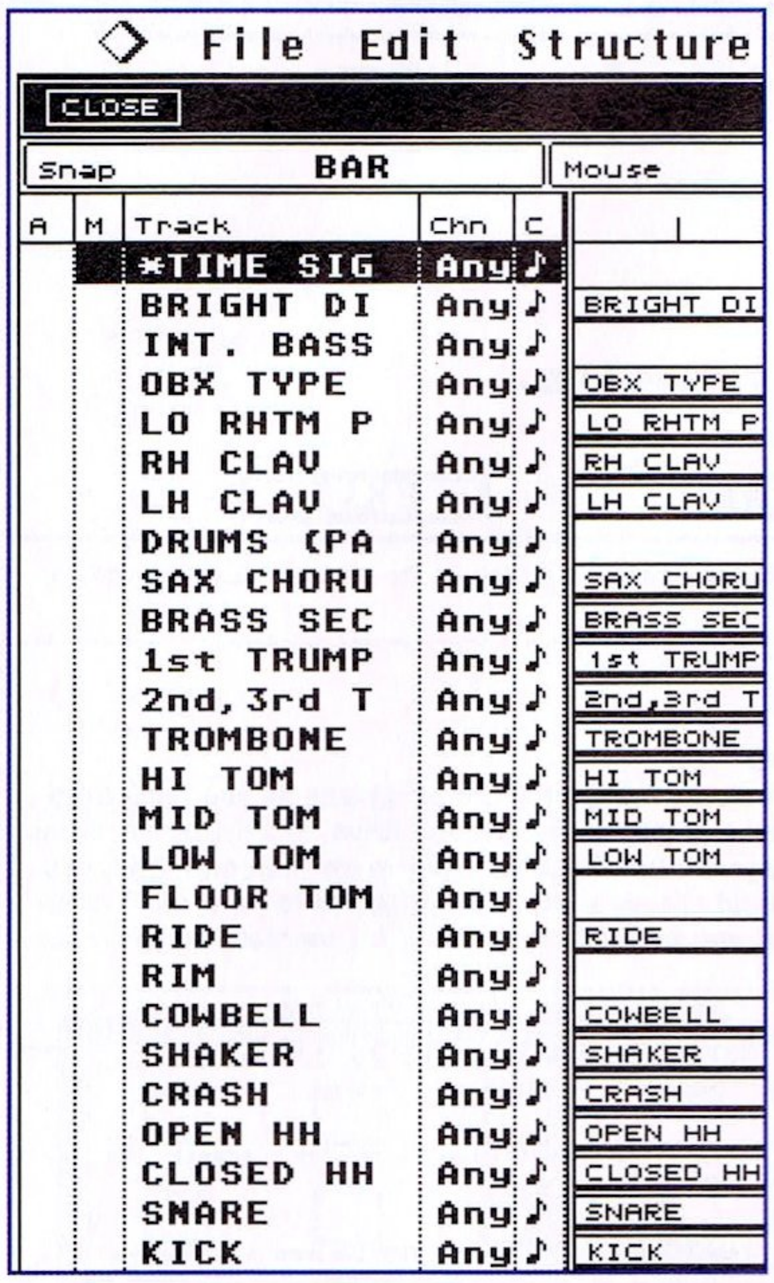
The MIDI standard enables 16 channels per output. A standard ST with no extra hardware has one MIDI output, which means that you'll be limited to 16 channels.

Downloading

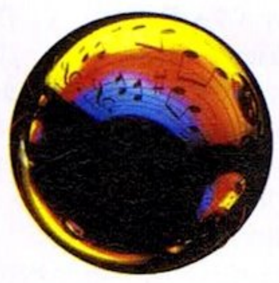
I've discovered recently that there are many BBS systems with MIDI files available to download to my ST. However, I'm concerned that the data may be getting corrupted, as the files don't load into my sequencer properly. Sometimes I just get one long track, and the names of the instruments often are not there at all. This happens even if the files are compressed with ZIP or LZH. What am I doing wrong?

Susan Blawes, Huntingdon

The Score: We suspect that you're doing nothing wrong at all, Susan. The fact is that MIDI files are written to a variety of different standards. At best, they may seem like normal sequencer files for your sequencer; at worst they may just be a list of nameless tracks. If this is the case, you're reduced to guessing which sound is which. It's a fascinating game and one that this journalist has spent many happy hours playing. Enjoy.



Not all MIDI files are as helpful as this one. Sometimes none of the parts are named and no program change numbers are included. This one has both, which means that all you have to do is assign MIDI channels.



CONTACT...

Write to: The Score, *ST FORMAT*, Future Publishing, 30 Monmouth Street, Bath, Avon BA1 2BW.
Or e-mail us on the internet at: thescore@theshack.demon.co.uk

MIDI NEWS

Cubase Audio ST!

Yes, you heard correctly, *Cubase Audio* is now available for the Atari ST as well as for the Falcon. In a joint move with Yamaha-Kemble Music UK, Steinberg have produced a version of *Cubase* that handles all the necessary audio controls to operate the Yamaha CBX-D5 4-Track hard disk recording system. With a CBX-D5, and a nice big audio-compatible hard drive, the world of direct-to-disk recording is wide open at last for ST users. An upgrade version of *Cubase* is available for existing users, or you can buy the whole package complete from Yamaha-Kemble. This underlines Steinberg's commitment to the humble ST, keeping it in the MIDI top-spot for performance, features and value. We hope to bring you a full review of this truly outstanding system in the coming months, but if you need information on the system right now then contact Rob Meek at Sound Control Hi-Tech ☎ 0191 232 4175.

The Yamaha CBX-D5, which you can use with *Cubase Audio ST*, presents a whole new world of possibilities for you as an ST MIDI musician. True 4-track direct-to-disk recording is on offer, and the price brings it just about within reach of the serious musician.

GM Price News

General MIDI, the MIDI standard initiated by Roland, is now supported by many standalone tone generators. If you would like GM compatibility as cheaply as possible then it's well worth considering the Roland SC7, which has a recommended retail price of £263. The simple white box fits neatly next to your ST and connects up via the standard MIDI ports. The sounds are perfectly adequate for listening to GM MIDI files and the unit boasts a full drum kit. Most sequencers can import MIDI files and if they are GM MIDI files the SC7 will play them back perfectly every time. If you are looking for a cheap and entertaining entry point in the wide world of MIDI music, this is a great place to start.

Alternatively, you could blow £699 on the top-of-the-range Yamaha MU80. It's a MIDI-driven tone generator that works perfectly with *The Score*. Contact Yamaha on ☎ 01908 369269.

Compression

MIDI compression usually acts on the velocity of a part. It's often referred to as a percentage. If sections of a part are too quiet, compression added bit by bit can bring their level up while not affecting the overall dynamic feel of the part too much.

Controller

A controller is a MIDI device (software or hardware) that inputs MIDI data. There are dozens of MIDI controllers with functions such as Modulation, Pitch Bend, Sustain and Volume.

Continuous data

Some controllers, such as aftertouch, send a continuous stream of data while they're in use. Although this gives a good level of flexibility to the effect, it generally fills up the serial MIDI transfer system with alarming speed. Many sequencers offer options to thin out this data so as not to cause a 'choking' effect.

Chaining

If you have only two or three MIDI devices, chaining them together is a cheap and effective way to get them to play in tandem. Simply connect the MIDI Thru of the first keyboard to the MIDI In of the next, and so on. Chaining too many MIDI devices can ultimately cause problems, in which case you may then want to invest in a MIDI Thru box.

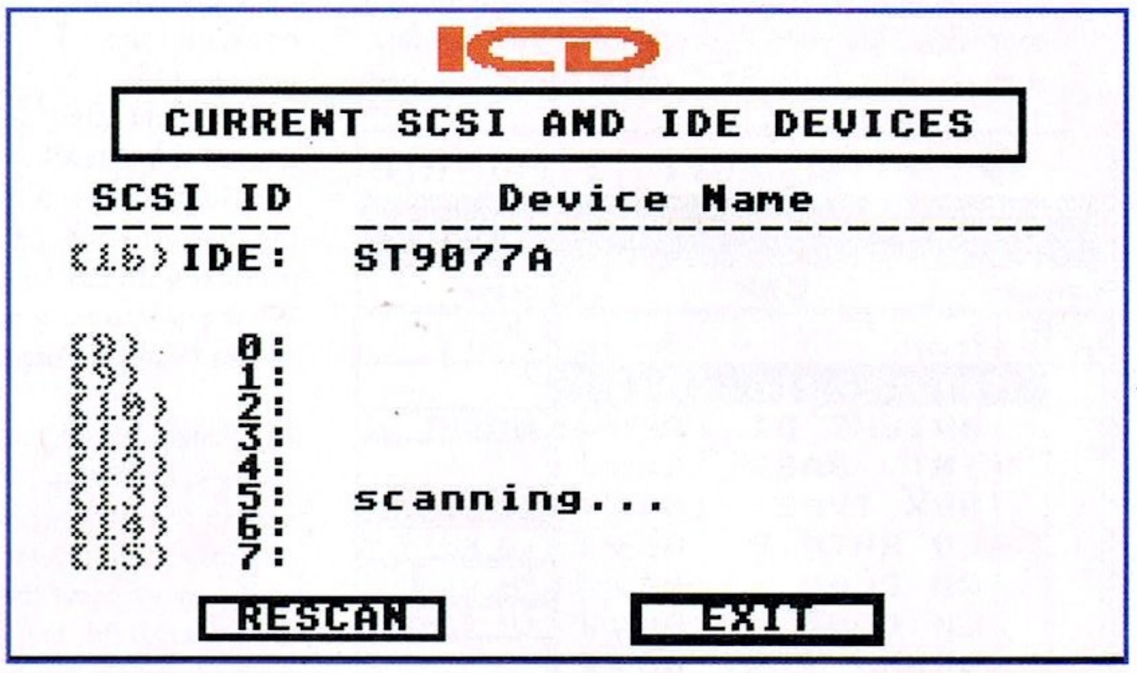
Cycle

Most sequencers have a Cycle mode in which you can play the same section of music repeatedly while adding parts or editing them.

More next month!

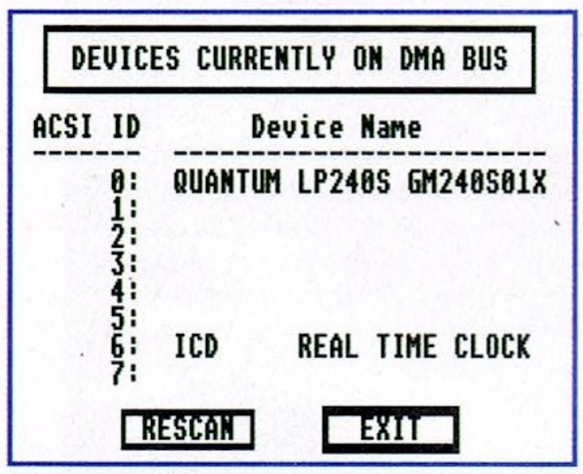
ICD hard drive utilities

If you have a hard drive, chances are you received an *ICD* utilities disk with it. Are you using those utils to their full potential? Simon Forrester takes you on a guided tour...



You could worry about the technicalities, but as long as the drive shows up you're fine.

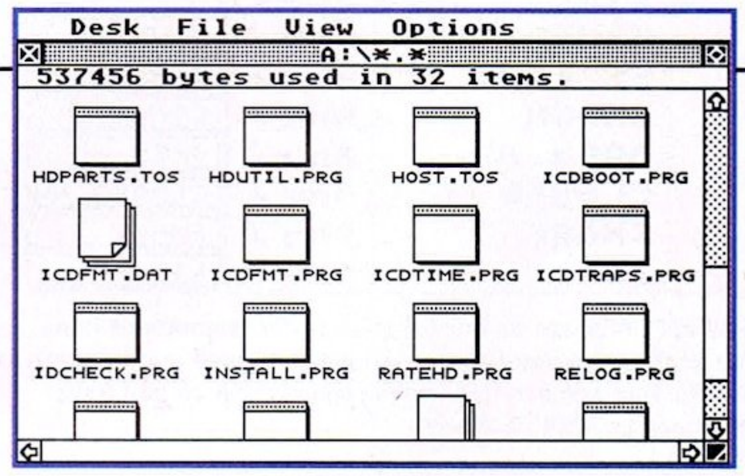
When you buy a modern hard drive, you also need to purchase an adaptor to link it to your ST. This is because most modern hard drives are manufactured to the SCSI standard, while the ST uses a non-standard DMA hard drive port. The adaptor enables the two to 'talk'. One of the most common adaptor kits you're likely to buy is the ICD Link 2 kit, which takes the form of the converter plug itself, and two, innocuous-looking floppy disks.



Have you gone to the trouble of installing a real-time clock in your system? You can just use the clock that comes complete with most SCSI drives. Check with the manufacturer when you buy a drive.

It's these two disks that are surprisingly useful. They contain all the *ICD 6.5.5* software, which you use to get your hard drive up and running, and to keep it that way. For example, did you realise that you can use the ICD software to speed up access to your drives, fix bad spots, keep a constant check on your drive's performance, act as a real-time clock for your ST, create partitions and toggle them on/off, and even protect your drive during transport? We're going to show you how.

The ICD disk comes packed with handy utils.



How it all works

Before we talk about setting up hard drives, you need to know the basics about how they work. A

makepark.prg

Ultimately handy, this one. You may not be aware of this, but it's possible to park the heads on a hard drive, keeping them safely clear of the drive's disks for safe transport and ultimate security when you're planning to leave the unit switched off for long periods of time. When you load up the program, you can select which drive you'd like to park and save out a program that, when run, parks those drives.

Top tips

Create as many of these programs as you have hard drives. If you only have one drive, you'll only need one program, but if you're using more than one drive you should create a separate program to park each drive and one to park every drive, for ultimate convenience.

hdutil.prg

This is probably the most handy program on the *ICD* disk, making some of those vital hard drive tasks a lot easier. If you bought a pre-formatted drive, it's also the first program you're likely to use. Its main menu has the following few options, represented by clickable buttons.

Boot

Enables you to decide whether your ST will automatically boot from your hard disk or from a floppy drive. It does this by placing an ICDBOOT program into the root directory of your hard drive for the ST to find on start-up. On selecting the option, you'll be asked which drive your ST is to boot from – select one by clicking on the appropriate box (C, D, floppy, etc). Select 'floppy' if you want to stop your hard drive auto-booting.

Zero

The scary way to work with hard drives. The name is deceptive – this option erases partitions of the drive on request. Its uses may not be immediately obvious, but it's handy for clearing out old drives (perhaps one you've bought second-hand) or for getting rid of a virus the nasty way – by nuking the drive.

Map

Corrupted hard drives are bad news. When a drive goes wrong, the damage is normally restricted to only a few sectors of that drive. A sector is one of the units making up a track, and amounts to only half a kilobyte. By loading and running Map, it notes any sectors that aren't in working order in the hard drive's FAT (File Allocation Table), and makes sure they're never used again. The fault will still be there, but your ST won't try to use that chunk of the drive.

Configure

Your chance to irretrievably mess things up by altering the ICDBOOT.SYS file that the Boot option (above) places on your hard drive. If you're not sure, don't touch. Most of the options here are defined when a hard drive is formatted, and shouldn't be changed if you want that same drive to keep working in the same way.

Top tips

For the best possible results from your drive, you should regularly map for bad sectors. This ensures that you don't stumble across any errors during those vital saves and loads.

Next, edit your configuration, using 'Configure' and enable write-verification, read-caching and write-caching. Although the verification slows your drive access, it cuts down on errors by checking everything that's saved. The two caches aid your reading and writing by pre-empting what you do, which is why they should be turned on.

Feel free to experiment, though – find an arrangement that works well for you.

desktop.acc

This is the program you use to manage drive partitions. The Accessory itself opens with a list of all drives attached to the system, in the form of partitions. Each partition is listed by its name and followed with information about the partition's type (usually GEM), whether it's on, and whether it's the boot drive. You can turn drives on or off by clicking the ticks, and rename them by clicking on the name and typing a new one. You can also turn write-verification on or off temporarily, for speed and convenience.

The other great thing you can do with the Accessory is swap drives. Each drive is listed on the right-hand side of the window with its drive letter, and these drives can be swapped by clicking on the name and dragging it to its new position. This enables you to swap things like boot drives, depending on exactly what you want to use your machine for.

Top tips

First of all, you should make sure that any software and files that you use regularly are on one partition. Fill another partition with your backups and precious data, and you can then turn that partition off. This not only protects the data, but also makes your ST's life easier, by giving it fewer partitions to deal with.

Ask yourself a question – how do you use your ST? If you use it for music and MIDI, for example, consider setting up one partition purely for music, then swapping the partitions over to boot from your MIDI drive instead of your normal root directory.

icdtime.prg

This program takes the time and date from the hard drive's clock and sets your system clock. It also watches for any changes you make to the system clock, and resets the hard drive clock accordingly. This gives you a real-time clock.

Top tips

Put ICDTIME.PRG in the Auto folder of your start-up drive. This makes your ST fetch the correct time from the hard drive clock on start-up, effectively replacing the need for a different clock.

```
WHEREIS Version 1.85 Copyright © 1994 by ICD, Inc.
 Enter search mask/options (or HELP): grabs
   E:\GRABS\ <DIR>
   1 match found!
-------> X to exit, any other key to continue...
```

WHEREIS.PRG, an easy way to find those files in among the megabytes of tosh.

hard drive is like a floppy disk drive in that it's a storage device accessible from your machine, but it can store an enormous amount more information.

However, while an 80MByte drive thinks of all of its 80MBytes as being available to you, your ST is capable of thinking about them in a different way. It's possible, for instance, to build a drive with partitions, which mark the end of one logical drive and the start of another (they're called logical because they exist only in logic). You could have an 80MByte drive with four partitions, making four drives on your desktop named C, D, E and F. And they don't have to be 20MBytes each – you can make them any size you wish.

Getting started

First, make sure your hard drive is on and connected. Insert Disk A containing the *ICD* software into your floppy drive, and double-click on the Floppy icon in the top left corner of your Desktop. You'll be presented with a catalogue of the disk, which contains a healthy wodge of programs and Accessories, among which are the gems dotted about these pages... *stf*

```
Copyright and Trademark Information

ADSCSI.CPX and this documentation are c
Inc.  All rights reserved.  These files
distribution only to owners of ICD's ST
AdSCSI host adapters directly on disk f
electronically from our BBS, GEnie, or
distribution is authorized.  AdSCSI is
Inc.  Other product names mentioned may
trademarks or trademarks of their holde.

Introduction

Atari's new extensible control panel XC
level of flexibility to ST owners.  It
necessary to have a separate desk acces
hardware or software feature.  With ADS
several host adapter control and inform
XCONTROL.

ADSCSI.CPX and ADSPEED.CPX (for ICD's A
accelerator) are the first, to our know
extensions to Atari's new XCONTROL exte
At this time, this control panel is inc
-More-
```

The *ICD* software comes with documentation of sorts, though you'll need this tutorial to really get the best performance and to keep your machine and drive working in unison.

HDUTIL, a universally handy utility that'll save your life on many an occasion.

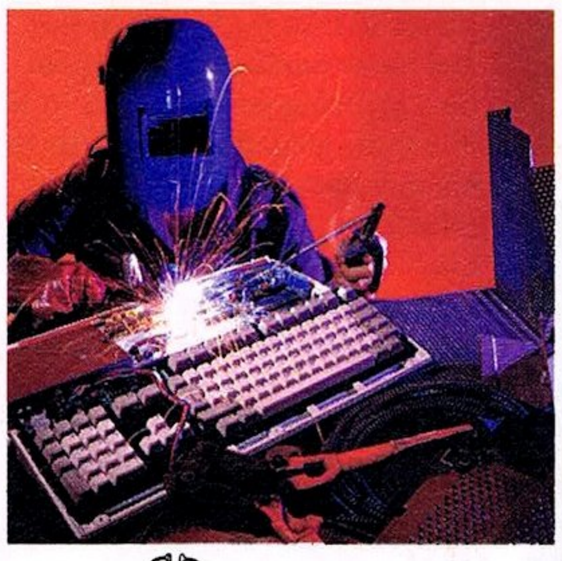
whereis.prg

Searches every partition of every drive, which is incredibly useful when you want to track down those elusive files. Simply enter the filename you want to search for, and the program does the rest.

And believe me, you'll use this program all the time. After all, we all know that the STs own search functions leave a lot to be desired.

Top tips

Keep a copy of this program on every partition. There's nothing more annoying than turning off a partition of your drive, only to find that it contains your only copy of this program. Drag it on to the Desktop if your version of TOS supports such features (this capability was first introduced in TOS 2.06).



FAST ATARI REPAIRS

FAULTY TROUBLESOME COMPUTER ??

SEND OR DELIVER TO THE EXPERTS FOR FAST RELIABLE REPAIR OF YOUR BELOVED ATARI ST

FOR ONLY £44.00 INC *

DRIVE OR KEYBOARD REPLACEMENT + £10

★ FREE GIFT WITH REPAIRS PLEASE TICK BOX

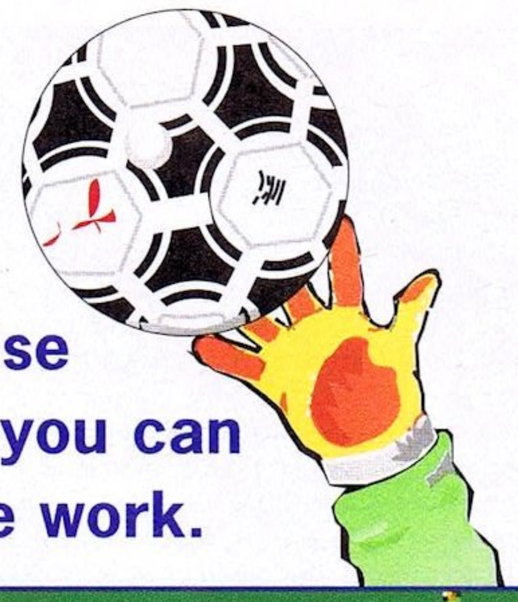
- Mouse Mat ❑
- Mouse Holder ❑
- Disk Head Cleaning Kit ❑
- Software Game ❑
- Mouse (Add £5) ❑
- Joystick (Add £5) ❑

FAULTY PART EXCHANGE SERVICE
PSU £24.99 KEYBOARDS £25.50
DISK DRIVES £25.50
UPGRADES
STFM 1MB £39.99
STE 1Mb Simms £25 POS 2.06 POA

WE ALSO REPAIR STE, Mega ST and Stacey
★ FREE QUOTATION ★

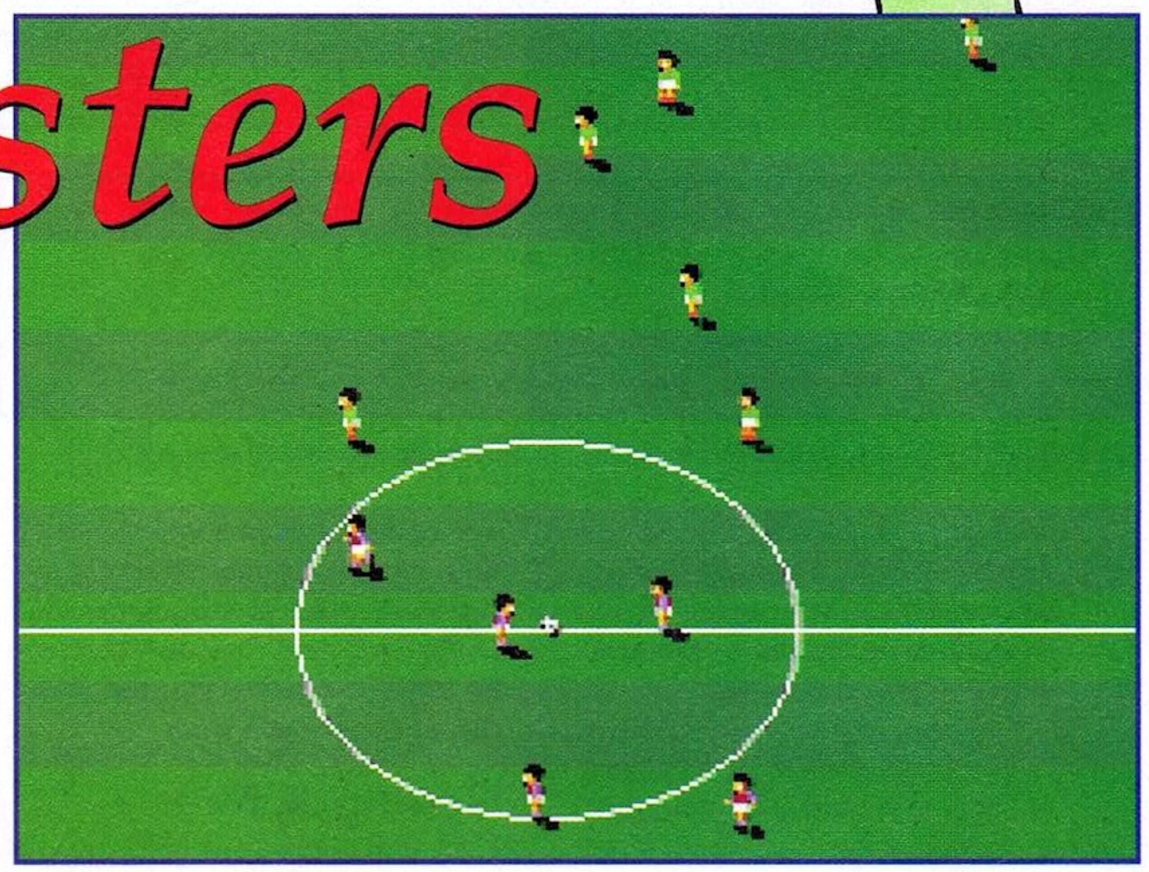
* COLLECTION AVAILABLE ANYWHERE IN THE UK.

144 TANNER STREET, TOWER BRIDGE, LONDON SE1 2HG. TEL: 071 252 3553



If you have a problem, if no one else can help, and if you can find him, you can hire Simon Forrester. He needs the work.

Gamebusters



The only problem with *Sensible Soccer* is that everyone's so tiny. If you really strain your eyes, you can make out that bloke in danger of being crushed by the ball.

Last month *Mark Boettcher,* who's currently *Loughborough's* resident low-down, dirty cheat, supplied the most incredibly extensive list of hints 'n' tips, but because of space restrictions we couldn't print them all. Here are a few of them:

Cisco Heat

For infinite playing time, pause the game and type: `time up`, then press [Return].

Dynamite Dux

Type `cheat` on the title screen. Now you can just press [F1] to [F6] and move direct to the corresponding level. This also gives you infinite lives.

Gods

Type `sorcery` on the password screen for infinite lives.

Lotus Turbo Challenge 2

There are several sections to drive through, each with its own password, as follows: night `twilight`, fog `pea soup`, snow `the skids`, desert `peaches`, city `liverpool`, marsh `bagley` and finally storm `e bow`. You can also replace the password with `deeside` for infinite lives, `turpentine` for extra time or `dux` to make the track scroll faster.

Magic Pockets

The game that absolutely no one's heard of... round here anyway. When you die, hold down [Fire], and you can continue playing.

New Zealand Story

There are two level warps in *NZS*, all of which are easy to reach. On level 1.1, climb on to the top platform just before the bird cage and shoot the highest point on the left-hand wall. A warp appears, which takes you to level 1.4. When you get there, swim to the right and jump up on to the ledges you find. Keep going up until you see the letters N and D. Collect them then walk to the left (shooting all the while) and the second warp appears, which takes you to level 2.4.

Thanks to Luke Chatburn's *Sensible Soccer* cheats, you can be the Man United of the *Sensible* world. To everyone else's annoyance...

Sensible Soccer

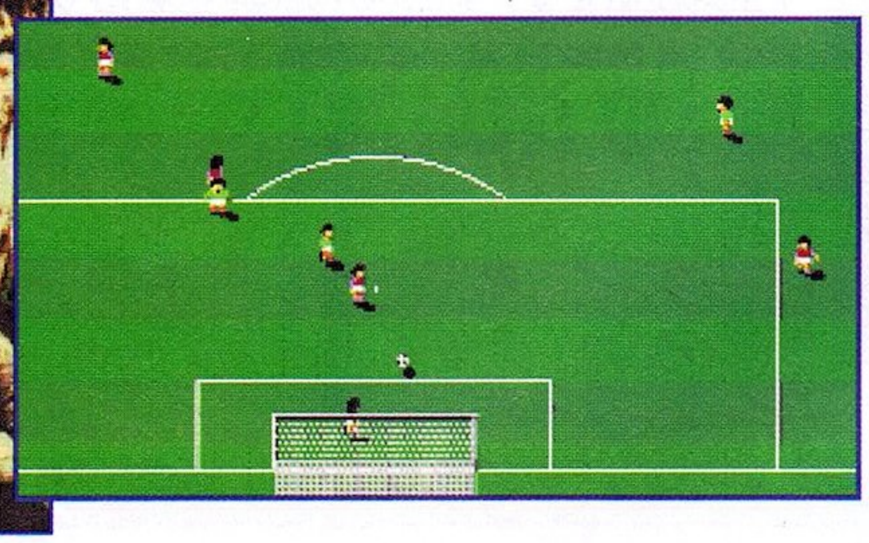
Sensible Software (available via mail order) ***STF*** **39, 91%**

Football isn't an easy game to cheat, but *Luke Chatburn of Oxford* has come up with some general tips for soccer success. Avoid the Eric Cantona method, and follow these.

To shoot and score, use the 4-3-3 formation. This enables you to pass the ball from the defence straight to the player in the centre-midfield, who can run it up and pass it to the forwards. To score, run toward the centre of the goal from the midfield and, as you touch the line of the box, shoot the ball while applying a curve to it, to take it to the corner of the box.

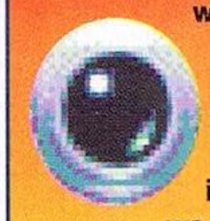
To get a goal from a corner use the 4-3-3 formation again. As you take the corner, another player runs up to you and stops when he's close. Wait for him to stop, then press the [Fire] button without moving the joystick, and without holding the button down for too long. This enables the other player to take the ball, then turn and shoot parallel with the goal line, applying enough curve to clip it into the goal. If you miss the net, another man is standing on the other post, and he can kick it in diagonally for you.

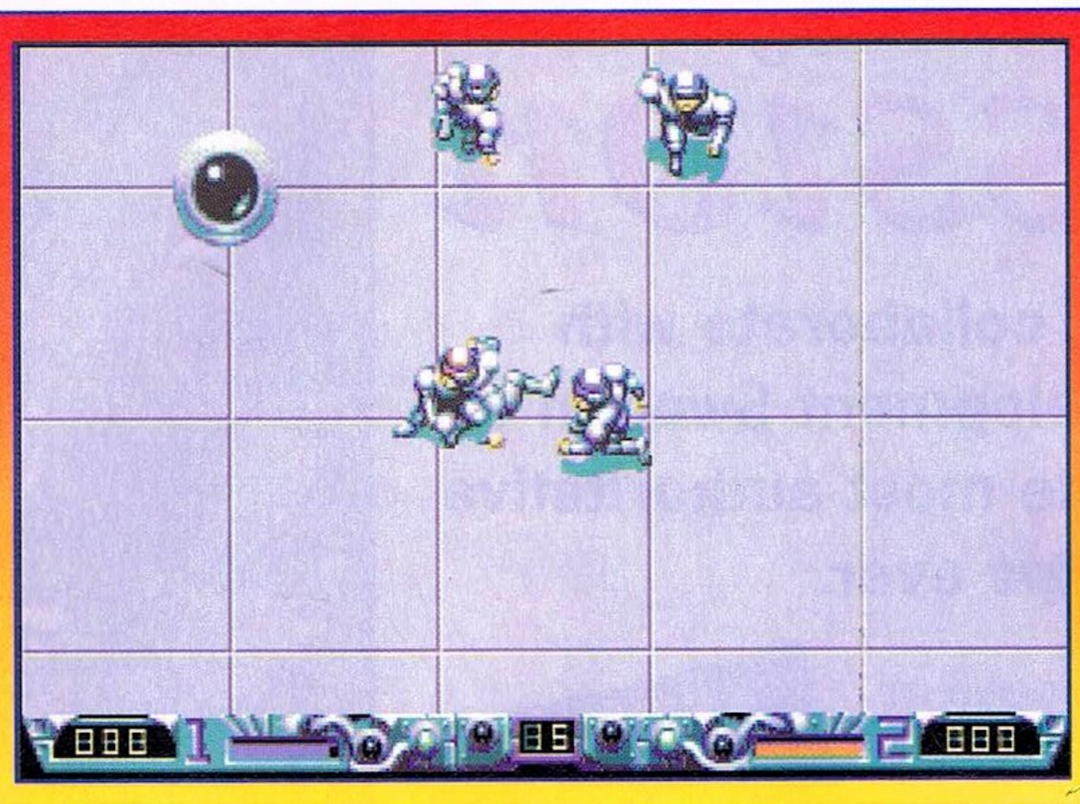
A final tactic, which may take a little time to perfect, is to shoot the ball diagonally towards the goal for a left or right forward, who won't stand a chance of scoring. The shot goes past the post and gets a goal kick if you leave it alone. Set a player up by the post and slide him – this knocks the ball into the net and sends the goalie diving straight past it.



SPEEDBALL 2

Nick Dutton of Wirral **wants to know if we have a cheat for *Speedball 2* that gives infinite credits. The answer is no, but we can tell you to build up a good bank balance – by playing a two-player game and only controlling one team. Nick has, however, supplied a cheat for *Defender*, which should please *Scott Miller of Davenport*. Just type `goaty` during gameplay to become utterly invincible. Don't ask why, we don't know...**





***Speedball 2*, a game well worth playing, if only for the terrific fouls you can commit. For a similarly violent game, try picking Man Utd in *Sensible Soccer*.**

Cheaters Digest

Over the last few months we've included several pages of hints and cheats taken from *The Cheaters Digest*, a fabulous cheat list that you can get on disk, containing over 5,500 cheats.

If you want to get hold of a copy – and it's a bargain at £4.99 – send a cheque made out to PjH Publishing, with your name and address, to: PjH Publishing, 4 Manor Close, Brampton, Huntingdon, Cambridgeshire, PE18 8UF. For an example of the kind of exhaustive cheats it offers, just look at the list of navigation codes and passwords for *Mean Streets*, below! We're not averse to a bit of cheating, and we suspect that you're not, either.

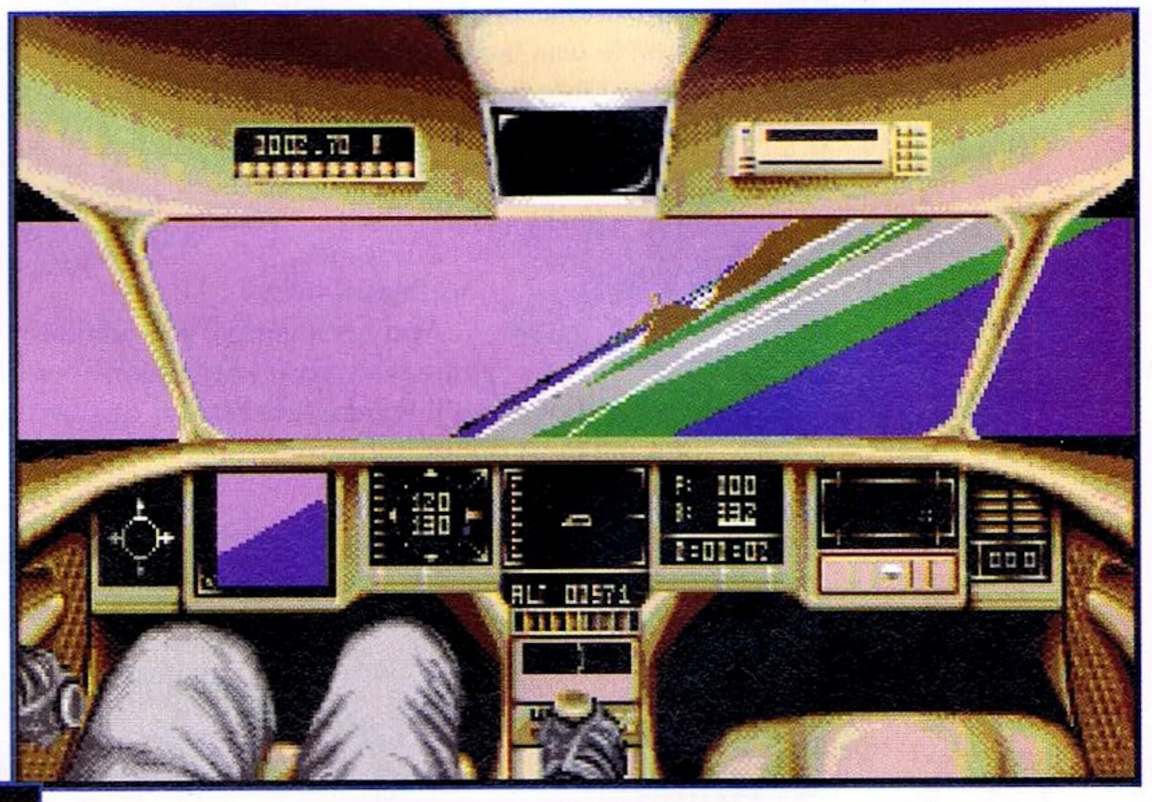
Mean Streets

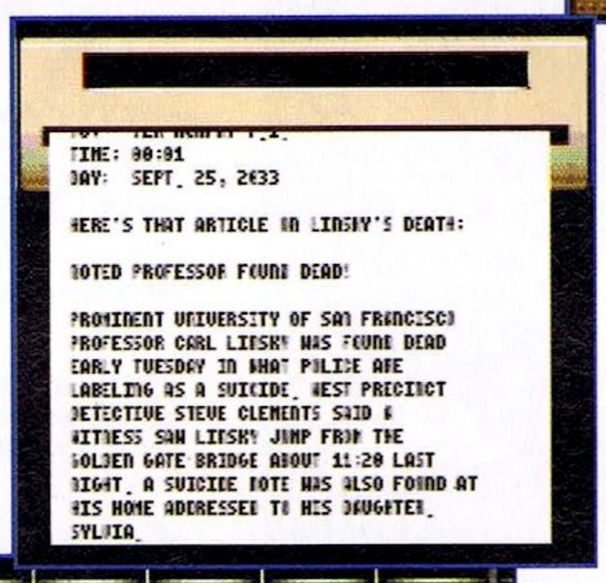
What would Gamebusters be without a long list of codes? This month's set of random numbers is the complete navigation code list to *Mean Streets*, courtesy of the *Cheater's Digest*, a fabulous cheat book containing over 5,500 cheats for a mere £4.99. To get hold of your copy, just take a look at the panel above right.

Aaron Sternwood	<NC 0439>
Apartment (search)	<NC 4605>
Arnold Dweeb	<NC 4610>
Bakersfield	<NC 1710>
Bash Dagot	<NC 4657>
Bazil Mallory	<NC 2713>
Beach house (search)	<NC 6470>
Big Jim Slate	<NC 4921>
Blaze Weiner	<NC 1715>
Bosworth Clark (search)	<NC 9932>
Brenda Perry	<NC 4577>
Cal Davis (search)	<NC 3720>
California Lab (search)	<NC 8911>
Carl Linskey's office, Usf	<NC 4663>
Linskey's home (search)	<NC 4660>

***Mean Streets*. The flight path's a little bumpy because the pilot's too busy surfing the Net. As usual.**

Carl Linskey's warehouse (search)	<NC 4675>
David Pope	<NC 6211>
Della Lang	<NC 2111>
Diamond Mine, Map	<NC 1700>
Ed Bradley	<NC 7312>
Gideon Ent, Frank Schimming	<NC 4650>
Greg Call	<NC 4753>
Harry Rice	<NC 1231>
Hotel, Matchbook	<NC 5162>
J Saint Gideon	<NC 3819>
Jerome Milbourne	<NC 4623>
John Klause	<NC 7012>
Ljorge Valdez	<NC 4931>



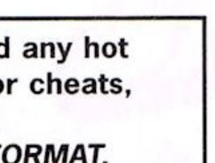


You receive your *Mean Streets* missions by fax. The next version will probably use e-mail...

Larry Hammond	<NC 4935>
Lola Lovetoy	<NC 4603>
Los Angeles, Bus Terminal	<NC 5194>
Los Angeles, Mtc Office	<NC 5037>
Maurice Gribble	<NC 8231>
Melba Wiedbush	<NC 4122>
Mtc Main Computer, Alcatraz	<NC 4550>
Peter Dull	<NC 4674>
Robert Knott	<NC 0132>
Ron Meat	<NC 4525>
Ron Morgan (search)	<NC 1998>
Sam Jones	<NC 0021>
Sandra Larsen	<NC 4599>
Smiley Monroe	<NC 3614>
Sonny Fletcher	<NC 5170>
Stanford Demile	<NC 3199>
Tom Griffith	<NC 4590>
Wanda Peck	<NC 4621>

The passwords, used with the passcards, are printed below in all their chess-related glory:

Orange	Checkmate
Yellow	Queen
Blue	Bishop
Grey	King
Purple	Knight
Black	Rook
Red	Stalemate
Green	Pawn



If you've discovered any hot new gaming hints or cheats, send them to us at Gamebusters, *ST FORMAT*, Future Publishing, 30 Monmouth Street, Bath, Avon, BA1 2BW. It's your chance to see your name in lights!

Our enormously long list of codes for *Mean Streets* should be invaluable for seeing those further missions that you've never made it to before. You cheat, you.

WE'RE ALL DOOMED

We're shying away from too much Jag coverage until the questionnaires all come back, but it's only fair to provide a little assistance to anyone having troubles with the 3D blood-fest, *Doom*. *Nicholas Bennet from Renfrewshire*, a proud Jag owner, has found invulnerability and infinite ammo cheats.

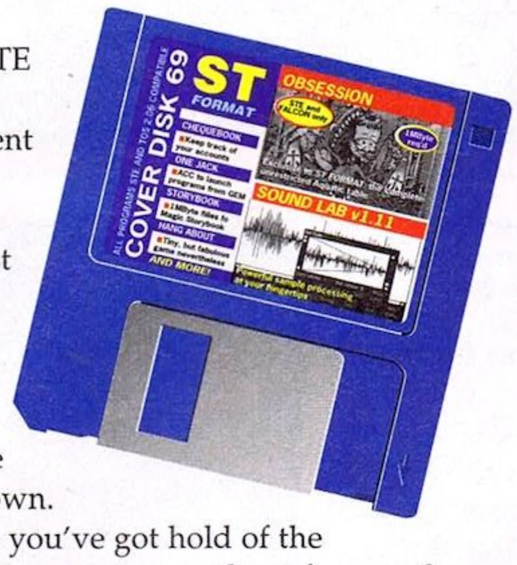
Just press the [Pause] and [*] keys together twice, and you'll have invulnerability, indicated by the slight change in your character's facial expression on the stats panel. Doing the same thing with [Pause] and [#] gives you all that lovely weaponry. Go on, be really violent. We're endorsing it.

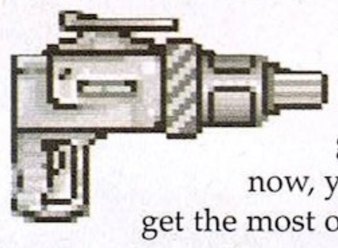
Gamebusters Special

Obsession

ST FORMAT collaborate with Unique Development Sweden to bring you the most authoritative *Obsession* tips ever.

Obsession is the brilliant STE and Falcon-only pinball game that impressed Trent so much that he gave it 94% in issue 67. The full Aquatic Adventure table was included on last month's Cover Disk, but the whole game is now also available at a specially reduced price of £21.95 – just fill in the coupon and send it to the address shown.

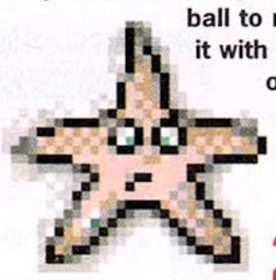




And once you've got hold of the game we've been raving on about for months now, you'll want a few hint 'n' tips on exactly how to get the most out of it. Just read on...

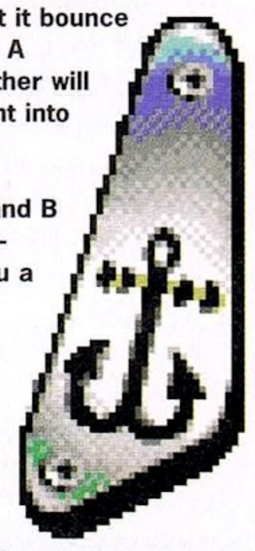
Aquatic Adventure

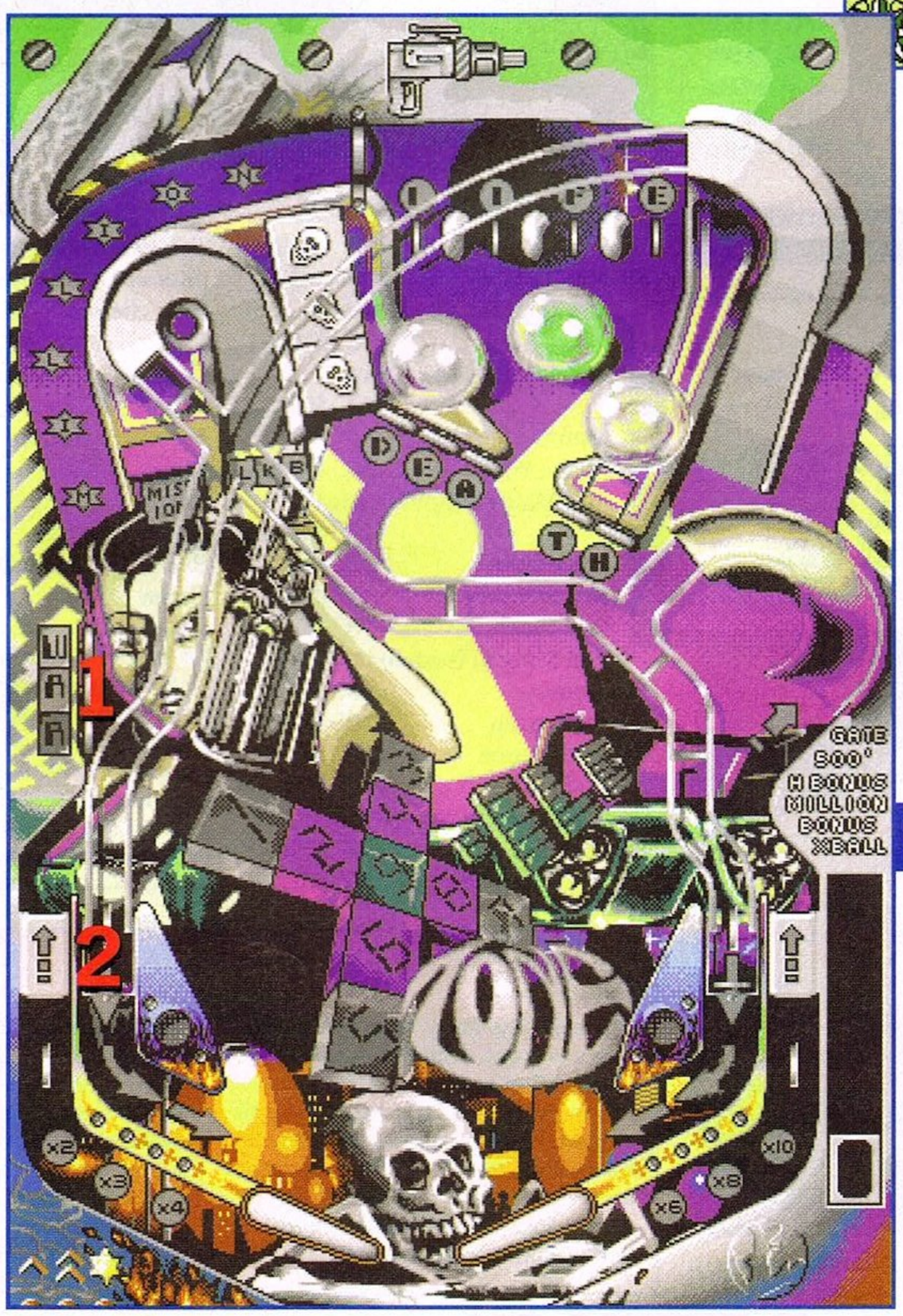
1 The easiest way to get a high score here is to get the ball into the oyster. If you can't manage this, shoot the starfish and wait for the ball to re-emerge. You can now either hit it with your left flipper or let it bounce on to the right flipper. A straight shot from either will send the ball straight into the oyster.



2 Always hit the H and B lights on the right-hand side of the table – this will give you a Hold bonus.

3 For extra points, try the skill shot. Use around 60 per cent power to launch the ball far enough to light one of the S, E or A lights. Now release the ball again, tilting it into whichever light is lit.





X-ile Zone

1 To activate missions, send the ball into the Mission Ball trap. The easiest way to do this is to shoot the W in 'WAR' – the ball bounces from here into the trap.

2 The kickbacks on each side of the table are activated by lighting the 'WAR' lights, and sending the ball up the curved ramp to the left of the Skull Ball trap.

● Try to finish as many missions as possible. The better your rank, the better your score.

GENERAL TIPS

● With computer pinball you don't have to spend a fortune to get the grip and feel of a table. Our advice is to practise your skills by loading up a table, then decide what lamps to hit. Try, for example, to hit D, E, A, T, H in the right order when playing X-ile. If you fail, drop the ball and try again.

● Try to use [Alt], [Space] and [Caps] to tilt the table whenever you can. By pushing the table from different angles you get much more control over the ball than you do using just the flippers. For instance, when the ball rolls under a flipper, lift the flipper and hit the [Spacebar], bouncing the ball back up high enough to be hit again.

● It might be fun hitting the ball whenever you can, but it's not the way to get high scores. Lift the receiving flipper to catch the ball, which stops it completely, and gives you time to plan and aim those all-important shots.

● To get the ball on to the other flipper, release the flipper it's currently halted on and tilt the ball over by hitting the [Spacebar].

Desert Run

1 For an increased bonus, make sure you're in first or second place when entering the gas station.

2 Never finish a stage in third place – being second or first doubles the score for clearing the stage, and being first also gives you an extra ball.

3 As with the other tables, the Tilt facility is very useful. A light touch of the [Spacebar] helps those slow balls get all the way up the pitstop ramp.

4 The Hundring ramp may present an easier way to collect gas than the speed ramp.

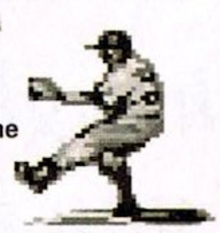
5 Always go for a better position (using the speed ramp) when using rocket fuel. This takes practice and nerve, but it helps you finish the race in a higher position.

● The time bonus on the whole race multiplies your score by ten.

Balls 'n' Bats

1 For a home run, you must send the ball up the Home Run passage within four seconds of it being pitched. Use the score display as a reference – it works with four-second units.

2 When the pitcher throws a curve ball, hold up the right flipper. This gives you the best chance of making a home run.



3 For an extra ball, light up the three arrows at the middle-left of the table. Now enter the Home Run passage from the other end.

4 When your time is about to run out in pitching mode, shoot the ball up to the Babe Ruth platform and light up one of the S, A, F or E lights. This gives you an extra 16 seconds to do your stuff.

5 Watch the lights at the bases to see how much time's been used.

6 Lighting all the S, A, F and E lights gives you a completely random reward. When you're not pitching, your score is multiplied by four, giving you the chance to score up to eight million if all four lights are lit.

Obsession Special Offer

I'd like to order ..... copies of *Obsession* at the special, one-off price of £21.95. I enclose a cheque for a total of £..... made out to Future Publishing Limited (or call ☎ 01225 822511 to order by credit card).
Order Code: STFOBS

Name: .....

Address (inc Postcode):

.....

.....

.....

Send the completed form or a photocopy, with your cheque, to: *ST FORMAT* Mail Order, Future Publishing, FREEPOST, (BS4900) Somerton, Somerset, TA11 6BR.

ST FORMAT Subscrip

Save up to £1.49 and get a second Cover Disk free – every month!

The benefits don't end there though. If you take out a subscription to ST FORMAT you'll also get...

- Exclusive software deals
- Free *Between the Covers* newsletter, containing news, gossip and complete instructions for your extra, subscriber-only Wonder Disk
- Guaranteed price protection for 12 months
- Free delivery to your door (within the UK)
- Airmail delivery anywhere outside the UK
- Free *ST FORMAT* binder when you pay by Direct Debit
- No-quibble refund if you choose to cancel your subscription

HOTLINE: 01225 822511

tions

A year in the life of an ST FORMAT subscriber!

Here are just some of the great software titles subscribers received over the last year

MAY '95
Painter (game), *Pablo Paint* (paint package), *APEX file viewers (APEX* add-ons), *KV Geography* (astronomy program)

APRIL '95
Compact Office Management System (business), *Cops 'n' Robbers 2* (game), *Superboot 8.1* (disk utility)

MARCH '95
Modest (MOD file database), *Duckdash* (game), *Marcel Dictionary, AB Format* (disk utility)

FEBRUARY '95
World Conquest (game), *Mini Draft* (CAD program), *Star Guide* (astronomy program)

JANUARY '95
NoBI Racing (game), *Family Tree 2* (genealogy program), *Lprint* (file printing utility)

DECEMBER '94
Darts 180 (game), *Munch 1.1* (art package), *Car Registration* and *Grocery* (silly utilities)

NOVEMBER '94
HyperGEM (multimedia database), *Drachen* and *Triyahoo* (games), *NBM* (benchmark utility)

OCTOBER '94
Spacewar 2000 (game), *ST Tools* (disk utility), *Cyclops* (password program), *Quartet* samples

SEPTEMBER '94
Bio Hazzard (game), *ST Zip 2.6* (archiver), *Marcel* (word processor), *Trashman* (utility)

AUGUST '94
Wyrd Ways (game), *Psycho Script* (utility), Map Editor for *Civilization* (utility)

JULY '94
Star Trek: Klingon War (game), *Backdrop* (desktop utility), *Extra* and *STOS Fix (STOS* utilities)

JUNE '94
Termadroid and *World League Soccer Manager* (games), *CD Player* (STE MOD player)

(8.45am to 6pm)

Yes, I want to subscribe...

Please enrol me as a subscriber to *ST FORMAT* (for 12 issues) from the next available issue at the all-in price of:

Please tick relevant box:

☐ £33 UK ☐ £30 UK Direct Debit

☐ £45 Europe (airmail) ☐ £54.95 Rest of world (airmail)

Mr/Mrs/Miss/Ms: .....

Address: .....

.....

.....

.....

Tel: .....EEC VAT No: .....

Method of payment

☐ Direct Debit – go straight to the form below

☐ Cheque (payable to Future Publishing Limited)

Please make out your cheque for the amount ticked above

☐ Visa ☐ Access/Mastercard Expiry date: .....

Credit card no: .....

Date: .....Signature: .....

Please tick if you would prefer not to receive notice of any special offers or new products ☐

Offer closes 9 May 1995 STF/MAG/05/95

Return the form (no stamp required) to:

***ST FORMAT* Subscriptions, FREEPOST (BS4900), Somerton, Somerset, TA11 6BR**

DIRECT DEBIT INSTRUCTIONS ID: 930763

Pay by direct debit and you save even more!

Fill in this form and send it with the above order form. Direct Debit is only available to subscribers who have a UK based sterling bank account. Direct Debit payments are deducted annually in advance.

This coupon instructs your bank or building society to make payments direct from your account. Please complete then send to: *ST FORMAT* Direct Debit Subscriptions, Future Publishing Ltd, FREEPOST (BS4900), Somerton, Somerset TA11 6BR

(Banks and building societies may refuse to accept instructions to pay direct debits from some types of accounts.)

1. Please write the full address of your branch
To: The Manager at:

DIRECT Debit

Bank/Building Society

Address _____

_____

_____

_____

_____

Postcode _____

2. Account number:

_____

3. Sort code:

_____

4. Account in the name of:

_____

Instructions to bank/building society

■ I instruct you to pay direct debits from my account at the request of Future Publishing Ltd.

■ The amounts are variable and may be debited on various dates. I understand that Future Publishing Ltd may change the amounts and dates only after giving me prior notice.

■ I will inform you in writing if I wish to cancel this instruction.

■ I understand that if any direct debit is paid which breaks the terms of this instruction, you will make a refund.

Signed _____

Date _____

NEW! READER ADS

Reader ADS

Totally free!

SALES

Atari TT, 2MB, 48MB HD, Eizo 14" monitor over £400.00 of software including Calligrapher, Lattice C 5.52, MultiTOS, SpeedoGDOS, NVDI and ImageCopy 2. Excellent condition, £500. Tel 01506 883652

Mega STE 4, 105 MEG HD, Speedo GDOS, Easytext Pro Vector, Calligrapher, Easydraw etc. Includes SM125 Monitor £425. Phone on 01332 832829.

Atari Mega STE, 4096 KB RAM monitor, scanner, Calamus DTP, 3D Calc Spreadsheet, Music Maker Plus, That's Write WP Package, C Font Converter, Games, Mouse + Ext. Disk D R. Phone on 01622 890578. Evenings.

STE 2MByte, Switched TOS 2.06/1.65, SC1435 Colour Monitor, 50MByte hard disk, power external floppy, Star LC24/20, CPC Mouse, FMC2 Clock, Productivity software and games, £550ovno. Phone on 01932 787451.

Microsoft Write word processor £15. Mini-Office Professional Spreadsheet £8., Hyper Paint £5, Sage Cash Trader Invoice and Finance Package £10. All boxed with manuals, last three new. Phone Tony on 0181 747 3167.

4160STE, High Res Monitor, 330MB H/D, 2nd Drive, Scanner, Complete set of STFormat, STUser & STReview, £2,000 of applications & Games Software – Offers over £550. 01502 711861. Anytime.

Atari Lynx II with batteries, PSU and Batman Returns game. Brand new and unused. £45. Phone on 01378 346357.

Atari SLM804 laser printer, plus, That's Write 3. 8ppm, 300dpi. Urgent sale so just £275. Phone 01378 346357.

Atari ST games for sale or swap. For list write to Andrew Buxton, 31 New Bolsover, Bolsover, Chesterfield, Derbyshire, S44 6QD

Calamus 'S' unregistered with manual but no box, only £85. Also much ST software – graphics etc. (no games) Phone for details: Dave on 0121 777 1802

Atari 520 STE upgrade to 1MByte Joystick, mouse, new 120MByte hard drive, Phillips colour monitor, 35 games including Civilisation, Elvira, Silent Service 2, Thunderhawk. £450 ono. Tel 01909 473695

Atari Jaguar, 3 months old, 7 games including T2000 and AVP, 2 conrollers, TV and Scart leads £350 ono. Buyer collects phone 01592 622111 (after 6 pm) ask for Alan

1MByte STFM Phillips CM8833 monitor, Panasonic KXP1081 printer, Ext 3.5DSDD, optical mouse, 2 joysticks,ST Magazines, 100+ games programs etc. £450 ono. Buyer collects phone Alan 01592 622111 (after 6 pm)

Unwanted ST games, joysticks all boxed, top titles, also lots of shareware, going for cheap. Write to Philip Spiers, 35 Ardmore Ave, Dundonald, BT16 OTB Northern Ireland

Citizen 120D+ 9 pin printer. Excellent condition, hardly used, £80 ovno. Tel 01622 763056

Tamiya Hotshot radio controlled car, plus controller, 3 batteries, quick and slow chargers. Cost over £250, sell £120. Tel 01798 343833

DSDD internal drive from STE, offers. 1MByte upgrade for STE, £5 Aviator joystick, £10. Phone 01407 720567

Atari 520 STFM 1Mbyte excellent condition, joystick, mouse, manuals, lots of software and boxed games £100 ono 0116 2861266 after 6pm

Atari internal disk drive, double sided £20 inc P&P. Phone Dave on 0181 466 0857

Atari ST case £5. TOS 1.62 ROM chips £15. TOS 1.4 ROM chips £10. External DD/DS C/W power unit £25. Phone Dave on 0181 466 0857

External single sided disk drive 360K for ST £15. Genlock Atari STE only £110. Phone Dave on 0181 466 0857

Falcon 4MByte, tower case, SCSI kit fitted, 64MByte IDE HD, 240MByte SCSI drive, sale include serious software £600 ono. Ring George 0623 513464

2.5MByte STE hard drive, scanner, printer, joysticks, mice, 50 games and art, DTP, WP, MIDI + 50 mags and disks. Worth £2,000+, Sell £500, contact Adam – Belgium 020 3227672239 (+ Lynx + 9 games £50)

Wolfenstein 3D for Jaguar, box, instructions and overlay, all in as-new condition, £30. Must be collected, ring 01384 838359 (Stourbridge, West Mids) after 6.30 pm

Premier Manager 2 £15, Populous/Sim City £7, Elviraz £10. Operations Stealth £5. Spy Who Loved Me £3 (all boxed originals). Tel 01473 272558 ask for Dean

2MByte STE, second disk drive, word processor and games, plus colour printer (Star LC200). Will not split. Phone Sam on 01789 778359

530 STFM, upgraded to 1MByte, 2 DSDDs internal and external, joystick, mouse, 2 boxes of disks, games include Civilization, Heroquest etc. 30+ ST FORMATs inc disks. £195 ono. Phone Ross on 01225 811146

Atari ST games, Elite 1 & 2, Fire & Ice, Cannon Fodder 200L, F19, Sensible Soccer, Movie Premiere, Lemmings, F16 Combat Pilot, Moonwalker, all boxed with instructions. £3/£5 each. Tel 01268 681291

Atari 520 STFM upgraded to 1MByte, speedmouse, Maverick joystick, Discovery pack inc 20 games & WPs, Many assorted disks, boxed with manuals, excellent condition £95. Tel 01268 681291

Falcon030, 4MByte 65MByte hard drive, TOS 4.04 + 210MByte Gasteiner external hard drive, software, mags etc. £700 or will split. Phone 01268 561066

Videomaster Colour Digitiser for Atari Falcon, complete with software, RGB splitter box, only £50. 01268 561066

Phillips colour monitor Pro 9CM053 RGB, TTL £70 ono with manual. Write to David John Skitt, 64 Franklyn Ave, Crewe, Cheshire. CW2 7NE

ST games and joysticks – 20 games and 6 joysticks. £50 the lot or will split. Ring for details, 0753 869677

Passport Master Tracks Junior, superb 60 track MIDI sequencer £20. Tel 01892 539279

MODs, Hip-hop, funk, jazz, ragga, £2 disk. 0374 777514

Lattice C5.6 £75 ono, GEM prog ref manual £10, Fun School 2 + 3 + 4 £15, Frontier Elite 2 £12, GFA Basic 2 + Advanced Prog Manual £15, all mint condition. Chris 0113 293 7436 after 6 pm

Atari 520 STFM with mouse and software (Firstworld, Neochromer, PD sequencer etc) mint condition £70 ono. 01246 211293

Back issues, ST World 16 to 53, Atari ST User May 1988 to Christmas 1993 (with disks). Sensible offers to Richard 0121 429 2410

Games, Aaargh £3, Gladiators £3, Silicon Dreams £6, Terrorpods £6, Final Fight £6, Borodino £6, Barbarian £6. Nick 01253 894296

4MByte STE £225, SM124 mono monitor £55, Clockcard £10, SLM804 laser printer £300, second disk drive £35, manuals, magazines, various software, £600 the lot. All in good working order. Tel 01522 544067

1040 STE and over 30 boxed top quality games for sale including Streefighter 2 and Championship Mananger £120 ono. 01443 401241 after 6 pm

Steinberg Pro 24 III with manunals and dongle £15, SIMMS (4 x 256K) for STE £10. 10 Star games original boxed – Asterix, Indiana Jones, Bond etc £15. 0171 720 3702

2MByte STE, SC1224 colour monitor (beautiful) £385, Roktek drives £39, 2MByte upgrage £55. Baby IBM286 circuit for STs plus Windows £119.99. Tel 081 287 2764

1MByte 1040STE £150, Phillips colour monitor £100, SM124 mono monitor £80, power scanner £50, HP500C inkjet £200, used 3.5-inch disks 15p each. 01502 572092

Atari STE 4MBytes with 170MByte hard drive, second floppy drive, med rez colour monitor, games and software £550 ono. 01603 427478 day / 01953 606957 eve

Atari STE (1MByte), Canon BubbleJet BJ10SX, Tantung mono moniter, external disk drive, about 40 games, many new eg Elite 2, ST FORMAT up to issue 30 with Cover Disks and Subs' disks, sell for £280. Tel 0620 830280

Civilazation for sale, perfect condition, offers please. Ring Steve on 01869 322864

Atari 520 STE, 45 various ST magazines, PD, diskmags, ST Basic, Hyperdraw, Hyperpaint, boxed games, kids games, and educational packages. All as new £125. Phone Martin on 01484 685231

Atari STE owner wanted to purchase my Yamaha PSR510 Mega Digital keyboard: Has 128 AWM sounds, fantastic sounding instruments, effects and more. Full MIDI, 2 years insurance, boxed £500. Tel 01702 342698

£200 of original ST software boxed as new from private collection, top titles and rare classics. All must go, no reasonable offers refused, list available (can fax). Tel Paul on 0526 834598 9am to 9pm

Atari 1040STE 1MByte with Phillips1134/10G colour monitor, second disk drive inc. Top games and cover disks, also manuals. 01693 64556 after 4 pm for information

SpeedoGDOS4, suitable for ST/Falcon and TT, complete with manual. £20 phone 0585 299203

520 STFM upgraded to 2.5MByte, external drive, loads of games, all leads and instructions, mouse and joystick £250. Ask for Darren 01909 484994

Atari ST games for sale, send SAE for list. Also for sale, Pace Linnet Modem 1200 baud or swap for a good external disk drive. John Wheeldon, 48 New Bolsover Road, nr Chesterfield, Derbyshire, S44 6QD

Imagecopy 3.52 £18, Textstyle £5, UVK6 £5, plus many games. All original and manuals. Phone Keith on 01635 86496 eves and w/end

Supra drive, Atari hard disk (external) 20MByte, plugs in to ST's port £85. Call 01865 371942 (eves/weekends)

Falcon 14MByte, 65MByte hard disk, NVDI, Kobold, Stalker, DEVpac 3, co-processor, few games, £850 ono. Multisync monitor £150. Andy 0171 9567075 (work)

Laser printer SLM 804. Good drum/condition, excellent print quality £175 for quick sale. Mike on 01234 261021

Atari Jaguar in immaculate condition with Doom, Tempest 2000, and Jaguar-to-Philips monitor lead, MK2 being converted, RRP £320 bargain at £210. 01525 861385

Atari 1040 ST, mouse, Amstrad colour monitor, 4 x joysticks, various software, £160 ono. Tel 0181 529 7798

Atari TT, 32-bit computer with a 50MByte hard drive,4 MBytes RAM, PTC 1426 multisync colour monitor, mouse, manuals and software £800. Tel 01239 851783

30 second-hand games for sale including boxes and manuals. £4 each. Phone for a list 01432 870539

Falcon030 14MByte FPU 65MByte internal, 540MByte external HDs. LatticeC, Devpac3, Devpac DSP, Papyrus, NVDI3, SpeedoGDOS 5, Screenblaster 2, programming documentation. Atari 4MByte card, other items, might split. Phone 01464 820975

WANTED

WordPerfect with manual for use on STE 1040 1MByte. Call Pete on 0117 9820604 after 6pm

Videomaster RGB or VIDI (ST)12 for ST 1MB. Full packages, cash waiting or swap for top progs. 0171 4314774

Has anyone got a lead to connect an ST to an Amstrd 464 colour monitor. Please phone with details 01257 791183

Thunderhawk wanted (must be original). Please sell it to me, or tell me where I can buy it. Roberto Giannotta,Via Solferino, 34142 – Trieste, Italy

AutoRoute wanted for Atari STE. Tel 0453 843602

Pool of Radiance and Curse of the Azure Bonds. Phone Rich with details on 01909 478217

Coders wanted for Falcon game idea (Falcon fruit machine simulator). I have all screenshots ready drawn – interested! Write to Robbo, 47 Croft Road, Oxford OX3 OJZ

Urgently wanted, Thunderhawk (for Atari) Helicopter Flight Simulator. Don't need manual or box, just the two disks will do! (Mine has been damaged.) Help! 01305 777390

Archer Maclean's Pool I will pay up to ten pounds if boxed with instruction manual. Write to David Rogers, 110B Turmill Avenue, Springfield, Milton Keynes, MK6 3JW

Wanted: Clip-Art Files in IMG Format of cowboys – cowgirls – rodeo riders – stagecoach with four or six horses – plus anything Country and Western. Chris on 01639 633715

T28 28MHz accelerator board, must be as cheap as possible and in working order. Tabby Graphics Tablet and light gun for ST. Anyone written their own programs for the light gun? If so how? Tel 01892 539270

Wanted DynaBlaster game for ST(E) with multi-player adaptor. Call 0380 850755

Atari hi-res monitor wanted, can collect or post. 2 or 4 MByte STE 1040 or 520. Also wanted up to date AutoRoute. Tel 01884 257487

Devpac 2 and manuals, ST internals, ST disk drives inside and out. Tel Roger on 01203 386548

Wanted desperately! Ultima V1, would swap with Populous or Dungeon Master, have tried everywhere to get Ultima V1. Someone please help! Tel 01834 812983

Very cheap Lynx games, preferably boxed with manual. Please send list to James Marson, 28 Redwood Drive, Maltby, Rotherham, South Yorkshire S66 8DL

Cover Disk 58 wanted (Quartet), will swap for issue 61 and Cover Disk due to having two copies. Phone Tues – Friday after 01226 294106

Wanted, Rolling Ronny, Magic Boy, Baby Jo to buy or swap. Contact Brian on 01865 739999

Games wanted, all types needed to build up small collection. Send list and details of games to me on e-mail cm4atgm@cr47c.staffs.ac.uk

Megatravellar 1 and 2. Reasonable condition, boxed originals with manuals. Atari STE. Please phone 01634 234854 (6 - 9pm)

Bloodwych, Bloodwych data disk, Bloodwych 2, Dungeon Master, Sensible Soccer 1992/93. Write to Tom, 99 Farmleigh Avenue, Clacton-on-Sea, Essex, CO15 4UL

Titan Reflex graphics card, must have dot clocks fitted for large monitors, will pay £50 plus postage. Call Dave after 6.30pm on 01922 616358

Editor for ensoniq SQ30/ESQ1, eg soundbits or geerdes, also czphonix V2 anyone? Phone Bill on 01430 423204

Deuteros and Milennium 2.2. Boxed originals only. Will pay £10 each and Dominion Space Games. 0115 975 7861

Help! I am totally stuck on Cannon Fodder, can anyone give me a save game disk for level 9? I will pay. 01786 474792

Cubase 2 or 3 original only required. Korg OI PCM keyboard card. MIDI files buy/swap. AtariWorks. Quality clip-art. Convector. Tel Robin Eves on 01522 752458

ChessMaster 2000 ST version. Tel 0768 63567

Has anyone completed all missions in Shuttle space simulator that can supply me with a copy of the Log disk. Will pay for disk. Call Charlie on 01333 427738

Arcade Pool or games in same catagory. 01782 212566

SWAPS

ST contacts to swap PD and games. Write to Bryn Jones, Bryn Golau, Cynwyd, Corwen, Clwyd, LL21 ONX

Contacts wanted to swap games. Lots available including Cannon Fodder, Streetfighter 2 etc. Send lists to Matt, 12 Moxon Place, Wakefield, W Yorks WF2 8EN

Swap PD software for nothing! Send a disk and a 19p stamp for a catalogue to J Blakeney, 12 Hodge Close, Jump Farm, Devizes, Wiltshire SN10 3RU

ST contacts wanted to exchange PD software. Send a blank disk for a catalogue to A Owen, 11 Castle View, Derrington, Stafford ST18 9NF

Swap colour medium res monitor for mono high res monitor in the Newcastle area. Ring Felix on 091273 4191

The ST Swap Club. Swap all your unwanted software for titles that you want. The more people join, the more titles available. For more details ring Steve on 01869 322864

Microprose Grand Prix or Cruise for a Corpse, will buy or swap for Sensible Soller or Another World, boxed and manual only. Ian Logan 01232 660302 (after 7pm)

Swap Timeworks Publisher 2 for a digitiser or scanner or any other external extras with manuals and software. Call 0113 276 2479 after 6pm, ask for Simon

Flight sims and adventure games, sell or swap, good prices. Tel 01782 212566

Monkey Island, Lure of the Temptress or any other adventures. Swap for Demon's Tomb, Scapeghost, Ninja Turtles. All boxed. Tel 0922 604451

USER GROUPS

User Group in Sweden: Staf, Stockholms Atari Forening, C/O Jonsson, Flintlasvagen 29 nb, S-19154 Sollentuna, Sweden

Programs wanted for PDL – We pay for your programs. Send SSAE for a leaflet about what we want. Write to PAJ Software, PAJ House, Shaftesbury Ave, Cheadle Hulme, Stockport. SK8 7DB

Chic – the very best Atari User Group. Newsletters, help, advice, contacts, PD, BBS, Internet and more. SAE for full details to CCC, BOX 121 Gerrards Cross, Bucks

Computer Club! For ST, Amiga, IBM PC. Send formated DSDD disk to: Offline BBS, c/o S Fulton, PO Box 9502, Johnstone, PA67EW, including a ssae (its free)

Help! Anyone who has an ST and lives in Holland, contact me! Tel 0308 227105 (Holland)

MESSAGES

Darryl Still! Why will you not return my Megafile 30 as you promised me? If I hear nothing I shall take legal action against Atari! Call 0161 653 0698

STellar is the ultimate Atari diskzine for the ST, Jag & Falcon. Send £1 for issue 15 to Mark Nobes, Newholme, Ashton Road, Chipping Campden, Glos GL55 6HR

For a free copy of the highly rated Power diskmag, just send a disk and a SSAE to James, 3 Salisbury Road, Maidstone, Kent ME14 2TY

Create a land! A fully playable adventure land, with everything you want in it! Send a blank disk to Cal, 20 Nayland House, Watermead Est, Catford, SE62TQ

Graphic artist seeks competent machine code programmer for a partnership on a 50/50 basis to produce commercial games. Contact Tony on 01705 785203

ST PD for sale. All disks £120 each. Send £1 for a disk-based list to: Derek Payne, 89 Wolverhampton Road, Codsall, Wolverhampton, WV8 1PL

ST contact disk magazine. For your copy of this article-packed magazine, send £1.50 to: Derek Payne, 89 Wolverhampton Road, Codsall, Wolverhampton, WV8 1PL

Someone to check my German Dictionary translations. Computer penpals worldwide. Age group 40 upwards or whatever. Write to A Patterson, 11 Berkeley Lane, Canvey, Essex, S58 OBT

ST FORMAT READER AD ORDER FORM

Name: .....

Address: .....

.....

.....

Telephone (inc new area code): .....

Write your ad in block capitals (maximum 30 words) in the space provided. Then either cut out the coupon or use a photocopy and send it in to: *ST FORMAT* Reader Ads, 30 Monmouth Street, Bath, Avon, BA1 2BW.

.....

.....

.....

.....

.....

Please tick: Sales ☐ Wanted ☐ Swap ☐ Messages ☐ User Groups ☐

Terms: *ST FORMAT* Reader Ads are accepted on the following conditions:1) No trade or commercial ads 2) The accuracy, position and timing of the ads cannot be guaranteed. 3) Anyone found using the *ST FORMAT* Reader Ad service to sell pirated software will be reported to the appropriate authorities. 4) We will only print your ad if you sign below.

I agree to abide by the conditions stated above.

RASTF70

Signed .....Date .....

Who's who!

ESSENTIAL CONTACTS

Academic Software ☎ 01296 82524
Acclaim ☎ 01703 860722
Accolade ☎ 0181 977 0880
Advanced Graphics ☎ 01942 488174
Alternative Software ☎ 01977 797777
Analogic Computers ☎ 0181 546 9575
Arnor ☎ 01733 68909
Atari UK ☎ 01753 533344
Audiogenic Software ☎ 0181 424 2244
Beaujolly ☎ 01737 222003
Care Electronics ☎ 01923 894064
Centresoft ☎ 0121 625 3399
CGS ComputerBild ☎ 0181 679 7307
Cheetah ☎ 0161 707 7080
Codemasters ☎ 01926 814132
Coktel Vision ☎ 00 331 46 30 99 57
Compo Software ☎ 01487 773582
Core Design ☎ 01332 297797
Creative Sounds ☎ 0117 9244395
Daze Marketing ☎ 0171 372 7435
Digita ☎ 01395 270273
Digital Integration ☎ 01276 684959
Dolphin Software ☎ 01603 617602
Domark ☎ 0181 780 2222
Douglas Communications ☎ 0161 456 9587
Electric Distribution/GST ☎ 01753 549442
Electronic Arts ☎ 01753 549442
EMagic ☎ 01462 480000
Empire ☎ 01268 541212
Empire/Readysoft ☎ 01268 541126
Europress Software ☎ 01625 859 333
Everglade ☎ 01463 240168
Evesham Micros ☎ 01386 765500
ExNet Systems ☎ 0181 244 0077
Fast Atari Repairs ☎ 0171 252 3553
FaST Club ☎ 0115 945 5250
First Computer Centre ☎ 0113 231 9444
Fujitsu ☎ 0181 573 4444
Gadgets by Small ☎ 00 1 303 791 6098
Gasteiner ☎ 0181 345 6000
GFA Data Media ☎ 01734 794941
Golden Image UK Ltd ☎ 0181 900 9291
Goodman International ☎ 01782 335650
Gremlin Graphics ☎ 0114 275 3423
Harman Audio ☎ 0181 207 5050
Hewlett Packard ☎ 01344 369369
HiSoft/AVR ☎ 01525 718181
ICD Inc ☎ 00 1 815 968 2228
IDS ☎ 0121 459 4340
ImageArt ☎ 0181 767 4761
Impact Software ☎ 01280 850450
Impressions ☎ 0171 351 2133
Infogrames ☎ 0171 7388199
JCA Europe ☎ 01734 452416
Kixx XL/US Gold ☎ 0121 625 3311
Korg ☎ 0181 427 5377
Kosmos Software ☎ 01525 873942
Krisalis ☎ 01709 372290
Kuma ☎ 01734 844335
Ladbroke Computing International ☎ 01772 203166
Lexicor Software (USA) ☎ 00 508 792 6618
Lexicor Software (Europe) ☎ 00 43 1 36 75 92
Llamasoft ☎ 01734 814478
Loriciel ☎ 00 331 46 88 28 38
Marpet Developments ☎ 01423 712600
Meedmore ☎ 0151 521 2202
Michtron ☎ 00 1 313 334 5700
Microdeal ☎ 01525 713671
MicroProse ☎ 01454 329510
Millennium ☎ 01223 844894
Mindscape ☎ 01444 246333
Mirage ☎ 01260 299909
Ocean/Hit Squad ☎ 0161 832 6633
Panasonic ☎ 01344 853195
Power Computing ☎ 01234 843388
Premier Mail Order ☎ 01268 271172
Pro Music ☎ 01284 765765
Psygnosis ☎ 0151 7095755
Q Logic ☎ 01382 25311
Q Tek UK ☎ 01382 200808
RC Simulations ☎ 0117 955 0900
Renegade ☎ 0171 481 9214
Roland ☎ 01252 816181
Rombo ☎ 01506 414631
Rubysoft ☎ 0171 381 8998
Silica Systems ☎ 0181 309 1111
Siren Software ☎ 0161 724 7572
Software Technology ☎ 0161 236 2515
Sound Technology ☎ 01462 480000
Special Reserve ☎ 01279 600204
Star Micronics ☎ 01494 471111
System Solutions ☎ 01753 832212
Thalion ☎ 0121 442 2050
The Third Dimension ☎ 01484 460888
The Upgrade Shop ☎ 01625 503448
Titan Designs ☎ 0121 414 1630
Titus Software ☎ 0171 700 2119
UBI Soft ☎ 0181 941 4004
Virgin ☎ 0181 960 2255
WeServe ☎ 01705 647000
zzSoft ☎ 01254 386192

E-MAIL ADDRESSES

All Future Publishing magazines, including *ST FORMAT*, are on the Net. Point your Web browser software at:
http://www.futurenet.co.uk/

***ST FORMAT*:** stf@futurenet.co.uk
Karen Levell: klevell@futurenet.co.uk
Andy Curtis:
andy@theshack.demon.co.uk
Clive Parker:
cparker@futurenet.co.uk or
clive@netmag.cityscape.co.uk
Frank Charlton:
frank@tachyon.demon.co.uk
Mac Marsden:
mac@mentor.demon.co.uk
Don Maple: donm@ucon.gun.de

CGS ComputerBild:
100042.2312@compuserve.com
Compo Software:
compo@cix.compulink.co.uk

Demon Internet: internet@demon.net
Gribnif Software:
gribnif@genie.geis.com
HiSoft: hisoft@cix.compulink.co.uk
Lexicor Software Corporation:
services@lexicor.com
support@lexicor.com
info@lexicor.com
graphics@lexicor.com
Mark S Smith: msh@dl.ac.uk
ICD: icdinc@genie.geis.com or
icdinc@delphi.com
Oregon Research: rres@teleport.com
Sam Tramell, Atari:
75300.3443@compuserve.com

Atari ftp sites:
atari.archive.umich.edu/atari/
ftp.demon.co.uk/atari
micros.hensa.ac.uk/micros/atari/
src.doc.ic.ac.uk/packages/atari/
umich/

Atari ST Usenet newsgroups:
comp.sys.atari.advocacy
comp.sys.atari.announce
comp.sys.atari.st
comp.sys.atari.st.tech
demon.ip.support.atari
Atari Web sites:
Atari CD FAQ:
http://www.dl.ac.uk/MISC/ATARI/CD_FAQ
Atari ftp list:
http://www.dl.ac.uk/MISC/ATARI/ftplist.txt
Atari Guide to Network Connectivity:
http://www.dl.ac.uk/MISC/ATARI/SLIP_FAQ
Atari TOS Desktop Survival kit:
http://www.dl.ac.uk/MISC/ATARI/survival
Mark Smith's Atari Web Page:
http://www.dl.ac.uk/MISC/ATARI/atari.html

USER GROUPS

ATARI USER GROUP (SCOTLAND), 50 Jones Green, Knightsridge West, Livingston EH54 8QB

ATARI-YAMAHA USER, 49 Summerfield Road, Wythenshaw, Manchester M22 1AE

ICTARI PROGRAMMERS USER GROUP, 63 Woolsbridge Road, Ashley Heath, Ringwood, Hants BH24 2LX

FALCON FACT FILE (FFF), 11 Pound Meadow, Whitchurch, Hampshire G28 7LG

FALCON OWNERS GROUP (FOG), 10 Oak Drive, Portishead, Avon BS20 8QS

PARATARI ST/TT/FALCON USERS GROUP, c/ Nicolas Salmeron 16, 2° Izqda, 47004 Valladolid, SPAIN

THE PANTHER OWNERS' GROUP c/o Michael Gray, 56 Whitley Crescent, Wigan, Lancs, WN1 2PP

PD LIBRARIES

16/32 PDL, 173 High Street, Strood, Kent ME2 4TW ☎ 01634 710788
AD-LIB PD, 22 Alexandra St, Pelton Lane Ends, Chester-le-Street, County Durham, DH2 1NT ☎ 0191 370 2496
A-ONLINE MULTIMEDIA, 1229 East Mohawk Avenue, Tampa, FL 33604, USA ☎ 00 1 813 238 5223 (BBS ☎ 00 1 813 238 4411)
AGPD, c/o A Green, 6 Middlebere Drive, Wareham, Dorset, BH20 4SD
ASCIILUM PDL, 34 Earlswood Gardens, Clayhall, Ilford, Essex EG5 0DF ☎ 0181 550 5572
ASGARD PD, 20 Langdale Drive, Flanshaw, Wakefield, WF2 9EW ☎ 01924 363059
ATARI USER GROUP (SCOTLAND), 50 Jones Green, Knightsbridge West, Livingstone, EH54 8QB ☎ 01506 32521
BALSALL PD, 6 Rushton Close, Balsall Common, Coventry CV6 7PA
CHAOS PD ☎ 01296 89059
CALEDONIA PDL, 250 Oldtown Road, Hilton, Inverness IV2 4PT ☎ 01463 225736
DIGITAL DISK, Steve Hill, 162 Burley Grove, Downend, Bristol, BS16 5QQ
FALCON OWNERS GROUP, 10 Oak Drive, Portishead, Bristol, Avon BS20 8QS ☎ 01275 843241
FaST Club, 2 Broadway, Nottingham NG11 1PS ☎ 0115 945 5250
FERDY BLASET, Halleyweg 114, 3318 CP Dordrecht, Netherlands ☎ 00 3178 172 879
FLOPPYSHOP, PO Box 273, Aberdeen AB9 8SJ ☎ 01224 312756
GL-PD 62 Colwyn Ave, Winch Wen, Swansea SA1 7EJ ☎ 01792 799762
GOODMAN PDL, 16 Conrad Close, Meir Hay Estate, Longton, Stoke on Trent, Staffs ST3 1SW ☎ 01782 335650
HIGHLANDER PDL, 11 Castle View Est, Derrington, nr Stafford ST18 9NF ☎ 01782 48735
IM SYSTEMS, Via Zamboni 41, 25126 Brescia, Italy ☎ 00 39 30 2090563/300762
LAPD, PO Box 2, Heanor, Derbyshire DE75 7YP ☎ 01773 761944
LOCUTUS PDL, 49 Summerfield Road, Woodhouse Park, Wythenshawe M22 1AE ☎ 0161 498 0716
MAGNETIC FIELDS, PO Box 118, Preston, Lancs PR2 2AW ☎ 01772 881190
MERLIN PD, PO Box 77, Stroud, Glos, GL6 9YD ☎ 01452 770133
POWER PD, 3 Salisbury Road, Maidstone, Kent, ME14 2TY ☎ 01622 763056
RIVERDENE PDL, 30a School Road, Tilehurst, Reading, Berkshire RG3 5AN ☎ 01734 452416
SDPD, Stephen Day, 11 Allington Mead, Bridport, Dorset DT6 5HF ☎ 01308 427179
SOLENT SOFTWARE, 53 Rufus Gdns, Totton, Hants, SO40 8TA ☎ 01703 868882
STAMPC PDL ☎ 01256 814549, 1 Keats Close, Popley, Basingstoke, RG24 9BS
STELLAR PD, Newholme, Aston Road, Chipping Campden, Gloucestershire, GL55 6HR ☎ 01386 840737
TRANSPARENT DREAMS PDL, 59 Renton Road, Wythenshawe, Manchester, M22 9TQ ☎ 0161 437 7474
TUMBLEVANE PDL, 6 West Road, Emsworth, Hampshire, PO10 7JT ☎ 01243 370600
WHO'S PDL, 5 Highmead, Plumstead, London, SE18 2DH ☎ 0181 473 1488

BUYING BY MAIL ORDER

The number of bargains available through mail order has never been greater – just follow our guide.

1. Before you send any money, ring the supplier to make sure the item you require is in stock. Ask questions about the company's policy on delivery and returns of faulty equipment. Make sure there are no hidden costs such as postage and packaging. Find out when you can realistically expect to receive your goods.
2. Make sure you read the small print on ads.
3. Beware of companies that don't include their address on their adverts, or don't answer or return your calls.
4. By far the best method of payment is by credit card. If you're ordering goods that come to more than £100 in total value, you are legally entitled to claim compensation from some credit companies if the retailer goes bust. Check your credit card company's policy. You can also try to get extra insurance in advance.
5. If you're not paying by credit card, pay by cheque. Never send cash, and avoid postal orders.
6. Always keep a record of your order, and make sure you keep it somewhere safe. If you're buying by credit card keep a note of the time of the order and ask for an order number. When ordering anything over the telephone, double-check the price before you part with your money.
7. If you are sending a cheque keep a note of the cheque number, the date and the exact value. Make sure you know the name and some details of the mail order company.
8. When you receive your goods, check them carefully. If anything is missing or faulty, contact the supplier immediately.
9. Order from the most recent issue of *ST FORMAT*.
10. If a problem does arise, contact the supplier first. Calmly and politely tell them your problem. Most problems turn out to be minor hitches or misunderstandings, which can easily be resolved. If you think you have a genuine grievance, contact your local Trading Standards Officer. The number is in the phone book.

BUYER BEWARE

Inclusion in this list does not mean *ST FORMAT* endorses or recommends libraries, user groups or companies in any way.

If you run a PD library, or a user group/club, and you'd like it to be included in the list, please send your details for inclusion (and your latest catalogue if it's a PD library) to: The Directory, *ST FORMAT*, 30 Monmouth Street, Bath, Avon, BA1 2BW.

ST FORMAT Back Issues

SPECIAL OFFER! £10 FOR THREE BACK ISSUES PLUS A FREE BINDER (WORTH £5.95)

ISSUE 69

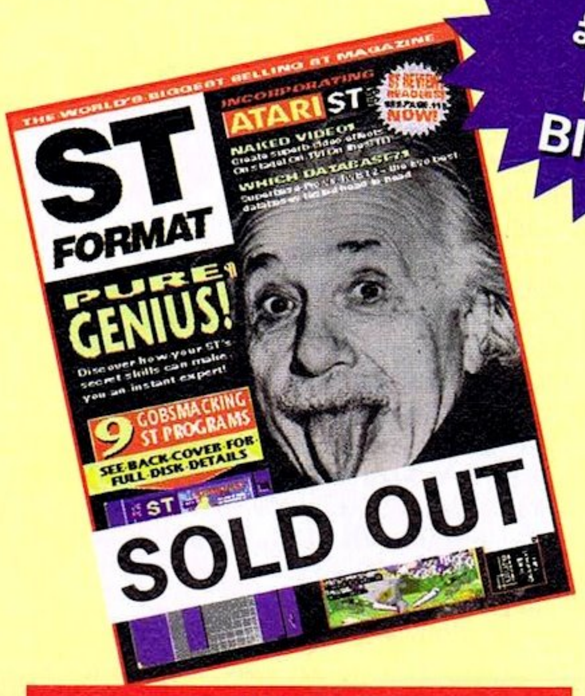
APRIL 1995

Disk: *Obsession* table, *Chequebook* and *Hang About* **Inside:** The Survival Guide, plus Mix It Up – music special. **Reviewed:** *Ease, Calamus* updates, *Hollywood Hustler* **Tutorials:** *AtariNOS, APEX media*

ISSUE 68

MARCH 1995

Disk: *Magic Storybook* and *BBS Directory* **Inside:** A World of Information – Net sites and how to set up your own BBS; *MagiC vs Geneva*; *KAOSDesk, Twist 2, ST Disk Cat, AtariNOS* tutorials; *APEX media...*



ISSUE 67

FEBRUARY 1995

Disk: *Smash Hit* and *KAOSDesk 2.1* **Inside:** Pure Genius – explore your ST's powers; *Twist* and *Superbase Pro* head to head; ProTOS show **Reviewed:** *Obsession, Quill 2, Imagecopy Colour 3.5*

ISSUE 66

JANUARY 1995

Disk: *Stardust, Endurance, Route Finder* and more **Inside:** All you need to know about animation; ST First Aid course; programming tutorials **Reviewed:** *Zero-5, Metamorphosis...*

ISSUE 65

DECEMBER 1994

Disk: *Grafix, Jetpac, Arcade Classics* and many more **Inside:** Plug your ST into the Internet; word processors head to head; *GFA* and *Personal Pascal* tutorials **Reviewed:** *Twist 2, ScreenEye...*

ISSUE 64

NOVEMBER 1994

Double Disk special: *Personal Pascal, Starball, Grafiek* and much more **Inside:** The future of the ST; full PD library round-up **Reviewed:** *HERO, NeoDesk 4, Munch, Robinson's Requiem*

ISSUE 63

OCTOBER 1994

Disk: *Quill* and *HERO* demos and *Herman* **Inside:** Pure Gold – all the *FORMAT* Gold winners; coding for beginners **Reviewed:** *Starball, Protext 6.5, Papyrus Gold* and *That's Write 3*

ISSUE 62

SEPTEMBER 1994

Disk: *Medieval Chess, Fastcopy 3, Albion* and *TUC* **Inside:** Supercharge your ST special **Reviewed:** *Rainbow, Xenomorf 2, EZ-Art Pro, Imagecopy 3, Ishar 3, Nova card, MIDIgrid Pro, Rorke's Drift...*

CLASSIC ST FORMAT

£4 EACH

Did you miss an old *ST FORMAT*? Is there a Cover Disk you need? Then just tick the issue number(s) you want on the order form below and post it – you don't even have to pay the postage if you're in the UK. If you don't want to take advantage of our special offer of three issues plus free binder for £10, you can still order a binder separately for £5.95, or two for £9.99. Just make sure you tick the right box...

Name .....

Address .....

Postcode ..... **Telephone** .....

TOTAL ORDER VALUE.....

Method of payment – please tick ☐ **Access** ☐ **Visa** ☐ **Cheque** ☐ **PO**

Please make all cheques payable to Future Publishing Limited.

Credit card number ☐☐☐☐ ☐☐☐☐ ☐☐☐☐ ☐☐☐☐

Expiry date ☐☐/☐☐

STF05/95

Please send me the following back issues:

☐ 42 ☐ 43 ☐ 44 ☐ 45 ☐ 46 ☐ 47 ☐ 48
☐ 49 ☐ 50 ☐ 51 ☐ 55 ☐ 56 ☐ 57 ☐ 59
☐ 60 ☐ 61 ☐ 62 ☐ 63 ☐ 64 ☐ 65 ☐ 66
☐ 68 ☐ 69

☐ **One *ST FORMAT* binder for £5.95** ☐ **Two *ST FORMAT* binders for £9.99**

Call Customer Services on ☎ 01225 822510 for availability of any other back issues.
Customers outside the UK please add £4 for overseas delivery.
SEND THIS FORM TO: *ST FORMAT* Back Issues, Future Publishing, FREEPOST (BS4900), Somerton, Somerset, TA11 6BR. You don't even need a stamp if you post it in the UK!
Please tick this box if you do not wish to receive direct mail from other companies ☐

Or call ☎ 01225 822511 and have your credit card ready

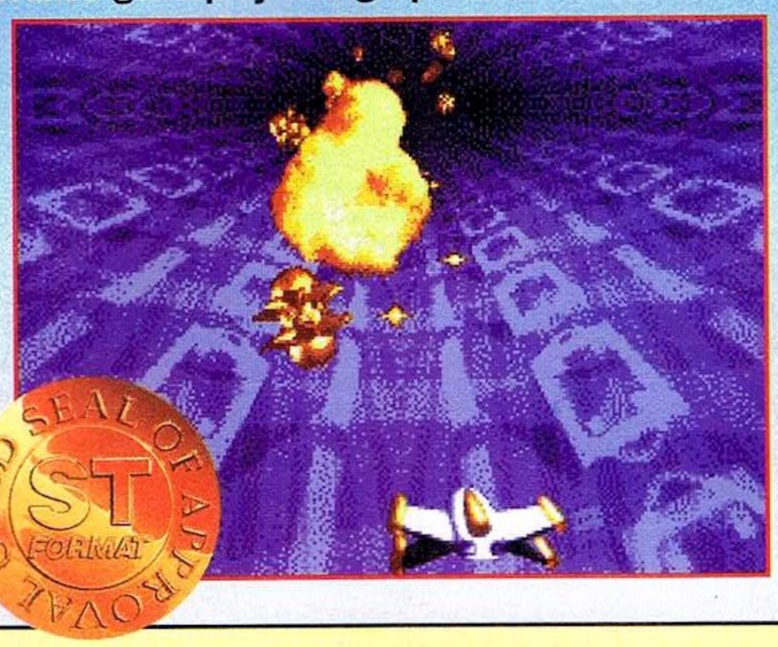
ST FORMAT Reader offers

STARDUST

DAZE MARKETING

£19.99
SAVE £5

Reviewed back in issue 68, where it scored a massive 94%, *Stardust* is one of the best arcade shoot-'em-ups you'll see on an STE or Falcon. With unrivalled gameplay and graphics to sell your granny for, *Stardust* is the essential addition to your collection.



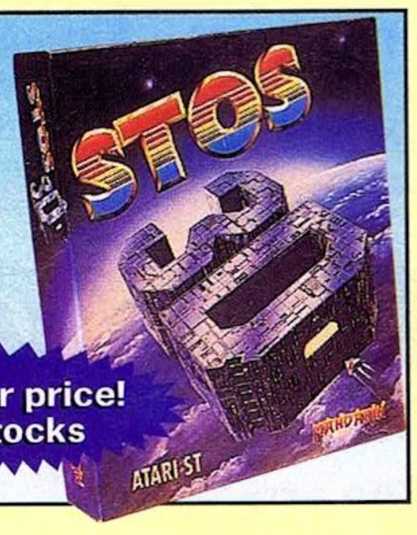
Description: *Stardust*
RRP: £24.99
STF price: £19.99
Order no: STFSTAR

STOS 3D

MANDARIN

£9.99

The easy way to learn 3D programming. *STOS 3D* enables you to get to grips with polygonal game design while it worries about the maths.



Special offer price! Limited stocks

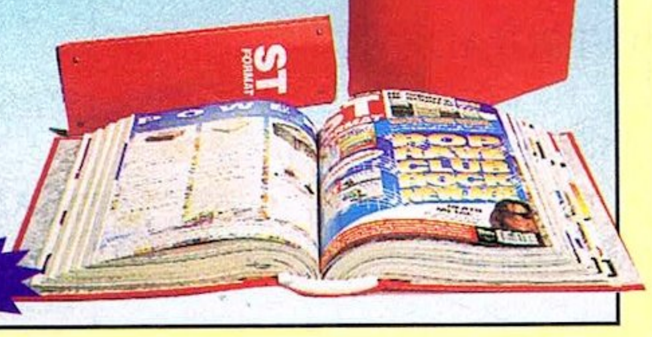
Description: *STOS 3D*
STF price: £9.99
Order no: STOS3D

ST FORMAT BINDER

ST FORMAT

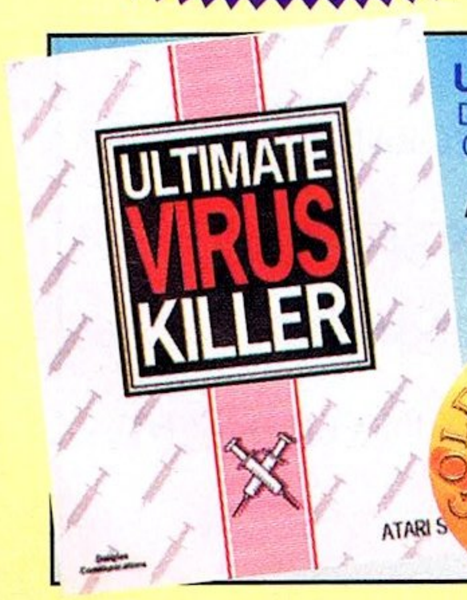
£5.95

Keep your prized collection of the world's most exquisite, comprehensive ST magazine safe from spills and stains in this quality binder.



Description: One binder
STF price: £5.95
Order no: ST112
Description: Two binders
STF price: £9.99
Order no: ST1122

TWO FOR £9.99



UVK 6

DOUGLAS COMMUNICATIONS

£9.95
SAVE £3

A comprehensive virus killer that can repair over 700 commercial titles...

Description: *Ultimate Virus Killer 6*
RRP: £12.95
STF price: £9.95
Order no: STFUVK

THE BEST OF ST FORMAT

FUTURE PUBLISHING

£9.99
SAVE £5

Features, beginners' guides, huge jargon busters section, techie tips and reviews – plus optional disks. It's great!

Description: *The Best of ST FORMAT* with two disks
STF price: was £15.40, now £9.99
Order no: ST BOOK D

GFA BASIC COLLECTION

GFA DATABECKER

£59.95
SAVE £20

GFA Interpreter, *GFA Compiler* and *GFA Shell*, all in one package for a mere £59.95 – a massive £20 off the RRP. It's the complete *Basic* solution for first-time programmers and established coders. If you want to find out more about how to use *GFA Basic*, take a look at our tutorial series in issues 65, 66 and 67 (for those who missed them, back issues is on page 76).

Description: *GFA Basic* collection
RRP: £79.95
STF price: £59.95
Order no: STFGFA

Name _____

Address _____

_____

Postcode _____ Telephone _____

Description	Order no	Price

TOTAL ORDER VALUE

Method of payment – please tick appropriate box

☐ Access ☐ Visa ☐ Cheque ☐ PO

Credit card number _____

Expiry date _____

Please make all cheques payable to Future Publishing Limited.
Customers outside the UK please add £4 for overseas delivery.

SEND THIS FORM TO: ST FORMAT Mail Order, Future Publishing, FREEPOST, (BS4900) Somerton, Somerset, TA11 6BR. You don't even need a stamp if you post it in the UK!

Please tick here if you do not wish to receive direct mail from other companies ☐

STF05/95

■ If you wish to order by credit card or have any queries, all you have to do is ring the Hotline on...

☎ 01225 822511

■ Customer Services can be contacted on ☎ 01225 822510

TOP BYTE SOFTWARE

(The subsidiary of Power PD)

EXTRA EXTENSION 3.0

If you are a Stos programmer, whether beginner or expert, then this superb extension is for you. It adds 58 new commands to the Stos language boasting a 77K on disk comprehensive manual with full examples, Jorce (originally going to be sold at £20!) and full support from the Programmer. PRICE £4.99 inc P+P

SUPER STARIO LAND

The ultimate in platforming. A Mario done on your ST with excellent graphics and great addictive playability. This is more than just a platform game with bonuses galore, a massive array of 'nasties' and lots lots more. PRICE £19.99 inc P+P

BRENARVIOUS (1 Meg only)

They say that in space no one can hear you scream and this is no exception! You're stuck on the alien infested planet named Brenarvious and you've been pulled deep down into the inside of the planet . Through tactics, strategy and manic blasting you must try to escape before the aliens get you and the planet blows up! PRICE £8.99 inc P+P

BRENARVIOUS EDITOR (1 Meg only)

Create your very own levels for the commercial game Brenarvious. Build the planet, place the power-ups, guide the alien and lots more and all with ease and no programming knowledge required. PRICE £5.99 or £11.99 for editor and game together!

Coming SOON... Ultimate utility disks, Fruit Machine Fun (1 Meg STE) and much much more. If you can program (any language) write to us with ideas and any examples of work. Make all cheques/P.O's payable to POWER PD and order by name.

3 SALISBURY ROAD, MAIDSTONE, KENT ME14 2TY. TEL (01622) 763056
FOR PD AT JUST 99P PER DISK YOU NEED POWER PD.
FOR A DISK CAT. WITH FREE PD, SEND A DISK AND SAE TO THE ABOVE ADDRESS.

LOCUTUS PDL

49 Summerfield Road, Wythenshawe,
Manchester M22 1AE
Telephone (0161) 498 0716

Quality PD for the Atari ST/STE
The Public Domain Library in Manchester
Disk Prices
1-5 Disks £1.50, 5+ Disks £1.25
Special opening offer any 5 disks for £6.00 P&P incl
Very friendly service, happy to help for free
No need to buy to qualify
Prepare to be assimilated - resistance is futile
Please make cheques etc payable to G.C Sykes.

LOWEST PRICED TOP QUALITY RIBBONS, INKJETS, TONERS & DISKS

Printer Ribbons

BLACK	1 off	2+	5+	10+
Amstrad DMP 2000/3000	2.80	2.65	2.45	2.25
Amstrad DMP 4000	3.66	3.51	3.31	3.11
Amstrad PCW8256/8512/LQ3500	2.85	2.70	2.50	2.30
Brother M1009/1024/1109/1209	3.90	3.75	3.55	3.35
Citizen 120D/LSP10/Swift 24/9	2.85	2.70	2.50	2.30
Commodore MPS1220/1230	4.50	4.35	4.15	3.95
Epson LQ100	4.10	3.95	3.75	3.55
Epson LQ400/500/800/850	3.45	3.30	3.10	2.90
Epson FX/MX/RX80/FX/LX800	2.90	2.75	2.55	2.35
Epson FX/MX/RX100/FX/MX 1000	3.36	3.21	3.01	2.81
Epson LX80/86/90	2.12	1.97	1.77	1.67
Mannesmann Tally 80/81	3.90	3.75	3.55	3.35
NEC Pinwriter P2200	3.03	2.88	2.68	2.48
OKI ML182/183/192/193/195	3.17	3.02	2.82	2.62

BLACK	1 off	2+	5+	10+
Panasonic KXP1123/1124/1140	3.46	3.31	3.11	2.91
Panasonic KXP1080/1180/90/1592	2.89	2.74	2.54	2.34
Panasonic KXP2123/2180	4.95	4.80	4.60	4.40
Seikosha SL90/92/95	5.70	5.55	5.35	5.15
Star LC10/20/100	2.29	2.14	1.94	1.84
Star LC200	3.00	2.85	2.65	2.45
Star LC24-10/200	2.86	2.71	2.51	2.31
Taxan Kaga KP810/815/910/915	3.14	2.99	2.79	2.59
COLOUR	**1 off**	**2+**	**5+**	**10+**
Citizen Swift 24	11.95	11.80	11.60	11.20
Panasonic KXP2123/2180	10.63	10.48	11.60	9.88
Star LC10/20/100	6.00	5.85	5.65	5.25
Star LC200	9.78	9.63	9.43	9.03
Star LC24-10/200	9.63	9.48	9.28	8.88

Ring For Ribbons Not Listed.

Ring us and WE WILL BEAT all other Ribbon prices

31/2" Disks & Disk Boxes

	DS/DD	DS/HD
10 Disks	£5	£7
25 Disks	£10	£14
50 Disks	£16	£23
100 Disks	£29	£43
250 Disks	£65	£92
500 Disks	£125	£175

100 Cap. Lockable Disk Box £5.99 with orders of £10+

Preformatted (MS-DOS) disks available at 2p extra/disk.
All Disks Certified 100% Error Free and INCLUDE FREE Labels.

Inkjets, Ink Refills & Toners

Canon BJ-10/20 Cartridge	17.54 each
Commodore MPS1270 Cartridge	12.13 each
HP Deskjet Cartridge (Double Cap)	24.24 each
HP Deskjet Tri-Colour Cartridge	28.89 each
HP Thinkjet/Quietjet Cartridge	12.13 each
HP Deskjet Tri-Colour Cartridge Refill	16.00 each

Inkjet Refills (Twin Packs) for Canon BJ-10/20, BJ300, HP Deskjet. Available in Black, Cyan, Magenta, Yellow, Red, Blue, Brown, Light Green, Dark Green and Gold..
1 Pack £11.00, 2+Packs £10.60 ea, 5+ Packs £9.95 ea.

HP Laserjet II/III Toner Cartridge	44.51 each
HP Laserjet IIP/IIIP Toner Cartridge	53.14 each

Ring For Inkjets & Toners Not Listed.

Miscellaneous Items

Roll 1000 31/2" Disk Labels	8.99
31/2" Disk Cleaning Kit	2.99
Parallel Printer Cable (1.8m)	3.99
Mouse Mat	2.99
CPU & Monitor Dust Cover	6.49
Monitor Dust Cover	4.99
80 Column Printer Dust Cover	3.99
Amiga 500 Dust Cover	3.99
Amiga 600 Dust Cover	3.99
Amiga 1200 Dust Cover	3.99

All Prices INCLUDE VAT (@ 17 1/2%) & UK DELIVERY

01543 250377 Ring us or send cheques to: 01543 250377
Owl Associates Ltd, Dept 329, Owl House,
5 The Brambles, Lichfield, Staffs WS14 9SE
Official Government & Educational orders welcome
E & OE

GOODMAN'S

PUBLIC DOMAIN & SHAREWARE UPDATE

No matter how much coverage the ST Magazines give to Public Domain & Shareware, they only give you a sampler of the vast range available. As one of the longest established ST libraries in the World, we are constantly adding new titles to our already extensive collection, so why not send today for our comprehensive PD & Shareware Guide, it's now approaching 260 pages, with good descriptions, screen shots, etc.

SHAREWARE GUIDE STILL ONLY £2·95

RECENT UPDATES	NEW TITLES	ALSO AVAILABLE
GEMVIEW 3.12	MUSIC BOX 2	VIDEO SUPREME 2
ZORG v1.41	MYSTERY	ART FOR KIDS
IDEALIST v3.51	TESSARA	THE MONULATOR
PGP v2.62	TRUE TYPE	CLUB DOMINOES
GEM SPOOL v3.2	FONT SETS	IMAGECOPY 2
RECIPE BOX v4.5	LOTTERY TITLES	EZ-ART PRO
ST DIARY v1.6	CARD GAMES	EASY TEXT PRO

NEW PREMIER COLLECTION SETS

A new series of disk sets comprising new programs, recent updates, and top titles from previous months. Typically over 4 meg when decompressed.

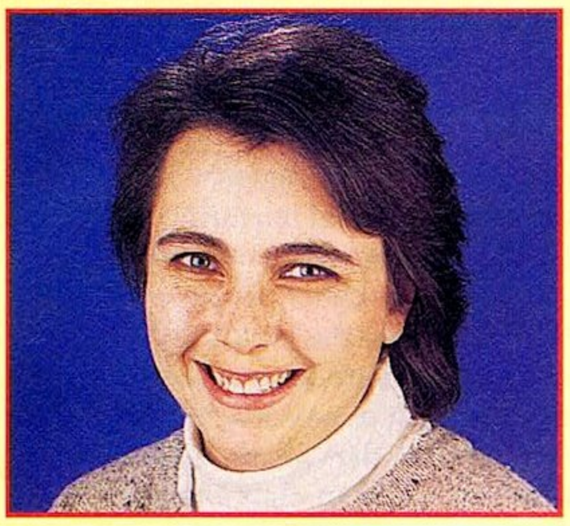
DISK SETS £7·95

(Send S.A.E. for info sheet on latest Premier Collection set contents)
Latest Premier Disk Set & Shareware Guide For Only £9·95

Goodman's (Dept STF)
16 Conrad Close, Meir Hay Estate, Longton,
Stoke-on-Trent ST3 1SW
TEL: 01782 335650 FAX: 01782 316132

ADVERTISERS INDEX

ANALOGIC COMPUTERS (UK) LTD 3
ASCIILUM PDL 59
CARE ELECTRONICS . . .48
DATA GEM LTD 59
EVERGLADE 48
FAST ENGINEERING SERVICES 67
GASTEINER TECHNOLOGIES LIMITED 23,41
GOODMAN ENTERPRISES . .78
INTERMEDIATES LTD . .36
JCA EUROPE LTD 10
JG DESIGN SERVICES . .59
LA PD 38
LADBROKE COMPUTING . . . . . .IBC
LOCUTUS PDL 78
OWL ASSOCIATES LTD .78
POWER PDL 78
PREMIER MAIL ORDER .36
SIREN SOFTWARE 59
STAM–PC 59
THE FIRST COMPUTER CENTRE . . . . . .IFC
THE UPGRADE SHOP . .53
TRADING POST 63
TUMBLEVANE PDL 63
UNIQUE DEVELOPMENT SWEDEN 10
WIZARD GAMES 63



Feedback

ST FORMAT MAY 1995

It's a mixed bag this month, with passions running high. Karen Levell brings in sniffer-dogs to check the post for letter bombs and tins of Pedigree Chum.

Slip us a disk

I read issue 68 last night – with hardly a cringe! Okay, so there's still a tinge of Murdoch consciousness in there, but not so much as to be insulting anymore. I read it. I enjoyed it. I felt better informed afterwards.

It's nice to see some do-it-yourself appearing, as I think a lot of people choose Ataris for their low price, and are perfectly willing to take the screws out and mess (by now most ST owners have had to fix ailing mouse ports and the like). Personally, I'd like to see an article on hard drives, especially now they seem to be appearing at slightly less impossible prices, along with any precautions that prospective buyers ought to take.

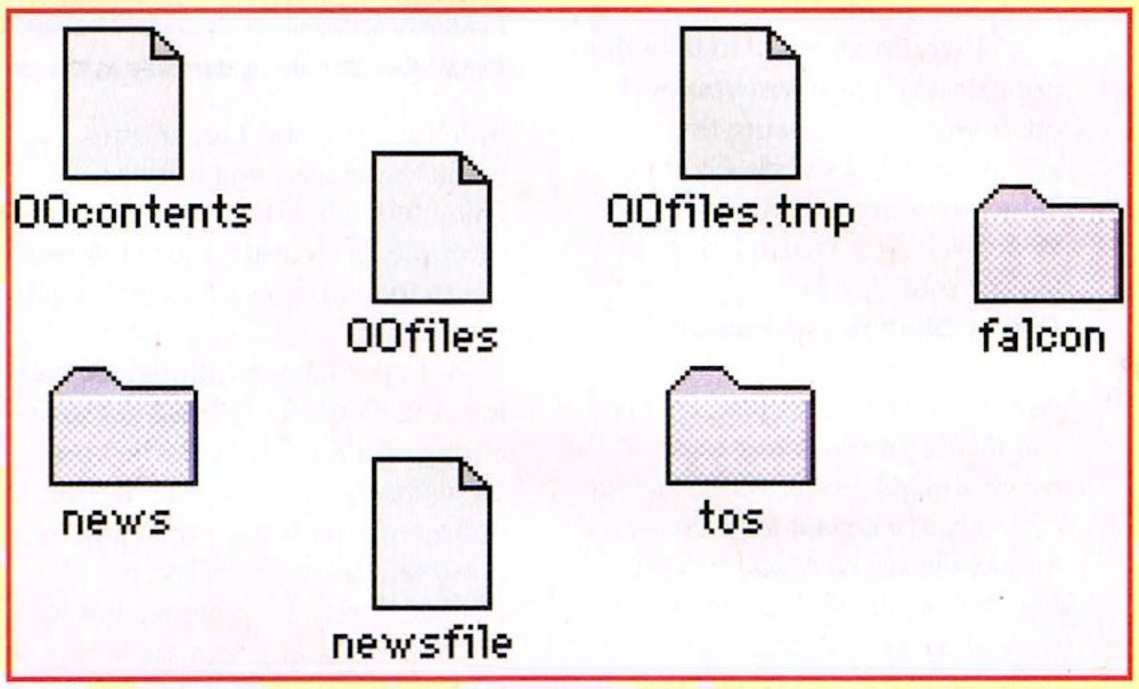
I do think the mag's a tad expensive, especially as you seem to be primarily featuring PD and shareware on the Cover Disk these days. I know you're going to tell me to subscribe, but I still ain't gonna! Would it not be a good idea to offer the second disk for sale at a modest price to those who don't subscribe, perhaps requiring a voucher or something from the current mag as proof of purchase?

John Blackwell, via Ad.Lib

stf: *First of all, thanks for your somewhat veiled compliments about issue 68 and your suggestions for future issues. The hard drive article is a great idea and one that, fingers crossed, will appear shortly. The mag is undergoing something of a transformation at the moment and hopefully these changes more adequately reflect the needs and wants of our current readers. But if there are further areas that you think we should be covering in future issues, please let us know.*

I'm also glad to see you recognise the benefits of subscribing: a second free disk, up to £1.49 off the current cover price (that's just £2.59 an issue), a binder for those that pay by Direct Debit and special subscriber-only deals on certain commercial software.

Unfortunately, I don't think we can, in good conscience, offer the second disk to non-subscribers. Apart from anything else these benefits have been sold as exclusive deals in the past, and to offer them elsewhere would undermine the value of subscribing in the first place. The bottom line is that our subscribers are our most dedicated supporters and, as such, we like to show a similar commitment to them. So you see it really does make sense to subscribe.



Huge amounts of Atari information and huge quantities of files are contained in HENSA/micro, one of the most impressive Atari sites we've seen.

HENSA errors

I am writing about the article on Internet resources, 'A World of Information' (*STF* 68). It was a pleasant surprise to see my section at HENSA mentioned. However, there were a couple of mistakes, which I hope you will correct in the next issue.

To begin with, the site is not called UK Micros, but HENSA/micros. Fully expanded this can be read as Higher Education National Software Archive, microcomputer section. (The UNIX section of the site is held at the University of Kent, while the micros section is held at Lancaster University.)

Next, I was disappointed that my name was spelt incorrectly. The right spelling is Denesh Bhabuta

CONGRATULATIONS

I'd just like to congratulate you on issue 68 of *ST FORMAT*. I have always preferred your magazine to those of your ex-rivals, but issue 68 was truly something special.

The original Internet article in issue 65 was useful in alerting us readers to the whole on-line thing, but it was only in this latest issue that I realised the wide range of services available on the Internet. I have since bought myself a modem and set up a Demon account.

It was also good to see the return of practical guides, especially the guide to *AtariNOS* – although I'm not sure I really feel confident enough to set up my own BBS yet!

So, once again, congratulations to the entire team. I look forward to issue 69 and greater things to come.

Dave Campion, Wolverhampton

I'd like to congratulate you, Karen, on the excellent job you've made of *ST FORMAT* 68. Definitely a vast improvement on the old mag. I actually took as long to read it as I did *STR*.

Sorry I can't say the same about the Cover Disk. There was only one program of any use *(BBS Directory)* and this had been on previous Cover Disk. This is just a personal view, of course, but I don't have much use or time for puzzle programs or making up stories *(Magic Storybook)*. As for *Picswitch* – how old is it? I know you can't please all of the people all of the time, but surely you can do better than that.

Still, a much better magazine, as I said. Keep up the good work.

Chris Good, via Ad.Lib

stf: ***First of all, I'd like to thank everyone for the positive feedback we received on issue 68. Unfortunately, we haven't room to print all those letters here, but it was satisfying to see that our efforts to improve the mag have met with such overwhelming approval.***

Of course, that doesn't mean we are about to become complacent. Our mission is to bring you the best magazine possible, and to that end we will continue to look at every area of the magazine, including, of course, the Cover Disk, to see where improvements can be made. If you love, like, dislike or loathe any of the changes you see in forthcoming issues, please contact us and let us know. That way we can give you the magazine you want.

The new, improved *ST FORMAT*. If you want to see changes to the magazine, let us know, and we'll do our best!

(as compared to Daneesh Bahbuta). I am also known to people as Danny.

I am pleased that HENSA is recognised as "a must for your ftp hotlist". Thanks for the compliment – I have put a lot of work into the Atari section since I started in April, and I hope this shows. I am totally committed to placing the latest software on-line. However I do fall behind sometimes, as I also take care of the Mac section... and something tells me Karen is into Macs too.

I would also like to take this opportunity to inform you of the other ways of accessing the archive at HENSA: via Gopher, Telnet, Dial-up and the World Wide Web. FSP is also being looked into.

Danny Bhabuta via e-mail

stf: *Oops, sorry about that, Danny, and thanks for contacting us to set the record straight. As for Macs, I admit it, I do have a certain fondness for them (I worked on Macformat for a time before settling into the captain's chair at ST FORMAT). But they're not as much fun as STs, and the software is far greedier in terms of processing power.*

If you're interested in finding out more about HENSA and the different ways it can be accessed, you can contact Danny at:
danny@micros.hensa.ac.uk

Wow!

Like I said, wow! Not only do we get a stunner for an Ed (do you know what it can do to a person having to look at Trent's pic every month on the Subs' letter?!) but she brings with her a stunner of a magazine.

Where has this slightly altered, twice-as-good, new *ST FORMAT* come from? I have to admit that while a lot of things are exactly the same (and, hey, why fix something if it ain't broken?) other little touches, and bigger ones, make the magazine far more enjoyable. The PD layout, for example, is so much more interesting to look at than it has ever been in the past.

I now have a humble request for you. Could we please get to see a pic of Jill this month? The best we've had so far is a stick figure on top of a building preparing to jump (all drawn by Nick, no doubt). Surely it's time we got to see her true and gorgeous face (although not as lovely as yours, oh esteemed editor... grovel, grovel, pant, pant, etc).

Duncan 'Dodger' MacIver, Aberdeen

stf: *Uh, oh! Looks like another argument against the Government's 'Care in the Community' scheme, I fear. Seriously, though, thanks for your comments on the mag, Duncan, and I hope you like the other design changes we've introduced since issue 68.*

You might also be interested to know that this is Jill's last issue – she's off to join our sister magazine PC FORMAT. She's done a sterling job of hounding all the ST FORMAT writers to ensure their stuff is submitted on time, and that it is both accurate and pertinent. And she'd like you to know that the stick figure was a self-portrait – it's the stress, you know.

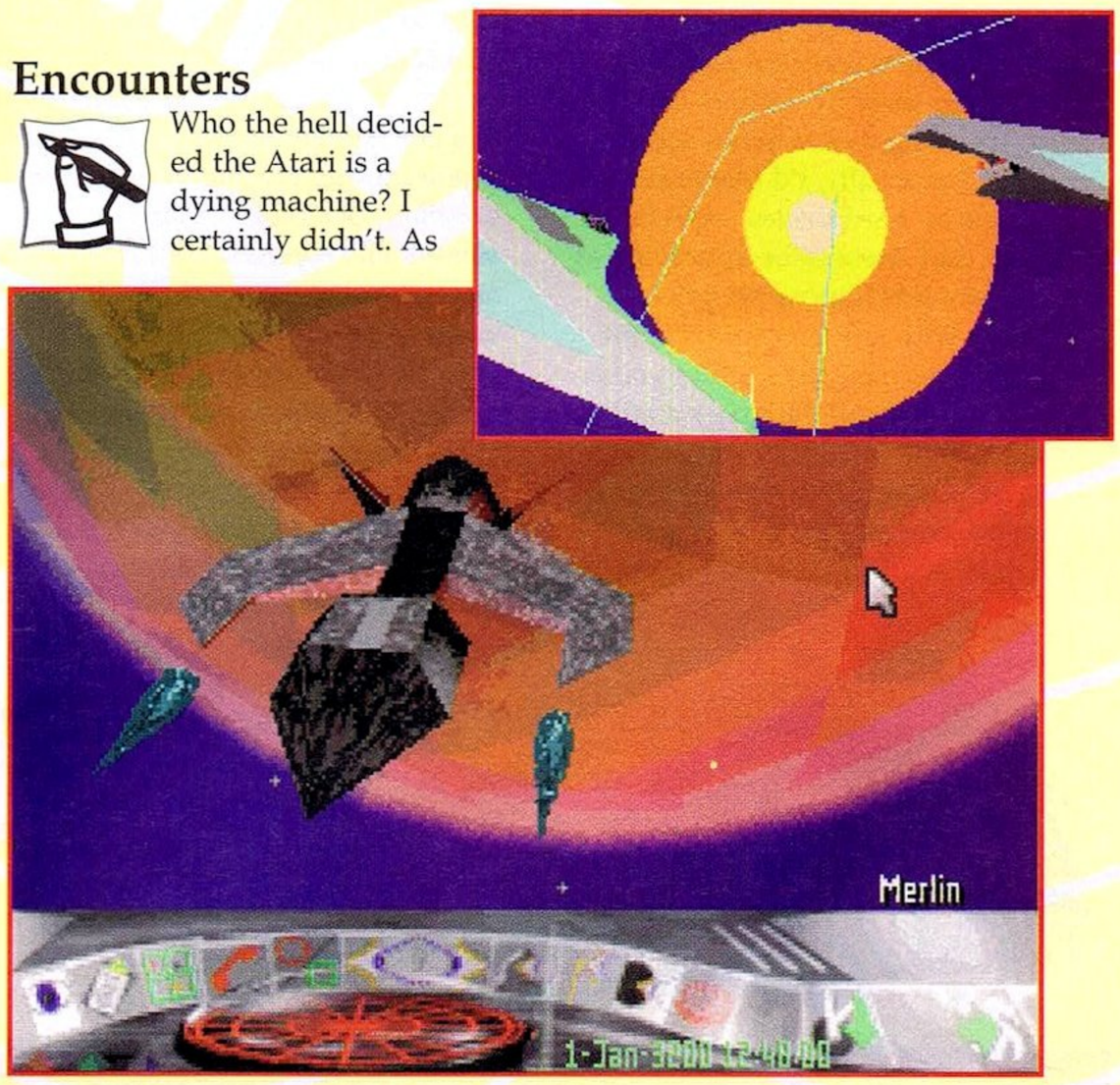
Also heading off into the sunset this month is Simon Forrester, whose talents as a writer are so much in demand that he's decided to become a freelance journalist. We hope you'll join us in thanking both of them for their efforts and in wishing them luck in the future. Of course, you'll have to wait until next issue to see whether our new recruits are as photogenic as Jill and Simon.

Simon and Jill blub hysterically at the prospect of leaving *ST FORMAT*. Tee hee.

Encounters

Who the hell decided the Atari is a dying machine? I certainly didn't. As far as I can make out the Atari corporation is a leading competitor in the home computer market, and are now so confident in their range of computers that they feel they can concentrate on nurturing the Jaguar without worrying about anything else. Other people would just rather take the view that because Atari are leaving the development of new machines to third parties, they are no longer interested in them, thus everyone seems to see this as a loss of confidence on Atari's part.

The bottom line is that the ST has many years left in it. It's time the games industry stopped finding excuses for not converting games to the ST and realised that the Atari ST is alive and kicking, and that there are vast number of ST owners ready and willing to pay for their products, if only they would convert and release them. *Encounters* is just one example.



***Encounters*, as it will look on the Amiga when it's released soon. But will it ever be released on the ST? Only you can make a difference!**

COMPANY SPEAK

If you work for a company producing software or hardware for any of the Atari computers, and have an announcement that you'd like to draw our readers' attention to – a change of address or distributor, perhaps – then drop a line to Company Speak and we'll do our best to fit you in. Please note, however, that this is not a chance to advertise your wares for free. Announcements submitted to this column should be brief and contain a point of genuine interest to our readers. And please bear in mind that, as with all letters sent to ST FORMAT, your scribblings may be edited for reasons of brevity and grammar.

I realise that in the past some readers of *ST FORMAT* have tried to purchase goods from certain unscrupulous companies, often with disastrous results for the buyer. In one case, a Midlands-based company was selling second-hand copies of *Calamus* as new.

If any of your readers are concerned about the validity of their *Calamus* software supplier, they need simply telephone us on ☎ 01734 452416 to check if that supplier is authorised by us to sell our products. Our current software range is: *Calamus 1.09n*, *Calamus SL*, *Outline Art 3*, *StereoCAD*, *Rainbow* and *Obsession*.

It is, I feel, a great pity that the vast majority of honourable Atari dealers should be tainted by the very few 'cowboys'.
Alastair Craig
JCA Europe

I am writing to inform you about the present situation of our new commercial art tutor, *Grafix... The Easy Way*. As you know, it appeared on the Cover Disk for *STF* 65 and was meant to be sold through IDS. However, we have since decided to terminate our contract with IDS and sell *Grafix* ourselves.

***Grafix* will be ready for release some time in March or April and can be obtained by writing to: Silly Software, 27 Turbary Walk, Minrow, Rochdale OL16 4JN. The price is £19.95 and customers should state whether it's for use with an STFM, STE or Falcon. Cheques or Postal Orders should be made payable to: D Sharples.**
Deano Sharples
Silly Software

PS...

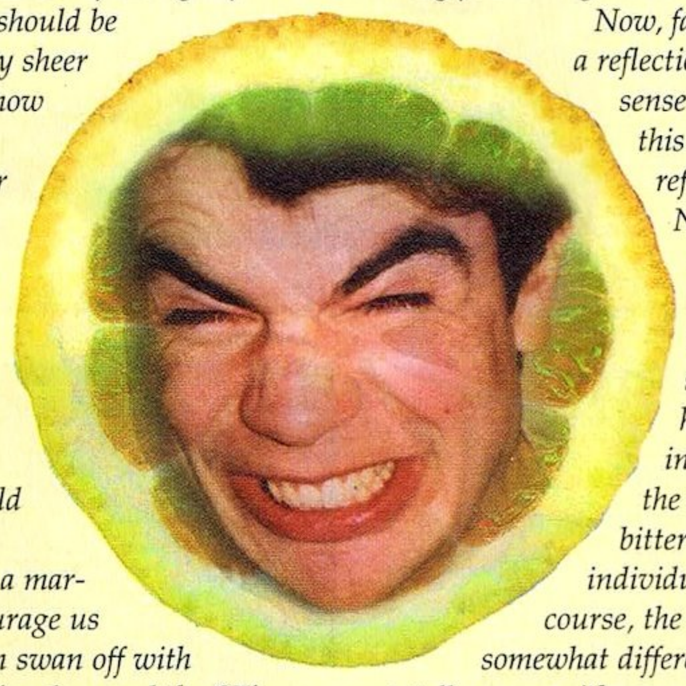
PS. Are so many of your staff really Trekkers?
Daniel 'Jean-Luc' Ellis, Worcestershire

stf: Yep, it's a dream that became a reality and spread throughout the office. After all, resistance IS futile!

When GameTek released *Frontier (Elite 2)* the Panther Owners Group started up, and we're now almost at issue 10, which just goes to show how popular *Frontier* is. To deny us *Encounters* is totally unfair – after all, is there a PC or Amiga equivalent of POG? If anything, ST users are more dedicated to their machines than any other breed of computer user, and it's about time everyone found out about it. I have already started a petition, and I fully intend to present it to either GameTek or Mr Braben. If you're serious about your ST and want *Encounters* to be converted please do the same.
Dave Hollis, Panther Owner's Group

stf: *You're bang on with your petition idea, and I strongly urge each of you to write to GameTek. If enough of us join in, we should be able to prove by sheer numbers just how big a demand there still is for ST software.*

I think you're being too lenient on Atari, though. I don't think a company should push lots of machines into a marketplace, encourage us all to buy, then swan off with the cash. They've damaged the ST's credibility with their lack of support, and it's just a good thing that third party software and hardware development is so strong in the ST world. Let's face it, Atari know their stuff when it comes to putting together tasty bits of hardware, but when it comes to developing and sustaining a market they clearly haven't got a clue.



Bitter and twisted

Today I received my copy of *ST FORMAT* and discovered, yet again, a new editor. As is my usual practice, I started my reading with the Subscribers' newsletter and, quite frankly, I was very disappointed.

The references to Nick Peers on the front and back are, in my opinion, vitriolic and give the impression that the new editor has some sort of grudge against him. If there is such a grudge or clash of personalities then Ms Levell should receive some urgent advice in relation to the abuse of autocratic authority and the manipulation of a powerful tool in the form of a large circulation magazine. If, however, this is a reflection of her own peculiarly dry sense of humour (let's hope so), she should receive some guidance on writing for public consumption.

Finally, I would like to say that Nick Peers is doing a good job and in my limited dealings with him I found him to be efficient, courteous, extremely helpful and a man who gets on with things straight away.
Howard Asbury, Tamworth

stf: *Whoa! Hold on there. I can only assume you're referring to the following sentence from issue 68's Subscribers' letter: "Meanwhile, Nick Peers, who's still bitter and twisted, and rapidly earning the nickname Mr Lemon, will continue to turn out storming Cover Disks featuring the best games, utilities and programs to help you make full use of our upcoming practical guides."*

Now, far from being a reflection of my own sense of humour, this is actually a reflection of Nick's. Ever since a little hiccup in Nick's personal life he has delighted in maintaining the image of a bitter and twisted individual. Of course, the truth is somewhat different and I totally agree with your assessment of the reality behind the image. There again, I thought I'd indicated as much when I said that he will "continue to turn out storming Cover Disks". Besides, he's a complete Trek-head, like me, so I've got to like him!

*As for the comments on the back of the newsletter... well, you'll have to ask Nick about them – after all, he writes that page, including any third-person references to himself. And believe me, they can get quite obscure at times... **stf***

The debates get more heated next month. If you have a point to make, send your letters to Karen Levell at: Feedback, *ST FORMAT*, Future Publishing, 30 Monmouth Street, Bath, Avon, BA1 2BW or e-mail: klevell@futurenet.co.uk

NEXT MONTH

As you may have gathered over previous months, we can't always be certain of what exactly is going to find its way into the following issue, but if things go according to plan (stop laughing at the back there) next month's *ST FORMAT* will include...

- **Upgrades: we all want that crucial speed, compatibility and processing power, but how do you actually install the kit on your machine? Next month we reveal exactly how to fit the most common upgrade components and explain the hardware you need to turn your ST into a real power user's dream.**
- **Discover everything you ever wanted to know about modems with our full round-up of the latest kit.**
- **The score: yep, our new music-dedicated section continues next month, with news of forthcoming releases, questions and answers, jargon busters, and intensive tutorials to help you stay in harmony with your ST, STE and Falcon.**
- **And, of course, we'll be continuing our guide to the Cover Disk stormer *Pablo Paint*, as well as offering all the news, reviews, PD and technical help you'll ever need.**

ST FORMAT

ST FORMAT 71 on sale Tuesday 9 May Miss it at your peril

On the cards

Now, there are no promises here, but if you're wondering what's pencilled into the *ST FORMAT* diary for forthcoming issues, take a look at the list below. And if there's a subject you think we should be covering and you can't see it here, or if you want us to address a specific question in any of these articles, drop us a line at: On the Cards, *ST FORMAT*, Future Publishing, 30 Monmouth Street, Bath, Avon BA1 2BW and we'll try to put it on the agenda.

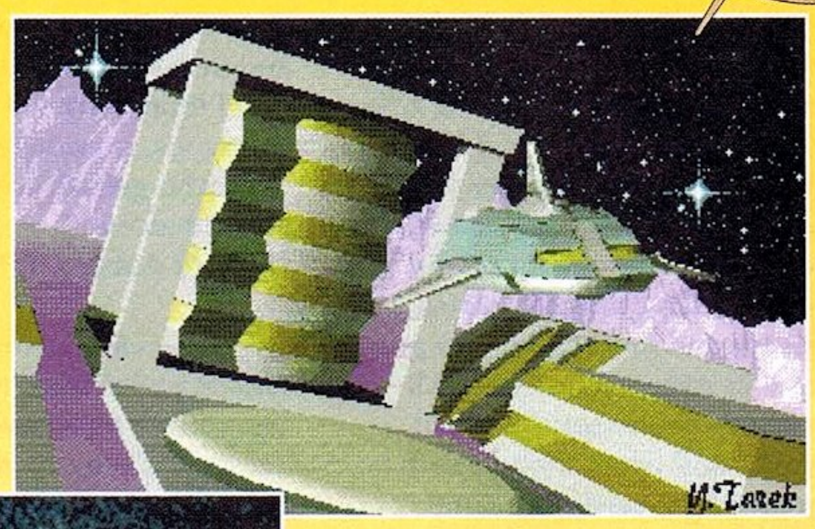
- **DIY special – we lift the lid off your ST and show you exactly how to get the machine you want**
- **How to get the most out of your mono or colour printer**
- **All you need to know about CD-ROM software and hardware, as well as the Who's Who of OS drivers**
- **Graphics workshop – professional hints, tips and tricks for today's Desktop designers**
- **PD libraries – what they have to offer and how you can set up one of your own. Should you feel brave enough...**
- **The buyers' guide to hard drives, what you should look out for before you choose, and the best offers available**
- **Upgrade special – we tell you exactly what you need and where it all fits in your machine**
- **On the money – your guide to specialist business applications and making money with your ST**
- **Programming special – how you can create your own games and serious software**

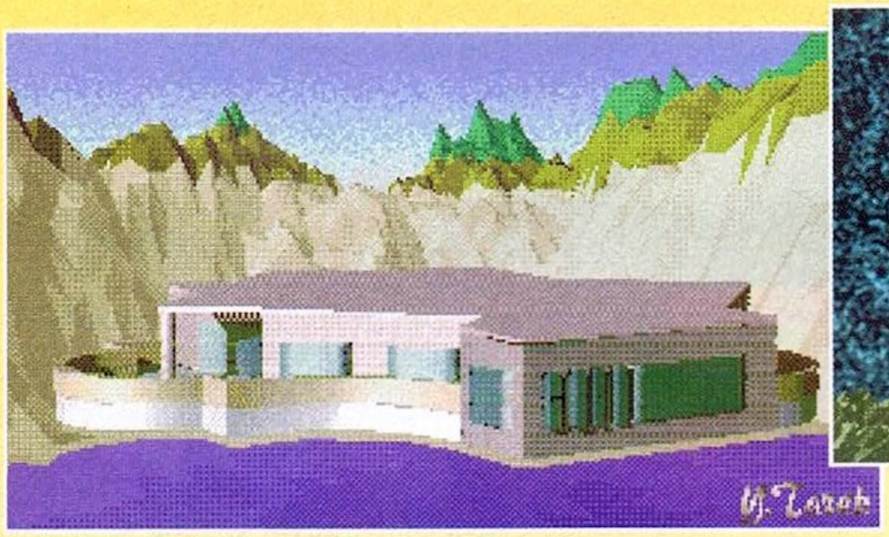
Twilight Zone

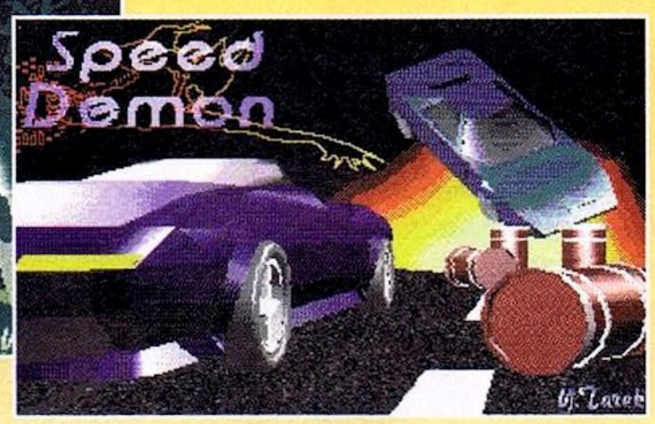
PIXEL PAINTING

This month's forum for reader artwork takes a slightly different slant thanks to *Tarik Yahiaoui*, who's been working with a number of packages to produce these gorgeous images you see before you.

The 3D objects were created using *CyberSculpt* and rendered in *Phoenix*, before being loaded into *Spectrum 512* to collate the images, then *Deluxe Paint* came into the picture to finish the images off, occasionally adding bitmap graphics where necessary. And if you were wondering, that excellent sky on the castle picture was created using *CyberPaint's* Defocus option. Thanks a lot, Tarik.







DO NOT MISS *ST FORMAT*

There's an easy way to guarantee your copy of *ST FORMAT* every month. Simply fill out the form below and take it to your local newsagent, and they'll keep a copy for you each month as soon as it hits the shelves. You don't have to pay in advance, you'll get a pristine copy, and you'll never have problems finding the magazine again. Go on, do it now.

Cut out this form (or photocopy) and hand it to your newsagent
Please reserve/deliver *ST FORMAT* each month, beginning with the June issue, which is on sale Tuesday 9 May, 1995.

Name and title: _____

Address: _____

_____

Phone number: _____

To the newsagent: ST FORMAT is published by Future Publishing ☎ 01225 442244 (Circulation)

RESERVE YOUR COPY NOW!

AD.LIBBING

AD.LIB, THE OFFICIAL *ST FORMAT* BBS and electronic lair of our resident ST Answers experts, Andy Curtis and Frank Charlton, has been a hive of activity this month. The normal blend of news, views and mindless banter seems almost irrelevant in light of:

SYSOPS.JPG

The electronic world was shocked by what is probably the most terrifying representation of our cuddly SysOps ever. The picture is, surprisingly, still available for download, despite numerous injunctions and a sharp note from the Department of Health and Safety.

Joke-athon

Ad.Lib invited entries of jokes, stories, poems and cartoons along with a minimum £1 entry fee in support of Comic Relief '95. The closing date was 25 March 1995, but keep an eye out for selected highlights next month.

E-mail

This month also saw the Ad.Lib BBS open its e-mail access for registered Ad.Lib users, giving those who paid their £10 and registered as elite users the ability to talk to the rest of the on-line community through centron.com. You can contact Ad.Lib users by sending to, for example, **Nick.Peers@adlib.centron.com**.

Have you ever been thrown out of a nightclub by these two? Frank Charlton and Andy Curtis take a bow.

Newsgroups

As if that wasn't enough, the board has also gained several newsgroups, including several Atari technical, science fiction, physics (?), and conservation groups.

If you haven't taken a look around the BBS already, you should. Call ☎ 0191 370 2659 at a kilobaud (9,200 or 14,400 baud), set to 8N1 and take a look. You can contact *ST FORMAT*, FishNET, and AtariNET, among others, as well as learning a lot of useful things about sausages.

Ladbroke Computing

33 Ormskirk Rd, Preston, Lancs, PR1 2QP

Ladbroke Computing International are one of the longest established home computer dealers in the U.K. We have developed an extensive customer service policy which involves testing of all hardware prior to despatch to ensure that goods arrive in working order, offering free advice and support over the phone and keeping customers informed. Although our prices are not always the cheapest we do endeavour to offer consistently good service and backup.

All prices/specifications are correct at copy date 16/03/95 (while stocks last), and are subject to change without prior notice. All prices include VAT but exclude delivery.

How to Pay
You can order by mail, Cheques/Postal Orders made payable to Ladbroke Computing. Or give your credit card details over the phone.

Delivery
Postal delivery is available on small items under £40 (Normally £3, phone for details). Add £7 for courier delivery. Next working day delivery on mainland UK subject to stock (£20 for Saturday delivery).

Open Mon-Sat 9.30am to 5.00pm.
Ladbroke Computing Ltd trading as Ladbroke Computing International.

Fax: (0772) 561071
Tel: 9.00am-5.30pm (5 Lines)

(0772) 203166

Printers

Star

Star LC90 Colour	**£119.99**
Star LC240	**£134.99**
Star LC240C	**£149.99**
Starjet SJ48 Bubblejet	**£189.99**
SJ48 Ink Cartridge	**£20.99**

Citizen

Citizen ABC 24pin Colour	**£169.00**

Hewlett Packard

HP Deskjet 540	**£269.99**
HP Deskjet 550 Colour	**£429.99**
HP Deskjet 320	**£239.99**

Ricoh LP1200 **£499.99**

- 2Mb RAM
- 400 Dpi
- 12 months on site warranty

Add £3 for Centronics cable and £7 for next working day courier delivery.

Data Pulse Plus

- Dual SCSI Port
- Internal Power Supply
- Device number selector
- 2Mb PD Software free

Hard Drives

- All Data-Pulse Plus Hard Drives are fully Autobooting Autoparking and are formatted, partitioned and tested before despatch, ready to 'plug in and go'.
- Full metal case measuring 250mm x 290mm x 58mm (wdh), ideal for monitor stand.
- Only brand new, highest quality mechanisms used (we do not use refurbished or second-hand mechanisms).
- All drives come with full 12-months warranty and free expert help and advice over the phone.
- Configured with SCSI port for FALCON compatibility etc.

SPECIAL OFFER

DATA-PULSE + 353Mb	**£309.99**
Data-Pulse + 532Mb	**£389.99**
Data-Pulse + 1Gb	**£659.99**

All drives come complete with ICD LINK 2 for the ST for instant "plug and play". For Falcon drives deduct £60 from the prices above.

3.5" External Drive

Zydec 3.5" External Floppy Drive. Includes own external power supply.

£57.99

SIMMS Upgrades

- All RAM upgrades come packaged with full fitting instructions/test disk.

512K SIMM's STE	**£4.99**
2Mb SIMM's STE	**£39.99**
4Mb SIMM'S	**£79.99**
2 x SIPP to SIMM adaptors	**£3.00**

Hand Scanner

Zydec Hand Scanner

- 100,200,300,400 Dpi Resolution
- 1 Letter mode, 3 photo modes.
- 105mm scanning head.

Zydec Hand Scanner ST £99.99

ST Mouse

High quality 290 dpi mouse with microswitched buttons ST/AM.

£8.99

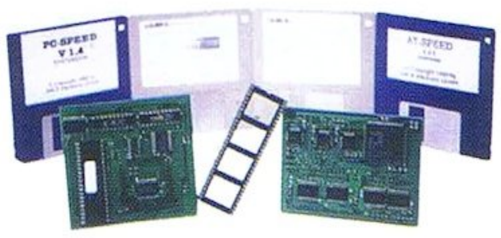
Marpet Upgrades

Marpet upgrades for the ST are 'plug in' and require no soldering. They are compatible with most motherboard layouts and come with full fitting instructions. These boards accept SIMM boards and are upgradeable at a later date. Please check that MMU and Shifter are 'socketed' before ordering.

Unpopulated Marpet board £22.00

See SIMM prices below.

PC Emulators



- Full installation instructions.
- XT or AT Emulation
- Check configuration before ordering.

PC Speed STFM (XT)	**£49.99**
PC Speed STE (XT)	**£49.99**
AT Speed STFM (8MHz)	**£139.00**
Falcon Speed	**£POA**

Repair Services

The Only ATARI Authorised Repair Centre in the UK

Our Atari trained technicians can repair ST's in minimum time at competitive rates. We can arrange for fully insured courier pickup and return delivery of your machine to ensure its safety. We even have a same day service which will ensure your machine is given priority and subject to fault, completed the same day.

We can fit memory upgrades PC Emulators, Security devices, ROM upgrades, hard drives to Mega STE's etc.

We offer a Quotation service for £15 for which we will examine your machine and report back with an exact price for repair, if you do not wish to go ahead with the repairs then just pay the £15. However, if you do go ahead then the charge is included in the minimum charge.

Please note. The minimum charge covers labour, any extra parts are chargeable.

Quotation	£15.00
Minimum repair charge	£35.25
Same day service	£15.00
STFM(E) PSU	£29.99
1Mb Internal Drive	£19.99
TOS 2.06 + Switch STFM	£54.99
TOS 2.06 + Switch STE	£54.99
Courier Pickup	£11.00
Courier return	£7.00

Phone for price and availability of ST spares.

Monitors

ST Mono Monitor **£99.99**
High quality 14" SVGA Monitor with ST adaptor (includes sound). Fully compatible with all ST Hi-Res Programmes with tilt/swivel.

Colour SVGA Monitor **£229.99**
High quality colour SVGA Monitor, .28 dot pitch includes Falcon adaptor.

Microvitec 1438 MultiSync **£289.99**
The Microvitec Multi-Sync displays ST Low, Medium, High resolutions using ST switch box, compatible with FALCON & FALCON screen blaster using FALCON VGA adaptor.

ST Multisync switchbox	£14.99
Falcon VGA Adaptor	£9.99
Falcon ST monitor Adptr	£9.99
Philips SCART to ST/STE	£9.99
8833 MKII to ST/STE	£9.99

On this month's...

ST FORMAT

GUARANTEE OF QUALITY

TESTED FOR MAXIMUM COMPATIBILITY WITH STS AND FALCONS, AND GUARANTEED VIRUS-FREE.

COVER DISK

7 STUPENDOUS PROGRAMS

PLUS BACK UP AND MENU PROGS

TEAM

The most realistic STE and Falcon football game to date makes its long-awaited appearance in this exclusive demo. *Team* makes full use of the STE's extended hardware capabilities to ensure total realism. Colourful graphics accompanied by a 50KHz soundtrack. Awesome stuff! Requires 1MByte.

525 2.02

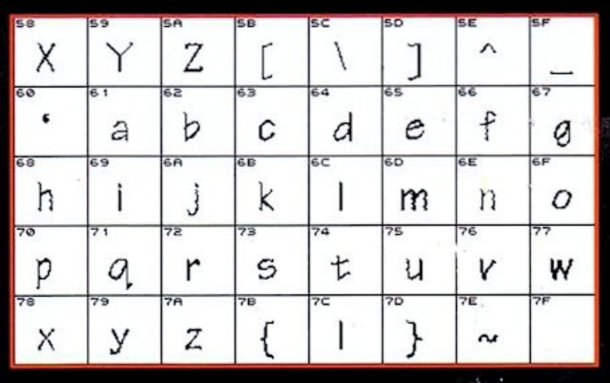
The latest version of this sample conversion utility beamed direct from Germany! Shareware for all Ataris.

CHAIN REACTION

Addictive multi-player game for all STs. Can you survive the perils of an uncontrollable *Chain Reaction?*

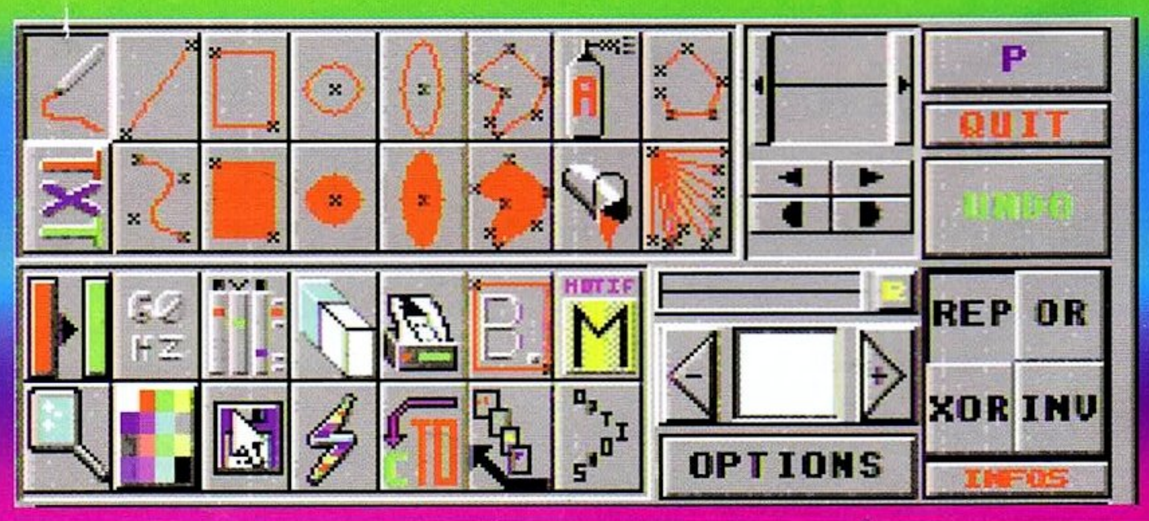
CALAMUS FONT CHECKER

Keep tabs on all your *Calamus* fonts with this powerful utility. Fonts can be displayed on screen or printed to create a catalogue.



PABLO PAINT

The complete and unrestricted colour paint package for all Ataris. This former commercial title is exclusive to *ST FORMAT*. 1MByte required – see our tutorial inside.



SPIRITED

Small but powerful text editor that runs as an Accessory. This features powerful Mac-like tools and can be called from any GEM program.

CLIP-ART

Brighten up your pages using these seven files. Crammed with clip-art images for you to import into your DTP and art programs.