

# ST FORMAT

## THE SURVIVAL GUIDE

We give you the ammo  
to troubleshoot your  
way through the toughest  
ST hardware and software faults!

INCORPORATING  
**ATARI ST** REVIEW

**EASE:** The king of desktops?

**STOP THE PRESS:** Calamus SL  
and Outline Art updates reviewed and rated

**MORE  
ST ANSWERS  
& SOFTWARE  
GUIDES**



## MIX IT UP! Music masterclass

- We show you how to use Sound Lab to become a sampling expert!
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- Sequencing secrets revealed!

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04







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# ST FORMAT

ISSUE 69 ■ APRIL 1995

## THE SURVIVAL GUIDE

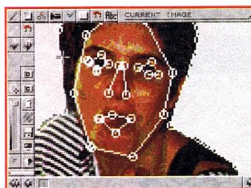


**16** We show you how to survive the unrelenting world of your ST! It's a jungle out there...

## MIX IT UP!



**48** You wanna be a rock star, hey? All you need is your ST, a MIDI device, some software and our guide.

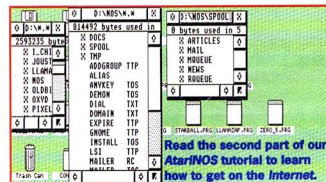


## Morphing frenzy!

**68** Follow our step-by-step tutorial to make your APEX morphs really frightening!

## FEATURES

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How to survive the worst your ST might throw at you. Printers, floppies, hard drives, memory... it's all here, just watching and waiting.
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News of two exciting special offers for you and your ST. It'll love you forever!
- 38 FINE-TUNING YOUR ST**  
The first in an ongoing series showing how the right software can make your beleaguered ST-owning existence more bearable.
- 48 MIX IT UP**  
We show you how to become a musician in your own home, with your Atari at the centre of it all.



- 66 TUTORIAL: ATARINOS**  
The second part of our guide to ATARINOS, the software you need to get on to the Internet.
- 68 TUTORIAL: APEX MEDIA**  
Learn to morph successfully using this stunning Falcon-only animation and art package.
- 69 TUTORIAL: MAGIC STORYBOOK**  
It's the ultimate storytelling engine for children and adults alike. We take you on a guided tour of last month's Cover Disk star.

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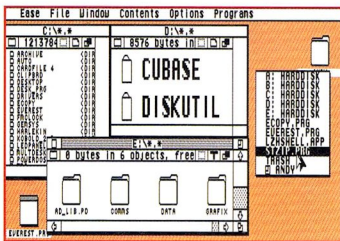
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## REVIEWS



**Ease:** latest and greatest in a long line of replacement desktops for the Atari platform.

### 24 EASE

The deep and dark secrets of *Ease*, Systems Solutions' stunning desktop replacement, revealed.

### 26 TUS HARD DRIVE

The Upgrade Shop's answer to your hard drive questions. But is it anything special?

### 28 CALAMUS SL UPDATE '94

Does JCA's update bring the big brother of the *Calamus* family bang up to date?

### 29 OUTLINE ART 3

Vector graphics at your fingertips. The perfect companion to *Calamus*, or not?

### 30 STOS EXTRA 3

Frank Charlton looks quietly impressed with this budget command extension to *STOS*.

### 32 HOLLYWOOD HUSTLER

The first STFM-compatible new game in a long while. Does it truly hold all the cards, or is it merely a well-worked bluff?

### 35 SHADOW OF THE BEAST 2

Psygnosis re-release yet another old standard on the ST. Simon kills and maims with glee.

### 36 MUSIC BOOKS

Two new books for MIDI enthusiasts everywhere.

### 41 PD ACTION/CHOICE

Top of their respective piles this month are *Conquest 2* and *Selectric*. Nick gets excited.



*Hollywood Hustler* enables all 1MByte ST owners to try their hand at poker in an authentic setting.

Clive Parker, Andy Curtis, Frank Charlton, Mac Marsden and Don Maple solve your technical queries. Better turn to page 57 then... Now, mister!

## REGULARS

### 6 COVER DISK

Get the most from this month's Cover Disk by spending a few moments in the company of our resident nutter, Nick Peers. God save his soul.

### 11 NEWS

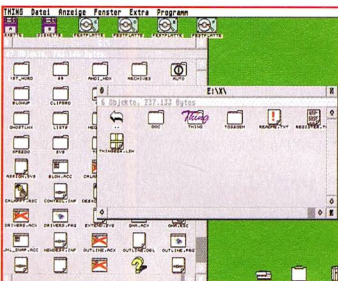
The Gasteiner show, Systems Solutions' latest catalogue and lots of small, crunchy snippets bits. Plus, the return of EuroNews! Don Maple gives you the lowdown on the European market.

### 15 QUESTIONNAIRE

What do you like and what do you hate about *ST FORMAT*? What would you like to see? And do you want Jag coverage or not? Now's your chance to tell us what YOU think.

### 57 ST ANSWERS

Got a problem? This month's ST Answers is hosted by Dr Clive Parker and company, all of them experts on what makes your Atari tick.



Want to find out about the European Atari scene? Turn to page 13, where Don Maple is waiting with news of brand new CD-ROMs and a PD replacement desktop to boot.

### 70 SUBSCRIPTIONS

Save money on the cover price of your favourite magazine, and revel in the delights of an extra disk and newsletter every single month too!

### 72 READERS ADS

Buying? Selling? Swapping? Looking for like-minded ST owners to write to? It's all here, and the text's having to get smaller to fit it all in.

### 73 ST DIRECTORY

Everyone who's anyone in the wonderful world of Atari. Your handy reference guide to who's who.

### 74 GAMEBUSTERS

Hints, tips, level codes and rude bits for more games than it's fit to mention.

### 76 BACK ISSUES

Issue 67's gone, disappeared, sold out. So if there's a back issue out there that tickles your fancy then you'd better get your skates on, hadn't you.

### 79 READER OFFERS

"Apples and pears, peaches and plums. I'm cutting me throat on these deals, mate." Yep, stupendous savings can be yours...

### 80 FEEDBACK

One reader takes a pot-shot at Albert Einstein, while another seems to have missed all the furor about *Starball*. Oh yes, it all happens in Feedback!

### 82 TWILIGHT ZONE

Then end of the mag is night! Save your souls now, while you can! Alternatively, read the back page and sob quietly at the end of another cracking issue.

# COVER DISK 69

## THIS MONTH...



**OBSESSION:** The complete Aquatic Adventure tale from UDS' pinball stunner. Uncompressed size: 642K

**SOUND LAB 1.11:** You've got your samples and you want to produce all sorts of weird effects with them. *Sound Lab*, combined with our music feature (page 48), is just the thing. Uncompressed size: 635K

**CHEQUEBOOK:** Keep track of your financial transactions with this powerful accounts program. Now you'll know the second you're broke, and not five days afterwards! Uncompressed size: 95K

**ONE JACK:** This versatile Accessory enables you to launch up to 33 programs with less effort than it takes to load one. Uncompressed size: 44K

**MAGIC STORYBOOK:** The combined editor and games program for 1MByte users. Saves on time and disk space! Size: 96K

**FORMAT 3:** Format your disks so you can cram even more on to them. You'll need to use this to dearchive *Obsession* and *Sound Lab* from this month's Cover Disk. Uncompressed size: 41K

**HANG ABOUT:** Can you scale the treacherous mountain range without plummeting to your eternal doom? Another addictive yet tiny game from the author of *Haywire*. Size: 9K

**MENU:** Dearchive the strange and wonderful contents of this month's Cover Disk using our *Menu* program. Don't forget to read the Cover Disk pages for full instructions! Size: 11K

**BACK UP:** Just do it, okay? Size: 12K



Production coordinator Claire Jessica Rabbit Booth  
Production controller Claire Wilma Flintstone Thomas  
Paper controller Fiona Betty Rubble Deane  
The Line Leads: The Anna Miley Simon O'Donnell, Mark Claver  
Jon Moore, Chris Stocker, Simon Windsor, Jason Tiley, Ollie Gibbs  
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At Future, Editors operate under two golden rules: ■ Understand your readers' needs ■ Satisfy them  
We're so SETTER INTERVIEW: 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 interesting stuff, better quality - magazines you can trust.



# Cover Disk

**ST FORMAT: Cover Disk 19**  
Select the program you wish to copy, press (Return) and follow the instructions on the screen. Make sure you have enough space formatted on disk ready. Press the (C) key to exit.

**Masterdisk** is a very useful utility of this formatting package. Checkbook! shareware program to keep track of your accounts

**Format 3** format disks to different capacities

**Paul's Storybook** combined editor and game program file (COPY)ed

**Paint** is a very useful utility of this formatting package. Shareware

**Save** should save the mountain in this way, but additive gene

ST Format Program Extraction Utility - Written by Detrex Software

Operation: complete, unextracted table from DOS. ST/Wincon only.  
Please select the zip file to be extracted.

Press any key.

FILE SELECTOR

Directory: A:\V.M.

Selection:

01 Please insert disk 1 into drive A:  
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OK Cancel Help

ST Format Program Extraction Utility - Written by Dattra Software

Operation complete, unextracted table from HD5. ST/raicon only.  
Please select the partition you want to extract.  
Press any key.

FILE SELECTION

Directory: A:\V-M...

Selection:

☒ N1 Please insert disk N1 into drive B.

☐ N2

☐ N3

☐ N4

☐ N5

☐ N6

☐ N7

☐ N8

☐ N9

☐ N10

☐ N11

☐ N12

☐ N13

☐ N14

☐ N15

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☐ N99

☐ N100

```
ST Format Program Extraction Utility - Written by Dettrax Software
Obsession: complete, unrestricted table from US. STE/Felton only
Please select the DESTINATION for this program
Press any key.
```

```

ST Format Program Extraction Utility - Written by Detrex Software

Format 1: format disks to different capacities
Please select the DESTINATION for this program
Press any key.

Press any key.
Loading: FORMAT1.LZH
Saving: FORMAT2.LZH
This file is packed.
Unpacking LZH file.

LHA's SFV v2.18, (c) Christian Grunberg, May 25 1994

Extracting: FORMAT1.DOC ...ok
Extracting: FORMAT1.LZH ...ok
Extracting: FORMAT2.ASC ...ok
Extracting: FORMAT3.ASC ...ok

Press key...
```

- We gave *Obsession* 94% in issue 67 and you're going to be deeply impressed once you've played it a few times. You'll then desperately want to get hold of the full game, which features another three stun-



## CHEQUEBOOK

**BY: Denys Bennett**  
**MACHINES: All STs**  
**FALCON-COMPATIBLE: yes**  
**MEMORY REQUIRED: 512K**  
**RESOLUTION: Medium/High**  
**UNCOMPRESSED SIZE: 95K**

### Getting started

Once the program has been dearchived using *Menu*, double-click on CHQBOOK.PRG.

### About the program

*Chequebook* enables you to keep an up-to-date account of your finances, as opposed to the out-of-date statement you tend to receive from your bank a week after ordering it (for which you're sometimes charged, if you're unlucky).

Once *Chequebook* has loaded, select 'Account Name' from the Set Up menu. Then select 'Opening Balance' to enter how much money is in your account on the date you're starting your records. Now you're ready to start entering transactions. Press [C] to enter a withdrawal (or cheque) from your account, or [D] to insert a deposit. When prompted, give the relevant details about that particular transaction: the amount, date of transaction, a reference number if desired (such as cheque number) and even the currency you want the transaction to be in (automatically converted to sterling for you). Then move on to the next record, until you're fully up to date.

### Red Envelopes

When your bank statement arrives, you can now just mark off each transaction by clicking on the appropriate line on screen, then,

When entering your transactions, you can record all kinds of information about your deposits and withdrawals.

when you've finished, you can compare the amount at the end of your statement with that frighteningly negative number displayed at the bottom of the screen next to 'Cleared'.

If you find any discrepancies (and why are they never in your favour?) select 'Recorded Balance' from the Calculate menu and enter the amount given on your statement. The difference will be displayed under Discrepancy at the bottom right of the screen.

Other options include the ability to search for certain criteria, ranging from reference numbers to entry dates, enabling you to find transactions quickly and easily. You can also update the exchange rates by selecting 'Currencies' from the Update menu. Finally, there are numerous keyboard short cuts – for example, you can assign frequently-used transactions (such as £10 withdrawals from cash machines) to the function keys.

### Printing...

*Chequebook* comes with printer drivers for the HP Deskjet range and for NEC 24-pin printer, or you can create a printer driver to suit your printer. Select 'Printer driver...' from the Set Up menu and load in

*Chequebook* enables you to keep an eye on your accounts in a clear and legible way, while also enabling you to be right up to date on where all your money's going.

Desk	File	Transact	Calculate	Set Up	Update
01	1315757	0001	0001	0001	0001
Date	Debit	Credit	Balance	Code	Item
14. 2. 95		50.00	150.00		Embezzled funds
14. 2. 95	75.00		75.00	0001	Blackmail payment
15. 2. 95		35.00	110.00		Swindled cash
17. 2. 95		125.00	235.00		Underhand dealings
19. 2. 95	300.00		65.00	0002	Gambling debt
19. 2. 95			65.00		
19. 2. 95		1,000.00	935.00		Family Inheritance
19. 2. 95	650.00		285.00	0003	Protection Money- Quark

CHQBOOK.PRN as instructed, then enter the printer control strings when you're prompted (see your printer manual for details). You must select some or all of the records before printing, or the printer will just print a blank sheet of paper.

This demo version is restricted to a maximum of 50 entries and six standing orders per account. Registering only costs £10 and gives you a fully updated version of the program with no restrictions. Details on how to register, along with full instructions

Desk	File	Transact	Calculate	Set Up	Update
01	1315757	0001	0001	0001	0001
Date	Debit	Credit	Balance	Code	Item
14. 2. 95		50.00	150.00		Embezzled funds
14. 2. 95	75.00		75.00	0001	Blackmail payment
15. 2. 95		35.00	110.00		Swindled cash
17. 2. 95		125.00	235.00		Underhand dealings
19. 2. 95	300.00		65.00	0002	Gambling debt
19. 2. 95			65.00		
19. 2. 95		1,000.00	935.00		Family Inheritance
19. 2. 95	650.00		285.00	0003	Protection Money- Quark

14.02.1995	Balances:	Recorded:	Available:	285.00
19:07:52	Opening:	100.00	Cleared:	100.00
			Discrepancy:	100.00
19. 2. 95	Gambling debt			£0

## DON'T FORGET

Write-protect your Cover Disk. Slide the black tab so that 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*.

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 just to the left.

Read the instructions in these pages and in any document file that is on the disk. They're there for a reason.

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

on how to use the program, can be found in the CHQBOOK.TXT file. Happy calculating...

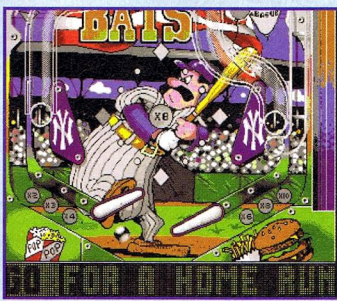
## YOUR MISSION...

The Aquatic Adventure table stars you as Bobby Bubble, who has just escaped the evil clutches of Captain Notpolite, complete with treasure map. With the Captain in

hot pursuit, Bobby dives into the Shark's Nest great coral reef intent on claiming the lost treasure or ending up as a shark snack. Which is where you come in...

ning tables: Desert Run, X-ile Zone and Bats 'n' Balls. And because we know all this already, we've done a deal with UDS themselves to supply you the whole game for a measly £21.95. Just fill out the form.

Obtaining the full version of *Obsession* gives you the other three tables from the greatest pinball game yet for the STE and Falcon. This is Bats 'n' Balls.



## 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.





## ONE JACK

BY: S.Tectre

**MACHINES:** All STs  
**FALCON-COMPATIBLE:** yes  
**MEMORY REQUIRED:** 512K  
**RESOLUTION:** Medium/High  
**UNCOMPRESSED SIZE:** 44K

### Getting started

*Menu* dearchives *One Jack* to the root directory of your blank disk. When you re-boot your machine, *One Jack* loads as an Accessory and is accessed from the Desk menu on your Desktop.

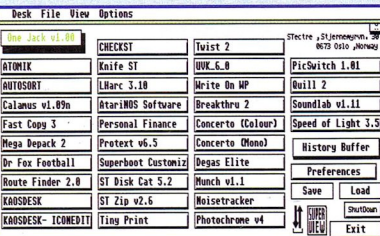
### About the program

This postcardware utility enables you to launch up to 33 programs from anywhere on a disk or hard

drive, without having to wade through successive drives and folders trying to find the file you want. You simply assign a program to each window, give it a title to make it easy to find, then save your changes.

Being an Accessory, *One Jack* can be called from within any GEM program without necessarily having to leave that program. Because Accessories can't run GEM programs, however, you need to run a separate program to call *One Jack* and load the program you're selected. To this end you need to run 1.JRUN.PRG or one of the three other similarly titled programs, which must all be placed in the root directory of your boot disk or drive before you start.

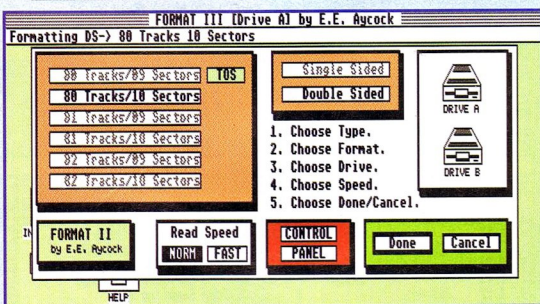
Thirty-plus programs? But I don't have that many programs that I run regularly. Omigod, look at this lot! Perhaps I do!



It helps if you can call 1.JRUN.PRG and company quickly and easily. If you have

KAOSDesk or your versions of TOS is 2.06 or more recent, you can store the programs directly on the Desktop. An alternative option is to double-click on the drive in which you've stored the various 1.JRUN files, which opens a window displaying the drive's

contents, open up any folder in which you've stored the files, then select 'Save Desktop' from the Options menu. This ensures that you can access the 1.JRUN files every time you boot up your machine, without having to open any other windows first.



Make sure you set up *Format 3* as shown here if you want to fit *Obsession* or *Sound Lab* on your blank disk. Otherwise Nick'll shout at you when you call the hotline.

## MAGIC STORYBOOK

BY: Jayne and Richard Dunn  
**MACHINES:** All STs (TOS 2.06 with STOS Fix 3)  
**FALCON-COMPATIBLE:** Yes (with STOS Fix 3)  
**MEMORY REQUIRED:** 1MByte  
**RESOLUTION:** Low  
**SIZE:** 96K

### Getting started

Delete your Auto folder from your

*Magic Storybook* disk, along with the 520.MBK file from your root disk. Then run *Menu*, inserting your *Magic Storybook* disk when asked to insert disk B.

### About the program

We couldn't cram all of the *Magic Storybook* files on to last month's Cover Disk, so this month we've included the combined editor and game program (which requires 1MByte to run). And if you turn to page 69 you'll find a tutorial that will help you around the program.

## FORMAT 3

BY: E.E. Aycock  
**MACHINES:** All STs  
**FALCON-COMPATIBLE:** Yes  
**MEMORY REQUIRED:** 512K  
**RESOLUTION:** Medium/High  
**UNCOMPRESSED SIZE:** 41K

### Getting started

Once *Menu* has dearchived *FORMAT3.PRG*, double-click on it.

### About the program

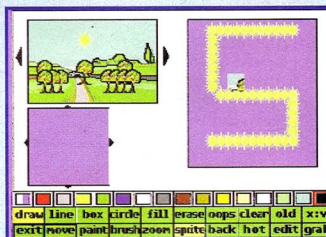
We've included *Format 3* this month because you'll need to format a blank disk to 80 tracks and 10 sectors to decompact *Obsession*

or *Sound Lab*. *Format* offers various formatting options, and can format either Drive A or B.

Once loaded, just double-click on the Panel icon to access the main formatting screen, then follow the five steps detailed in the middle of the screen ('type' signifies whether you want to format a single-sided or double-sided disk). Next, select how many tracks and sectors you want, choose Drive A or B, normal or fast mode and finally click on 'Done' to proceed or 'Cancel' to abort. Double-clicking on the Help icon displays an abridged version of the *FORMAT3.DOC* file.

Rolf Harris loved *Magic Storybook* when it was first released back in 1990. You'll love it too, especially if you're under 12. We all did.

Of course, all of this is useless if you missed last month's Cover Disk, including the main program (and we'll be round later to find out why). Turn to page 76 to order your copy of issue 68, and remember that registering costs just £10, for which you receive the unrestricted version



plus a 20,000 word manual and two extra stories. Go on then.

### About the program

Hot on the heels of the small, but perfectly formed *Haywire* comes another tiny gem of a game from Lancashire's finest small games author. (*How do you know what size he is?* - Karen) This time you get to guide your tiny matchstick climber up three increasingly hazardous mountains, which are randomly generated to keep the game fresh and challenging.

You need to climb or even leap between ledges, scrambling frantically for hand and foot holds. If you miss one ledge you'll hopefully fall on enough others to slow

you, enabling you to grab a hold. Fall too fast, however, and your momentum is only stopped when you spectacularly smash to pieces on the ground. Press the [Fire] button on your joystick to make a superhuman jump for the next handhold, but be warned - your climber only has enough energy for one of these jumps.

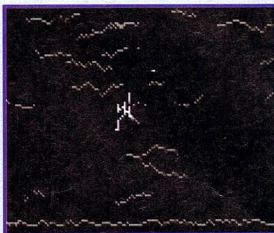
As John himself admits, it's addictive stuff, and at 9K it's a reminder of those golden days when it was possible to construct similar games on a machine with less memory than your age. Can you climb the mountain?

## HANG ABOUT!

BY: John Hodkinson  
**MACHINES:** all STs  
**FALCON-COMPATIBLE:** yes  
**MEMORY REQUIRED:** 512K  
**RESOLUTION:** Low/medium  
**SIZE:** 9K

### Getting started

Double-click on *HANG.PRG*, which can be found in the *HANGABT* folder on your Cover Disk.



When searching for iddy biddy little programs to squeeze on to what's usually an already-packed Cover Disk, addictive 9K games of the calibre of *Hang About* win through every time.



## SOUND LAB 1.11

**BY:** DMJ Software  
**MACHINES:** All STs  
**FALCON-COMPATIBLE:** yes  
**MEMORY REQUIRED:** 512K  
**(1MByte recommended)**  
**RESOLUTION:** Medium/High  
**UNCOMPRESSED SIZE:** 635K

### Getting started

Format a blank disk to 80 tracks and 10 sectors using *Format 3*, then run *Menu* to dearchive the two LZH files. After the first LZH file has been transferred to your blank disk, put the main Cover Disk back in the drive, even if *Menu* fails to prompt you before pressing any key for the second time. Finally, run *SOUNDLAB.TOS*.

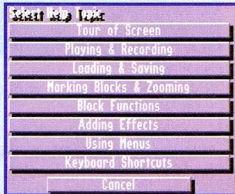
### About the program

If you want to do all sorts of strange things to your samples, you need *Sound Lab*. This is the latest version of this sample processor (an earlier version appeared on Cover Disk 41).

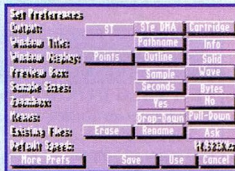
The beauty of *Sound Lab* is that a wide variety of effects are available at the click of a mouse button. You can alter your sample's volume, frequency and speed, reverse it, and even add an echo or fade it in and out. To get the most out of this superb program, you need to turn to our music feature on page 54, where your genial host, Andy Curtis, awaits...

## RUNNING SOUND LAB ON 512K

As it stands, *Sound Lab* will only run on 1MByte machines. To get it to run on a 512K machine you need to create an Auto folder on your disk and move *SOUNDLB.TOS* into it (it won't work if you just copy it). Once there, rename *SOUNDLB.TOS* to *SOUNDLB.PR* and re-boot the machine with your blank disk in Drive A. And away you go...



The Help box enables you to select which interactive help topic you want. The program then takes you on a guided tour of each function.



The Preferences screen enables you to configure *Sound Lab* exactly as you want it. Clicking on 'More Prefs' gives you even more options.

## BACK UP

### Getting started

Double-click on *CD\_BACK.TOS* in the *BACKUP* folder.

### About the program

You're all getting better at this, it would appear. There's been a general decline in the number of people calling to tell us that they've

just corrupted their one and only copy of the Cover Disk because they spilled coffee/tea/acetetic acid (delete as appropriate) all over it. To which we usually respond with hilarious laughter. But beware! Now is the time for vigilance! Keep backing up your Cover Disks, and save everyone involved (including yourself) the hassles of getting hold of a replacement.

## 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 March Disk Returns,**  
**PO Box 21, Davenport, 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.

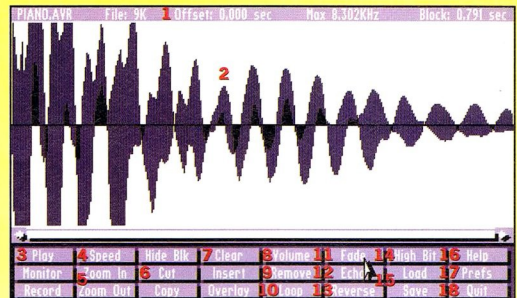
If you are having problems with a Cover Disk program, reread the instructions and any DOC files. If you still have problems, call the

**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 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.

## TOUR OF DUTY

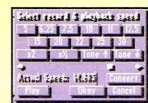


### What does what?

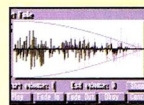
1. Gives you information about the currently loaded sample, including its name, size and frequency.
2. The main screen, upon which your sample is displayed, either as points, outline or a solid wave (see the Set Preferences box).
3. Plays the sample
4. Alters the sample's speed or converts it between different frequencies.
5. Zooms in or out of your sample. Useful for fine cutting.
6. Block Functions, enabling you to hide, cut or copy the currently selected block.
7. Enables you to clear the block, buffer or entire sample.
8. Alters the sample's volume.
9. Permanently removes the currently selected block.
10. Loops the sample so that it plays continuously.
11. Performs a fade effect on the sample.
12. Gives your sample an echo effect.
13. Reverses the sample so it plays backwards.
14. High Bit function. See the full guide on page 54.
15. File options, enabling you to save the sample as it stands or load a new one.
16. Calls the Help menu.
17. Goes to the Preferences screen. See Set Preferences box.
18. Quits from *Sound Lab*.



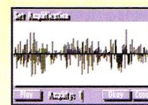
The Echo Effects Box enables you to exactly define how your echoed sample will sound.



With Select Speed you can not only alter the sample's speed, but also convert it to a different frequency.



With Set Fade you can fade your sample in or out by one of four different ways (via the Shape icon).



The Set Amplification box enables you to change the volume of your sample to your needs.

## 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 baa-hootles would be nice... ■ 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.

Signed \_\_\_\_\_ Date \_\_\_\_\_



# THE UPGRADE SHOP

## TEL 0625 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

For Tos 2-06 machines

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 (TOS 2.06 required for High Density).

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

Royal 14" Mono for ST series .....£109-00

TUS 14" Mono for ST series .....£99-00

TUS 14" Colour for Falcon .....£229-00

Add £15-00 to Mono Monitor prices for sound system. All monitors include appropriate connecting leads.

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**





# STF News...

Read all about it: Spotlight '95 dates announced, new mobile modem, and a big STench in user groups...

## Spotlight on Gasteiner

Following the massive success of their previous annual shows, Gasteiner are holding their Spotlight 1995 show over the weekend of 10-11 June. The show is being held in co-operation with ST FORMAT and Amiga Computing, and the venue is the ever

popular Novotel in Hammersmith.

The show looks to be the ST event of 1995, attended by everyone who's anyone in the ST market, including HiSoft, Power Computing, Golden Image, Gasteiner (of course), Compo, Meridian, Digital Village, Music

Village, GeSoft (from Deutschland, no less) and First Computer Centre. Last year over 30 exhibitors and 4,000 visitors attended the show, but this year the figure is expected to increase fourfold, with greatly

increased input from European companies. It'll be an invaluable opportunity for you to quiz the exhibitors about their plans first-hand, as well as try out new releases and explore a wide array of hardware and software bargains.

This year's show also plans to take a more thoughtful approach to the ST, catering not only for games enthusiasts but also for more serious users. And, of course, ST FORMAT will be there in full force to answer questions, listen to your views, solve your problems and welcome you to what will be a stormer of a show.

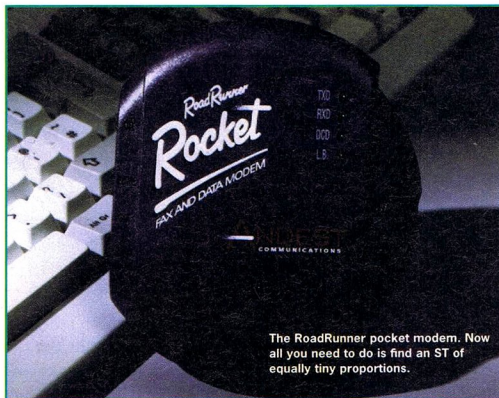
So make a note in your diary – it's 10-11 June at the Hammer-smith Novotel, the doors open at 10am. Tickets cost £5 and you can order them in advance from Gasteiner on ☎ 0181 345 6000.



The people behind the friendly, accessible Gasteiner think this will be a show that every ST user will remember.

## Beep Beep!

IS YOUR MODEM JUST TOO darned big? Then you'll be pleased with the latest Andest offering, the RoadRunner Rocket. The modem itself is a portable (palm-sized, in fact) V.32bis faxmodem costing only £115, making it a good choice for laptop surfers. Andest aren't just releasing this as a modem, though. It comes as a full Net starter's kit, including a free copy of *The Internet Magazine*, 80 hours of Net access, \$15 CompuServe credit, free software and special offers on training courses. You can find the RoadRunner Rocket in the high street, or contact Andest on ☎ 01494 429309.

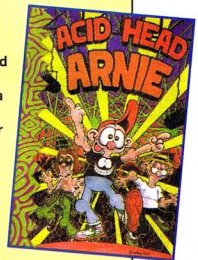


The RoadRunner pocket modem. Now all you need to do is find an ST of equally tiny proportions.

## NET NEWS

DECEMBER 5 SAW THE launch of the UK Internet Users Group, an Informed Business Services venture that leans towards commercial applications. UKIUG offers support for newbies and propeller-head alike, and will be holding monthly evening forums, initially in London, to give people the chance to explore the Net hands-on with a bit of friendly guidance. Annual membership costs a mere £10, for which you receive a regular newsletter that covers not only the latest Internet news but also useful places to visit. You can get more information from: Informed Business Services, 25 Old Street, London EC1V 9HL ☎ 0171 490 2811 or e-mail [ibs@informed.demon.co.uk](mailto:ibs@informed.demon.co.uk), CompuServe 100415, 1136.

The European Cartoon Arts Network recently turned to the World Wide Web as a way to distribute their material and link cartoonists and cartoon organisations across Europe. In CartoonNet's first three weeks of prototype service it received 12,000 commercial contacts from the American public alone. To explore CartoonNet, head towards <http://www.pavilion.co.uk/cartoonet/>.



Keen not to be left out of the scene, Barclaycard are offering their services over the Internet, at the Web address of <http://www.barclaycard.co.uk>. Although they won't be offering an on-line payment service, you'll now be able to receive a wealth of information about the company and get turned down for a credit card electronically, saving them the price of a stamp.

Not everyone's getting on to the Internet, though. In a report published by Key Note this week, 37% of those polled in a Gallup survey said they rarely, if ever, use a computer. Only 6% of the polled group had ever used e-mail, and a mere 6% said they found the idea of electronic shopping attractive. On the other hand, young people tended to be more interested in joining the world of computers, and were more likely to consider their computer skills up to speed.



# A catalogue of System Solutions?

System Solutions pledge to continue their support for the ST, even if Atari stop making computers. That's the message Karl Brandt, System Solutions' Managing Director, is

pushing in the new System Solutions Spring '95 catalogue. This positive statement comes through in more than just Karl's foreword, though. The polished brochure, which includes details of all the company's products, is itself an affirmation of their belief in the Atari market, having been entirely

produced on the TT and ST.

The catalogue, which is free to all System Solutions customers (and a mere £2 for browsers), really does show that the ST is more than capable of competing with Macs and PCs when it comes to DTP. For more details about the catalogue, give System Solutions a call on 01753 832212.



## SNIPPETS

Impact Software's schedule-beating footie simulation, *Team*, has been delayed for yet another month. Impact apologise for the delay, but hopefully the wait will be justified – rather than being rushed out for a deadline, the game should be painstakingly perfect...

Iiyama have announced a drop in price of their Vision Master range of monitors as of 1 February 1995. Renowned for the quality of their monitors, the discount is a direct result of the success of the units, which are now competitively priced at £299 (15-inch) upward to £1,379 (21-inch). It's amazing what a few extra inches can do. You can contact Iiyama on 01438 745482.

InterFX have just released an interface for controlling hardware using your ST, from the comfort of STOS Basic. Remember *Micro Live*? It was a BBC1 programme devoted to people who wanted to spend their time hooking their BBC Micros up to disco lights, robots, room lights and curtain motors. InterFX's new interface enables you to do the same thing but using an ST, and for only £25. Look out for a review next issue, or call 01535 211914 for more information.

UbiSoft have moved. The company responsible for such excellent and novel graphical adventures as *BAT* can now be found at Bridge House, 11 Creek Road, Hampton Court, Surrey, KT8 9BE, or called on 0181 941 4004.

Just when you thought you could hear your computer perfectly well, SpectraVideo launch the next in their line of speakers: the Screenbeats 4 and 5. Starting at £14.99, the speakers have a 10watt peak power, booster circuitry, magnetic shielding and mounting clips to straddle monitors. Keep an eye out for them in your high street.

Have you seen the new Jaguar version of *Sensible Soccer*? You could, if you vote for Jag coverage in this mag (and why not – you seem to be buying enough Jags). *Sensi*'s been developed by Williams Brothers Development, a one-year-old development company that's also working on *World Class Cricket*, *Powerslide*, *Virtuoso* and the long-awaited *Rise of the Robots*, all for the Jag. If you want to know more, fill in the questionnaire on page 15, now.

# What's that STench?



SIMON OSBORNE, THE man behind the up-and-coming ST-specific PD library Transparent Dreams, has recently announced the launch of his new user group, curiously named STench. Membership of the group costs £3 per year, with a bimonthly diskzine, *Trannies*, available for £1 to members only (reviewed this issue on page 46).

As STench grows, more of Transparent Dreams PDL

will be sectioned off for members only, with each PD disk costing a further £1.

If you're looking for support, software and information from other like-minded ST users, and you'd like to get a little more involved in the user movement, contact STench at: 59 Renton Road, Wythenshawe, Manchester, M22 9TQ or ring 0161 437 7474. If you call before June you can also take advantage of a special offer: buy ten disks of PD and you receive a free disk box.

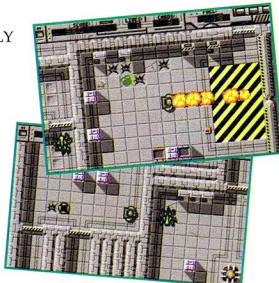
## Future Attack

NOT CONTENT WITH BRINGING you *ST FORMAT*, Future Publishing launch *PC Attack* on April 13. *PC Attack* will devote itself to PC games and promises to offer in-depth coverage, exclusives, demos and blood-temperature-raising, behind-the-scenes info on the hits of the future. Produced by ex-Mega, Edge and Total journo's, the launch issue will be an event similar in magnitude to Krakatoa.



# They came from...

999 SOFTWARE ARE CURRENTLY working on *Alien Thing*, an overhead action-packed game. The game is planned to be a massive romp and explosion fest, packed with puzzles, strategy, extra weapons and insane amounts of action. 999 also plan to make the game more involved – you won't just go round killing things, you'll have other objectives and missions. Looks like they'll be busy – they're also working on two other games, *Potholer* and *Solar War 2*, as covered back in issue 67's news pages.



*Alien Thing* – Gauntlet fans should keep an eye out for this one...





# EuroNews...

Welcome back to EuroNews! Welcome back? Yup, as dedicated *ST FORMAT* readers will remember from a few years ago, EuroNews brings you the hottest Atari news from that continent over there.

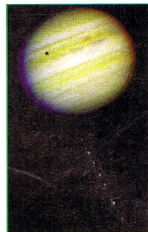
## JUPITER: Out of this world

**R**OTH EDV are a German CD-ROM company who specialise in astronomy software. *Jupiter*, their latest CD, follows in the steps of *Astronomie Software Service 1994/95*. Although there's a certain overlap between the two titles, *Jupiter* is different in so far as it contains images of the Shoemaker-Levy 9 comet's recent plunge into the gas giant. *Astronomie*, on the other hand, makes do with various star charts. There's more to *Jupiter* than just

stunning terrestrial and space observatory images, though. This is a multiformat CD-ROM with a host of Atari and PC programs – 550MBytes of them to be exact.

And while the PC programs, which are configured for use with DOS and Windows, will be of little interest to the majority of you, the pictures and various document files are platform independent.

The CD-ROM is bilingual, with documents and README files in both English and German.



*Jupiter features some stunning digitised footage of the solar system's planets.*

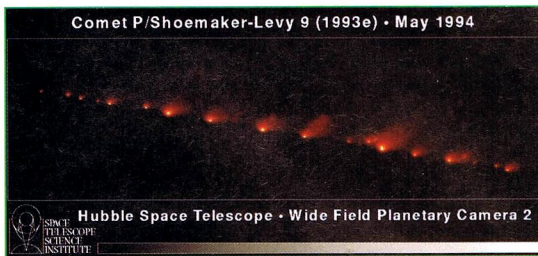
Some programs are in only one language, but English predominates by far. The images, of course, look gorgeous in any language, and *Jupiter* is highly recommended to anyone with an interest in space.

ROTH EDV are currently looking for a UK distributor, but they do take Eurocard, so ordering directly is a simple matter for card owners. Eurocard also takes care of the currency exchange and – thanks to Maastricht – there're no customs to worry about. Euro-Cheque and International Money Orders (add £4) are also accepted.

*Jupiter* costs DM59 (about £25), *Astronomie* goes for DM98 (about £40) and together they can be had for DM139 (about £60). Add £2 for p&p and write to: ROTH EDV, Bruecker Mauspfad 448, 51109 Cologne, Germany.

Celestial fireworks as the SL9 comet takes a dive into Jupiter.

Comet P/Shoemaker-Levy 9 (1993e) • May 1994



## PD of the month

So you want to know what's happening in the European PD scene, do you? Well, look no further. Starting this month we'll be bringing you all the latest news on PD and shareware from across the Channel.

Another month, another alternative Atari Desktop... Going by the name of *Thing*, this latest recruit requires TOS 1.04 or better, and will happily run under MagiC and MultiTOS. It also boasts support for other files systems, such as MinixFS.

*Thing* needs at least 1MByte of

memory and includes a hypertext help file. Unfortunately, both the program and help files are in German, although this is bound to change as more interest is generated outside Germany.

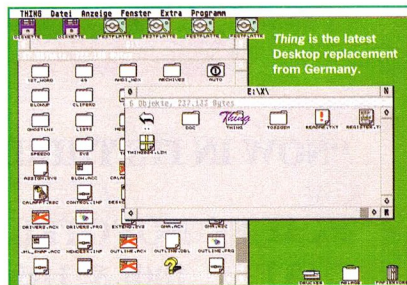
Among *Thing*'s features are animated and different sized icons. And the Desktop, which is navigated using both mouse buttons in conjunction with the [Control] and [Alternate] keys, is much easier to find your way around than the standard GEM Desktop.

Together with drive icons, a number of other objects can be moved to the Desktop, including folders, files, the clipboard and printer. In addition to a number of

powerful keyboard short cuts the function keys can also be redefined.

If you want to try *Thing* out you can get hold of the latest version directly from the author. He insists that *Thing* is not PD but encourages people to copy it. The Desktop isn't shareware either – at least not yet – because the program is totally free.

However, registration is required and the author will gratefully accept any donations should you be so inclined. Include



a disk with an SAE and a couple of international reply coupons (available at your local PO), then mail the lot to: Arno Welzel, Georgenstrasse 55, 86152 Augsburg, Germany.



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# Questionnaire

## Tell us about it...

Your chance to tell us what you want to see in future issues of **ST FORMAT**. Don't let this one slip by...

**W**e want to give you the magazine you want, but in order to do that, we need to know exactly who you are, what kind of Atari equipment you have sitting in your house, what you do with it, what you think of our past performance and what you want in the future. Then, of course, there's the all-important poll on Jaguar coverage... So if you want a say in how **ST FORMAT** is produced over the coming year, get your pen out and start ticking boxes.

### About you...

1. Look down - are you male or female?  
Male ☐ Female ☐

2. How old are you?  
Under 18 ☐ 19 to 24 ☐  
25 to 34 ☐ 35 to 44 ☐  
45 or over ☐

3. And what do you do with yourself all day?

Go to school ☐  
Go to college/university ☐  
Visit the Job Centre ☐  
I'm unemployed ☐  
I have a part-time job ☐  
Grumble - I have a full-time job ☐  
Other? ☐

4. The big question: what's your annual income?

Under £5,000 ☐  
£5,001 to £10,000 ☐  
£10,001 to £15,000 ☐  
£15,001 to £25,000 ☐  
Over £25,000 ☐

### Your Atari and you...

5. How long have you been using your Atari?

1 year or less ☐ 2 to 3 years ☐  
3 to 4 years ☐ 4 to 5 years ☐  
Over 5 years ☐

6. Which Atari machines do you own?

520STFM ☐ 520STE ☐  
1040STFM ☐ 1040STE ☐  
Mega ST ☐ Mega STE ☐  
TT ☐ Falcon ☐  
Jaguar ☐  
Other? ☐

7. Which, if any, of the following machines do you intend to buy over the next 12 months?

Falcon ☐ Jaguar ☐  
Falcon Mk 2 ☐ Eagle ☐  
PC ☐ Mac ☐  
Amiga ☐ Sega console ☐  
Nintendo console ☐ None ☐  
Other? ☐

8. Would you class your ST level at:  
Expert... ☐ I get by... ☐ Beginner... ☐

9. How much RAM do you currently have in your machine?

0.5MBytes ☐ 1MByte ☐  
2MBytes ☐ 4MBytes ☐  
Over 4MBytes ☐

10. Which version of TOS are you currently using?

TOS 1.0/1.2 ☐ TOS 1.04 ☐  
TOS 1.06/1.62 ☐ TOS 2.06 ☐  
TOS 3.06 ☐ TOS 4 plus ☐

11. Which pieces of hardware do you currently own?

Hard drive ☐ TOS upgrade ☐  
Second disk drive ☐ Mouse ☐  
High-res monitor ☐ Printer ☐  
Low-res monitor ☐ Joystick ☐  
Memory upgrade ☐ Video digitiser ☐  
MIDI equipment ☐ Sampler ☐  
Modem ☐ Scanner ☐  
CD-ROM drive ☐ Graphics card ☐  
Other? ☐

12. Which pieces of hardware do you intend to buy over the next 12 months?

Hard drive ☐ TOS upgrade ☐  
Second disk drive ☐ Mouse ☐  
High-res monitor ☐ Printer ☐  
Low-res monitor ☐ Joystick ☐  
Memory upgrade ☐ Video digitiser ☐  
MIDI equipment ☐ Sampler ☐  
Modem ☐ Scanner ☐  
CD-ROM drive ☐ Graphics card ☐  
Other? ☐

13. Do you have or intend to buy any 'serious' commercial software that falls into the following categories?

Have ☐ Intend to buy ☐  
Accounts ☐ ☐  
Comms ☐ ☐  
Databases ☐ ☐  
DTP ☐ ☐  
Education ☐ ☐  
Graphics ☐ ☐  
Miscellaneous utilities ☐ ☐  
Music ☐ ☐  
Programming ☐ ☐  
Spreadsheets ☐ ☐  
Word processing ☐ ☐

14. How much money did you spend on your ST in the last six months?

Less than £50 ☐ £51 to £100 ☐  
£101 to £250 ☐ £251 to £500 ☐  
£500 or more ☐

15. What do you mostly use your Atari machine for? (Select three of the following activities)

Mostly ☐ Occasionally ☐  
Playing games ☐ ☐  
Making music ☐ ☐  
Word processing ☐ ☐  
Graphics ☐ ☐  
DTP ☐ ☐  
Programming ☐ ☐  
Comms ☐ ☐  
Education ☐ ☐  
Accounts ☐ ☐  
Database work ☐ ☐

16. If you're into programming, which languages do you use?

GFA Basic ☐ STOS ☐  
Pascal ☐ HiSoft Basic ☐  
Assembly (machine) code ☐ C ☐  
Other? ☐

### ST FORMAT and you...

17. In the past how often did you buy ST FORMAT?

Every month ☐  
(from the newsagent) ☐  
Every month (by subscription) ☐  
Most of the time ☐  
(9 to 11 issues a year) ☐  
Every now and then ☐  
(6 to 9 issues a year) ☐  
Occasionally (3 to 6 issues a year) ☐  
Rarely (less than 3 issues a year) ☐  
Never ☐

18. How many issues do you expect to buy over the next 12 months?

12 (from the newsagent) ☐  
12 (by subscription) ☐  
9 to 11 ☐ 6 to 9 ☐ 3 to 6 ☐  
Less than 3 ☐ Never ☐

19. Which of the last 12 covers appealed to you the most?

☐  
☐  
☐  
☐  
☐  
☐  
☐  
☐  
☐  
☐  
☐  
☐

20. We've covered a lot of subjects over the past year. Which appealed to you the most?

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☐

21. You may have noticed that recent features have had a more practical slant to them. Are there any areas you'd like us to cover in a one-off feature?

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☐  
☐  
☐

22. What do you think of our regular sections?

Like ☐ Dislike ☐ No opinion ☐  
News ☐  
'Serious' software and hardware reviews ☐  
Game reviews ☐  
PD reviews ☐  
ST Answers ☐  
Individual tutorials ☐  
Cover Disk tutorials ☐  
Gamebusters ☐  
Feedback ☐  
Twilight Zone ☐

23. Do you want to see Jaguar coverage in ST FORMAT?

Yes ☐ No ☐

24. Is ST FORMAT...

Too technical ☐ Too easy ☐  
About right ☐

### The ST FORMAT Cover Disk

25. Which three Cover Disk programs have appealed to you most over the last 12 months?

☐  
☐  
☐  
☐  
☐  
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☐  
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☐  
☐

26. Which three Cover Disk programs have appealed to you least over the last 12 months?

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☐  
☐  
☐  
☐  
☐

27. When it comes to ease of use, how would you rate the Cover Disk?

Easy to use ☐  
Moderate ☐  
Confusing ☐

### What else?

Are there any other comments you'd like to make about ST FORMAT?

Right, that's it for now. Now all you have to do is send this page (or a photocopy of it) to: Tell us about it, ST FORMAT, Future Publishing, 30 Monmouth Street, Bath, BA1 2BW. We'll publish the results in a forthcoming issue of ST FORMAT, but in the meantime, so long and thanks for all the fish... stf



# THE SURVIVAL GUIDE

You are a nobody. You're a pathetic sack of computing inefficiency, just waiting to be blown to pieces by the smallest bug, crash or glitch. That's why you're here. You are about to suffer five gruelling pages of intensive ST training. By the time you leave this feature you'll be able to survive anything your ST might throw at you.

You can cling all you like to the cosy world of tutorials, helpful salespeople and *ST FORMAT* Cover Disk hotlines, but sooner or later you're going to be faced with programs that refuse to run, disks that give 'read fail' messages, incomprehensible memory shortages, unreadable files and persistent viruses. You're going to have to learn your way around the ST jungle. Think of this feature as your survival guide...





## 17



# HARD DRIVES

**"This, gentlemen, is your hard drive. You will work with it. You will play with it. You will eat with it, and you will sleep with it. Get to know it – you'll rely on it in the field. And when it lets you down?"**

**T**he worst case scenario is that you start up your machine only to find that it doesn't recognise or can't read the hard drive. They're capable of anything, hard drives. They can work one minute and refuse to do a thing the next, with no fear, no remorse and absolutely no warning.

Once you're used to your hard drive, your next best friend should be a copy of the boot disk that comes with it. Most people have ICD drives, so we'll concentrate on the ICD system software that's provided to help you sort out any problems. When your hard drive fails to even show

up on your Desktop, you should do the following:

1. First, check the connections (obvious, but easily forgotten).
2. Run IDCHECK (on your ICD disk) to make

sure your drive is being recognised by the machine. If

it doesn't show up on the list of attached drives displayed,

there's a hardware fault, at which point you should probably find a qualified repair technician (unless you're Clive, that is).

3. If it does turn up as a device, try

**If a small chunk of your drive becomes corrupted, it can cause surprising problems**

running BOOTFIX in an attempt to get the drive to boot up of its own accord again.

## Implying what?

Your hard drive can also fail because it's corrupt. And the ST version of corruption doesn't involve money changing hands – it's much more sinister. If a small chunk of your hard drive becomes corrupted, it can cause surprising problems if left alone. Should you experience problems with

your hard drive, which the above suggestions don't help you solve, follow these steps:

1. Run HDUTIL to check each hard drive partition and track down the

exact section of the drive that's become corrupt.

2. If the problem is localised to just one file, try erasing that file and check your drive again.

3. If the problem is an area of the drive that's corrupt, leave the files over the corrupted area (you're not likely to be able to retrieve them in any usable form anyway). Leaving them covering up the corruption stops any other files being saved over the problem area.

4. If the section is too large to be avoided, try reformatting that partition only, leaving the rest of the hard drive intact. Make sure that you save any precious files on to other partitions of the drive first, otherwise you may lose them too.

5. If all else fails, reformat your entire hard drive using IDFM (on the ICD disk) while weeping bitterly and cursing at humanity.

Theoretically, you could actually link this pile of hard drives together, giving yourself a massive amount of storage space and heat you could fry an egg on.



# MEMORY

**"RAM is like ammunition, men. You can never have too much, and no matter how much you have, you always seem to run out at the most inopportune moment. So treat it with respect, and aim carefully."**

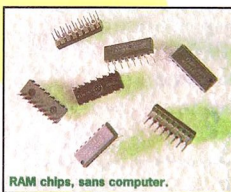
**S**oftware that refuses to run on anything less than a 1MByte ST is common.

Occasionally, though, even after you've kitted yourself out with the full 1,024K programs still refuse to work. Why? WHY?! Well...



## Extensions

If you're suffering from memory shortages, you can be sure a fair old chunk of it's being taken up by thousands of byte-hungry system extensions, most of



which are probably designed to blurt *Star Trek* samples at regular occasions. If you need memory in a hurry, start by kicking out those ACC files lurking suspiciously on your root directory.

Or get hold of a copy of *SuperBoot*. It's an extensions manager that appears at start-up and enables you to select which extensions you want to use in your next session. Ideally, software will then either leave a few kilobytes of space for these extensions or kick them out of memory completely, although some programs simply complain (or, even worse, crash) when they haven't got a comfortable amount of space.

Bear in mind that if you're running something from floppy

that boots automatically from start-up, then extensions aren't to blame for that total lack of memory space. So what else could it be?

## Too much memory?

You'll occasionally come across a program that has all the memory it needs, yet it still complains of space problems. This is caused by bad programming. The author of the software has included a routine in his program to ensure, for example, that 1,024K is available, but the routine checks that there is exactly 1MByte of memory, instead of checking for a minimum of 1MByte. So, for example, if a value of 2,048K is returned, the software thinks it's short of memory.

The answer? If at any time you need to trim the odd megabyte here and there, there are two programs you can use – *Make1MB* and *Make512K*. *Make1MB* turns off all the extra memory in your machine cutting it to 1MByte, and we'll leave you to guess what *Make512K* does. Both can be found in most PD libraries and *Make1MB* was on Cover Disk 62 (back issues on page 76, folks).



# DISK DRIVES

Disk drives, though never really needing to be stripped down and cleaned, can fail you at the most inconvenient times... *(This army metaphor thing's getting a little strained now, I think – Karen)*



**W**hen your disk drive fails to do anything at all, it can mean one of three things:

1. You haven't turned the machine on, in which case you're out of this army, boy.
2. An internal connection has come loose, in which case you should remove your machine's casing (carefully!) and check those connections. There should be two of 'em: one for the drive's power and another for the exchange of information between the units.

3. You haven't tried a different floppy disk in the drive. You often find that it's the disk that's up the spout, and not the drive. Remember, don't use cheap, unbranded disks.

**You often find that it's the disk that's up the spout, not the drive**

## Space

Occasionally, you get a surprise attack from the most unexpected quarters (that's why they call it a surprise). Nick, for instance, occasionally puts

software on the Cover Disk that doesn't quite fit on a normal floppy once it's darchived. Should this ever happen again, you should make sure you're equipped for the problem.

The essential piece of kit is a program by everyone's favourite, Clive, called *Disk Kit*. Having served its tour of duty

on Cover Disk 66, it's specially trained in formatting normal disks to slightly different specifications, enabling you to use a few more

tracks or a few more sectors on each track, so that you can store those vital extra kilobytes on a normal floppy with no hassle. Back issues, people. Page 76, now!

## Autoboosts

Just a quickie – if you have a hard drive connected to your machine and you're having trouble getting floppies to autoboot, hold down the [Alternate] key while starting up and you'll boot from disk instead.



# COMMS

**"All the lines are down! You can't**

**get in touch with HQ!**

**What can you do? Follow these instructions very closely..."**

**Y**ou've seized control of the rogue unit, but you still can't carry out operations. There are lots of things you need to check:

- Always check the protocol is set in your comms software to '8N1'. This means that each byte has 8 data bits (it's lower than 256), there is no parity (a primitive error check) and there's one stop bit (which signals the transmission of each byte).

- This sounds silly, but make sure that if your modem has two phone sockets on it, the correct plug is in the correct socket. The plug marked 'line' should go to the phone socket, and the telephone should be plugged into 'phone'.

- Unless you have an old modem, your machine will pick its own speed. You must make sure the software you're using is aware of this fact, or is set to the maximum speed the modem caters for.

## Transfers

There comes a time when information relocationisation will not be possible. In English, this means that occasionally you might find your modem is transferring a file so slowly that your software gives up and gives a 'transfer failed' message. And when your failed transfers start to number higher than your changes of socks this year there are four things you should try:

## HAYES CODES

Once and for all, to avoid any more confusion, doubt, or wild rampaging modems terrorising the nation, here's a complete list of Hayes codes. These are commands you send to your modem by typing them into your comms software. Before you type in any of the commands listed below you need to type 'AT', to tell your modem that it's about to receive a command. Follow this with the command, without a space. For instance, to get your modem to dial a number, you'd type 'ATD' followed by the number.

- A Answer mode
- A/ Repeat last command
- AT Attention
- Cn Transmitter toggle
- D Dial following number
- E Local command mode toggle (follow with 1 for on, 0 for off)

- F On-line command mode toggle (follow with 1 or 0)
- H Hook control toggle (follow with 1 or 0)
- I Inquiry (followed by 1 or 0)
- K Modem timer (follow with 0 to 3)
- M Modem speaker control (follow with 0 to 3)
- O Return on-line after operation
- Q Quiet mode
- S Set register value (follow with 0 to 27). If this is followed by ? it gets register status.
- V Verbal/numeric result codes (follow with 1 for numeric or 0 for verbal)
- X Extended result codes (follow with 1 or 0)
- Z Reset modem
- > Repeat command

And to hang up the phone without problems, send a string of ++.

- Log off the service you're communicating with and call back, in the vague hope of getting a better connection next time.
- Turn on error checking, also known as CRC. To do this, specify CRC as a transfer protocol in your comms software. This makes sure that any failed chunks of data are resent until they're correct.
- CRC is, however, by no means

perfect. Try your transfer at a different time of the day, such as late evening. Myth or not, transfer quality does improve dramatically outside business hours.

- If the service supports network mail, get the file sent to a node nearer to you. Cutting down the distance cuts down the number of possible failures, thus the number of retries, thus your phone bill.



# LOST DATA

**"The 'virus' is designed to travel with stealth, and attack from within. It will destroy your files indiscriminately and without remorse. It is to be feared. Should you come up against one, be very careful."**

**N**ow, if you had any sense at all, you'd have followed our First Aid article (issues 66 and 67) to a land where viruses simply don't exist. Different viruses do different things, but if your ST is behaving at all strangely then you should probably be suspicious. A classic example is the Ghost virus, which reverses mouse actions – when you move the mouse up, the pointer moves down.

When you discover a saboteur in your midst, you must remove the offending alien presence immediately. Without any arguments, second guessing, appeals to congress or weak excuses you must:

1. Turn your computer off at the wall. This means you should cut power to your ST and everything connected to it. It may not be essential, but superstition says it's your best bet.
2. Disconnect your hard drive and remove all floppy disks.
3. Turn your machine on after ten seconds or so.
4. Insert UVK and scan any floppies that were in the drives at the time of the attack.
5. Turn your machine off and reconnect your hard drive.
6. Turn your machine on again, booting from your UVK disk. Don't give your

hard drive time to initialise.

7. Scan your hard drive for any signs of those virus scum.
8. When you've identified the virus, check all other disks you used in that session or, if you have time, your entire collection.
9. Install a boot sector virus checker in every Auto folder you can find. These checkers come on most PD disks as standard.

These steps are arranged in this order with these stipulations to make sure that any infected systems are wiped cleanly and effectively. When a virus begins its reign of terror on your machine, you should keep all storage systems away from each other.

If the virus is on a floppy then it shouldn't be in the drive while there's a hard drive connected. It may just sound like computer superstition, but at no point should you give the virus the chance to spread.

## Retrieving files

Everybody has momentary lapses of reason, intelligence, basic co-ordination and common sense. If you have an unfriendly, primitive version of TOS, it's perfectly

**If your ST is behaving at all strangely, then you should probably be suspicious**

LOGICAL: 00113 Directory & Attributes				
F1N				
STF67	COV	<Folder>	00-00-28	12:03am
STF67	WON	<Folder>	00-00-28	12:06am
STF68	COV	<Folder>	05-05-33	01:42pm
STF68	WON	<Folder>	05-05-33	01:42pm
STF66	COV	<Folder>	19-12-94	12:06am
STF66	WON	<Folder>	19-12-94	12:07am
PENDING		<Folder>	03-01-95	06:41pm
STF68	123	142318	22-04-87	12:00am
STOSSER	123	139980	12-01-95	07:19pm
STOSSER	PRG	139980	12-01-95	07:20pm
STF69	WON	<Folder>	13-01-95	07:27pm
STF69	COV	<Folder>	17-01-95	07:07pm
TEMP		<Folder>	20-11-85	12:00am
Unassigned				
Unassigned				
Unassigned				
<div>DISK</div> <div>PRINT</div> <div>OK</div> <div>PREV</div> <div>PAGE 01</div> <div>NEXT</div>				

*Knife ST is an essential item to keep in your kit bag for those times when your troops of kilobytes wander off on their own, get lost and end up strung up in a jungle.*

common to absent-mindedly trash megabytes worth of important information. Sometimes your hands even do these things by themselves – you don't notice. So, you've just dragged ten important files to the wastebasket, and okayed the prompts. What are you going to do?

1. Do not write anything to the drive in question. The files still

exist, they're just waiting to be overwritten by new files.

2. Dig out a copy of *Knife ST* and run the undelete program, UNDEL.PRG.

3. Using the program is relatively straightforward, except that the first character in the eight-letter filename will be missing on every file erased. Therefore you'll not only have to spot which files you want but you'll also have to rename them. Unless of course...

4. You realise that the files you accidentally trashed were *Knife ST*.

## 'Read fail'

This is the message that strikes fear into the hearts of ST owners everywhere. It means that your ST is having trouble reading what's on the disk, or writing data to it.

Your instant reaction should not be to place your head against the monitor at speed. It shouldn't even be to throw the disk away... yet. There are a few reasons why disks might not read:

1. The machine's having problems. Reset it and try again.

2. The temperature's all wrong. Now, this generally refers to extreme temperatures, but if you're using your ST on a beach in Rhodes then don't expect to read too many disks.

3. Too much moisture. Air moisture can affect the performance of a disk drive.

Storing your disks somewhere warm and dry can extend their lives and even aid the sick.

4. If none of the above apply, then the disk is corrupted. Assume a grim expression and throw it away. Make sure you buy quality, brand-name disks next time.

## Cover Disks

Call off the marines. Return the fighters to their carriers. Withdraw the gunships from the river Avon. If you have problems getting your Cover Disks to work, there's a standard procedure you should follow, and it doesn't involve charging on Future Publishing's offices with guns blazing:

- If your disk is corrupted to the point at which you receive a 'read fail' message, send it to our duplicators marked with the month. For instance, this month's disk would go to: *ST FORMAT* April Disk Returns, PO Box 21, Daventry, NN1 5BU.

- If your software won't work for other reasons (it crashes, for example), make sure you read all the instructions printed in the magazine, and also any DOC files on the disk itself.

- As a very last resort call the *ST FORMAT* Cover Disk hotline ☎ 01225 442244, on Wednesdays after 2pm only. Make sure you've followed all the instructions first.





# ESSENTIAL KIT

If you're to stand even the remotest chance of surviving the ST jungle, you're going to need to pack your kit bag very carefully. The inventory of the standard ST survival kit should be as follows...

## Knife ST STF Cover Disk 42

For recovering those damaged or erased files, as well as inspecting hard drives at a closer range. Features such as the sector editor and verifier will prove invaluable to you when you need to get a little closer to your data.

## Disk Kit STF Cover Disk 66

Clive Parker's utility for formatting disks to a high capacity, for those times when 720K just

isn't enough. Alternatively, *Format 3* is on this month's Cover Disk and will serve pretty much the same purpose, formatting disks to a higher capacity in order to squeeze that little bit extra on.

## Ultimate Virus Killer 6 Reader Offers, page 79

This has to be the best anti-viral utility available to date (although why you'd want to take a piece of software out to dinner is beyond me). UVK won't do all the anti-viral work for you, though – you'll still need to be careful about your ST being too promiscuous.

## Superboot

On this month's Wonder Disk. This little program sits in the way of your hard drive's start up procedure, enabling you to turn selected extensions and Accessories on or

off, to free up that vitally needed extra memory.

## A screwdriver

Everybody needs a screwdriver, preferably a Philips. If nothing else, you'll have to open your machine to check things like connections, and you'll need something vaguely thin to flick those DIP switches.

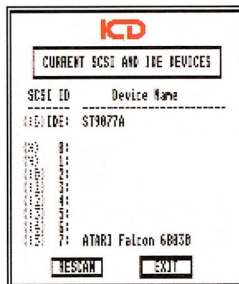
On the subject of DIP switches, you may also need a hairpin.

## ICD Pro ...or equivalent

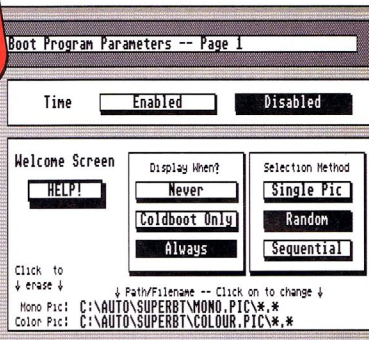
You'll undoubtedly get a copy of this software (or something similar) if you buy a hard drive for your ST. It's a set of utilities that are designed to help you set up and care for your shell-shocked hard drive. Using them you can verify tracks, format partitions, change attributes... all that sort of thing. It's all almost like a medpack for your hard disk, and it comes free with your hardware.

## ST FORMAT

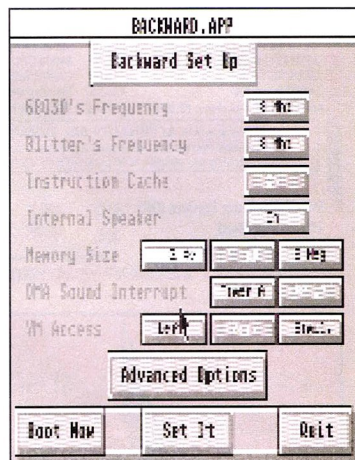
Particularly our ST Answers pages. Commander Clive answers all your queries without resorting to military metaphor. (Thank goodness – Karen!) And then, of course, there's the monthly dose of action-packed ST fun, liberally sprinkled with the odd serious bit. Great. *stf*



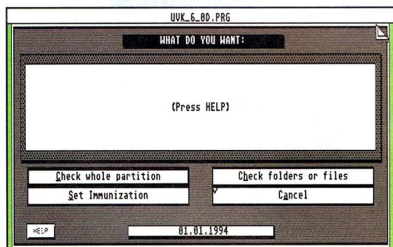
ICD Pro has SCSI devices line up and jump to attention. Think of it as parade inspection (if you think of it at all).



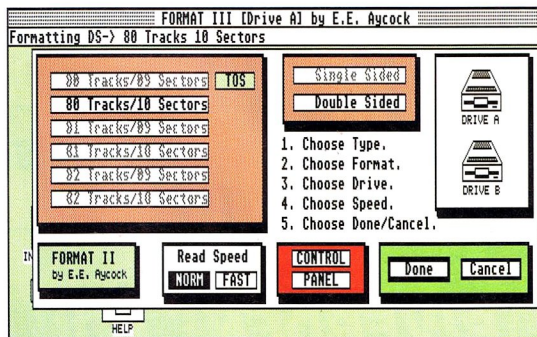
Superboot organises those hundreds of possibly useful AGC files on your ST, enabling you to toggle them on or off at startup. This is only part of its abilities – it can also display images, autoboot software and pick resolutions.



We haven't mentioned Backward in the feature because it's Falcon-only, but it enables you to run ST software on your Falcon should you so desire.



Okay, so UVK may not look all that pretty, but you'll thank it when it stops those killer viruses destroying every piece of software you've accumulated in this battle.



We were going to include a pic of Disk Kit, which is handy for those extra high-capacity disk formats, but we didn't want to give Clive Parker yet another plug. So if you're running out of space on your floppies, you could also use Format 3.





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# ST FORMAT

# Special Offers

Now everyone can afford to go rodent crazy, as we offer you the **FORMAT** Gold winning **Lemmings** and **Lemmings 2 – The Tribes** for just £9.99 each!

**Y**es, it's good news time, folks. After much shady dealing in darkened rooms, **ST FORMAT** has tied up the deal of the century. And while stock brokers jump, the gilts market crashes and the *News at Ten* team don dark suits, **ST FORMAT** astounds economic pundits by offering you **Lemmings** and its sequel **Lemmings 2 – The Tribes** for just £9.99 each, or £17.99 for both.

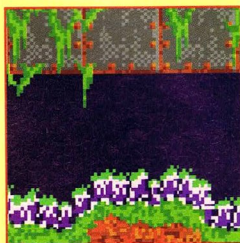
Yes, the two most famous rodent-'em-ups in the universe can now be yours for these silly prices. Both games were awarded the **ST FORMAT** Gold accolade when they were reviewed, and if you

haven't already scrambled your mouse in the effort to get the tiny tormentors home, you haven't lived. They really are that good. Even Jill's played them.

To order your copy, or indeed copies, simply fill out the form below, stuff it in an envelope and send it to the address on the form. Then wait a couple of weeks, stock up a healthy supply of valium and get ready for a puzzler to make Rubik sweat. *stf*

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

Ed Ricketts on **Lemmings**



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

Please send me...

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# Ease desktop

Not so much a desktop program, more a way of life. Andy Curtis is reporting live from Nirvana.



Ever since the first versions of *NeoDesk* and *Gemini* were released years ago, the search has been going on to find the ultimate desktop system. System Solutions would have us believe that *Ease* is the best offering yet. But should we believe

the hype? What, exactly, does *Ease* offer that other systems don't?

## System requirements

Like many of the high-end packages for your ST, *Ease* is happiest running on a machine with 2MBytes or more, and a nice big hard drive. Surprisingly, though, it will run on any ST with 1MByte, and in every Atari resolution apart from ST Low. *Ease* even

Worth noting is *Ease*'s ability to install applications with up to six different extension types. A text editor, for example, could respond to the extensions TXT, DOC, MAN, CFG, BAT and INF. Whenever you double-click on a file of one of these types, the editor loads itself and the file, ready for editing.

includes a routine that removes it from memory when running other specified applications, meaning that it effectively can be run using no memory at all! It's also completely TT, Falcon and MultiTOS/MagicC compliant. In fact, unless you really do have the lowliest of the low, *Ease* has something to offer you.

## Installation

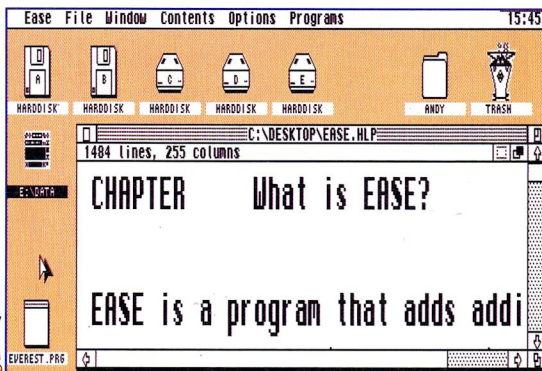
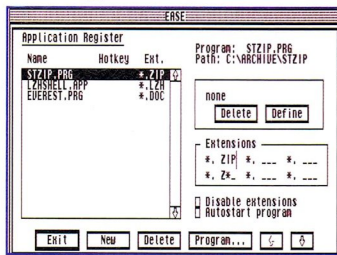
Installation couldn't be easier. Simply copy the *Ease* program over to your hard drive or boot disk together with its icon and configuration files. Two other self-extracting archives containing important utilities are included. *Ease* runs from anywhere on your hard drive – just double-click on the EASE.PRГ file and away you

go. And it doesn't require any Auto folder programs to be run before it will work, as *NeoDesk* does, for example.

The presentation of the package is not in the least glamorous, being a simple plastic wallet containing one disk and a manual booklet. While it would never win any prizes for design, it is functional and do you really want to pay more just for a flash box? 'Nuff said.

## Power desktop

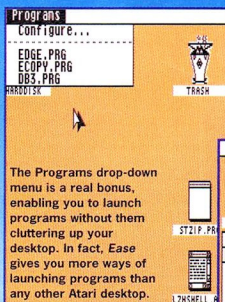
Third-party desktops can often be very slow at drawing and scrolling through windows. Time lags are often noticeable compared to the GEM Desktop. *Ease*, however, is written in 100 per cent assembler (or machine) code, making it



*Ease* comes with a friendly disk-based help-file to get you out of trouble if you don't have the manual handy. Almost all the functions are clearly described here – but don't worry, we just selected a huge font for fun. *Ease* will display it for you at a less ludicrous point size should you so desire...

## LOOK AT ALL THOSE FEATURES!

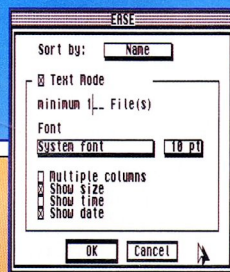
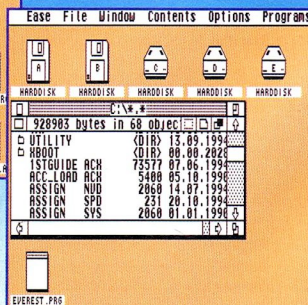
- Drag files to the desktop. There they can be started, opened and copied in the normal way.
- Drag and drop data files on top of executable files, which enables you to run the program with the data file automatically loaded.
- Nominate Hot Keys to start programs.
- Assign parameters to TTP programs, which will be passed each time the program is run.
- Fully GDOS and SpeedoGDOS aware.
- Extensive file search facility.
- Free drive space shown in directory window if desired.
- Windows auto-size themselves according to the contents of the directory.
- Copy, Move, Delete and Format can be carried out by *Kobold*, the lightning-fast copier. Completely invisible interface.
- Use the file selector to pass paths in a TTP parameters dialog.
- Right mouse button acts as a double-click.
- Choose desktop backdrop colour or import pictures.



The Programs drop-down menu is a real bonus, enabling you to launch programs without them cluttering up your desktop. In fact, *Ease* gives you more ways of launching programs than any other Atari desktop.

A simple *Ease* desktop setup. Notice the extra click box below the top left-hand corner box. This box closes the window immediately, regardless of where it happens to be in the directory structure.

*Ease* gives you the opportunity to decide exactly what's displayed in a text mode window. The configurability of the program is one of its strongest selling points.





# MULTITASKING WITH EASE

Ease is the perfect companion for multitasking operating systems such as MultiTOS and MagiC. It has been specifically written to work as the desktop environment for MagiC, and its performance as such is undeniably excellent. TOS programs can be launched to run in windows, thus not wrecking the environment, and any program can

be made to run as a single task if that is what you want. The result is multitasking without tears.

Ease and MagiC together enable problem-free running of almost all programs, except Cubase – which just doesn't want to know. If you are a MagiC user then you absolutely and definitely need Ease. It's as simple as that.

quicker than a quick thing on a quick day in Speedyville.

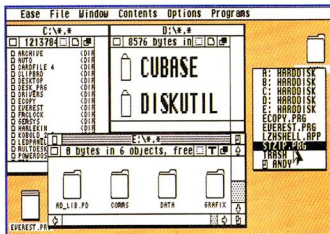
Working in conjunction with NVDI 2.5 the speed of window updates is impressive, and is really the one feature that raises itself clearly head and shoulders above the other (also excellent) features. With dialogs and windows snapping into place almost instantly, you soon start to feel like you have complete mastery of your machine. Not only that, but a veritable host of snappy keyboard short cuts – which are quickly and easily taken on board – speed you still further.

Ease is also full of nice little touches, which you discover as

you go along. For example, if you select items in a window, then use the window scroll bars to move up and down the directory, the items stay selected. If you hold down the [Control] key and double-click on a desktop icon, a window opens showing you where the original file is stored. And if you should ever get lost when using Ease, simply refer to the extensive on-line help system located in the Accessories menu.

Configurability is another feature that keeps cropping up. You find yourself able to configure just about everything, even down to the fonts used in individual windows. The icons are super-flexible too. A complete icon handler program is in the package, so you can produce the setup you need, each icon is assigned to a program or desktop item. This means that if you want to use an icon twice, you put it in the icon file twice.

Ease is 100 per cent GDOS-compatible, regardless of what version you run, and will happily display the contents of different windows in different fonts.



## The final frontier

Ease is not a space guzzler either. It runs quite happily from a floppy drive and, once loaded, doesn't need to constantly refer back to itself (this is because it holds all its configuration in memory). You only see disk access when Ease needs to re-load itself after running a program that removed it from memory, or to save configurations. And if you think that 700K is a lot of disk space, just try asking a PC-compatible owner how much disk space Windows 3 requires.

## General comments

This program is truly well written, offering virtually everything an ST owner could wish for. The code is stable and all but bug free – in fact, the only serious bug we found was that pressing the [Esc] key did not force a true media change as the manual claimed. Even this is

relatively minor bugbear (ouch), because you can use a shareware file selector such as *Selectric* to do the job for you.

Once you've used Ease, you'll never want to go to another desktop system. They'll seem slow and cumbersome by comparison. Ease puts you in the driving seat and presents you with all the tools you need to run your computer sessions efficiently.

The MagiC operating system (STF 60, 94%), and the *Kobold* file management system (STF 61, 90%), together with Ease, provide you with a power desktop setup that's geared towards serious applications, and we'd seriously recommend you purchase all three programs – they work as a team superbly. Maybe System Solutions will release them as a set in the future. We can but hope. *stf*

ANDY CURTIS

## EASY KEYS!

No desktop system is complete without a full complement of keyboard short cuts. Ease has absolutely no intention of letting you down on this score. Here's a selection from the many keyboard short cut options available.

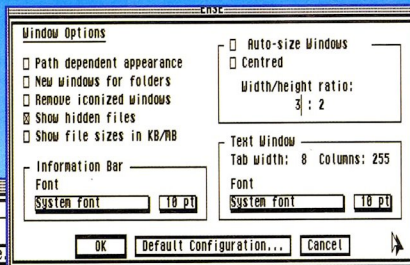
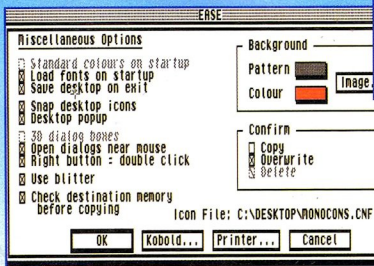
- Right mouse button click while in the Ease desktop environment acts the same as a double-click with the left mouse button. Once you get the hang of this, you won't want to be without it.
- [Alternate] + [drive letter] opens a window for the selected drive.
- [Undo] while in a dialog box quits the box with no changes.

And while a window is open and active you can use these short cuts and others.

- [Undo] moves back one directory, or closes if root is displayed.
- [Control] + [Closer] takes you to the root directory of the window.
- [Shift] + [Alternate] + [drive letter] displays the new drive contents in the existing window.
- [Shift] while dragging objects drags all selected objects, even if they're in different windows.
- [Control] while double-clicking on a desktop File icon opens the directory where the actual file is to be found.
- [Control] + [Delete] deletes all the selected objects in all windows.



Here you can see how well Ease interfaces with Kobold, the file copier. In use you hardly realise that another program has been called.



Fonts with everything! GDOS fonts of all types can be utilised if you have NVDI or any other form of GDOS loaded. Just about every conceivable window option is covered.

One of the main configuration dialogs for Ease. Despite the screenshots in the manual (done on a TT), 3D buttons are not available for ST yet – 16 colours or more are required, which means a TT or Falcon.

**STF VERDICT: STFVERD**

**Ease**  
 £49.95 System Solutions  
 ☎ 01753 832212  
 ST, TT, Falcon, 1MByte  
 (2MBytes recommended)

**HIGHS**

- Extremely fast
- Chock-full of features
- Compatible with almost everything

**LOWS**

- Force media change doesn't work

**In short...**  
 Fast, compatible and exciting to use. Quite simply the best ST desktop that money can buy!

**97%**



# TUS hard drive

The Upgrade Shop's 234MByte hard drive may be little, but it can stand up for itself in the battle of the hard drives. Simon Forrester checks whether or not it goes the distance.

**T**he Upgrade Shop would like you to think of their new hard drive, the 100c, as a small, quiet, efficient and generally discreet hard drive that just happens to store 234MBytes of data.

These are not wild claims – the 100c can indeed store 234Mbytes inside a box only 6cms high, 17cms wide and 23cms deep. This lack of internal airspace would make the unit heat dramatically were it not for a fan quietly keeping the internals cool. And at a weight of 2.4kg, it's lighter than most other drives on the market, which partly due to its plastic casing (instead of the usual metal) and small drive mechanism. You can't judge a book by its cover, though...

## Interface links...

The 100c works to the SCSI standard, using the ICD *The Link* interface that many hard drive owners will already know and love, as many other drives are sold with it bundled. The interface consists of an adaptor to replace

your ST's DMA connector with a standard SCSI connection (this is necessary to convert the SCSI signals from the drive into the ACSI signals the ST understands), and the software to convince your ST to talk in a new language. The software provided is comprehensive, to say the least. The first disc contains all the software you'll need to format, partition, park, boot and generally please your hard drive, and the second contains comprehensive CD software. CD software?

That's the beauty of SCSI. The 100c's SCSI through port means that not only can you attach further hard drives to the unit without needing another ICD interface, but you could also plug in a CD-ROM drive, and access 650MByte CDs with no extra fuss. And the CD ROM format is standard, so you can read Macintosh and PC CDs as well.

Unfortunately, you'll still have the usual hard drive problems. Mankind has not yet devised a hard drive that boots up in the time it takes your machine to



The drive in all its glory. It's a small but perfectly formed beast, whose appearance belies its perfectly respectable capacity of 234MBytes.

## DO YOU WANT ONE?

It's all very well talking about buying a hard drive, but not everyone wants them. A hard drive is a mass storage device, capable of storing many megabytes as opposed to the 720K you can fit on a 3.5-inch floppy disk, at several times the speed.

Other than size, shape, look and noise, most drives perform to a standard – when shopping for one, all you really have to consider is the storage capacity (measured in megabytes), the interface (exactly how its connected to your machine) and, of course, the price.

look at it, which means you'll still occasionally find yourself looking at a crashed start-up sequence instead of slipping smoothly into your boot-up sequence. But this is an area where the software needs improving, not the hardware.

## It looks nice, too...

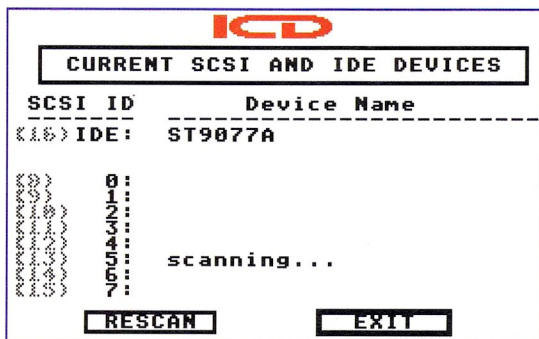
If you care about aesthetics, this is a hard drive from the new school of hardware design – it has one access LED (which occasionally flashes, at least), it doesn't produce the dramatic heat of the STFM, and it's way too small to use as a monitor stand – which is a feature some hard drives are advertised by. In fact, for its capacity, the 100c is an extremely compact unit, and takes up even less space when mounted on the side stand provided. Of course most people sit drives on their sides anyway, but the stand does make things a little less precarious, and hard drives make such good coffee mats, don't you find?

## Ask yourself

Do you want a 234MByte hard drive? If you're using your ST to the extent that you could fill a drive of this size, the 100c is as

good a choice as any – and 234Mbytes is perfectly adequate for most people's home needs, unless you plan to start a bulletin board or PD library, or even catalogue the British Library. Other companies can offer you similar drives for similar prices – take a look at a Gasteiner ad, for example – but you shouldn't spend your money on anything bigger, noisier or less convenient than the 100c. *stf*

SIMON FORRESTER



## TUS 100c hard drive

£264 ST, £249 Falcon  
The Upgrade Shop  
☎ 01625 503488

### HIGHS

- 234MBytes!
- Unobtrusive
- Affordable

### LOWS

- Could warm up faster

## In short...

An affordable and reliable drive with a comfortably high capacity. Yep, quite reasonable **85%**

The ICD software comes packaged with most hard drives, including the TUS 100c, for that quick-start joy of a ready-to-run piece of hardware.

STF VERDICT ○ STF VERDICT





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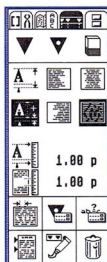


# Calamus SL update

**Calamus SL is the state of the art in the DTP world, and JCA have just released an upgrade that makes it even more flexible. But is any upgrade worth £69?**

**R**eleased early in the history of the ST, Calamus is the definitive DTP package on this platform. It works exactly as a flexible powerful DTP package should – everything on your page is a separate element, over which you have a large measure of control. You're not restricted to bitmapped graphics or fonts, which means you can scale them smoothly to any size, as you can other elements such as lines, boxes and fills. Mistakes can be singled out and deleted, and pages can be re-arranged at the touch of a button – all of which gives you greater control over the final look of your page.

Calamus SL, reviewed in issue 37, added and explored the colour option. The package gave you the power to create intelligent, clear



Calamus is designed to give you complete control over look, style and content.

page designs, but then you'd expect that for the hefty price of £199.

However, Calamus SL suffered from a few glitches and versatility problems (lacking colour features, page tools and the like), which is why JCA Europe have now released the *Calamus Upgrade*, at a cost of £69. But is any upgrade really worth that much? What does it offer?

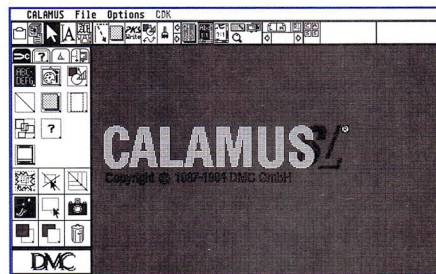
**Wow! Cor! Blimey! Etc**

Well, a number of all-important features have been added, as you

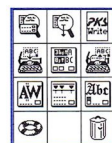
can see in the panel below. These are definitely worthwhile additions – the page tools are vital for editing large documents, the process spot colour is invaluable for prettier pages and NT compatibility enables you to take advantage of PC facilities for printing (such as laserwriters and copy shops).

There are always down points, though. For some reason, Calamus still refuses to have anything to do with PostScript, the standard compatible language for printers. The NT compatibility makes up for this in a way by providing a file you could use on a PC, but a PostScript option would have made the system compatible with linotronic machines, all printers, and the rest of the publishing world.

However, these additions do help make Calamus the package it



The tools you can use sit on the left-hand side in a palette. It may take you a while to understand all the icons, though.



These palettes are switchable – you can select drawing tools, or even a number of text options, as pictured here.

should have been years ago – it now sits on a par with professional packages like QuarkXPress on the Apple Macintosh.

The price seems steep, but when you consider the cost of other professional DTP software (it's all in three if not four figures on the PC and Mac) it becomes more reasonable. The fact this is an upgrade may turn some people off, and unless you know you're going to have a very definite use for the extra features, you might not feel it's worthwhile taking the plunge.

If, however, you're producing a publication on your ST, you'll soon find that this update can add that extra sparkle to your work, as well as making it a lot easier to produce. *stf*

**SIMON FORRESTER**

## NEW FEATURES

### Spot colours

Calamus is now capable of processing and separating spot colours. This means that if you use a third colour (black, white and, say, blue), you can print it out as a separate plate, which is vital for reproducing that page with the colour intact. For instance, the hideous yellow tint that adorns Karen's face on our subscribers' newsletter is printed out as a separate plate, using a printer which can print the relevant colour.

### Edit process colour

The ability to edit process colours has been added. This means that you can select a spot colour by mixing varying degrees of red, green and blue light, achieving just about every colour available in the spectrum. If you're not familiar with the idea, look at the way a television works – it can display any colour available by simply displaying different amounts of red, green and blue. Well, now you can do this too.

### NT document compatibility

Calamus is now compatible with the Windows NT version, enabling you to freely exchange between the

two. This means that you'll be able to use pages created on a PC under Windows NT, and that the PC will be able to use PC files as well. This could be invaluable for getting your work duplicated – a copy shop would be able to print your work, even though there won't be a single ST in sight.

### Uniframe

You can also now produce module specific frames where necessary, making more complicated tasks easier by cutting down the amount of separate elements needed for some modules. In English, this means that you can make operations easier to perform by setting up the software to concentrate on these tasks.

### Page tool

And finally, Calamus now has a handy module with which you can edit, delete or rearrange the different pages of your document as pages, as opposed to items on those pages. So when you're using large documents you can quickly manipulate your pages, and restructure documents with the minimum of fuss.

STF VERDICT: ST FVERDI

## Calamus SL update

£69 JCA Europe  
01734 452416

### HIGHS

- Glorious technicolor
- Addition page tool

### LOWS

- It's getting gradually slower
- But it's worth it

## In short...

An invaluable addition to your Calamus system, if you need the extra functions

**90%**



# Outline Art 3

If you want to create impressive clip-art, a vector graphics package is essential. We take a look at the latest addition to the Calamus range.

You may have one of the best DTP packages for your ST, but are you still using bitmap clip-art on your pages? Powerful DTP packages like Calamus can use vector files, which means that you can import vector clip-art, then increase the size of the picture infinitely without any loss in quality. So all you need now is to find a vector clip-art file to suit your needs. Enter Outline Art 3, a vector art package.

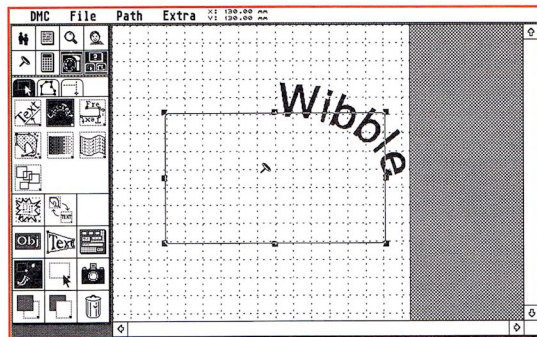
Vector art packages are different to your classic bitmap art packages, and a great deal more powerful. Using an art package like Outline Art you create your on-screen elements – text, lines, shades and geometrics – as you would with any art package, but

you can then manipulate each element separately. If you don't like a line, then instead of deleting it and drawing another, you can simply move or stretch it. Every element that sits in the picture has a precise location, geometric shape and dimension, all of which can be changed.

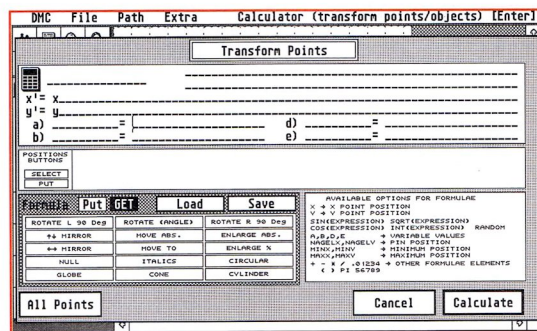
## How do they do that?

For ease of use, Outline Art displays all the graphic functions in a palette on screen while you're editing your picture. Using these you create all the elements that make up your picture, be they text, lines, shapes or fills. These elements, although they look different on screen, are all stored the same way – as paths of lines.

The remaining tools on the



We could try to show you everything a package like Outline Art can do, but there'd be no room left for the magazine. Here, however, is wrapped curved text.



Not all design can be left to your creative eye – Outline includes a calculator function for formulating dimensions and positions of objects and elements.

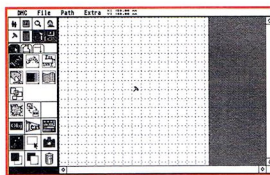
palette enable you to change and manipulate these elements. They either deal with whole elements (a clump of text or a shape, for example), or the paths of those elements. You can move elements around each other, or in front of or behind other elements, and you can twist or stretch whole elements. You can also edit the paths of those elements, moving, adding or deleting individual points, enabling you to easily alter any objects you've already drawn.

It's by combining and manipulating all these on-screen elements that you create original and complex work. Outline is very different to use than your standard bitmap art package, and you'll spend a fair amount of time familiarising yourself with all its idiosyncrasies. You can't quickly create a simple graphic object, either, but then, Outline isn't a package for quick doodling.

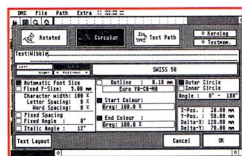
What makes Outline Art so worthy is its versatility – you can achieve more with it, and what you produce looks excellent. You should, however, consider the cost – £99 is a fairly hefty price. But Outline matches the professional standard of the Calamus range, and

if you're serious about the kind of artwork you want to produce, this is the package for you. *stf*

SIMON FORRESTER



You should always start with a blank sheet of paper. The drawing pin isn't essential, though.



As if the Calamus functions weren't enough, Outline gives you yet further control over text effects – right down to the nearest 0.01mm.

## SORRY? VECTORS?

Pictures come in two types: bitmapped or drawn. Bitmapped graphics are built up of individual pixels, and can be found in IMG, PICT, and TIF files to name but a few.

However, when you enlarge the picture you effectively reduce the resolution of the output, because there's only a finite number of pixels in the image.

The second type of picture file

is built up of vectors. This type doesn't show you what the picture looks like, but rather tells you what elements it's built up of. A vector pic's stored as a set of co-ordinates for lines, shapes and fills. This info is converted into pixels once the pic's scale and resolution have been fixed (when it's displayed or printed) and so can be reproduced smoothly at any resolution.

## Outline Art

£99 JCA Europe  
01734 452416

System requirement:  
3Mbytes minimum RAM

### HIGHS

- Vector graphics
- Clean interface
- Quietly powerful

### LOWS

- Vectors can be tricky
- Not very instinctive
- Price

### WHAT ELSE?

- DA's Vector Pro, a demo of which was given away on Cover Disk 64.

## In short...

An important tool for anyone who's really serious about DTP and the artwork they use

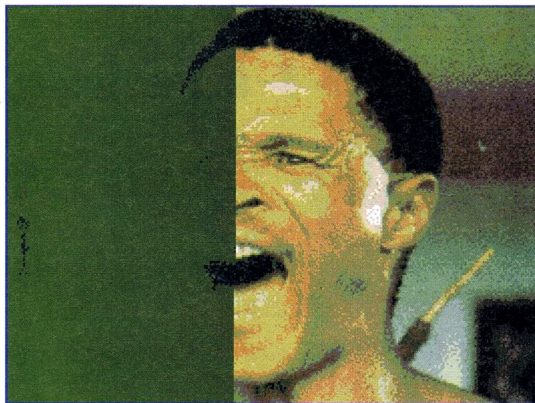
**85%**

STF VERDICT • STF VERDICT



# STOS Extra 3

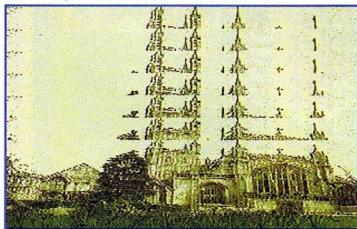
Resident STOS buff Frank Charlton wanders through the commands and source code of STOS Extra 3 and asks the question: is it any use?



STOS Extra's 'Deshade' command can do all kinds of weird and wonderful things to a picture's palette. Of course, a modicum of artistic talent helps...

**E**xtra 3 is an Extension for the STOS programming language. Written by Martin Cubitt, *Extra* started life as a handy little PD enterprise that added a bundle of new commands to STOS. Martin was about to put *Extra* to bed for good when Top Byte software persuaded him to release it as semi-commercial software with a low price.

Top Byte have kept the cost to a minimum by cutting out the use of packaging and printed manuals. You get a single floppy, containing the Extension, a 70K text manual, lots of examples of STOS source codes, and the original assembly-language source to the Extension itself.



Extra includes a nifty screen-reducing command, which is much faster than using the inbuilt STOS command.



STOS Extra's attractive installation program. Shame there's no display like this on a mono monitor, though.

Yep, you read that right, you get the full source. If you've ever wanted to write your own STOS Extension, now's your chance to pick through the bare bones of an established example.

Installation of the Interpreter and Compiler Extensions is done with a natty program, and they'll install to a hard disk, unless you have a mono monitor – in which case it asks for a formatted disk... Grr.

Extra can't really be pigeonholed like other Extensions – it doesn't deal with a specific type of command the way *The Missing Link* does, for

example. It's almost as if Martin added commands as he went along, producing a hotch-potch of useful but strangely unrelated commands. Not that this is a bad thing – I'd rather see this than the older Extensions, which offered only a few piddly little instructions, and where you tended to end up with a boot disk full of Extensions just to use 40 new commands.

Extra covers stuff you wouldn't normally expect to see in a so-called 'non-serious' language like STOS, including some nifty disk bits and – goody, goody – access to the TOS Cookie Jar.

Even if you're just writing a simple platform game, you're likely to want to save high scores or player data to disk at some point. Extra makes this easy, with routines that format disks and check to see if they're write-protected. Want to dump stuff to the printer? Instead of STOS producing a cryptic error number, Extra enables you to check to see if the printer is actually on-line first.

The big problem with a lot of Extra's commands is that they might seem boring, but there will come a time when you need a set of good, basic routines to do general housekeeping stuff, and you'll be glad Extra isn't all flashy graphics-related wibble. Having said that, it has some flashy graphics wibble too – a neat set of instructions to do tricks with palettes and fades, and even convert Amiga IFF pics, nestles in with the more mundane stuff.

Most of the graphics jiggery-pokery has been done before in other Extensions, but Extra's excellent set of disk commands is unique. This Extension won't set the world alight, and some of the examples are spartan, but it fills its niche well. If you're writing at anything above a simplistic level, it'll come in handy sooner or later, and considering the full source code is provided, it's a steal. *stf*

FRANK CHARLTON

## EXTRA COMMANDS

What, 58 new commands? Let's have a brief peek at a few of them...

**l=fmt text**  
(s,e,d,c,w) **Format text to your specs**  
**prntr** **Check if the printer is on-line**  
**write protected** **Disk write-protected?**  
**disk verify**  
**on/off** **Turn disk write verify on/off**  
**disk free (A)** **Retrieve amount free on disk**

**disc used (A)** **Retrieve amount used on disk**  
**fmt disc** **Format a floppy**  
(6 parm)  
**cpy disc** **Copy Drive A to B**  
**A,B,buffer** **Toggle screen Hz**  
**set screen hz** **Blur portion of screen**  
**blur (8 parms)** **Horizontally flip screen**  
**hrev varptr (\$\$)** **Vertically flip screen**  
**vrev varptr (\$\$)** **Pixel Perfect screen copy**  
**ppsc (parms)** **Depack Ice 2.4/Atomik 3.5**  
**desquash addr**

STIF VERDICT • STIF VER

## STOS Extra

£4.95 Top Byte, 3 Salisbury Road, Maidstone, Kent ME14 2TY  
☎ 01622 763056

### HIGHS

- Comes with lots of examples
- Excellent value

### LOWS

- A mixed bag

## In short...

A little random, but well worth the money if you're serious about STOS. **77%**  
Go for it!



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# Hollywood Hustler

Simon Forrester narrows his eyes, counts cards, and tries to work out if his ST's bluffing, in a poker sim with a difference.



Poker – a game for real men. And computer people. Pit your wits against Bono, Nigel Lawson and Robert Plant, win your lass back and ask: "Oh, what was he in?"

There appear to be two distinct types of computer game, each with its addicts and its cynics. There's the 'original' computer game, which, if done properly, tests your reflexes, ingenuity, timing and accuracy. Then there are the computer versions of existing games, from

board games to cards. The two have never really merged successfully, cards being as difficult to beef up as space invaders is to tone down, but *Hollywood Hustler* makes a brave attempt to take the standard cards game and liven it up, with the addition of plot and characters. It may not be fast and furious exactly, but that doesn't

stop it being a good game.

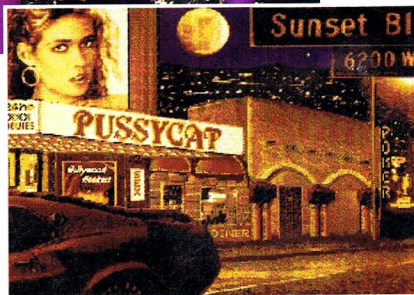
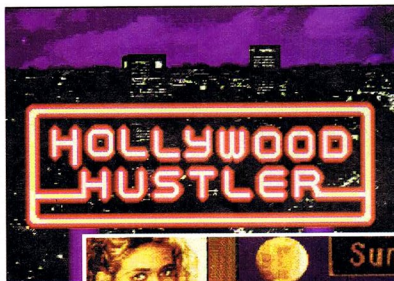
The plot is surprisingly gripping, especially for a poker game. You follow the fortunes of a down-and-out (who looks creepily like David Essex). His

girlfriend has left him for the lights and glamour of Las Vegas and, despairing at the loss of his love interest, our down-and-out follows his lass to the lights of Vegas in search of enough fame, fortune, and winning hands to get her back. Although deep down you always know that what you're watching is just a poker game, the digitised sequences and sampled speech do add to the game.

The movie sequences – shot on location in Hollywood and Hull no less – form a neat intro for the rest of the action. They also provide some essential plot points. The graphical style and theme is continued throughout the game – *Hollywood Hustler* is instantly recognisable by its distinctive (and unerringly brown) use of colour, sound and animation.

cards game is that you're not just playing one boring game of poker after another. There's a definite aim to what you're doing, as opposed to simply accumulating money. And while you're playing, people amble up and watch, other people around the table exchange banter, and you even find yourself cultivating a real dislike for the bloke at the far end (and his shirt).

*Hollywood Hustler* has a number of endings, depending on how well you do during the main game. You might get your girl back and walk away to a happier life in Hollywood (or, of course, Hull), or you could lose dramatically and have to pay your debt by receiving enormous amounts of physical violence. Or you could give up



Hmm – if you were going out with David Essex you'd probably only leave a note as well. What a note, though – we're looking at the work of a game designer with a chip on his shoulder, methinks. Still, nice animated intro, showing off David's wide range of emotions – angry, annoyed, irritable or simply depressed. What acting.

## It's not just poker?

The first advantage *Hustler* has over your standard computer



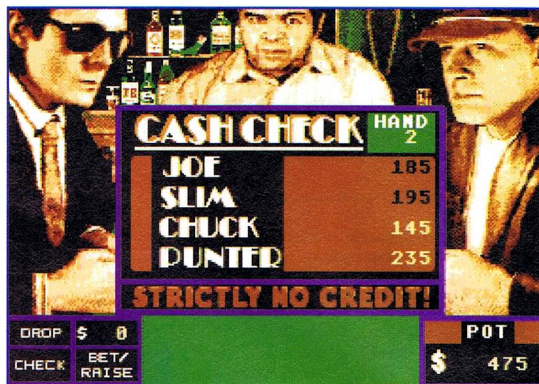




## FIVE GREAT MOVIE CHEATS

Five great movie-style ways to cheat at poker...

- Get someone to sit on a balcony behind your opponent with binoculars and a radio link to your ear (*Goldfinger*).
- Wear UV sensitive glasses and mark the cards (*God of Gamblers*).
- Keep a card up your sleeve (*Casino Royale*).
- Get everyone in on the scam except for one poor, unfortunate victim (*Maverick*).
- Kick seven shades out of anyone who beats you (*Five Card Stud*).



The night is young, but I've started winning already. You can start playing on a rookie level to get the hang of things, and continually win on a pair, or you can crank it up to expert and get taken for every penny you've got.



Tired, happy, drunk and wealthy, David goes off to bed. Alone.

computer card games or loathe them. *Hustler* might overcome your preconceptions, though. While poker is for most people a strictly social activity, *Hustler* manages to make it interesting for the solo player. It successfully provides a new façade for an old favourite, and you might well find yourself having a surprising amount of fun. *stf*

SIMON FORRESTER

## Hollywood Hustler

£14.99 Desert Star  
Software • 01482 871210  
System requirements:  
1MByte STE or higher

### HIGHS

- Movie sections
- Plot that actually matters
- A good poker engine

### LOWS

- It's still a poker game
- Interface could be more informative
- I hate that bloke's shirt

## In short...

A faithful poker simulation with a novel interface – well worth 15 quid in my book.

**75%**

STF VERDICT • STF VERDICT

halfway through. Whatever, the plot bends and shapes depending on how you play.

But despite all the digitised sequences, scenarios and voices, *Hustler* is based on cards, and you'll spend most of your time playing poker rather than watching sequences.

This is all very well if you're heavily into poker games, but not particularly attractive if you're a recently-cured compulsive gambler. If you are the card game type, though, then you'll be pleased to know that *Hollywood Hustler* is a perfectly good poker game simulator.

The game is, of course, five card draw – the classic for American bars and casinos. While

this might not be the version of the game you're used to, don't worry, the manual familiarises even the newest comer to the rules of the game with ease.

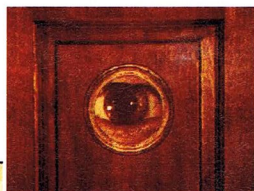
## Bet, raise and fold

A vital part of any card game is the control system. *Hustler*'s is straightforward – using your mouse or joystick you select from a set of icons at the bottom of the screen, which means you can do your betting, raising and folding with a waggle of the joystick. This ease of use leaves you to concentrate on getting the hang of the game of poker itself.

On the other hand, the lack of information you receive from the computer sometimes leaves you wondering exactly what's going on. It would be nice to be given a little explanation as to exactly who got what hand, who won each game, and why, instead of simply flicking over to the next hand.

This leaves you wondering what *Hustler* could have been like with a more sophisticated system that enabled you to get into the psychological side of the game as well as the chance side. Of course, there would be problems with this approach – I mean, how would you tell if your ST was bluffing? By the look on its keyboard?

Despite its attractive frills, *Hustler* is, at the end of the day, a poker game, and most people either like





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- G.352 JEWEL BUGGY: Arcade diamond mining game.
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- G.381 MAX (IMB): Help Max find his girlfriend. A 'cute' arcade platform game.
- G.333 SUPER PSYCHO KART: High speed platform game to rescue penguins (1Mb S/W)
- G.316 HAMEC 'The Ultimate Pac Man' (1Mb ST & Falcon)
- G.286 ROCKFALL: Special Edition: Tunneling/diamond collecting puzzle game.
- G.281 PSYCHO PIG: 'Piggy' shows 'em up with Rambo-esque pig (2 disks £3.00) S/W
- G.279 OPERATION GARBIE: Frantic Operation Wolf type shoot 'em up action (ST)
- G.268 MEGALINE: 1Mb Tron light cycles game for 1-4 players (ST only)
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### PUZZLE

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# Shadow of the Beast 2

Psygnosis are rather proud of this particular platformer re-release. Simon finds out just how much deeper the second title is...



In a further attempt to save money for the authorities, the Channel Tunnel now uses a more 'motivational' approach to the problem of keeping its passengers moving.

**T**he original platformer won awards from all quarters for its originality, design and gameplay. *Shadow of the Beast* was a definite hit – its odd blend of spooky artwork, mythology and gameplay clearly appealed to a lot of people. And now along comes *Shadow of the Beast 2*.

*Shadow 2*, which runs on all STs, takes a much more involved tack than even its predecessor, featuring characters you can talk to, buildings you can explore, and all manner of insanely violent bad guys. Although the original managed to be more than a platformer, this interactivity and detail is a welcome addition to *Shadow of the Beast 2*, although it is still a platform game at heart. You control a morphing maniac in his almost human form, who wanders around a 2D platform landscape killing people, in an attempt to rescue his baby sister.

The violence ain't new – just a little more pronounced than it was previously. Instead of the more tactful gun, laser or hand grenade, you're now playing a game set in the time when real men used



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chains, maces, clubs and axes. It's messy, but at least you really feel like you're killing someone. Great.

Then there's the type of people you get to kill. These can range from simple tribal folk – whose only crime is being a little protective of their territory – to more odd, airborne, formidable foes. They all have personality though – the tribes actually act like tribes, sticking together or jumping out at you on cue. If someone tries to kill you he'll say something first... if he's in a good mood, that is.



## Death

When you start the game you have effectively one life, but you lose energy every time someone scores a hit – so don't go wandering around thinking you're the only one doing the killing in this game.

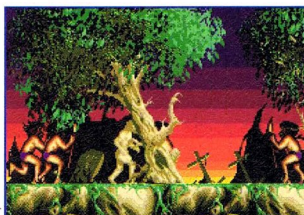
There are all kinds of power-ups along the way that'll help replenish your vital statistics as well as give you those extra bits of dastardly

weaponry to perform dastardly deeds in style.

*Shadow 2*'s artwork is some of the most original and atmospheric you'll see anywhere, and it fits in with the action beautifully. The pleasing intro sequence, for instance, details the hero's fall from human form and his ITV-style morph into the strange, twisted beast you see in the game. Okay, so it takes up a whole disk on its own, but trust me, it's worth it.

*Shadow 2* manages to be fun to play, without being shallow. There are a few problems with it though. For example, the sprites move too slowly, and they jump a little too high... so high in fact, that you can, if you're a real pacifist, jump clean over most of your foes rather than killing them slowly and horribly.

And it's frustrating to find that while *Shadow* goes some way towards being an RPG, restrictions on disk space and RAM, prevent this from being explored to its fullest extent. Maybe there's room for *Shadow 3*?



There's nothing like a pleasant walk in the forest. There isn't much like being attacked by the feared native Hendrix tribe of Ulan Bator, either.

## Violence

Though there has obviously been an effort to keep this game firmly in the action platformer category, *Shadow 2* is about as close as you'll get to a graphic adventure without using the *Monkey Island* approach – it has the depth of characters, locations and plot points, but all within a 2D action platform framework.

*Shadow of the Beast 2* is a fun little game, offering plenty of people to be nasty to, a veritable realm of locations to explore, and even the occasional piece of dialogue. These all conspire to take it beyond the realm of the platform game, and keep you well and truly hooked... for a while at least. Wandering around clubbing people really can be quite a fun way to spend your time. *stf*

**SIMON FORRESTER**

## Shadow of the Beast 2

£12.99 Psygnosis  
☎ 0151 709 5755

### HIGHS

- Atmospheric
- Good-looking
- Mindless violence ahoy!

### LOWS

- It's a little too slow

## In short...

Not the best platformer the ST has ever seen, but it's mindless violent fun for a while

**80%**



"I like what you've done here." "Well, we felt it was about time someone opened a proper, rustic pub in Milton Keynes." "Strangely empty though, isn't it?"



# Music book reviews

## Sequencer Secrets

Over 150 power tips for MIDI sequencer users  
by Ian Waugh

You've got your synth or sound module. You've got your MIDI sequencer. You've been making music for a couple of months, and it's fine, but not great. You want to move on to adjectives like 'inspired', 'innovative', or 'clever', not just 'fine'.

Ian Waugh espouses this philosophy. He gets into the nitty-gritty of sequencer power without banging on about what MIDI is exactly. You're straight into using preference files, expanding to 32 MIDI channels, hot keys and MIDI Bank Select (a difficult subject, but Waugh explains it clearly).

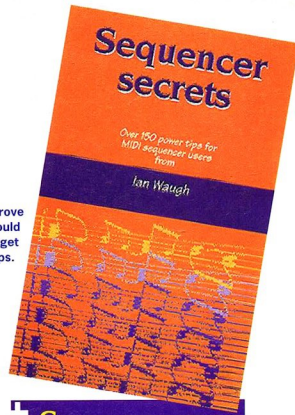
The real potency of the book, however, lies in the four or five chapters where Waugh comes up with some truly incisive tips on transposition, using expression and volume controllers, quantising for that human feel, and programming drum parts through experimentation. Layering techniques are a good idea, even though they are focused on writing orchestral works. Dance music devotees get essential revelations on programming gate effects, mandatory for kickin' rave numbers. The only things missing are hints and tips about the

advanced use of MIDI controllers other than volume.

Waugh lays out the facts on the MIDI delay debate (do long MIDI leads really make events slower?), and a thorough troubleshooting section. And no MIDI reference work would be complete without a list of general MIDI program numbers, controller numbers and hexadecimal conversions – it's all there under 'Techie Stuff'. All the companies who can help you, bar a couple of notable exceptions, are listed too.

This may not be exclusively for STs, but there's no obvious bias towards a particular platform or packaging in it that could obstruct what it has to say. PC Publishing have a punchy 100 pages of valuable lore here.

DAVE ROBINSON



**Sequencer Secrets**  
£6.95 PC Publishing,  
4, Brook St, Tonbridge Kent  
TN9 2PJ  
01732 770893  
104 pp, ISBN 1870775 37 6

**In short...**  
Punchy and unbiased. Gets straight down to the nitty gritty, and is full of useful tips **80%**

## Practical MIDI Handbook

by RA Penfold

PC Publishing's 1988 *Practical MIDI Handbook* is now into its third edition, and has been revised, updated and expanded.

PMH 1995 is a loin-girding, teeth-gritting kind of experience – much like the original. It talks of the basics and principles of MIDI in a general fashion, so it's accessible to ST users, or any other format owner. The why and what of modes and channels, connecting up, controller messages, General MIDI, computing, and the huge

range of available MIDI gear are all here – and all treated stoically. The number of boxes containing binary numbers and MIDI codes is huge – it's the kind of no-nonsense textbook you might be set for a GCSE in MIDI. You won't find any friendly overtures or non-technical intros to lead you in gently.

But there are greater criticisms to be levelled at this tome. You'll still find redundant references to cassette storage of data; there's no mention of

magneto-optical and cartridge drives; and the quote "Probably the cheapest way to set up a good computer system for MIDI is to obtain a second-hand BBC Model B" is sacrilege.

The other advice on choosing a computer platform is so noncommittal as to be useless, and it doesn't mention a single trademarked product in the body text by name, only printing a (slightly inaccurate) list of manufacturer contacts at the rear. Surely the vaguest idea of what's on the market these days could be presented in an unbiased way? As a first-time reference, forget it!

DAVE ROBINSON

**Practical MIDI Handbook**  
£8.95 PC Publishing  
01732 770893  
135pp, ISBN 1870775 36 8

**In short...**  
Vic Lennard's *MIDI Survival Guide* is a far jollier way into MIDI. And it's by PC Publishing **50%**



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- Digital Signal Processor:**
- Motorsola 56001 DSP running at 32MHz
  - 16MIPS performance at 32MHz
  - 32K 16-bit Static RAM

- Interfaces, Ports & Expansion Slots:**
- Internal direct processor slot
  - SCSI-2 Port with Direct Memory Access
  - High-speed LocalTalk/AppleTalk compatible LAN port
  - Connector for VGA, composite video, RF (cable supplied), and broadcast analogue RGB (monitor output requires adaptor) - see below
  - Bi-directional parallel printer port
  - 25-pin enhanced digital/analog connector

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- Stereo mic. input/Stereo audio out - 35mm
  - Two 9-pin joystick connectors
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- Data Storage:**
- 14mb floppy Disk Drive
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- Graphics:**
- VGA 640 x 480 256 colour
  - True colour 16-bit mode display up to 65,536 colours from a 262,144 palette
  - Accepts edit video signal for genlocking - up to 65,536 possible colours from a palette of 262,144
  - Hardware-assisted horizontal fine scrolling
  - BLITTER graphics processor

- Sound:**
- Eight 16-bit digital audio DMA record and playback channels (up to 50k/s sampling)
  - Records 16-bit DMA input & output
  - Stereo sound/DMA co-processor

- System Software:**
- Multiple window user interface with icons and dropdown menus
  - Icon-based graphics user interface with self-explanatory command functions
  - Multi-tasking operating system with inter-process communication (MULTIOS)
  - On-line help
  - NewsDesk desktop and extendable control panel allows customisation

**INCREDIBLE POWER**  
At the centre of the Falcon Q30 lie two powerful hearts: the super fast 68030 processor which runs 4 million instructions per second and the Motorola DSP 5601 processor. Working together, they give processing speeds up to 10 times quicker than any other multimedia system at a comparable price. The Falcon Q30 also boasts an impressive array of interfaces for linking peripherals.

**THE IMPACT OF COLOUR**  
The Falcon Q30 produces images indistinguishable from a real picture displayed on your TV. Every pixel on screen can be shown in a different colour and 65,536 colours can be displayed at once, from a palette of 262,144, producing a true colour display of the highest quality.

**SUPERB VIDEO**  
The Falcon can be used to create special effects, overlay pictures, lighten any that are too dark, even get rid of the unforgotten bits. Video editing and special effect techniques are both easy and affordable.

**CD QUALITY AUDIO**  
The Falcon Q30 comes complete with a stereo input into which can



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# Fine-tuning your ST



Your ST has the power, but it can be a headache to use. Nick Peers has the remedy – a software guide that will make your life easier.

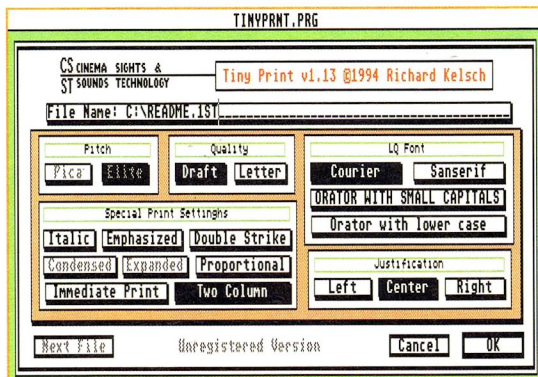
**Y**ou've had them. Those nightmare days when your ST is too awkward for polite words, and everything seems to take an eternity, whether it's saving files, printing documents or formatting disks. Especially when you've just lost a 3,000-word document because you couldn't be bothered to save it regularly. While the ST is undoubtedly a wonderful machine, the word 'fine-tuned' is not one that could be applied to, especially in its standard TOS/GEM setup.

## Make life easier

This is where software can leap to your rescue. Think of any aspect of your ST, and it's more than likely that there's a utility out there that can make it just that little bit

friendlier to use. We're not talking about powerful applications like word processors or databases here – we're talking about the little things in life that can take the trauma out of everyday situations. Like using your ST's file selector. This can be fiddly and awkward, especially when you're in a hurry or want to search through your 120MByte hard drive for that file you forgot to put in the correct folder the day before. Or like the lifetime you spend waiting for your ST to print something – time you could spend playing *Obsession*, or even – gasp – doing some work. (Let's not get silly here – Karen)

You might want a more flexible desktop like *KAOSDesk*, which appeared on Cover Disk 67, or a more flexible disk formatter. You might like to fit more files on



*Tinyprint* appeared on Cover Disk 65 and is a great example of how small programs can improve your life. It enables you to cram loads of print on a single A4 sheet.

to a single disk or read text-files without having to wait for your word processor to load. Or you might want to use various files from different machines on your ST – PC graphic or sound sample files, for example – but need help converting them to your particular Atari platform.

A list like this could go on forever. There's just so many areas of your ST that can benefit from a bit of tweaking. Over the next few months, we're going to delve into the world of the small but perfectly formed utilities that can make your life more enjoyable, starting with a

basic, but indispensable, part of your ST's Desktop. Ladies and gentlemen, I give you the one, the only, file selector.

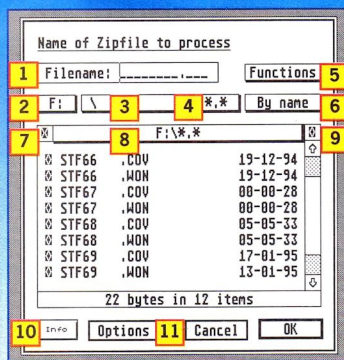
## File selectors

You come across the file selector whenever you want to load or save something in a program, such as a data file. Up pops the box and you simply double-click on one of the files to load it. Your ST's own file selector (or item selector, as it's known in older machines) is limited, with the only real development Atari have made over the years being the inclusion

## SELECTRIC: IMPERIAL FILE-SELECTING AT YOUR FINGERTIPS

Just feast your eyes on all the options *Selectric* offers, then register your copy for just £13...

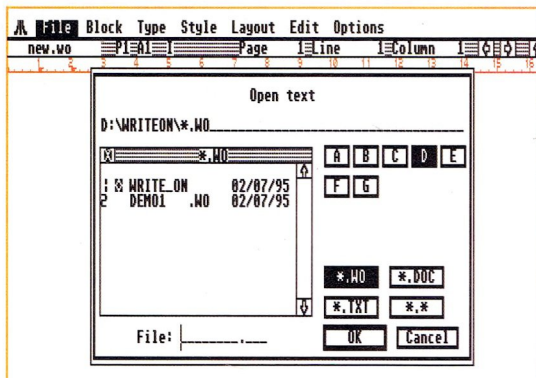
- As with the standard Atari file selector you can manually type in the name of the file you require here, such as *SELECTRIC.DOC*.
- Clicking here brings up a list of all accessible drives, and you can change the current drive just by clicking on the drive letter you want.
- Clicking here backtracks through your folders to an earlier subdirectory or even the root directory.
- Clicking here brings up ten alternative file-extensions (such as *DOC* or *LZH*) for which you can search. Alternatively, clicking on "\*" brings up all the files in that directory for you to browse through at your leisure. Double-clicking enables you to alter your ten preset file-extensions and to enter your own file-extender. Wildcarding is also incorporated, so entering *PI?* displays all Degas pictures, not just those in a particular resolution.



- This option covers a wide range of features. See the 'Selectric Functions' panel on the opposite page for more details.

- Tells you how the files are currently sorted. You can elect to sort by date, size or file-extender. You can even sort the files backward and *Selectric* can take account of numerical characters (so 8 appears before 10, and not after it as is usually the case).
- The Close box icon, as found in the standard Atari file selector.
- Clicking here reveals up to ten different directories, enabling you to move between your most commonly used folders with ease.
- Clicking here selects all the files in your current directory.
- Displays information about *Selectric*, including details of how to register the program for a trifling £13. Get it to now!
- Display options give you the chance to show hidden files, lower-case characters or even the 'date stamp' on currently selected items. 'Extras' enables you to open folders with a single or double-click and decide whether you want to save file-paths. You can also determine, after copying or moving a file, whether you want to stay in the destination directory or return to the original one.





Certain programs, such as Compo's *Write On*, have their own custom built-in file selector. These are geared specifically towards the particular program's needs – here *Write On* has three specific masking options enabling you to search for WO, DOC or TXT files. There's also a wildcarding option for awkward files.

of drive-selector buttons (TOS 1.04 and later versions).

A good file selector makes selecting files as straightforward and hassle-free as possible. It should enable you to move between different drives and folders without command lines or successive mouse-clicks, something early versions of Atari's own file selector made too laborious. Another feature the original lacked was the ability to format disks from within the file selector, or copy and move files between different folders and drives.

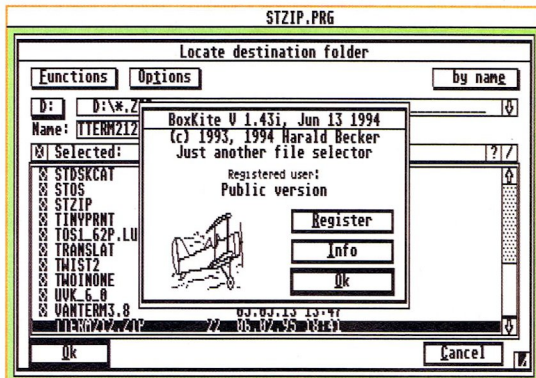
The challenge of replacing Atari's file selector was quickly taken up by PD. For a long time, *Little Green File Selector* and *Fselect 6* (STF 34, 84%) were the best available, and introduced the idea of sorting and masking files from within the file selector itself. They also enabled you to alter a file's attributes. These utilities were a real improvement over the inbuilt TOS offering, and were the best around until *Selectric* appeared.

### Top of the pile

*Selectric* is one program you can't do without. It represents what, so

far, must be the summit of human achievements in the field of ST file selectors. And it's shareware! Take a look at the accompanying panel, which lists all its features, then read PD Choice to see just why it won Application of the Month with a whopping 91%.

*BoxKite* is a more recent but similar program, and is also reviewed in PD Choice. However, it doesn't quite match up to its illustrious predecessor in either presentation or content, although it



The only real advantage of *BoxKite* over *Selectric* is the fact it supports filenames of up to 32 characters. Unlike *Selectric*, certain options, such as the ability to stamp files with the system date and time, are only available to registered users. Registering is a very reasonable DM20 and helps ensure the future of shareware.

## WHERE TO GET 'EM

A quick round-up of the packages featured this month.

### Selectric

Shareware, registration fee £13  
The king of all file selectors (see the PD Choice review on page 44).  
STF RATING: 91%

### Universal Item Selector 3

FaST Club ☎ 0115 945 5250 £14.95  
This commercial offering has a nifty Disk Formatter option for on-the-fly formatting, although it doesn't boast many of *Selectric*'s other features.  
STF RATING: 83%

### BoxKite

Shareware, registration fee DM20 (approx £8.10)  
*Selectric* clone with a little more, but a lot less too.  
STF RATING: 80%

### Little Green File Selector

PD  
Simple, aged, but popular nevertheless. For those of you who don't have a need for many options and like your file selectors clear and readable.  
STF RATING: 75%

All of the shareware and PD utilities are available from all good PD libraries, listed on page 73.

does have the excitingly exclusive distinction of supporting filenames of up to 32 characters.

The only commercial offering currently available is *Universal Item Selector*, from FaST Club ☎ 0115 945 5250. The most recent version stands at 3.32 and is similar to *Selectric*, but has the additional feature of a disk formatting option which enables you to customise a disk to pre-definable size from within the file selector. Although superseded by *Selectric*,

this unique option still makes *UIIS* a viable product if you regularly need to format disks on the fly.

### Next time

Next month we look at disk utilities, those programs that make file, folder and disk manipulation more straightforward. Whatever you want your ST to do, the programs that can make your life easier will be here on test. *stf*

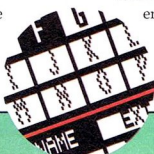
## SELECTRIC'S FUNCTIONS

This is where *Selectric* really comes into its own. The utility features a whole stack of functions you won't find anywhere else. With *Selectric*, you can manipulate files as readily as you could with the standard GEM Desktop using the Functions option. Don't believe us? Well, check out the individual functions listed below.

**New Item:** selecting this option enables you to create a new folder or file.  
**Delete:** deletes all the selected files from your current directory.  
**Touch:** stamps the system date on the selected file, bringing it firmly up to date.  
**Move and Copy:** enable you to – surprise surprise – move and copy the selected file to a different location

using *Selectric*'s own file selector.

Info gives you information on the selected file(s). Where more than one file is selected, the number of folders and files is displayed, along with the combined size of the files, in bytes. You are also given the option to view individual files in turn, which gives you information on a file's name, date and time of construction, as well as size and attributes (whether it's read-only, hidden, a system file or an archived file). Drive Info gives you all the information about the current drive, including a graphical display of how much space has been filled with data. Find enables you to search for a particular keyword on either the current drive or on all drives.



*Little Green File Selector* is a great file selector in a colourful, but simple kind of way. Nick particularly likes it.



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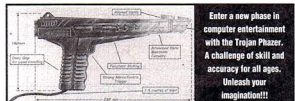
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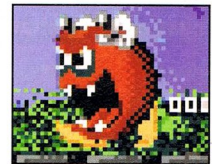
**MPD2286 . . .Rumbo.** Not Falcon. A new arcade game which seems to play like Mario but much much easier.

**STOSSER 220 Popular disk magazine.**

## PHONE FOR CATALOGUE



# PD Action



Lots of games reviewed this month – here's Nick Peers with the lowdown on what's hot.

## CONQUEST 2: THE VIKING HORDES

LAPD, DISK L105 (£3)

**CONQUEST 2 IS A SEQUEL.** Both it and its predecessor are based around the old text-based Kingdom simulation where your task is to keep your populace and loyal subjects fed, watered and safe from grisly attack. The sequel gives you five islands to explore, colonise and conquer (but probably in reverse order to that), as well as more control over the fate of your put upon followers. You, and only you, are responsible for training inventors to create new weapons so that the blacksmiths can exercise

their skills in crafting the ore extracted by your miners.

The plot is based around a group of early medieval settlers who leave feudal England for Utopia (which is somewhere in the east apparently), get blown off course and... well, you get the picture. Basically, you're shipwrecked on one of five islands off the coast of Norway and, as the leader of this ragged bunch, you must take charge and keep them alive for as long as possible. This is the ultimate juggling act. If you're not producing food and water to sustain your minions, you're chopping trees to build

houses and barricades, or inventing new kinds of weaponry and training a militia to use them. Once you have the resources under control you have to build boats and send out your intrepid colonists to settle the other islands.

One of *Conquest's* attractions has always been its rather natty looking graphics, which are fractal generated to appear more realistic. There's also the point-and-click icon interface



This is your island home, and you've got to keep it fed, watered, sheltered, healthy, defended, entertained, subdued, loyal... you get the picture.

to replace the established text input. The original game suffered because each turn was far too short – cramming in all your chores was well nigh impossible. This has now been rectified, and when you're playing *Conquest 2* you can make the days as long as you like.

Other downers? Well, the icons are initially a little daunting, although printing out the game's READ.ME file gives you a quick reference guide. There's also no quick and easy way to check all your statistics in one go – it's a case of patiently cycling through various icons trying to remember how well you're doing and worrying in

case your good citizens are about to come under vicious attack. A tad tedious, if you had to put up with it all the time. Thank goodness, then, for the speed-up option, which you can use when you're ready for some hands-on stuff.

All in all, though, this is an excellent example of both STOS as a game engine, and licenceware as a concept. The game itself will provide hours of absorbing strategy, and prepare you for the time (which surely must come soon), when you too must take control of 300 peasants and defend them against marauding Vikings.

STF RATING: 87%



Everything's icon driven in *Conquest II*, and you're never more than a mouse-click away from knowing all you need to know about everyone, everywhere. Isn't life great when you're a despot?

## PD PACK EIGHT

CHAOS PD, DISK PD50

FOUR GAMES MAKE UP THIS COMPILATION disk from Chaos. *Hector versus the Mutant Vampire Tomatoes From Hell*, aka *Hector*, is by far the best of the bunch. *Hector* is a stupendous platformer that's strongly reminiscent of an old Dragon 32 game which went by the (rather dodgy) name of *Bonka*. The idea is to wipe out each level's killer vegetables by digging holes to catch the mutant vampire tomatoes. Once trapped, you have to bash them on the head to send them plummeting to their doom. The graphics are top-notch, with some vivid effects to enliven it all.

Also featured on this disk is *Invaders*, Dave Munsie's competent conversion of the arcade class-

sic of the same name. There's a nail-biting twist here, though – you don't have any shields, and your craft skims from left to right over gently undulating hills rather than the usual flat surface.

*Infiltration*, the next title on the disk, is yet another 3D *Construction Kit* adventure with a plot not too dissimilar to Cover Disk 66's *Endurance*. Basically, you plant the mines and run like hell.

The final program, *Aquarium*, is a text adventure that incarcerates you in a lunatic asylum and gives you an interface to match your insanity. Weird idea, which sadly doesn't make the grade.

**Hector versus the Mutant Vampire Tomatoes From Hell.** It's enough to make you a born-again carnivore, it really is.



All in all, if you can discount *Aquarium* that is, this is a disk that smacks of good value and will make subtle, but incredibly insistent, demands on your playing time.

STF RATING: 82%



## PROJECT PURIFY

**LAPD, DISK L93 (£3)**  
Joystick required

IT IS THE YEAR 2267 AND A whole new industry has been created to clear up the asteroid belt. Rewards exist for the brave and/or foolhardy who pilot the ships that clear the way for trade and passenger freighters everywhere. This is, of course, where you come in.

*Project Purify* is a poor man's *Stardust*, which means it's an *Asteroids* clone. It does make a few additions to the tired genre, such as the idea of selecting different

sectors to clear up in turn. Some are more densely littered with meteors than others, meaning a greater return on a greater risk.

With your earnings you can equip your ship with better weaponry, shields (renewed for each mission) and other useful items, such as a hyperjump to leap around the sector, or a cloaking device (shades of *Star Trek*, again...) to make your ship momentarily invisible and impervious to the meteors. Once kitted out with the latest technology, it's off to the next sector for a bit of

Yet more asteroid bashing with *Project Purify*. Original it's not, but for £3 it's pretty good value and fine for a quick, gratifying blast.

derring do, meteor-sweeping and alien bashing.

The animated graphics are a bit small and sparsely detailed, and the sound effects are nothing to get worked up about, but all in all it's a reasonable rendition of *Asteroids*,

## EQUIPMENTS



and might just keep you occupied for a few hours.

**STF RATING: 63%**

## MAX AND STARBURST



*Mad Max* it isn't, but *Max* may prove fun for less enlightened gamers who don't like much of a challenge. (Nothing like damning with faint praise, eh Nick? - Karen)

**POWER PD, DISK PWR925**  
Not TOS 2.06-compatible.  
1MByte and joystick required

*STARBURST* IS A LEFT to right flip-screen shoot-'em up - the sort that were last popular a good ten years ago. It seems the author has never heard of scrolling or even 16-bit computers. This game, featuring a puerile plot based around human slavery and the second coming of Christ, deals with your attempts to bring religion to an asteroid full of escaped slaves, by destroying the one they already possess. Obviously, eh?

Ho hum, nothing new there, then. The game is ultimately dire: dire graphics, dire sound and dire gameplay (you can get quite a long way into the game just by holding

down the [Fire] button as you move through each screen). Truth be told, the list of 'dires' is endless. Forget it.

*Max*, on the other hand, is slightly more ethically sound. It's also quite fun to play, although it's not going to stretch the expert gamers out there.

The graphics are very reminiscent of 8-bit machines like the Amstrad CPC and BBC, and the soundtrack quickly becomes nauseating.

Your aim is to guide *Max* through the platform world by leaping monsters, spikes and water, while collecting bonuses and the letters 'E', 'X', 'T' and 'T' to escape the level. It's not that bad, but it comes nowhere near commercial offerings.

**STF RATINGS: Starburst 20%**  
**Max 55%**

## POP!

**LAPD, DISK G373**  
All STs

*POP!* COMES ALL THE WAY FROM SPAIN and involves a plot which, if the author's pidgin English is anything to go by, is highly complex. All you need to know is that you and a friend, if you've got one, need to splatter everything on screen to proceed to the next level. This is achieved by repulsing the baddies' advances with some kind of gunk gun, which sprays gloopy stuff over a short distance. Hit the aliens enough times

and they explode, let them get to you and you're the historical part of the story.

The opening loading sequences are very pretty, as are the menu

Hmm. Yes. I see.  
Ah. Of course.  
Obviously. Yes. He's suffering from the 'death by explosion' kind of death.  
Definitely popped his clogs that one.

screens. Sampled sounds are liberally sprinkled throughout, including a lovely 'pop' sound that accompanies the beginning of every game. Those are the rather superficial good things.

Unfortunately, great graphics don't necessarily make a good game, especially as the actual animation is lifeless. And sadly, the game itself is dull and repetitive - just keep blasting away until the enemies explode. Or you do. Either way, it's hardly



mind-boggling stuff. Platforms and a time limit do little to bring in an element of suspense. *Pop!* is far too limited and disjointed.

**STF RATING: 51%**



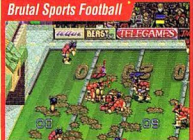
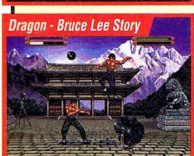
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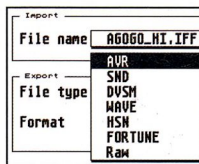
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# PD Choice



There's no Falcon PD this month because our Falcon's sick. Nick's in charge of the Lemsip.

## UTILITIES

### SELECTRIC 1.10E

#### AD-LIB PD

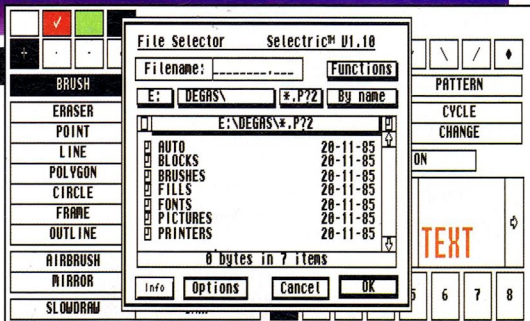
WHEN ATARI designed their original file selector – the application that enables you to load and save files anywhere on your available drives – they forgot basic precepts like making it user-friendly or powerful.

But now *Selectric*, has appeared on the scene. It aims to be truly indispensable – and it succeeds. Use it once, and you'll wonder how you ever did without it. As the 'Fine-tuning your ST' feature on page 38 demonstrates, it's one of those programs that makes your ST much, much more accessible and easy to use, without



radically changing it in any way.

A quick rundown of *Selectric's* features will quickly convince you of its power. For starters, there's no more typing in fiddly command lines to change drives; simply click on the drive letter button, and all available drives will be listed for your immediate perusal. You can mask the item selector to display certain files only, which is useful if you want to find all your *Degas* pictures, for example. Wildcarding is also featured, so entering 'P!\*' will search for all *Degas* uncompressed picture files, regardless of resolution. You can

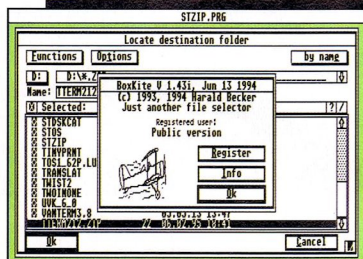


It's funky, it's groovy, and it's really, really useful. *Selectric*, winner of 'Application of the Month' Award, we salute you. For more details about *Selectric*, turn to page 38.

sort your files by any criteria and even extract information on selected files, folders, or even specific drives. Use *Selectric* to move or copy files anywhere, any time.

This is without a doubt the best file selector you can get. Packed with useful features, it's attractive and easy to move around as well.

STF RATING: 91%



### BOXKITE 1.43

#### FAST CLUB, DISK DM45

BOXKITE MAKES NO bones about the source of its inspiration: *Selectric*. Its main claim to fame is that you can give your files a name of *BoxKite* enables you to have filenames of up to 32 characters in length.

anything up to 32 characters long, instead of the more usually restrictive eight and three character extension, such as CALAMUS.PR.G.

This apart, *BoxKite* is slightly inferior to *Selectric*. Most of the same options are supported, but *BoxKite's* layout is less attractive and doesn't feature the ability to return to upper directories quickly and easily. You are also forced to return to the command line in

order to alter the mask set on files. *Selectric*, on the other hand, supports ten extensions, which you can access with a quick click.

On the up side, *BoxKite* has the ability to create filenames with 32 characters, and its Desk Accessory enables you to switch between *BoxKite* and the standard Atari file selector whenever you like. Good, but not that good.

STF RATING: 80%

### 525 v2

#### AD-LIB PD

THE ULTIMATE SAMPLE CONVERSION program just got better. If you've got a load of samples from your Mac or PC-owning colleagues, and you want to convert them into the AVR format for the ST, this program is for you.

And here's how it does it. This version of 525 supports seven different file formats. Aside from the common AVR format, there's WAV for PC samples and SND for Mac-generated ones. Raw data files are also supported, giving you the chance to convert sample formats

not supported by the program – not that it always works, of course.

There's also a feature that enables you to convert samples between various internal types – so AVR files can be altered from 8-bit mono to 8-bit stereo, or even 16-bit mono. This doesn't improve the quality of the sample per se, but once again proves 525's versatility and compatibility between different platforms.

You can also change a sample's frequency to alter its speed and pitch, although actually changing its frequency without altering its sound is still a thing of the

future. Various effects are also available: most notably the ability to fade samples in and out and the option to pump up the volume of the quieter samples.

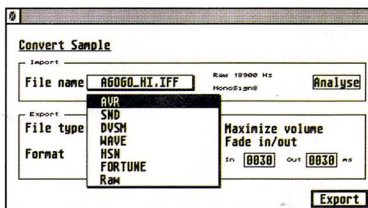
BUT, you still can't play your sam-

ples and there's no on-screen graphic. We can only hope that future versions address these omissions to create a real classic.

STF RATING: 83%

"Now guv, you've got a classic case of two computers not being compatible, see. It's gonna cost you to fix it... it's the labour, you know."

Alternatively, register your copy of 525 and congratulate yourself on a job well done.







## COMPACT OFFICE MANAGEMENT SYSTEM

CHAOS PD, DISK PD55

THIS DISK CONSISTS OF A SUITE OF PROGRAMS designed to help you keep your head above water with your personal or small business interests. Not only does it feature various budgeting programs (enabling you to keep a close eye on all incoming and outgoing transactions), but it also has an address database, an exchange rates calculator, a program to create and print various receipts, reminders and the like, and even a small Accessory calculator.

Setting up is easy, as the INSTALL.PRG leads you gently through the whole installation procedure. In fact, the entire program makes a point of leading you gently wherever you want to

go. Everything is accessed from drop-down menus, which enables you to move quickly between different aspects of the program. A help index is only a mouse click away if you get stuck.

This office management system is competent, although it can be a little slow from floppy. The Accessory calculator is a welcome feature, but it needs to be a little better if it's going to compete with the likes of *ProCalc*, for example. If you're starting a small business, however, *COMS* is an invaluable and inexpensive aid to helping you get off the ground. Recommended.

STF RATING: 81%

DESK	HELP.DCS	LIST/PRINT	BANK/CASH	ADDRESSES	REPORTS	END / Etc
Page	HELP INDEX	*****				1
11	ABANDON DOCUMENT			11	CODES	
19	ABANDON PAYMENT IN			5	COMMAND BOXES	
21	ACCOUNT STATUS			14	CONVERTING	
25	ADDRESSES			20	CREDIT CARDS	
17	ADJUSTMENT			5	DATE ENTRY	
19	ALLOCATION			21	DELETE ADDRESSES	
27	ARCHIVED DATA			26	DELETE DOCUMENTS	
26	AUDIT TRAIL			6	DELIVERY/PACKING NOTES	
5	BANKING UP			11	DOCUMENT LENGTH	
26	BAD DEBTS			26	DRAWINGS	
19	BANK ACCOUNTS			15	DUPPLICATE	
5	BATCH ENTRIES			14	EDIT DOCUMENT	
11	BLANK LINE in Document			28	ERRORS	
26	BOUNCE LEADER			31	END OF PERIOD PROCEDURES	
27	CASH FLOW			14	ESTIMATES	
19	CASH PURCHASES			23	EXPORT DATA (address file)	
19	CASH SALES			9	FILE SIZES	
19	CHARGES			22	FIND ADDRESS	
6	CHEQUE BOOK NUMBERS			24	FOREIGN LANGUAGES: CHANGE CURRENCY/PRINTER CHARACTERS	

Enter Page No: RETURN =exit +next page P=Print

This shareware program could well make Bitter Incorporated the most powerful small business ever. Today Avon, tomorrow the world! (Ha! Ha!)

## TEXT HELP FILES AND UTILITIES

MERLIN PD, DISK ESE075

THIS DISK CONSISTS OF TEXT-files, plus the excellent *Revenge Document Displayer* to help you read them. The files themselves

may well save beleaguered users from succumbing to temper tantrums when it comes to either GEM programming as a whole, or translating the documentation for the *Gemini Desktop* into English.

There's even a special file giving away the secrets of yet another replacement desktop, *Teradesk*.

Assuming you need help in wordy matters in the first place, there's also a small utility that

enables you to count how many times various words are used in your realms of mauve-to-lilac prose. Would-be authors of the world – beware!

STF RATING: 66%



Now, if I screw my eyes up really tight, perhaps I'll see the darned picture. Nope. Okay, perhaps if I stand like so, with one leg here, and my arm there...

## MISCELLANEOUS

### VISUAL ILLUSIONS

LAPD, DISK A95

THIS DISK COMPRISES 24 LOW-res *Degas* pictures that have been created by the *Auto Stereogram Creator* (also available on disk L77 from LAPD for £3).

So, what are stereograms? Well, remember those intensely irritating piccies of dots you spent hours peering at all last Christmas? You know, the ones that are supposed to reveal their secret image to the favoured few (but never you)? Well, those are stereograms. And now someone has discovered

that computers are just ideal for displaying these images. While veterans will appreciate being able to show off once again, the rest of us will merely groan.

What's more, you can get a multiple stereogram fix by using the slideshow program to cycle through each picture, and all without having to refocus.

The shapes revealed (if you get that far) are rather basic, but this is nevertheless a good example of what kind of images can be displayed on a monitor.

STF RATING: 75%

## DISK MAGAZINES

### THE THIRD DIMENSION ISSUE 10

FLOPPYSHOP, GOODMAN'S PD, OR DIRECT FROM: Tony Hartley, 19 Kipling Close, Lockwood, Huddersfield, Yorkshire, HD4 5HA (£1.50, or £1 with disk)

THE THIRD DIMENSION IS THE disk magazine for all enthusiastic users of Domark's *3D Construction Kit*. A monthly release, it comes with a number of text-files that make up the current issue, as well as the *Revenge Document Displayer 3* to display them with the minimum of fuss.

The disk, like the *Superscape* system itself, is PC and Amiga compatible, giving the group a wider appeal.

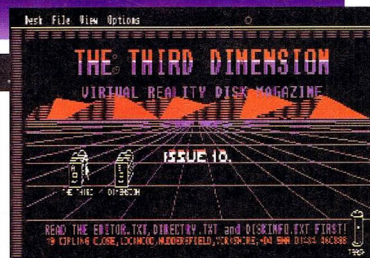
Opening the READ.ME folder gives you information on what files are on the current month's disk. This contents list highlights a regular melting-pot, which includes far more than just the articles and columns found in most magazines. The disk also features loads of data files which you can import into your own *Superscape* creations. This disk offers value for money indeed. You might find the articles themselves a

little cliquy to start with but you'll settle into the style after a couple of months.

This is a user group that obviously cares about its members (if you're really and truly stumped, for instance, there're three separate helplines) and deserves every success coming to it. With the release of a three-hour (!) video guide to

*3D Construction Kit 2*, plus plans to set up a bulletin board, The Third Dimension gives you plenty of reasons for dusting down that old box from the shelf and giving *Superscape* another try.

STF RATING: 85%





# STELLAR DISKZINE ISSUE 14

## STELLAR PD

A NICE INTRO SEQUENCE, featuring two smurfs slamming a door, brings in the latest issue of STellar's well-established disk magazine. As their review of Simon Osborne's *Trannies* mag (see below) so aptly puts it, it's obvious where he gained his inspiration from.

Actually, the *STellar Diskzine* is a good yardstick for future *Trannies*. It's packed with a good mix of features, reviews and the odd interview, and covers a wide range of subjects, not all of which

are associated with the ST itself.

Once you've finished reading – and that's going to take quite a bit longer than the usual five minutes – you can always try some of the free PD that goes with the disk. The game *Warzone* is especially challenging, despite its rather simple concept.

It's not as slickly presented as either *Power Diskzine* or *ST Beermat*, but it's packed with interesting features and the free PD that accompanies it makes it worth your while. We liked it, even if we didn't agree with all the editorial.

STF RATING: 83%



Cynics claim that the ST magazine scene is declining, but quality disk-based magazines like *STellar Diskzine* paint rather a different picture.

## TRANNIES 1

### TRANSPARENT DREAMS PDL

TRANNIES OPENS WITH HAL'S immortal words "I'm completely operational, and all my circuits are functioning perfectly" before leading into some intensely annoying chip music that instantly has you diving for the volume control. This is Simon Osborne's first attempt to break into the disk magazine market, and unfortunately it shows.

It's a sparse affair – you'll have read it within five minutes – and there are a few inaccuracies too. The mag's information regarding the German ST mag, *Computer* may be suspect and he lifts his 'interview' with Jeff Minter straight from our conversation with the llama-lover in issue 67. Still, there's some free PD there, even if none of it is particularly awe-inspiring.

A tip for issue two: expand each section by at least 500 per cent and stop lifting stuff from other sources. Oh, and we know exactly where you got that competition prize from, too!

STF RATING: 54%

## PD TOP 10

This month, the mighty AGPD get to show their wares and impress you all:

1. DIY Demo Maker
2. 2nd Atari ST Manual
3. Power Disk magazine 22
4. European Megademo
5. Pure Energy Packers and Unpackers
6. Adrenaline Games Compilation 7
7. MLP Module Disk 51
8. State of the Art Demo 2
9. Newdisk Creator
10. Golden Dawn Games Compilation 22

AGPD can be contacted at:  
6 Middlebere Drive, Northmoor  
Park, Wareham, Dorset, BH20 4SD.

## PD ROUND-UP

Missed a back issue? Want to know when we reviewed a particular piece of PD in the last few months? Then look no further than this definitive guide to PD reviews over the past four issues.

### PD Choice

Title	PD Library
Award Maker Plus	Tumblevane
Speed of Light v3.5	Floppyshop
Falcon Utilities	Floppyshop
Clip Art Collection	Floppyshop
Falcon Utilities	Floppyshop
Route Finder v2.0	Cover Disk 66
Oh no! More Froggies	Floppyshop
Kozmic v4	Goodmans
Ultimate STE Megademo	Demo
Family Tree v2.1	Utility
Modest	Misc.
Cydelic KO Demo	Falcon
Chinese Horoscope/1 Ching	Goodmans PD
Ozbornz Modules 3	Transparent Dreams
Scorewriters	Tumblevane
The PD Collection	Transparent Dreams
RAE Tutor	Floppyshop
JPEG Pictures	Floppyshop
Imagelab	Goodmans PD
Psion-ST Transfer Software	Goodmans PD
Even More Falcon Utilities	Floppyshop
The TIFF Demo	Floppyshop
Archivers	Goodmans PD
Intro Maker v1.5	Utility
Big Top Type	Education
Atari Museum	Misc.
STellar MOD Collection	Misc.
Magnet 9/Gullbach	Falcon
Falcon MOD Files	Falcon
Club Culture Mix Pack 2	Floppyshop
UFology	STellar PD
Fly Over Fantasy	STellar PD
	Floppyshop

Type	Issue	Rating
Utility	66	91%
Art	67	90%
Falcon	68	89%
Art	67	88%
Falcon	65	86%
Utility	66	86%
Demo	67	83%
Utility	66	81%
Demo	66	81%
Utility	65	80%
Misc.	68	80%
Falcon	67	79%
Misc.	68	79%
Misc.	68	78%
Misc.	66	76%
Utility	67	76%
Misc.	68	76%
Falcon	67	75%
Utility	65	74%
Utility	67	71%
Falcon	68	71%
Demo	65	70%
Utility	67	70%
Utility	67	68%
Education	67	67%
Misc.	65	66%
Misc.	66	65%
Falcon	68	65%
Falcon	67	61%
Demo	66	51%
Misc.	68	38%
Demo	66	25%

### PD Action

Game	PD Library
Dynabusters+	AWF PD
Pacman on Es 2/Tomtar	Power PD
Golden Dawn Menu v15	STellar PD
Serenade Menu v17	STellar PD
Fruity/Match It	Transparent Dreams
Noughts & Mad Crosses	Power PD
Darts 180	Merlin PD
Frantick	Goodmans PD
Violent Death	Transparent Dreams
ST Vegas	Who's PD
Zuffers	Power PD
Overscan Invaders	Floppyshop
Grand Prix Manager	Floppyshop
Lindemo and War	Goodmans PD
Jet Bike Challenge	Transparent Dreams

Issue	Rating
65	92%
68	90%
66	85%
68	84%
68	78%
68	76%
65	75%
66	73%
66	68%
67	65%
66	60%
67	55%
68	54%
67	50%
65	48%



# TIMBLEVANE PDL

(Dept 1), 6 West Road, Emsworth, Hampshire PO10 7JT  
Telephone: Emsworth (01243) 370600

## GAMES AND ADVENTURES

GM 027: Monopoly  
GM 097: Folemaster  
GM 101: Psycho Pig 2 (2 disks)  
GM 111: The Glass Buttock of Tharg  
GM 114: Course Angler  
GM 119: Insectoid  
GM 115: The Obscure Naturalist  
GM 124: The Klingon War (Star Trek™) 1 Meg  
GM 133: Snacman (Pacman clone)  
GM 134: Starball

GM 135: Dave Munsie Game Collection - 9 great games on 1 disk  
GM 136: HMEC Pacman Clone  
GM 137: MAX - 5 mod platform game  
GM 138: Doris 180  
ADV 028: A Night on the Town  
ADV 009: PORK 2  
ADV 032: Christian Adventure  
ADV 052: Heavy Bunch/Investigation  
ADV 035: Deena

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MUM 53: Kawai K1-cx2, Hi-res, 2 Mb  
MUM 55: Yamaha SY22 Editor, Hi-res, 1 Mb  
MUM 56: Guitar Practitioner, 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

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AAG 35: Creative Titles, Video titler  
AAG 39: Atari Image Manager V1.96, 2 disks  
AAG 38: Crackart V1.36 Full English Manual 1Mb  
AAG 60: Creative Titles 2 - 1 Meg Version

AAG 54: Cosmic 4 Psychedelic Art  
AAG 55: Cosmic Slide Show  
AAG 57: Photochrome Version 3  
AAG 58: Clipart, Judo & others  
AAG 61: HP Chrome - print pics on HP deskjet

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EAC 11: Maths Made Easy  
EAC 02: Body Search, Basic Human Anatomy  
EAC 18: The World (Quiz)  
EAC 20: Telltale chemistry, GCSE Levels A, B, C  
EAC 19: Planetarium

EAC 21: QA Worldbook, hi-res over 240 countries, 4 disks  
EAC 06: Shipwreck (Maths, Cartoon)  
EAC 29: Workout - A learning aid  
EAC 09: Chunnel (French/English)  
EAC 37: GCSE Maths

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WPD 19: Printing Press + 15 new fonts  
WPD 23: DB Writer  
WPD 03: Typing Tutor

WPD 22: Printing Press extras  
WPD 24: DB Writer support disk  
WPD 35: Marcelle - The Word Processor

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UTA 34: DB Master, create your own databases  
UTA 38: 5 Databases, one has got to do the job  
UTA 51: 70,000 word spell checker

UTA 53: German Translate, 27,000 words  
UTA 04: Saganon Virus Killer  
UTA 48: Astubank (Personal accounts)  
UTA 57: Hitchhikers Units with Dock Displayer 3  
UTA 01:

Please pay by cheque or postal order only, payable to: Timblevane PDL

Latest Update December 94

Full catalogue disk for £1.00 or 50p with order  
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The December Catalogue is now available

Tel: 01463 240168 **EVERGLADE** Tel: 01463 240168  
68 TELFORD ST, INVERNESS, IV3 5LS

## Atari ST Budget Software

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Action Fighter ..... £6.99  
Alien World ..... £4.99  
Another World D/S (1Mb) ..... £12.95  
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Battle of Britain II Mission Vol 1 ..... £9.99  
Beyond the Ice Palace ..... £3.99  
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Lotus 1, 2 & 3 ..... £5.95  
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Police Quest 2 ..... £13.95  
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Simpsons Vs The Space Mutants ..... £8.95  
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THERE IS A POINT  
BEYOND ADDICTION



BSSESSION

Atari STE

1 Mb memory and color monitor required  
Falcon compatible

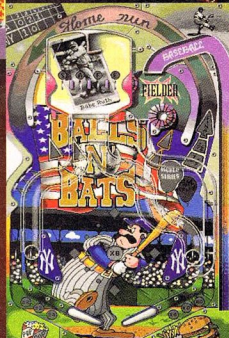


"A modern-day masterpiece"

"Obsession is pure class and totally timeless."

"The best ever Atari game"

Actual screenshots from the STE version. The game includes a total of 4 tables.



98%  
Atari ST Review

94%  
ST Format

Out now from



Unique Development Sweden

The Falcon version will feature 256-color graphics, 50 KHz 16 bit sound and ...Multiball! Order Obsession now, and buy Obsession Falcon (release spring 1995) with a 50% discount!



# Mix It Up

Ever wondered how musicians make millions of pounds with the help of the ST? Join Nick Peers and Andy Curtis on a guide to setting up your own sound studio and creating a few audio masterpieces.

**Y**our ST was designed with musicians in mind – that's why it has built-in MIDI ports, which enable quick and easy connection to a MIDI keyboard or other tone generator. Add sequencer software to the equation and your ST can control precisely what the keyboard does – and that's a powerful combination.

But music comes across as being a complicated and expensive field, which might have put you off in the past. Over the next few pages, we're going to show you how to set up your own ST system, even if you're on a shoestring budget. We'll also cover future upgrade paths that you can follow once you've decided you're really committed to the music thang.

## Make a tune

Once you've got your studio set up, you're going to need some sequencing software. This provides the interface between your ST and a

MIDI instrument, and in doing so helps you create your tunes. To make this confusing field simpler, we've written a four-page tutorial starting on page 50, which takes you through the different elements of creating your tune, step by step. We've concentrated on *Breakthru* and *Concerto*, but the principles apply to most other sequencing software. And if you're confused about which software to buy, we've rounded all the main sequencers up for your information. In fact, by the time you've read the tutorial, all that'll be left for you is to actually compose your chart-topping tune.

## Sampling and MIDI

Certain sequencing packages, including *Concerto* and *Breakthru*, enable you to incorporate samples

(digitised sounds) into your tunes. This means you can connect your STE/Falcon and your MIDI instrument to a stereo and mix the two together, for example. You can also use samples to supplement your MIDI instrument's output, which comes in handy when you're building up a complex arrangement that your keyboard is incapable of playing alone. And

The mighty Queen used STs in the recording of *The Miracle* way back in 1989. And *ST FORMAT* covered this historic event way back in issue six!

you can also use samples to produce effects that are beyond the capabilities of your particular keyboard (like a realistic guitar riff, for example).

We've included the latest version of *Sound Lab* on this month's Cover Disk to enable you to prepare and configure samples for use in your preferred sequencer by altering elements such as the sample's volume, frequency and even pitch. Andy Curtis shows you exactly how, on page 54, to round off what is, to quote the words of Mike Smash, "a totally popstastical experience in a completely bonkers-type way".



This MIDI setup won't cost you the earth, but it enables you to create and mix music with a fair degree of flexibility. Read on for what to get and what to dream about...

**Disk Editors** everywhere swear by (and at) the Yamaha PS5790. It's cheap and capable of some catchy tunes, even if it is a tad quirky at times.

## THE PERFECT COMPANION

Our sister magazine, *Future Music*, is the perfect companion to *ST FORMAT* for the serious ST musician. Its pages contain news and reviews of all the latest

dedicated MIDI equipment that's out there, plus tutorials helping you make the most of what you've got. Each issue costs just £3.50, and that includes a free CD.



# Setting up your studio

**S**top for a moment and admire your ST, whether it's a humble 520 STEF or a mighty 4MByte Mega STE. That machine will form the heart of your musical setup. However, while your ST will do all the donkey work, you're going to need a few extras to convert your dreams into reality.

To make your sounds you'll need a MIDI instrument, which can be interfaced with your ST using its built-in MIDI ports. I use the Yamaha PSS790 which can now be found for as little as £100 second-hand. It boasts 100 realistic voices, a 50 piece drum-kit and can play back 28 notes at once. It's perfect for beginners, although a glitch means you can't link the PSS790 to both MIDI ports on the ST simultaneously (you'll create a feedback loop and risk serious damage). Yamaha fixed this problem with the PSS795, so if you spot one of these beasts, nab it.

To control your MIDI instrument you'll need sequencing software, which enables your ST to store any tunes you play on the instrument, then play them back later. A good sequencer also enables you to control all aspects of the sound produced, from instrument changes to special effects such as echo and reverb (if your keyboard supports them).

Your ST, MIDI instrument, cables and sequencing software form the bare core of what you need, but it can be expanded. For a start, if you're going to spend long hours editing your sonic masterpieces, you ought to get a mono monitor to reduce eyestrain.

If you want to record your masterpieces you'll need to connect your MIDI instrument up to a recording device. If your stereo has Aux In sockets, or even a Mic socket, you can play your instrument through its speakers and record your meisterwerk.

Certain sequencers, such as *Concerto* and *Breakthru*, also support mixing MIDI output with

your ST's inbuilt musical capabilities. STE and Falcon owners can play up to four samples simultaneously through their custom DMA chip, while the keyboard is playing. As the diagram shows, you can then link both your ST and keyboard up to a stereo and mix 'n' match the two outputs through one amplifier.

## Dream on

If you're serious about recording, and plan to make a demo for record companies, you'll have to produce the best quality sounds around – and that means a MIDI upgrade. A first purchase has to be a copy of *Future Music* to find the best buys. Yamaha's range of tone modules are a good starting point and cost from as little as £299 for the TG100 model.

Pro musicians use multi-track recorders to improve the sound and depth of their recordings. These make it possible to record your composition track by track. If you only have a 28-note polyphonic keyboard, a four-track recorder could give you an effective 84 notes polyphony over

three tracks, freeing up the fourth for a vocal track or perhaps your Atari's audio output. You do this by splitting your song into three constituent parts, then playing each part through each track in turn. Try putting your drums and bass through one track, your guitars or orchestra through another and special effects through the third. Four-track recorders start from £300, although eight tracks is a bare minimum for serious work.

## The cutting edge

Gasteiner currently offer a 4MByte Falcon with 85MByte hard drive for under £630 – supreme value when you consider the machine's immense suitability for music. As well as retaining inbuilt MIDI ports, the Falcon is capable of CD-quality direct-to-disk recording and possesses a dedicated Digital Signal Processing chip for superb sampling effects.

Although largely ignored by Atari, C-Lab's purchase of the Falcon and subsequent re-release of the machine emphasises the Falcon's future as the cutting edge of musicianship.

## WHERE?

Here're a few phone numbers to help you find the rest of the kit you'll need.

### Hardware

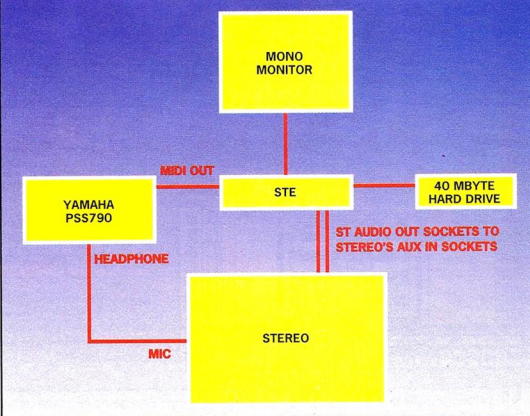
Digital Village  
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Gasteiner ☎ 0181 345 6000  
Roland ☎ 01792 310247  
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### Software

Goodmans PD  
☎ 01782 335650  
Microdeal/AVR  
☎ 01525 718181  
Harman Audio  
☎ 0181 207 5050  
Sound Technology  
☎ 01462 480000  
Dawsons Music  
☎ 01925 632591

You should make it to the sixth annual MEMS Show at Olympia 2 in Kensington, London on 21-23 April. All the major music players will be there, including Harman Audio, Roland and Yamaha, and there'll be seminars and tutorials as well as show bargains. It'll also feature the first showing of the Falcon Mk 2 in the UK. Tickets are £5, the MEMS hotline is ☎ 01369 707888. Page 47 has more details.

## NICK'S SETUP





# Sequencing, music and your ST

Right, so you've got your ST, you've got your MIDI instrument and you've got your MIDI cables to connect the two, but how the heck do you interface them? Cue Nick Peers and the answer.

**S**equencers enable you to record whatever information your MIDI keyboard passes to your ST, and play it back through the keyboard. And that isn't just the notes themselves; it's also the control tweakings, such as the volume and instrument assigned to each channel. This enables you to build up a programme of sophisticated songs that a band

might have just recorded in one perfect take. For hints on how to do this, jump to the 'Recording' section of the tutorial (starting on the next page).

But sequencing goes beyond recording and playback. Once stored in your sequencer you can edit each channel in turn to iron out any rough patches or improve the arrangement. You can also split your song into different sections,

or patterns, making it easier to move between different parts of the music depending on whether you're editing a verse, chorus or instrumental break. To find out more, see the 'Editing your tunes' section of the tutorial (page 51).

Another valuable function provided by sequencing software is the ability to take component parts of your tune (verse or chorus, for example) and construct a whole 'song' from them. You can record the chorus once, then repeat it several times around other elements. Look at the 'Arranging

your song' section of the tutorial, on page 52 to find out how.

Once you've constructed your tune you'll want to mix it. You could emphasise a melody line by increasing the volume of that channel, for example, or perform effects like Slur on particular sections or notes. To find out more, jump to the 'Mixing' section of the tutorial. Finally, you might like to add samples to your tune. For an intro to sampling jump to 'Sampling' on page 53, then turn over the page for a guide to using the *Sound Lab* software.

If you want an idea of how many instrumental parts can make up a song, look at this transcription of *Who Wants to Live Forever*, from *Classic Queen: Off the Record*.

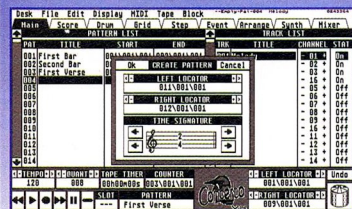
Desk File Edit Display MIDI Tape Block									
Intro/1st Verse Voice 0224053									
Main Score Drum Grid Step Event Arrange Synth Mixer									
PATTERN LIST									
PAT	TITLE	START	END	TRK	TITLE	CHANNEL	STAT		
001	Intro/1st Verse	001'001'001	017'001'001	001	Voice	01	On		
002	2nd Verse	017'001'001	038'001'001	002	Guitar 1	02	On		
003	Guitar Solo	038'001'001	047'001'001	003	Guitar 2	03	On		
004	Bridge	047'001'001	058'001'001	004	Guitar 3	04	On		
005	End Vocal	058'001'001	069'001'001	005	Keyboard 1	05	On		
006	End	069'001'001	091'001'001	006	Keyboard 2	06	On		
007				007	French Horns	07	On		
008				008	Trumpets	08	On		
009				009	Tronbones	09	On		
010				010	Drums/Percus	10	On		
011				011	Strings	11	On		
012				012		12	Off		
013				013		13	Off		
014				014		14	Off		

Desk File Edit Display MIDI Tape Block									
072 008 0080m005 001'001'001									
PATTERN LIST									
PAT	TITLE	START	END	TRK	TITLE	CHANNEL	STAT		
072		008	0080m005	001'001'001	001	Voice	01	On	
Cue 1: LEFT LOCATOR 001'001'001									
Cue 2: RIGHT LOCATOR 009'001'001									

## CREATING A MASTERPIECE USING CONCERTO

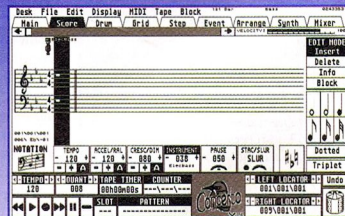
Nick would love to think he wrote *Killer Queen*, but he didn't. But he does know how to reproduce it on his MIDI setup using *Concerto*. Here he reveals the secret of Freddie and al's success.



**1** First, select 'Key Signature' from the Display menu to make sure your masterpiece is displayed in the right key (*Killer Queen* is in E-flat major). Next, you need to create your patterns. Highlight each pattern in turn, then select Create Pattern in order to set the parameters required: the start and end bars of the pattern, and its time signature.

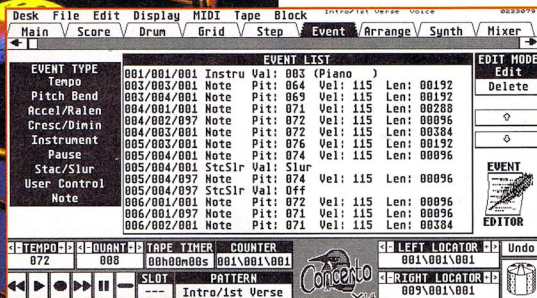
Desk File Edit Display MIDI Tape Block									
Main Score Drum Grid Step Event Arrange Synth Mixer									
PATTERN LIST									
PAT	TITLE	START	END	TRK	TITLE	CHANNEL	STAT		
001	Intro/1st Verse	001'001'001	017'001'001	001	Voice	01	On		
002	2nd Verse	017'001'001	038'001'001	002	Guitar 1	02	On		
003	Guitar Solo	038'001'001	047'001'001	003	Guitar 2	03	On		
004	Bridge	047'001'001	058'001'001	004	Guitar 3	04	On		
005	End Vocal	058'001'001	069'001'001	005	Keyboard 1	05	On		
006	End	069'001'001	091'001'001	006	Keyboard 2	06	On		
007				007	French Horns	07	On		
008				008	Trumpets	08	On		
009				009	Tronbones	09	On		
010				010	Drums/Percus	10	On		
011				011	Strings	11	On		
012				012		12	Off		
013				013		13	Off		
014				014		14	Off		

**2** Click on each instrument to assign it a MIDI channel and a name. Most MIDI devices can handle up to 16 channels simultaneously. Note how the drum channel is actually number 16 on most MIDI keyboards, including the Yamaha PSS790.

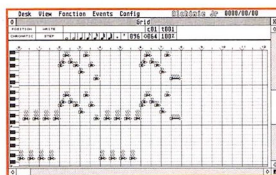


**3** Next, you need to insert a control change at the beginning of each track, so that your MIDI device recognises what instrument it should be playing. Select First Bar as a pattern, Melody as the track and then click on Score to enter the Score Edit screen. Next, select Instrument as shown above and choose the piano.





Believe it or not, this is Who Wants to Live Forever, as seen on the video screen of *Concerto*. Well, that's one way to butcher a song.



All sequencers, including the shareware *Alchemie Junior*, feature a Grid screen, where you can edit your notes even if you have absolutely no knowledge of musical notation whatsoever.

## Recording...

Once you've loaded up your sequencer you're up to a keypress away from transferring music to your ST's memory. Most sequencers have a plethora of tape buttons at the bottom of the main screen. Once your keyboard's MIDI out socket is connected to the ST's MIDI in, clicking on the Record button and the sequencer will record notes you play in real-time until you either run out of memory or press Stop.

If you lack the confidence or ability to play the piano, most sequencers feature a Step screen, enabling you to enter your notes one at a time. It's a simple process: in Microdeal's *Concerto* for example, you just click on the Step folder at the top of the screen to enter Step mode. Then, enter each note (or chord) on your MIDI keyboard once at a time, pressing [Spacebar] to move to the next note and [Backspace] to remove the last.

## Channel hopping

To make your song easier to access and view, you can split it into two different ways. You can assign each instrument a separate track, or MIDI channel, which will enable you to record, edit or view it independently. Or you can divide the actual song itself up into its component parts: verses, choruses, instrumental breaks, and so on. This eases movement between the different sections of the song, and enables you to repeat certain parts without having to re-record (such as a verse or chorus).

If you're still lost, try following the step-by-step guide below, which takes you through the first stages of transferring a song (whether it's original or

# JARGON BUSTERS

**MIDI:** Musical Instrument Digital Interface, or the device that enables you to use your ST to control your MIDI instrument. Channel: each channel represents one instrument. Most MIDI devices support 16 channels: enough to emulate a rock or pop band. A small orchestra, even! Control changes: these enable your ST to control each MIDI channel's volume, instrument and other special effects (such as pitch bend, echo and reverb).

**General MIDI:** many instruments (but not the Yamaha PSS790) conform to a set pattern of notes and drum sets enabling you to port songs easily from one MIDI instrument to another. Polyphony: the number of notes your MIDI instrument can play simultaneously. As some instruments use more than one note at once, anything with less than 28-note polyphony can be restrictive, especially for grandiose pieces.

otherwise) from your MIDI instrument to your ST.

## Editing your tunes

It's unlikely that your first recording attempt using your ST's memory will be perfect, and the ability to view your song on screen and remove all the nagging or glaring errors, while mixing your song for maximum effect, is a jolly good idea. You have a choice of several screens you can access, depending on how you want to view your audio masterpiece.

The first is only found in certain packages (*Concerto*, *Breakthru* and *Cubase*, included), and is the best choice for music readers. This is the Score or Score Edit screen, in which your music is displayed as proper musical tablature, enabling you to edit it using crotchets, quavers, tied notes and other such musical notation. These sections are icon driven, and can be mastered quickly – as long as you can already read music.

For less formally trained musicians there's the Grid screen which displays your composition in a more linear way. Think of it in terms of graph paper: the columns correspond to which note is being played while the rows demonstrate

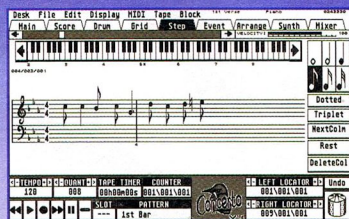
its whereabouts in the song. The bigger the screen presence, the longer the note.

## Events

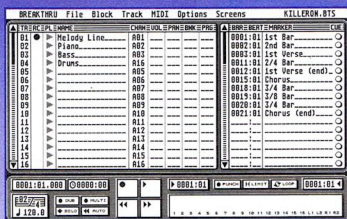
You can also view your song as text. Put simply, every single piece of information sent from the ST to your MIDI device, be it a note or a control change, is recorded and displayed in the order in which it occurs. Its display is actually similar to that of the tracker programs like *ProTracker* and *Noisetacker*.

Unsurprisingly, this isn't the most practical way of editing songs, unless you want to incorporate notes of an unusual length not found on the other screens, for example. *Concerto* can only create notes up to a maximum of six beats – no good if you want to hold a note for several bars.

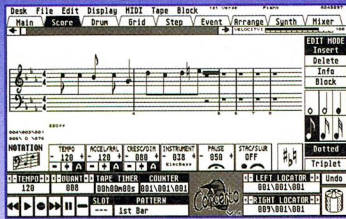
This ability might also be useful when you want to produce a special effect for a specific note. You might want it to be far more strident than any of the others, or conversely, barely audible. Whatever your needs, the Events screen is best for when you're fine-tuning later versions of your masterpiece, rather than in the early creative stages.



**4** Go to the Step screen. You can now enter each note (or chord – hold down the right notes simultaneously), one at a time. The program moves to the next note, and mistakes can be wiped off with a [Backspace]. Altering note lengths is easy: press [1] to [6]. [1] is the longest (a semibreve). Dotted and triplet options are also available.



**5** Repeat steps three and four for each track, highlighting Piano, Bass and Drums in turn. You are slowly building up a rich, multi-layered sound which can sound pretty impressive, especially the first time round. This is how the screen would appear in another package, in this case *Breakthru* 2.



**6** Once entered, you can easily review and tweak your work on the Score screen, using the various icons to add and remove notes, change instruments and add various effects, such as staccato or slurred notes. You could even create your entire song from this screen without ever actually using the MIDI instrument!



## Drummin' up a storm

All good sequencers have a Drum Edit screen, where you can create your drum pattern with less fuss than would be involved in tapping at your MIDI keyboard. A list of each percussion instrument, from a bass drum to a splash cymbal, lines the left of your screen while the actual beats and bars are displayed across the screen.

Laying down drums is a simple point and click affair and it's relatively easy to set up a basic back beat before proceeding to experiment with flashy drum rolls and solos. It obviously helps to have a good sense of rhythm, but you don't need to be an expert drummer to get the most from this part of the sequencer, just an awful lot of patience.

## Put your song together

So you've got the elements of your song in place. Now it's time to mix 'n' match. One of the beauties of sequencing is that, however repetitive you think your music sounds when finished, there's no need for you to record it that way. For example, if you have a chorus that needs to be repeated 12 times (it could happen: just listen to any dance or rave track) you can record it once, and then arrange it to repeat when required.

Some programs, such as *Breakthru*, have an entire screen dedicated to arranging your patterns coherently. If you're feeling lazy, *Concerto* enables you to drag a completed pattern (a chorus, perhaps) to a later empty slot, making an exact copy of the



*Concerto* features a custom mixer screen, which effectively gives you a mixing desk like those found in recording studios.

earlier pattern, which will then be played in sequence.

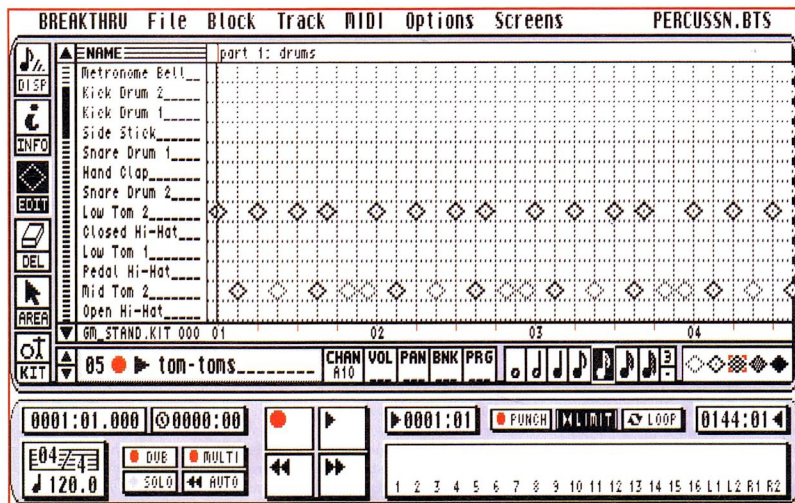
*Midigrad Professional* takes arranging one step further. You assign different sequences, control changes or even individual notes or chords to boxes on screen. Clicking on the relevant box produces the effect. You can mix effects to your heart's content, too,

which makes it perfect on stage where you need to mix pre-produced effects on the spur of the moment. A demo of the program was featured on Cover Disk 67 – that back issue has sold out, but try placing a Wanted ad (page 72).

## Mixing

Getting all the notes in the right places at the right time isn't the end of the story. Oh no. When you play your song for the first time you'll find each channel is at exactly the same volume, which means it will be lacking in expression. In the case of a guitar part, for example, you might want to keep it in the background until you let rip with a solo, when you'd want to pump up the volume.

Sequencers take the hassle out of making changes like these. If you were precise enough as you went along, you may not want to adjust anything. On the other hand, you may decide to wait until the raw sounds have been laid down before assuming the producer's hat at the mixing screen. Experiment with volume control or special effects, such as subjecting certain notes to staccato or slur (blends notes together).



It's easy to put down a complex drum set with *Breakthru*. A similar screen is found in other packages, like *Cubase* and *Concerto*.

## MIDI SOFTWARE ROUND-UP

### PD AND SHAREWARE

#### Henry Cosh Sequencer

16-track sequencer that equals many commercial offerings. Stores up to 6,000 notes in 512K and is colour or mono. No sample or score display options.  
STF RATING: 75%

#### Alchemie Junior

24-track sequencer that runs in colour or mono and can store up to 10,000 notes, even on a humble 512K machine. It's all reasonably slickly put together, and has everything that the first-time user needs except for a score display (high resolution only).  
STF RATING: 82%

### General utilities

Useful PD utilities include *Notepad*, a Desk Accessory that can be called up at any time where you can record up to 500 notes. In *Control* puts you in control of 20 programmable sliders, usable in conjunction with your MIDI keyboard to alter the characteristics of each channel (such as volume and aftertouch).

### COMMERCIAL EFFORTS

#### Cubase Audio

£700 Harman Audio  
☎ 0181 207 5050  
This Falcon-only package takes the seriously successful *Cubase* series and adds built-in recording to take advantage of the Falcon's direct-to-

disk technology, which enables you to sample straight on to hard drive without any external hardware.  
STF RATING: 94%  
Reviewed issue 56

#### Cubase 3

£349 Harman Audio  
☎ 0181 207 5050  
This is the package that for years has ruled the roost in music studios everywhere. It's a massive 64-track recorder that, with extra hardware, can support more than one MIDI device. It's also user-friendly, featuring Score Edit for musicians who know a crotchet from a quaver. Also available in a cheaper, 12-track version, *Cubase Lite* (£99).  
STF RATING: 91%  
Reviewed issue 46

### Notator Logic

£349 Sound Technology  
☎ 01462 480000  
Another package for pros, this is as powerful as *Cubase 3*. It's quick and not as complex as it seems, and comes with a multitasking capability that enables you to open up to eight windows at once. It possesses the best scorewriting facilities of any program and comes with hardware protection that includes an extra three MIDI Out ports.  
STF RATING: 91%  
Reviewed issue 51

#### Breakthru 2

£149.95 Gajits Technologies  
☎ 0161 236 2515  
This sequencer is the successor to *Sequencer One Plus* (see below). As



Mixing samples and MIDI information is easy in Breakthru: where up to four samples can be played at once through a variety of output sources.

## Sampling

Certain sequencers enable you to mix samples and MIDI information within the same song. There's nothing more frustrating than transcribing what you know is your best song ever, only to find that it has too many instrumental parts for your 28-note polyphonic keyboard to handle. If you can afford a second instrument and MIDI junction box to link the two to your ST then you'll do just fine, as most sequencers can handle more than 16 MIDI channels at once (including the shareware *Alchemie Junior*).

If, however, you can't afford such luxuries, some sequencing packages support the playback of samples at the same time as MIDI information. Two such programs are *Concerto* and *Breakthru*. *Concerto* is limited by the fact that you can only play one sample at any one time through the STE and Falcon's DMA Chips, which leaves all you STFM owners out in the cold.

*Breakthru* is far more versatile in that up to four samples can be played with simultaneously, while the pitch of each sample can be altered in the program without recourse to another program such

as *Sound Lab*. Even STFM owners can join in the fun, although output is limited to your monitor only, unless you own a sampling cartridge in which case you can direct it to a stereo through its output sockets. STE and Falcon owners can, of course, link up directly with a stereo as shown in Nick's setup on page 49.

One problem with such sequencers is that they all demand different standards for their samples, which makes it awkward for you to port them between different programs. Thank goodness, then, for small mercies, in the form of *Sound Lab*, the latest version of which appears on this month's Cover Disk. To find out exactly how to make the most of *Sound Lab*, turn the page for Andy Curtis's definitive tutorial on this shareware masterpiece.

well as all the usual MIDI functions, including Score Edit, it offers a 24-track MIDI sequencer along with four channel sample playback. Unlike *Concerto*, *Breakthru* enables you to take one sample per channel and the program automatically alters its pitch as required.  
STF RATING: 89%  
Reviewed issue 57

## Concerto

£29.95 Microdeal/HiSoft  
☎ 01525 718181  
A superb sequencer for the price, featuring a 24-track MIDI sequencer, scorewriter and even DMA sample playback on the STE, TT and Falcon. Perfect for newcomers to MIDI, as it's easy to use and features a comprehensive,

but compact, manual.  
STF RATING: 86%  
Reviewed issue 36

## Midgrid Professional

£135 Dawson's Music  
☎ 01925 632591

This program utilises a unique but intelligent system of dividing sequences, notes and bars into a user-definable grid on screen. Clicking on each box triggers whatever sequence is stored on there making *Midgrid* very useful in a live situation where improvisation is called for. It also has many features found in the other packages, but loses points for not possessing a Score Display feature.  
STF RATING: 79%  
Reviewed issue 62

## Sequencer One Plus

£39.95 Gajits Technologies  
☎ 0161 236 2515  
The precursor to the *Breakthru* series, this budget price means you can try out Gajits' renowned Diamond Drag Editing system and Jukebox feature without shelling out over a £100 for the price. A good starter pack for those of you intending to upgrade to *Breakthru* later. No Score Editor though.  
STF RATING: 75%  
Reviewed issue 39

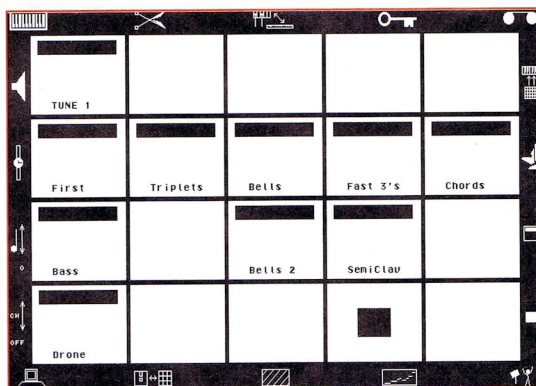
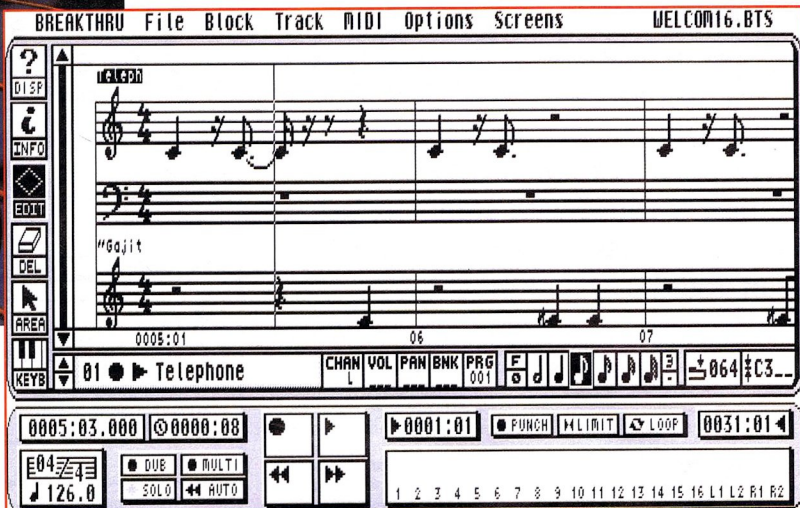
## Rave

£49.99 The Software Business  
☎ 01480 496497  
Another top-notch 32-track budget sequencer. As with *Concerto*, this features Score Edit along with

sample playback. However, only one sample can be played at any single time, which is restrictive, and it will only run in medium resolution.  
STF RATING: 71%  
Reviewed issue 55



*Rave* is a good choice for beginners to MIDI, introducing you to all of the elements explained in our tutorial. A cheaper and more powerful choice is *Concerto*.



*Midgrid Professional* enables you to assign different elements, such as individual notes, chords, sequences and even control changes, to different boxes. You can resize the grid to fit more boxes on screen, thus enabling you to access more effects.



# Free Samples!

Andy Curtis demonstrates that getting creative with samples, using the Sound Lab software, is easier than you may have thought.

Okay, so here's the situation. You have a great idea for a MOD or sample sequence but there's a small snag – you don't have the sounds you need. You may have downloaded some instrument sounds from a BBS or bought them from a PD library, but they're all in different formats and it all starts to get a little confusing and fiddly. So, should you pay someone for specially prepared instrument samples in the right format?

No way! *Sound Lab* is a shareware program (which we've given away on the Cover Disk, this month) that enables you to produce professional sounds that are every bit as good as anything similar you might be tempted to buy. Follow the simple steps in this feature and you'll soon be making wonderful music. Maybe. At least, the samples will be great.

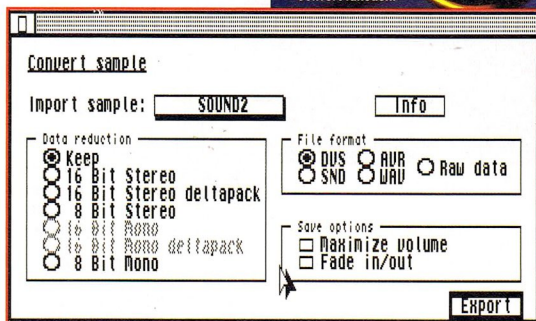
*Breakthru* is currently one of the best ways of incorporating samples into your sequences. Up to four samples can be played simultaneously, giving you some real creative power, even if you have no MIDI gear at all. *Breakthru* also supports the 16-bit samples produced by *Replay 16*. If you need really superb sample quality to use within sequences, *Breakthru* is the business.

## Hunting for samples

There are many different sources of samples. Magazines love putting them on Cover Disks, PD libraries have stacks of 'em and many BBSs bulge with vast sample libraries. You might even want to create your own samples. Sampling on your ST is straightforward – packages like *Replay 8*, *Replay 16*, *Mastersound* and *Sample Star* all produce excellent results.

If you have a *Replay* cartridge then you can use *Sound Lab* itself in the sampling process – otherwise use the sampling software provided with your cartridge. If possible, save your samples out with the extender SPL, although this isn't vital.

And making your own samples can be fun. If you have a microphone you can make samples of yourself singing in the bath, for example, or you can use any instruments to grab samples.



Unusual sound sources often provide fantastic sounds. You can spend some quality time annoying members of your family by hitting various objects (no, not them), and seeing how good they sound.

Once you've got some sounds together, no matter where from, you'll need to get them ready for use in your favourite sequencer or MOD file editor.

## Your goal

Your aim is to end up with samples that are roughly the same volume, and that harmonise with one another. There must be no clicks at the beginning or end of your samples, and they need to be at the correct frequency. *Sound Lab* can load almost any kind of data and interpret it as sound, which means you can load all kinds of

*Sound Lab* is a great utility for converting between a wide range of sample standards. If you're going to play around with samples this is one piece of shareware that you are going to need. There's no *Replay* option in the program, just a simple *Convert* function.

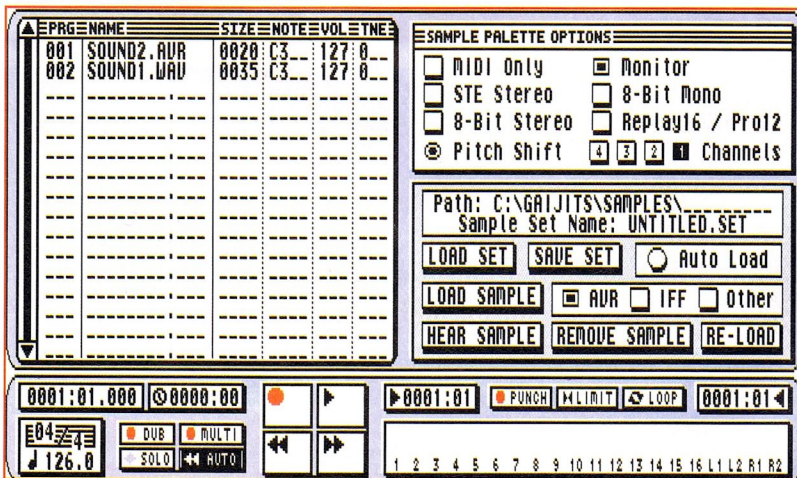
foreign sample formats and be fairly sure of getting results. If the sound is chronically distorted when you play the sample for the first time, try clicking on the High Bit button and play it again. The chances are it will now sound closer to what you expected.

## The gruesome part...

Like it or not, you're going to have to cut bits off your sample to make it usable as an instrument sound. If you've selected a sound with a sample header then it will need to be removed, because the header will be seen as sample data and – on an ST at any rate – played back by *Sound Lab*. Not a pleasant noise, believe me.

To remove the header, simply select the block containing it, using the right and left mouse buttons. Now keep hitting the Play button so that you can hear what you have selected, and gradually extend the right-hand marker until the unpleasant scratching sound comes to an end and the note begins. You can also use the Zoom button to help you position the marker more accurately.

When you have it set correctly, hit the Cut button and remove the offending section. Now select the rest of the sample using the same method and listen to it again, this time without the garbage at the beginning. If you've made the sample yourself, you will be, effectively, cutting it out from a much larger sample. Just use the same methods but remember to clean up the end of the sample as indicated above. It may be an idea to select the very end section of the sample and use the Fade function to end it neatly.



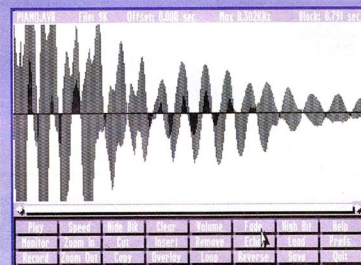




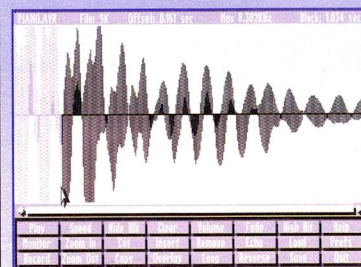
## THE ART OF TUNING

Ultimately, it's the tuning of a sample that governs whether it's usable or not. This has been a stumbling block to many, but the solution is here at last. You'll need some sort of recording device or a well-tuned instrument to tune a sample for this, because you need to be able to generate a reference note. If you have a keyboard then try using middle C as a reference note.

1. Load your sample into *Sound Lab*, once you've chopped off the unwanted bits and boosted its volume.
2. Click on the Speed button and play your sample.
3. Compare it with your reference note. If the pitch is different use the horizontal slider bar to change the frequency of the sample until it matches your reference note. When it does, click on OK.
4. Select the Speed box again so that you can convert the sample at its new pitch to the correct playback frequency. We recommend 12.5KHz for most MOD file editors, but you may need the extra quality of 25KHz. Click on the speed you require.
5. Click on the Convert button. Click on OK in the dialog that pops up and play your sample again. It will be at its tuned pitch but still playing back at an STE DMA-acceptable frequency.
6. Repeat this process for all the samples you need and you'll end up with a nice, classy set of tuned samples that are all your own.



**1** The first step is to boost the sample to a decent volume level. All the samples you use should have a similar basic volume. The Volume button enables you to boost or cut the sample volume and preview it as you go. As a general rule, allow the biggest part of the sample to slightly over-run the viewing screen.



**2** There's a nasty distorted click at the start of this sample, so let's select it using the left and right mouse buttons to define the start and finish. Select the Cut button to remove the unwanted garbage.



**3** Now we can set the pitch of the sound. All the samples must be in tune with each other to sound correct when played together. The panel above describes sample tuning. When you've tuned your sample correctly, you'll need to convert it to a DMA-compatible frequency - 12.5KHz or 25KHz for use with most sequencers or MOD file editors.

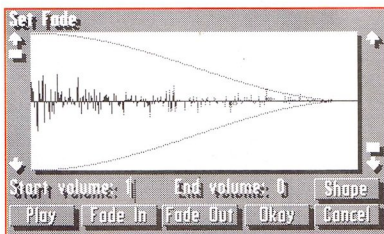
If you have an ST Replay or DigiSound cartridge then you can actually sample from within *Sound Lab* itself. Unfortunately, support for the DataSound cartridge, in previous versions, has been removed. Also, if you don't like the built-in file selector then you can use your standard GEM one.

### More Preferences

Input:	ST Replay	DigiSound
Fileselector:	Custom	GEM
Load Format:	.SPL	.SAM
Save Format:	.AVR	.###
Save AVR:	.WAV	.AK
	Signed	Unsigned
	Okay	Cancel

### Loop the loop

Some sustained samples can be kept short by looping them. If you're planning on doing this it is vitally important that the sample has no clicks at the end, otherwise no can do. Don't fade the sample out if you plan to loop it later. The looping itself it often best done within the program in which you are going to use it, because they all store the loop data in different ways. The important thing is producing a sample that is adequate for looping.



afraid to experiment and even break the rules. In the chase for that elusive special effect almost anything goes. *Sound Lab* is a wonderful tool which will revolutionise the way in which you can use and manipulate samples. Thank goodness they remembered to stick it on the Cover Disk. *stf*

*Sound Lab* enables you to alter your sample in a variety of ways before exporting it. You can reverse it, add an echo or even fade it in and out as demonstrated here.

### And finally...

As the world of sampling and samples opens up to you, don't be

## SAMPLE USAGE

The methods described here apply to sample preparation for use in all kinds of sample applications, including MOD file editors, DIGIT, Breakthru, Rave, Prodigy and

Quartet. If you want to hear more about sampling tips and tricks, write to: MIDI & Music, ST Answers, ST FORMAT, 30 Monmouth Street, Bath, Avon, BA1 2BW.

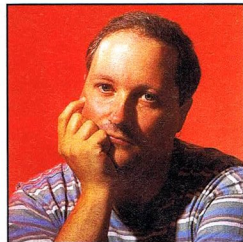






# ST Answers

Upgrades, downgrades, Lou Grades. They're all here waiting to be sorted out by Clive Parker. This month, some of the more obscure questions he's received.



## VIRTUAL MEMORY

**Q** I'm finding the 4MBytes of RAM in my Falcon rather restricting. I have heard that there are some virtual memory applications available. What is virtual memory, and can I get it for my Falcon?

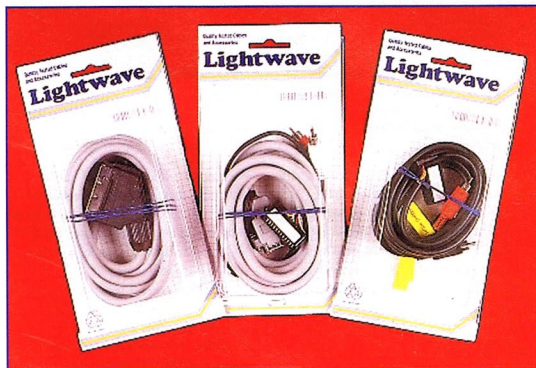
Kai Svvennsen, Frinton-on-Sea, Essex

**A** Virtual memory is a system that enables your Falcon030 to use the hard drive instead of memory to store information. A vir-

tual memory program fools the Falcon into thinking that it has more memory installed than is physically present. Of course, you must make sure that there is enough free space on the hard drive to use as virtual memory. It's no good assigning, say, 20MBytes of virtual memory if you only have 10MBytes of free space on the drive.

And yes, you can get virtual memory software for the Falcon. It's called Outside, and it's available from 16/32 Systems for £29.99. Give them a call on 01634 710788 for details of Outside and other Falcon software.

Although the Falcon030 usually has 4MBytes of memory installed as standard, for some high-end software that's still not enough.



The Atari Jaguar can be used with almost any type of computer monitor, providing you have the correct cable, that is. Fortunately, Meedmore have a whole range.

## JAGUAR LEAD

**Q** I have an Atari Jaguar which I use with an old portable TV. I also have a MicroVitec Multisync monitor which I would like to use with the Jaguar. Do you know where I can get the correct lead and adaptor to use the monitor with the Jaguar? I would also like to use my Falcon030 with the monitor.

Colin Wilson, Bedford

you need a Falcon and a Jaguar lead. They will be happy to make up a special lead if a ready-made one doesn't already exist, although this may cost a few pounds more.

If you have a monitor that you want to use with your ST, TT, Falcon or Jaguar, then contact Meedmore – they're specialists, and are only too happy to help out with any monitor problems you may come across.

**A** The answer to both your questions is the same. Meedmore 0151 521 2202 specialise in computer leads and already have a range of Jaguar cables for £15. All you have to do is call Meedmore with details of the monitor, and let them know that

## CD-ROM

**Q** I'm well pleased with my Falcon – it can hold its head up high in the sea of PC and Apple Macs. Just take a look at powerful programs like APEX media or AtariWorks, for example.

## CRAZY CORNER

There are some things we cannot answer, for the simple reason that the question is totally obscure, crazy or incomprehensible. The names here have been omitted to protect the guilty...

### ¿Que?

Porque no traducen esta magnifica reuista al Espanol dues hay mucha gente interesada, pero no domina el Ingles. Saludos y felicitaciones por el buen trabajo que estan haliendo.

En Espana no hay una reuistatana buena y completa como esta. Traduzcanla "please". Spain

stf: ¿Que?

### Monitor mystery

I have just bought myself a 520STE and I have connected it up to a Commodore monitor. Is it breaking?

Gloucester, Gloucestershire

stf: Er, no.

### What's best?

What is the best and cheapest computer to run my Write On word processor disk on? I'm confused about which one to get. Derby

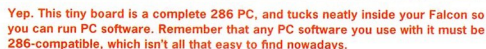
stf: I'm not sure. Hmmm, let me see. How about, perhaps, possibly, gasp, dare I suggest that the Atari ST might be your best bet?

### Backup required

I have a 520STE and an external floppy disk drive. Would it be possible to back up my disk using ST Writer rather than keep taking the disk out of the Atari drive each time? London

stf: Yes... or no. What on earth are you on about, mate? Use the magnificent Cover Disk Back Up program that we supply on the Cover Disk every single month.





**A**t the moment there isn't any way that Windows 3.1 can reliably run on a Falcon and use PC CD-ROM software. The only PC emulator for the Falcon at the moment is Falcon Speed 286 (€229) from Compo Software ☎01487 773582. Falcon Speed 286, as you can probably tell from the name, emulates a 16MHz 286 AT PC, and you really need the power of a 486 running at 25MHz minimum to use CD-ROM software effectively. There have been

Also, most PC game software runs in 256 colours, and while the Falcon is capable of a VGA standard 256 colour display, an emulator like Falcon Speed 286 only use 16 colours in PC VGA emulation mode. Another problem is that the emulator runs too slowly to run games software, or any CD-ROM software, effectively.

*I recommend that you get a 24-pin mono printer – that means it only prints in black and white, not in colour. You should get hold of the Star*

Because you have a 520STFM, you need a word processor that runs in 512K of memory – you can also get Protext 4.3 from the First Computer Centre for £45. The Protext software runs the printer without any problems. Both the printer and the software are easy to use.

Now to my problem. I am looking for a program that appeared on an *ST FORMAT* Cover Disk a couple of years ago.




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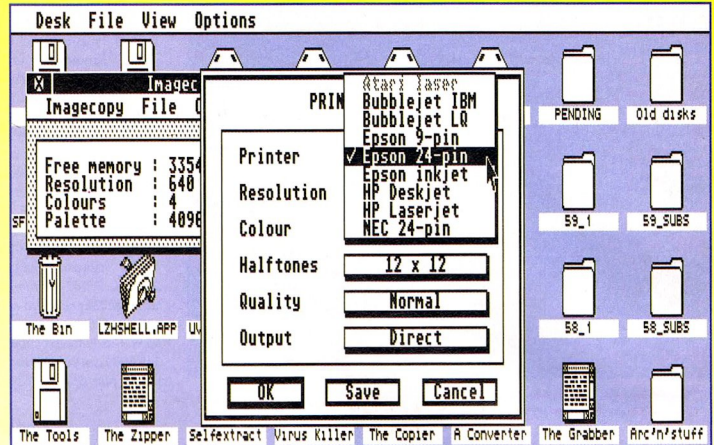


## SQUASHED IMAGES

My daughter has a 520STFM upgraded to 1MByte. I've just bought her an Epson LQ100 printer to use with it, and I'm very pleased with the printer when printing text, but I'm having problems when printing Neochrome pictures. The pictures are squashed up to about one inch at the top of the page. What am I doing wrong?  
Georgina Peacock, Great Barr, Birmingham

**stf:** You're not doing anything wrong, Georgina. This is one of those questions that turns up in the ST Answers post almost every month. The problem lies with your paint package, Neochrome. Because Neochrome is a very old program, almost ten years old now, it doesn't 'know' about printers like the Epson LQ100, which is why it doesn't print out correctly. The solution to your problem is to get Imagecopy 3.5 from the FaST Club ☎ 0115 945 5250 for £29.95. All you have to do is save the picture you've created in Neochrome to disk, then exit the program, run Imagecopy 3.5, and load the picture into it. Imagecopy 3.5 has lots of printer options, so just select Epson LQ100 from the list and you can print out your pictures. It costs a few pounds, but it

 enables you to use your printer to its full potential.



It's lean, mean and slightly more expensive than a Public Domain or shareware program, but Imagecopy is worth every penny. We rely on it here at the ST FORMAT office – what better recommendation could you have? Get it today!

It's called Outline or Outliner and it's a graphic utility that I desperately need to get.

I believe it's either PD or shareware, but I've been unable to track it down at any PD library. If any of your readers know where I can buy this program, and I want to use it professionally, I would be very grateful.

P W Graham, Lancaster, Lancs

**A** I've had a browse through my master disk box, but I've been unable to find either of the program names you mention on any ST FORMAT Cover Disk. Perhaps it was on the disk of one of our now-defunct rivals. If anyone does have a copy of Outline or Outliner, whichever it is, contact Mr Graham at: 55 Kirkes Road, Lancaster, Lancs LA1 3DW.

## MEMORY MAD

**Q** I'm considering upgrading my 4160 STE to TOS 2.06 with 12MBytes of RAM using the Marpet XtraRAM +8 board, but I have a couple of questions first.

Does graphics software like DA's Vector Pro and DA's Picture and music software like Cubase make use of the additional RAM? Would there be any disadvantage in opting for a switchable version of TOS 2.06? And do you know of a company that would be able to perform both upgrades for me?  
Pete Rimell, Erdington, Birmingham

**A** Professional standard graphics like DA's Vector Pro and DA's Picture should work

with the XtraRAM +8 without any problems, because they are both designed to work on the Falcon, which has up to 16MBytes of RAM. The same is true of Cubase. As a precaution, the XtraRAM +8 board is supplied with a conversion program which alters your software so that it recognises the extra memory.

You can use a switchable TOS board to retain compatibility with the few, older programs that don't recognise the extra memory supplied by the XtraRAM +8 board. In reality, though, almost all serious software works with TOS 2.06.

Your main problem lies with adding two hardware upgrades to your STE: the TOS switcher and the XtraRAM +8 board. Compo Software ☎ 01487 773582 specialise in upgrades of the kind you want and, although the XtraRAM +8 and Compo's T-Board TOS upgrade board for the STE both connect to the Motorola 68000 processor in the STE, this shouldn't cause Compo a problem when they perform your upgrade. You see, the XtraRAM board has been designed with through connections, which means that any board that normally uses the 68000 can sit on top of the memory board. If you aren't worried about retaining compatibility with older software that may not work with TOS 2.06, you may be better off asking Compo to simply replace the old TOS ROMs in your STE with the new ones. Then the XtraRAM board can simply fit directly on to the 68000 processor.

## I'VE HAD AN IDE

**Q** I've been offered the chance to buy an IDE Smart Drive. Is this compatible with my STE?

William Single, Wolverhampton, West Midlands

**A** No, I'm afraid IDE drives aren't compatible with your STE because it's designed for use with PC-compatible machines or other computers with an IDE interface. You need to get a hard drive with a SCSI interface and adaptor. Call Gasteiner on ☎ 0181 345 6000 – they have a range of affordable hard drives you can connect to your STE.

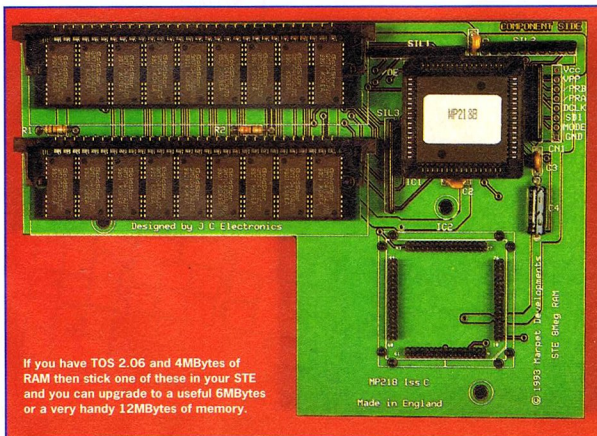
## MEMORY SWAP

**Q** I have an Atari STE with 4MBytes of RAM installed. I'm getting a 1MByte Falcon030 – can I use the four 1MByte SIMMs from my STE with the Silica unpopulated RAM board, and use them in the Falcon? And can I use my Philips CM8833 Mk 2 with the Falcon?  
Pete Archer, Witham, Essex

**A** You can use any 30-pin SIMMs on the Silica RAM upgrade board for the Falcon, so the SIMMs from your STE should be okay. You can use your Philips monitor with the Falcon. Ask for an Atari monitor adaptor when you buy the Falcon.

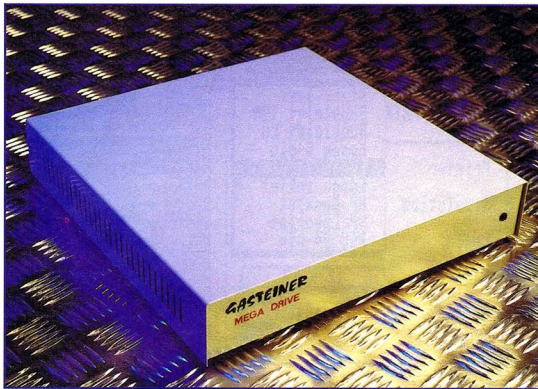
## WHAT'S THE LINK?

**Q** I need to get a new hard drive, and I'm thinking about buying an IBM-



If you have TOS 2.06 and 4MBytes of RAM then stick one of these in your STE and you can upgrade to a useful 6MBytes or a very handy 12MBytes of memory.





Hard drives, eh? If you really must (and you must) then make sure you get yourself a SCSI drive. They're fast, efficient and eminently affordable.

compatible. Would this be the best choice? Am I forced to buy a drive with a SCSI interface? What is the Link, and will I need it? Is there anything else I should know before I buy a hard drive?

B Lumley, Harden, County Durham

**A** You can forget about getting an IBM-compatible drive unless it's an external model with a SCSI interface. Other types of PC-compatible drives like IDE and EDSI can't be used with the ST because there isn't a suitable interface for connection. So yes, you do need a hard drive with a SCSI interface, and you need a Link host adaptor to connect the drive to the DMA port of your ST.

The Link is basically an adaptor that converts the ACSI (Atari Computer Systems Interface) signals, which are used by the ST to access hard drives, to the SCSI (Small Computer Systems Interface) signals used by many hard drives.

If you want a hard drive, you should aim for a minimum of 100MBytes, because you'll soon fill up

anything smaller. Gasteiner on ☎ 0181 345 6000 supply a range of SCSI drives complete with Top Link SCSI adapter starting at £215 for a 120MByte drive.

## WHAT'S THE DELAY

**Q** When TOS 2.06 boots up a system it uses an automatic built-in delay of over one minute, which enables the hard drive to get up to speed before booting. Why exactly does TOS 2.06 have this delay on booting?

Eric Davies, Leicester

**A** The delay on booting TOS 2.06 is designed for a couple of reasons. First, it enables any networked machines to be 'found' by the file server (any machine controlling a network). Second, it enables any hard drives connected to initialise before the ST tries to access them. You can bypass the delay by pressing the [Spacebar] once your hard drive has initialised. TOS 2.06 also performs a full memory check when it boots up your ST.

## MORE LEADS

**Q** I've just bought an Atari Falcon – can I use my Protar external hard drive with it? The Protar drive has a SCSI connection, but the SCSI connector on the Falcon looks different to the connector on the drive.

Where can I get a lead to connect the drive to the Falcon?

Richard Bachman, Castle Rock, Herts

**A** Most Atari hardware specialists can supply you with a SCSI2 cable for your Falcon, although the prices can vary between £25 and £50 depending where you get them. Gasteiner Technologies ☎ 0181 345 6000 can supply the cable for £24.50 plus £3.50 carriage.

## VGA GRAPHICS

**Q** In an earlier issue of ST FORMAT you stated that the Falcon can only display 256 colours on screen at a resolution of 640x480 pixels on VGA monitors. What is the highest resolution at which 65,000 colours can be displayed on a VGA monitor, and can the Atari SC1435 or an SVGA monitor show 65,000 colours at 640x480 pixels? How bad is the flickering in interlace mode on the SC1435? Should I get an Atari monitor or an SVGA monitor?

Dexter Carter, Cardiff

**A** The highest resolution that the Falcon is capable of displaying 65,000 colours on a VGA monitor is 320x480 pixels, and the highest resolution possible on the SC1435 in interlace mode is 640x400 with 65,000 colours. Interlace mode is very flickery at the Desktop, but less noticeable when viewing graphic images if you are working in a paint program.

Your best option is to buy an SVGA monitor – we rarely use a standard Atari monitor with our Falcon.

## ALL KEYED UP

**Q** The keyboard of my STFM is starting to wear out – not the mechanical bit, but the small rubber bits under each key. I contacted Atari but the best they could do was offer a replacement keyboard for £100. Is there anywhere I can get these parts?

Jerry Rice, Tamworth, West Midlands

**A** System Solutions ☎ 01753 842212 have just what you need, a packet of little rubber disc-shaped things called Key Clicks. The full set costs £29.95.

## SIZE MATTERS

**Q** I find that the editing software supplied with my scanner is too limited – I need to be able to edit and adjust the size of a printed image.

Ricky Jackson, Nottingham

**A** The ideal program for you is called Multiprint, from FaST Club. It enables your output to be configured and sized to your exact needs, and the latest version now has a fast print option. Multiprint costs £9.95, call FaST Club on ☎ 0115 945 5250 for details.

## 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.

## UPGRADE PATH

I have a 520STFM upgraded to 2.5MBytes, and I use TOS 1.02. I've been using it for games up to now but I'm interested in using it for more serious pursuits like word processing and databases. I haven't really got much of a clue about computers and the manual doesn't really help me at all.

Can I use the STFM for this type of software, or should I buy an STE or Falcon? I don't have a mono monitor – if I get one can I use it with the STE or Falcon later? And will my software run on these other Atari computers?

Keith Crow, Camberley, Surrey

**stf:** You can use your STFM for the kind of software you describe. The only thing I'd suggest is that you invest in a TOS upgrade to version 2.06. This is because TOS 1.2 is slightly unreliable with

some software. You can get the Amitar TOS 2.06 upgrade for £59.95 from Analogic Computers ☎ 0181 546 9575, and if you're not confident about performing hardware upgrades they'll do it for you. Call them for details of current prices.

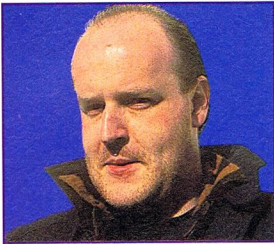
If you get a mono monitor you can use it with the STE and Falcon, but because the Falcon is a colour machine it's not much use with a mono monitor. Most serious software runs on the STE and Falcon without problems, but ST games may not run on the Falcon.

You're really better off sticking with your STFM, adding TOS 2.06 and getting a mono monitor (Analogic sell high resolution monitors, too, if you're interested).

If you have an STFM with TOS 1.2 then you should really upgrade it to TOS 2.06 if you want to do serious work on it.







You've been asking for it for long enough, and now it's here – the Internet and comms section. Every month, Frank Charlton guides you through what's hot and what's not in the on-line Atari world.

# alt.queries.net@...

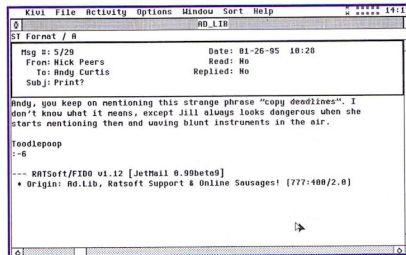
## Off-line Mail Readers

You've been asking for a guide to Off-line Mail Readers (OLRs) so, here we go...

An Off-line Mail Reader is a program that enables you to download your mail and messages from your favourite BBS in a compressed bundle, then reply to them while you're off-line and send the replies back next time you call the BBS. It cuts down your phone bills, leaves the BBS free for another caller, and means you have more time to think about what you want to say – no more hurried messages full of spelling mistakes.

All mail readers on the ST support the popular QWK format, which is used on almost every ST and PC BBS in the world. When you call, the BBS checks for any new messages left since you last called, then compresses them and sends them to you. You need the OLR software itself, and an archiver like STZip or LHarc. You don't, however, need a hard drive, and most OLRs will run in 512K.

There are several shareware and PD OLRs to choose from, all of which we've listed here. Next month we'll run through a step-by-step guide on how to get going.



**KIVI** is the newest contender in the Off-line Mail Reader stakes, which might explain its ease of use and friendliness.

### KiviQWK

The baby of the bunch, *Kivi* hails from Finland. Its strength lies in its ease of use and friendliness, and the fact that it's the only OLR that really works with MultiTOS or MagiC. Nicely GEM'ed, *Kivi* is fully mouse-controlled and runs happily on a 520ST.

### IMHO 1.07

*Ian's Memory Hungry* OLR needs at least 1MByte of RAM to work properly. It makes little use of GEM, and it doesn't like multi-tasking systems like MagiC, but despite these limitations it's still a corking piece of software, with

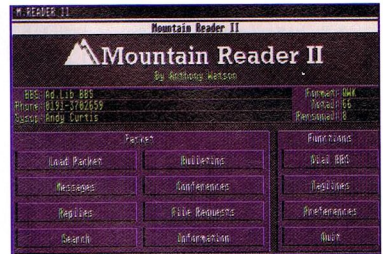
options coming out of its ears. It's also surprisingly easy to use. This is the Off-line Reader that most people seem to prefer.

### MicroTime QWK

Clearly displayed and a doddle to use. No big bells and whistles here, but it certainly does the job. Well written and ideal if you're low on memory and using floppies.

### Captain's QWK

Not bad this one. You do need to register the shareware fee, though. If you don't, it defaults to sending messages from someone called Elli Pirelli as an incentive to pay!



Is it just me, or does *Mountain Reader* bear an uncanny resemblance to Freeze Dried Terminal? Thought so.

## Mountain Reader

The big boy from the USA, *Mountain* is the only ST Off-line Mail Reader to handle the PC-specific Blue Wave format, which is handy if your local BBS runs on a PC and you want to answer your mail off-line.

*Mountain* is attractive and easy to use, although a little slower than most. It's shareware, and the freely available demo just about gives you an idea of what it's capable of. This is a professional bit of kit with features coming out of its ears, including a swish, if slow, custom interface. Expensive at \$40 but worth a gander.

## ATARI AND THE WORLD WIDE WEB

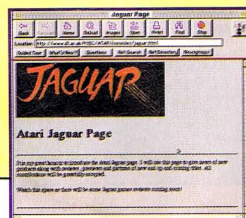
The WWW is the topic in the Net world these days, but, unlike Macs and PCs, the ST doesn't have a graphical browser capable of handling the images used there. But fret not: the ST software is on its way.

In the meantime, you can set up MiNT and the MiNTnet Extension and use a text-only

browser like Lynx. *AtariNOS* users can also Telnet to a public-access server like telnet.w3.org too (we'll be covering this next month).

Dave Nash is adding WWW support to *AtariNOS*, and there's talk of at least two graphical browsers being written even as we speak. Craig Graham is also porting the *Chimera* WWW browser to the ST under MiNT, and tells us it should be ready soon. More news as we get it.

micros.hensa.ac.uk. The lists include places to visit to pick up the latest software (over the coming months we'll cover each of the sites in more detail). If you don't have Net access, you can get a copy of the list from the Ad.Lib BBS on 0191 370 2659 in the Internet File Area.



The ST doesn't have a flashy Web browser like this yet. But then, the Jaguar doesn't either, even though it has a Web page.

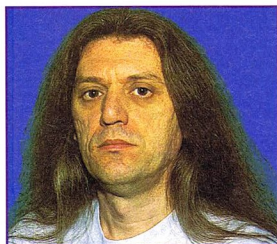
### PLACES TO VISIT

Mark Smith, co-ordinator of the Atari WWW page, has now taken over the compilation and update of the list of Atari ftp sites to visit. Copies of the list are posted in the comp.sys.atari.st newsgroup on Usenet, and are also available from ftp sites like ftp.demon.co.uk and

You can contact Frank at the ST Answers address (page 60) or at the following on-line addresses:

frank@tachyon.demon.co.uk  
NeST 90:100/308.2  
AtariNet 51:6/208.2  
FidoNet 2:256/502.28





Don Maple, a man with a serious need for speed, looks at how to drive your hardware to run to its full potential by optimising your code.

# Assembly Line

## Once upon a time

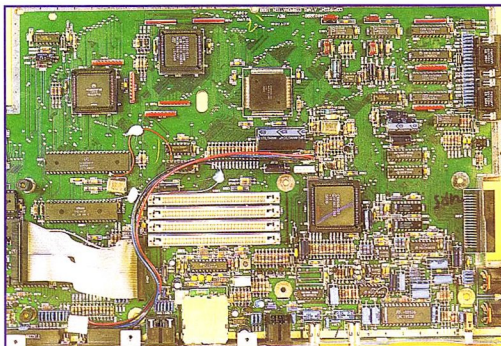
In the beginning there was nothing. The world was analogue. And then the Electronic Designer In The Sky (EDITS) went digital and created the microprocessor. And EDITS saw that the microprocessor was good! So, EDITS created the microcomputer. That was even better! Well, at least until IBM spoiled everything... But seriously, as you've doubtless spotted by now, Assembly Pointers is being relaunched. Welcome!

Assembler programmers generally like to control the hardware unhindered and drive it to its full potential. Optimisation plays a crucial role in this, so we'll devote this month's column to making your code faster and smaller.

## The need for speed

The fastest things happen within the processor itself. The bottleneck occurs when the data is shuffled in and out of the CPU. This means you should always try to keep your data in a register, or at the very least, in the cache. Keeping frequently used data in registers will increase your operations speed per end.

The next step is fairly obvious. Use the 'quick' format of the



The slang for assembly level programming is 'bashing the metal' or 'hitting the hardware' – just thought you'd like to know. Oh, you didn't... Ah well.

instruction whenever possible. This includes MOVEQ, ADDQ and SUBQ – they're called quick for a reason! The drawback is that they have a limited range: MOVEQ can only move a byte, resulting in values from -128 to +127, while ADDQ and SUBQ can only 'count' from 1 to 8.

## Loopy

When branching always use the short version of the instruction. This means use Bcc.S, BSR.S and

BRA.S. Most assemblers will offer to do this for you automatically, but I always turn it off, so that if the loop spans beyond the scope of a short instruction, I will be warned. This is useful because it has the added benefit of reminding the user – in this case, me – that such a loop probably won't fit within the cache. Two problems solved for the price of one.

Speaking of loops, the DBcc instruction really is precious – you should use it whenever possible, and if you can't use it, then reconsider your design. More often than not something is very fishy if your loop can't use the DBcc loop.

## Branching out

Another design consideration is that taking a short branch is slower than dropping through. This means you must analyse your data and estimate the likely outcome, then structure your decision taking so that the logic will, in most instances, drop through. In the case of multiple branches, though, this should be turned on its head – the test with the most likely branch to be taken should go

first, with the least likely at the end. This way you cut down on useless tests.

MOVEM is fast but only if you move more than two registers to the stack, or retrieve three from the stack. And while we're splitting hairs, (An)+ is faster than -(An). But beware, MOVE is an exception here.

## Cycle down

Multiply and divide are very 'expensive' in terms of clock cycles. If you need to perform these calculations with a power of 2 – which is often the case – use bit shifting instructions instead. Each bit shift will halve/double the value. In the case of doubling it's even 'cheaper' to simply add the register to itself. One caveat though, shifting will not always produce a longword result and shifting a negative number instead of divide doesn't work.

Finally, cleaning up the stack is best done with ADDQ. If there are more than eight bytes, though, use LEA instead.

Although using these tips will make your code both smaller and faster, in the end you must choose between speed and size. Unrolling a loop – writing out multiple moves for example – will always be faster because there's no loop overhead, but it uses more space. Partially unrolling the loop may give you the best of both worlds.

## Literature

The ultimate tip overall is to read those Motorola books. For more info contact: Motorola Ltd, ELC, 88 Tamers Drive, Blakelands, Milton Keynes MK14 5BP.

## FASTER COMMANDS

MOVEQ #S0,D0  
CLR.L D0      Clearing a register with MOVEQ is faster than using CLR

BRA.S label  
BRA label      Short branch is not only faster but also smaller in size

DBF D0,label      DBcc is always a good idea

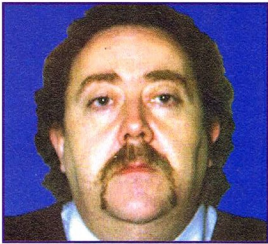
BRA.S down      Taking a branch is slower than simply dropping through down

MULU #S2,D0  
ASL.W #S1,D0      Multiplying by a power of 2 is much better done by shifting

ADDQ.L #S8,SP  
LEA.L SC(SP),SP      Clear the stack with ADDQ but for more than 8 Bytes use LEAxxxx

If you have any questions about assembly programming, send your queries to Don Maple at the usual ST Answers address (page 60) or on-line to: donm@ucon.gun.de





Mac Marsden picks up his crumpled suitcase and trundles into town to deliver the latest batch of definitive GFA answers, or something.

# GFA Workshop

## WHY GFA?

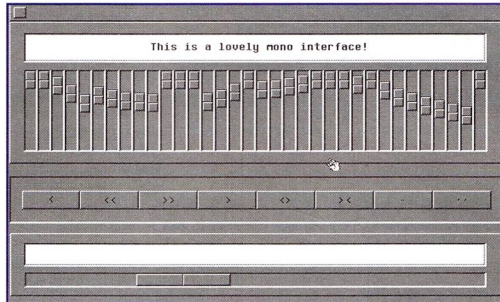
**Q** I've been using an Atari ST for nearly a year now and I've played all the games there are, so I want to do something else for a change. There seem to be quite a few different versions of BASIC available, but which one should I go for? Is GFA Basic really the best of them all?

Sandy Nickleton, Berks

**A** It really isn't a question of which is best, Sandy, it's more a question of which is most suitable for your requirements, because every programming language has its strong points. If you want to write games then we advise you to have a look at STOS – it's quick and easy to learn, and great for shunting sprites and stuff like that about.

If, on the other hand, you want to write programs that will function well under multitasking operating systems such as MiNT, MultiTOS or Magic, then you'd be better off looking at HiSoft Basic. HiSoft Basic comes with a great GEM toolkit, and the latest versions include special libraries that give you access to MiNT and Falcon-specific functions.

GFA Basic scores because it's simple, quick and easy to use, while stuffed with powerful features. If you need to write utilities of all kinds that will run on the ST, TT and Falcon then it's well worth considering. Its



Use AutoZest today to put some zing into your drab old mono interfaces, or we'll give you Clive's money back. (Sounds fair enough to me – Karen)

editor program is a delight to use, informing you if you've made a mistake and, in most cases, formatting your code for you. Sometimes it even adds syntax if you miss it out. This sets it above other languages that often require you to use a simple text editor and wait for compilation before finding out whether you've made any irritating little mistakes.

GFA Basic uses an interpreter, which means you can run your program as you write it, without having to compile it into a PRG file. The advantages of this are obvious – you're in complete control and can spot any errors instantly. GFA's straightforward approach to coding has won it many fans over the years, and many

people started their programming lives using it. There are lots of good programs out there written with it, the QBBS bulletin board system and the FANSI 16-colour ANSI editor to name but two.

**If you don't fancy learning GFA Basic, there's always STOS. Then you can hassle Frank with your problems too!**

## TO GEM?

**Q** I like GFA, but I want to write a program with a customised interface, rather than using the boring GEM menus and buttons, besides which, I'm not very good at handling resource files, no matter how much I try. I've seen interfaces like the ones in Freeze Dried Terminal, and I'd like a program to help me create something like that.

George Parker, Gimley

**A** If you have a high-resolution monitor, and you don't mind your work being restricted to other mono fiends, then take a look at AutoZest. It's a construction kit that you use to design your interface, and saves your design as a chunk of commented GFA code, which you then use as the basis for your own program.

Just add the various procedures, which are called whenever the buttons are clicked, and you'll have a working program in no time. You'll find AutoZest in most PD library catalogues, and we even gave it away on a Cover Disk a looonng time ago (STF40, now sold out – Karen). Another alternative is

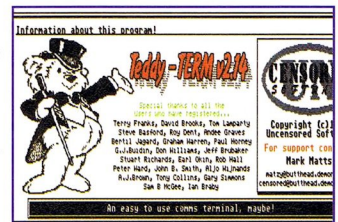
GUI4GFA, which adapts itself for either medium or high resolution when your program runs. Sadly, its author Mark Matts, has since left the Atari world, but if anyone knows how we can contact him, let us know and we'll find out if he's willing to release it freeware.

## SERIAL PORT KILLER

**Q** I wanted to write a comms program in GFA Basic, but I've been told it's too slow for practical use. Surely this can't be the case – it seems very fast to me. Am I flogging a dead horse?

Paul Kwan, Bucks

**A** Paul, GFA is as capable as you want it to be, and lots of comms software is written in GFA Basic. We mentioned QBBS a few questions back, and take a look at the excellent TeddyTerm 2.14 by Mark Matts. TeddyTerm is written entirely in GFA Basic, and works with modems up to and including 14,400bps without any hassle. What you want to do isn't easy, but can be a satisfying challenge. Go for it.



No, we don't know why a hard program has a cute name like TeddyTerm either. Hmm...

**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 60) or e-mail him at: mac@mentor.demon.co.uk**

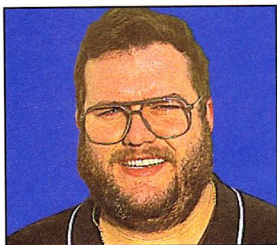


**The Game Creator**




Written by F Lionet & C Sotiropoulos





The world of music and MIDI is a vast, confusing and often dangerous place, but one man stands ready to guide you safely through even the worst pitfalls and snares. That man is Andy Curtis.

# Music & MIDI

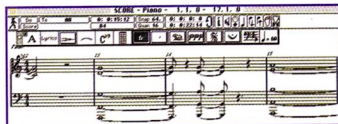
## SCORE PROBLEMS

**Q** I upgraded *Cubase* to version 3.1 on the premise that it'd work on my Falcon. It loads, but the score editor fails with an internal error when you try to do anything with the score. The error isn't always the same, and you can sometimes scroll the score left five times and nothing goes wrong. Load it again under exactly the same set of circumstances, scroll just three times and errors occur.

M S Smith, Manchester

**A** We contacted Steinberg about this and they said that any problems with the score module were due to individual setup errors. However, the simple fact is that many users have problems with the score editor in *Cubase* 3.1, and they can't all be wrong. Perhaps the clue here is the amount of time and effort Steinberg have put into producing *Cubase* Score.

*Cubase* Score offers unprecedented score control, making *Cubase* a complete music DTP package as well as a superb sequencer. Needless to say this involves an upgrade fee, but the package is well worth having if you need advanced scoring facilities. Call



The score module in *Cubase* 3.1 can be a little tricky to use because of its susceptibility to crashing. If you really need to score edit, upgrade to *Cubase* Score.

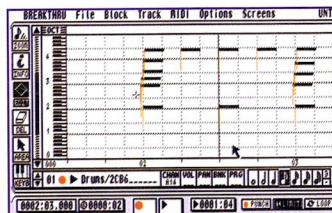
Harman Audio on 0181 207 5050 (Steinberg department). They can supply upgrades to all registered users.

## THE D4 SAGA

Thank you to all who wrote to us in response to Margaret Reay's original query regarding notes 'cutting off' on the Alesis D4 drum module. You were all making substantially the same point, namely that it is possible to assign a 'cut-off' parameter to any sound on the D4, as you would for the open Hi-hat so that it didn't overrun the closed Hi-hat sound.

You put forward the theory that Margaret may well have assigned this parameter to a cymbal sound, so that when the next note is played, the cymbal is cancelled. This is a valid point and we're grateful to

everyone who took the trouble to write in and share it with us. Having had recent experience of this module, we would have to say that the D4 is a little shaky in the polyphony department at times, particularly in comparison to the



Moving sounds slightly before or after the beat as shown can take the pressure off your drum machine without altering the sound to any noticeable degree.

RM50 by Yamaha and EMU drum module.

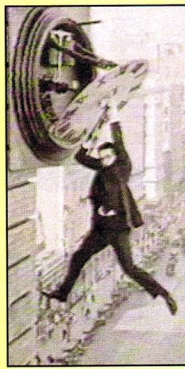
If you are experiencing problems, and have checked that the cut-off parameter has not been set incorrectly, then we advise you to thin out the drum part in your sequence and move some of the notes off the beat by a fraction, thus taking some of the pressure off the machine.

## DREAM ON...

**Q** Is it possible, under one of the MultiTOS programs, to run a sequencer playing a MIDI file and to simultaneously activate the recording function in *Band in a Box* so that it would record my cleaned up MIDI file?

Allary Erik, Belgium

**A** Sorry, Allary. No can do. Only one program accessing the MIDI ports at a time, that's the rule. What you need is another ST to pipe it through. If you need to do this a lot why not invest in a standalone MIDI file player? There are lots of options here, but they all involve spending money. Sorry.



## THIS MONTH'S HAPLESS HARRY...

### EH?

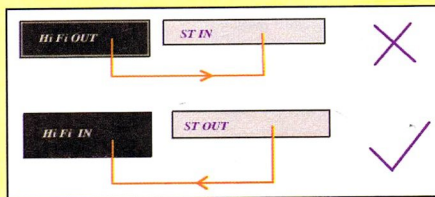
I have an STFM with TOS1.4. I connected the Audio Out plug of my hi-fi to the Audio In pin of the ST's monitor socket, and the music the hi-fi played came directly out of my monitor speaker whenever the ST was switched on. After this my ST never made a sound again. Why is this, and what can I do to fix it?

Jonathan McHugh, Hereford

**stf:** Far be it from us to criticise, Jonathan, but if you read your letter carefully you will see that the clue is in the question. If you have connected an Output from your hi-fi to an Input on your computer, all you will hear is your hi-fi.

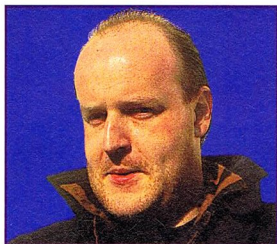
If however, as I suspect you intended, you tap the Audio Output of the computer and route it

through your hi-fi via a line level Input then you are likely to gain the results you were seeking in the first place. If you are still unsure, we recommend you read this reply several times and observe our informative diagram below. In short, you screwed up in a big way, but you should be able to fix it, or at least get it fixed.



If you have any MIDI & Music queries or information, you can e-mail Andy Curtis at: [acurtis@theshack.demon.n.co.uk](mailto:acurtis@theshack.demon.n.co.uk) or send your queries by snail mail to ST Answers (page 60).





**STOS Corner returns in style this month, with more space and more news. Frank Charlton dons his special STOS TechnoTrousers once again.**

# STOS Corner

## NO MORE DISKS!

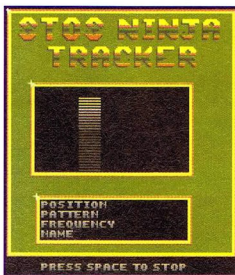
**Q** I'm in desperate need of a STOS file called BASICM.H.PR.G, because I've heard that it will be able to run the upgraded version of STOS with the compiler on my STE. I think this was on STF Cover Disk 41. I have enclosed a disk and a self-addressed envelope so you can just easily add the file for me.

Simon Chu, Hamilton

**A** As I've said before, we can't deal with personal letters, and we certainly haven't got time to copy disks and send them back. If you've missed a Cover Disk you should check out the Back Issues section on page 76, or failing that, try placing a free wanted ad (see page 72). The fix you describe will update your copy of STOS to run on your STE, and if you contact your usual PD library they'll be able to sell it to you. Goodman PDL have an great STOS collection – call them on 01782 335650 for details.

## TRACKING THE STE

**Q** Has anyone written anything to play tracker modules on the STE using STOS, because the STE can play them without any slowdown. If there isn't one, can somebody out



Les Greenhalgh's MOD player – coming soon to an ST near you!

there please write one!  
James Marson, Rotherham

**A** Yep, Ye Olde STOS Tracker is a bit outdated, isn't it? You'll be pleased to hear that Les Greenhalgh, who runs the STOS Mailing List, is currently beaver away finishing his adapted STOS Extension which uses the Ninja MOD replay routines to work with STOS.

I've seen an early beta version of the interpreter Extension, and very tasty it is too! Unlike STOS Tracker, you just use the normal MOD format without any fiddly conversion first, and the sound quality is a lot better. As soon as Les decides it's ready to release, we'll let you know.

## SMEAR CAMPAIGN

**Q** I've been trying to place a stationary sprite against a scrolling background, but the sprite leaves a trail on the background. Adding a WAIT 2 statement stops the smear, but causes the sprite to flicker.

M Y K Hilton, Manchester

**A** First, if you're still using the built-in STOS sprite routines, you really should take a look at STOS Extensions like Misty and The Missing Link. I've mentioned them several times already and with good reason – the sprite routines in The Missing Link are excellent.

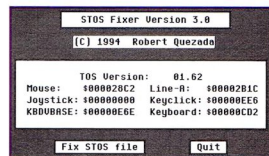
Check your local PD sources for a copy. Looking through the snippet of code you sent in, you're completely missing the WAIT VBL command. Because a TV picture is built up from scanlines drawn by the electron gun, if you move your sprite or background while the screen is only half drawn, you'll see it flicker. Add a WAIT VBL command just before you use SCREEN SWAP to switch between the hidden work screen and the physical one, and you'll lose the flicker. WAIT VBL waits until the electron gun is ready to start drawing a new screen. TV images are updated 50 times a second, so you can see how quick STOS can be!

## LOAD OF OLD TOS?

**Q** I've just written a demo in STOS and I want to give it to my friends, but some of them have different versions of TOS to me. I have an STE, but one of my mates has an old STFM, and his cousin has a Falcon. I've tried the various STOSFIX programs, but they don't seem to work.

Derek Smalls, Luton

**A** The STOSFIX programs work by modifying the compiled STOS program to work with other versions of TOS. Your best bet is to pass your compiled demo to your friends along with STOS Fix 3, which we gave away on Cover Disk 67. Your friends can then use STOS Fix to fix your program to run on their specific version of TOS – although an STFM should run it without any changes at all. stf



STOS Fix performs surgery on your masterwork so that other ST peeps can enjoy it too.

## CASTING THE NET

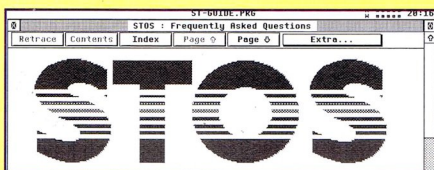
Since I mentioned the STOS Mailing List on the Internet a few issues ago we've seen a healthy influx of new STOS users there. There's a fair amount of STOS activity on the Net, and it's a good source of info too – but don't worry if you're not on-line yet, because I'll be bringing you all the news from the cybersurfing STOSers over the next few months.

Mark Westguard is busy updating his STOS-written BBS Directory to

include a terminal program, so you can nip off for a quick logon to the BBSs in the database.

However, when it comes to getting transfer protocols like ZModem to work from within STOS

he's having problems. If you've programmed comms stuff in STOS, or have any technical details about ftp, please get in touch and I'll pass the info on to Mark.



The STOS Mailing List regularly updates this list of Frequently Asked Questions (FAQs) about STOS.

If you're on-line, you can contact Frank at the following addresses:

Internet:  
frank@tachyon.demon.co.uk  
NeST 90:100/308.2  
AtariNet 51:6/208.2  
FidoNet 2:256/502.28



# AtariNOS know-how

You called Demon Internet, you shelled out your dosh, got yourself an Internet account, uploaded AtariNOS, read last month's tutorial and realised it stopped halfway through. Here, then, is the second half.

**Y**ou may have subscribed to Demon Internet and learnt how to log on to your local Demon server, and communicate with it to use ftp sites, but that's not all that you can do on the Internet – there are many other things to get the hang of. This month, we're going to show you how to cure all known

diseases and put an end to war. After that, we'll show you how to use e-mail and newsgroups, then a short coffee break.

## The e-mail species...

If you've never attempted to use e-mail before, you probably don't yet know what a completely unfriendly system it can be. It's

still the insanely handy, incredibly fast and damned useful system we told you it was a month ago – it can just be a problem to use.

The standard Demon interface, accessible by selecting 'Electronic Mail' from the NOS main menu (as covered last month), is command driven. On jumping into it you're presented with your mail log (a list of the e-mails you've received), which you can read through message by message by hitting [Return]. This will only, incidentally, enable you to view new messages – to view a previously read message you select that message specifically, using the 'P' command.

These commands are used as single letters, followed by any parameters that need to be given. The parameters are separated by spaces. Where you see a parameter in [square brackets], it's optional and can be left out, although this

may change the action of the command in some circumstances. The commands are:

**D [number]** condemns the specified message to be deleted at the end of this session. If you don't give a message number, the current message gets the chop.  
**F address [number]** forwards mail to a user. This enables you to send mail you've received to another user by stating the new destination address and the message number to be sent. Again, if you don't give a number the current message will be forwarded.

**H [number]** shows the message list from the specified number. If you don't give one you'll see the index immediately surrounding the current message.

**L** lists all unmet messages in the Mqueue directory.

**M address** sends a new message to a user at the specified address.

**N mbox** changes the mailbox you're currently examining by stating a new user name.

**Number** If you simply type in a number, you'll travel straight to that message and start reading from there.

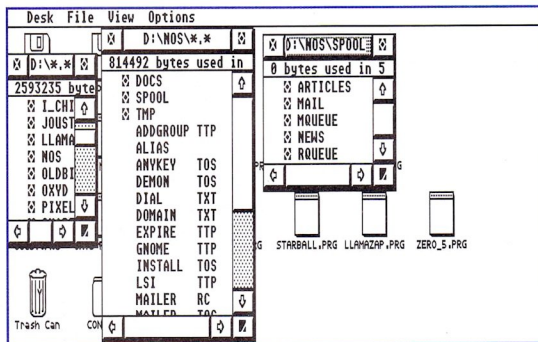
**P [number]** does exactly the same thing as entering the message number without the P.

**Q** quits the electronic mail system, filing and sorting any messages you've read, deleted or dealt with in any of the other ways described in this rundown.

**R [number]** replies to a specified message, or the current message if no number is given.

**S [file]** saves out a message to a specified file. If no filename is given the message will be added to the file named MBOX.TXT in your NOS folder structure.

**T address file** sends mail to a user at the specified address, taking the



That all important NOS menu structure. Make sure it sits in your root directory. Also remember that those equally important mail files are in the spool structure.

## JOIN THE QUEUE, MATE...

Throughout the explanation of the mailer commands, you'll have come across the occasional mention of a queue file. It's really quite important that you know what's going on here.

Queue files are the files full of mail to be processed by your mail reader program and Demon. The file MQUEUE contains all mail to be sent by AtariNOS (or a subprogram of it) to Demon, which is an easier way of dealing with e-mail. These queue files are essentially managed by the NOS

software itself (which means that you don't have to go anywhere near them).

Your e-mail system works as a series of queues. When you send mail, you add it to an outgoing queue, and when you receive it and read it you're removing it from an incoming queue. You can almost think of it as an In tray and an Out tray, with you sitting in the middle reading and writing letters (and throwing the majority of your In tray into the bin... like Jill does).

## Demon Internet Access Software for the Atari ST

### Main Menu

- A. Logon to Demon
- B. Usenet News
- C. Electronic Mail
- D. News Utilities
- E. Edit Configuration
- F. Command Shell

X. Exit To Desktop

Enter choice: "

That main Demon menu. Read last month's instalment to find out exactly what all those other juicy options can do for you.





#### COMMANDS AVAILABLE:

```
m user      send mail to a user
t user file  send mail from a file to a user
f user [msg] forward message to a user
r [msg]      reply to a message
ENTER       show next unread message
msg         show message
p [msg]      show message
s [file]     save message in a file
w [file]     save message without headers
d [msg]      mark message as deleted
u [msg]      mark message as undeleted
+           goto next message
-           goto previous message
h [msg]      list headers starting at msg
n mbox       change mailbox
l            list unsent messages
x           exit without updating mailbox
g           exit with updating
?           This help text
[msg]       - message number, default to current message
[file]      - file name, default to mbox.txt
mbox        - Mailbox name
Press a key...
```

There are a lot of commands to get the hang of with the message system. Just take it easy, breathe deeply and evenly... then go for it! Everything should be okay.

message from the file specified.  
U [number] unmarks a message that's been marked to be deleted. If no number is given, the previously deleted file will be unmarked.

W [file] performs the same task as the S command, except header information is not saved - only the main text of the message is stored.

X exits, without updating any message statuses. This enables you to quit leaving everything as it was when you started.

+ travels forward by one message.  
- travels backward by one message.  
? gives you a list of all the available commands.

#### This is the news

The news editor, *SNews*, is the package you use to read your news. Once again, this can be

selected from the main menu, but you can also run it directly from the NOS folder, which makes life much easier. The package enables you to select the newsgroup of your choice, the thread within that group and the item along that thread. To do this, use [Tab] to select the appropriate option in the menus and hit [Return] to confirm your choice. You can read the item using the various keys described on the Help screen (hit [H]).

The important parts to understand about newsgroups are the programs that support the *SNews* system - addgroup, rmgroup, unbatch and expire. These deal with the news files and, in particular, the NG (newsgroups) file. You should leave these programs alone, they won't

## RC? I SEE...

If you look in your base NOS folder, you should find a file called MAILER.RC. If you look in the News folder (itself embedded in the spool folder), you should find a further file called SNEWS.RC. Far from being yet more files with unhelpful extensions, these are information resources for the mail and news programs (but can you guess which is which?).

Although you entered an unfeasibly large amount of statistics and information when you edited your configuration last month, you're going to have to go through the process again, this time working on the .RC files. The files themselves contain all the instruction you need - just load them into a word processor (or cut-down text editor) and work on them there.

appreciate it if you do anything to the NG file unless you're using them. This file contains the details of every newsgroup you want to receive and sits in the same folder as SNEWS.RC. Those programs in full are as follows:

Usenet: Newsgroups:  
comp.sys.atari.advocacy when prompted for a group.  
Rmggroup A shortened 'remove group', I can't possibly think what this routine does! You'll have to state the full newsgroup name again, of course.

#### Go forth and e-mail

That's it. There is no more. This is the end of the *AtariNOS* tutorial. You should now know how to take part in the whole interactive on-line thing using only an ST, a Demon account and a copy of *AtariNOS*. Next month, Frank Charlton will explain exactly how you can go about getting all those tasty Web pages on your ST. Till then, have fun. Oh - and don't forget the modem. Or your password. Or to make sure the NOS folder sits in the root directory of Drive C. Oh ho. *stf*

## CONFUSED?

*AtariNOS* is a package designed for accessing the Internet (STF 65), and downloading all that great information (STF 68) free of

charge. The first part of this tutorial (STF 68) is essential if you want to understand what's going on. Why not buy a back issue (page 76)?

The addgroup programs are in TTP form, meaning that you'll be prompted for information as the program starts to run.

OPEN APPLICATION  
Name: ADDGROUP.TTP  
Parameters:

OK

Cancel

### Demon Internet Access Software for the Atari ST News Utilities

- A. Add a Newsgroup
- B. Remove a Newsgroup
- C. List Active Newsgroups
- D. Unbatch News
- E. Expire Old Articles
- F. Reindex a Newsgroup

X. Return to Main Menu

Enter choice: █

Another way to access those newsgroup programs is using this, the Newsgroup menu, which you access from the main Demon menu.

```
# such a command.
#
# For example using Brief ...
#editline="n"goto_line %d"
#editline=
# Ted does not support this option.
#
# home
# The full path of your home directory (used to find your signature file).
#
#home=~nos
#
# mailqueue
# The full path of the ka9q outbound mail spool directory.
#
#mailqueue=~nos/spool/nqueue
#
# quotemark
# The line prefix for quoting included articles
# If the "_" (underscore character) is placed in this item, it is
# converted to a space when quoting.
#
# quotemark=)_
#
```

Those .RC files, complete with a comprehensive set of instructions telling you exactly what information you need to enter, and where you need to enter it.





# Morphing with Apex

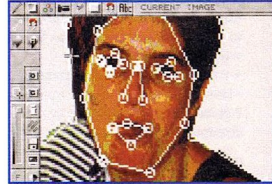
Jill – oh my – she’s turning into... Ugh... That’s hideous. It’s... it’s... Nick... Simon’s got hold of APEX media and he’s out for revenge!



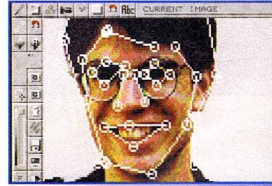
**1** Load the image you plan to play with into APEX’s frame one. This assumes that you’ve started afresh with APEX, and that there are no other frames in memory.



**2** Load the destination image into the final frame. To do this, use the frame select bar to travel to the last frame, then use the ‘Load’ option under the Disk icon once more.



**3** Add the warplines to your first image. These lines are your way of stating which part of which picture should end up where. To morph a face you’d outline the eyes, nose and mouth.



**4** Switch back to your final image and adjust the warplines (without adding or deleting any) using the warpline dragging tool. The lines should now fit each image, rather than being identical.



**5** Make sure the AMR icon is set to A, then hit the Go icon to morph your image. If you’re lucky, you too will be able to produce Su Pollard.

**C**ast your mind back. No, further than that – all the way to the last issue, in which we reviewed APEX media, an incredibly powerful 24-bit animation package for the Falcon (available from Titan Designs ☎ 0121 693 6669).

If you remember, we gave it a highly impressive 93%. Why? Well, it contains everything you’d ever need from an art and animation package. It really is second to none, especially when it comes to special effects such as morphing.

Not only is morphing highly effective (in an overly-used Hollywood kind of way) but it’s also damned good fun. Of course, it isn’t quite as easy as it sounds, and a tutorial on the process can only help. So, budding special

## WASN'T HE ON TAKE HART?

No, not that Morph. If you don’t know what that morphing means, you obviously haven’t seen either *Terminator 2* or the Family Credit TV ads. Morphing is an effect by which one image turns smoothly into another. Michael Jackson turns into a car, the Esso tiger turns into a car, and the T1000 turns into, well, anything he wants to... After all, no one’s going to argue about it. Although the effects get

more sophisticated the more money you pump into them, the technique is the same. The initial image is scored with lines, which define its key shape, and these lines are then mapped in their destination positions on the final image. The computer ‘simply’ calculates the movement of these lines between the two images, and the movement of the pixels following those lines, creating a metamorphosis effect.

effects wizards and wannabe animators, let’s morph.

Following the steps shown on the right, you can morph a picture effectively over a series of 20 frames. Of course, you could

add other distortions and effects over the course of as many frames as you wish, but we’ve just given you the essentials here. After all, you can be creative in your own time, right? Have fun. *stf*

## GOT A PROBLEM?

So you did as you were told, and created your morph, but it didn’t look quite as good as you expected, eh? Here are a few ways to get your smooth, fluid objects to

flow into each other with the greatest of ease.

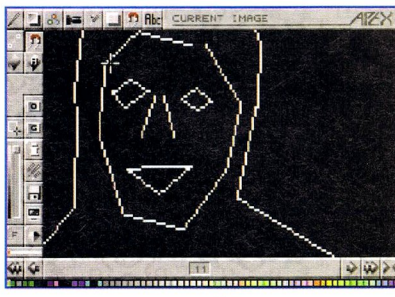
- If your images have a lot of background, make a point of blanking out any irrelevant stuff with a colour that isn’t used in the subject image (pure bright cyan, magenta or yellow, for example).
- Use as few warplines as possible. The more you use, the mushier your image will become.

Remember that if you add a warpline to one image, it’ll be automatically be added to every other frame, and will need somewhere to go.


Don’t let your warplines sit too closely together, otherwise the morph algorithm will attempt to stretch too few pixels over too great an area.

If your animation gets mushy or unclear during the middle frames of your morph, try rendering them on their own. To do this, travel to the frame, then hit ‘Go’ (with AMR set to ‘F’) before calculating the whole animation. This will enable you to see what it looks like. You can then move your warplines to tidy up the middle frames.

Frankly, this one looks a lot better than Nick, Jill or Su Pollard. Oh yeah – warplines – “warpline 5 – engage!” Aha ha!





	<p>Long ago and Far away there was a Kingdom. People in this kingdom had become very frightened. One day a dragon flew from the mountain and breathed fire everywhere.</p>
<p>long ooo buzz guil near neoc cheer horn clank horn clink horn clap wind</p>	<p>quiet roar scream scream scream scream scream</p>

hornH, roarH, sneezeH

menu scene story nope play wait \* loop swap

First, Goldilocks went to the kitchen and ate porridge on the table. She was hungry so she tasted it. Daddy Bear's was too hot so lay on Mummy Bear's too sweet.

5

Goldilocks      porridge  
first      saw      went  
kitchen      table

menu scene sound pages 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100 101 102 103 104 105 106 107 108 109 110 111 112 113 114 115 116 117 118 119 120 121 122 123 124 125 126 127 128 129 130 131 132 133 134 135 136 137 138 139 140 141 142 143 144 145 146 147 148 149 150 151 152 153 154 155 156 157 158 159 160 161 162 163 164 165 166 167 168 169 170 171 172 173 174 175 176 177 178 179 180 181 182 183 184 185 186 187 188 189 190 191 192 193 194 195 196 197 198 199 200 201 202 203 204 205 206 207 208 209 210 211 212 213 214 215 216 217 218 219 220 221 222 223 224 225 226 227 228 229 230 231 232 233 234 235 236 237 238 239 240 241 242 243 244 245 246 247 248 249 250 251 252 253 254 255 256 257 258 259 260 261 262 263 264 265 266 267 268 269 270 271 272 273 274 275 276 277 278 279 280 281 282 283 284 285 286 287 288 289 290 291 292 293 294 295 296 297 298 299 300 301 302 303 304 305 306 307 308 309 310 311 312 313 314 315 316 317 318 319 320 321 322 323 324 325 326 327 328 329 330 331 332 333 334 335 336 337 338 339 340 341 342 343 344 345 346 347 348 349 350 351 352 353 354 355 356 357 358 359 360 361 362 363 364 365 366 367 368 369 370 371 372 373 374 375 376 377 378 379 380 381 382 383 384 385 386 387 388 389 390 391 392 393 394 395 396 397 398 399 400 401 402 403 404 405 406 407 408 409 410 411 412 413 414 415 416 417 418 419 420 421 422 423 424 425 426 427 428 429 430 431 432 433 434 435 436 437 438 439 440 441 442 443 444 445 446 447 448 449 450 451 452 453 454 455 456 457 458 459 460 461 462 463 464 465 466 467 468 469 470 471 472 473 474 475 476 477 478 479 480 481 482 483 484 485 486 487 488 489 490 491 492 493 494 495 496 497 498 499 500 501 502 503 504 505 506 507 508 509 510 511 512 513 514 515 516 517 518 519 520 521 522 523 524 525 526 527 528 529 530 531 532 533 534 535 536 537 538 539 540 541 542 543 544 545 546 547 548 549 550 551 552 553 554 555 556 557 558 559 560 561 562 563 564 565 566 567 568 569 570 571 572 573 574 575 576 577 578 579 580 581 582 583 584 585 586 587 588 589 590 591 592 593 594 595 596 597 598 599 600 601 602 603 604 605 606 607 608 609 610 611 612 613 614 615 616 617 618 619 620 621 622 623 624 625 626 627 628 629 630 631 632 633 634 635 636 637 638 639 640 641 642 643 644 645 646 647 648 649 650 651 652 653 654 655 656 657 658 659 660 661 662 663 664 665 666 667 668 669 670 671 672 673 674 675 676 677 678 679 680 681 682 683 684 685 686 687 688 689 690 691 692 693 694 695 696 697 698 699 700 701 702 703 704 705 706 707 708 709 710 711 712 713 714 715 716 717 718 719 720 721 722 723 724 725 726 727 728 729 730 731 732 733 734 735 736 737 738 739 740 741 742 743 744 745 746 747 748 749 750 751 752 753 754 755 756 757 758 759 760 761 762 763 764 765 766 767 768 769 770 771 772 773 774 775 776 777 778 779 780 781 782 783 784 785 786 787 788 789 790 791 792 793 794 795 796 797 798 799 800 801 802 803 804 805 806 807 808 809 810 811 812 813 814 815 816 817 818 819 820 821 822 823 824 825 826 827 828 829 830 831 832 833 834 835 836 837 838 839 840 841 842 843 844 845 846 847 848 849 850 851 852 853 854 855 856 857 858 859 860 861 862 863 864 865 866 867 868 869 870 871 872 873 874 875 876 877 878 879 880 881 882 883 884 885 886 887 888 889 890 891 892 893 894 895 896 897 898 899 900 901 902 903 904 905 906 907 908 909 910 911 912 913 914 915 916 917 918 919 920 921 922 923 924 925 926 927 928 929 930 931 932 933 934 935 936 937 938 939 940 941 942 943 944 945 946 947 948 949 950 951 952 953 954 955 956 957 958 959 960 961 962 963 964 965 966 967 968 969 970 971 972 973 974 975 976 977 978 979 980 981 982 983 984 985 986 987 988 989 990 991 992 993 994 99

20 effects available for each story, and you can build up a soundtrack by clicking on each sample in turn. As you build up a collection of effects, they'll be displayed as a string at the bottom of the screen.

The two arrows determine whether the next selected sample is played forwards or backwards (ideal for those occasional satanic rituals), while clicking on Wait adds a delay measured in fifths of a second and can be set to any length. Loop and Sweep enable you to loop a sample in either direction. These two functions work best in conjunction with the Wait option.

Any mistakes can be rectified with the Oops button: clicking on it with the left mouse button removes the last sample you selected, while the right button removes the entire string. Play, of course, gives you a chance to hear what the complete sound effect will sound like.

## Save it

Once you've altered the story as much as you want, you can save it as a single file entitled NOREGYET. You then play your story by selecting Play from the main menu.

If you want to create a whole new story, with your own sprites and backgrounds, then you'll need to use the Editor program. To find out how to get the most out of this feature, you really ought to register the program – it's only a measly £10, and could inspire the author to create more masterpieces. *stf*

Follow last issue's Cover Disk instructions to get the program running, then, once *Magic Storybook* has loaded, pick one of the stories to edit. After it's loaded, you'll find yourself at the Picture Designer screen, where you can alter the story.

Two general points first. You move between pages of the book

by clicking on the left or right of each page. It's also worth bearing in mind that you use the left mouse button for accessing options or cycling through different screens, and the right one for quitting options (such as the Oops icon) or to return to the first screen.

The Picture Designer screen (see the accompanying annotated screenshot) enables you to create the pictures for each page of your book. These are made up of a background image coupled with animated sprites, which you paste on top to give the story more life.

## Storytelling

To alter the text of your story, just click on the Story icon. There're a couple of ways you can enter text.

One way is to click on the relevant words (cycle through the selection by clicking on the View icon), along with any punctuation you need. Clicking on Oops deletes text, one word at a time.

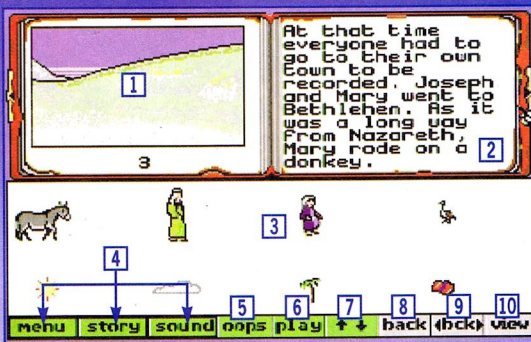
If you're in 8+ mode, however, you have more words available. You can also click on Edit and type directly on screen as you would with a word processor. All the usual keypresses are available, including [Backspace] and a wider range of punctuation marks. Click the right mouse button when you've finished.

## Sound effects

Clicking on Sound enables you to access the sound effects for each screen. There are between 15 and

## PAINTING THE PICTURE

- 1 The background image upon which you paste your sprites.
- 2 The text screen, outlined below.
- 3 A set of ten sprites just waiting to be pasted on to your background image.
- 4 Clicking on any of these accesses the other parts of the program.
- 5 'Oops' enables you to remove sprites from the background image by clicking on them when they're flashing.
- 6 'Play' demonstrates how the screen will look when animated.
- 7 Enables you to alter the z-axis of the highlighted sprites, which brings them forward (left mouse button) or moves them further back on screen (right mouse button).



- 8** Enables you to add to the background image itself in the form of blocks, such as trees and clouds. Use the cursor keys to select different blocks.
- 9** Clicking here enables you to alter the background image by cycling through those available from other pages.
- 10** Click here to cycle through all of the sprites available. Ten are displayed on screen at once.





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Panasonic EXP 1120 printer, very good condition £240, £80. Also Atari ST Internal Disk Drive (DSDD) £20. Phone 0115 253 3568.

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Neodisk 3, £10. Elite 2, Bat and Sound Cartridge, £8 each. F15 Strike Eagle 2, Ishar, Epic, Utopia & New Games, £4 each. Borodino, Heroquest, £3 each. Phone Steven on 01709 829298.

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Atari STE 1MBYTE upgrade, lots of games, mouse, joysticks. Some games new £180. Phone 01929 623765.

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30 original STf games for sale, £2 in £1. Thunderhawk, Lethal Weapon etc. Chris 0121 559 2849 after 6pm.

VIDST, RGB Splitter and Software, £60. Will split. 2 x 1MByte 30 Pin Simms. £45 2MBYTE upgrade STf. Phone Chris after 6pm on 0121 559 2849.

MEGA ST4, mono monitor, 170MBYTE Hard drive, hand scanner, 100+ magazines with coversdisks, Geneva, Cadiback, NDI, Calligrapher. Sensible offers for P&E, Flat 39, Alexander Court, University, Stirling FK9 4NL.

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Logo for Atari also primary school software eg, Playdays, Fun School 4, Thomas, Pat etc. Call Mark on 01255 430570.

Please help. I want the wheat to obtain more money on railroad tycoon? Please write, Mr B Taylor, 89 Beechwood Avenue, Salisbury on Thames, Maiden TW16 3UN.

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STOS M cartridge and manual, solution to Hacker. Many thanks to those who have helped me. I have also obtained Steve Hislop, HMV Britannia, BFPD 239.

417X HD Recorder & Mod Master, £1700. Sun Cow Donaghadee Road, Bangor, Co Down, BT20 4PP, N. Ireland. Or phone him on 01247 453812.

Help me please Looking desperately for Elite 1 and 2, and canteract on the Atari STf computer. I have a Manual included. I will pay full price for both programs. Ask for Patrick in Belgium 00 32 43 049 5027, 2 evenings.

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Wanted. Replay 16, 550. Phone Steve on 01222 701279.

Hint books for Sierra Police Quest 1 and 2, and Space Quest 1, 2, and 3. Please contact 01522 521507.

Ferrari Formula 1, Treasure Trap, Super Cycle, Buggy Boy, Wreic Le Mans, Ghoul & Ghoul, Blood Money, Original copies, write with price; other old games wanted by STE. K Simpson, 80 West Pleasant Road, Bromham, 105 9SR.

Wanted: Breakout 2. Phone Steve on 02229 701279.

Wanted One Elite (Freibird) with manual. Write to: P Webber, 4 Firbank Road, ST. Albans, Herts AL3 6JL.

Wanted. For 520 STFM. Pedigree Program for Birds or Animals. Phone with details and cost 01246 569693.

Wanted - desperately - need a 520 STE. I have 25, 01521, new if possible. Phone with details and cost. Day - 01132 450120. After 6pm - 01924 278936.

Wanted. Gods by Btmap Brothers. Tony 01462 814667.

Wanted. Questmaster 2. 2 or Upgrade from V2. 2 items also wanted. Contact J Lukas, 22/14 Europa Road, Grange.

Wanted. Bismark Scenario for Turcan Research Dreadnoughts, Dogfight by Microprose. Originals only. Will pay postage. Call Mark on 01579 622027.

Wanted. Cretaceous Dinosaur, £15.99. Edinburgh EH1 9NP.

Wanted. Hand scanner and software to do ST. Also good WDP program needed. Call Marlyn 015395 35650 after 6pm.

Please help me! I'm in desperate need of Final Fight. Willing to loan or purchase, please contact: M Reid, 24 Heatheringham Gardens, Top Valley, Nottingham, NG5 9EA.

Wanted. High Res monitor SM124, SM125 or SM144. Please ask for Tony on 01994 256955.

Jan DA, 300, 4MBYTE RAM, 65MBYTE HD, 210MBYTE TKS Omega Software. Phone on 01582 593895, any time.

Gods by Renegade/Bt Map Brothers wanted desperately. If you're willing to sell, please phone on 01462 814667.

Jaguar games wanted. Tempest 2000, Doom and Chequered Flag £40 each. Also, Kasumi Ninja for sale just £35. Write to me, I'll write back if interested: L Harris, 15 Darwin Close, Walsgrave, Coventry, CV2 2BZ.

Wanted. The Game of Thrones, by George R.R. Martin, 2, Tropic Eclipse, The Crypt Chase Master 2, Darkside, I'd buy or swap. Also wanted, Bubble Bobble. Phone Gary on 0117 904 0607.

Falcon 030, 4/65, Monitor adapters, NVD1, Speedo - GDOS, Screen Blast, £500. 789 18r 14r 'SVA Monitor £175, Calamus 1.09N £300, Superbase Pro £30, AV Keyboard £30. Phone 01249 53148.

Excellent pictures, 256 colours or black and white. Atari ST or Falcon, write to: H. Kral, Salersstr. 17, 71334 Wablingen, Germany. I will send you my offer.

Wanted: contacts for swapping modules for Golden Dawn module disks. Send list to: Anthony, 6 Middlebire Drive, Northmoor Park, Wareham, Dorset BH20 4SD. 1007 Reply! Kasumi Ninja to swap for Doom, Tempest 2000 or Chequered Flag. I'll write back if interested: L Harris, 15 Darwin Close, Walsgrave, Coventry, CV2 2BZ.

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## MESSAGES

Anybody out there know of GO for the ST? (amazing, simple Japanese Board Game). Could anyone write one Frank, 144 Palgrave Road, Gillingham, Kent ME14 4BS.

Christian Diskmag - Revelations available now! £1.50 to: Thomas Smith, 11 Ballygowan Duns, Kilscoy, Bangor, Co. Down BT19.

NW4.5 is now available. £2 + S&E to NVA 5, 91 Elm Tree Ave, Kilburn, Belper, Derby DE56 0NN. Includes two full programs.

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To Matthew, aged 9, from Bury. Please write to the Panther Owners Group and tell me your address. POG is at 46, Whiteley Crescent, Wigan, Lancs, WN1 2PP. Thank you.

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Help! I keep finishing bottom of the league in Championship Manager '93. How do you write? Owen Hewlett, 14 Little Park Road, Walsgrave, CV2 2BZ.





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**CGS ComputerBldg:**  
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**Clive Parker:**  
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 micros.hensa.ac.uk/micros/atari/  
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**Atari ST Usenet newsgroups:**  
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 comp.sys.atari.st

comp.sys.atari.st.tech  
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**Atari Web sites:**  
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 http://www.dl.ac.uk/MISC/ATARI/  
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This month Simon Forrester averts a few world catastrophes, saves a dozen cats, helps hundreds of old ladies cross the road and still finds time to pull this month's cheat column together. What a hero.

# Gamebusters

**F**irst up this month is our £25 winner, **Mark Boettcher of Loughborough**, who's sent in a wealth of tips on numerous games.

## Advanced Rugby Simulator

After you've scored a try, press [F1] instead of [Fire] to get back to the match. If you then press the [Fire] button another try will be added to your score.

## Arkanoïd

Type **da1ey 88** on the title screen for nice things.

## Balls

It's level code time, starting with level five and continuing every four levels. The codes are: d mode,



mellow, k bush, delius, t webb (sounds familiar), joshua and cooper.

## Captain Dynamo

Type **purple rain** on the high score table for infinite lives, and use the [+] key to skip levels. To reach the level warp on level one, when you come to the end of the level, jump on to the right-hand spring and push to the right.

## Final Blow

Pause the game while you're fighting and press [F10] six times, unpauing again for infinite lives.

## Flying Shark

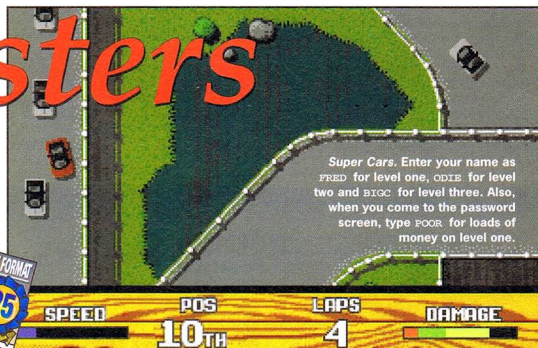
When (or perhaps, if) you get to enter your name on the high score table, use HSC for infinite lives,

KDJ for invulnerability, RLH for acid men, JGL for full

fire-power, and RAB for immunity. You must hold down the [5] key on the numeric keypad while you type in the last letter though, or the cheat won't work.

## Pit Fighter

Type **1obsters** during the game to activate cheat keys. You can now go to any level by hitting the corresponding number, the championship by hitting [C] and the elimination match using [L].



**Super Cars.** Enter your name as **PRSD** for level one, **CDIZ** for level two and **BLOC** for level three. Also, when you come to the password screen, type **POOR** for loads of money on level one.

## Predator

Hold down [F10] for extra energy.

## Rodland

Enter **big boss** on the high score table for infinite lives.

## Rubicon

For infinite lives, pause the game and type \*

## Teenage Mutant Hero Turtles

For infinite lives enter the level code as 8859 - 1506, then the level code that's actually asked for.

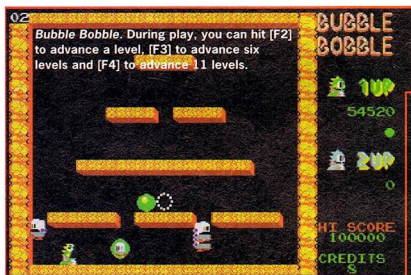
## Turrican

Type **bluesmobil** for infinite everything.

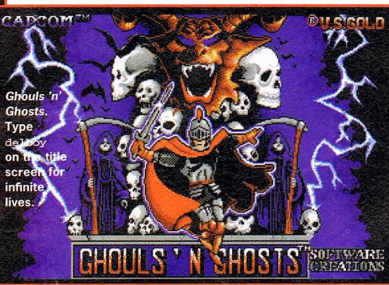
## Viz

Type what a large set of bollocks on the character selection screen and you should then hear a funny noise that sounds absolutely nothing like a large haddock hitting the floor. Hit a number between [1] and [5] on the keyboard and you'll be taken to the corresponding level. *stf*

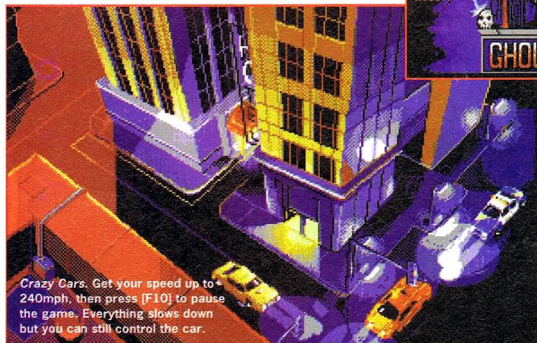
**Don't forget! Send your cheats to: Gamebusters, ST FORMAT, 30 Monmouth Street, Bath BA1 2BW.**



**Bubble Bobble.** During play, you can hit [F2] to advance a level, [F3] to advance six levels and [F4] to advance 11 levels.



**Ghoul's 'n' Ghosts.** Type **da1ey** on the title screen for infinite lives.



**Crazy Cars.** Get your speed up to 240mph, then press [F10] to pause the game. Everything slows down but you can still control the car.

## MORE! MORE!

Next comes **CP Hammond**, the **Bedfordshire** man with cheats for **Strider 2** and **Chuck Rock** (no prize money, though).

## Strider 2

While playing, type **swift**. A cheat icon should appear on the left-hand side of the screen. You can now

press [E] for more energy and [D] to destroy the robots.

## Chuck Rock

To help you through the game, try typing in these cheats on screen: **estrano** for fly mode, **mortimer** to skip zones by pressing [F1] to [F10], turn frame to skip levels by pressing [1] to [4], and **uncle sams** for infinite lives.



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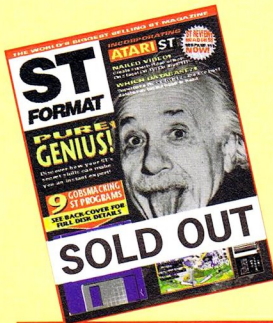
# Back Issues



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*, *Graftek* 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 Hero* - 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*, *MIDGrid Pro*, *Rorke's Drift*...



ISSUE 61

AUGUST 1994

Disk: *Well 'Ard*, *Twinn*, *Digit 1.1* demo and *Atari View 3.8* Inside: Serious software review; art packages rated Reviewed: *3D Calc*, *Kobold*, *Diamond Back 3*, *HP Chrome 2.5*

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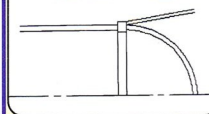
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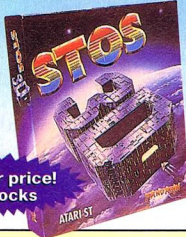
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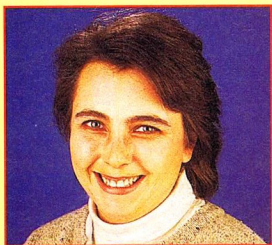
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# Feedback

ST FORMAT  
APRIL  
1995

Your chance to have your say. Whether you want to bang on about the ST scene or your Aunty's troubles with gout, send your crafted prose here!

## Better to be safe

I'm writing this letter so that people can learn from my mistake. After various compatibility problems I took my hard drive to the Post Office and sent it back to Gasteiner. Two weeks later I phoned Gasteiner, but they said they hadn't received it yet. It is now five months and I haven't heard a thing - the drive has gone taking my money with it.

I can't claim from the Post Office because I sent the drive First Class and it wasn't insured. The card that I bought it with also has no insurance. My advice to anyone sending expensive hardware is to make sure that you are protected against loss. Another £3 would have saved me £360!

Paul Hill via e-mail

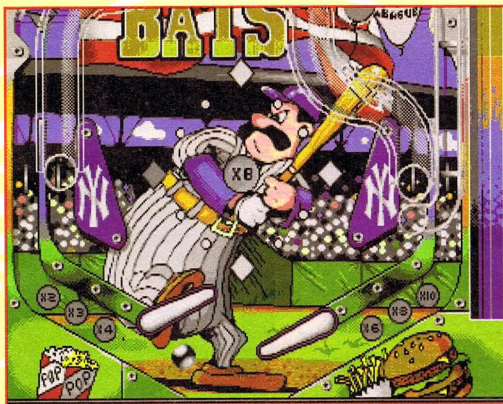
stf: Be warned!



Don't fall victim to the 'It'll never happen to me' syndrome. Always, always, always make sure you insure your kit before trusting the Post Office with it.

## Disappearing act?

Can you tell me what happened to Merlin PD? After reading your review of *Obsession* I rang Merlin and ordered a copy, which I duly received. Unfortunately disk two was faulty.



Obsession just one of the fab games from the recently relocated Merlin PD.

I rang Merlin again, they said no problem - send the disk in and we'll send a replacement. After a week I still had no disk, so I rang again. All I got was the BT message saying the number had not been recognised. Enquiries to the operator confirmed the number had been disconnected.

So, what happened to Merlin PD? Am I now the proud owner of a useless half copy of *Obsession* as well as being £24.95 poorer? AC Conniff, Burgess Hill

stf: No, not at all. Merlin have simply moved offices. Their new address and phone number can be found in this month's ST Directory on page 73.

## Get serious!

I just have to put pen to paper to express my sorrow over what is happening to the ST magazine scene. A lot of people will have been saddened at the untimely demise of *ST Review*, which during the past twelve months has gained much credibility on the ST front.

As an older user (serious and games) I share the worries centred on *ST FORMAT* being the only ST magazine on the market. I have been a subscriber for a number of years now and have seen many changes, some of which I don't believe were beneficial. I have

strong reservations about the comic book style and the unfunny language that's often used. I suspect a number of your readers are in fact 'older', and as such are not amused with the schoolboy humour and language.

I'm also concerned at *ST FORMAT*'s value for money, as the numbers of pages seem to be diminishing in comparison with other computer mags (including *ST Review* which contained the same number of ads). It doesn't seem many issues ago that we were treated to 130/140 pages whereas now we don't even get 90.

You at *ST FORMAT* have an important part to play in the life of the ST and I wish you well in spite of the above reservations.

JM Freeman, Sheffield

stf: *ST Review* and *ST FORMAT* were always very different magazines and, to a certain extent, they were doing different jobs. We are aware of the needs of more serious users and our increased responsibility to the ST market in the light of the recent mergers - indeed, the growing *ST Answers* coverage and new practical approach of recent features is an attempt to save the appetite of the more serious STers.

As for the value for money aspect - yes, we'd love to do more pages, but as more companies leave the ST market the ad revenue simply doesn't allow it. *ST Review* did have more pages with the same number of ads but, as recent events have shown, it couldn't maintain that position in the long term. We hope to be

## COVER STORY

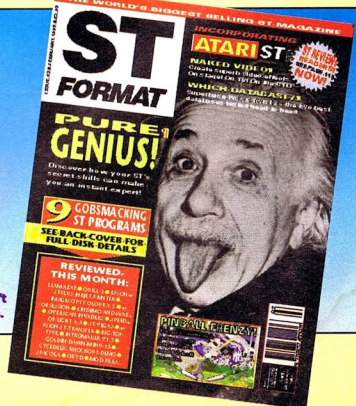
What a terrible front cover to issue 67! I'm not devoid of enjoying a laugh, but I could see nothing funny at all in that inane face with a tongue poking right out at me on the front of a computer magazine. To repeat this picture twice more on the inside pages merely aggravated the situation. There must be some reason why you thought it was appropriate to use the picture on the front cover (and twice inside). If I were to find the explanation reasonable perhaps I'd be able to be a bit more understanding.

Herbert Spencer, Maidstone

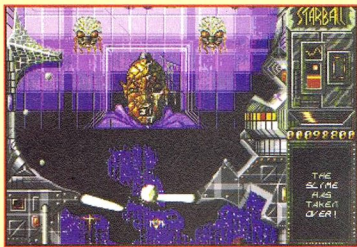
stf: Oh dear! That INANE face, as you put it, just happens to belong to the greatest genius of the

Twentieth Century: Albert Einstein. And that particular photo is the single most famous shot of the revolutionary physicist. This alone made it an apt image to promote our Pure Genius feature, which tackled programs that could increase your knowledge of the world and all the things contained therein. As for repeating the image on the contents page and at the start of the feature, this is deliberate policy that makes the cover feature easier to find. I'm sorry if you found it offensive, but you're the only person we know of who suffers from tongue-phobia.

Sticking your tongue out at a camera isn't big and it isn't clever... unless your name's Albert Einstein, that is.







**We don't bother playing this game any more – it's much more fun just asking Nick why it won't install properly. By the way, has anyone got a strait-jacket we can borrow? No reason... just wondering.**

here for a long, long time to come, but unfortunately, in the hard world of business, that means showing a profit.

## Starball



I've just spent a frustrating couple of days trying to decompile the *Starball* program from issue 64's Cover Disk. The instruction at step five to select Drive B is what has me stumped. Nowhere does it explain how to do this. I've tried changing the line 'A:\' in the file sector box variously to 'B', 'B:', 'B:\' and 'B:\STARBALL' but I always end up back at step three. Could you please help.

Thanks by the way to *ST FORMAT* for putting something on the Cover Disk that can be run on a stock standard STFM, which mine is. One day I'll probably get round to getting it upgraded, but in the meantime I have the mortgage to pay and the kids to put through school.

Thanks for your patience  
Michael Skurrie, Victoria,  
Australia

*stf:* Your problem is a common one for users of TOS 1.02, Michael, and lies in a fault of the file selector. As is now stated in step two of the 'Getting started' section of the Cover Disk pages, when you select Drive B using the command line, you need to replace 'A:\' with 'B:\' and then click on the Close box icon. Do not press [Return] at this point or click on OK until after you have been told to insert disk B into Drive A.

If your ST only has 512K of memory you'll also come up with a lack of memory message when trying to decompile *Starball*. To get round this (due to a mistake on Nick's part, freely admitted in issue 65) you need to open up the *STARBALL* folder on your Cover Disk and copy the *STARBALL.LZH* file across to a blank disk. Once done, re-boot your machine with the blank disk in Drive A, open it up and click once on *STARBALL.LZH* to highlight it. Rename the file to *STARBALL.TOS* using 'Show Info...' from the File menu and then double-click on it to dearchive the files. Once done, delete *STARBALL.TOS* and re-boot your machine. *Starball* will now load automatically. And it's as complicated as that, really.

## Rack 'em up



Let me begin by saying that I'm a long time Atari user (about 13 years now) and I have been reading *ST FORMAT* for nearly four years. *ST FORMAT* will always be on my shopping list – great work. The Cover Disks are invaluable and so are the articles.

I've used so many of your programs and learned so much from your articles – my STE would be lost without you.

Now for the reason I'm writing. I noticed a reader's question from issue 66 in the Help section asking if there is anyone around who's making rack mountings for the ST. I believe I have the perfect solution: a large company in Worcester, Massachusetts custom designs all types of expandable, high quality office furniture. Each design can be custom configured using several types of shelves and worksurfaces at various heights and strengths, each can be reconfigured at any time, added to, removed from or expanded to unlimited new dimensions.

I can highly recommend these units to anyone, even Future Publishing. For info or to order catalogues, contact Wright Line Inc on 001 508 852 4300 – remembering to take into account the time difference between the UK and the East coast of the USA.

Steven Anderson, Mass, USA

*stf:* Have you ever thought about selling insurance?

## A world of info



I'm writing in response to Robin Mthawani's letter about comms, and your rather worrying reply. I really didn't mind one article on the Internet some months ago, but when it comes to taking up half the magazine with a subject that one quarter of your readers enjoy and the other three quarters couldn't care less about it seems senseless to say the least.

I am of course referring to your statement that you'll be running reports on comms every

month – I just hope it isn't as big as the one you write on the Internet.

Being a musician, I really don't want to know about how good the latest BBS is, and you comm users out there couldn't care less about how good *Cubase* is. So, if you don't publish the report on comms everyone will be happy.  
Richard Deaville, Littleborough

*stf:* And if we axe the MIDI column in *ST Answers* all the comms fans will be happy, and if we cut all the game reviews the 'serious' enthusiasts will be happy, and if we cut all the serious reviews all the gamers will be happy... I could go on, but I think you get my drift. *ST FORMAT* is an all-round mag, we try to cover everything in as much detail as we can and encourage all our readers to get the most out of their ST.

When it comes to comms, though, it doesn't matter if you're a regular Net head or not – the Internet covers absolutely everything, including loads of music stuff (MOD, 4L, AVR, GM MIDI files, musical scores, and offers you the chance to swap gossip and tips with thousands and thousands of other computer musicians). The Internet is possibly the greatest social revolution of the last 50 years and, given a few years, it will become a routine part of everyone's lives. Enough said? *stf*

If you're at all interested in life, the Internet has something to offer you. If you're not, why are you still breathing?

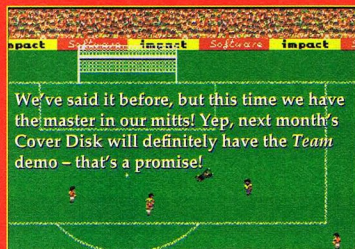


# NEXT MONTH



## GET YOUR MESSAGE ACROSS!

We show you how to get the very best results from your DTP package. It's everything you need to know!



Brush up your electronic artwork with our extensive guide to next month's Cover Disk demo, Pablo.



It's multimedia, but not as we know it. We show you how to seamlessly link pictures, words, animation and sound to create interactive letters.

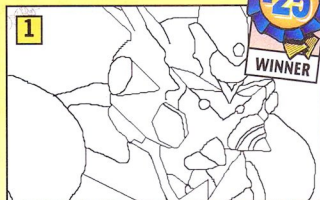
**May issue of ST FORMAT on sale Tuesday 11 April**



# Twilight Zone

## PIXEL PAINTING

This month's piece of perfect pixelation was produced on *Paint Pot* by Ian West, who's a fan of the *Guyver* cult cartoon series (a late '80s Manga-type thang). Ian made good use of the freehand tools, tidying up his work with the jolly handy Zoom function. Zoom is a tool you should never underestimate, or so it would appear. Anyway, this is what he did.



1 Ian started off with the basic outline of the armour plates, and prepared the colour palettes.



2 Next, he started adding contours by shading curves on to the plates.



3 When he filled in the picture, those stipply fills gave the impression of light.



4 Ian then added extra colours to smooth out the shading, which he blended using *Canvas*.



5 And here it is - the finished picture. We were certainly impressed. Well done, Ian, take £25.

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## THEY'RE EVERYWHERE

Have you noticed how barely a page of *ST FORMAT* goes by without some gratuitous mention of *Star Trek*? You can blame it on Nick, Karen, or whoever you like, but it's a fact that we've consistently reached our *Trek* piccie quota every issue for the past six months.

Seeing as even the most ardent anti-Fed Head has by now been turned into a sci-fi fan via osmosis, you might like to know about *Ad Infinitum*, a newsletter forming over the next few months. Containing

everything from news and reviews to short sci-fi stories, it'll be compiled and produced on a 4MByte ST. For more information write to: Robert Coare, 27 Henshaw Road, Dagenham, Essex, RM8 3AU.

If anyone else is involved in any clubs or fanzines, ST related or not, they can vie for space in *Twilight Zone* by writing to: Fanzines, *ST FORMAT*, Future Publishing, 30 Monmouth Street, Bath, Avon, BA1 2BW. I doubt this'll be the last page to bear the name *Twilight*...

## JUST PLAIN ELITIST...

Some games get played, while others end up being worshipped. David Braben's *Elite* is simply adored, as is *Frontier*. In fact, its depth and variety make it perfect fodder for user groups, including the one that we're about to give a shameless plug to this month.

Jonathan Bond runs the *Frontier* Club, a group of people who've decided to share their tips,

knowledge and expertise of the *Frontier* universe. You can think of them as a Dark Wheel, if you'd prefer. If you're a *Frontier* addict, you can contact the group at: 24 Heathrington Gardens, Nottingham, NG5 9EA.

Membership is free until June '95, and anyone wishing to join should send along a disk with one saved commander.



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# COVER DISK

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**Note:** This is not the partially disabled demo that has appeared elsewhere, but the full mission-laden table used in the complete game.



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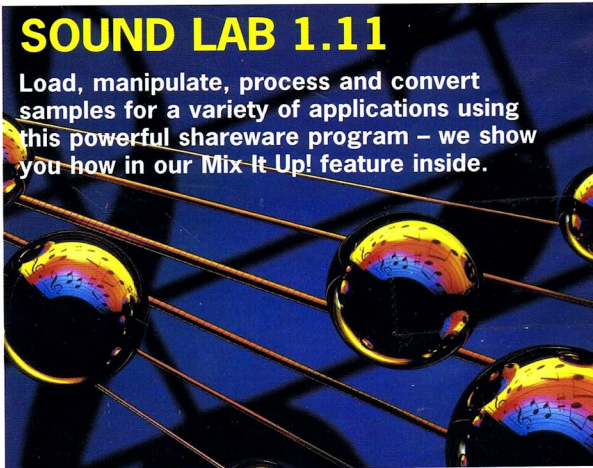
### MAGIC STORYBOOK

The combined editor and game program file for 1MByte users. Requires last month's Cover Disk *Magic Storybook* files in order to run.



### SOUND LAB 1.11

Load, manipulate, process and convert samples for a variety of applications using this powerful shareware program – we show you how in our Mix It Up! feature inside.



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