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The ST of tomorrow: read all about it on page 22

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<tr>
<th>Memory Type</th>
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<tr>
<td>Xtra-Ram Board 0Mb</td>
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<td>512K to 1Mb</td>
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<td>1Mb</td>
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<td>14Mb Falcon</td>
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<td>Virtual Memory</td>
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<td>8Mb</td>
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<th>Memory Type</th>
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<td>Bracket for Hard Drive</td>
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<td>IDE Cable</td>
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FALCON Eagle Sonic 32

(32MHz) Accelerator for Atari Falcon 030 ……£199.00

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HI-SOFT PRODUCTS

THE CODERS MULTIPACK (Programming)

<table>
<thead>
<tr>
<th>Product</th>
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<td>Power Basic</td>
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<td>£79.95</td>
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<td>Devpac 2</td>
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THE HOME OFFICE MULTIPACK (Business Applications)

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<td>K-Spread 2</td>
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<td>Harlekin 2</td>
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<td>K-Graph 3</td>
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<td>Personal Finance Manager Plus</td>
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THE MEDIA MULTIPACK (Video/Music)

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<td>Video Master</td>
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<td>Colour Master</td>
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THE DISK MULTIPACK (Utilities)

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<td>Diamond Edge</td>
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<td>Diamond Back 2</td>
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NEW PRODUCTS

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<td>Papyrus</td>
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<td>True Image</td>
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WORD PROCESSORS

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<td>Word Writer</td>
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<td>1st Word Plus v3.2</td>
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DTP SOFTWARE

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<td>Callum 1.09</td>
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<td>Calamus SL</td>
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<td>OCR Software</td>
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<td>Touch-up Upgrade</td>
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<td>Cyber Studio</td>
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<td>ST-Basic</td>
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<td>Human Design Disk</td>
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<td>Easy Tools</td>
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<td>That’s Fun Face</td>
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<td>Family Curriculum Software</td>
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BITS AND PIECES

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<td>Internal Power Supply for Atari ST</td>
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<td>STE Motherboard</td>
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<td>Outer Casing, STE, STFM</td>
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ACCESSORIES

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<td>Twin Joystick Ext. Cable</td>
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<td>Mono Colour Switchbox</td>
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<td>Multisyx Switchbox</td>
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<td>Printer Cable</td>
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<td>Null Modem Cable</td>
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<td>Serial Cable</td>
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<td>Philips/Atari Cable</td>
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<td>Scart Cable</td>
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<td>3.5&quot; External Disk Drive</td>
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<td>Blitz Turbo</td>
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<td>Power Cable</td>
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<td>Mouse Mat (picture)</td>
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<td>Box 10 Disks</td>
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<td>Dust Covers (all sorts)</td>
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<td>SCSI Cable</td>
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<td>Centronics to Centronics</td>
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<td>Optical Mouse Mat</td>
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<td>ST-TV Cable</td>
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<td>Auto Printer Switchbox</td>
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<tr>
<td>Disk Box (80 capacity)</td>
<td>£6.95</td>
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<tr>
<td>Disk Box (100 capacity)</td>
<td>£9.95</td>
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<td>SCSI to Centronics Cable</td>
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<tr>
<td>G.E. Soft Host Adaptor</td>
<td>£39.95</td>
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<tr>
<td>SCSI II Cable for Falcon</td>
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<tr>
<td>Top Link Controller</td>
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MONITORS

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<td>Gasteiner GM148 with Sound</td>
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<td>Microview 1440 Multisyx</td>
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<td>Commodore 1084 SC Colour</td>
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<td>SVGA Mono for Falcon</td>
<td>£120.00</td>
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Official purchase orders welcome from educational establishments and major corporations. (Strictly 14 days net). Please phone for approval. All prices include VAT. Prices and specifications subject to change without notice, E&OE. All goods over £50 please add £3.50 p/p and all goods over £75 please add £10 Courier Service. Next day service please call.
The future of the ST

There are new variants of ST on their way — but they're not Adatis. Find all about the latest TOS technologies: the uses, the power, and the potential, on page 22.

Bibliotech

How many PD libraries? All of them! Every ST library contacted and checked out. If you want FREE software go to page 60 now!

ST Answers

Got a techie ST question? Then get some ST Answers from Clive Parker?

Just how do they do it?

The PD demo coders tell their own story. What they do, how they do it and why they do what they do. On page 16.

Get the most out of...

Quartet, Personal Pascal and DA's Vector Pro. Superb tutorials for the best in Cover Disk software. Quartet — page 72 Personal Pascal — page 76 DA's Vector Pro — page 78

COVER DISKS 64

11 TOP PROGRAMS ON DISK

TURN TO PAGE 6 FOR
FEATURES

16 JUST HOW DO THEY DO IT?
The PD demo coders strike back! They get more colour, more noise and more speed out of their STs than is theoretically possible - for free! Now they explain why they do what they do in our "Why do they do it?" feature.

22 THE FUTURE OF THE ST
As Atari hands over Falcon development to a third party, independent hardware designers are creating a new range of hybrid ST technologies. We explore the potential of this next generation in our "Well Arwad feature."

60 BIBLIOTECH
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72 GET THE MOST FROM: QUARTET
Tips straight from the top on using Quartet. The experts told us. Now we tell you.

76 GET THE MOST FROM:
PERSONAL PASCAL
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78 GET THE MOST FROM:
DA'S VECTOR PRO
A few fine pointers on just how to manipulate images using this month's splendid Cover Disk demo.

82 INTERVIEW: ANDREW GIBBY
The man who's making Zero-5 a reality talks turkey about 3D, the ST scene and Access in our "3D-OH!" feature.

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Bah! Foiled again! Another month of damn fine software.

33 NEODESK 4
The best replacement desktop gets better. Impressive is not the word. Try "stupendous", or "brilliant", even.

34 LADBROKE FAXMODEM
It's cheap. It's fast. It's effective. And it's a fax too. So where's the catch?

36 FOOTBALL MASTERS:
PLAY BY MAIL
Software that helps you set up your very own "money making" football leagues. But is it worth £50?

38 MUNCH
The famously cheery painter gets a monochrome paint package. It's a real scream.

39 TRUETYPE FONTS
Star Trek fonts, the 500 Font CD, and the TrueType Font Pack. Nick's happy, but are the other 545 fonts those that aren't Star Trek-related worth the effort?

48 HERO
The debut game from IDS hits the reviews circuit. Is it a Flashback buster or just a bit of backdropless?

52 CHAMPIONSHIP MANAGER:
END OF SEASON DATA DISK
More football management. This time it's '94/95 flavour, with all the transfers, promotions and teams.

54 ROBINSON'S REQUIEM
 Forget Ishar, Robinson's Requiem is here. There's more flexibility! More depth! More amputations! Mmm. Brilliant.

83 Robinson's Requiem - we've waited, we've previewed, we've hyped. Was it worth it?
 You bet! Turn straight to page 54 for the full review.

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11 NEWS
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31 REVIEWS INTRO
The definitive guide to all the reviews in this month's ST FORMAT and what our scores really mean.

41 PUBLIC SECTOR
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44 INDIES CORNER
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56 PREVIEW: OBSESSION
The long-awaited pinball simulator is finally nearing completion. Shot for the preview bonus NOW!

57 JAGUAR UPDATE: WOLFSHEIN
The game that changed the face of the PC hits the Jaguar. Can Atari's new prodigy cope?

58 SUBSCRIBE!
Your chance to save some serious cash AND get an ST FORMAT newsletter and Wonder Disk every month!

66 ST ANSWERS
Clive Parker does his white coat and asks you to explain your ST problems in your own time.

79 GAMEBUSTERS
Simon Ferrerster does his white coat and asks you to explain your games problems... Oops, done that one.

A FULL COVER DISK GUIDE

Lino and scanning Simon Chibbersen; Mark Glover; Nick Harvey; Jan Moore and Jack. Graphic: Simon Waugh; Leon Miller, Dale, Jtr
Printed by Garnett Dickenson Ltd, Rothwell
Circulation Manager Jim Bailey (0205-442-544)
Publisher Simon Stanfield
Group Publisher Steve Carey
Managing Director Craig Ingman
Annual subscription rates: UK £33, UK Direct Debit (+ free ST Disk inc) £56. Europe £68.99, ROW £80.89

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Personal Pascal v2.05
A complete and incredibly easy-to-use programming language worth £30 for your ST.
Uncompressed size: 304K (see page 76 for full instructions on how to install and use the program)

DA’s Vector Pro
A complete working demo of this FORMAT Gold rated graphics package. It requires 2Mbytes and a high-resolution display (or Sebra – see below).
Uncompressed size: 623K (over two disks)

Starball
Arguably the greatest ever PD game. It scored 96% last issue, and it’s on this month’s Cover Disk!
Size: 365K

Grafiek
A superb graph maker enabling you to port your creations into art programs and DTP software.
Uncompressed size: 216K

Quartet tunes
Two excellent Quartet songs and a voice set which are bound to give you lots of inspiration.
Uncompressed size: 141K

Stickler
Keep yourself posted on upcoming events in your life with this excellent shareware organiser.
Uncompressed size: 51K

DosAce v1.5
Keep an eye on how much free memory and disk space you have left, among other things, with this indispensable Accessory.
Uncompressed size: 41K

Error
An excellent little STOS accessory that tells you what those annoying error numbers mean.
Size: 15K

Sebra v1.33
The latest version of this excellent high-res emulator. Enables you to run DA’s Vector Pro and Grafiek on a colour display.
Size: 22K

Pulldown
Banish those annoying drop menus with this little accessory. Your Desktop will love you for it.
Size: 5K

Menu
The Cover Disk Menu program makes it so easy to install the programs that your ST virtually does the job itself. What will you do with all that spare time?
Size: 10K

Backups
Keep your Cover Disks safe with our indispensable program. Back it up or regret it.
Size: 12K

**STARBALL**

By: Volume 11
Machines: All STs, TTs and Falcons
Minimum memory: 512K
Resolution: Low
Uncompressed size: 365K

(Cue fanfare.) It scored a massive 96% last month, and this month it’s on the Cover Disk! Yes, now you can see for yourselves just how excellent Starball is, and the beauty of it is that it will run on any ST, from your humble 512K STFM to your mighty 4MByte STE (with TOS 2.06 and hard drive installed). Even Falcon users can join in the fun, and import your own MOD soundtracker tunes to accompany your pinballing fun (read the MODLIST.TXT file for more details on how to do this).

It’s a foregone conclusion that you’ll like this game – the beauty of it lies in its simplicity, which means that even those of you (like me) whose idea of a good score is anything over a hundred, whatever the game, can play it. The controls are so simple that you can spend your time concentrating on the gameplay instead of thinking of what you’ve done. Just see the ‘Those keys’ panel (next page) to see what key controls what feature (hint – Nick rarely, if ever, uses tilt. That’s probably why he’s not that good – Ed!)

Once you’ve marvelled at the game’s superlative and atmospheric graphics and been flabbergasted by the gameplay (assuming of course, you’ve managed to tear yourself away from that superb introduction), you will quickly learn how the game works and what it does. There are many features lurking within Starball – time and space warps and other weird and wonderful bonuses. And when you think there’s nothing else to do, you find one of the sub-games.

Pinball Dreams
The sub-games not only offer relief from crashing the ball around the pinball table, but also provide a purpose to the game itself. Some hints and tips are called for here. One of them is accessed by building the spaceship in the middle portion of the screen, while the road to another begins by letting the slime take over. The sub-games...
Now we’ve made it really easy for you to copy and extract programs from our Cover Disk and Wonderdisk. Just follow the ten steps below and make sure you have some blank formatted disks ready.

We’ve assumed a double-sided, single drive system in medium resolution for these instructions. If your ST is in low resolution then switch to medium resolution using the Preferences command in the Options menu at the Desktop.

You can use the menu program to copy files to an external disk drive or a hard drive. Select the destination drive using the file selector in the usual way.

Those keys

Left <Shift> : left flipper
Right <Shift> : right flipper
<Control> : tilt
<Spacebar> : pause on/off
<Esc> : quit

They are a clever cross between pinball and four classic computer games, including Invaderball and Arkanoidball, and you can quickly rack up big scores when you’re playing them.

One final important point. You are morally compelled to bug the authors a fiver when you realise how excellent Starball is. The details are included in the game. Otherwise, when Volume 11 don’t come up with any more games, you won’t be in a position to complain to them. Support the shareware scheme, and you’ll earn the right to expect things from it.

QUARTET TUNES

By: Dan Love
Machines: All STs
Minimum memory: 512K
Resolution: Medium/High
Uncompressed size: 141K

Those of you who read the magazine backwards will have noticed the feature on Quartet on page 72, and the challenge that accompanies it. To give you a taste of what we’re after we’ve included two tunes and a voice set for you to load into Quartet itself, or into one of the two Quartet players we’ve featured on the Cover Disk (Quarter Player 3 on issue 63 and OPlay 3 on issue 59). All you have to do is load in the relevant bits at the right time then sit back and let these atmospheric ditties filter into your mind.

And if you’ve somehow managed to miss these Cover Disks with either Quartet or one of the players (and we’re not even going to ask why), turn to page 89 to see how you can get your copy and join in the musical fun.

- Quartet was given away on the Cover Disk of STF 58, and tens of thousands of ST owners have been praising it to the skies ever since.
eliminate this time-consuming task entirely. Unfortunately, the program needed to access the disk every time it was called, which meant that you had to keep the main STOS basic disk in the drive at all times (unless you copied the program to your STOS data disks – about as arduous as looking up the problem in the manual). Error changes all that. Just insert the backup of your STOS basic disk when instructed to insert Disk B by the Menu program. It then copies the contents of the ERROR folder on to the root directory of your STOS disk and, hey presto, when you next boot the program, you can call ERROR.ALB as an Accessory. No extra disk calls, and no frantic disk swapping. Read the accompanying text-file for full details on how it all works.

DA'S VECTOR PRO

By: CGS Computebild Machines: All STs, TTs, Falcons Memory needed: 2Mbytes Resolution: High only Uncompressed size: 823K (over two disks)

Vector Pro is an incredibly powerful vector graphics program, and received a FORMAT Gold rating of 96% when it was recently reviewed in issue 60.

In this exclusive demo, all of the Save and Print options are disabled, and many of the modules and examples have been cut, to ensure that the demo fits on to the already stuffed Cover Disks.

Once you've installed the program on to two disks (see Using the ST FORMAT Menu Program' panel on the previous page), double-click on DAVECTOR. PRG to get started. The main program itself is packed, which means you must wait a few seconds after it's loaded before you can start testing out Vector Pro for yourself. Getting around Vector Pro is an easy affair – aside from the drop-down menus at the top of the screen, there are a number of icons to the left of the screen, which change according to the mode you are in and enable you to select the sub-menus you want and get into the heart of the program quickly and easily. You really need to sit down and go through the Know-how accessory to learn the workings of the program, but a brief demonstration of DA'S Vector Pro's power is possible just by experimenting. Turn to the walkthrough on page 78 to see how straightforward it is to create an object, and then subject it to all manner of warped effects.

Getting DA's Vector Pro on to disk

You'll need two blank disks ready, one labelled 'program disk' and one labelled 'modules disk'. Boot up the second Cover Disk containing Personal Pascal and all of Vector Pro except the Know-how accessory and run the Menu program. You'll find two options relating to Vector Pro: one labelled 'program', the other 'modules'. Run each, remembering to insert the correct blank disk when instructed to insert Disk B.

Once you've done this, boot up the main Cover Disk and run the Menu program before selecting DA'S Vector Pro. This time you'll be copying the Know-how Accessory across to your blank disks. Insert the 'modules' disk as Disk B if you have 2Mbytes, or the 'program' disk if you have 4MBytes or more. Once this is done, you're all ready to try out the exclusive demo! Enjoy (as they so pompously say in Cosmo).

Another of DA's Vector Pro's impressive features is its text handling abilities. You can even import fonts from Calamus and Didot Professional.

On-line help available

There is an excellent on-line Help option, which gives you information on all of the program's functions in the form of a Desk Accessory. Because DA'S Vector Pro only just squeezes on to a 2MByte machine there is no room to install the Know-how accessory when the main program is running unless you have more memory. The 'Getting DA's Vector Pro on to disk' panel gives full details of how to decompact Vector Pro, and tells you what disk to insert when copying Know-how across from the main Cover Disk. If you're a 2MByte user you can only access Know-how when you're not running Vector Pro, while those of you with the luxury of more memory can run both at once.

The full version of Vector Pro requires a hard drive to work as well as 2MBytes of RAM and a high-resolution display, and is available direct from CGS Computebild (on 081 679 7307) for £249. So if you're really serious about vector graphics, and you don't defy reality by absolutely hating the demo we've so assiduously chucked up for you, you know what to do.
**STICKLER**

**By:** David W Binning
**Machines:** All STs
**Minimum memory:** 512K
**Resolution:** Medium/High
**Size:** 512K

*Stickler* is a useful shareware utility that reminds you of what you’re supposed to be doing during whichever day you select (and it’s automatically updated if you have a clock for your ST). You can enter daily, weekly, monthly or even annual reminders, then select how often and when you want to be reminded.

The program itself is really straightforward to use. Just make your adjustments as demonstrated in the accompanying text-file. Everything is stored in the STICKLER.DAT file, and a few examples that betray the author’s American origins are supplied (such as ‘take out the trash’) to give you an idea of how the program works. One important point is to remember that when you are asked to supply the date, you need to enter the month first and then the day and the year. It’s awkward, I know, but then Americans drive on the wrong side of the road too, so what do you expect? Just see it as a small price to pay for what is an indispensable program.

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**GRAFIK**

**By:** K Vandamme
**Machines:** All STs
**Minimum memory:** 512K
**Resolution:** High
**Uncompressed size:** 216K

Grafiek is one of those indispensable programs that fully displays the power of the language with which it was created – GFA Basic. Import data from spreadsheets, turn it into one of seven highly polished graphs, tinker with it to your heart’s content and finally export it to disk as an IMG or PI3 file, enabling you to utilise it in your DTP and word processing documents with minimal fuss.

Although Grafiek only runs in high resolution, you can use it in conjunction with Sebra, the high-res emulator that’s also included on this month’s Disk. Although the display is not as good as a dedicated high-resolution monitor it is perfectly readable and the graphs you create can still be used in a lower resolution if you save them as IMG files. One important point to note when saving IMG files is that you should hold down the <Alternate> key while dragging the mouse over the area that you wish to store as an IMG file. Forgetting to hold down <Alternate> invariably causes the program to crash and lock up, forcing you to re-boot.

Several example IMG files are contained in the EXAMPLES folder, but perhaps the best way of seeing Grafiek in action is by loading in a GK1 or GK2 data file and generating graphs from it. When you’ve finished creating your graphs, you can add text and some graphical effects before saving your masterpiece for use in another program. Note that you must make these cosmetic additions after you’ve finished twiddling with the graph itself and just prior to saving – otherwise your painstaking additions will be lost with screen redrawings.

**Using Grafiek with other programs**

The beauty of Grafiek is that you can grab data from dedicated spreadsheets like Kuma Spreadsheet 2.9. An Accessory is supplied which you install into the root directory of your spreadsheet backup, so that you can access it at any time. It can be a fiddly process, but if you are determined to use Grafiek in this way it is best to register the package.

Entering your own data is straightforward. Begin by selecting ‘Input 1’ from the Data1 menu to access Grafiek’s mini-spreadsheet. Use the cursor keys to move the highlighted box around the grid and enter your data accordingly. Pressing <Return> at any time exits this section of the program and enables you to start construct-

---

**Register! Register!**

To get the most out of Grafiek you really ought to register it. For a measly five pounds you’ll not only receive a free update, but you’ll also receive the manual which is an indispensable aid to using Grafiek to its full potential. Get your cheque-books out, and make them payable to K Vandamme, before sending off your order to: Grafiek Registrations, 16 Canterbury Way, Nuneaton, CV11 6FY. It’s a deal not to be missed!
SEBRA
V1.33
By: P. Persson
Machines: All STs
Minimum memory: 512K
Resolution: Low/Medium
Size: 22K

You may have noticed that we occasionally put Sebra on the Cover Disk. This is because some of the programs that we feature only run in high resolution and cannot otherwise be accessed on an ordinary TV or colour monitor. Now Patrik Persson has come up with an improved version that removes some of the bugs from earlier versions, and adds even more features to Sebra’s already impressive repertoire.

Installing Sebra to your floppy disk is just sooo easy. The Menu program that comes with each issue’s ST FORMAT automatically copies the contents of the SEBRA folder on the main Cover Disk into an Auto folder on your desired blank disk, which means that Sebra will run whenever you boot up your ST with the disk inserted. Once done you will find yourself in high resolution which enables you to run DA’s Vector Pro and Grafiek, which also feature on this month’s Disk.

If you want to alter the various options within Sebra, just enter the Auto folder, then double-click on SEBRA.PRG. You will be presented with an Options screen, which enables you to determine whether you want a more attractive and readable display, or a quicker screen update time. Both have their pros and cons, and you’ll find that different programs work better under different settings, hence Sebra’s versatility in possessing such options. Now you have the perfect excuse to discover just how excellent high-resolution programs are. You’ll be rushing out to buy a monochrome monitor within minutes, no doubt.

BACKUP

By: Brian Tilley
Machines: All STs
Minimum memory: 512K
Resolution: Any
Size: 12K

The real reason Clive Parker gave up doing the Cover Disk each month was that he ran out of ideas for introducing the one program that appears on every issue’s Disk without fail. Backup is that program, and Nick Peers is the man that has been drafted in to come up with new ways of bringing this indispensable program to your attention. Backup should be a vital part of every ST user’s life because it can prevent your world falling apart every month. Backing up your disk is one of those things you should do automatically, like cleaning your teeth before you go to bed and paying registrations for your drivers you use regularly. To use Backup simply double-click on CD_BACK.TOS, and follow the on-screen instructions. So remember, just accept defeat and incorporate using Backup into your monthly schedule (along with buying ST FORMAT). stf

THAT READ.ME FILE

For the first time on the hallowed ST FORMAT Cover Disk we’ve included a READ.ME file. We take the most stringent precautions to make sure viruses and bad language don’t appear on the disk. If you don’t write-protect your disks as soon as you get them, you might infect them with viruses, should any lurk in your existing collection (and it can happen to everybody – before joining STF I had viruses go through my disks on three separate occasions). You should also always make back-ups of your disks and work using those backups. That way, should anything catastrophic happen, you still have your original Cover Disk, safely sealed away in a concrete bunker in the middle of Wales, from which you can generate more backups. And every one’s happy (unless you live in the middle of Wales that is). Can I go back to playing Starball now?

Nick Peers, Cover Disk Editor and part-time karaoke star.

TEN TIPS FOR COVER DISK SATISFACTION

1. Write-protect your Cover Disk by sliding the black tab so you can see through the hole; this prevents you from accidentally erasing data.
2. Always make a backup using the ST FORMAT Backup program, see the instructions above.
3. Always read the instructions for the program you are using on the Cover Disk and in any document file that is on the disk.
4. Never run software directly from the Cover Disk except the Backup program, and always use your backup disk.
5. Never, ever try to decompress self-extracting TOS files on the Cover Disk; always copy them to a blank disk.
6. If you have any general problems with your ST consult your manual. If you are still stuck then write to: ST Answers, 30 Monmouth Street, Bath, BA1 2BW.
7. If you can’t load, copy or back up your Cover Disk programs then you may have a faulty disk – it happens sometimes.
8. If you are having problems with a Cover Disk program go back and read the Cover Disk pages and any DOC files on the disk. If you still can’t get the program working, call the ST FORMAT Cover Disk Hotline on 0252 442244 on Mondays between 3pm and 7pm only – we can’t accept calls at any other time.
9. If you have other hardware or software queries, contact the manufacturer or publisher. Alternatively, ring the official Atlas Helpline on 01322 323232 between 6pm and 11pm Monday to Saturday and 8am and 7:30pm on Sundays.
10. ST FORMAT Cover Disks are double-sided; if you have an old STFM and cannot read the Cover Disk then you should upgrade your ST to a double-sided drive.

WE WANT YOUR PROGRAMS

We pay for your software – so if you’ve got 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 1. Include on-disk and paper documentation 2. Write your name and address on the disk 3. Use a virus-free disk 4. Keep a copy of your program, because contributions are non-returnable 5. Enclose an attractive bribe. Not that it makes a difference, of course.

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

Signed
MAKING MACHINES, MAKING MUSIC

by Simon Forrestor

S
ound Technology, the
people responsible for C-
Lab and Alesis (the music
software used by professionals),
are currently working on a music
workstation based on the technol-
ygy of the Falcon. As everybody
knows, by far and away the best
machines for working on music are
made by Atari. Since the launch
of the Falcon, the world of elec-
tronic music has advanced mas-
vively, and it looks as if the
same could happen again.

When the new worksta-
tion does see the light of day, it
should be similar to the Falcon,
but with much greater facilities.

A music workstation is a
powerful piece of equipment,
hopefully performing every task from
MIDI sequencing through sampling and noise
processing, to digital mixing.
When you bring a pow-
erful machine like the
Falcon into the equation,
the finished workstation could
replace a lot of the hardware, wires
and technological mess found in
amateur music studios today.

Should your plans come to
fruition, at a time when Atari have
stepped down research and devel-
opment on all but the Falcon030
and the Jaguar, the Falcon will
almost definitely experience a
resurgence of sales, at a time
when the computer industry needs
a powerful home computer at an
affordable price.

The question has to be
asked, though – if you’ve got your-
selv a Falcon 030 and a copy of the
new, 16-track highly priced but
very wonderful Cubase Audio,
then who needs a new workstation
anyway? While the Falcon is
already capable of hard disk
recording, and has the hardware
on board for most musical applica-
tions, any improvement on this
already impressive machine has to
be worth a quick look. Watch this
space (or this magazine, rather) for
more details.

PD News

GL-PD have obtained the rights
to distribute DCS Starkaving
Bonkers at £3.39, and Reflex
Action at £8.99 including P&P –
both are reviewed in this month’s
Corner. They were formally
only available through
Warzone PDL. GL-PD are also
distributing the ST Handbook
at £2.50 including P&P, and the full
version of the BBS Directory
at £3. They have also reduced the
price of all their Powerfirst licence
software titles to £1.75 following the
collapse of Powerfirst produc-
tions. GL-PD can be contacted on
0792 797962 and are featured in
this month’s big PD libraries
round-up starting on page 80.

TITAN DESIGNS ARE SOON TO
release a new colour digitiser for
the Falcon called Expose, which we
previewed back in issue 60, and at
the last round of regional Atari
shows it was given an enthusiastic
response. Expose boasts 24-bit
colour true-colour grabbing from a
variety of video sources, such as
VCRs or video cameras. It will now
be bundled with a version of Apex
Media (rather than Chroma Studio
24, as initially expected).

Apex enables you to perform
all the usual operations you’d get
with a high-end art package and
turn your grabs into something
truly wonderful, offering block
operations and colour dithering
capabilities, as well as extra fea-
tures including PIP (Picture-in-Pic-
ture on screen, a feature found on
expensive VCRs but so far unseen
in an Atari digitising package). An
updated version of Apex Media is
also planned with extra support
functions, including the ability to
morph one picture into another.
This version will be available separ-
ately from the Expose hardware.

Titan’s well-received and
highly original ideas processor,
Thought! (STF 68, 88% – see page
89 if you missed it) is also about to
receive a major update. Version
two is to be released mere months
after the first version, which proves
it was reasonably popular. Further
details on this and Expose for the
Falcon can be obtained by contact-
ing Titan at: 8 Witherford Way,
Selly Oak, Birmingham, B29 4AX.
Alternatively, you can call or fax
them on 021 414 1630.

EXPOSE UNCOVERED

Thought! Unique, original and totally
beyond the intellectual capacity of
anyone on this magazine...

Hangman – Dave Cobbedick’s
‘stark’ style of comedy game
action, with added execution.
AMERICAN ATARI SHOW BOOST

By Nick Peers

FLOPPYSHOP GET STITCHED UP

FLOPPYSHOP HAVE TAKEN OVER the distribution of Easy Stitch, a cross stitch generator program, from Emerald City. Easy Stitch takes pictures from most popular art packages, including EZ-Art Pro, Degas Elite and NeoChrome, and converts them into charts similar to those you can see in our sister publication, Cross Stitcher. The program runs on any ST/T/I/Falcon with colour display and is written by Chris Skelton of Circle of Nuns fame. It retails at £19.95 in the UK, European stitchers should add £1.50 post and packing, while people from elsewhere (like the island of Niue) should add another £3.

And Floppys are also delighted (as they say) to announce the unmitigated success of their floppyware scheme, a form of licenseware designed to “be fair to both users and authors”, and which began only a few months ago. There are currently 21 releases available at prices starting from £2.50, with a further 12 planned for October.

TEAM TO RUN ON FALCON

FOLLOWING LAST MONTH’S story, IDS have announced more details of products they’re currently developing. Team is to be made available in a separate form for the Falcon as well as the ST, and will make use of the Falcon’s advanced facilities. It should be available in November at £24.95 and you can be sure that we’ll have the full, definitive review. Meanwhile, Grafix, the animation tutorial package, mentioned in last month’s story, will include an art package enabling you to easily try out all the tutorials. Watch out for an exclusive demo of Grafix on next month’s Cover Disk.

Those of you impressed by HERO, and you can count everybody in this office among them (see the review on page 48), will be pleased to know that two data disks are planned, promising not only new levels but also new graphics. IDS plan to release it before Christmas. Finally, IDS are keen to hear from upcoming young ST programmers to code possible future releases. If you’ve got a great idea, and the ability to program it, contact Vic Wright at IDS, 1 Fordhouse Lane, Stetchley, Birmingham, B30 2NH.
Analogic Computers (U.K.) Ltd
Unit 6, Ashway Centre,
Elm Crescent,
Kingston-Upon-Thames, Surrey KT2 6HH
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[Image]
IT'S SHOWTIME

THE TIME: 9.30AM
THE DATE: 26-30 OCTOBER
THE PLACE: EARLS COURT 2
THE EVENT: THE FUTURE ENTERTAINMENT SHOW

Yea! It's almost here! The most exciting, comprehensive computer show of the year kicks off in just a few days' time. Showcasing the best in current and future computing technology, this is one event you can't miss. After all, you could miss out on events like these:

Champion!
The final of the National Computer Games Championship. With the preliminary rounds of the Championship complete, the top game players in the country will be gathering for the final stages of Britain's most prestigious games tournament. The grand final itself will be held on Saturday 29 October, with the winner picking up a good few grand's-worth of kit.

Multi-mejia!
On display for testing and investigating will be the latest multimedia, CD-ROM and desktop music and a whole new range of virtual reality equipment.

Games galore!
The latest games will be on display at the Future Entertainment Show. All the established consoles (SNES and Mega Drive) will be there, as well as the Jaguar, Sony PlayStation and the 3DO, and you'll be able to have a blast on them yourself. There will also be a Video Gaming theatre for die-hard games-heads, which will host a series of displays and debates by top developers covering all aspects of the future of the interactive entertainment industry.

Music Mon
The ST is the music machine and will be the star of the Future Music arena. All the latest hardware and software will be being demonstrated by top professionals and the Future Music team. So if you want to make some noise - then head on down to the FES.

Big Boys
The big boys of the computer world will be there at the FES. Atari will be showing off their latest baby - the Jaguar. Alongside them will be the likes of Microsoft, Opus, Philips and Canon - who will be parading their FORMAT Gold winning series of printers.

WHO'S GOING TO BE THERE?

Atari
Canon
Compaq
Future Zone
Harman Audio
Marie Multimedia
Microsoft
Ocean
Opus
Orchid
Philips
Silica
Unica

THEATRELAND

Tickets
• How much will it cost to get in? Either £5 in advance (by sending off one of the coupons you'll find on page 46 or by calling the ticket hotline) or £7 on the door.
• Is there a discount if I bring a huge group? Yes, if you book in advance for a party of ten or more, then each ticket is only £5.
• Can I book by credit card? Yes. The credit card hotline number is 0369 4235.

Where and when
• Where exactly is the show and what are the opening times? Earls Court Exhibition Centre Hall 2, Warwick Road, London SW5. The show will be open from Wed 26 to Sun 30 October. Wed - Sat, 9.30am - 5.30pm
• How do I get there? Buses: Earls Court is served by routes 74, 31, 249, 349 and C3. Taxi: A set down and pick up facility is available for taxis. Tube: The nearest Underground station is West Brompton - Wimbeldon branch only (closed on Sundays) or Earls Court Station - District and Picadilly lines. British Rail - Kensington Olympia station is served by a daily high-speed InterCity schedule linked with NW and SE England. What's In It for me?
• Can I try new software and hardware as well as watch demos? This year's show will give you a chance to test drive the hottest new software and hardware.
• Will I be able to buy stuff there? Of course! There's a huge shopping area where you'll be able to get bargain prices on virtually every piece of kit around.

ALL YOU EVER WANTED TO KNOW ABOUT THE FES

• With all this going on aren't I going to miss all the good bits? There'll be a show guide on sale on the door (£2) containing a full list of all exhibitors, a map of where everything is and a set of vouchers offering discounts.
• Can I order a show guide in advance then? There's a box on the coupon on the FES ads to reserve and show guide. Tick it and you'll get a voucher with your tickets which you use at the show to get your show guide. Order in advance and you get 50p off the £2 show guide price. You can also order one through the hotline.
• Are there facilities for disabled visitors? Yep, full facilities for wheelchairs.
ST FORMAT NOT DEAD SHOCKER!

By Nick Peers

A news story featured in a recent issue of ST Applications questioned the future of ST FORMAT, following the news that our parent company, Future Publishing, is to be sold off. It ended its report by stating: "Whether or not ST FORMAT will continue to be produced following a buyout remains to be seen, especially considering the decline in sales of ST magazines over the past year."

Unsurprisingly, some of you may have been worried by this statement, but fear not, ST FORMAT is one of Future's most successful and long-running magazines, and don't take our word for it. According to the highly respected Computer Trade Weekly: "Whatever you think of the 'long-dead ST market', ST FORMAT remains one of Future's most profitable magazines, and significantly so."

No buyer in his right mind would close a magazine in such a healthy position, especially when it outsells both its rivals added together. Okay?

JAG GAMES COMING SOON – HONEST!

According to official Atari sources, a veritable plethora (er, are you sure those were their exact words?) – Jilli of Jaguar games are to be released soon in the States. Eleven games should be available by the time you read this, including the long awaited Alien vs Predator and Doom from Atari, and the rather excellent Cannon Fodder and European Soccer Challenge from Telegames. Another exciting release looks to be Pinball Fantasies from 21st Century, and surprise, surprise, Dragon's Lair, UBIsoft's game of much graphical wizardry but no gameplay, is to be released on the Jag too, having exhausted virtually every other console.

BLACK LEGEND JOINS YUGOSLAVIAN CONFLICT

Black Legend UK, responsible for Tactical Manager on the ST have announced that they are opening an office in Croatia. Why this has occurred is uncertain, but to be on the safe side you should probably allow 28 months for your orders to be processed. (Oh, ho ho – Trent)
Demos, eh? Why do they do it? How do they do it? What exactly is a demo, anyway?
Simon Forrester asks around.

Okay – we admit guilt. Over recent months, we’ve been hard on demo coders. They haven’t had an easy ride of it, and it’s partly because the ST press as a whole just doesn’t value demos. Our point of view is to satisfy our readers’ needs (that’s you), and keep you up to date on the most useful, innovative software for your machines, and demos just don’t fit that philosophy.

ST FORMAT could never be accused of being dogmatic, though. Demos do have a genuine following, and it’s about time we took a closer look at the whole genre. So how and why are demos created in the first place?

What are these demo things, then?
If you’ve just arrived on the ST scene, or if you haven’t spent too long trudging around public domain libraries, you may not know exactly what a demo is. The word ‘demo’ is short for ‘demonstration’ (yup), but that’s not a great help, is it?

In most cases, the unaccompanied ‘demo’ that you find floating around a public domain library is a little program (although they can be huge) that simply does flashy things, plays nice music and displays pretty graphics effects, to demonstrate the talent of the programmer. They might sound trivial, but these little programs generate massive followings – a good demo not only shows off the talents of its author, but also of the ST.

How do they work?
For the most part, demos are fairly simple. Although the effects they achieve are almost always impressive (if a little repetitive), the programming techniques are fairly straightforward, and the only thing that gets difficult is the maths processing. Music and samples can be produced using music packages like the excellent Quartet (given away on the issue 58) graphics can be drawn with any old art package and the main program could even be written in BASIC.

Occasionally, though, things get a little more complex. To
impress the real programmers, you have to go one step further than wobbling a picture and sending a 'scroll' across the screen. You can get as technical as you like, and the programming used is often more complex than that of applications and games.

But it just grew and grew...
Demos started off as a fun little hobby, with computer fans getting together and writing the occasional demo, but it's since become one of the biggest crazes the computer industry has ever seen. With several thousand demos hitting the PD libraries, the ST is buried in demos.

And it's not just the ST, either - every computer has a PD scene, and every PD scene has demos. Still on the Atari front, the Falcon has its fair share of demos in the short (ish) time it's been around. You can find details of a lot of them in issue 62's Falcon PD round-up, although the list is by no means exhaustive.

Let's talk
In our Feedback pages in issue 62 we had a letter from one demo coder who had a good old whinge about how demos are treated by ST magazines. This is their opportunity to fight back - we asked various demo coders to talk us. The first demo team on the panel, is Paranoia (you can find their brief history elsewhere in this feature if you're worried about credentials): "Demos escape from the image of 'corporate' software and give the makers the opportunity for complete self-expression within the parameters of the machine's abilities. It is perhaps more art than science."

"Techniques used in games are often first pioneered in demos. A major driving force in writing our demos was a dismay at the..."
lack of high-quality music in games. Some games achieved this, but usually either required 1MB or 10 disks or both.

“A culture entirely separate from that of other programmers has evolved around demo makers, with unique conventions such as the obligatory scrollers, mindless greetings and fake pseudonyms. Critics moan about these, but they are an important part of a crew’s arsenal and immediately identify them with this group of people. Demos are important, not only as entertainment but also as a showcase for new effects; crews endlessly striving to push forward the limits of what is feasible. Also, exposure in the PD might eventually lead to employment.”

Right, I’m off home

That seemed to sum it up quite nicely – we ought to do that more often. But perhaps we should talk to a few more demo coders. Perhaps there are more aspects to this than Paranoia manage to cover. MEX (a fringe coder) has a different view of the demo scene:

“It’s more than just a way of showing off. If I wanted to show everyone how good I am at coding, I’d write a word processor or a game and get much more coverage. The point of demos is the community they create.

“The scrolls everyone loves to pick up don’t mean more than just talk... [deleted, owing to decency rules]. After the normal messages come the greetings; long lists of other demo coders that the programmer likes, and even little messages to a lot of them. It’s like sending a group Christmas card, speaking to people that you wouldn’t normally see or phone.

“There are times when you see a demo on a disk and it’s been written by someone you haven’t heard from in years. It’s a nice way of letting people know you’re still out there.”

Good man...

A valid point about demos, then, is that there’s a community spirit involved. All coders form teams eventually, and a parallel could be drawn between those coders and user groups, communicating between groups to exchange software. Mike Goodman from Goodmen PDL (who did you think ran it?) explains: “To be honest, we don’t really stock as many demos as we used to. The only people who want to see demos are other demo writers, and they all send their work to each other personally.

“We also had problems with a lot of demos – we can’t stock anything that breaks copyright laws [read the ‘legal schmegal’ panel, people] or contains pornography. You’d be surprised just how many demos have hidden programs with all kinds of things on them. We also don’t like to distribute anything containing too much swear ing – the ST has an adult user base,

BACK TO THE START

Demos have traditionally been given huge amounts of grief for various reasons – but how did the whole conflict start? Up until now, the arguments for and against demos have been quite simple:

Con: “Who needs demos, eh? They’re all identical, either with raster bars or a picture with some odd effect, and a scrolling message saying ‘hi’ to the author’s mates. What’s more, they’re absolutely useless – they look cool but always play nice tunes, but do nothing to help you get more out of your ST.”

Pro: “Our demos aren’t repetitive, but everyone else rips us off – what we’re actually doing is trying to push the machine that little bit further, as well as advertise the fact that we’re the ones pushing it. It’s a demonstration of programming talent more than the machine’s running on. Besides, it’s fun.”

Demo coders do have a distinct point. If they’re happily and quickly churning this stuff out to PD libraries who’re happy to stock it, and if the public likes ordering disks full of the things who’s to stop them? What’s the problem with that?

But, on the other hand, the ST is beginning to suffer when it comes to software, and the fact that programmers are exhausting their talents on software that serves no purpose can be frustrating. Demo haters don’t want to get rid of the demo coders, they’d just rather they pointed their talents in the direction of games and flash utili ties rather than demos.
ST OWNER OFFERS

ST SOFTWARE + PERIPHERAL OFFERS!

LAA0901 DRUM UNIT - ATARI SL9004 LASER Replacement unit. Use with SL9004. Refurbished. £139.00

SPA1074 DMA IC - ST-FM/MEGA ST Controller chip for high speed hard drive port. £29.75

SPA5352 TOS 2.06E INT. UPGRADE - ST Expansion port. £23.95

SPA4448 T-BUS 68 IN. TOS 2.06E - T Interface. £4.99

SQA4524 4FT/MULTITRACK RECORDING S/W Falcon ready-to-use recording software. £34.99

SQC0332 CURBIE LITE Programming. MIDI software. £11.00

SQC4122 L-CORE COMPLETE PACK Multipurpose pack with Notator 3.1, Unit 2 & M40. £62.95

SQC9926 CURBIE V3.0 Flexible four track sequencer. £18.99

SEE4522 EMBOSSER XL MIDI sequencer, sound edit & print out management system. £119.95

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SSH753 HYPERCHART Presentation. Graphics software. Takes into account existing data. £9.95

SSL642 LOW POWER SPEAKER V1.0 Low cost, low volume, non-magnetic interface. £49.95

ST1042 TECHNOBRAKER 2 High quality drawing package. Colour at 640x400 pixel resolution. £29.95

STM740 ST BASIC SOURCE BOOK For current ST and compatible PCs. £3.99

RAM8100 4MB/16MB RAM BOARD - FALCON Expansion board for Falcon 030. Max. addressable 16MB. £39.95

HAR7000 HARD DISK Bracket - FALCON Allows a 2.5" hard disk to be fitted to the Atari Falcon. £14.95

FALCON FROM ONLY £399!

System Architecture:
- CPU: Hitachi 82050 operating at 18MHz
- RAM: 256 KiB data, 64 KiB address
- ROM: Hitachi 82050 00000 - 179FFF
- I/O: 40-pin configuration
- GPU: X16

Digital Signal Processor:
- Motorola 68020 DSP running at 25MHz
- Plug-in units: Midi, Ethernet, RS-232, Disk
- Data rates: 100000 operations per second

Interfaces, Ports & Expansion Slots:
- MIDI interface
- SCSI-2 Port with Master/Slave support
- High-speed RS-232 parallel interface
- Adapter for VEGA, composite video, RF video

BRILLIANT GRAPHICS LIKE REAL PICTURES ON TV

- Graphics: Fast 16-color graphics, 16-bit color display
- Game: Scream in 16-bit, 256 colors
- Video: Interlace, non-interlace, composite, RF
- Audio: Stereo, Mono

CD QUALITY STEREO SOUND

- Stereo: 16-bit Digital Audio DMA Channels
- Speaker: 16-bit Digital Audio Input/Output

INcredible Power

At the heart of the Falcon 030 lie two powerful hearts: the ultra fast 68030 processor. A simple 4 million instructions per second and the Motorola 68020 DSP processor. Working together, they give processing speeds up to 10 times quicker than any other multiprocessor system at a comparable price. The Falcon 030 also boasts an impressive array of interfaces for linking peripherals.

The Impact of Colour

The Falcon 030 produces images that are twice as rich as a standard computer in one picture displayed on your TV, every pixel on screen can be seen in a different colour and 65,536 colours can be displayed at once, from a palette of 256, 644,464 true colours. The colour display of the highest quality. Super Ultra

Video PAL

The Falcon can be used to create special effects, overlay pictures, lighten any text that is too dark, even get rid of the unfocused bit. Video editing and special effect techniques are both easy and affordable.

CD Quality Audio

The Falcon 030 comes complete with a stereo input into which can be plugged a microphone, a Walkman, or a hi-fi system. To reproduce this sound, a converter mixes the eight-bit channels, then outputs crystal clear stereo sound at a sampling frequency of up to 120KHz, better than CD quality. The Digital Signal Processor with direct-to-disk capability, means that the Falcon can store sound samples, including the human voice, on hard disk and play them back in real time.

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DEMO CONSTRUCTION KIT

Yes, there is one. Even if you
know diddly squat about pro-
gramming and you couldn't tell
a BASIC listing from a small hip-
popotamus in a tutu, you can
still churn out some comfort-
able pieces of work.

The only problem with the
Demo Construction Kit is that
it's exactly that - a demo in kit
form. If you were to buy a car in
kit form, no matter how
mechanically competent you
were, the only thing you could
produce from the component
parts is the sum of those parts -
a car. The Demo Construction
Kit, although well versed in the
ways of scrollies, music,
starfields and picture manipula-
tion, is still limited - everyone
who uses the package can pro-
duce a demo, and every demo
will be made up of a selection
of around ten basic elements.
But the idea of a demo is to dem-
strate the talents of its author,
and to be innovative. So there.

The Demo Construction Kit - for people who really can't be bothered.

but a lot of users are parents, and
their kids could end up seeing
something quite explicit.
Besides, no one's interested in that
kind of thing.

It's nice to see that libraries
have such a responsible attitude
towards the software they stock.
What does Mike think of the PD
scene in general, though?

"The problem with
demos is that they aren't
interactive enough. A
few years back I
suggested that
these demo
coders try to
create something
interactive, but so
far no one's really
managed to do it. You
can get demos with key-
presses now that let you play with
visual effects, but nothing that
could be called interactive
entertainment. That has to be the way
forward for demos, though."

Bod of Stax

Presenting a more personal argu-
ment, Bod of the Stax team of
coders doesn't really see the equa-
tion as involving Joe Public in any
way. He finds other motivations:

"The main reason I write demos is
for the challenge. You can look at
other demos produced by other
teams, see the kind of graphic
effects they're using, or the new
programming techniques they've
mastered, and try to reproduce
them yourself. It's all down to per-
sonal satisfaction in the end."

So what does the viewer get
from your work?

"Entertainment."

Hmm. If Billy or Johnny don't
find them entertaining, they don't
have to look at them - fair point.
After all, a lot of other people
do find them entertaining, mainly
other demo coders. Do Stax make
an effort to get their work to the
general public, then?

"No, we don't go to any
length to get our demos in public
domain libraries. We just send
them to the other demo groups
we're in touch with, and they get
passed around that way. Between
the nine of us, we know quite a
lot of different people."

It's over

So if you're a demo coder, and we
haven't mentioned you, perhaps
you'd like to have your say. We
review demos in our PD section - if
you're sending your demo to a PDL
send it to us too, and show us
exactly what you can get your ST
to do. We're not easily impressed
though, so make it good. stf

LEGAL SCHMEGAL

Ooh - enter the people in suits.
Although the program, ideas,
tunes and graphics in most
demos are completely original,
some (obviously not very musi-
cal) coders take the easy option
- borrowing material from other
sources such as pictures from
books, samples from films, and
even music from games. Yup -
get a briefcase, mister!

Way back in the mists of
time (about two years now), a
library called SouthWest PD got
a severe hammering by the
British Legal System on account
of the demos it was stocklisting.
The content of these demos,
though legal and insensitve in
itself, broke one major rule: the
duplication of copyrighted
material (film soundtracks,
music, that sort of thing) is fine
for personal use in the home,
but couldn't be more illegal
when distributed. The PD library
did what PD libraries do - it dis-
tributed the software. It was
also none the wiser. After all, it
was the first real time this kind
of situation had arisen, but it
wasn't to be the last.

More recently other organi-
sations have viewed them-
selves in the problem. On the
fringe you'll find bodies like the
Performing Arts Society among
others, who have on occasion
taken exception to breaches of
copyright. So if you do decide
to get into the world of demo
coding, watch your back.
What does the future hold for the ST? The Falcon030 was Atari's most recent evolutionary step for TOS-based computers, but since its release they've been distracted by the Jaguar. Now development of the 32-bit beast has been taken up by the independents.

But the ST is too strong a breed to be ignored. A ceaseless flow of peripherals continue to make the impossible possible. Not only are new configurations of existing technology continually being tested, but new machines are also emerging, all ensuring that the ST continues to evolve and explore every possible future. The DV3 digitiser, Janus PC emulator, Sonovista and Medusa T40 are examples of these developments, fighting to dictate the ST's future.

Some may flounder in the battle for survival and dominance, but each one will influence the future shape of computing. ST FORMAT has examined them all. So to see what the future holds for your ST, gaze into our crystal ball...
Five months ago ST FORMAT rushed you news that the new low-cost DV3 digitiser was on the way. Where is it now? Here are the latest developments.

³ For a digitiser? That may sound like a silly price for some serious kit but it’s true and it’s here – well, almost. When ST FORMAT first ran this story the project had just metamorphosed from a hopeful project into a feasible prototype. Now the hardware has been perfected, the software has been fully tested and the DV3 digitiser cartridge is ready for full production.

![The Digital Images software has been polished and features some major improvements.](image)

For those of you sad enough to have missed ST FORMAT 59 (that was the June issue with a rather natty picture of Clint Eastwood on the front) the DV3 is a composite video digitiser, which means you can plug your VCR straight into your S20STFM (or any other ST for that matter) and start sampling still frames using the DV3’s Digital Images software. The resulting monochrome PII pictures can then be bundled into any art package or saved as IMGs and used in any way you see fit (Star Trek Desktop backdrops are a particular, if slightly predictable, favourite of both Nick and Clive).

Back in the summer the system was still having minor teething troubles, with both the software and the board requiring a few tweaks. As with any system that makes up a standard TV picture (with Teletext and the other peripheral trash taken out), and squeezes them into the ST’s 200 line low-resolution display. Now even the mathematically dyslexic of us can work out that 575 horizontal lines in a standard TV picture. 575 doesn’t easily divide into the 200, so there are two modes available. One mode mixes every two lines of the picture, which creates a slightly stretched picture, while the other mode combines three lines together and creates a very slightly squashed picture.

The future of the ST feature.

**STILL FREEZING**

**DV3 - The new batch**

The 13 seconds taken to digitise a frame left the early version of the DV3 relying on the source video recorder having near-perfect freeze frame functions to grab crisp clear pictures. Now the system has been improved to offer even us folk with clunky old VCRs the chance to do some sampling too. Added to the software is a new Lock function. The DV3 scans the video signal and now tells you when the best picture is available. Which is just as well, because the temptation is to move the ‘noise bar’ – the horizontal screen corruption that appears on most paused video images – right off the screen. While that might look like the best version to the naked eye, to the ST this is far from perfect because the noise bar is an essential part of the video synchronisation sequence and its disappearance from the screen means that the next frame is being cued up – which can make a mess of even the slightest frame.

The Lock function now reads the signal, checks for synchronisation and then advises you when to grab. The result you get is clearer grabs even though the video picture itself might look like a complete mess.

Further refinements have been made during the testing process too, and these include a solution to the long-term problem of variable colour saturation in monochrome grabs. ‘Historically’ large patches of colour – especially red – have inherited a symmetrical shadow when digitised. Thanks to some nifty thought work Philip has now resolved this degrading problem. The hitch, it transpires, was caused by the fact that video colour information is actually put on a subcarrier wave within the video signal. The introduction of a filter within the board design smooths out this wave and elegantly solves the problem.

**Still coming soon**

The DV3 cartridge looks to have great potential. Using readily available components and custom written software the costs have been kept to a minimum. The final piece of the price jigsaw is the number of digitisers that are produced – economies of scale and all that sort of thing. Philip is in discussion with a number of companies to manufacture and market the device and a deal should be tied up in time for Christmas. So don’t send Santa that list just yet.

**The hardware has been perfected, the software fully tested and the DV3 digitiser cartridge is ready for full production**

**How does it do what it does?**

DV3 works by scanning the picture from side to side to accommodate the 575 horizontal lines that make up a standard TV picture (with Teletext and the other peripheral trash taken out), and squeezes them into the ST’s 200 line low-resolution display. Now even the mathematically dyslexic of us can work out that 575 doesn’t easily divide into the 200, so there are two modes available. One mode mixes every two lines of the picture, which creates a slightly stretched picture, while the other mode combines three lines together and creates a very slightly squashed picture.

Philip Green, has carried out all the minor revisions and now the DV3 is ready to go – all it needs is a major manufacturer/distributor and every ST owner in the country will have access to a fully-fledged mono-chrome digitiser for the same cost as, if not less than, most commercial programs.

Using the contrast and brightness controls you just set up the image to the level you want, so that it will stand out in the document to best effect.

**Excuse me, but didn’t I explain you upstairs?**

**STOP**

**ST TRENTON WEBB**
You’ve got yourself a PC. Now what? Wrestle with DOS? Get slimed by Windows? OS/2? If only there was a way to get the friendly Atari Desktop back? Well, now there is...

Last month we reviewed the GEMulator, an ST emulator card for the PC. This month we review Janus, an Atari ST on a PC card. Plug the Janus card in, turn the PC on, run the accompanying software and you’re facing an ST. And not just any old ST, but an improved ST!

Schizophrenic PC

Only a PC with the right psychological profile can develop a second personality. In practical terms this means that to run Janus the PC must be at least a 586SX and have 1MBbyte of RAM, standard VGA graphics and MS-DOS 4.0 or higher. All your other PC bits and bobs – Microsoft compatible mouse, keyboard, monitor, hard and floppy disks, printer and just about everything else in and around your PC – will also be recognised by Janus automatically.

The specs of an average PC these days are far above these minimum requirements, which means that in practical terms any recently purchased PC should work with Janus. Anything bigger and faster in your PC – a VLB graphics card, for example – will boost Janus’ performance accordingly.

The Janus card has all the necessary electronics to run the Atari operating system and talk to the host PC. However, it doesn’t have the unique Atari ports such as ROM, MIDI and ASCII. In addition to a Motorola 88000 processor clocked at 16MHz Janus has sockets for TOS 2.06 and two RAM SIMM slots. The SIMM slots are the same as in the STE but can take a much wider range of memory. Janus – and therefore Atari emulation – is capable of up to 32MBbytes of RAM.

The bad news is that in addition to buying the Janus card, you must also purchase this RAM – which has nothing to do with PC RAM – and you need a set of TOS 2.06 ROMs. The good news is you may be able to transplant one or both from your current ST, depending on what machine you happen to own.

God-like

The name Janus comes from a Roman god with two faces. To get your PC to show its ST face you must run the accompanying PC program named JANUS.EXE. This program runs in two different modes, called local and dual.

Dual mode is more interesting, because in this mode the work is shared between Janus and the PC. For example, graphics run at native PC speeds and, at last count, there are five different resolutions.

The downside is that only ‘clean’ programs run in this mode. If the program attempts to access ST hardware directly, then the chances are it will crash.

And that’s where local mode comes in. In this mode everything happens on the Janus card, which means that even ‘dirty’ programs are likely to run. The downside is that there is only one graphic mode, which is equivalent to ST monochrome, and everything runs slower. Naturally there is no per cent guarantee that all programs will run, but, to be fair, some programs don’t run on all real STs either.

Finally, some unique Atari keys are missing on the PC keyboard. These have been remapped and the Janus program also adds a couple of special key combinations.

Two-Faced Graphics

The graphic resolution is determined by a parameter, which is passed to the JANUS.EXE program. Currently, there is one local and five dual modes. The one local mode is monochrome, while all dual modes are in 16 colours. Since this is only a question of PC software expect constant upgrades. For example, 256-colour modes have already been announced. Note, however, that resolutions of 800x600 pixels and higher need a VLB graphics card in your PC. But seeing the ST emulation at 1,280x1,024 in 16 colours is enough to whet anybody’s appetite!
Pressing <Alt><Ctrl>-Del> on the PC resets the computer — the Atari side of things, that is — just as it does on the ST. <Alt><Ctrl>-Esc> ends JANUS.EXE and returns the control back to DOS. You can also run Janus under Windows, albeit not yet within a window. However, you can still use the Windows shortcut <Alt>-Tab> to switch between Windows programs, effectively multitasking between Windows and Atari programs.

**Final Judgement**

Most ST games flatly refuse to run on the Janus but then, if you've got a PC you'll be able to play games that aren't available on the ST anyway (and cost about 10 times as much). Games have a short shelf life and the ST programs you're really only going to want to run on your PC are constantly being improved, with 256-colour mode and emulation within a window under Windows due soon, in the guise of a simple software upgrade.

The speed improvements, unheard-of graphic resolutions and gigantic memory space provided by Janus makes its price quite reasonable. Equipping your ST with a comparable accelerator, graphic and memory expansions would cost much more. If you have a PC, the Janus is recommended.

**DON MAPLE**

---

**ST IN DISGUISE**

Graphics cards, more memory, hardware accelerators. You want to upgrade your ST but there's no room in the case. Enter the Desk Topper.

One of the biggest problems that ST owners suffer on account of their machines is that the ST has all the design grace of a small rhinoceros. Your joystick ports are hidden underneath the box, the disk drive hides somewhere on the side and the keyboard, being firmly attached to the rest, is slightly inaccessible unless you've got a desk the size of Luxembourg. So why not change the case design?

Lighthouse, a German company with ST know-how, have released the Desk Topper, a new case with separate keyboard box for all single-unit STs. With this new lump of metal, you can turn your old, dirty, damaged ST into a smart, sharp and tidy set of steel boxes on your desk, with all the ports and disk drives handy at all times and lots of space available.

The Desk Topper has definitely been thought through. There's ample space for your processor boards and the like, plus room for a disk drive or two, a hard drive, a modem, and anything else you'd like to keep in one place. In addition to the one-boxness of it all, the Desk Topper means that you can have accessible ports, tidy wires and a clean desk.

On the downside, once you've rebuilt your ST the whole lot will probably giving off enough of an electromagnetic field to bring aeroplanes down. And before you go any further, you really ought to be warned that this is a taking the screws off kind of thing. You're not going to make any use of this package unless you're willing to take the guts of your machine out, reorganise and then re-install them.

If having several boxes wired together measurably bothers you, rush out and get a Desk Topper immediately. If however you're unhappy about the idea of lifting the case off your ST, avoid the Desk Topper — it's a health risk.

**SIMON FORRESTER**

---

**Janus**

<table>
<thead>
<tr>
<th>Price</th>
<th>£299 CGS ComputerBild</th>
<th>£65 679 7307</th>
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</thead>
<tbody>
<tr>
<td>Price doesn’t include TOS 2.06 and SIMMs</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Requires PC with 386SX, 1MBbyte, standard VGA</td>
<td></td>
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<tr>
<td>graphics and MS-DOS 4.0</td>
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</table>

**Highs**

- Faster than an ST
- Workstation-like graphic resolutions
- Uses all PC peripherals
- Excellent compatibility

**Lows**

- No ROM and MIDI ports
- TOS 2.06 and Janus RAM cost extra

**What else?**

- GCMonitor, reviewed last month — compatibility isn’t nearly as good as Janus

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**Desk Topper**

<table>
<thead>
<tr>
<th>Price</th>
<th>£69 95 System Solutions</th>
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<tbody>
<tr>
<td>Price</td>
<td>0735 832212</td>
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</table>

**Highs**

- One nice, neat box
- Everything’s easily accessible

**Lows**

- It does mean taking your ST apart
- But not that far apart
**A LEGENDARY ST?**

**In Greek myth Medusa could turn people to stone. In real life this new super-ST makes other computers look like they’re made from the stuff.**

At a shareholders’ meeting this summer Atari officially came off the fence and admitted that there are no plans for any new computers in foreseeable future, and that if Atari ever releases a new machine it will be based on Jaguar technology. However, things are not as bad as it appears because an ingenious bunch of Europeans are showing Atari how it should be done!

Medusa is the first third-party Atari-compatible computer, and easily outperforms Atari's flagship TT. It was designed by a Swiss hardware wizard called Fredi Ashwanden, who originally offered the project to a now defunct German monthly ST Magazin as a DIY project. Now a German company called MW Electronic is manufacturing and distributing the new board in a variety of full computer configurations.

Why should they suddenly take an interest in building a hybrid ST though? Well, because Medusa is the only Atari computer with a Motorola 68040 processor. And as if that weren’t enough, Medusa also runs at 64MHz which is nominally twice as fast as the TT.

**ST compatible at last**

The Medusa actually comprises two components: a Mainboard and ST/I/O card. The Mainboard is a high-tech six-layer motherboard containing the processor, RAM, ROM and hardware bits and pieces to support up to six expansion cards. The ST/I/O card plugs into one of these slots and contains all Atari-specific chips. In practice the ST/I/O card is really a full-blown Mega ST with only the ROM port missing. Everything else is there, including a bonus IDE hard disk interface. The ST/I/O card also contains an ISA (that’s PC-type) slot for graphic cards.

MW Electronic also manufactures two other cards. The VME-Bus card provides the VME bus seen on the TT and Megaste and it is here that the additional ST graphics cards can be plugged in. The VME card also contains the ROM port and a DMA connector, so that owners of Atari laser printers, hard disks and other ACSI devices can connect them here.

The second card is the SCSI card, which provides this industry standard port so that you can connect everything from hard disks to CD-ROMs and colour scanners to your Medusa. This is a fully TT-compatible SCSI-I implementation.

**Mix and match**

Medusa is supplied in an attractive PC-style tower case. This can be either full size or a so-called baby tower. Being modular in nature it’s up to you to decide what you want inside, perhaps opting for a more modest setup at first and then upgrading later.

So what does all this mean in practical terms? One word: speed! Medusa is three to five times as fast as the TT and in some applications even faster. All resolution independent and ‘cleanly’ written programs that don’t use dirty tricks will run on the Medusa, including most users’ favourite in the areas of DTP, image processing, CAD and any other calculation intensive applications. But it’s as a professional Atari workstation (with a price to match) rather than as a machine for the home user, that the Medusa will succeed.

---

**A Fully loaded Medusa in all its glory. Although it fits into a baby tower, as shown here, Medusa is also available in the full tower cases for maximum expandability.**

---

**AT A GLANCE**

The Medusa comprises the following details:

**Standard configuration:**
- Basic components: Medusa Mainboard and ST/I/O card
- ET4000 Colormaster 12+ ISA graphic card
- 8MBytes of RAM on two PS/2 SIMMs
- 1.44 MBytes floppy drive
- hard disk
- TT keyboard and mouse
- tower case with power supply

**Options:**
- software: NVDI, MultiTOS and SCSI-Tools
- SCSI-card with TT-compatible SCSI-I
- Minibus card
- VME-card with VME bus, ROM and DMA connector
- 16MByte RAM on two PS/2 SIMMs
- 32MByte RAM on two PS/2 SIMMs
- 2.88 MByte floppy drive
LOOK INTO THE FUTURE

Yet more sexy bits of ST kit and an explanation as to what they really mean to you and me.

SONOVISTA

The Falcon really is a fabulous little machine, isn’t it? The only problems you suffer as a Falcon user are that you’re using machines designed to meet as many different applications as possible. Although the machine is excellent at things like music applications, the video processor isn’t as good as the audio system. And even though it’s capable of a range of graphic effects it hasn’t got a video effects processor. Until now. (Tacky writing there, sorry.)

BCS of Macclesfield (centre of the universe) have just announced the UK launch of the Sonovista, a full video processing system based on the original Falcon. The Sonovista (only £3,400, loooh), Frankie Bones (never heard of him), and Smashing Pumpkins (yup), proving that this is a system worthy of professionals.

It’s nice to see the machine’s kept its original looks, though. The back panel may seem slightly different, but you’re still looking essentially at a Falcon. On screen, however, it’s virtually unrecognisable, throwing away desktops and the likes for sound-to-light processing, ramzapping, strobos, filters, layers, kaleidoscope, VideoGobo (the 5,000 billion part), video typewriters and transparency masks.

If this is the future, it looks good. This is a machine capable of any visual task you care to set it, based on original Atari hardware (partly because it’s just so enormously powerful). Direct from BCS (*0825 615379*) for between £3,000 and £4,000, depending on the unit you buy, it’s well worth the money if you’re a professional or semi-professional who needs a delicuously powerful image processor.

NOVA GRAPHICS CARD

It’s a 24-bit graphics card. We reviewed it in issue 82, and it scored 85%. What’s a 24-bit graphics card then? It’s a little circuit board that enables you to get 24-bit graphics on your MegaSTE. 24-bit graphics are more colourful and flexible than normal, boring, smelly old ST graphics, y’see.

How does it work? Well, if you were to take a 16-bit number, the highest value you could use is 65,535, which is the upper limit to the amount of colour information you can carry. If you look at 24-bit numbers, you can get all the way up to 16,777,216, enabling you to store that little bit more information, referring to more colours.

Can I have one? Have you got £419 spare? Do chickens have lips? Phoo – you could have rung 16/82 Systems on *0634 710788* and picked one up.

These new machines and add-ons are only the beginning of the story. For the first time the future of a home computer is being dictated by the users and not the manufacturers. Previously manufacturers held the power, because machines hadn’t permitted enough users or because they didn’t offer enough potential. Now it’s different.

The worldwide popularity of the ST and its many derivatives means that there are millions of people who are able to use the machine to the full. They know it’s a good system, they know what they want and they know what the TOS technology can achieve. The result is machines like the Sonovista and the Medusa.

The machines these independents are developing may be limited in production terms by the lack of support from a major manufacturer (Atari, IBM, Compaq, Commodore and friends) but they’re unlimited in their potential, because they aren’t shackled by the mass-market need to appeal to all the people all of the time. This means they can specialise, and when computers specialise they excel.

The Sonovista harnesses the colour power of the Falcon9090. The Medusa uses the brutal speed at the heart of the ST. Janus ensures that the ST can thrive even in a PC-dominated environment, while the continual developments in the peripheral arena mean that now powers are continually being added to your ST – and the more it can do, the wider its appeal.

Atari are Jaguar-centric at the moment, but their interest in the Falcon hasn’t subsided. As they chase the pot of gold at the end of the console rainbow, rather than suspend their explorations of the Falcon’s potential they have simply allowed others to take on the task. Hopefully these new machines will rekindle their interest.

Even if it doesn’t, rest assured that the next evolutionary step of the ST is happening now. Watch the skies – and ST FORMAT!
Spectacular launch issue on sale Wednesday 26 October
Cheaper than psychiatric bills!
Easier to understand than Wired!
Lighter than PC Plus!

It's .net magazine
The complete guide to the wired world
If you want to get involved in the Internet (and you should) this is where to start...

Easy Internet
Your complete guide to getting on-line

Net Work
How the Net will change your working life

48 Hours
One newbie's first days in cyberspace

Net Cults
The more you get into it, the weirder it gets...

Issue one on sale Wednesday 26 October
Essential reading for netsurfers — and those just about to dip their toes in the water
The Gold Standards

Last month's STF carried a round-up of the products that, over the years, had been awarded the accolade of an ST Format Gold. We were delighted to see that 22 of our titles achieved this high status, and 16 of them are still current products! Who else can give you the professionalism, the attention to detail and, above all, the commitment to the ST/Falcon market than the company that sets the standards...

Programming

Lattice C 5 90%
HiSoft BASIC 2 90%
HiSoft Devpac 2/3 95%/91%

Word Processors

papyrus 91%

Utilities

Diamond Back 2/3 92%/95%
Harlekin 3 94% XBoot 3 92%
SpeedoGDOS 4 92%
Diamond Edge 90%

Video/Music

VideoMaster 92%
Quartet 94% Replay 16 92%

Books

The Atari Compendium 91%
Modern Atari System Software 90%

A Golden opportunity...

Now for the best bit... order any of our Gold titles and receive a free golden gift according to your order value: spend over £30 and receive a 10 box of Terry's All Gold chocolates, spend over £60 for a gold-plated carriage clock (worth over £15) and order over £120 of goods for a Lorus gold-plated bracelet watch (value at least £35). Order before 30 November 1994 and we will engrave the last two gifts with up to 10 letters of your choice - a truly golden opportunity!

<table>
<thead>
<tr>
<th>Product</th>
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<tbody>
<tr>
<td>Lattice C 5</td>
<td>£139</td>
</tr>
<tr>
<td>HiSoft Devpac 2/3</td>
<td>£79.95</td>
</tr>
<tr>
<td>HiSoft BASIC 2.1</td>
<td>£99.95</td>
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<tr>
<td>Papyrus Gold</td>
<td>£129.95</td>
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<td>Diamond Back 2</td>
<td>£29.95</td>
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<td>Diamond Edge</td>
<td>£49.95</td>
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<tr>
<td>Modern Atari S/W</td>
<td>£19.95</td>
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Order Form

Please rush me the following software for my Atari computer

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<th>Price</th>
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Telephone your credit card order on 01525 718181

Limit of one gift per order. All offers subject to availability © HiSoft 1994.
33: Neodesk 4
Are you tired of DOS? Are you drained by CEM? How about a brand new, all-powerful desktop system to solve those niggles? No? Oh.

34: Ladbrokes Faxmodem
Want to talk to 200 million computer users worldwide? You could, but you’d have to shout really loud. Alternatively, you could all go out and buy modems, and turn the information superhighway into something resembling the M25.

38: Football Masters: Play By Mail
Stepping off the information traffic jam, you could travel by snail-mail (the postal service) instead. Set up a PBM fantasy football league. Alternatively, you could take up chokechoptry.

38: Munch
You won’t believe that this rather spilling monochrome art package is shareware, but it is. So there.

39: TrueType Fonts
TrueType fonts – 546 of ’em – reviewed for those of you with an insatiable appetite for fonts.

41: Public Sector
There’s no such thing as a free lunch, you know. There is such a thing as free software, and most of the decent stuff’s shareware. If it isn’t shareware, and it isn’t taff, Nick Peers reviews it.

48: Indie Corner
Here at ST Format, we like to think of fledgling software companies as young, innocent puppies, waiting to lick the face of the ST world. Let’s just think of these reviews as a quick visit to the vet...

48: HERO
Animated platforming nuclear antics with our hero of the moment, Fred. We knew him when he was still called Fred, y’see – since then, however, he’s landed the starring role in the excellent HERO.

52: Championship Manager: End Of Season data disk
Yeah – right. So it’s a game that involves lots of people going home. Step into the fast, furious world of the caretaker, keeping kids off the empty, silent, uinited pitch, because everyone’s too knackered to play.”

54: Robinson’s Requiem
The passage of time is a strange and wonderful thing, you know. This time we’re at the dawn of man. There is no technology here, no society, nothing. The wildlife is hostile, the natives aren’t much better. A bit like the FES, in fact (26-30 Oct folks). But there’s an ST in a cave, and a full review.

56: Obsession
The latest on this lovely little pinball game. Hope it hasn’t got any bad points. They’d be obsessive disorders, y’see (Groan).

57: Wolfenstein
Forget tactics. Forget pretty. Forget game. Wade your way through bullet-ridden, twisted corpses now.

THOSE RATINGS IN FULL, THEN

Reviews are funny things – someone wibbles on for several hundred words, throws a percentage at you, and expects you to take it from there. Percentage marks are funny things, though – some people are disappointed with 70%, when 50%’s the average mark. So here it is – the ultimate guide to exactly what those ratings actually mean:

90-100 What? You haven’t got this? Are you sick?
80-90 Get your wallet out.
70-80 The odds are you’ll enjoy this.
60-70 Now we’re starting to get there...
50-60 Flip a coin. If it’s tails, don’t buy this. If it’s heads, feel guilty.
40-50 Sorry, but it’s still not really up to scratch.
20-30 Hmm, well, it loads well enough.
10-20 Good for wiping up sick, but that’s about it. (Yeeech – I’ll)
0-10 If it’s offered to you free of charge, still feel offended.

Did you ever write a little fanzine as a child? Everybody did. Do you remember the problems you had trying to fill some of the pages? What you needed was a reviews intro page.
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P&P and VAT is included for all UK orders. Please add £2.00 P&P for Europe and £3.50 for rest of the world. Next day service available only at £4.00 per item.
American software house Grinbfax produce more desks than MFI. Well, replacement desktops, that is. Their latest is really quite impressive.

Most programs for your ST are specific in purpose: word processors for word processing, art programs for drawing and games for playing. Neurodesk however, one of the most popular pieces of serious ST software, does none of these things. The previous version of this FORMAT Gold winning, widely used replacement desktop scored 94% in 1990. But does the new version live up to its promise?

N e o d e s k 4 comes with a user-friendly installation program, which you use to set up Neurodesk on your system simply by clicking on the options presented on screen. Neurodesk can be configured to run automatically every time you boot up your computer, and once it’s installed, the plain ST icons and empty looking desktop are replaced by more ornate, pictorial Neurodesk icons.

Neurodesk enables you to create icons for programs and folders on the desktop, which you can double-click on to run the program directly. This means you can start all your favourite software without hunting through your hard drive to find it. Once you’ve put your chosen software on the desktop, just select Save Configuration from the drop-down menu, and your new setup is always presented. Although Neurodesk is much more useful to hard drive owners than those who just have floppy drives, it will run on and enhance any ST system, and is fully compatible with the TT and Falcon.

And there’s more

But you don’t buy Neurodesk merely to improve the look of your Desktop and icons. Loads of clever features are included which improve any ST’s general performance – see the ‘What’s new…’ panel below for its most important features.

If you just use your ST or Falcon to play games, or only occasionally use applications, you don’t really need Neurodesk. If however you’ve got a hard drive, utilise plenty of serious software and like to extract the maximum power and performance from your system, you won’t want to live without it. There are many helpful things it can do: you can name disks using up to 20 letters instead of 6 characters; you can view text and picture files just by clicking on them; and it copies and moves all your files smoothly. Neurodesk works in a similar fashion to the standard Atari Desktop which makes it easy to pick up, and the more you play with it, the more little enhancements and features you’ll discover. The upgrade to version 4 from Neurodesk 3 is an essential investment, and good value at £25. If you intend to go in for multitasking, Neurodesk 4 plus Geneva or MaGiC make a great combination. The price of version 4 is much higher than version 3 (which is £19.99), but if you can stretch your wallet, you won’t regret it. STF

Peter CRush

After a long time in development it’s here. It has a novel, modern look, but works the same friendly way as before.

What’s new in Neurodesk 4?

As well as retaining all the benefits of previous versions of Neurodesk, new features abound in version 4. Here are the most significant:

1. Complete multitasking support for users of MultiTOS, Geneva and MaGiC, including background file and disk operations, tear-off menus, and the ability to either have the Desktop in a window, or to run it as a Desk Accessory.

2. New look dialogs that can be displayed in their own windows and set to appear centrally under the mouse pointer for speed. They all contain keyboard short cuts and text editing abilities.

3. Modernised ‘3D’ styling for buttons and scroll bars, and the window contents can now be set to scroll in ‘real time’, which means that when you move the sliders, the window contents update and move about immediately.

4. Powerful new Groups feature that enables easy grouping together of any series of files and program. They can appear in a window, or be given an icon or identifier and placed on the desktop.

5. Support for the new colour icon standard so that up to sixteen colours can be used. Separate Selected and Unselected Icons are possible, and you can use PC Windows Icons.

6. Enhanced Search facilities enable advanced file and pattern matching throughout a whole drive or set of folders. The results of the search are then displayed in a Group window, making them easy to process or save.

7. Complete redesign of the drop-down menus to place them where they are needed. Each window now has its own menus for easy sorting or file manipulation of the contents, while the main menu bar is still retained.

8. A built-in, context-sensitive Help feature. Clicking on the Help button displays explanatory text in a scrollable window complete with hypertext links to related topics. Just like those PC compatible machines!

9. Complete support for GDOS and SpeedGDOS fonts. If you already use these on your system, Neurodesk 4 can utilise them in all its windows and dialogs – you can even have a different font for each one.

10. Advanced NeuroDesk Program Information files enable complete customising of the way your programs work from Neurodesk 4’s environment. Optional, for the ‘fiddle under the bonnet’, techies types (Clive for example).

Neurodesk 4

£59 (upgrade from v3 £25 plus return of older disk)

Compo Software
0487 773885
Any ST/E, TT or Falcon, 1MByte recommended

Features
Easy to use
More powerful than ever
Compatible with multitasking

What else?
Teradisk, a PD alternative desktop, from all PD libraries, better than the ST’s Desktop but can’t compete with Neurodesk
Ease desktop, £49.95
System Solutions 0215 351 223
Recently released, partners MaGiC, watch out for a full review

90%
Ladbroke FAXMODEM

Ladbrooke Computing have come up with a cheap but incredibly fast way to get you into comms.

Y

eah, right. You people think you’re so damned good, what with your Internet ‘n’ all. You can ring up your local node and chat to some anorak-wearing geek who’s squeezing them at the other side of the world, but you don’t know the half of it. I remember the days when a 1,200/75 baud rate was fast, talking to bulletin boards that were in no way linked, and calling back at 300/300 to upload something. I remember waiting for the tone, and then giving a few carriage returns, hoping the Pace Nightingale modem at the other end was doing its job properly. I remember receiving huge, bulky parcels that turned out to be the telephone bill. Fond memories.

And now, you people have your massive worldwide network — you can route a message through every continent on the map, bounce it off satellites and read the reply your next door neighbour sends back in a matter of minutes. You can talk to any-

one, anywhere, about anything. Well, you could if you had a modem like the all-new Ladbrooke modem.

What can it do?

As far as modems go, y’see, there’s really not much to make one modem any better than the next. They all have little blinking lights, they’re all software controlled these days by way of Hayes compatibility (a set of commands which is built especially for communicating with modems), and they’re all incredibly fast.

That’s right — this is a modem that can send and receive faxes, a faxmodem as they’re known. Faxes being what they are, you’ll lose a lot of speed, and your final sending speed will be around 14,400 baud which, though it sounds like a massive speed loss after our staggering 57,600 baud, is still a highly reasonable fax rate — a lot faster than most fax machines, in fact.

A few more fax

If you thought your modem was going to end there, you’d be utterly wrong. When you’ve finished piddling away huge amounts of cash on your massive net bill, you can piddle even more money away by using your modem to send faxes to the people you know that aren’t on the net (you do know people that aren’t on the net, don’t you?).

Going soft?

Of course, having a box that can do everything short of making Sunday breakfast and getting the papers is one thing, but you still need to get your ST working with it. If you really don’t feel like splashing out even bigger lumps of cash on comms software, don’t worry. Rest safe in the knowledge that Ladbrooke supplies everything you need to drive a modem and send or receive faxes. Buy this package, and you get everything you need, except a phone line and an online account. Everyone has a phone, and you’ll hear about things like accounts in a little while...

Should I buy it?

The question of buying a modem usually involves a lot more than the money you splash out on the box itself — you soon encounter all sorts of hidden costs, from phone bills to online charges, as well as tariffs on some of the information you’ll have access to. If you are getting into the idea of comms — and you certainly will after you’ve read our feature on ‘Everyting you wanted to know about comb’s but were too embarrassed to ask’ next month — there’s no reason why you shouldn’t consider the Ladbrooke faxmodem. It’s fast, reliable, and relatively cheap, compared to a lot of other boxes. You’ve got an ST which is an excellent machine for cheap, fun comms use, and there’s a lot of software, information and, more importantly, people, out there that you really should get connected to. If you do decide to go online, let the Ladbrooke FaxModem drift into your mind for a while.

ST FORMAT ISSUE 64

WHAT’S GOING ON?

By now a lot of you are probably wondering what the hell a modem is. The sensor instilled by a review that goes straight over your head can put you clean off a magazine. To avoid losing our entire readership in one fell swoop, we’d better explain exactly what a modem actually is.

There’s a phone line, and there’s your ST. Just as older computers were capable of saving data out to tape in the form of audio signals, now computers can communicate over telephone lines via the same method — converting the ASCII codes (or just numbers) into pips and squelches. The modem is simply the box that converts the numbers into the unintelligible squelches.

The worldwide computer net-

an enormous network of computer systems which, if you have a valid account with the system, you can access at any time, using a modem.

The benefits of access to such a system include electronic mail, Instant software, user conferences, and information on just about any subject you care to mention. From Tori Amos to vegetarian scaffolding, it’s all out there. Don’t take my drifty, uninspiring word for it, though — read next month’s communications feature for the full low-down on the net (soch).

If you want more information, just nip out and buy yourself a copy of net, the brand spanking new magazine written by, among others, our ex-techie god, Clive Parker. On

85%
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Unpopulated Marpet board £24.00
See SIMM prices below.

STE Packs

1Mb RAM STE £199.99
2Mb RAM STE £254.99
4Mb RAM STE £319.99
Phone for pack details.

PC Emulators

Dataview Hi Res Monitor £109.99
High quality 14" SVGA Monitor with ST adaptor (includes sound). Fully compatible with all ST Hi-Res Programmes with little or no tweaks.

17" Multisync Monitor. £629.99
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High quality colour SVGA Monitor. .28 dot pitch includes Falcon adaptor.

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Thermal Colour
Star SJ144 £399.99
- 144 Element print head
- Colour 14 page per minute
- 360 DPI resolution
- Emulates Epson LQ250, IBM Pro Printer & NEC graphics

Ricoh LP1200 £599.00
- 2Mb RAM
- 400 Dpi
- 12 months on site warranty
- Add £2 for Centronics cable and £7 for next working day courier delivery
FOOTBALL MASTERS
PLAY BY MAIL

Now you too could play a game that takes a minimum of one week per move. The heady world of the ST, huh?

Play by mail all started with postal chess. The ability to send little bits of paper up and down the country did a lot for the world of the chess player – you could play absolutely anyone, anywhere, without having to travel huge distances or spend too much time in close proximity to serious chess players. The idea of postal games didn’t stop there, though – the ’80s saw the beginning of many different types of play-by-mail games, from RPGs to what are now known as fantasy football leagues. The Football Masters play by mail (PBM) system is a package designed to help anyone who seriously wants to set up their own football league PBM campaign.

Note the word ‘seriously’ in that last paragraph – it’s there for a reason. The first thing the world must know about Football Masters Play by Mail is that it’s not a part-timer’s package. The author has made it quite clear that although PBM games can be good fun – connecting hundreds of people in all kinds of ways – anyone running a game should take the whole affair very seriously indeed. This attitude is reinforced by the price – you pay £50 per season per league you play (flipping!’ eck), plus ten per cent of your turnover (mama mia) from running said leagues. With the manual giving details on exactly what to do when your profit exceeds £45,000, ESP are looking to make a hell of a lot of money, as of course are you.

Fantasy football
The software itself lives up to its promises. It’s a moderately friendly little interface of menus and options, and serves its purpose adequately, cutting easy paths to each feature. The features included in the package, though, are something else.

You’d have thought it’d be reasonably easy to set up and organise a fantasy football league. You’d have thought you could have run the whole thing on a couple of pieces of paper. You’d have thought wrong. Any decent sized PBM system involves hundreds of players, hundreds of transfers, and thousands of moves, entries, bids, updates, and match calculations, all of which Football Masters handles with ease. It works.

Graphics? Who cares? Sonics? Do you really want to know? The package’s presentation is fairly good, if not good enough to earn any special merit. The point is that this is a filling program that specialises in certain calculations, which it performs admirably. Every feature you need to run a fantasy football league is in there, fully working and everything.

Probably the most daunting thing about Football Masters (apart from ESP themselves) is the enormous amount of football technicalities you have to master before you can go any further with the game. The documentation is clear and concise, taking you through every step of the system slowly and simply. And if that isn’t enough for you, ESP offer on-site training for those who’re into football rather than the ST.

If you’ve picked up the impression that ESP are out to rip you off, however, you’ve got the wrong idea (and I’m an incredibly bad writer). PBM football leagues can be horribly profitable affairs, and that can scare people. If you really want to set up a system like this, you’ll need something complex like Football Masters by your side. The amount of money you’ll pay is nothing compared to the amount you could eventually make, and although it is by no means a guaranteed route to financial success, Football Masters PBM is the package to make it with. 

SIMON FORRESTER

SIGN YOUR LIFE AWAY

Although it’s not standard reviewing practice, we really ought to warn you about just what you might be getting yourself into here - the phrase ‘restrictive measures’ comes to mind. Every time you want to start a new league you’ll need a new password from ESP Software, costing £50. Whether you like it or not, this is not a piece of software you can buy and use at your discretion – this is a piece of software you’ll be bound for life to ESP With. Is this a good thing? Well...

If you’re planning to buy this program, then you have to be planning to set up a serious PBM system. At £50 a throw (and other money after that) this is not something you can enter into half-heartyed. You could push your new PBM group through the brand new ST FORMAT reader ads (on page 84) if you wanted to, or you could simply set the thing up with a group of friends, but the manual is very specific that you should charge serious money for the service, and the program is set up to deal with the financial aspects of the campaign as well as the football technicalities.

So if you’re just toying with the idea of setting up a football league play by mail system, don’t bother. If, however, you’re absolutely certain that you want to do this and you’ll kill anyone who suggests you might not make thousands of pounds from the scheme, Football Masters PBM is the one for you.

Football Masters
PBM

£50 ESP Software
32a Southchurch Road, Southend-on-Sea, Essex
SS1 2ND 0702 600557

Highs

- Comprehensive football system
- A serious money-making package
- You’ll be tied to a software company

Lows

- A serious money-making package
What exactly does eating food have to do with a new monochrome art package?

We find out with this shareware offering from Norway.

Just to prove what a worldwide phenomenon the ST is, the latest stonkingly good shareware monochrome art package has come all the way from Norway. It certainly gives PAD (STF 61, 90%) a run for its money, and forcibly demonstrates the fact that the shareware market is continuing to produce consistently high quality products, which can hold their own even against fully-fledged commercial releases.

Munch has all the features you'd expect from an art program: lots of drawing options, plenty of fills to choose from, and then some. It supports all the important file formats — Degas, IMG, TIFF and even MacPaint — which means you won't have any problems finding a picture to load in. Munch's most impressive feature lies in its Effects menu. You can lighten or darken your picture, add shadows, alter its perspective, wrap it round a cylinder, emboss it, the list is almost endless. Register the package and you can also create your own effects, which you can import into Munch using the accompanying program — attractively titled The Munch Effect Construction Set (MECS). Which means, rather frighteningly, that the only limits to your pictures are your imagination.

Everything is accessed from icon-style menus, and if you have trouble working out which option does what, a short description is displayed under whichever option your mouse pointer is currently over. Munch is so intuitive to use that even if you're using it for the first time, you can be up and running within moments.

Munch is one of those programs that makes owning a monochrome display a privilege (almost). It's the sort of program that goes well with DTP packages like Papyrus Gold — it concentrates on being an excellent art package and frees up the DTP package to do its own job more efficiently.

What will really impress you about Munch is how easy it is to create wonderful pictures with the minimum of fuss. None of the screen grabs on this page took more than a minute to create and all resulted from experimenting with just a few of the different and varied effects on offer. It's a perfect example of how shareware should operate: nothing is disabled in the demo version except the ability to save your document as a file type that can be compressed (such as IMG). If you register, however, you also get an excellent manual and three extra utilities, all of which add to Munch's usefulness. They include Sprite Editor, with which you can define icons and mouse pointers for programs like Mouse-Ka-Mania, and an Effects Construction Kit, which enables you to add your own fully user-definable effects to Munch.

Munch is a welcome reminder that the ST is still a highly impressive platform on which to develop excellent software. With programs of this calibre appearing all the time there's really no excuse at all for looking at PCs or Macs.

NICK PEERS

REGISTRATION TIME

Full details on how to register are enclosed in the accompanying REGISTER.DOC file, but, because we're nice like that, this is how you go about it. The cost is 230 Norwegian krone (approximately £22) by International Money Order or Credit Card (Visa, Mastercard and Dinerscard accepted), and the address is c/o S A Jensen, 3630 Redberg, Norway. Drop 'em a line if you'd like more information about Munch.

Munch

By Vegard Hofsey
Available from AdLib PD
= 091 370 2496
Registration approx £22
All STs. 1Mbyte and high resolution required

Highs

■ It's littered with powerful tools
■ You name it, you can do it to your picture

Lows

■ Monochrome only
■ Can only be registered from Norway

What else?

■ PAD, reviewed in STF 61, 99%
■ Available from all good PD libraries (see the directory on p44)

93%
TRUETYPE FONTS

Now that SpeedoGDOS v5 has finally enabled you to use TrueType fonts on your STs, suddenly all sorts of font packs are appearing...

One of the major advantages of SpeedoGDOS v5 for your Atari is that it now supports TrueType fonts, which were previously only available for the Mac and PC. As a result, Compo have just released three different TrueType Font packs, which can be imported into programs supporting SpeedoGDOS, such as the excellent Papyrus Gold. If you've felt left out by the ridiculous number of fonts available for PCs and Macintoshes (and let's be frank here, it's not as if they deserve them) you can now look them squarely in the eye and say, "The Star Trek font pack? Yes, I've got it and to be brutally honest, it looks far sexier on my machine than it ever will on yours." And if the philistines laugh at this, just ignore them. It's better to set the trends rather than follow the crowd. I think you know exactly what you have to do.

The Star Trek Font Pack (£12.99)
Six fonts for £13 compares quite unfavourably to the other two font packs on offer, especially when you consider that two of the fonts have nothing to do with Star Trek at all. Two of the fonts stand out as excellent - 'Star Trek' (the original series font) and 'Star Trek Film' (the movie titles font). The other two, however, fall down somewhat, especially 'Star Trek Png', which consists of just 14 symbols: three from Starfleet and the rest from the Klingon language. The final font, 'Starfleet Bold Extended' is used on all the starships from the movie era and is functional rather than innovative. If you love the original series you'll probably snap this up (I've used nothing else since it arrived), but had the rather empty looking disk contained a few fonts from The Next Generation then it might have been more appealing.

500 Font CD (£49.95)
A CD-ROM just packed with fonts, wait for it, 500 fonts. If you can't find what you're after from this lot then you must have really peculiar tastes because a quick scan of what's on offer seems to cover just about everything, except the Star Trek fonts. There are plenty of classic Roman fonts to enable you to enter clear and perfectly readable text, plus lots of more, erm, 'illustative' fonts to make your documents stand out from the crowd (or just look silly – take a look at the accompanying example for an idea). There's even a couple of fonts that possess only symbols, including an almost-feeble Yuletide set, to spruce (geddit? sorry) your documents up even further.

At just under £10 a font all you need is a CD-ROM drive, an insatiable desire for fonts, and a heeeeeuuge hard drive or loads of floppy disks. If you answer all of these criteria, this collection is undoubtedly for you.

TrueType Font Pack (£12.99)
This pack contains 40 fonts, spread over three disks, which compares favourably to the Star Trek pack. Seven typefaces are represented, some with bold and italic derivatives, while there are 16 decorative faces that serve as useful headline fonts (such as Fraktur, as used in the pic at the bottom of the page). Although none of the fonts are as instantly recognisable as those from Star Trek, you can't complain – the variety should suit most of your needs.

If you're using Papyrus Gold you might encounter problems with some of the fonts (in other words, I did, but hey! Nobody’s perfect and I suspect I’m probably doing something horrendously wrong somewhere anyway) but at £12.99 for 40 professional fonts from Bitstream you can’t really go too wrong.

NICK PEERS

Is it really worth £12.99 just to be able to write 'Star Trek V' like that? I leave the decision to your better and probably slightly less clouded judgement.

These fonts affect what you write in a silly sort of way. £12.99 for 40 fonts sounds a veritable bargain to me. See?
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Casting off the chains of the evil Lord Forrester, Nick Peers boldly went where he’d been before – the Public Sector. Yet it seemed so friendly last month, when he wasn’t all alone...

PUBLIC SECTOR

GAMES

GOLDEN DAWN MENU TEN
STELLAR PD GOLD 10

My goodness! A compilation of PD games that are actually rather good (unlike menu nine, reviewed below). The games include Viking 3, which is an excellent STOS game – simple yet fiendishly addictive. It takes a few old concepts (Moon Lander and Drop Zone) and injects a little life into them. There are two versions on the disk, the 1MByte version featuring excellent sampled effects that add to the game’s atmosphere.

And as if Viking wasn’t good enough on its own, there’s also Combat, which is a nifty little Op Wolf clone. It’s slickly done, but suffers from being a tad repetitive. Then there’s Pointer, which is reminiscent of an old Spectrum game and reasonably addictive, and intelligent life on Titan. However, this turns out to be largely superficial and the game itself would be ultimately forgettable if it weren’t for the digitised sound samples, which are taken from the ill-fated Apollo 13 mission to the moon (you know, the one that nearly didn’t make it).

These games are fun, but only in a five-minute kind of way. The ground isn’t even trembling here, let alone breaking. The samples are the only possible reason for buying it.

STF RATING: 55%

GOLDEN DAWN MENU NINE
STELLAR PD GOLD 9

Unlike the wonderful Volume Ten this compilation is something of a disappointment. It features two STOS shoot-'em-ups, neither of which look particularly promising or stunning in any way. Violence just looks dated, with no redeeming features to speak of, while GeoTran (which is 1MByte-only) has more going for it, including a slightly dodgy plot concerning evil

MUSIC

OZBORNZ MODULES VOLUME 1 & 2
TRANSPARENT DREAMS PD DISKS M1 AND M2

Five MOD tracks grace Volume 1. Against Time is a pleasant slightly bland track. Fantasia has a lovely atmospheric intro, and conveys a dreamlike atmosphere. Groovy reminds you of those American action series of the early '80s (with freeze-frame effects) – in other words, best forgotten. Piece of Mind wouldn’t work on Storm Tracker, at which point it became apparent there was a virus on both disks. Finally, Sunny Summer is a bouncy little tune – the sort that people in this office would kill to.

Volume 2 has nine more such ditties on it (plus virus). Lotus is undoubtedly the best of the bunch – a nifty little dance tune which is great if you happen to like nifty little dance tunes. Then there’s Groovy, which is another of those early '80s tunes, this time reminiscent of Triangle, that dodgy glam soap set on board a ferry. Oh dear. With the next track, Happy, the decline begins – it elicits cries of: “It’s the Smurfs under nuclear attack” from our erstwhile Editor. Live (short mix) isn’t short enough, justle sounds like some pathetic sports quiz, and... oh dear... I’ve been threatened with actual body harm by the redoubtable Andy O (STF’s Art Ed) if I play any more. Suffice to say that all the tracks are instantly forgettable – a bit of fun but of no tangible value.

One piece of advice that arises from these disks: as soon as you receive them, you should always check your PD for viruses (or should that be virii?). If you find one, contact the PD company so that they can make sure it doesn’t happen to anyone else, and also severely beat the authors for their sins...

VOLUME 1 - STF RATING: 60%
VOLUME 2 - STF RATING: 50%
DEMONS

THE WORLD CUP 1966 DEMO
FIVE DISKS GL.PD

Five disks, containing a total of 3.5MBytes of data. We've got a 4MByte machine in the office, but you're going to have fun if you've only got a 512K machine, because this demo only loads a few sequences in at a time on 'lesser' STs.

Then again, you might as well save up your £5 for the actual video - because all the World Cup 1966 demo consists of are a few selected highlights from the match itself, complete with commentary from Kenneth 'they think it's all over' Wolstenhome.

Because the grabs are all from Videomaster, they're only quarter-screen size (you'd have to load about twenty disks for full-screen highlights). The clips themselves are only a few seconds long each, but the commentary runs for up to thirty seconds extra - a problem the author has got round by repeating the same digitised sequence again and again while the commentary drones on. As a result, you know England have scored long before poor old Ken gets round to telling you about it. It would have been more effective to have used a still shot until the commentary matched the action, introducing some suspense. Even worse, each of the clips is repeated twice before moving on to the next, which quickly becomes incredibly annoying.

This is only recommended if you want to use the digitised grabs for something else. Each disk also has its own Unused folder - sequences that one day might be worked into an extended version of the whole affair. Just don't expect anyone here to review it, that's all.

STF RATING: 40%

Utilities

HP SUPPORT DISK 2
FLOPPYSHOP UTL 4536

If you own one of the popular HP DeskJet printers you've just got to have this disk. It's packed with little utilities and patches for your printer and enables you to make it an even more versatile part of your ST.

For a start, there's Becker and DJBot 1.6, which enable you to print text in multiple columns, and on both sides of an A4 piece of paper. Even better is the fact that you can print your text in landscape and thereby create two facing pages of A5 text, which can be stapled together to make a professional looking magazine or newsletter.

MiniPrint enables you to cram as much text as possible on to a single sheet of A4, and PRHP 1.2 gives you even more versatility over printing. But it doesn't end there, oh no. Outburst can speed up your DeskJet's performance by as much as 20 times and Jetemulator makes it possible to preview your screen before printing.

LOTUS DOCUMENT DISPLAYER
CHRIS SHARP

There's the Revenge Document Displayer, the Standstone Stacer Document Displayer, and now there's the Lotus Document Displayer. What all these have in common, surprisingly, is that they're all document displays.

Lotus has a host of extra features, including the rather bizarre option of having music play while you're reading your files (thankfully it can be turned off). You can also display a single Degas screenshot (very handy, he says sarcastically), and you can change the size of the text to your liking. In fact, the list is endless, just not particularly useful. Lotus also reads packed files, which enables you to store more files on disk, but is of no use if you ever need to edit them in a word processor. Another problem is that you can only use it in medium resolution - Revenge in particular supports high resolution, making it compatible with monochrome as well as colour systems. Lotus doesn't add anything new to the genre, but if you like a tune when you're reading your documents, give it a whirl. Contact Chris at 4 Sunnycroft Lane, Dinas Powys, South Glamorgan, CF64 4QQ.

STF RATING: 70%

Both sides is one of many excellent programs on this disk. If you have a DeskJet it can improve your printouts.

Rounding off this excellent disk of utilities disk is a suite of Desk Accessory programs that further enhance your printer's capabilities. They include PHPHard: a utility enabling you to do 300dpi dumps of the screen to your printer. Got a Deskjet? You need this!

STF RATING: 87%
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ST BEERMAT ORGANISED CHAOS LICENCEWARE

With a logo that bears more than a passing resemblance to your favourite ST magazine, ST BEERMAT is a diskmag that’s packed with features, reviews, and the like, and promises less of the padding for which other disk magazines have been criticised.

There aren’t any reviews of new releases to read, but if you missed, for example, all the reviews of Videomaster when it first appeared, here’s your chance to read the ST BEERMAT version of events.

The disk is packed with features, and it would take forever to list them all, but the sections are broadly similar to this very magazine: news, PD reviews, commercial reviews, cheats and programming. Of the other little sections, the sci-fi section has some highly dodgy Borg jokes, although the one about changing the light bulb isn’t bad.

The viewer program itself is a nifty little offering and enables quick and easy access to the various sections, including a couple of rather fun little logic puzzles. There’s literally pages and pages to wade through, and you’re bound to find something to interest you. Costing just the price of a disk (plus £1.50 shareware fee) this is excellent value.

Write to Organised Chaos Liceware at: Chasewater House, Kings Green, Berrow, Malvern, Worcestershire, WR13 6AQ to get hold of your copy. And do it soon, otherwise there may not be another issue (or at best a crippled version) which would be a pity, because it’s really rather impressive.

STF RATING: 84%

POWER MAGAZINE 16

POWER PD

When compared to ST BEERMAT, this disk appears less professional, runs much slower and is slightly more expensive to register.

STF RATING: 80%

NOVADISK 2

JAMES BIRD

I read the review of the first issue of this Star Trek based diskmag back in STF 60 and decided there and then that I had to get a job on ST FORMAT just to review this kind of stuff. (The fact that you were about to finish university at the time had nothing to do with it, of course – Trent) And look exactly where that kind of thinking got me. But enough about myself.

This time round, there’s a Klingon feature in the Next Generation section; a review of Emissary, the Deep Space Nine pilot; a section called Science Log, which deals with the Slingshot method of time travel and Cloaking technology; and something called Outer Reaches which deals with other sci-fi series (this issue it’s the end of Quantum Leap and Babylon 5). Surprisingly it’s the classic Trek section that’s the most current, reporting on gossip from the latest Star Trek movie. Also promised for next time is the script from the film, but it’ll ruin the film for you if you see it...

Two criticisms leap out instantly: the bad spelling (especially of character names, which sometimes vary from one sentence to the next) and the lack of current material as far as The Next Generation goes. No references to the seventh, final season exist (although that can be remedied by sending in your contributions), which would have given you something genuinely new to read. But the little bit about William Shatner and Marina Sirtis (I’m saying nothing more) is worth the cost of the diskmag itself, which remains excellent value at £1. It’s available from James Bird; at 91 Elm Tree Avenue, Kilburn, Belper, Derbyshire, DE56 ONN.

STF RATING: 76%

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For a listing of what each of these PD libraries has to offer, turn to our feature on page 60. Everyone you need to know to buy with confidence.
CORNER

Time to take a look at what the independents have produced. This month Simon Forrester examines two releases from Dave Cobbledick, long-time ST supporter and programmer.

REFLEX ACTION

Following the philosophy that ‘simple is fun’, Reflex Action is a simple, fun little game involving one bat and a handful of balls. The key to Reflex Action is that it takes elements from other classic gaming styles and meshes them together, producing a Frankenstein’s monster which, fortunately, turns out to be quite an easy-going bloke. (Much like our Simon, in fact – everyone else) Reflex Action also contains pinball bumpers, which move about the place and bounce the ball off in odd directions (usually where you’re not); a moving goal that, when hit several times, explodes and gives you a nice, fat bonus; and occasionally, a mothership flies across the top of the screen. Despite these few elements being dotted about the screen the court remains pleasingly sparse and futuristic.

Lacking any originality that might help keep your interest up (apart from the ‘spot the game reference’ element), Reflex Action relies on fun-factor to keep you playing. But does it manage it? Well, sort of.

The problem isn’t with the game itself (it’s a nice implementation) but with the fact that you never feel like you’re actually getting anywhere. Maybe I’m Mr Unco-ordinated 1994, but it’s difficult to get to the level of proficiency where you can confidently work through the game without losing lives on anything but the easiest level.

The game has got appeal, though, just not £6.99’s worth (and why does it require a 1MByte machine?). Which is unfortunate, because it’s potentially excellent.

STF RATING: 48%

STARK RAVING BONKERS

After having your reflexes completely bypassed in Reflex Action, you might well feel like a little insanily – cue Stark Raving Bonkers, which lives up to its name in places.

The game begins with your chance to build up a few credits with a ‘true or false?’ session. It’s at this point that you find yourself asking two questions: “Is this worth £8.99?” and “How the hell am I supposed to know which airlines fly out of Washington?” Slightly frustrating.

The interrogation over, you find yourself progressing to the next section: a fruit machine. With the aid of the occasional hold, you must light up the word ‘feature’, letter by letter, to progress to the next stage. This is where your credits come in, dictating how many spins you get.

From here, you find yourself playing a number of sub-games, designed to explore different areas of difficulty, tax your every capacity, push your mind and body to its limits, prime the machine, oil the... er... maybe I should have a little lie down.

The games range through pairs, memory tests, reflex tests, BlackJack, Hangman, and quite a few others. Memorable moments include a version of Hangman in which the man who’s to be hung pleads with you and makes stupid comments when you pick a duff letter. It’s almost a shame when you get the obnoxious little toad off the hook, although the actual hanging is censored anyway.

As a series of very different games linked together, S88’s presentation is excellent. The occasional tasteless colour creeps in, but a few good threads run through the whole thing and hold everything together. The game has some great sonic effects as well, from “You have 40 sec-
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After playing virtually every ST game on the planet at some time or other, we thought HERO would be a breeze. After dying 44 times in quick succession...

The THORP plant is in a bad way. A very bad way. In fact, the fate of the entire human race is in the balance as you stand by the teleport, the clock slowly ticking. Yup, you’re on a Human Extraction and Rescue Operation, scantily complex level layout makes for an incredibly difficult game.

If anyone really is missing Flashback, HERO comes reasonably close to filling the gap. Although the plot and settings are obviously different, the game follows the same style – a little man running around in a Prince of Persia manner but with more in mind than just travelling through the levels.

One of the big attractions Flashback had was its control and movement system. Going a little further than running around and jumping in a crap platform style, this hero can fairly-step, crouch, climb, drop, and more importantly, shoot. The game’s attractions come not only from the exploration element, but also from the timing and practice you’ll need to get your bloke through some tough obstacles.

Unforeseeable death

Yup, HERO’s one of those incredibly difficult games. The puzzles aren’t too complicated, but you still find yourself dying a hell of a lot. Most of the deaths are caused by unforeseeable problems – you might be running down a previously empty corridor and suddenly bump into a flying droid, or crouch to shoot something and manage to crawl into it instead. The problems don’t stop the game entirely, but knowing a level doesn’t help. Travelling great distances isn’t easy either – once you’re mid-run you can’t turn around, and unless your reflexes are perfect you find yourself running into just about everything you come across. You’re likely to have the same problem with jumping – if you’re running toward a ledge, you find yourself running off the end instead of jumping at the last minute, or you jump too early and fall short of your target. In the end, you find yourself inching through the whole game, too terrified to take larger steps because you’ll probably come to a sticky end. And the big problem with the

“When you do get the hang of HERO, you find a damned good game hidden beneath layers of intense difficulty”
sticky ends is that they really are sticky. Fall a little too far, touch some toxic waste with your foot for a fraction of a second, bump into a robot or get the tip of your ear singed by a laser and you're dead. Everything kills you. Unless it's metallic, and still, you'll die. Even if it's metallic and still, you'll probably die anyway. This is not a game to play in your underwear — this is a game for playing until you know the levels like the back of your hand and then, if you're especially lucky, making it halfway through without dying. If you die, you see, that's it — start again.

But HERO isn't a relaxing game. You won't have a fun little stroll around several levels, knocking out enemies and jumping huge drops. Instead, you'll have a taxing time running into things that shouldn't kill you on touch but do, getting completely lost in a mess of doors, and managing to trap yourself in some of the most difficult situations. Completely.

But this is all too negative for HERO, which is a game designed to start where most other computer games end. You see, HERO is still an incredibly good game. You're in control of a bloke who can do a lot more than just run, jump and fire, and there are an awful lot of applications your multi-talented character can turn his hand to. There are jumps to time, maps to work out, switch puzzles to solve, pieces of hidden kit to find, cupboards to search and people to rescue. When you do get the hang of controlling the little chap and keeping him alive for anything over 30 seconds, you realise that there's much more to HERO than meets the eye. First impressions are always misleading especially with a game that so obviously sets out to be difficult from start to finish.

When you do start to get the hang of HERO, you'll find a damned good game hidden beneath a few layers of intense difficulty. Your hero's movement is smooth, suited perfectly to 'combs'; you can put a sequence of moves together, and he happily goes through each with a swanlike grace.

The rest of the graphics are all much of a muchness, with scenery that doesn't change a great deal from level to level, nicely drawn though it is. You never find yourself struggling to work out what something is, and you're always able to twig what might be dangerous or not. The sonics, though a little meagre in places, match the game perfectly, keeping in tune with the smooth, understated graphic style.

Buy yourself a copy of HERO and you won't have wasted your money — this is a huge game, with enough to keep you interested for a surprisingly long time. It's not the best ST game ever, but it's quite obviously been lovingly crafted by someone who knows what works on the ST. Despite the fact that it's such an incredibly difficult game, HERO is definitely worth quite a few hours of your life.

SIMON FORRESTER

**HERO**

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- The game's insane difficulty...
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**Lows**
- partly because it's so insanely difficult

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CHAMPIONSHIP MANAGER:
END OF SEASON

A week's a long time in politics
but three months can be an
aeon in football, especially
when you're talking data disks.

Had somebody 20 years ago,
sitting and looking dreamily
into the sky, thought about
the words 'computer', 'manage-
ment', 'football' and 'game' and
tried to put them together into a
coherent concept they would have
shaken their heads and laughingly
agreed with their friends that they
were going mad. Yet the computer
football management game is one
of the most popular genres in the
High-tech Hollywood that is the
modern software industry. Com-
puter game buyers, it seems, just
can't get enough of them. We buy
hundreds of thousands of copies
and there are hundreds of different
games to choose from.

The range of ideas used to
implement these games is enor-
mous too - from graphic to text-
based and realistic to fantastical -
although all the different games
do have a common theme. Cham-
pionship Manager sticks firmly to
the realistic, text-based, no-nonsense
approach. It's the train-spotter's
football management sim, accurate
to the last detail. All 2,000 plus
players from the Football
League are here, each
detailed by age, tempera-
ment and a wide variety
of skills including tackling,
passing, creativity, pace
and flair. Indeed, one of the
joys of Championship
Manager is looking up a
player that you know
quite well, from your local
team for example, and
seeing whether you agree with
the lads from Domark about his
ratings. And you know what?
You nearly always will.

Last year, (in issue 49,
fact fans), this attention to
detail coupled with its
straightforward and flexi-
ble, if rather slow, game-
play scored Championship
Manager '93 a highly
respectable 80%, a defi-
nite recommendation for
you to go out and buy it (if you like
this kind of thing, of course).

Down to the nitty gritty
So now the End Of Season data disk
appears. This combines with your
old game - there's a nifty update
facility on the disk - and creates
three new disks. The new data
seems to be accurate up to the
beginning of this season, which
makes for rather a mixed blessing.
For example, Brian Roy has signed
for Notts Forest, but Phil Babb
is still with Coventry and Dion
Dublin is still with Manchester Utd. This
creates a strange, half-finished feel
- you're never quite sure where
you're going to see a player and
you get slightly confused. Although,
it's impossible to be completely
up to date, a data disk should be as
close as possible. It would seem like
a better idea to release the data
disk after the first few weeks of
the season when there's always a flurry
of transfers, rather than at the end
of the close season.

The other problem is that
Domark appear to have applied the
'95-'96 promotion/relegation rules
to this season. This means that
there are only 20 teams per league
in the game and that Notts Forest
and Leicester City are in the first
division rather than in their rightful
place in the Premier League.

What is so puzzling about this
is that Championship Manager is the
perfectionist's management game.
The game for people who want an
almost ridiculously accurate simula-
tion to play. Domark must have
known that this information was
wrong and yet they went ahead
and used it anyway. Why?

And it's expensive for what
you get. You do get Nick Hornby's
excellent book Fever Pitch in the
package, but £16 is still a lot for
a single data disk. After all, you paid
for all the development and pro-
gramming when you bought Cham-
pionship Manager '93 for £26.
stf

STEVE FARAGHER

End of Season data disk
£15.99 Domark
0 881 780 2222

Highs
- Impeccable research
- Realistic results
- The chance to cover
yourself in glory
- An excellent book

Lows
- Only impeccably
researched to the
end of last season
- Only 20 teams per
league, bizarrely

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ROBINSON'S REQUIEM

Billed as an adventure game, Robinson's is more like a cross between Casualty and Blake's Seven. Is this a good mix? And is it still filmed in Bristol?

The xenophobic holiday advice offered to Brits visiting continental Europe used to be: "Don't drink the water" - until a whole parade of EU commissions proved that European water is actually cleaner than the British equivalent. However, stick-in-the-mud nationalists can seek solace in the fact that the old adage still applies to the moon of Zarathustra - which is where you find yourself at the beginning of Robinson's Requiem - on which the merest sip can prove fatal.

In fact everything on Zarathustra proves deadly: the flora, the fauna, the landscape, even the locals. A combination which doesn't so much make life awkward as short. You see, Robinson's Requiem is a survival simulator. The aim of the game isn't just to find your way out who are to recover bits from your ship, scavenge some food and even get a few more useful items together. Sticks, for example. These form the basis of an escape kit that has to be robust enough to see you through a four different areas of the moon, while you slowly unravel the sabotage subplot that had you dumped here in the first place.

“Sick though it sounds, amputation is actually an important part of the gameplay”

In your face full then's the problem of getting some regular rest - a fact hammered home by the spooky darkness that descends for four hours a day.

If that wasn't enough to have you writing to Dear Deardrie, then there's the need to keep yourself properly attired. If you get caught in a rainstorm, and you haven't built yourself a hat out of leaves, then you get a cold. Wear too many togs as you trawl through the warmer climes and you dehydrate. Fall in the lake without sufficient clothes and you catch a chill. And then there are the natural hazards: leg-shattering drops, poisonous berries and vicious animals who infect with their claws. Do I need to go on? Suffice to say that there are million and one ways you can do
First Aid or Last Post?

One of the unique features of Robinson’s Requiem is that you get to carry out rudimentary first aid – on yourself. Now this isn’t just a case of popping the odd aspirin, here you get to deal first hand with a variety of wounds and infections via a rather neat first aid screen.

Medicine – Use antibiotic pills to clear up any infections. Go easy with them though. Oversdosies can also prove fatal. Just ask Mr Hendrix.

Simple wound – Bandage cuts immediately. Always use disinfectant to clean them up. If you haven’t got any disinfectant alcohol will suffice – but only if used externally.

Large wounds – Time to practice your cross stitch. Lose over a litre of blood and your vision goes wonky. If your wound is on a limb, a tourniquet can be used ‘downstream’, as it were, just remember to loosen it occasionally.

Fracture – Splint it up and don’t walk on it, although we couldn’t find a ‘favour the other leg’ option.

Poisoning – Try a) Not getting poisoned in the first place; b) Taking serum before entering a poisonous zone; c) Using a tourniquet to restrict blood flow in the affected area and then applying the serum.

Gangrene – Nasty horrible infection that sets in untreated wounds. Requires amputation. Try. Amputation – Off with his head. This is, in fact, the only part that you can’t amputate. All your other limbs can easily be put to the knife – yuck!

Malaria – Keep up your quinine levels. So keep drinking those G&Ts, okay?

Chaos Engine

Further evidence of Robinson’s bid to be that little bit different is the engine that drives the game. Everybody loved the Ishar series, but it was still locked in a Dungeon Master universe, in which everything, even wild forests, worked on a 90 degree basis. You could only turn a quarter circle – no more, no less. In Robinson’s, clever coding and crafty design enables you to turn just a fraction at a time. You can even look up and down, if you like.

This sounds like a good idea and in high detail mode it even looks like a good idea, adding an element of realism rarely seen in computer games. But during play the system struggles to keep up and, because it looks so good, you want to wander over and examine everything. You want to spin round and check what objects look like from behind, but you can’t. Well, you can, but it all takes time, while the vaulting ambition of the graphics desperately tries to push the processor to its limits.

As a result the battles are not the fast and furious hand-to-hand duels they should be. Instead they’re slow slugging matches, which are more akin to a late 70s John Wayne Western than the frantic atmosphere promised by these slick ‘90s looks.

The sluggish pace isn’t terminal, just annoying. The graphics have to be of this quality for the game system to work but the inevitable consequence is a slow-down that irks every now and again. The sheer bravery of the programmers and designers and the obvious ambition of the program can’t be criticised. With the cunning health-care twist to keep you on the edge of your typing stool, the oddly intense gameplay more than makes up for the occasional graphical failing. The result is an adventure that doesn’t rely on cack plots or huge monsters to hook you, but subtlety and craft. Which makes it not only a rare game but a rewarding one too.

Trenton Webb

The world of Zarethnus is littered with weird people. Most deserve, and get, a good kicking!

The map. Sure it’s not the most exciting thing in the world to look at, but it is a vital survival aid.

Full details of your health (pulse rate, body temp and blood pressure) are found on Sessame, your handy portable computer.

Robinson’s Requiem

£32.99 Daze Marketing
071 372 7455
All STs, 1MByte

Highlights

- Brilliant medical gameplay
- Quietly intense pace
- Gob-smacking graphics

Learn more
- Just a little too sluggish at times

ISSUE 64 ST FORMAT

Page 55

89%
OBSESSION

It’s nearly here. The latest commercial pinball game for the ST is nearing completion and ST FORMAT has had a peek.

PREVIEW

PUBLISHER:
ULTIMATE DEVELOPMENTS (SWEDEN)
UK DISTRIBUTORS:
MERLIN PD AND JCA EUROPE
PRICE: £24.95
EXPECTED: OCTOBER

The ST, it’s safe to say, was until recently cruelly ignored as far as pinball is concerned. But within the space of the last few months two releases have turned this situation on its head, and threatened to leave console owners cursing their foolishness in shelling out vast amounts of money for a game that is now available for Atari owners at a fraction of the price. Starball scored a massive 96% last month (see page 89 if you missed it) and is featured on this month’s Cover Disc, and now Obsession is almost ready to join the fray.

Obsession requires a 1MBYTE STE or Falcon to run, and will appear on two disks for £24.95. Among its features are ultra-smooth hardware scrolling, stereo sound on both the STE and Falcon (the Falcon also featuring CD quality music), and huge colourful graphics – 256 colours on the Falcon and over 40 colours on the STE. Obsession promises to be much more realistic than Starball in terms of its ball movement and flipper control, with variables like gravity, friction and acceleration incorporated. However, all these impressive specifications are fine in principle, but what about in practice? Will Obsession live up to its price tag?

Mission Impossible
Obsession features four different tables, which add variety to the game – just take a look at the two screenshots to see how detailed and colourful they are. All the levels are freely accessed from the introduction screen, enabling you to quickly discover your favourite table. The preview version that we played unfortunately didn’t include the planned ‘missions’ feature, which will extend the gameplay beyond simply banging the ball around the table in search of points, and add to the game’s realism. This introduces the option to hit certain parts of the table in sequence to progress and gain extra bonuses, much like the standard pinball machine format. Starball instead features sub-games, which add variety to a game that could otherwise become ever so slightly monotonous.

Because one disk contains all the code, and the other stores all the data about each table, future add-ons to Obsession will be straightforward to introduce. One add-on is already planned for Christmas, complete with Yuletide feel – watch out in these pages for more information. Judging from what we’ve seen so far, Obsession looks like it’s going to be a right cracker of a game.

NICK PEERS

MINUITAE

Obsession itself has been coded by Ultimate Developments in Sweden, but its distribution in the UK is being handled by Merlin PD (+ 0453882793) and JCA Europe. Call them for more details and up-to-date information on the game’s release date, then sit back and await the full review when it appears in ST FORMAT.
WOLFENSTEIN

In game terms the Jaguar has finally arrived. And the conversion of the PC classic Wolfenstein is the reason why...

The plot behind Wolfenstein is simple, and highly satisfying, particularly if you'd rather avoid the real madness of war and just get stuck into shootin' and killin'. You storm enemy fortresses during World War II, shooting everything you see. And if you find the concept that wars can be fun a little tasteless, then you obviously haven't tried playing Wolfenstein yet...

Unlike previous efforts at war games, Wolfenstein is set in a free-moving 3D environment containing doors, furniture, treasure and all the other paraphernalia of your typical German fortress. More importantly, the game also contains huge swarming teams of Nazis, and lots of lethally effective weaponry, offering you the opportunity to blow fascists away with everything from pistols to bazookas, not forgetting the chain gun. We're all so fond of around here (or, we are -- Trent). And so, being the war hero you are, risking life and limb for the sake of your country and not enjoying a few hours of sick, brutal, gooey and completely mindless violence at all, you set out to conquer each and every one of them.

Your task: to get to the end room in each one. Probably the most surprising thing about this 3D game is the way you play. Your movement isn't governed in the standard Amidar/Dungeon Master way (moving one square forward or turning 90 degrees at a time) but is totally unrestricted. You can run where you want, sidle along a corridor, slip around the back of your enemy and blow his brains out in a satisfying, squelchy kind of way.

Sick, mindless violence
Apart from Id Software's recognition of the fact that everyone likes a little sick, mindless and utterly pointless violence, there are a few other nice touches to Wolfenstein, such as secret walls and doors. To make things slightly more interesting, you come across the occasional boss with more fire-power than the US army in Iraq (although with slightly better eyesight). With difficulty levels from 'Daddy, can I have a go?' upwards, and bodies that stay where you killed them (leaving you wading knee-deep in Nazis at times), Wolfenstein is a game for the more psychotic Jaguar owner.

So it's impossible to win a chain gun is massively good fun. In a gung ho way.

PAST, PRESENT, FUTURE

As far as trivial things like plot are concerned, Wolfenstein owes more to the ethos of 'The Eagle's Nest' (Rom Players) than anything else. In terms of gameplay, however, the game is an original -- almost a cross between Dungeon Master, the Freespace series and Space Invaders. Wolfenstein is no longer a singular example of its genre, though. After releasing the original PC version, Id Software went on to write Doom, a similar style of game that dispersed with Nazis and pistols in favour of demons and bazookas and screaming babies. Bloody heads impaled to walls (yum). Though Doom has yet to arrive on the Jaguar in force, we wait with bated breath for the UK release, and continue to trumpet the flood of similarly angsted games, among which should be the highly acclaimed Alien vs Predator, set for release in a few months.

Wolfenstein

£49.99 Atari
0753 533344

Highs
- It's just one big deranged high

Lows
- A few more weapon types would have been, er, nice?
- As would a little more gore

90%
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- HYPERGEM – Construct your own multimedia experience using text, graphics and sound samples, and astonish your friends and foes.
- DRACHEN – An infuriating Chinese game, demanding hours of intense play.
- NBM – Analyse your ST in detail. Does that accelerator really speed up your ST?
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Nick Peers spent days mentally preparing himself to bring you the ultimate PD directory, then retreated and let the PD libraries fight it out among themselves.

BIBLIOTECH

The public domain is an excellent way of keeping your ST happy on a tight budget. With releases of the calibre of GEM-View 3 (STF 58, 93%) Munch (reviewed this issue on page 38 - it scored 93%) and Starball (STF 63, 96%) becoming available for the price of a mere disk, plus registration fees, there's never been a better time to dip into the PD market to find a bargain.

But if you're looking into PD for the first time the long list of entries in the PD Directory at the end of Public Sector each month can appear a little daunting - which one would best suit your needs and wants? But fear no more, because we've contacted all the major PD companies and quizzed them on all of their pertinent facts and unfounded opinions. We've also included an interview with Stephen Raines, who used to run the Aquila PD library, to give any of you who might be contemplating setting up your own library an idea of what it's like.

Before reading the list you must remember that this directory is in no way an advocacy of any of the PD libraries here. Most, if not all, offer an excellent service and great value for money. However, ST FORMAT cannot be held responsible for your subsequent dealings with any of the libraries listed here. But if you do encounter problems, let us know and we can warn other ST owners out there. That way the less reputable libraries get punished, giving the better libraries the custom and attention they deserve.

NB: All disk prices include postage and packaging unless otherwise stated.

16/32 PDL
173 HIGH STREET, STROOD, KENT, ME2 4TW
= 0634 710788

Disk Prices: £2 each
Delivery: same day turnaround on all orders
Catalogue: disk and paper catalogues are available for £1 each

Ad.Lib PD
22 ALEXANDRA STREET, PELTON LANE ENDS, CHESTER-LE-STREET, COUNTY DURHAM, DH2 INT
= 091 370 2496

Disk prices: £1 per disk
ordered (see below)
plus SAE or jiffy bag
Delivery time: max 14 days
Catalogue: a complete file list is sent with each order, including all the latest updates

Ad.Lib PD is here to give you access to the files contained within the file directory of the Ad.Lib BBS as cheaply as possible. The beauty of online Bulletin Board Services is that they often acquire the latest new software or upgrades before the standard PD libraries do. Ad.Lib PD gives you access to these files whether or not you have a modem. All files are archived to get as much code as possible on disk, and you actually pick and mix your choice of files to go on the disk (hence the charges per 700K).

AGPD
C/O A GREEN, 6 MIDDLEBERRY DRIVE, WAREHAM, DORSET, BH20 4SD
= N/A

Disk prices: £1 per disk
(10 for £8)
Delivery: around 48 hours
Catalogue: not numbered, but updated almost daily

"AGPD - The Next Generation of ST public domain...

At AGPD we insist on value for money. This is why we stock great amounts of compacted disks, including Golden Dawn and Adrenaline Games disks. We specialise in soundtracker modules with the latest compositions and fresh conversions (we have the entire range of Merks Module Disks). A varied selection of demos is also available from rock to rave (and including POVs). Why AGPD? Because all orders are dispatched within two days and all our PD is only £1 per disk including P&P. The best value in Britain."

Anthony Green

Andy Curtis and Frank Charlton

AGPD

PD & Shareware

ALiB

The Next Generation of ST
ASCILILUM PDL
34 EARLSWOOD GARDENS, ILFORD, ESSEX, IG5 ODF
= 081 550 5572

Disk prices: one to five disks, £1.25 each; six to nine disks, £1 each; 12 disks for £10
Delivery: n/a
Catalogue: first version will be available soon on disk. Call for more details

“What is ASCILILUM all about? 1) Another PDL intending to rip you off from your hard-earned cash? 2) One of the closed PDLs starting up again under a new name? 3) A hobbyist who has hundreds of disks and is getting involved in a bit of a lame dance before the Atari disappears? Or, 4) Another PDL promising support but finding out nobody is interested and then vanishing quickly?

The answers are: 1) No. 2) No. 3) Yes. 4) Possibly. ASCILILUM is not the best, it’s not the biggest, but it is new, it’s got lots to offer, and it’s here for you.”

G Simmons

Chaos PD
= 0296 89059

Disk prices: £1 (free disk for every five ordered)
Delivery: usually within three days
Catalogue: paper catalogue (send a SASE)

“Chaos PD specialise in games: we have 20 exclusive titles coming to our library shortly (mainly shoot-em-ups). However, we are always happy to search for programs for our customers if we don’t have what they want. Not only do we aim to keep our prices low, but we conduct surveys to see how Chaos is perceived by our customers. We also sell blank disks from as little as 33p each. Every one comes preformatted and tested for disk errors.”

Ben Holkhan

Asgard PD
20 LÄNGDALE DRIVE, FLANSHAW, WAKEFIELD, WF2 9EW = 0924 363059
(24 HOURS)

Disk prices: £1 per disk
Delivery: orders usually turned around in 24-48 hours
Catalogue: not mentioned

“When not available we have an answering machine which can record queries at any time. All our disks are priced at just £1 including post and packing. We have a library of about 400 disks and this is increasing weekly. We have been established as a library for three years and also have a big Amiga, PC and Archimedes library.

Our main selling point is our across-the-board budget prices... plus a technical phone helpline and fast turnaround on deliveries.”

E Morrison

Caledonia PDL
250 OLD TOWN ROAD, HILTON, INVERNESS, IV2 4PT
= 0463 225736

Disk prices: £1.50 each (members); £1.90 each (non-members). Discounts for bulk purchases
Delivery: 24 hour turnaround of orders. Often same-day dispatch
Catalogue: disk v8.0 (free on request)

“The Caledonia PDL has long been established at the forefront of the ST PD industry: we’ve been around now for five years and have built up extensive worldwide contacts as far afield as America, Australia and even Malaysia!

We are now affiliated to a PC public domain library in Inverness and while we provide all kinds of software we are especially recom-

ended for utilities, graphics and demos. We also sell commercial software by zzSoft and Bay Computers and are always willing to provide help whenever needed.”

Jake

AWF PDL
123 HAZELWELL CRESCENT, STIRCHLEY, BIRMINGHAM, B30 2QG
= 021 458 4345

Disk prices: 1-15 disks £1.29 each; 16 or more disks 99p each
Delivery time: usually around 48 hours
Catalogue: disk (send £1 or a blank disk and SAE)

“AWF has been going for eighteen months and is an ST-specific library boasting over 2,000 disks.

We’re soon going to start a special section for commercial products which will include IDS’s complete software range (including HERO – see the review on page 48). We also hope to bring public domain software in from abroad, in particular from the massive German market, while we also keep a keen eye on the bulletin boards.

We have a helpline with an answeringphone for you to leave your messages and queries if no one’s in. There are some big changes planned: AWF will be going forward in a massive way, so keep an eye out!”

Andrew Fern

Falcon Users Group
10 OAK DRIVE, PORTISHEAD, BRISTOL, BS20 8QS
= 0272 843241

Disk prices: £1 (members) or £1.90 (non-members) per HD disk. Add two First Class stamps if ordering five disks or less. Overseas orders only to members
Delivery: all disks dispatched within seven working days, usually the same day
Catalogue: most recent Sep/Oct 94 with 149 disks

“The FUG PDL has been collecting Falcon-specific PD and shareware since its introduction. We don’t stock ST-compatible software, only titles that we feel are enhanced enough to warrant inclusion in the library. With our strong Internet links we always get new software well before anyone else. Whatever you are after we’re bound to stock it somewhere and we can also recommend software and give general Falcon advice.

We are the only PD library to publish a monthly Falcon magazine and the new PD update appears within its pages. You can download our catalogue from many popular bulletin boards, or send us a blank disk and a stamp or cheque for £1.”

Richard Davie
FaST Club
7 MUNSTERS ROAD, NOTTINGHAM, NG2 7PP
= 0602 455250
FAX = 0602 455305
(NEW DIALLING CODE = 01159)

Disk prices: £1.25 per disk
(£1 for members); add
£1.25 for postage for orders under £20
Delivery: orders are sent the same day
First Class
Catalogue: one printed
catalogue (free on request – current issue
14); three disk-based
catalogues (75p each)

"Formed as The ST Club in 1986, we are one of the
longest established Atari PD and shareware libraries. The library
caters for all interests, but shies away from demos and the like in
favour of utilities, programmers’
tools, fonts and DTP-related disks. Along with Budgie UK we
invented the concept of licences
software. As well as the
library we also publish a monthly
magazine called ST Applications
(£2.50) and we distribute a wide
range of commercial titles. We
also still
commission new
software for the
ST and the
Falcon."
Paul Glover

GL-PD
62 COLWYN AVENUE, WINCH
WEN, SWANSEA, SA1 7EJ
= 0792 799762
FAX = 0792 792582

Disk prices: 1-10, £1.75 each;
10 or more, £1.50 each.
Concessions for members.
Annual membership £10;
life membership £30
Delivery: Orders usually
dispatched the same day
Catalogue: v3.9, available for
£1 (refundable) or a disk
and blank SAE

"GL-PD started trading just
over two and a half years ago,
and as far as I know GL-PD is the
only Atari PD library in Wales. I
don’t specialise in any one particu-
lar subject, I just try to give a fast
and friendly service to anyone. If
something contacts me and asks
for a particular title and I haven’t
got it then I will be only too
happy to get it for them and charge
my normal disk prices even if I have to
buy it at a higher price."
Gareth Levering

Goodmans PD
1G CONRAD CLOSE, MEIR
HAY ESTATE, LONGTON,
STOKE-ON-TRENT, ST3 1SW
= 0782 3355650
FAX = 0782 316132

Disk prices: £1.45 a disk
(members); £1.95 a disk
(non members)
Delivery: orders usually
processed within 24 hours
of receipt
Catalogue: has always been
paper-based as opposed to
one on disk. At present it’s
a 240-page A5 loose-leaf
shareware guide, and contains
full program descriptions and
screenshots. New and
amended pages are produced
on a frequent basis to keep it
up to date

"Having operated for over eight
years, we have built up an enviable
record for service and reliability.
This was reflected in a reader sur-
vey conducted by ST FORMAT, in
which we were voted ‘PD & Share-
ware Library of the Year’. Back in
1991 we were the first ST-only
library to satisfy the standards,
(gain approved status) of the
influential American Association of
Shareware Professionals.
Although we’re known
mainly for PD and shareware, we
also supply a range of commercial
software, including the new Art
For Kids, Storm Tracker, and our own
budget range of MicroMagic Soft-
ware. We plan to continue support
for the ST and Falcon as long as
users continue to show interest
in our organisation."
Mike Goodman

Goodman International
**Keefy’s PD**  
ST HEARSALL LANE, EARLSDON, COVENTRY, CV5 6HF  
= 0203 715921

**Disk prices:** free (see below)  
**plus a stamp for postage**  
**Delivery:** orders usually processed within 48 hours  
**Catalogue:** disk-based. Just send a blank disk and stamp (doesn’t work with TOS 2.06)

"Keefy’s PD is unique in that it is a disk swapping service. We have a library of over 800 disks and to get hold of a disk, all you have to do is send us a disk of (preferably) PD in return. Our founder, Keefy, is famous for the late lamented STOSSEUR magazine and has subsequently built up a wide range of contacts from all over the UK. So, get swapping (and don’t forget to enclose your stamps to cover the return postage)."  
Keefy Dunn

---

**Merlin PD**  
PO BOX 77, STROUD, GLOS, GL6 9YD  
= FAX 0453 882793

**Disk prices:** £1.25 each  
**Delivery:** between 24 and 48 hours  
**Catalogue:** paper (v5.0) for £1; disk (v5.1) for £1

"Merlin are unique because we offer PD at reasonable rates and the chance to select what’s on your disk. If you want games, utilities and accessories why buy three disks? Tell us the programs you want on one disk. We offer a wide range of software and hardware at competitive prices - Merlin were able to maintain full-time occupation and then devote almost all their spare time to running what became one of the most respected libraries around. Because there’s no need to make a living from the library they’re able to offer the best service possible at the lowest price. The collection of disks in the library covers all the most popular types, and numbers many thousands of programs. What you won’t find here are blatant infringements of copyright - you’ll have to go elsewhere for anything illegal."

Phineas Pope

---

**New Age PDL**  
PO BOX 30, LEIGH-ON-SEA, ESSEX, SS9 4AD.  
= 0702 480696

**Disk prices:** £1.78 each  
**Delivery:** generally 24 hour turnaround  
**Catalogue:** continually updated, and free!

"New Age PDL have been supplying PD to the ST market for three years and we are now one of the biggest PD distributors around. We are one of the very few full-time libraries that are dedicated to Atari - most have now strayed into the Amiga and the PC. We have hundreds of disks for the ST and Falcon, all full to the brim, and our catalogue describes each and every program on the disk. Our catalogue is free, our postage is free in the UK and if you need any help with our disks then our after-sales service is free too."

Caroline Price

---

**Power PDL**  
3 SALISBURY ROAD, MAIDSTONE, KENT, ENGLAND, ME14 2TY.  
= 0622 763856

**Disk prices:** 99p each (UK); £1.49 each (elsewhere)  
**Delivery:** all disks are dispatched within 24 hours, First Class postage  
**Catalogue:** continually updated - latest version around number 20

"With years of experience behind us and hundreds of disks in front, we are simply the best. We boast among the cheapest PD disk prices around on the ST scene along with numerous licenceware releases, the ST Handbook, DCS commercial software and our own commercial brand of software coming soon. We are running a service, not a business. To obtain the ultimate catalogue disk, just send us a self-addressed SAE and not only will we send you a free copy of our disk catalogue, but also a free copy of the latest issue of the POWER disk magazine [reviewed on page 44]. We’re different to the rest!"

James L Matthews

---

**Floppishop**  
PO BOX 273, ABERDEEN, AB9 8SJ, SCOTLAND  
= (OR FAX) 0224 586208

**Disk prices:** ST PD £2 per disk (discounts on sets); Falcon PD £2.50 per disk  
**Delivery:** postal orders - same day dispatch; telephone orders - same day dispatch before 2pm  
**Catalogue:** ST catalogue v7.0; Falcon catalogue v2.0

"Floppishop is a family business - it was originally started by me in 1987 but soon grew to the point where mum, dad and wife Eileen are now involved as well. Our aim is to provide our customers with the best: we don’t accept a program just because it’s

Steve Delaney

---

**LAPD**  
PO BOX 2, HEANOR, DERBYSHIRE, DE75 7YP  
= 0773 605010

**Disk prices:** £1.50 each (except licenceware)  
**Delivery:** same day turnaround and dispatch  
**Catalogue:** on disk - available to anyone sending a blank disk and self-addressed SAE

"LAPD is renowned for service and honesty. It’s the brainchild of two Atari enthusiasts who..."
Tumblevane PDL
6 WEST ROAD, EMSWORTH, HAMPSHIRE, PO10 7JT
= 0243 370600

Disk prices: £1.75 each; five for £9.99; ten for £12.45
Delivery: all orders processed by return of post
Catalogue: October edition out now (free with first order, or 50p)

“Tumblevane PDL offer a personal service and helpline on all matters Atari, not just PD. We always strive
to keep as up to date as possible – for example we have recently added the latest versions of Award Maker and Translate to the library. We specialise in Atari and our personal service extends to getting hold of any PD for customers, even if it isn’t in our library. To this end, we have established a wide range of personal contacts extending to the German PD market, where we are in the process of establishing links to enable our customers to get hold of software not otherwise readily available in the UK.”

Dave Jones

SD PDL
C/O STEPHEN DAY,
11 ALLINGTON MEAD,
BRIDPORT, DORSET,
DT6 SHF = 0308 427179

Disk prices: 1-10 disks, £1.95 each; 10-20 disks, £1.50 each; 20-50 disks, £1.25 each; 50 or more disks, £1 each.
1 disk free with 10 or more
3 disks free with 20 or more
5 disks free with 30 or more
Delivery: usually within 24 hours for cash and postal orders. Cheques require a further three days to clear (minimum order £5)
Catalogue: recently fully updated

“SD PDL have been running for several years now, and are growing faster and faster year by year. The library covers virtually all aspects of computing on the Atari ST and we will continue to offer the service as long as the ST is with us. The library prices aren’t that expensive – the more you buy the cheaper they are and all disks are crammed with PD. Even if you only order one program, why waste disk space? SD PDL strive to offer the best service around. Try us and see.”

Steve Day

There are 22 PD libraries here, but if you think you can do better, and you’re not put off by Stephen Raines’ description of running a PDL, why not set up your own library? Target a specific audience – musicians, gamers, trainspotters from Reading even – and you could find yourself making new friends from places as far afield as Lands End or even Sydney! stf

Wizard PD
178 WAWERLEY ROAD,
READING, BERKS, RE3 2PZ
= 0734 574685

Prices: £1.50 each (plus 50p p&p on orders under £10)
Delivery time: ooh, quick
Catalogue: free with order (on request) or send a blank disk and SAE

Owing to an oversight on the part of Nick (right, that’s it. You’re fired! – Trent) Wizard PD weren’t contacted in time to be able to give their 100 words for the feature. So here’s Nick’s version:

“Looking at their advert in ST Handbook (issue 3), Wizard’s main selling points seem to be as follows: 1) double-sided disks that are filled to the brim with software relating to a specific theme, and 2) a 24-hour orderline (with human answers 9am-9pm Mon-Fri, and 9am-12pm Sat). Having made a few purchases from them over the years (ULT 134 was a particularly good bargain – a disk packed with virus killers) I’ve certainly never had any problems.”

Nick Peers
(on behalf of Wizard PD)

Transparent
Dreams PDL
59 RENTON ROAD,
WYTHENSHAWE,
MANCHESTER, M22 9TQ
= 061 437 7474

Disk prices: £1 each
Delivery: minimum of two days to enable your order to be processed
Catalogue: v2.0 is available from the same address

“My company started two years ago when I obtained an ST. As I got more interested in the ST, I built up a collection of PD. I feel my company is different to others because I offer free advice to customers as well as contacting buyers two days after I’ve sent their PD to them, to check that it arrived virus-free. I believe in customers being the main priority. If you don’t treat them correctly, you just don’t get any sales, and I think that says a lot.

I also specialise in games, and have five contacts who write with them SEUCK.”

Simon Osbourne

THE BEST SELLING PD OF ALL TIME!

We asked all the PD libraries to send us a list of their all-time best-selling PD. A Top Ten was impossible, but the five programs listed below did well in most quarters

Top Five PD programs of all time

1. GEM-View – the excellent FORMAT Gold rated shareware image processor. It scored 93% in ST FORMAT 58.
2. Award Maker – recently updated – look out for a review in ST FORMAT next month.
3. Crack Art – the PD art program, which received 94% in STF 61.
4. Fastcopy – the best PD copier for the ST available. Its big brother, Fastcopy Pro was awarded 90% in issue 62, and Fastcopy 3 was featured on that month’s Cover Disk.
5. ST Writer Elite – received a credible 75% when it was reviewed. It even features Spanish and German versions of the program.

Top Five categories of PD

1. Games – while no game made the all-time Top Five, their combined sales visibly demonstrate the ST’s continuing power as a game’s machine, particularly with releases like Grandad and the Quest for the Holy Vest, Bill Hazard and Starball doing incredibly well.
2. Utilities – a difficult category to define: this includes virus killers, disk utilities and printer drivers as well as databases and spreadsheets.
3. Art – with the success of GEM-View, Crack Art, PAF and Munch, (reviewed this month,) to name but a few, what did you expect?
4. Miscellaneous – programs that don’t sit comfortably elsewhere. Like Award Maker and Route Finder. Even the Spectrum Emulator sold well in some quarters!
5. Word processors – with the power of ST Writer Elite, Marcel and 1st Word, public domain has always been a good source of alternative typewriters.

All of the programs mentioned are indispensable parts of anybody’s software library, and their popularity is unlikely to wane soon. And with the likes of young pretenders like Sound and Bynx busters pushing the boundaries of PD even further, you can be assured the PD market is not going stale.

Crack Art is a superb art package, and all for the price of a disk! It even includes a virus scanner so that scum of the earth virus creators don’t get to run have all the time.

Grandad and the Quest for the Holy Vest: weird title, great game. Here’s Grandad on holiday in his back garden.

6. STF
Pay me!
If I were to create a game and I wanted to put it in a PD library, how exactly would I go about it? Would I be paid by the library?
Owen Rogers, Newport

A
It's dead easy. All you have to do is post a disk with the game on it to the PD library, and then if they feel it's good enough they'll include it in their catalogue. And no, you won't be paid for the game because PD libraries only charge enough to cover their costs. They don't charge for the software at all, just the disk and postage.

What is shareware?
I'm slightly baffled by some of the terms used in ST FORMAT. What is shareware and licenccware, and what is a demo?
Dale Cooper, Par, Cornwall

A
Shareware software can be freely obtained from PD libraries, BBs and, of course, from the wonderful ST FORMAT Cover Disks. Shareware is software that's written by a programming enthusiast rather than a full-time professional programmer. If you like the software and find it useful then you are asked to send a small fee to the programmer. Licenseware, meanwhile, is software - usually games - distributed by a PD library by permission of the programmer for about three or four pounds, and the PD library then pays a percentage of the money it collects back to the original programmer.

Executive basic
In ST FORMAT 62, Martin Lovick wanted to know how to make 1st Basic programs executable from the Desktop. Put 1st Basic and your data file on to the same disk, click once on 1ST_BASIC.PRG and then select the 'Install Application' command from the Options menu. Type in BAS in the 'Document Type' line and click on the install button, then save the Desktop. Now when you boot from your 1st Basic disk you can click on any BASIC file with a BAS file extender, and 1st Basic loads and then runs the BASIC program.

Yousuf Karsh, London

A
Normally all you have to do to assert your copyright is to include a line on the intro screen or in the 'About this program' alert box saying something like: "© James Baster 1994." Should do the job.

Right or wrong?
I have written several programs for the ST. How do I copyright them?
James Baster, Kirkwall, Orkney

A
Thanks for that tip Yousuf. However, the problem with it is that Martin wanted to make programs that would run on their own without 1st Basic being on the same disk so he could distribute his creations through PD libraries. Remember, you're not allowed to distribute copies of 1st Basic because it is a copyrighted commercial program.

STs and printing
I have ST Writer but I am unable to get anything to print on my Epson LX-850 printer. Is this because the ST has a 25-pin printer connection and the parallel socket has a 36-pin connection? Perhaps not enough information is reaching the printer.
G Christmas, Swindon

A
It's meaty, meaty, big and bouncy! Postex 4.3 - probably the best range of printer drivers in the world.

ASSEMBLY POINTERS
Once more, Tony Waggstaff strives forth to combat the terrors of assembly language programming in another thrilling episode of Assembly Pointers

Sounds like...
I'm writing a database and I want to search for similar sounding names, even if an exact match fails (such as Davis and Davies). Is there an easy way that I can go about doing this?
John Fuller, Exmouth

A
There is a routine developed by Remington Rand Corp that does exactly what you want. Although a complete assembly listing would take up too much space in the magazine, the basic algorithm is simple enough and gives you a starting point from which you can write your own code.

First of all, if any two consecutive letters are the same, remove one of them, so that, for example, 'William' becomes 'William'. Apart from the initial letter, remove any occurrence of the following characters: A E I O U W H Y. That leaves you with WLMN.

Now you need to convert each character to a number, again with the exception of the first letter. BS and Peach become one, C G J K O S X and Z become two, D and T become three, E, F, M and N five, and it becomes six. So, WLMN ends up as W452. Cut the final characters off if you wind up with more than four characters, and pad with 0 (ASCII 48, not NULL) if you end up with less than four.

Although the algorithm's not goofproof, similar sounding names should produce the same four-letter code. That's the algorithm, all you have to do now is to write the code yourself.

Environmental problems
I'm having problems with the Pexce call, which I'm calling like this:
move. 1 env., (sp)
move. 1 cmd., (sp)
move. 1 file., (sp)
move. w h, (sp)
move. w map, (sp)
trap #1
add. 1 #14, sp

My assembler gives an add addressing error, and won't assemble it. If I change the last two lines to:

move. 1 w, (sp)
move. 1 cmd., (sp)

It assembles OK, but crashes with two bombs. Could you also explain why I only need to add 14 to the stack - surely I should be adding 16? And finally, what is the environment string?

Aaron Fitzimmons, Birmingham

What the instruction move. 1 env., (sp) achieves is to move the contents of the memory address env on to the stack. What the Pexce call expects, however, is the memory address itself, not its contents. So you need to type it like this:

move. 1 #env., (sp)

The same goes for the cmd and file labels.

This explains the assembler error. The address referred to by the label cmd is an odd number, and attempting to move a word or long from an odd memory address creates the assembler error you're experiencing, although you can move an odd memory address itself.

The command line is not a null terminated string, instead, the first byte of the command line should contain the number of characters in the string, followed by the characters.

You're quite correct about the stack adjustment, it should be 16. Unfortunately many reference books have typing errors, and for some reason the stack adjustment seems more prone to them than anything.
There's nothing wrong with your ST's parallel port - all computers have a 25-pin connector. The problems lie with ST Writer itself. Check that you have selected the correct printer driver in the Printer Options menu. If your printer isn't specifically mentioned there, try the different drivers, until you find the one that works best for you.

Alternatively, why not try a more professional word processor like Protext? You don't have to get the very latest version - you can pick up Protext 4.3 from First Computer Centre at £39.99 - and it includes the most comprehensive list of printer drivers you could wish for.

Empty menu

I am unable to access anything other than the ST FOREST Desk Accessory command from the Desk menu. Is there something wrong with my ST?

Jonathan Barker, London

Aha. Nothing's appearing under the Desk menu because you haven't installed any Desk Accessories. A Desk Accessory is a small program that loads into memory when you switch on your ST (this is the only time you can install them). Desk Accessories have an ACC file extender and are usually little utilities or tools. To load them you just have to copy them to a blank disk and then reset your ST with the disk in the drive.

doesn't automatically make your software run faster - you need a hardware accelerator to achieve that effect. See our PowerUp feature in STF 62 for more information (or back issues on page 89 if you missed it).

Upgrading again

I want to upgrade my 520STE to either 2MB or 4MB of RAM. Could I buy a bare Marpet board and place eight 512K SIMMs to get 4MB, or do I use two 2MBYTE SIMMs? When I've done the upgrade what happens to my guarantee?

A Hussain, Keighley, Surrey

First of all, you don't need any kind of upgrade board at all because your ST already has four SIMMs sockets inside. To get 2MB of RAM you just remove the two 256K SIMMs inside your ST and replace them with two 30-pin 1MBYTE SIMMs. To upgrade to 4MB you just install four 30-pin 1MBYTE SIMMs. It's that easy.

If you are worried about upgrading your ST yourself then you'll have to send it away to be upgraded - and there will be an installation fee. Call Compo Software on 0487 3582 and ask them for their current prices for memory upgrades. It normally costs around £25-30 for a 1MBYTE SIMM but prices do fluctuate.

Mac emulation

Is there such a thing as a Macintosh emulator for the ST? If so, how much would one cost, and where could I get hold of it?

Chris Preece, Bristol

There is an excellent Mac emulator for the ST called Spectre GCR, but unfortunately there is no current UK distributor for it - it's only available directly from the USA. Contact the manufacturer, Gadgets by Small, to find current prices by calling 010 1 303 791 6098. Remember that you must pay in dollars using an International Money Order from American Express and you will have to pay import duty. To use the Spectre GCR hardware you must have at least 1MBYTE of RAM and a high-resolution mono monitor.

Plug this little beauty into your ST and you can run Macintosh software, Kewah!

Too much info

I have got a hard drive for my ST but I don't know how to save any information on it. Please help me!

Ross Elliott, Paisley
GFA WORKSHOP

Mac Marsden, a man barely alive. We have the technology to rebuild him. We need some RGs, better, stronger, and faster. He will be, in fact, the world's first ever iron man.

File copy?
I'm trying to write a disk utility program and I have become absolutely stuck. I don't seem to able to find a way to enable me to copy a file from a floppy disk to a hard disk.

Bob Jackson, Yaddiethorpe

One method of copying files from one drive to another is listed below. Remember that it is important to enter the full pathnames of the source and destination files and drives like this:

```
"A: \FPA\FORMAT.DRI", "C:\FPA\FORMAT.DRI"
```

Do not, whatever you do, try to copy the file to itself, because this may erase your disk permanently.

PROCEDURE copy(bh, sh)
LOCAL block
OPEN "A:", #1, SOURCES
OPEN "C:", #2, DESTS
block=0
PRINT #1, INPUTS(32000, #1)
PRINT #2, INPUT (block, #1)
CLOSE #2
RETURN

Sort me out
I have a problem with using the GFA Basic. What I am trying to do is to sort an array of numbers into ascending order. I know this is a simple task but it really has got me baffled. Can you please help?
Graham Kneke, Ouston

Anything is easy once you have done it once. We've included a simple listing below to enable you to understand exactly what is going on. The code is familiar as a recursive sort, but after the first pass of the outer loop, you know the largest number in your array is at A(10) and you don't need to look at that number again.

```
DIM a(10) : SET UP ARRAY WITH RANDOM NUMBERS
FOR i=1 TO 10
a(i)=RANDOM(50) : FILL ARRAY WITH RANDOM NUMBERS
NEXT i
FOR outer=1 TO 10 COUNTER LOOP
FOR inner=1 TO 10 COUNTER LOOP
IF a(outer) > a(inner)
"TO Swap"
NEXT inner
NEXT outer
```

Moving graphics
I have been using GFA Basic for six months and would love to begin programming moving graphics, beginning with a line moving on screen and then disappearing when the next line is drawn. Could you please print a small routine to do this?
Adrian Robson, Carlsbrooke

The trick is to draw the line twice with a slight pause in between changing the drawing colours. The listing below draws a random line on screen, pauses for a second, overwrites the original line, and then draws another line a split second later.

```
300 a(4) : FILL ARRAY WITH RANDOM NUMBERS
600 "TO DRAW AN ARRAY"
700 a(i)=RANDOM(240): NEXT i
800 NEXT y
```

STOS CORNER

This month Frank Charlton resolutely avoids any vaguely dodgy STOS jokes.

Screen-savers again?
In the August issue of ST FORMAT someone wrote in asking for a screen-saver that works in STOS. The Boink screen-saver is such a program. I hope this proves useful.
John Henderson, via AdLib BBS

That's great news, John - cheers. Boink displays a bouncing Atari Pong symbol when it kicks in, and it's quite old now, so your usual PD library or favourite BBS should have it in their collection somewhere. We use a copy now at STF too, to save our monitor during those lengthy STOS sessions.

Tandem for two
Here's a tip for using Extensions with STOS. Normally STOS only checks the drive it was booted from for the STOS and COMPILER folders, so your Extensions need to be on the one disk. You can load them from your external disk drive if you use the Tandem program from ST FORMAT Cover Disk 66 (see page 80 if you missed it). Copy the STOS and COMPILER folders with the extra Extensions to Drive B, and Tandem loads its ST into thinking they're all on the same disk. You need to copy Tandem to the Auto folder of your boot disk, and it needs to run before STOS to work.

Ijar Hussain, Birmingham

Thanks for that useful tip, Ijar. Now you're not limited to using just a few Extensions crammed on to one disk.

Virtual reality
Would you consider putting STOS 3D on the ST FORMAT Cover Disk, because I have heard Mandarin have stopped producing it.
Sonny Cotton, 3t Austell

It seems as if Eurogread Software have stopped production of the entire STOS range of products. However, there is still a version of STS 3D available, so we've arranged a little special offer. If you're a subscriber to ST FORMAT (and if you're not, why not?) we have a limited number of copies of STOS 3D available at the highly reasonable price of £9.99.

Quiz of the week
I've come up with an idea for a quiz program, and I've written some of the basics of it. I would like to ask the player a question selected at random from a possible 200 questions. I've got it as far as being able to select the question, but now I don't know how to match up a random question with the right answer.

Adrian Wherry, Kilmarnock

Presuming you're storing your questions in DATA statements, you can use arrays to hold both questions and answers. If you've established the array at the start of your program with a line like:

```
10 DATA "This is Question One", "This is the answer to Question One", "This is Question Two", ... ;
```

All you need to do (at the point in the program that reads the DATA statements) is add an extra line to read each answer as well. For example:

```
50 FOR X=1 TO 200
60 READ question(X)
70 READ answer(X)
80 NEXT X
```

If your randomising routine chose question 65, the question is held in question$65, and the answer in answer$65. It isn't the most elegant way to do it, but it's a starting block for you to work from.

CyberPaint sequences and STOS
Many moons ago, back in ST FORMAT 62, (all right, not that many) Michelle Hubback asked if it was possible to use animation sequences in CyberPaint. SEQU format within her own STOS program. Tony Greenwood from the inimitable Stossier diskmag has written in to tell us that it is possible. Stossier featured this routine in a previous issue, and you can contact Tony at 29 Paxton Street, Accrington, Lancs BB5 1QQ for details.
resolution – you are using. Pages 251-253 in the GFA manual tell you the values to use for your chosen screen resolution. Just enter the correct values in SCREEN: 3x, V, S.

Nice but...
What is the DIM statement used for?
James Cope, Bath

The DIM statement is used to reserve memory within the machine so that numbers or characters may be held there instead of being loaded from disk when needed.

Back to basics
What is the difference between an integer and floating point number?
David Jones, Northfield

An integer number is a whole number – 1, 5, 15, 100 and so on – and a floating point number is a decimal number – 1.232, 3.1452, 10.23, that sort of thing.

Please wait
I need a routine that will pause a program while it waits for a mouse button to be clicked?
Stanley Ipkiss, Edge City

One way is to use a simple loop:

DO * PUT YOUR PROGRAM HERE LOOP UNTIL MOUSE

The code will then continue until a mouse button is clicked.

---

formatted? Is it even designed for your ST? You see the problem we have answering this question. Write to us again and provide us with full details such as make, model number, where you bought it and the software supplied with it. It's also a good idea to let us know exactly which ST you have.

SpeedoGDOs

I have SpeedoGDOs for my 1040STE and I am having a few problems. Whenever I try to run Hyperpaint 2 or Timeworks 21 I get error messages such as “not enough memory for scratch buffer” and “do not use special effects”. You have said in ST FORMAT that you can use SpeedoGDOs with any GDOs compatible program, so what's the problem here?

David Magn, Farmborough, Kent

Memory: To run SpeedoGDOs effectively you must have at least 2Mbytes of memory in your STE, especially if you want to run GDOs-only programs like Timeworks 2 alongside SpeedoGDOs. Invest £50 in a couple of 1Mbyte SIMMs and install them in your STE to take you up to at least 2Mbytes of RAM. You know it makes sense.

Select me!

I want to unpack the Medieval Chess program from ST FORMAT Cover Disk 62. I have used your Cover Disk Menu program but when the instructions say the file selector is supposed to appear the item selector appears instead. This happens with all of the programs on the Cover Disk.

Anthony Youd, Gateshead, Tyne & Wear

Ah. Actually, the file selec-

Stoster has gone from strength to strength, and Tony tells us he's never missed deadline in 17 issues. There are some excellent routines and tutorials to be found on the disks, and they're well worth taking the time to read.

The CyberPaint routine was written by Andy Cato of Newcastle, who's a regu-

Vanishing RAM

I have a 2Mbyte memory board from Power Computing installed in my 5205TFM, giving me a total of 2.5Mbytes of RAM. When I run Knife ST from Cover Disk 42 it tells me that I have 2,560K of RAM installed. However, when I run Sysinfo from Cover Disk 53 it informs me that I have 512K in memory bank 0 and 2,048K in memory bank 1, yet I only have 1,024K of ST RAM available in total. UKY also informs me that I only have 1,024K of RAM. Many of my programs alert me to low memory – can you help?

Zakaria B Din, Talpingt, West Malaysia

A

The problem is probably caused by a bad connection somewhere in your installation. Take a look inside your ST and carefully check the upgrade against the instructions manual. If you can't find the problem then we suggest you take your ST to a local electronic repair store – sorry we can't be of more help.

We contacted Power Computing who suggested you write to them at: 44c/b Stanley Street, Bedford MK41 7RW, explaining your problem – they have an excellent technical department.

Do you want to see these flashy CyberPaint animations in your own GDOs programs, thanks to the hard work of Andy Cato.

Stoster contributed, and it's a neat little smasher (as they say up North). Cheers, Tony and Andy!
**MIDI AND MUSIC**

Odd tracker formats, non-MIDI sequencers, overlapping drum notes. Is there anything at all that Andy Curtis doesn’t know about using MIDI on your ST?

**OctaMED compatibility**
Could you tell me whether there are any utilities to convert or play Amiga OctaMED soundtrack files on my ST? I have tried using Octoliner v0.96 but I keep getting thrown back out to the Desktop. Help.

Scott Pendere, Bristol

At present there are no utilities to play OctaMED tracker files on the ST. The Storm Tracker package (reviewed last month) has great 8-track facilities built in, but as far as we know it’s unable to load the Amiga files.

**Sequencer misery**
Can you please get me out of my misery and tell me what I am doing wrong. I have my Roland D20 linked up to my Atari STE 1040 and I have tried to use the Breathes and RKS Omega 1 sequencers. My problem is that if I record six different tracks on six different channels, they all play back on the same instrument. Also, if I use 24 tracks how can I D20 to play back 24 instruments? What am I doing wrong, or am I completely mad?

Peter Hills, London

You are, of course, completely mad. Peter. Don’t let this put you off, though. You do, however, need to read the manual of your D20 very carefully, because it sounds like you need to switch your synth into multichannel mode. This should sort out the track assignments and get you going. Remember that tracks are not the same as channels. You may want to use six tracks on your sequencer, for example, on one channel. This enables you to build a part up from a number of takes. The most common usage of this is with the drum track.

**Sample converting**
I use Quartz and need AVR sound samples to work with. I have seen a number of disks advertised in PD libraries for soundtracker samples and wonder if I can use them, or is this just a waste of my resources?

Charlie Waterman, Norwich

While creating specific headers for some sample formats can be problematic, if you simply need to hear and use a sample then almost any chunk of sample data can be used. Our advice is to load the sample into an editor such as Soundlok or one of the Replay editors and have a listen to it. If it sounds okay then save it as an AVR file. If it sounds awful and distorted then click on the High Bit button or use the 'Sign Sample' command – this should make the sample sound cleaner. If there is a bit at the end of the sample, simply cut it off using the editing tools in your sampler software. Don’t be put off by strange sample suffixes such as WAV, SND, AU and RA – just load them into a sample editor and have some fun.

**Drumming polyphony**
I was having problems with polyphony on my drum machine – Lexis SRT6 and I solved it by editing the note lengths of the drum notes. When I played the drum part into my ST I was pressing the notes for longer than they needed to sound for. If I went into Drum Edit and shortened the notes it left the machine clear to receive the next note sooner. Hope you understand this.

Erik Hoffman, London

Thanks for a great tip, Erik. What you suggested could well solve some people’s problems with overlapping drum parts. One other way to ease the congestion is to advance one instrument, the snare for example, by a very small amount using an Edit page. This helps prevent too many notes queuing up to be sounded at the same time.

**Multiple-platforms**
My brother, my friend and I all keen on art and graphics using an ST, an Amiga 1200 and a 486PC. I need a program to convert images files between GIF, IFF, SPU and BMP formats. What do we need and where can I get it from?

Robin Daigleish, Langholm, Dumfriesshire

You’ve just described GEM-View 3, which converts between all the formats you have mentioned and many more besides. You can get GEM-View 3 from any PD library or download it from most ST BBS’s – it’s shareware and you will have to register it because most of the save options become disabled 30 days after you install it.

**SyQuest time**
Is it possible to connect a SyQuest drive with removable 130MByte cartridges to my STFM? What hardware do I need and where can I get it? I can get new 130MByte cartridges for £40 each and a SyQuest drive for £240.

Paul Monk, Nottingham

You can use external SyQuest drives with your ST using a special SCSI host adaptor called the Link 2. This is a special lead with data conversion hardware in the large plug at one end; the other end connects to the DMA port of your ST. Connect the two devices together and use the software provided to format your SyQuest cartridges. The Link 2 is available from First Computer Centre 0532 319444 for £85. Remember you can only use an external SyQuest drive with the Link 2 and that it must be cased and have its own power supply and a standard 50-way Centronics SCSI connection.

**GOT A PROBLEM?**
Send your ST related problems to ST Answers, ST FORMAT, 30 Monmouth Street, Bath, BA1 2BW. Please indicate the type of problem on the envelope.
PROTEX 6.5 at new Low Price £74.95

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For Atari ST, TT, Falcon. 1Mb required. (Also Amiga, PC).

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Since issue 58, when we put it on our Cover Disk, we've been inundated with requests for help with using and making the most of Quartet.
Simon Forrester is your genial (and hairy) host.

There are two main problems you'll have with getting the most out of Quartet. The first is the hassle of actually building a musical tune, as we're not all musically as good as these packages apparently want us to be. The second is getting used to how the package works. Let's start with the basic steps of creating your tune.

Getting started

1. Decide your timing. Move the cursor to the top left icon bar, and use the Clock menu. If you're not sure about musical timing, but you want to write a tune that goes 1... 2... 3... 4... pick 4/4. Read The Rudiments of Musical Theory (from all good bookshops) if you want to learn the full ins and outs.

2. Next, decide on your speed. It's best to work with a tempo of 200, but feel free to fiddle about with the setting and get the hang of this speed business.

3. Create a simple drum beat, to keep time while you put the rest of the instruments in. If you're stuck, repeat this simple pattern:

4. Next, you need to add a bass track, this time in the form of some 'ahhh' (they're on the original Quartet disks). In nearly every tune you write, you'll need some sort of foundation for the other instruments. If you don't throw some low(ish) instruments in there, your music will have no real meat to it. So switch to track two, and paste in a nice little backing track.

5. Finally, you can add your melody. Moving to track three, pick a lighter instrument and lay your melody on top of the two tracks we've already created.

And that's the simple part. Now, before you get into the more complicated elements of the package, you'll need your tune. You can either rip off the one we've done, for the sake of practice (they're just random notes, though!) or you can create your own tune. If you do go your own way, there are a few things you should bear in mind:

To make things a little more interesting, place this sequence (above) directly after the first. Because you've placed the second fill directly after the first, the two will loop continually, giving an impressive effect for ten seconds' work.

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Try to keep a channel free – if you want to use your soundtrack as a background track for a game you'll need a channel free for sound effects, and if you just want to write some music, you may want to throw a few more effects or sampled voices over the top.

**Recording**
As well as having a full sheet music editor, *Quartet* has facilities for recording music played on a MIDI instrument, such as a keyboard. This can be handy if you're the kind of person who has a mastery of the piano, but the rest of you may as well gnaw off your fingers. *Er, sorry? – fill*

If you're going to be all poncy and insist on using this input method (and there's no reason why you shouldn't), there are a few ways you can make the whole experience easier:

- Leave a few drum bars at the beginning of the piece, to get your timing right before you start.
- Slow the piece down to play along – the notes are snapped toward the nearest semi-quaver in terms of timing, so any mistakes on your part will only be magnified by the time the program's finished with it.
- Only listen to one other channel. Although you can record one channel while playing the other three, it's never a wise idea. The best method is to play along to the basic drum beat or bass line only. Why? Well, try it both ways and you'll soon see the difference.
- Don't tie your hair back. It looks really good if you can fling it about while dramatically striking your keyboard.

**Other little points**

**Transposing** – This function isn't just useful for dropping whole tunes by a few notes. If you ever want to produce a harmony effect, copying the melody on to another track and transposing it works wonders. Your extra track should really be seven semitones higher (that magic number again). If you want to go for a second harmony on top of that, make it one octave (12 transpositions) higher.

**Play one** – Don't use it. If you're writing a melody over other channels, playing only the track you're working on will give you no idea of timing, feel, or even synchronisation. Always play every channel, unless you're recording.

**PolyPlay** – A handy little option enabling you to use *Quartet* as a MIDI controller and send your music to a MIDI keyboard. However, you shouldn't then write your tunes using ST samples and expect your keyboard version to sound the same. If you're writing something that will eventually be played through a MIDI device, then you should play it through that device during development as well.

**Block** – It's that little B button

---

**A little demonstration of some of the more technical bits of notation, yes.**

Pay attention everybody - we're going to look at linking. This is a handy way of tying two notes together to get them to sound in fast succession. When you link different notes, you create a smooth slide between the two. You can link a note to the previous one using the minus sign on the numeric keypad.

Here you can see how the different lengths of note work. As you work from left (the longest) to right (the shortest), the notes become less complex. If a note has a dot directly after it, it's half a step shorter than the next note down the list. After they've lost their flourishes, they lose their sticks, then their fills.

If you're worried about timing notes to make sure the gaps last as long as the actual note, use the pause symbol with the same serifs as the note you're trying match. With shorter notes, you need to use dots after the pauses. Remember that you can use these, as they're invaluable for more complex pieces.
underneath the channel selectors. Try and make use of this button, because it enables you to look at or edit strings of notes that you've cut from your music, ready to paste in elsewhere. If you get used to editing with the block editor, you'll be able to edit four channel tones on what is effectively a five-channel editor. Cunning.

Your turn
Well, that's it, then. You've either got the hang of this music thing, or you never will. If you look on this month's Cover Disk you'll find two *Quartet* files courtesy of Paranola, who are an excellent little demo writing team and would really like you to hear their work.

If you listen to the tracks and think, "I could do that," here's your chance to show off your talents to the ST world, with our STF Quarter Challenge. It all works simply — if you've written an original piece of music on *Quartet*, or even if you've done a cover version, send it on disk to: STF Quarter Challenge, 30 Monmouth Street, Bath, Avon, BA1 2BW.

Why? Well, on 8 December, we'll be picking the best piece we receive, and the author will win not only fame on the Cover Disk of the biggest ST magazine around (that's us), but also five excellent pieces of music software for their STs.

So what are you waiting for? Get to it, now! STF

THE SAMPLE EDITOR

On the second *Quartet* disk (if you're using the standard release package), you'll find a program called *Digital*, which is a sample editor that you can use for creating new and exciting instruments to use in your music.

The samples provided with *Quartet* range from real instruments (which sound like slightly distorted beeps) to more interesting sounds and noises (which sound like slightly distorted beeps) to more interesting sounds and noises (which sound like slightly distorted beeps). You don't need to know masses about how digital samples work, but when you're actually editing your noises, there are a few things you ought to bear in mind.

1. These samples will be played in fast succession. When you're creating a sample it may sound exactly as you want it, with a good, sharp attack and a nice fade to silence, but this won't work in a tune. While any silence at the end of the note will be chopped off by the next note, silence at the start of a note will cause some nasty pauses, making your song sound disjointed. As you write faster successions of notes, you won't hear a thing — because by the time the silence has finished, the next note's silence has started.

2. If you've abandoned the idea of 'proper' sounding instruments, you can create some good new instruments by slowing down an existing sample. All you have to do is reduce the playback frequency by approximately two thirds. Any lower, and everything sounds the same. If you speed up the samples up, the instruments will just sound ugly.

3. If you're going to mess about with sampling frequencies you'll need to set the note back to A. Use the 'shift note' button.

4. Noise reduction, although good for refining and tidying up your samples, always reduces the sound quality somewhat. It works by killing all low-frequency noises, like mains interference hum, aeroplanes taking off in the background, and traffic, and it also strips the low-frequency end of the sound you wanted to use.

5. Always bear in mind the volume of your samples. Instruments that are to be used as bass instruments (played at a low pitch) should be louder, because higher notes are always easier to hear. Either drop the volume of the lead instrument or raise the volume of the other instruments.
There's so much to tell you about Personal Pascal that we couldn't fit it all on the regular Cover Disk pages. Nick Peers covers a few of the basic principles, then shows you how to write your own simple game.

PERSONAL PASCAL

By: HiSoft
Machines: All STs
Memory Needed: 512K
Resolution: Medium/High
Uncompressed size: 493K

To install Personal Pascal, take a blank formatted disk and run MENU.PRG from Cover Disk 64b. The files are archived to fit them on the disk, but Menu automatically decompresses them on your blank disk. Insert the disk when prompted to by the Menu program and you'll soon have your own working copy of Personal Pascal. Reboot with your Personal Pascal disk in the drive, and double-click on PASCAL.PRG to load it. Don't load any of the other PRG files from the Desktop. They're accessed from inside the main program.

How Pascal works
A Pascal program is written in blocks. The blocks are framed by the terms BEGIN... END which makes its form easily visible, and helps when you are either creating or editing your programs. By defining each BEGIN... END, your program can later call each block as it's required without having to jump around in what otherwise quickly becomes a logistical nightmare.

It's all but impossible to write a beginner's guide to Pascal in less than two pages, but we've written a sample program listing to give you an idea of how the language works in practice. The program is a simple game in which Player One enters a number, which Player Two then tries to guess. Just examine the listing - you can almost understand how it works by looking at it.

The listing begins by giving the program a title (game) and declaring that it will require both inputs from the user and outputs to the screen. The 'var' command sets up the four variables that will be used in the program: 'x', 'num', 'guess' and 'goes'. The 'integer' command tells the program that all the variables are whole numbers; other commands such as 'string' enable you to create variables made up of text, but for this program you only need numbers. The bones of the program are two procedures. One is named

#### THE PROGRAM LISTING

program game(input, output);
var x, num, guess, goes: integer;
procedure getnum;
begin
num:=0;
while (num<0) or (num>100) do
begin
write('Give me a number between 1 and 100:');
readln(num);
end;
x:=0;
repeat
begin
write('x:=x+1;
end;
till x=60;
end;
procedure guessnum;
begin
write('Guess number: ,goes:');
readln(guess);
end;
procedure wrong;
begin
if guess=num
then writeln('Too low!');
else writeln('Too high!');
goess:=goes+1;
guessnum;
end;
(*Main program start here*)
begin
goes:=1;
geussnum;
while guess<>num do wrong;
writeln('You got it in ',goes);
readln;
end;

Personal Pascal manual

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BUT WHY PASCAL?

It's difficult to write well-structured programs in languages like BASIC. The use of GOTOs and GOSUBs to leap around your program tends to break down any sense of logic it possesses. Just look at this example:

10 REM BASIC program
20 PRINT "First, I'm over here."
30 GOTO 60
40 PRINT "And finally I'm over here."
60 PRINT "Now I'm over here."
70 GOTO 40

It's a ludicrous example, and can be written much quicker like this:

10 PRINT "First I'm over here."
20 PRINT "Now I'm over here."
30 PRINT "And finally I'm over here."
40 END

Even if you don't know the first thing about BASIC you can see the advantages of the second program over the first. The second program is shorter and follows a far better structure and pattern. The beauty of Pascal over BASIC is that it was specifically written to promote the writing of well-ordered programs, so even BASIC experts can learn by using Pascal. Beginners are catered for too, because Pascal is relatively straightforward to learn.

'getnum' and the other 'guessnum'. The first deals with getting Player One to enter a number, which Player Two will try to guess. Two blocks are involved here: the first ensures that the number entered is between 1 and 100, while the second deals with clearing the screen by printing 60 blank lines (thereby preventing Player Two from seeing the number that he's supposed to be guessing).

The 'guessnum' procedure is much shorter, and merely consists of the routine that enables Player Two to enter his guesses. The 'write' command prints the message telling Player Two what number guess he's on, while the 'readin' command enables him to enter his guesses (storing each one in turn as the variable 'guess'). Finally, the 'wrong' procedure tells Player Two that the number he entered is incorrect, and whether it was too high or too low.

The heart of the program

If the three 'procedure' routines form the bones of the program, the section under the line "Main program starts here" forms its heart. It is here that the program is driven within the block framed by BEGIN... END. It starts by setting the number of guesses at 1, then calls the 'getnum' procedure to enable Player One to enter his number. 'Guessnum' is then called where Player Two enters his guess. Next, the program checks his guess with the number entered by Player One, calling the 'wrong' procedure if it is incorrect. When he guesses correctly, the program tells him how many guesses he took, waits for the <Return> key to be pressed and ends the game.

The game is simple – it could use a better interface, and it will crash if you enter anything other than a number. To enhance it would require a longer program, with new procedures to give it the improvements suggested, but with essentially the same structure and theory. Watch out for future tutorials in these pages, but in the meantime see below for how to order the full manual from HiSoft. If you're serious about Personal Pascal, you'll need it!

PASCAL CHALLENGE!

If you fancy yourself as a programmer, then write a program using Personal Pascal and send it in to us here at ST FORMAT. If we like your program we might even put it on the Cover Disk. Send the compiled program, with the original Pascal listing on a disk to: Personal Pascal Challenge, ST FORMAT, 30 Monmouth Street, Bath, Avon, BA1 2BW.
VECTOR PRO A-GO-GO-GO

Leave Nick Peers miles behind when you use this mini masterclass to become an expert with Vector Pro.

1. Select 'Vector path' from the Edit menu, and draw an object by clicking on the 'Freehand polylines drawing' icon.

2. Next, select 'Vector graphic' from the Edit menu, click on the 'Area attributes' icon and select 'Load fill pattern'.

3. Load one of the two fills supplied before selecting the 'Activate fill pattern' icon to shade your object.

4. You can easily alter the shape and orientation of your object by selecting the appropriate icons from the main 'Vector graphic' icon menu.

5. Select 'Bezier grid transformation' from the main icon menu before clicking on the 'Edit Bezier grid' from the sub-menu to prepare your object for yet more warping.

6. By clicking on the various points of the grid you can warp it to the desired shape before clicking on 'Perform transformation' to alter your object.

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- **Speedball II D/S (512k)**...
- **Stealth D/S**...
- **Strider 2**...
- **Striker**...
- **Striker**...
- **Striker Car Racer**...
- **Super Monaco GP**...
- **Supa**...
- **Tennis Cup 2 D/S (512k)**...
- **Thomas the Tank Engine**...
- **Thomas the Tank Engine**...
- **Transarcilla**...
- **Turbo Outrun**...
- **Turbo Outrun**...
- **Turrican 2**...
- **Turrican 2**...
- **Ultimate Darts**...
- **Wend Dreams**...
- **Winchester Gold**...
- **World Class Leaderboard**...
- **X-Out**...
- **Xenon II**...
- **Zik/Zebrak & Alien Mindbenders D/S**...
In our increasingly morally aware society, cheat pages are frowned upon. Soon, pages like this will be outlawed as subversive. Simon Forrester would sell his grandson, only his sister beat him to it.

**CIVILIZATION** REVIEWED: STF 46, 92%

That's right - these are the pages where we do all the hard work so that you don't have to. Before we dive into the next part of our Rock 'n Roll Clams solution, we're having a brief dabble with the world's civilisations, courtesy of Christopher Jenkins from Worcestershire (and not, as some people previously believed, God).

There are many game strategies that work, some of them in different situations, and although none of them are guaranteed to work, some are very valuable. (Not really committing yourself here are you? - Jil) When the game starts, there are four different situations that you might find yourself in:

1 **On a large continent with other civilisations on it.**
   This is the worst possible case. Unless you really are very lucky, and are a great distance from your nearest rival, it's best to leave such games and start again.
   This is because even if you do manage to conquer all the other cities on your continent, they more often than not have overlapping economic radiuses (radii?), which means that they compete for resources, and will never be able to grow to full size.

2 **On a continent (of any size), that's totally isolated from the rest of the world, with no way of reaching anywhere else with your trierims.**
   An isolated civilisation can concentrate on peaceful growth and even become quite prosperous, as long as it develops the land around its cities to the full.
   It's useful to build the pyramids quickly and become a democracy. Although you can no longer explore the seas (trierims, being military units, make two people unhappy in their home city), you can expand to the full, and your civilisation should become the biggest fairly quickly.
   However, this only lasts for a while. Your land runs out, which precludes further expansion and means you have to develop the land around your cities quickly to get the best out of them. Other civilisations overtake you, but you

3 **On a small(fish) continent with one rival on it.**
   They must be destroyed quickly, so that you don't have to compete for resources with them. Follow the guide to waging war to improve your chances.
   The game then follows the course of either the second or fourth situation, depending on the location of other continents.

4 **Isolated on a small continent with access to the rest of the world (other continents within the range of your trierims).**
   You're lucky. This situation gives you all the advantages of the second situation, with none of its associated disadvantages. Get in there!

---

**Cheating more**

All you need now is the map editor from Wonder Disk 61 (you do subscribe, don't you?). When editing the map, the best pattern of terrain around a city is this:

```
   OOOOOOOOO
   OORRHO000
   OORHROR00
   OORROR000
   OORRRHO00
   OORRRR000
   OORRRRRR0
   OOO0000000
```

River, Hill, Ocean, City (which is itself on a river)

All rivers should be irrigated, all hills should be mined, and everywhere should have railroads. Note that there is a hole in the landscape (the sea gets in diagonally above and to the right of the city). This is to enable ships to be built in the city. If you wanted a challenge, you could wipe out all the land in the world, except for the land around the cities of all the different civilisations. This is best done at the beginning of the game, when each civilisation has just one city.

Remember, it's tempting, but don't use the DU terrain type. It messes up the display, and makes it harder to see your units.
Here it is – the second and final part of our Rock 'n' Roll Clams solution. Once again our most sincere and heartfelt thanks go out to those marvellous people at Casplan. And hey! Plug time. Turn to page 82 for our interview with Andrew Gisby, who's programming the wonderful-looking Zero-S for Casplan. And don't forget – if you think you can do better then send us your solutions to any recent games, to the address in that box just there to the right. There's money in it for you...

You think you can wipe out the opposition in Cannon Fodder? Score max points in Elite 2? Get around the intricacies of Herman? Or do you have hot tips on any other ST games? Send 'em in to: Gamebusters, ST FORMAT, 30 Monmouth Street, Bath, Avon BA1 2BW. You could even win some cash.
For several months now, the ST gaming world has been waiting for Caspian's launch of Zero-5, a game that looks to be the best this year. Zero-5 is an advanced 3D space shoot-'em-up, dispensing with the mechanics of space flight in favour of the mechanics of blowing stuff up. And its author, Andrew Gisby, had lots to say about it.

When did you start to code?
I started on an Acorn Electron at school, teaching myself BBC BASIC. I didn't really get any further until I left school, at which point I got a job and bought myself an ST. It was only then that I started with machine code having already mastered BASIC.

Which computers do you use at home?
I've got three Atari machines - an STFM, a 1040STE and a Falcon, to test the different versions of the game as I write it. I use a Yamaha keyboard to create sound effects. I've also got various other bits and pieces, although they don't really come into writing Zero-5.

Do computers come into your life in the daytime?
I'm a systems analyst working in an insurance brokers, so most of my waking hours are spent working with business computing - Unix, other business systems.

What are your favourite games for this stack of STs?
I like single-author games - Glyn Williams, Jon Ritman, and the like. It's that kind of game that has the real originality, and shows real hard work. If you're into programming, who doesn't look up to David Braben? You aspire to what people like that are doing, and decide to have a crack at it yourself. Those are the people I admire.

Is Zero-5 your first game? What have you done before?
I work like most other coders - a lot of ideas start, get 75% of the way there, but don't get publisher interest, so you start on something else. Without the support I got from Caspian, it would have been difficult to finish anything of worth. I had a flirtation with shareware last year and produced De-res, which went down well on bulletin boards and in fanzines. Unfortunately, like most shareware in this country, the honest response was dismal - it's just the way the British think.

So how long have you been working on Zero-5?
Zero-5 has really only been in development for a year, but I'm modifying some routines I wrote three years ago. I've spent most of the last year drawing the graphics.

I've spent a lot of time on the 3D, though - making sure objects react realistically, so that when you blow something up it actually falls to bits in its component parts, instead of disappearing in an explosion.

How does your 3D work?
I did it in the same way as your feature last month [see 82, folks - page 89 if you missed it]. The actual maths aren't extremely complicated, you just have to code the formula into the fastest routine you can. The calculations are fast - it's drawing the polygons that takes the time. On most games, the basic shapes are all very simple, and if you're only doing a transformation on 50 vertices, it's not going to take up too much processor time. The big trick is to only draw the polygons you need.

Was it conscious decision to write the game alone?
I've only been writing the game in evenings and weekends, but I've been coding since 1986, so my routine library is pretty big by now. If I didn't have that library, the development process would have taken three times as long, but having pre-written material really cuts down on time.

Did you base Zero-5 on any other 3D games?
The initial idea for the game came from the film The Last Starfighter.

THE QUANTUM IRRADIATOR

There are certain aliens that fire a quantum irradiator. If you don't manage to shoot them before they hit you, they'll explode in a lovely big white-out effect. It's possible, though, that the explosion could throw you back in time, effectively throwing you back through the script to play certain parts of the game again. Tough!
Those consoles...

Where do you think the ST fits into the market today?

The good thing about the ST is its architecture—it’s very easy to write games on it because of the way it’s laid out. You’re not likely to come across the kind of strange bugs that you’ll find on an Amiga or PC.

I think I made a good choice all those years ago—I picked up assembler because of the machine’s simplicity, and within six months I’d written my first game. I like Atari, anyway—I’d like to write a Jaguar game at some point.

So you’d like to go into console games?

It all depends on how well Zero-5 does, but we’re fairly hopeful. I’m a great believer in games that are simple to play—I like the arcade concept where you’ve got very simple controls, instead of a light gun using every key on the keyboard, and the Jaguar is perfect for the arcade style of game. They don’t have to be simple, just easy to use—you’ll get a better game out of it in the end.

How do you feel about the larger software houses that you may have to deal with in the future?

My only problem with larger software houses is that they release formula games. Sega, for instance, have just released a long line of cute platform games. The Amiga went through it as well, getting another game every week. You do get exceptions like Elite 2 and Formula 1, but most teams are just up in the clouds, and produce games to a certain, predictable formula. I still tend to buy the games that are done by relatively unknown teams, and haven’t got US Gold logos splashed all over them.

We wanted to get as many aliens on screen as we could, and let the player blow them away. As things get harder there are more intelligent attack patterns, but we’ve made sure it’s always cinematic and graphic. We’ve tried to achieve something that feels really good to play—there’s an on-board computer shooting warnings, things blinking and bleeding and aliens exploding everywhere. It’s all about gratification, so play it on a big screen...

How has the game changed from your original concept?

The main changes were to do with the game’s linearity—I started before Chris [Caspian boss] contacted me, when I was just tinkering around. It was after speaking to Chris that the changes were made to the sequences surrounding the game and the front end in general.

Does what you’ve got now live up to your expectations?

It was originally aimed at the STE, and I think it’s about as fast as I could get a game to run on that machine—it’s pretty quick, but the proof of the pudding will be when the review comes. Because you can use the blitter and calculate things in parallel, you can get about a 20% speed increase on other machines.

Do Caspian have a say in the game’s style? Where does the creative control sit?

So far, apart from a few of the music routines, “I’ve done everything”—the concept, the program, everything. Caspian are a lot of help and have a lot of good ideas about how the game should look, and I listen to them but in the end I’m the one writing the game.

Is Zero-5 going to work on all machines?

The game tails itself to the system it’s running on. On an STE it uses the blitter and all four sound channels—we’re trying to write a game that does more than just run on the bog-standard STFM. It’s one of Caspian’s directives really, to use as much hardware as you can if it’s available. Zero-5 runs on the Falcon, the TT, powerpads if you’ve got them, a mouse if you plug that in, and a hard drive.

What parts of the game are you particularly proud of?

The is the first time that I’ve really put a lot of work into the graphics side of a game. Explosions aside, I’ve taken tips from things like Star Trek TNG, and made even the front ends simple to use. We’ve tried to make the game intuitive, as well—you can load up the game and go straight into it.

We’ve created a pilot database to record every mission you complete and every award you receive, so if you do want to remember where you got up to, you create your database and whenever you finish a mission, you can accept or reject completion of the mission, either saving that mission as completed, or leaving it. This gives much more scope for longevity.

When’s Zero-5 going to be released?

We’re aiming for October. Obviously, if something disastrous happens it’ll be put back, but there’s nothing left to go wrong—the main game is written, I’m just working on the smaller things like the mission manager.

We can add more missions and aliens at any time, though—Zero-5 works with a scripted system, so a level will play in roughly the same way every time. Everything from aliens to computer verbal warnings works to these scripts, letting us fiddle with them very easily and create new levels without too many problems.

So there may be a construction kit element?

No. Not initially. We could well produce one, because the system is flexible enough. If enough people buy the game and ask for one we might well think about it. We can add new scripts easily, and all scripts are fully compatible, which means that all missions run on all versions of the game.

This version control runs through the whole system, so we can even expand with a new game, and you could use your pilot database with it. There are no plans for a sequel at the moment, but if we do want to do anything, the flexibility’s there.

Which language did you write Zero-5 in?

The whole game is written in 68000, occasionally using 68030 for the machine-dependent parts, using DevPac 3 and Replay 8 (but I gave up with the upgrades). Because I use assembler, instead of having some nasty C program to do the tricks, everything’s as fast as it can possibly be.

That’s rather a scary idea for a lot of people, though. How exactly would you suggest our readers get into coding?

I’m a great believer in being self-taught. If you mess up on an ST, you’re not going to wreck anything, so it’s okay. When I started, my first goals were to understand how the screen worked, and scroll it. You’ll find that if you start with these simple goals you’ll learn a lot of techniques that you’ll eventually use elsewhere.

It’s important to get into a high level language first (BASIC or C) though, because you’ll need to learn the techniques of programming in general.

Releasing a brand new game on to a market, are you at all worried about piracy?

It’ll end. Soon. It’ll be a social stigma, on a level with driving out of a garage without paying for your petrol. Eventually, everyone’ll realise what piracy’s doing to the industry, and it’ll become socially unacceptable.

You think twice when you pick up a Sega cartridge, though—at four times as much as an ST, you have to ask yourself whether it’s really worth the money. astf

As the shot ripped through the ship’s fin, Derek found himself diving toward the cream puff planet.
READER ADS

An avalanche of mail hit the postbag when it was suggested in Feedback that ST FORMAT should host a reader ads service. ST owners everywhere, it seems, have a bit of kit to sell or are looking for a long-deleted program. So here you are, a small ads section that goes straight to the heart of the ST scene - each and every month!

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NOW YOU'RE GOING TO GET THEM!
YES, ST FORMAT READER ADS ARE HERE

ST FORMAT’s free reader ad service hits the pages next month (in the December issue) so make sure you avail yourself of this brilliant free service soon.

Is there’s some software you’ve been hunting for? Is there a bit of equipment you’d like to sell? Do you want to tell the world about your ST user group? Or do you just want to leave a message for some coding colleagues? Then fill out the form left and it’s job done. But send it back to us DEAD QUICK if you want be part of the December issue adstravaganza.

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If you've got a problem, a complaint or even a gripe, send it in to Trenton Webb. We do get the occasional nice letter, but we don't print them 'cos they're dull.

A fool writes

Dear STF,
I am a fool. I am prepared to admit this because while attempting to back up my Cover Disk I formatted Drive B instead of Drive A. I consider myself a seasoned ST user, and subscribe to your wonderful magazine. Please would it be possible to re-copy Cover Disk 62? Although I admit total responsibility for my actions, my ST FORMAT disk and Wonder Disk always arrive unprotected. Could this situation be remedied?
Yours (red-faced),
GM Bromly, Leeds.

Mind control

Dear Feedback,
I am beginning to get irritated with the attitude the ST FORMAT editorial team has towards PCs. The constant references to PCs as expensive, inflexible and 'clunky' will never be, in my mind, any more than childish and pointless attempts at stopping your readership 'defecting' to the PC. I feel that your attempts at indoctrination will simply be laughed at, except perhaps by the younger, more impressionable reader. Those of your readers who want a PC and can afford one will go out and buy one. Those who don't, won't.
Yours sincerely,
Steven Hogan, Swanley, Kent

stf: The operative words here seem to be 'pinch', 'of', and 'salt'. We're not trying to discourage people from getting a PC, nor are we trying to start some kind of petty argument. I notice you didn't complain about our attitude towards consoles in ST FORMAT 62's News pages, though - maybe we're all a little biased at times.

All good stockists

Dear Trenton,
As a regular reader of ST FORMAT, I am writing about the ST Answers pages in your magazine, in which replies often feature suggested PD programs as solutions to various problems. The questioner is referred to three libraries in the main, namely FaST Club, Goodmans and Floppyshop, as the source of these programs. I would like to point out that this prejudice towards libraries often works against the bank balance of the reader who pays a higher price for the disks than they would from other, cheaper outlets.

Sometimes the distribution of a program is limited to one or two distributors but mainly all good PD libraries will be able to offer your readers the program suggested. So please, in future, allow the reader to make their own minds up as to which library they wish to use by stating that the program is available from all good PD libraries, unless this is not the case.
Yours sincerely
A Davies, Swansea

stf: Well yes, and no. We could use the line 'available from all good stockists' and flash teeth at the camera, but that doesn't help those readers who don't want to hunt through Public Sector for a contact list, or someone new to the magazine who doesn't know who 'all good stockists' refers to. Alternatively, the writer could chase up and list every library stocking the software, but you'd really start to lose sight of the ST Answers section and what the program was in the first place. You do have a point though, so we will try to include a few more libraries along the way.

Manual labour

Dear Trenton Webb,
Am I just a thickie or am I like most uneducated computer users? Over recent years I have purchased from HiSoft many programs like Diamond Edge, Diamond Back 2, Datafile and now SpeedoGDDOS and Word-Fair 2. I have yet to get any of them working satisfactorily, and after having spent some six hours of fruitless endeavour have finally given up on the last two.
Then, having installed SpeedoGDDOS, I found that I'd failed to disable GDDOS, and had to start all over again. Then when I

NOT AGAIN...

Dear ST FORMAT,
Why hasn't The Secret Of Monkey Island 2 been released on the ST? The original was, in my opinion, an excellent RPG containing humour, sword fighting and wit, keeping me and my friends busy for a long time. Why did Amiga owners get the sequel when we didn't?
Yours sincerely,
John Lacey, Gwynedd

stf: The trouble with owning an ST is that although its reputation as a musical accessory is unbroken, and its technical specifications make it the perfect machine for anyone faced with a buying decision, it's not seen as the ideal platform from which to launch games. Does anyone want to start a Monkey Island appeal to add to our ongoing 'release Flashback on the ST' debate?

ST FORMAT ISSUE 64
Dear ST FORMAT,
I feel I must reply to LD Holland's letter in September's Feedback. I have been a regular reader since issue 16 (I didn't even have an ST then and have not missed an issue). He says that he once got his fingers burnt, but the ST FORMAT track record is outstanding.

I have just received the first issue of my new subscription one day before the shops got theirs, and well chuffed I am too. Your offer of Speedo and Disk and even more money off if you pay by direct debit did the trick for me. As for your voucher idea, no thanks. Please stick to tempting us mere mortals with nice juicy carrots.

Mr Holland's excuse of being on a pension is not sound. I'm unemployed and have been for 4 months now, yet I saw the wisdom of stretching my meagre income to accommodate my computer's desires. So come on LD Holland! If you really want the extra disk take out a subscription. You know it makes sense...

Keith Hemmer, Tyne & Wear

STF: Nuff said. (Apart from turn to page 58 if you'd like to take out a subscription.)

— SpeedosDOS. One of many new programs that would be good news, if only you could get them working.

reformat partition C and re-copy from backups (made with Diamond Back). But, yes you guessed it, one of those floppy's was corrupt, even though it backed up without apparent or indicated error.

Having finally got Speedo back on, I loaded Wordflair onto partition D, but all I get when attempting to load the program is a selection of errors, and as a result I've given up in despair. I know I'm doing something wrong, but why do HiSoft insist on putting out software that requires a fairly comprehensive knowledge of the techniques of computer use?

I have never had trouble with any other purchased programs, and must assume that HiSoft only really want to sell to the elite, which means all the programs I have from them will remain unused because they're really far too difficult to comprehend for peasants like me.

Yours in total confusion,
R Moyes, Suffolk

STF: It's a problem. The more complex software gets, the longer it takes to install and actually get running. Every third release you buy is utterly incompatible with all but the bog-standard machine, the rest requiring various DOS systems, as well as certain parts of TOS you'd really rather not give up.

At the end of the day, it's down to the softies. At the minute they're assuming you all know exactly what you're doing, but not really actually do. One point to consider, though: should softies sacrifice the power of the software to make it easier to use?

Addressing the problem

Dear Sirs,
On page 55 of issue 62, you reviewed a PD utility called GB Route Finder, showing it as being available from Asgard PD.

However, after scrutinising the magazine, there is no mention of the address or telephone number of Asgard - how can I order it?

Martin Ansell, Potton

STF: You can get hold of Route Finder by contacting Asgard PD at:

20 Landele Drive, Wakefield, Yorkshire, or you can ring them on 0924 363059. (Oops, sorry about that – Jill)

— SpeedosDOS, many of new programs that would be good news, if only you could get them working.

PRETTY LITTLE FLASHBACK COMES

It's been phenomenal. Huge numbers of readers have already written in with petitions, ranting letters, and even banners. With this level of response, it's surprising the softies didn't realise the game's appeal before now. Keep sending them in, though - we can never have too many votes of confidence.

In the meantime, you've got games like H.E.R.O. appearing for the ST, filling in the Flashback-shaped gap we're all so concerned about. So if you'd like to see a certain game appear on the ST, why not fill that gap yourself? If you know your way around an assembler and would like a bit of respect from your fellow ST users, why not give writing your own game a try? We'll happily review anything you send us, as well as giving you as much support as you could possibly need.

But Flashback isn't the only game you'd like to see. John Lacey's letter wasn't the only one this month for Monkey Island 2, and we've had requests for other games in the past, so why not look through a few back issues, dig out a construction kit and see what you can do?

There are two ways you can play this. You can sit around and wait for the large software companies to come along and release games on your machine (how kind of them) or you can start producing the kind of games you want to see without their help. When it comes to a choice between a conversion knocked out by some jobbing programmer eager to get down to the pub or an original title created by an ST fan (who knows the machine inside out), we all know which we'd prefer.

Maybe we won't need Flashback after all...

— Will we ever get to see Flashback? Depends on who you believe - some say it's finished, others say it was barely started.

Living on the Edge
— Dear ST FORMAT, I've been a regular reader of ST FORMAT for about two years, and I've also bought every issue of Edge since issue 8. I'd just like to say that I find it worrying that two magazines that work for the same publisher can contradict each other as much as you do and Edge do. I don't know if this is the case with any of the other single-format magazines available, but the STF team and the Edge team clearly do not communicate with each other.

My reason for saying this is that Edge are doubtful (possibly justifiably) of Atari's future with the Jaguar, whereas ST FORMAT see the Jaguar as the company's saviour, and expect it to become the best-selling console around.

For example, in the September issue of ST FORMAT, you reported that Atari's presence at the recent CES did much to allay fears that software is not forthcoming. There were over 25 titles on show, and the promise of this number reaching 30 by the end of the year.

Edge's September CES report, however, said that "what was instantly noticeable was the lack of quality titles actually available now. Admittedly, 35 games were on show, but as most of these were at an early stage in the development process, the real total was closer to ten."

ST FORMAT saw Kasumi Ninja as "a brilliantly Mortal Kombat-inspired beat-'em-up with quite stunning visuals". Edge preferred to describe it as "the jerky, blood-thirsty and generally inadequately Mortal Kombat clone". What's going on? Are you sure you both went to the same show?

The trouble is, who do I believe? The people who know Atari well and have stuck by them through their rise and fall from popularity, or those who are
well-experienced in all platforms and how they compete?
Yours sincerely,
Graham Courtney, Devon

**sff**: Are you sure we’re actually contradicting each other? Factualy, the quotes you’ve picked agree with each other. The only real difference between Edge and ST FORMAT as far as Jaguar coverage is concerned, however, is attitude and perspective.

Edge, for all those of you who haven’t read it, is a magazine devoted to the new waves of gaming technology, so the Jaguar obviously falls into their domain. What you have to remember is that whereas Edge covers the format in relation to the other 8-bit consoles and CD-based machines currently appearing, ST FORMAT looks at the Jaguar in relation to the ST and Falcon.

So we’re not really contradicting each other, only seeing the machine in a different light. Sure, most of the games at the CES weren’t commercially available at the time, but you’ll never go to an electronics show and find hot new games that are actually for sale – it was a preview, remember.

If we’re guilty of anything, it’s being enthusiastic. The Jaguar is the obvious step for patriotic ST owners, and we believe it’s a good step to take if you want to get into gaming. Sure, you could go out and buy a 3DO, PlayStation or whatever, but this is an Atari mag, and we look at the world from that angle. That’s why you love us.

---

**Not working that old Magic?**

Dear ST FORMAT

Having just received my copy of ST FORMAT 62, I eagerly booted my machine and attempted to use your "new, easy-to-use menu", only to find that it does not work under my Magic I setup.

I am using a 520STFM with 2.5MBs of RAM and TOS 1.02, with which the "new, easy-to-use menu" works, but when I load Magic 2 the menu system bombs. This I find totally unacceptable – I feel that such a program should be tested fully before being released, and should not force readers to revert to an old setup so they can utilise their "easy-to-use" programs.

I know the program was not written by ST FORMAT, but, considering the fact that the writer of the program pocketed a nice £50, I think a little better judging may be needed. I hope this problem will be rectified on future Cover and Wonder Disks.

Yours sincerely,
Bob Manning, Bristol

**sff**: You have to consider the logistics of the Cover Disk situation. At present we go to great lengths to ensure that the disks we publish work on all STs (unless otherwise stated) and under as many versions of TOS as we can find. You do have to agree, though, that if we were to try to consider every single operating system you can find on any ST anywhere, we’d be here all year, and never actually manage to get a Cover Disk together.

It’s one of those situations where we can’t please everybody all of the time. For all unhappy people everywhere, try using the individual files on the disk in the same way as you did before the menus was added. They’ll still work.

---

**ST FORMAT’s GUIDE TO BUYING BY MAIL ORDER**

The need for buying by mail order increases as high street shops with ST peripherals get scarcer. Here’s our advice.

1. Before you send any money, ring the supplier to make sure the item you require is in stock. Ask questions about the company’s policy on delivery and returns of faulty equipment. Make sure there are no hidden costs such as postage and packaging. Find out when you can realistically expect to receive your goods.

2. Make sure you always, always, always read the small print on adverts.

3. Beware of companies that do not include their address on their adverts. Also, avoid any companies that do not answer or return your calls.

4. By far the best method of payment is by credit card. If you’re ordering goods which come to more than £100 in total value, remember that you are legally entitled to claim compensation from some credit companies if the retailer goes bust. Check your credit card company’s policy. You can also try to get extra insurance in advance.

5. If you’re not paying by credit card, pay by cheque. Never send cash, and avoid using postal orders.

6. Always keep a record, and keep it somewhere safe. If you are buying by credit card keep a note of the time of the order and ask for an order number. When ordering anything over the telephone, always double-check the price before you part with your money.

7. If you are sending a cheque keep a note of the cheque number, the date and the exact value. Make sure you know the name and some details of the mail order company.

8. When you receive your goods, check them carefully. If anything is missing or faulty, contact the supplier immediately.

9. Always order from the most recent issue of ST FORMAT.

10. If a problem does arise, contact the supplier in the first instance. Calmly and politely tell them your problem. Most problems turn out to be minor hitches or misunderstandings that can easily be resolved. If you think you have a genuine grievance, contact your local Trading Standards Officer. The number is in the phone book.
ST FORMAT

Back Issues

OCTOBER 1994

SEPTEMBER 1994
Disk: Medieval Chess, Fastcopy 3, Albion and TUC. Inside: Supercharge your ST special. Reviewed: Rainbow, Xenomort 2, E-Z Art Pro, Imogecsopy 3, Iskar 3, Nova card, Midgrid Pro, Rorke’s Drift...

AUGUST 1994

JULY 1994
Disk: Smarcon, Desk II, Sam 2 Disk, DiskMint, AutoRAM, and Matic Minit 2 demo. Inside: Next generation of ST games. WP – sorted! Reviewed: Expose, Vector Pro...

JUNE 1994

MAY 1994
Disk: Quartet – full program and a Cannon Fodder demo. Inside: Piracy – your views; DIY monitor switcher; GDOS exposed; AVP previewed; Reviewed: DA’s Picture, Gemini CR-ROM, Fortkit Plus, Outburst...

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COLD ANCHOVIES

You'll be fascinated to know that you can now place Pizza Hut orders on the 'net. However, the only Pizza Hut offering the service is in Santa Cruz, California.

The STF team gets through the odd pizza near deadline. Our travel correspondent, Chris McCosh, informed us that it's a 12 hour 55 minute flight from America, plus six hours getting to and through LAX airport. After an hour at Heathrow and hiring a car, and three hours getting to STF's Bath office, the total delivery time is twenty three hours on a good day.

Our pizza cost £8 sterling, the flight came to £484, and the hire car around £47 - a total of £539. Bargain. But the delivery took more than 20 minutes.

NEXT MONTH

As That's Write 3, Protext 6.5 and Papyrus Gold take the floor, it's obvious that the word processor head-to-head is more closely resembling a razor-fight in a back alley. As the crowd cheers at the first spurt of blood, it looks as if Papyrus may not survive that kick to the solar plexus. Will the steadily growing mass of contenders steal the trophy from the old favourites? The crowd is in for an exciting fight in next month's ST FORMAT.

Why do you see competition as violent? You believe in passive competition? What exactly do you mean? You seem a little anxious to persuade me you're not a violent person - have you ever been violent in the past? Everybody has that's right - discover your own mind with just an ST and a copy of ST FORMAT, as we look into the psychology of computing.

Plus, of course, all of the news, reviews, previews and interviews on what's new in the ST world. We'll be waiting for you on Tuesday 8 November, so don't be late. Problem?

DON'T MISS OUT ON ST FORMAT

Banish those 'I can't find my copy of ST FORMAT' blues by ordering your copy of the magazine direct from your newsagent. As well as ensuring that you get your copy without the fuss of having to search all over town for it, you get a completely pristine copy - nobody will have had the chance to get their grubby fingers all over it. All you have to do is what thousands of other people are already doing - just fill out the coupon below and give it to your newsagent who's happy to keep hold of ST FORMAT for you. You could even have it delivered to your front door, making life even easier for you.

So go on, fill out the form and take it to your newsagent today. Alternatively, you could always take the even better option of subscribing - saving you money and giving you extras like the Wonder Disk and a free newsletter. See page 58 for details.

ST FORMAT'S ESSENTIAL CONTACTS

This month's piece of pixel wizardry comes from Paul Matson of Cheshire, using Canvase to good effect with his picture, aptly named Werewolf. Starting with the large, bright circle of the moon, Paul drew the silhouette of the werewolf using a black brush. The tree was created with the K-Line function, one of Canvase's more useful features.

Finally, Paul added a thin, brown outline to the wolf, to give an indication of colour, solidity and fur without ruining the effect of the overall image. Well done, Paul, £28's on its way to you as you read this. If you've created anything you'd like the world to see, just send it along to: Pixel Painting, ST FORMAT, 30 Monmouth Street, Bath, Avon, BA1 2BW. Or don't.

You think this is scary? You should see our Production Editor on a bad day...

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