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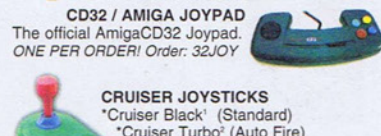
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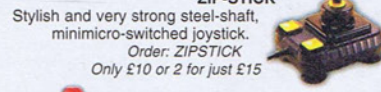
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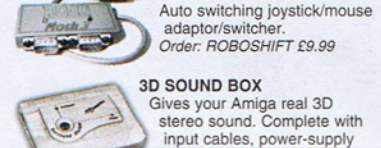
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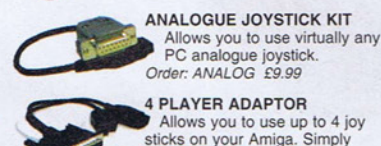
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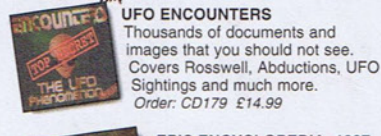
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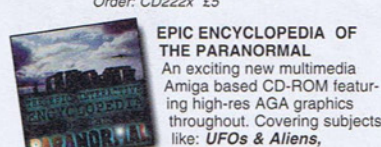
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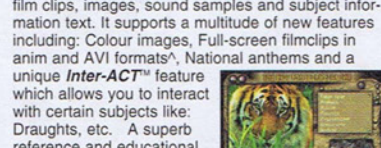


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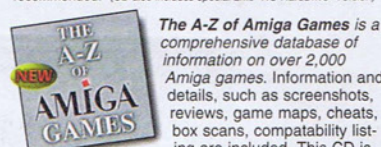
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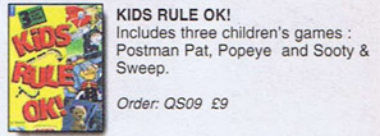


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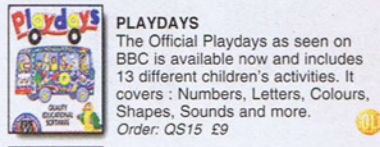
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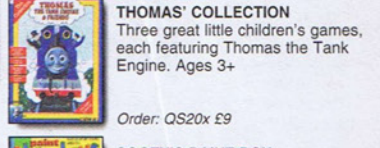
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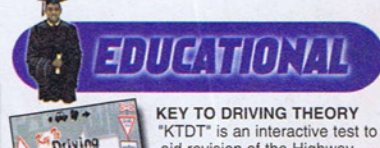
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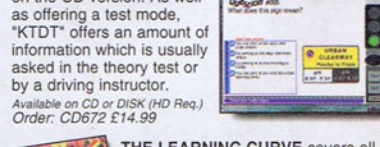
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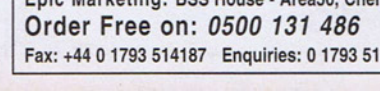
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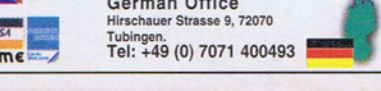


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Fun, Fun, Fun! - Platform romp!



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Blockhead 2
100 levels of frustration!



Operation Combat 2
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Forest Dump Forever
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Card & Board games
Solitaire, Monopoly, Poker etc.



Damage!
Seriously horrific platform game (18)



Lost On Parrot Island
Standard click and point adventure



Abduction
Atmospheric Adventure (Violent)



Gunbee
Cute manga style shoot'em up



Pulsator
Stylish horizontal shoot'em up



Medieval Warriors
Strategic management simulation



Civilization
Build an empire to stand the test of time



Virtual Karting 2
FAST 3D Karting Sim



A-Train
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Dune II
Strategic management simulation



A320 Airbus 2
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Worms DC
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Doom Trilogy
3 CD-ROM Set



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(full games are included with the permission of the authors)

Zombie Massacre is Alpha Software's nightmare vision of a world populated by flesh-eating zombies and the human race struggling for survival. Featuring heart stopping 3D zombie action and pumping digital audio by the Award Winning Will Morton.

"It's a brilliant game and I suggest you get it pretty soon. 96%"
Neil Bullock (World of Amiga Mag.)

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- Over 40 levels of single and double player mayhem
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- Over 100 Meg of full screen FMV with actors
- New enemy intelligence and realistic shadows





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CD Games generally only work on AGA Amiga's. (oem = unboxed). Send a SAE for a complete games list.

AMIGA
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* 1000 frames of animation
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Full spoken dialogue on the CD Version.
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Full animated intro. sequence on CD.
Load and save at any point in the game.
Hundreds of items to pickup and use.
Massively complex enigmas.
Month's of Gameplay. The biggest Graphics Adventure ever.

Month In View

Nick Veitch does a good impression of the ghosts of Christmas Past, Present and Future...

Christmas is usually the season when we start dreaming about what exciting new stuff is going to be coming up next year, as well as looking back on the exciting things we saw this year. We will, of course, be doing all that in the form of our That Was the Year That Was feature, along with our predictions on what we can expect next year.

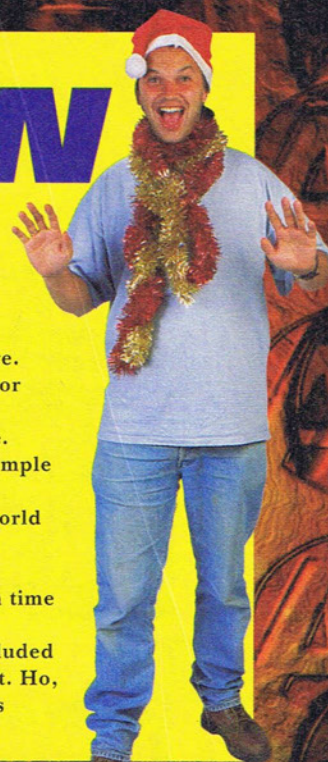
We'll also have a whole mag full of stuff that's here and now. We've finally got a working version of *Descent*, the much hyped PC game, and we've given it a thorough going over. There's also an interview with Weird Science and Blittersoft about Cerberus, their new non-Amiga machine which you may have noticed them advertising. We'll be asking them just what it offers Amiga fans, and why they have decided to sell it. You can read their answers on page 16.

Workbench 3.5 looks like it's going to be a bit late for Christmas but you can still find out what new features it has

and how you'll be able to upgrade your machine – see our extensive news coverage.

Something which has arrived in time for Christmas is *REBOL*, Carl Sassenrath's excellent-looking new web-aware language. Available on multiple platforms, and so simple even *BASIC* programmers will be able to understand it, will it be able to take the world by storm? John Kennedy has some of the answers in a special three page feature.

Of course, you should get this issue in time to do some last minute shopping, or even compile a nice list for Santa, so we've included a special present guide to suit every wallet. Ho, ho, ho, everyone. Now please tear out this picture and destroy it...



Nick Veitch
Editor



CERBERUS PAGE 16

They've been called all sorts of rude things for advertising the Cerberus. Now we give Weird Science and Blittersoft the opportunity to answer their critics.



THAT WAS THE YEAR THAT WAS... 1998 PAGE 20

While your chestnuts are roasting on an open fire, you might care to take a look back over the events of the last twelve issues.



REBOL PAGE 29

Can Carl Sassenrath really change the way the web works with *REBOL*?



STOCKING FILLERS PAGE 22

There's something for every sized stocking in our seasonal round-up of the best bargains and the things you really should want for Christmas.



GET CONNECTED PAGE 60

How easy can joining the Internet community be?

AF NEWS

- 8 AMIGA OS3.5 NEWS**
We've got the low-down on what's happening with the new Workbench right here.
- 9 G3 SHOCK**
Power Computing are to launch a dual G3 card.
- 10 FIRST GAME FOR NG**
Delsyd Software on their new launch.

AF REGULARS

- 48 PD SELECT**
Dave Cusick with the best of the PD world.
- 52 SUBSCRIPTIONS**
The perfect present - AF delivered every month...
- 66 SHOPWATCH**
Where to go for your seasonal Amiga gifts.
- 68 WORKBENCH**
"Ho, ho, ho, no problem," says John Kennedy.
- 72 AMIGA.NET**
Dave Cusick looks at net hoaxes. Or does he?
- 84 MAILBAG & GALLERY**
Paint and prose from the Amiga world.
- 88 FREE READER ADS**
The best place to pick up a Christmas bargain.

AF CREATIVE

- 76 HTML**
Writing words on the web, with Neil Bothwick.
- 78 SOUND ADVICE**
Tony Horgan introduces the art of bouncing tracks.
- 80 C FOR YOURSELF**
Start writing your own game, with John Kennedy.
- 82 UNDER THE BONNET**
Simon Goodwin explains all about retargeting.

Christmas Giveaway

We're brimming over with seasonal spirit here at *Amiga Format*, so we've got over £2,000 worth of the best Amiga goodies to give away, scattered through the mag. There's no tricky questions to answer, either - just pop a postcard in the post and a prize could be yours!



AF SERIOUSLY AMIGA

56 PFS2

Andrew Korn is cruel to hard drives. Will *Professional File System 2* change his ways?

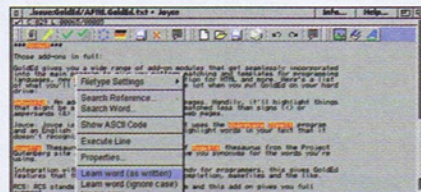
How will *PFS2* cope with this icon-filled drawer from Hell?



58 GOLDEN 5

Will the latest version of this text editor be good enough to come between Ben Vost and his beloved *Turbotext*?

The spellchecker in action.



60 GET CONNECTED

The *NetConnect 2* package won an AF Gold, so can *Get Connected* compete? Ben Vost goes surfing to find out.

The popular *Miami* software makes up one part of the *Get Connected* package.



62 ANALOGIC STUFF

An external SCSI dual drive bay, as well as an external SCSI hard drive? Nick Veitch likes SCSI. Mmm... SCSI.

The external SCSI dual drive bay - it's very, very big indeed...



64 CATALYSER

Nick Veitch puts his feet up and watches some TV, although he'd have you believe he was reviewing tutorials for *ImageFX* on video...

Could these two videos make you an expert at using *ImageFX*?



Christmas Special

16 CERBERUS

Two dedicated Amiga companies launching a PC-based machine? **Ben Vost** finds out what's going on.



Weird Science and Blittersoft defend the launch of the Cerberus machine in our exclusive interview.

20 THE YEAR THAT WAS...

Nick Veitch gets all nostalgic as he takes a look back at what's been an exciting year for Amiga owners.

1998

29 REBOL

It's a revolutionary new computer language, says **John Kennedy**.

REBOL

REBOL could change the way the web works...

32 STOCKING FILLERS

Christmas pressies to suit any budget, brought to you by the thrifty **Ben Vost**.

Mice, hard drives, accelerators, memory and other gubbins... we love Christmas!



AF CD-ROMS

96 AFCD34

Like an overstuffed Christmas stocking, our CD is bursting with goodies like the latest *Wildfire* and *AmigaWriter*.



AF COVERDISKS

92 ULTRA ACCOUNTS 4.6

Get all your finances organised and then get funky with *DigiBooster Pro*.



REVENGE AGA

Death by shotgun, alien experiment, airstrike, rifle, etc. Mmm. We like it.

AF SCREENPLAY

PREVIEWS

38

Nick Veitch looks at three brand new games you'll be playing next year.

WORK IN PROGRESS

40

Digital Images' **Stuart Walker** explains how their new game, *Space Station 3000*, is developing.

FOREST DUMP

41

Ben Vost gets all nostalgic with this traditional platformer. And rather annoyed...

DESCENT

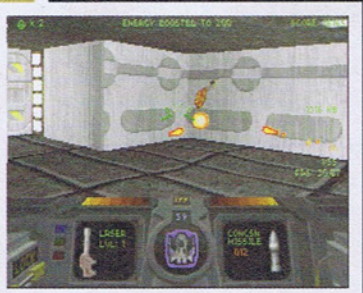
42

Like a psychopathic dwarf, **Nick Veitch** sings hi ho, tools up and goes down a mine to kill robots.

READER GAMES

44

Mark Wheatley eagerly unwraps the homemade games you've kindly sent in. Aww.



Mmm, games. Lovely games. Except that one, don't like it. This one's nice though. Mmm, games...

AMIGA

WHAT'S UP?**Workbench 3.5 news**

All the official facts about next year's operating system.

Faster Power

Power Computing are to release the fastest Amiga accelerator yet.

The Last Patriot

Details on the first Amiga NG game.

WORLD NEWS**Official Amiga OS3.5 announcement**

At the start of October, after our last issue went to press with its speculative OS3.5 article, Amiga Inc. posted details of the new version of Workbench on their website at <http://www.Amiga.com>.

The main features of the new version are as follows:

- RTG (Retargetable graphics) card support
- RTA (Retargetable audio) card support
- Internet enabled
- Enhanced printing
- Enhanced file system
- CD file system
- ARexx update
- New Shell features and extended commands
- Improved interface
- PowerPC co-processor support

The bar has been raised for base level machines too, since the minimum requirements for Workbench 3.5 are now a CD-ROM drive, hard drive, 68020 or higher processor, Amiga 3.1 ROMs and 4Mb fast RAM.

The Kickstart 3.1 part is very important since there are a lot of A1200 users out there using a mixture of Kickstart 3.0 and Workbench 3.1 at the moment. While this combination does work, it's not completely safe, especially when it comes to DataTypes and other less obvious things.

Workbench 3.5 will definitely require Kickstart 3.1. The 68020 requirement has also come as a bit of a shock to hundreds of annoyed A500 owners who still plod along with their

68000 chips, but the fact of the matter is that while other platforms have moved ahead with the times, the Amiga is the only one that still works with 10-year-old hardware, and part of the reason why we haven't got the nifty features that people want in an OS is due to having to support the extreme low-end. Amiga Inc. have been inundated with questions about the new operating system and they've asked us to try to explain their point of view as best as possible.

AmigaOS3.5 will be available in the first half of 1999, but there's no price set for it yet, although it will probably be similarly priced to 3.1 upgrades. A CD-ROM drive is necessary as OS3.5 has grown to an unmanageable number of disks. Developers have also asked Amiga Inc. to make this item a standard component of the Amiga and this will be done by making OS3.5 CD-only.

Likewise, there will be no multi-user support or industry standards like *Quicktime*, *AVI*, *Java* or *PDF* for the same reasons. Multithreading won't be included because it would almost certainly break existing software and be very difficult to implement in the time allotted for OS3.5.

However, there will be an update to ARexx, planned with a commercial developer (but not William Hawes, the original author of ARexx, because he will have nothing to do with Amiga companies after been messed around by Commodore).

The look of Workbench will also be improved thanks to a new icon.library (removing the need for *Neulcons*) and icons created by Matt Chaput, the creator of *Glowicons* and a Silicon Graphics employee.

For those of you who are worried that OS3.5 is going to eat into the time being devoted to the new machine, fear not – there are two separate teams so there's no (unnecessary) cross-over, which

means that both projects are being worked on simultaneously.

This release of OS3.5 does not mean that it will be compatible with the new Amiga. However, the new Amiga will be able to run any software that runs on OS3.5 thanks to an emulation



66

Amiga OS3.5 is the ideal bridge between the classic Amiga and the next generation machine.

99

As for support of third party products like Zip, Jaz and so on, OS3.5 will be an interim, maintenance release of the operating system, and so Amiga Inc. don't really see the point in spending huge amounts of time putting new standards in place to support these things, especially since third party software allows easy use of such items.



Dual G3 power to come soon!

Power Computing, with DCE in Germany, are set to release the fastest accelerator the Amiga has ever seen. What's more, this accelerator board doesn't have the processor that's at the heart of every Amiga since 1985 at its core, but is based solely on PowerPC technology instead.

The new board, which has yet to be named, will feature two of the PowerPC 750 processors, otherwise known as G3's, on-board, and they'll have DIMM sockets instead of the familiar SIMM sockets in order to provide faster and more memory access for the processors.

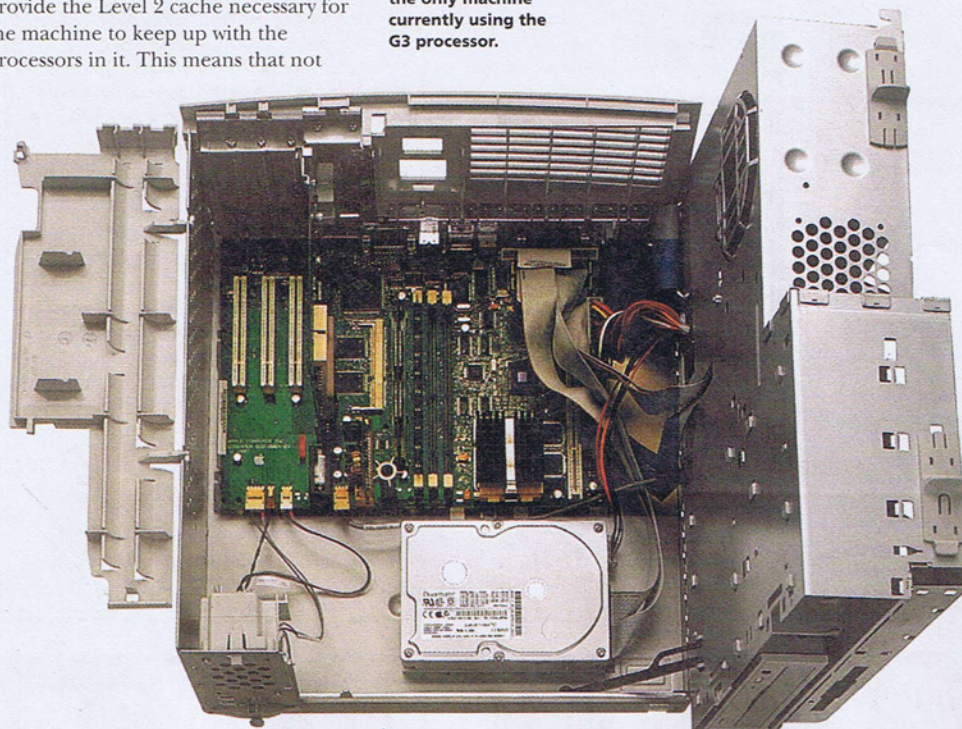
Rumour has it that the card will also provide the Level 2 cache necessary for the machine to keep up with the processors in it. This means that not

only will the dual G3 card be faster than the 604e's that are currently the norm, it'll be orders of magnitude faster.

Those wondering how such a card can exist without the 68K processor that graces the phase 5 cards will understand once they know that the card is to use Haage & Partners' 68K emulation. It is hoped that this will give '060-level speed in pure emulation through the G3.

The card is due to be unveiled at the Cologne show, still two weeks away at the time of writing, but if you'd like to know more about it, contact Power Computing on 01234 851500.

This is not an Amiga, it's a Mac G3, but it's the only machine currently using the G3 processor.



model similar to the Java Virtual Machine, or the Mac's *Rhapsody*.

People who want to know why the new version of the operating system will require a 68020 will be pleased to hear that many of the ROM routines are to be re-compiled in 68020 code to give a significant speed increase. However, there won't be processor-specific versions of Workbench components since the gain between '020 and '040 is minimal and creates false expectations in users. Those of you wondering why ROM code is going to be re-

compiled when there are no new ROMs planned should know that it looks like there will be some element of softkicking to a new Kickstart 3.5, using up half a meg of fast RAM (hence the increased memory requirements), although the system will need KS3.1.

It is rumoured that some companies will be licensed to produce EPROM-based Kickstart 3.5 chips.

Although the new operating system will incorporate many features already

“While we will be taking a lot of third party functionality, there'll be a lot of new code in Amiga OS3.5.”



AMIGASOC'S SOUL GETS HUNTED

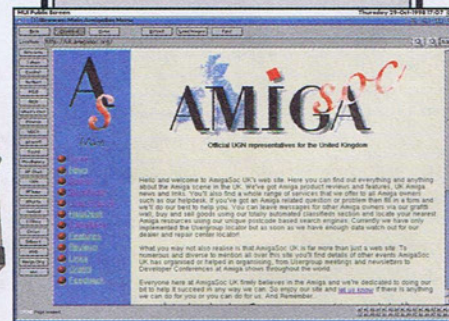
As part of their commitment to UK Amiga users and user groups, AmigaSoc have announced that their Lost Souls database is now being automatically monitored by the *Soul Hunter* program.

The idea of the Lost Souls database is simple. Amiga users who don't have a user group in their locality register with AmigaSoc, who then put them in touch with other Amiga users near to them, or inform them of any new user groups that may be of interest.

To counteract fears that names may be entered into the database and then forgotten about, AmigaSoc Lost Souls can rest safe knowing they're being watched by the *Soul Hunter*. Using a postcode database, the *Soul Hunter* can pinpoint each user to within 5km and then match them to other Lost Souls in the database, so no Amiga owner needs to be alone. To register in the Lost Souls database, visit the AmigaSoc Website at:

<http://uk.amigasoc.org>

And yes, apparently it was inspired by Babylon 5...



If you don't know where your nearest user group is, those nice guys at AmigaSoc have a website to help.

found on existing Amigas, such as the RTG scheme, it will install intelligently so that existing, working schemes don't get overwritten. Amiga Inc. also feel that the incorporation of many existing third party patches, hacks and commodities won't detract from the OS, but will strengthen it instead.

While Amiga Inc. have no intention of reinventing the wheel by duplicating efforts that are already in place, they will add things that really should be part of the OS and not external.

People who have every single patch available still won't have all that will be incorporated into Workbench 3.5 as it will be more than a simple bundle of existing software.

Continued overleaf →

Talking heads

What have the Amiga Format staff been doing this month?



Nick Veitch
Editor

I don't really have any idea what I want for Christmas at all, but I know that next Christmas

I'll want a super, fab, new Amiga to play with. Assuming it's ready by then, of course.



Ben Vost
Dep. Editor

Deer Santa, I want a noo operatin system, ana decent ceedee writer. Ide also like a

noo hampster to replace the one that got runned over. Umm, and sweets. Fanks.



Mark Wheatley
Prod. Editor

A never-ending supply of cheese would be nice. Mmm, cheese. Like cheese. And

tuna. Tuna's good too. And Belle & Sebastian to have the Christmas number one, just to irritate Ben.



Colin Nightingale
Art Editor

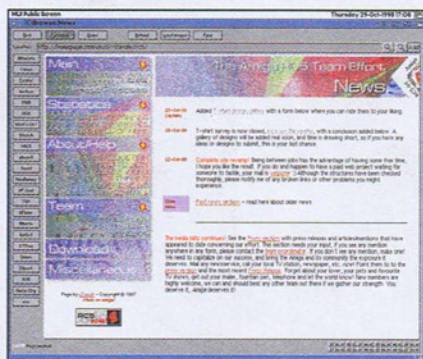
For Christmas, I think the greatest gift would be world peace and brotherly love. Only joking! I

want a video, a big telly, a PlayStation and loads of action men, if you're reading, mum.

RC5 update

The Amiga RC5 effort is still doing extremely well. At the time of writing we are in sixth place overall, and the OS/2 user group in front of us are only 19,000 cracked kkeys a second more per day ahead.

To give you some perspective, 19kkeys is equivalent to only a few more high-powered Amiga users joining up and adding their efforts to the Amiga team. Another



The RC5 effort is still going, even if we can't tell who is in the overall lead at the moment.

matter of interest is that Distributed.net, the organisers of the competition, can't give stats for the team efforts at the moment due to the fact that their database can't handle the extremely large numbers it's trying to manage.

If you click on the link for Overall team stats, this is the message you get right now:

"As of 26 Oct 98, the total number of 2²⁸ blocks completed by the RC5-64 effort exceeded 2³¹. This was the upper limit for numbers stored within our stats databases. Unfortunately, once we reached this limit, our software could not accurately keep track of the blocks completed by the users involved in the project. Keep in mind that this is only a problem with the statistics server; no work has been lost as the proxy network is functioning flawlessly."

If you haven't joined up yet, please do. The RC5 client for the Amiga is now very easy to use and doesn't slow your machine down at all because it runs at a very low priority. It will also automatically receive and send blocks when you go online so you don't even need to do any maintenance.

For more details, visit the recently revamped Amiga RC5 page at: <http://www.cistron.nl/~ttavoly/rc5/>

First game for the new machine?

Delsyd Software have been working hard on the fundamentals of the plot and the 3D engine for their first commercial game, indeed the first commercial game announced for the new Amiga, called *The Last Patriot*.

According to Chris Kelley, head programmer at Delsyd, the game will have: "Some of the most sophisticated Artificial Intelligence techniques ever used in a video game. Each enemy will have its own thought processes and will react to their environment in a realistic way."

The Last Patriot is going to be a first-person perspective game like *Quake*, but it will be more puzzle-oriented. Delsyd expect to have a demo for the new machine available by June of next year, presumably for people with the development systems to play, and they are aiming to have the full game finished by March 2000.

When asked to explain how Delsyd got started, Chris said: "All three of us had fairly boring jobs and we wanted to do something exciting for a change. So we saved up enough money to keep us going for a few months and quit our jobs. This gave us a chance to concentrate on *The Last Patriot* 100%. So far, we are near the end of our layout stage and we're working towards a rudimentary 3D engine." Delsyd Software can be reached at:

<http://www.geocities.com/siliconvalley/foothills/2705>

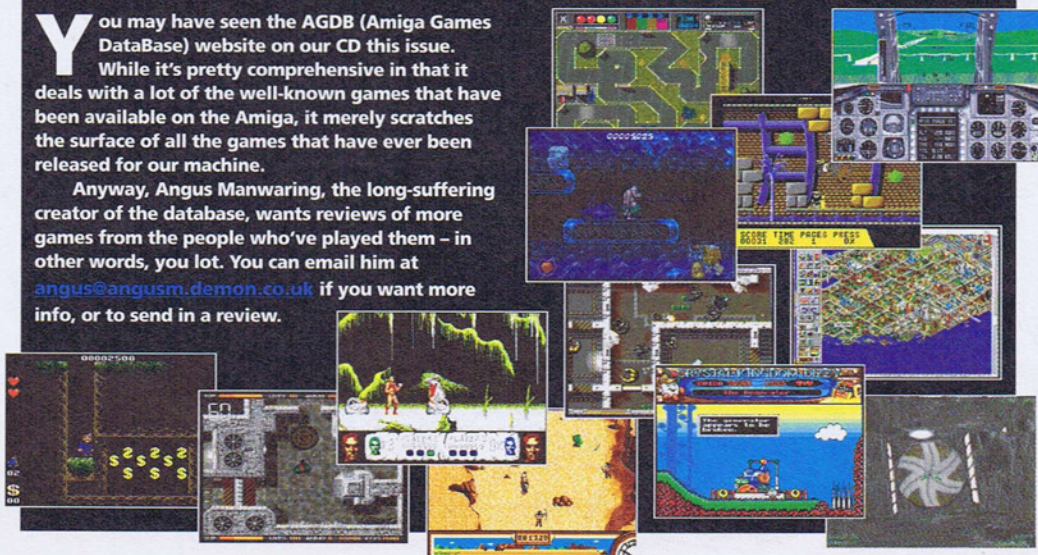
Delsyd Software

AGDB help plea

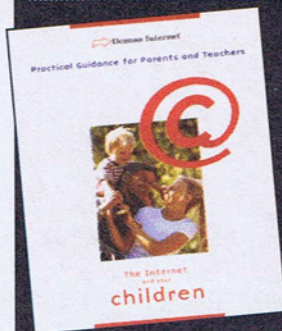
You may have seen the AGDB (Amiga Games DataBase) website on our CD this issue.

While it's pretty comprehensive in that it deals with a lot of the well-known games that have been available on the Amiga, it merely scratches the surface of all the games that have ever been released for our machine.

Anyway, Angus Manwaring, the long-suffering creator of the database, wants reviews of more games from the people who've played them - in other words, you lot. You can email him at angus@angusm.demon.co.uk if you want more info, or to send in a review.



Safer surfing for students



Demon Internet are going to launch a 'green cross code' guide to the Internet for parents and teachers. It will offer a jargon-free, step by step guide on how to get safe,

The Internet guide for kids, from Demon.

educational surfing on the Internet for children.

The move was prompted by research which showed that while 98% of adults wanted their children to use the net for educational purposes, over a third felt they didn't understand the net properly themselves.

David Furniss, Sales and Marketing Director of Demon, explained:

"Technologies such as the Internet are so accessible and simple to use today that it is easy to forget that the take-up and interest in the Internet has happened so fast that many parents are finding that their children are already several steps ahead of them. To ensure that both they and their children gain maximum benefit from the Internet, it is vital that a resource is available that will provide them with not only an overview of the Internet, but more importantly the direction and helping hand they need to enjoy using the Internet as a family."

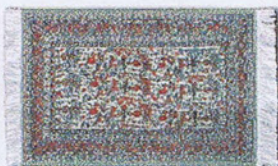
The free guide is available by calling 0800 0270127.

Magic carpets

Described as a design classic in the making – with tassles – the MouseRug from Fuseon Graphics looks set to improve your desktop.

By scanning a real hand-woven rug, digitising the image and recreating it in the Lextra fibre coating process, multi-colour designs that don't use ink can be created. Each of the seven million yarn dyed nylon fibres on the MouseRug is charged with 50,000 volts and 'shot' into the pattern, giving a unique mousemat surface, with these benefits:

- Dissipates static
- Keeps the mouse clean (the millions of fine fibres collect debris from the mouse ball, which Fuseon claim will almost eliminate the need for maintenance)
- The mouse is grounded as the fibres of the rug have a conductive finish which draws static electricity away
- It's never sticky, wet or cold and it is totally washable and very durable.



The three MouseRug designs currently available. From top to bottom: Earthtone South Western, Maroon Bokhara and Jade Fars Pictorial.

There are three designs currently available, which should sell for £12.95, although you can create a unique MouseRug with your own pattern or logo.

For more details, see <http://www.mouserug.co.uk>, fax 01376 500578 or call 01376 500566.

Frequent flyer warning?

Power Computing have told us that there has been a case of grey importing of their IDE enhancer, the Flyer, into the country by unknown sources. They have a problem with A1200 motherboard revision 2B, a problem which Flyers purchased from Power don't have since the revision of the grey import Flyer is an older one that will have no support in this country.

If you have one of these Flyers, or if you are interested in purchasing a legitimate Flyer, please contact Power Computing on 01234 851500.

Speedier surfing...

Access to the Internet at speeds of up to 128K will be possible before Christmas, thanks to a new service from Netcom Internet.

They aim to introduce the 128K ISDN connection in December.

Netcom's Product Manager, Tony Hogarty, said: "With 128K access, Netcom customers who choose to sign up for BT's new digital service will be some of the first people to use BTHighway as the real dual carriageway it was intended to be."

For more information on BT's HomeHighway service, there will be an in-depth guide in next month's *Amiga Format*.

Netcom
UK

We make the Net work for you



Competition rules for all competitions in this issue:
1. Employees of Future Publishing and the competition sponsors are ineligible to enter. 2. No correspondence will be entered into. 3. No cash alternatives are available.
4. Winners will be notified by post and a full list will be printed in the magazine.
5. The closing date for all competitions is January 30th, 1999.

Vital Horgan



Isn't it funny how a night out on the beer can lead to some inspiring ideas – like why don't the local council install those flat escalator things you get at airports all around town to help you get home from the pub?

I was struck by another inebriated bolt from the blue recently when I was having trouble following the game on Match of the Day because I couldn't decide which of the 44 players on the pitch were real and which were translucent clones produced by my inability to point both eyes directly at the TV.

From this I somehow deduced that it would be great if the new Amiga could drive two independent video outputs as standard. OK, it's a loose connection, but the game wasn't much good and the mind tends to wander...

So how about it? Just think of the fun you could have: two player games in which each player has his own screen – you would only need one computer and one copy of the software. Then there are all kinds of advantages it would give video producers who would be able to edit and control the broadcast output in real-time on one monitor while watching and/or transmitting the results on the other output. Make the outputs TV compatible and you've got an incredibly versatile system.

There's no reason why you should stop at two. The hardware and operating system could be arranged so that new screens could be opened and directed to additional outputs which could be added onto expansion cards.

To make this thing work even better, wouldn't it be wonderful to be able to make use of any onboard RAM for display purposes, or at least have a highly expandable pool of display RAM sectioned off? You could open a new screen with its own resolution, colour depth and scan frequency, then assign it to any of your available outputs.

The OS would automatically allocate an area of RAM from the main bank of SIMMs on the motherboard as display RAM for the new screen. That way the extra video/display outputs could be incredibly cheap, consisting of little more than a few connections, instead of having to be full graphics cards complete with their own costly display chips.

"Ha!" you say, "You couldn't do that because of XYZ." Well, go and fix XYZ and then you can do it. Simple. It's called innovation.

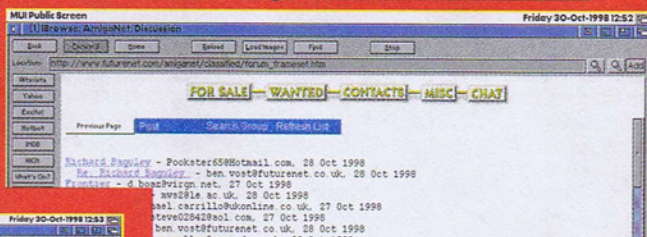
Tony Horgan

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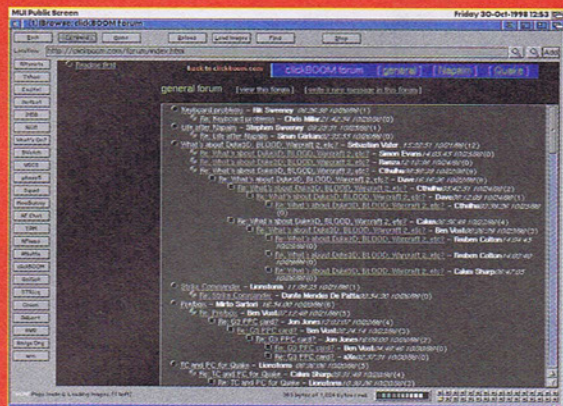
Net Corner

AF CHAT

http://www.futurenet.com/amiganet/classified/forum_frameset.htm



The Amiga Format chat forum has been in place for some time now, but since we don't really publicise it, it's not surprising that it's only the dedicated Amigans who find it. Come and have a chat if you're thinking hard enough!



CLICKBOOM

<http://www.clickboom.com>

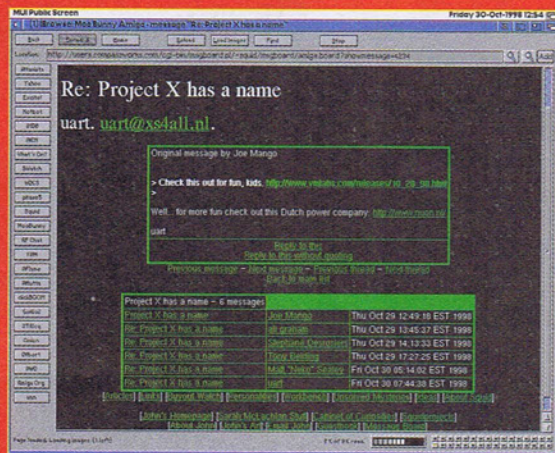
ClickBOOM's website is always great, but there's little point in me telling you the exact URL for their forum since they update their site so often that it'll probably have changed by the time you read this. The forums on the site are devoted mainly to Napalm and Quake, but there is a general area too.

These are the best places to meet like-minded people and chat away to your heart's content.

MOOBUNNY

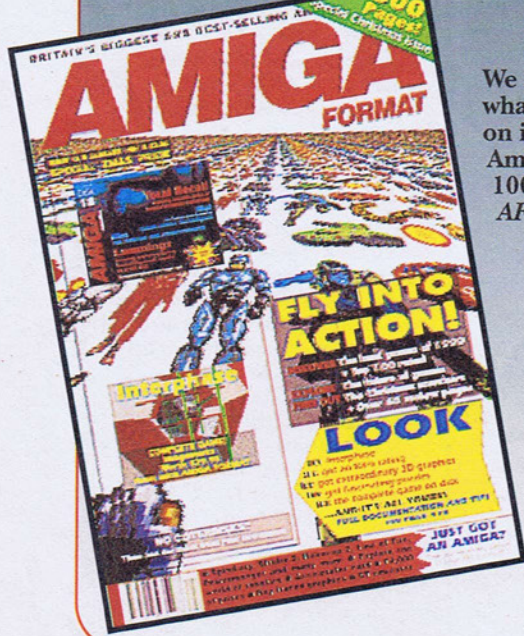
<http://users.compassworks.com/~squid/msgboard/Amiga/>

MooBunny is the chat forum for Squid's Amiga page and is visited by a lot of very bright Amiga people. There isn't much of a welcome for people who don't listen before talking, or for those asking silly questions, so don't expect to get much support from here. However, if you consider yourself to be an Amiga expert, this chat forum is usually one of the most informative going.



100 Issues ago

AMIGA FORMAT



We look at what was going on in the Amiga market 100 issues of AF ago...

AF18 January 1991

■ Cover feature: Fly into action. Not really sure how this links into the features inside the mag, other than the fact that there were a couple of flight simulators released this month.

■ On the disks: Two disks this issue (and only for this issue, for a while). One of the disks contained the full version of *Interphase* from ImageWorks, which AF had previously given 88%.

It was this full game and others that led to ELSPA's ban on full games being covermounted (although that lapsed a couple of years ago). If they'd just made the same statement for serious software, the Amiga market might be in better condition than it is... The other disk had demos of *Lemmings* and *Total Recall*, amongst other things.

■ News: More than 2 million Amigas have been sold worldwide, with more than 500,000 A500s in this country alone. The A1500 gets launched at the new Commodore show (which has more than 14,000 visitors) and the A3000 also gets its first airing at CG90.

■ Prices: Power Computing had an '030 card reviewed in last issue's Amiga

Format, but if you were to buy their offering for the A2000 back in issue 18, it would have cost you £1,795 for a 33MHz unit with 4Mb RAM and no co-processor or SCSI controller.

■ Games reviewed included: New review scorebox this month and new games included: *Powermonger* (EA) 94%, *Rogue Trooper* (Krisalis) 85%, *Shockwave* (DMS) 87%, *Spindizzy Worlds* (Activision) 94%, *Robocop 2* (Ocean) 80%.

■ Serious products reviewed: No scores yet, but a new verdict box. Reviews included: *Real3D*, *Bars & Pipes*, *Chameleon*, *Simpatica*, Fujitsu DL1100 printer, Mega Midget Racer, BASEboard.

■ Notes: This was the biggest issue so far at 300 pages, though a large percentage of those pages were adverts, and there weren't that many more pages of editorial compared to the previous issue. The reason we're smaller these days isn't because we've run out of things to say - not by a long way. If you want AF to get bigger, support our advertisers!

■ Pages: 300 ■ Cost: £3.95

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Typhoon A1200 68030



Typhoon 68030/40

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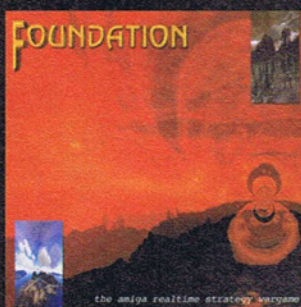
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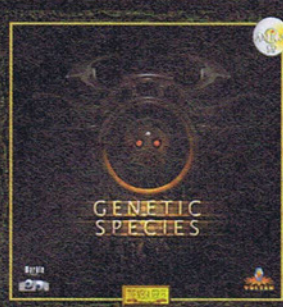
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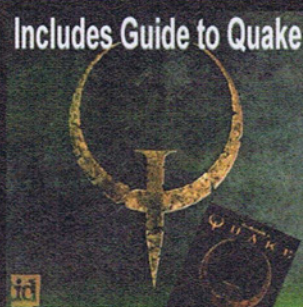
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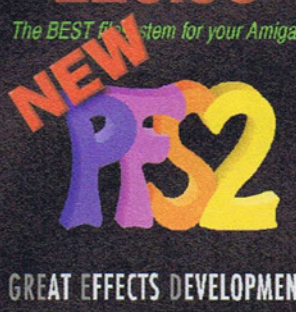
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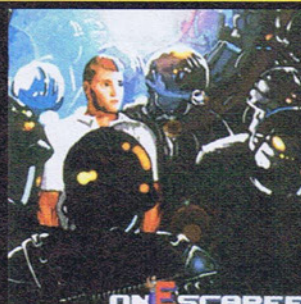
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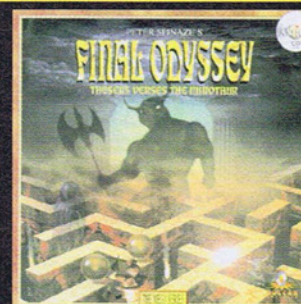
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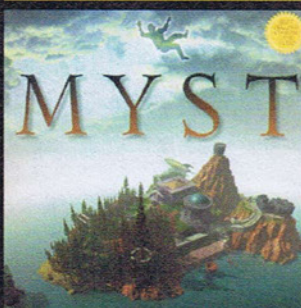
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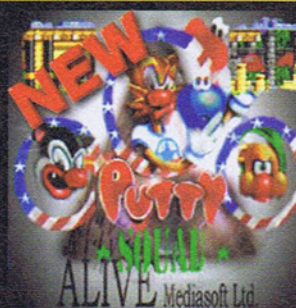
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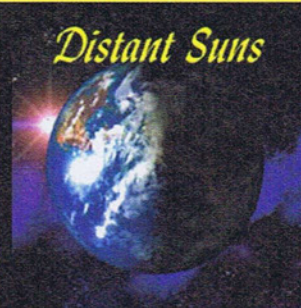
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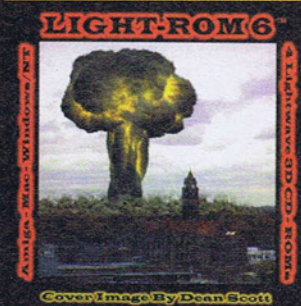
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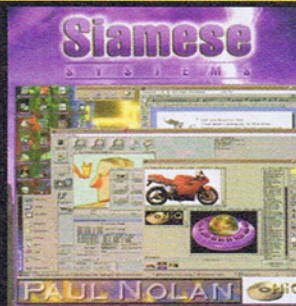
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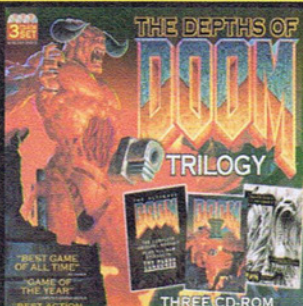
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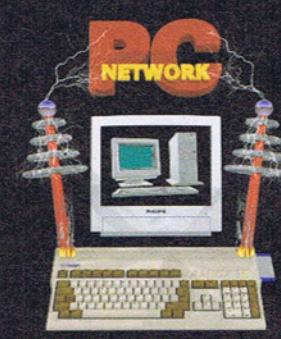










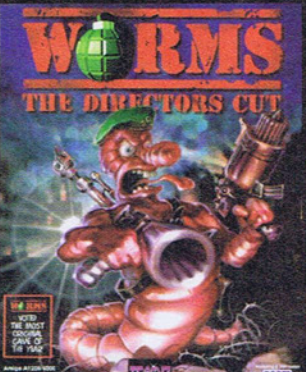
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Full explanation of all these titles and more on The Weird Science Web Site. For a full Price List within seconds just send a blank email to prices@weirdscience.co.uk. To keep up to date with us at Weird Science check out our Web Site Mailing List.

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We will PRICE MATCH on Software



Cerberus

Weird Science and Blittersoft have got together to offer, of all things, a PC to Amiga users. **Ben Vost** talks to them to find out why.

When we first saw the ad on the back of the last issue of *AF*, we were as surprised as many of our readers to see the Cerberus.

Worried about the effect that advertising a PC in our mag would have on Amiga owners, we talked to both Blittersoft and Weird Science about this new machine. This is what they said.

AF: Our readers will have been shocked to see an advert seemingly for a PC on our back cover last month and this month. What can you tell them about this machine?

We are pleased that people are shocked. Cerberus is meant to shock and wake Amiga owners up to the possibilities of DVD and the future. We also hope it sends a wake up call to Amiga Inc. that says "Pull your finger out guys, we want these features now."

Cerberus is a highly integrated multimedia home entertainment system. Our motherboard has an Mpace 2 Multimedia Processor directly on board, providing first class 2D graphics, 3D acceleration for games, industry leading hardware DVD decoding and playback, as well as outstanding sound and wavetable capabilities. The integration of the Mpace 2 processor acts much like the custom chips of the Amiga and means that Cerberus does not need separate cards for graphics, 3D, DVD or sound. Cerberus does, however, come with a full array of standard ISA and PCI slots for users to expand.

The key to Cerberus is DVD. With DVD it is possible to watch high-quality movies on the monitor or output to TV with fantastic Dolby Digital sound.

“The key to Cerberus is DVD. With DVD it is possible to watch high-quality movies on the monitor or output to TV...”

Cerberus is capable of using the vast wealth of PC software and thanks to a 'Software Amiga' system, it also offers a high degree of backwards compatibility with existing Amiga software.



The contentious (but very good-looking) machine at the heart of this interview.

AF: Why a PC with a 'software Amiga', rather than a Mac or an Amiga with PC and Mac emulators?

We looked at the possibilities of providing DVD support for the Classic Amiga. The prospects didn't look good from a price or time point of view.

CERBERUS

There seems little point in spending a year developing new hardware to be launched at the same time as the new Amiga. The Mpace 2 Multimedia Processor at the core of Cerberus already had all the drivers written for Windows95 and 98 on a PC.

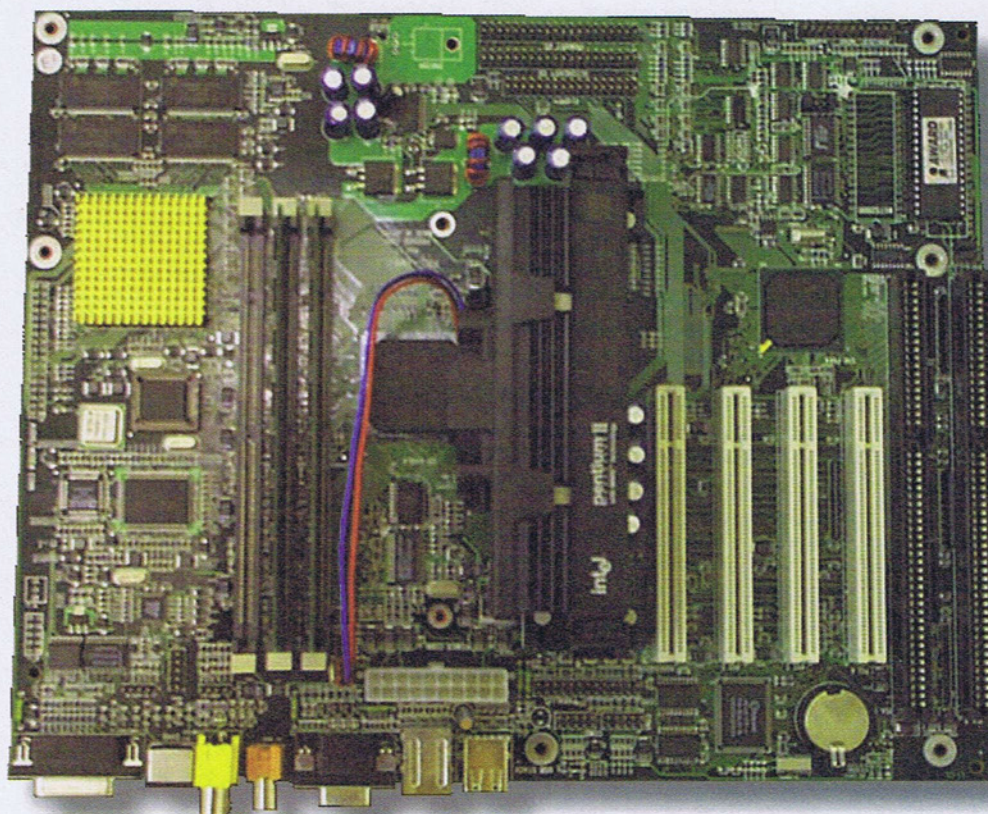
Currently, there is simply no way to offer usable PC emulation on the Amiga. Using a Mac as the base platform is also a great deal more expensive and prevents us achieving our other aims within our target price.

DVD is the aim of Cerberus and DVD requires hardware acceleration to provide a quality viewing experience. A Pentium II 450MHz providing over 800 Mips of computing power cannot decode .mpg 2 video streams fast enough to make watching films on DVD a reasonable experience, let alone a pleasurable one. Having said all of this, we would not have continued with Cerberus if we could not provide a very good degree of backwards compatibility with existing Amiga software. After all, both Weird Science and Blittersoft are committed Amiga companies. While there is still an Amiga user in the world, this will not change.

AF: What's so good about DVD that you've gone to this step to push it?

Digital Video Disc or Digital Versatile Disk (DVD) is a standard for storing large amounts of digital data in a high density format physically identical in size to a compact disc. However, while a CD can only hold about 650Mb of data, the larger capacity DVDs can hold 17Gb – more than 26 CDs or 9,500 high density Amiga floppies. Simply put, DVD is an overachieving compact disc.

The DVD viewing experience is comparable to that of laser discs and is nearly three times better than that of VHS video recorders. What really sets DVD apart from CD-ROM is its video, and .mpg 2 compression is the key to that. DVD will be the replacement to the compact disc for storage of computer data, and due to the support of all the



The highly-integrated Cerberus motherboard with the MPact 2 chip under the gold heat sink on the left-hand side.

major film companies, it's also touted as the replacement to the humble video.

AF: What if the user wants to add a bit of hardware they see reviewed in *Amiga Format*, or a piece of software they get to work under UAE emulation?

Cerberus is not an Amiga and we're not trying to say that it is. The hardware is based on industry-standard PC hardware and thus Amiga-specific hardware add-ons aren't supported.

However, a quick scan of recent issues of *Amiga Format* will show that a lot of hardware tested is actually PC hardware in an Amiga package, like modems, CD writers, tower cases, CD-ROM drives and printers, etc.

The whole point of Cerberus, according to its creators, is that it gives you the ability to do things now that the new Amiga will provide in the future.

Truly innovative Amiga hardware, such as the Power Flyer or the Kylwalda, while fantastic pieces of Amiga kit, have no place on Cerberus. Software is a

“To get your existing software over to Cerberus we provide, as standard, the necessary networking software...”

tricky issue. We've tried to provide as much backwards compatibility as possible. We provide every Workbench and Kickstart ROM from 1.1 to 3.0 so even some really old games that stubbornly refuse to work on the Amiga 1200 will probably work on Cerberus.

AF: What will users do with their software collections if the PC can't read Amiga disks?

DL: This is a major limitation and we are working on it. However, in the meantime we have the ADF format. It is possible to create a disk image of floppy disks in the ADF format.

This disk image file is used by the Amiga side of Cerberus like a real floppy disk. It can read, write, format and even boot from these files as if they are real floppy disks. To get your existing software over to Cerberus we provide, as standard, the necessary networking software and cable to link Cerberus to a real Amiga.

With this system you could copy

your entire hard drive over and boot the Amiga side of Cerberus from that.

AF: How do you see this machine affecting the way the Classic Amiga market is going to go?

Weird Science and Blittersoft are more involved in the Classic Amiga market than most. Blittersoft have invested heavily in the BoXeR board and this is still our single most important project. Weird Science import more software from around the world than any other Amiga company in the UK and this is our single most important aim.

Cerberus will take advantage of the Inside Out board, a project that is very close to the BoXeR. If anything, Cerberus could actually improve the Classic Amiga's future because it is yet another system that will be greatly improved by Inside Out.

Users can happily purchase a Cerberus system and gain advantages that the Amiga sadly cannot offer at this time. This system will bring more cross-system integration than ever before thanks to *Fusion PC* and *Amiga Forever*. It will make the Inside Out more sought after and will also allow Amiga users to take advantage of DVD now.

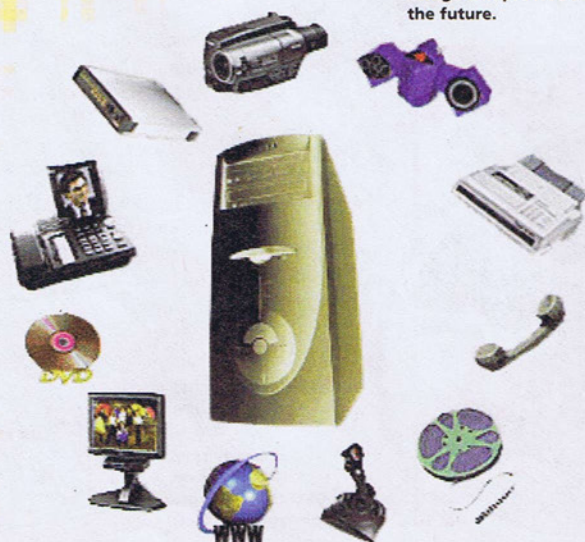
One key factor that Cerberus and our support of the new DVD format will offer Weird Science and Blittersoft is allowing us to continue to wholeheartedly support the Amiga. It helps ensure our continued viability as Amiga companies and thus we can continue to provide the Classic Amiga market with the excellence of service they have become accustomed to from Blittersoft and Weird Science.

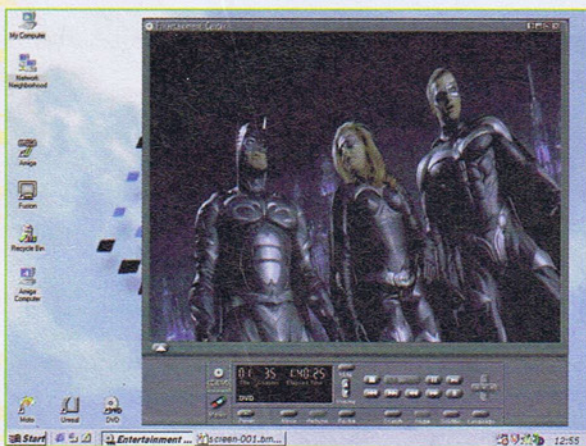
AF: How will having this machine affect Amiga owners' ability to do the things they take for granted now, like going online, printing, scanning, making music, etc?

Cerberus ships as standard with the required software and hardware to connect, browse and email the Internet. Printing and scanning will be quicker with Cerberus than an Amiga. Most people will find that their printers or scanners actually came with PC drivers straight out of the box.

As for music, this is really going to knock people for six. Cerberus ships with AudioStorm 3D positional audio, supporting DirectSound3D and the MPact Forté advanced wavetable synthesiser. This provides 64 simultaneous hardware accelerated voices, 8Mb 16-bit sample set developed by Synclavier, 324 instruments and 11 drum kits. All of this is General MIDI and Roland GS compatible. You can sample sounds directly with Cerberus at greater than CD quality.

Continued overleaf ➔





← **AF:** Why have you chosen to advertise this machine in *Amiga Format*, rather than advertising it in a PC magazine?

Both Blittersoft and Weird Science are Amiga-oriented companies. We have produced Cerberus for Amiga users to access the features that the new Amiga promises and Cerberus delivers now. There are plenty of other companies providing these facilities to PC and Macintosh

customers. Our customer base and expertise is with the Amiga and we wanted to provide the exciting new features that computing has to offer to our Amiga customers.

Remember, if we could have done DVD with the existing Amiga, Cerberus would not exist.

AF: What reaction have you had from Amiga users who've contacted you about Cerberus?

If you want DVD for your Amiga right now, this is your only choice.

OPINION

We're not sure whether this can be considered a good or a bad thing. There's always the question of what exactly an Amiga is to bear in mind, and also the fact that since *Amiga Forever* – the software that provides the Amiga side of Cerberus – only comes with Kickstart 3.0, you won't be able to run OS3.5 on it.

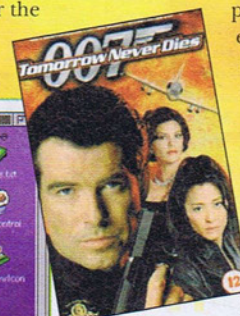
In fact, since *Amiga Forever* can only emulate an OCS Amiga (with a graphics card, since it's not limited to only 16 colours), it will probably mean that some of your AGA software won't work. *Amiga Forever* also has difficulty in emulating Paula's relatively complex sound, so while games may

work, it isn't guaranteed. The answer is that you won't be playing *Turrican*, you'll be playing *Unreal* on the PC. Likewise, you won't have to worry if you can't get *Lightwave* to run on the Cerberus' Amiga emulation because the PC version is far superior anyway.

While this may be true, it comes as cold comfort to someone who has spent lots of money on Amiga software, only to have to ditch it in favour of PC versions.

However, if you would like to have DVD on your Amiga, this is the only way to get it right now, and as an interim machine it may be that Cerberus fulfils your needs.

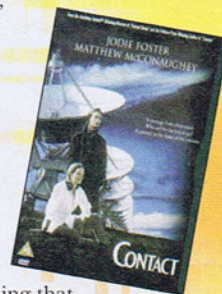
DL: Inevitably, when you mention the dreaded word 'PC' to Amiga users, some will go into a frenzy, accusing you of heresy and insisting that you are burnt at the stake under a full moon on the third Tuesday in June. However the vast majority of our customers' comments have been very



positive. Some have even taken the trouble to thank us for doing something for them and taking the brave step of developing Cerberus. We have already had hundreds of enquiries for our full information

pack, which is available to anyone who wants to learn more about Cerberus.

We haven't tried to hide what lies underneath, so any suspicion is unwarranted. Trying to achieve



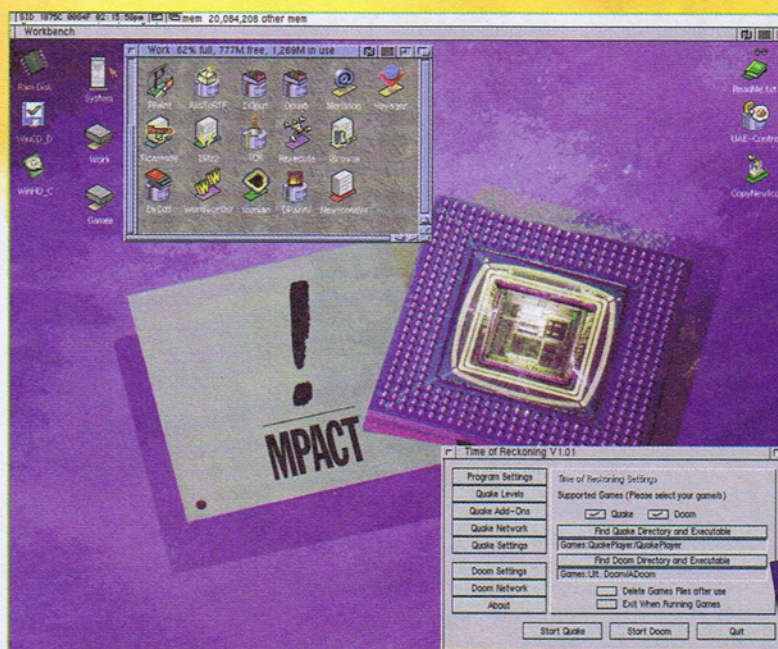
everything that Cerberus offers as neatly as it does (at the price we offer) is simply not possible with standard PC systems.

Amiga users should rest assured that, for us, Cerberus is a means to offer the new DVD technology while

maintaining a good degree of Amiga compatibility. In no way does it hinder our plans or change our long term commitment to the Amiga platform, which is, as it always has been, our number one priority.

Our feeling is that Amiga users will decide for themselves

Just a very small selection of the DVD titles that are already available.



Having a big, colourful WB like this is more attractive and useful than a standard A1200.

Christmas Giveaway

Get Covered in ink!

EMComputergraphic, the people who put our CD together for us every month, have also branched into the colour inkjet ink market. They've kindly offered to give away a mono ink cartridge of your choice, and a colour one. Send a postcard to: **AF Christmas Ink Draw • EMComputergraphic • 8 Edith Road • Clacton-on-Sea • CO15 1JU.** Remember to state what printer you have.

amigawriter new

£49.95



program : amigawriter
version : v1.1 (english version)
format : floppy disks
available : yes
price : £49.95
awards : amiga magazine (DE) 87% 'very good'.

AmigaWriter is the newest word processor (or word creating) package for the Amiga. Officially ratified by Amiga International, thus supported by the "Powered by Amiga" logo, AmigaWriter contains some unique features for Amiga word processors: platform independent (full support for commercial, shareware or freeware plugins), ease of use (easy selection, true WYSIWYG, very Amiga-like in action), full paragraph control, page formatting, chapter management, support for different image formats and much more. AmigaWriter is almost similar to a DTP program, allowing full box control over text and image placing within your document. All version 1 users will receive the forthcoming PPC version and version 2 free of charge!

- **PowerPC version inclusive in the price** - in development, due in v1.x, available free of charge
- **Flexible box layout concept** - design your pages in true DTP style
- **Support for external image formats** - support for IFF and JPEG and any other image via datatypes!
- **Extensive plugin support** - expect commercial, shareware and freeware plugins
- **Free update to v2 (due 1999)** - postscript/truetype fontengine, spell checking, form editor, table editor and MS Word import filter and much more.

netconnect v2

£49.95



program : netconnect
version : v2.2
format : cd-rom or floppy disks
available : yes
price : £49.95
awards : amiga format gold, 96%, cu amiga 94%

The award-winning NetConnect v2 is the easiest and most comprehensive Internet compilation designed to enable any Amiga user, from novice to expert level, to get onto and use the Internet. By using the new Genesis Wizard, a user should be able to connect to the Internet in a matter of minutes. Containing Genesis, Voyager-NG, Microdot-II, AmiIRC, AmFTP, AmTelnet, AmTerm, NetInfo, AmTalk, X-Arc and the Contact Manager. Ideal for both an Internet or local area network connection.

- **Eleven Commercial Programs** - contains the highest quality Internet software, all commercial versions.
- **Truly Integrated** - the beauty of NetConnect v2 is the integration. Contact Manager works with Microdot-II, Voyager, AmiIRC and more. Centralised MIME preferences works between all the programs.
- **Flexible Dock Bar** - setup and launch all your software from this advanced and flexible tool bar
- **Aimed Towards Beginners Through to Advanced Users** - NetConnect v2 is simple enough for the beginner to use to connect to the Internet for the first time, but powerful enough for the advanced user who may require a dialup connection and local area network (LAN).
- **Award Winning** - Amiga Format Gold (96%), CU Amiga Superstar (94%)
- **Expandable** - software works with external programs. The Contact Manager works with IBrowse, YAM v2 r6, STFax Professional. Genesis is supported by WebTV, AmiCQ and more.

stfax professional

£29.95



program : stfax professional
version : v3.5
format : floppy disks
available : yes
price : £29.95
awards : amiga format gold, 95%, cu amiga superstar, 95%
amiga magazin (DE) 89%, Amiga Plus (DE) 96%

STFax Professional is a commercial fax/voice message program which enables you to use your Amiga as a digital answermachine. Ever wondered how companies manage to create their voice based operator system? You can do this at home or in a small office! ie. 'Press one to leave a message for Mike or press two to leave a message for Sue'. Setup a fax on demand service, advanced message box system for family members, log numbers via caller-ID, call screen or blacklist phone numbers, control other programs etc.

- **Full fax modem support (class 1, 2, 2.0)** - fax from your favourite Amiga software
- **Advanced voice capabilities** - use your Amiga as a digital answermachine
- **Support for the PACE Solo, 3-Com Message Plus or Kortext Adaptix Independent Operation mode**
- **Mini-BBS** - setup your own small BBS

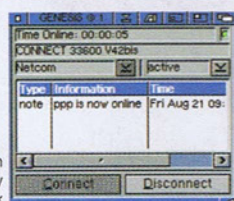
Special Offer: Buy NetConnect v2 and STFax Professional together for only £69.95!

genesis

£29.95



program : genesis
version : v1.0
format : floppy disks
available : yes
price : £29.95
awards :



Genesis is a new TCP/IP stack for the Amiga computer, allowing both dialup Internet access and local area networking, with the advanced facility to run more than one interface at one time (ie. keep your ethernet network connected, whilst putting your dialup connection on and offline - ideal for Siemens users, LAN'ing one or more Amiga's or an Amiga to PC/Unix/etc). Genesis ships with an easy to use Wizard. Simply enter some basic information about your provider and the Wizard goes online and gathers the advanced information. The status window (shown here) allows you to control the interfaces and shows the connection speed, the time you have been online and which interfaces are connected. Genesis is supplied with an advanced time and cost logger so you can see how much time you have spent on the net and the costs involved.



Delivery Information

S'Ware - £1.00 for UK delivery
- £1.50 for EU delivery
- £2.00 World delivery
H'Ware - £6 for UK next day delivery
(serial cards charged at £3 for standard delivery)

Make cheques/P.O.'s payable to Active Technologies and send to the address listed opposite. Credit/debit card payment accepted. For any additional information contact us.

Oval House, 113 Victoria Road, Darlington, DL1 5JH

Tel : 01325 460116

Fax: 01325 460117

E-Mail: sales@active-net.co.uk

http://www.active-net.co.uk



home highway - ISDN

from... £129.95

With the launch of BT's 'Home Highway', ISDN is now affordable for the home user. Our branded Dynalink 'MagicXpress' modem (as featured in this issue) enables you to connect to the Internet at blazingly fast speeds (you must also have a high speed serial card to use ISDN). So, what does ISDN offer the average home/Internet user:

- **Digital connection** - no line speed fluctuations (unlike normal modems), connect at 64K and you stay at 64K, instant (half or one second) connections and the clearest possible phone/data lines!
- **Upto 4 times as fast as 56K** - surf the net at 64K or 128K (using both lines), meaning that large files or web sites are downloaded at the fastest possible rate (74 seconds for a 1MB file @ 128K ISDN connection, compared to 4.16 minutes for a 1MB @ 44K on a '56K' modem).
- **Upload at 64K or 128K** - the main difference between ISDN and a 56K modem is that you can upload files at ISDN speeds, whereas a 56K modem uploads at 33.6K maximum.
- **Two lines** - use both digital lines for 128K connections, use one line for telephone calls whilst using the other line for a 64K Internet session! Why not connect two computers to either line or simply make phone calls on both lines at the same time?

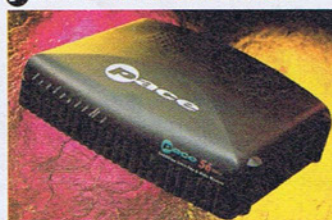
Code	Pack Contents	£ Prices
ID01	External ISDN Terminal Adaptor (TA)	£129.95
ID02	ISDN TA & NetConnect	£159.95
ID03	ISDN TA & NetConnect & Hypercom 1	£189.95
ID04	ISDN TA & NetConnect & IOBlix Serial Card	£229.95

high quality modems

from... £79.95

Choose from three high-quality **branded** modems - the top of the range, award winning PACE 56K, the new PACE 'Solo' 56K or the middle of the range Dynalink 'MagicXpress' modem (same colour as your Amiga). All ship with a five year warranty. The PACE modems also ship with free lifetime technical support, UK caller ID (only modem available which supports this), a superb speakerphone, conferencing feature, volume slider/control, easy to understand LED's and non-technical, easy to read documentation. All PACE and Dynalink 'MagicXpress' 56K modems are now v90 shipping ready - the agreed standard for 56K connectivity. Why not treat yourself to the brand new PACE 'Solo'? The 'Solo' can be used standalone from your Amiga. Want to go on holiday but need to receive fax and voice messages, but don't want to leave your Amiga running? The 'Solo' is the answer.

Pace External 56K Modem



Pace 'Solo' 56K Modem



Dynalink 56K External Voice/Fax/Data Modem

PACE 56K External Voice/Fax/Data Modem

PACE 'Solo' 56K External Voice/Fax/Data Modem

£69.95

£119.95

£189.95

modem pack options

from... £79.95

Various money saving packs are available. These are all based on the Dynalink 56K modem. Packs based on PACE 56K or PACE 'Solo' 56K modems available as an additional cost option.

Code	Pack Contents	£ Prices
PK01	56K Modem & STFax Professional	£ 79.95
PK02	56K Modem & NetConnect	£ 99.95
PK03	56K Modem & NetConnect & STFax Professional	£109.95
PK04	56K Modem & NetConnect, Hypercom1, STFax Pro	£129.95
PK05	56K Modem & NetConnect, IOBlix Card, STFax Pro	£169.95

ADD £40 for a PACE 56K Modem (instead of the Dynalink 56K)

ADD £110 for a PACE 'Solo' 56K Modem (instead of the Dynalink 56K)

- All packs come with one month free connection to Demon Internet and/or UK Online
- Choose between the CD or Floppy disk version of NetConnect v2 with your modem pack

high speed serial cards new

from... £39.95

The new IOBlix card offers 4 high speed serial ports and 1 (2nd port option) high speed EPP/ECP parallel ports to your Zorro based Amiga. The serial ports provide 64 bytes of FIFO memory, which is also upgradable. The parallel ports offer both uni and bi-directional modems, offering compatibility for all printers. The IOBlix also has a modular interface. Two modules are currently being developed: an AHI-compatible sound card and a SANA-II compatible ethernet module. The Hypercom high-speed serial cards are available for the A1200 (uses internal clock port) and zorro based Amiga's offering one (two with the Hypercom 3Z) extra serial and parallel (Hypercom 3Z only) ports.

Model	Machine	Specifications	Price
Hypercom1	A1200	1 x 460,800bps highspeed buffered serial port	£39.95
Hypercom3Z	Zorro-2/3	2 x 460,800bps highspeed buffered serial ports, 1 x 500K bytes/sec parallel port	£69.95
IOBlix	Zorro-2/3	4 x 460,800bps highspeed buffered serial ports, 2 x uni/bi 500K parallel ports	£89.95

miscellaneous software

Various other individual software titles are available. These titles may be interesting to those not wanting to purchase NetConnect v2.

	By Disk	By Email
Scalos - workbench replacer with advanced features	£20.00	£18.00
Voyager Next Generation	£22.00	£20.00
Microdot-II v1.1 (release) - email and news client	£22.00	£20.00
AmIRC	£22.00	£20.00
AmFTP	£20.00	£18.00
AmTalk	£17.00	£15.00
X-Arc - system archive management tool (handles lha, lzx and zip archives)	£17.00	£15.00
Contact Manager - system addressbook, works with many net/comms programs	£12.00	£10.00
AmTelnet + AmTerm Package Deal	£20.00	£18.00

• 5% Discount when 2-4 Vapor products are bought, 10% Discount for 5+

internet informer issue 3

The latest issue (issue 3, out Autumn 1998) of our Internet Informer magazine will be available soon. Wanting to learn more before you connect to the Internet? Still unsure about the costs involved, what hardware you need or what you, as an Amiga user, will obtain from being connected to the Internet? The Internet Informer gives you this information, extra product specifications and more.

That was the year that was...

From the dark past of January to the bright new dawn of the New Year, take time out with **Nick Veitch**.

As has become tradition, in this special Christmas issue we'll be taking a look back at the year. For us, it's a time of reflection on what we've achieved, the accomplishments we are proud of and the mistakes we will vow never to make again. However, it is also a time to try to discern what the future holds. Join us then, in looking, er, backwards and forwards.

AF106 January



1998 kicked off to an interesting start with our extensive coverage of the Cologne Amiga show. We were expecting big news announcements

from Jeff Schindler about the future of Amiga Inc. and Gateway's commitment to the platform.

Unfortunately, Mr. Schindler's budget still hadn't been approved and he felt the need to keep quiet until he could say things with any sort of authority.

It was revealed that Amiga Inc. were keen to talk to potential licencees of the Amiga hardware, and that several companies were likely to take them up on that and produce genuine new machines.



Apparently there was more to the Cologne show than just great Amiga bargains.



More exciting news appeared in the form of a statement from ClickBOOM, who had been hounded by thousands of emails since rumours began circulating that they might do a conversion of *Quake*. The statement revealed that they were in discussions with id Software, although nothing was definite.

We also showed A500 owners how to make a Zorro slot, though I don't know why because the ingrates still ring us up to say we don't cover any WB1.3 software (it was superseded eight years ago guys, and we can't review software that doesn't exist).

BEST GAME: *Final Odyssey*, 88%
BEST SERIOUS: *Picture Manager Professional*, 92%
QUOTE OF THE MONTH: "These beer halls all sell their wares in 20cl glasses" - Some of Ben's in-depth reporting from Cologne.



Picture Manager Pro won our, er, picture manager round up.

AF107 February



We were still waiting for confirmation on the *Quake* situation this month, and we were still waiting for a review copy of *Myst* to appear. Andy Smith was

looking forward to 17 new games which were due, past due or very nearly due, as he tried to get to grips with what would be released this year. We're still waiting for some of them.

There was plenty of stuff to be getting on with though, including *Shadow of the Third Moon*. Andy was battling with alien forces in this 3D space-fighter combat game which he reckoned was "one of the most playable and enjoyable games of its type".

There was even more exciting action in another part of the office as I ably demonstrated that even the clumsiest of people could re-house their Amiga in the new Power Tower in less than half an hour. Of

course, I actually had to do it a number of times for photography



We were wowed by the elegance and ease of installation of the Power Tower.

1988

purposes, during the course of which I managed to lose most of the screws. I hope you're more careful.

OXYPatcher, Font Machine, the Zip Plus, X-DVE 3 and the Hydra Ethernet card also managed to scoop AF Golds in probably the biggest award-fest we've ever seen. I'm not sure why we were in such a generous mood, but I'll make sure it doesn't happen again.

If you were in the mood to learn something, you might have

got to grips with exporting stuff from *DrawStudio*, custom classes in *MUI* and how to run a web-

browser under *UNIX*, once you'd worked out which CD we'd put all the files on.

BEST GAME: *Shadow of the Third Moon*, 89%

BEST SERIOUS: *Power Tower*, 97%

QUOTE OF THE MONTH: "You'll all be thankful when I've saved the world yet again" - Andy Smith gets carried away in *SOTTM*.

Continued overleaf ➔

AF108 March

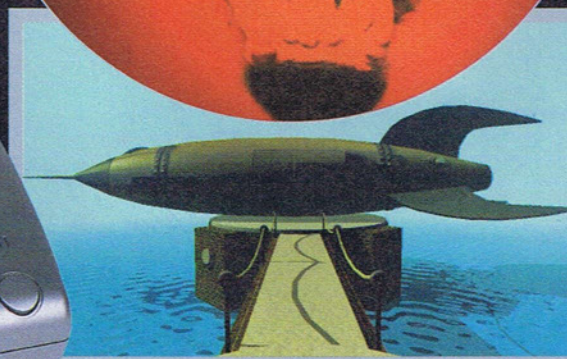


The major action was on the coverdisc this month as we served up a huge serving of unadulterated *DOOM* because the Amiga conversions (for they were manifold) had just appeared. We compared the best ports and gave you everything you needed to get going.

It was a huge game-fest inside, too. To Andy's delight, *Myst* finally turned up and he actually managed to solve some of the puzzles by himself, without needing the help of his bumper book of popular game cheats.

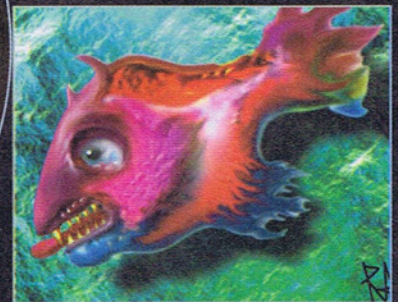


Shadow of the Third Moon (above) proved to be popular with Andy Smith.



Ben even got in on the act by compiling a huge Games Explosion feature which profiled most of the notable game developers who were then working on Amiga titles.

It was hard to get anyone to review anything that didn't involve games in some shape or form, but we did manage to squeeze in a modem round up, take a look at the re-released *DPaint* and Hisoft's C++ compiler.



DPaint was re-released on CD, *Myst* finally appeared and we had *Doom* on the CD - not a bad month...

BEST GAME: *Myst*, 92%

BEST SERIOUS: *Active 56K modem*, 92%

QUOTE OF THE MONTH: "It's really existed ever since *3D Monster Maze* on the ZX80" - Me, enlightening the world on the dawn of first person perspective gaming.

AF109 April



Another games exclusive this month as we gave you the full *UFO: Enemy Unknown* game, including the manual. I spent hours translating it



Theme Park (above) fulfilled the definition of a timeless classic.

because Epson didn't actively support the Amiga, whereas Canon would supply you with a free driver for your BJC4300. Uncontroversially, *TurboPrint*, which was also reviewed in the printer round

up, managed a huge 95% and a well-deserved AF Gold.

We previewed *Quake* this issue and tried to break it gently to A500/A600 owners that it didn't look like they'd be able to play it. In fact, you'd need a 50MHz '030 at least, and probably a graphics card. We also suggested that a PPC version may emerge soon, but various cracking teams soon put paid to that idea.

Controversy reared its head again when we tackled the thorny subject of PPC versus WarpUp development. Simon Goodwin reckoned there were merits in both systems and that Haage & Partner and phase 5 should just stop bickering and work together. It took a few more months for them to listen to reason.

Finally, we sent Mark out on his first mission for AF. He didn't pass Go or collect £200, but went straight to Northumbria Police HQ and took a look at their Amiga driven community safety strategy. Fortunately, they let him go. Eventually.

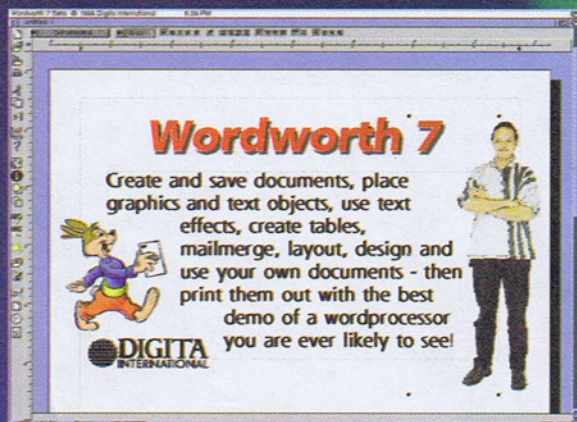


Mark avoided being detained by the friendly Northumbria Police, and even managed to write a two page feature about the ordeal.

BEST GAME: *Theme Park* CD, 90%
BEST SERIOUS: *Wordworth 7*, 92%
QUOTE OF THE MONTH: "Please now everyone, don't bother sending in any more" – Andy Smith on Tamagotchi clones from readers.

all into AmigaGuide format and not one person wrote in to thank me. Still, I've grown to expect that. In fact, some people thought we shouldn't have given it away at all.

The spirit of controversy also persisted inside the mag as we looked at colour printers. Many people later complained that Epson's Stylus Colour 600 shouldn't have got an AF Gold



BEST GAME: *Flashback* re-release, 89%
BEST SERIOUS: Blizzard PPC, 90%
QUOTE OF THE MONTH: "March is always a busy month for me, as I try to see as many of the Oscar nominees as possible" – Ben Vost takes time off from hobnobbing with Jack Nicholson and Kate Winslet to write his Talking Heads piece.



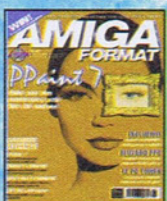
Retro-gaming was big in '97, with classics like *Flashback* being re-released.

people who rang up asking silly questions because they hadn't read the six pages in the magazine devoted to it.

There was big news on the games front as we revealed that ClickBOOM were working on a new game called *Napalm*. The pictures we printed got a great response. We're still waiting for the game, though (it will be out really soon, we promise).

In serious terms, we looked at the amazing Blizzard PPC, the Eyetech EZPC tower and I managed to completely destroy the brand new Catweasel II, though thankfully after I had finished reviewing it. Everyone makes mistakes though, and in five years at *Amiga Format* it is still the only piece of hardware I've ever broken through my own negligence.

AF110 May



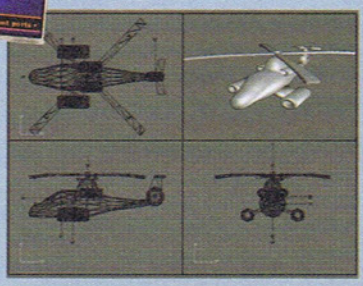
It was summer, of sorts, but there was no sign of the traditional lull in activity. Filling most of the news pages this month were details of phase 5's pre-box machine, which was effectively another Amiga clone, but one equipped with multiple PPC processors.

We also had our work cut out



The greatest graphics package giveaway ever adorned the cover of our May issue.

bringing you the definitive PPaint tutorial to back up another amazing coverdisk giveaway – PPaint 7. We know many thousands of you used this coverdisk quite a bit, if only from the number of



AF111 June

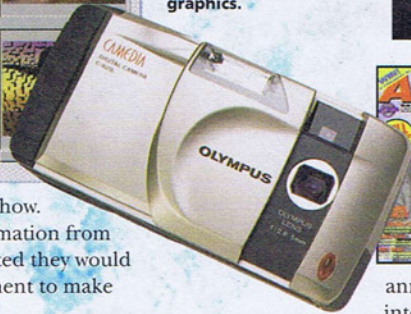


This was the big one. Our cover was quite categorical about it – we had *Quake* and we'd reviewed it (properly). The cover was so good

we even had a very big one made for the upcoming World of Amiga show. News wise, not a lot was happening as everyone was saving their big



New versions of *ImageFX* (left) and more digital camera software made it a good month for graphics.



All the news this month was from the World of Amiga show, phase 5 and Haage and Partner became allies in the aftermath of a rather shocking

announcement – Amiga Inc. intended to mothball the

announcements for the show.

We did glean some information from Amiga Inc. which suggested they would have a major announcement to make about something.

Although details of who was attending and what would be shown were scanty, we did manage to piece together a show guide, which I hope was useful to you, whether you attended it or not.

But enough of show-related antics. What of *Quake*? It was too good a game to let Andy Smith review on his own so Ben and I joined in with our own comments. The result was that, if you could get it running on your machine, it was great.

There were disappointments elsewhere, though. The long-awaited *ImageFX 3* was found to be seriously flawed (though thankfully Nova Design updated it almost as soon as we'd printed the review, and they addressed all the problems we had found).

We had a new tutorial starting this month too, all about *Icons*. It proved to be pretty popular.



BEST GAME: *Quake*, 94%
BEST SERIOUS: Olympus Camedia, 91%
QUOTE OF THE MONTH: "The sooner I can lay this page out, the sooner I can bugger off" – Colin shows his dedication in Talking Heads.

Quake awoke in June, and, in spite of heavy system requirements, proved very popular.



AF112 July



It was a time for deep controversies which turned neighbour against neighbour, as Amiga Inc. revealed their plans (above) and Andy Smith reviewed *Genetic Species* (right).



"Classic" Amiga and produce a whole new range of hardware, bypassing the PPC completely. Understandably, many PPC purchasers and developers were a little confused, especially as up until this point Amiga Inc. had been giving verbal support to phase 5 and others' efforts. It took many months to explain to everyone exactly what was going on.

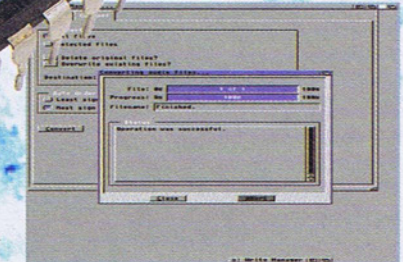
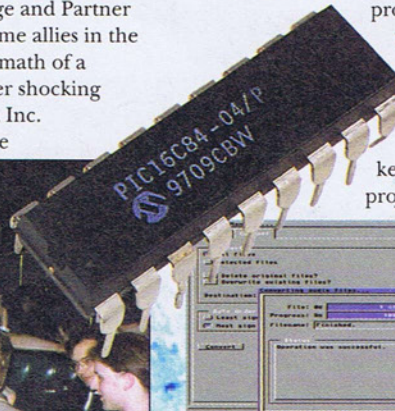


Malice (above) was the first in a series of *Quake* conversions to be featured in our games pages.

The show was certainly the most interesting one for some time, and key Gateway figures (no names this time, Steve) were up long into the night discussing the future of the platform.

We also had a rather nice feature on PIC programming this issue, written by, er, me. In spite of a few people who wrote in saying it was nothing to do with the Amiga (I don't know what they thought I was using to write the

programs), I'm glad to say a number of people wrote in to say that they had built and used the keyboard adaptor project successfully.



It might look boring, but this was state of the art CD mastering.

In other controversy, I mean news, Andy Smith drew the wrath of the gaming public by painting Vulcan's *Genetic Species* in a less than favourable light. He did give it 89% though, which seemed fair, but some readers were baying for blood as Andy had failed to mention some of the games most important features.

BEST GAME: *Malice*, 91%
BEST SERIOUS: *MasterISO v2*, 96%
QUOTE OF THE MONTH: "We have a green light from Gateway. The next Amiga will blow your socks off" – Amiga Inc.'s Jeff Schindler.

AF113 August



We had to let Simon Goodwin out of the dungeon (he likes it down there, really) long enough to do yet another reprise to his record-breaking (for length) series on emulators. This time the excuse was new versions of *Fusion* and *ShapeShifter*, another variant to the *Siamese* line-up and the finished, final release of Cloanto's *Amiga Forever*, which became, to the best of my knowledge, the first non-Amiga product we have ever reviewed.

Continued overleaf →



We also took a speculative look at BeOS, which then seemed to be the front-runner in terms of a new OS for the "November" box. We found it wanting in several areas, so it was a bit of a relief that Amiga Inc. later ruled it out.

Andy Smith was out to make friends again, this time with a review of *Foundation*. Many people found that comments like "Is *Foundation* better than *The Settlers* then?"

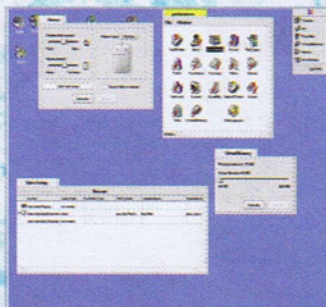
Frankly, no. It's not even as good as the *Settlers* and "hard to control and understand" were a bit upsetting, as did the score of 79%.

After a full, in-depth investigation (I played the game myself for hours), I found that he was indeed completely correct, and even thought he might have been a bit generous. Sure enough, it's a good game (and better now with the subsequent releases), but at the time it wasn't *AF* Gold material by a long way.

On the serious side, we brought you a full and detailed report of the Power Flyer, which one young, handsome person claimed was probably "the most significant hardware release of the year" for the average A1200 owner. The beauty of it was that it made the drives you already had go many times faster.

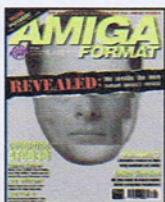
BEST GAME: *Foundation*, 79%
BEST SERIOUS: Power Flyer, 98%
QUOTE OF THE MONTH: "While the other options can't be dismissed out of hand, BeOs seems to offer a way forward. Time will tell if our predictions are accurate" - Dave Taylor getting it wrong in his BeOs article.

The Power Flyer (above) was labelled "the most significant hardware release" of the year.



As a replacement OS, BeOS (top) wasn't perfect. Neither was long-awaited *The Settlers* clone, *Foundation*.

AF114 September



The future of the OS still wasn't clarified and it seemed that nobody at Amiga Inc. wanted to talk. In a special feature this month, we profiled the people at Amiga Inc. so at least even if nobody knew what exactly they were doing, everyone would know who they were. We were also able to clarify some of the specifications of the new hardware the next generation Amiga would be based on.

As well as reviewing *Resurrection*, the *Quake* add-on, we also devoted two

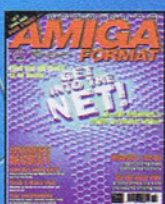


They deserved it, every one of them...

pages of GameBusters to a Gareth Murfin special on how to get *Quake* running at a reasonable speed on your particular set-up.

Judging by our Reader Survey results published this issue, only 28% of you didn't have the processor power to run the game. The average user had 11Mb of RAM, a figure we expect has increased dramatically after a year of rock-bottom SIMM prices.

AF115 October



Although in general terms activity had decreased in the Amiga market, we revealed that there had actually been growth in two areas, most notably the Internet. Once again we informed the interested and upset the die-hard luddites by updating our guide to getting online. So much had changed in terms of software and technology since the last time we covered the subject that it was sorely needed. It helped that this coincided with the release of ibrowse 1.22, which now had working SSL libraries.

Expensive digital cameras were also seen to

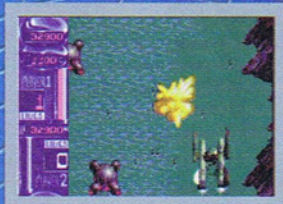


Hmm... I'm sure you can probably think up a better caption to this than I can.

be strapped to flimsy kites and launched skywards. No, we weren't mad, but John Kennedy obviously was because it was his camera. Still, he did manage to get some rather interesting photographs, and a surprising number of readers seem to have taken up this foolhardy hobby.

If you were a comic-book fan you might have been interested in the *X-Men Quake* conversion we previewed this issue, but it was a bad month for game releases generally, allowing the competent but unfulfilling *Ultra Violent Worlds* to top the scoring charts.

Fortunately, on the serious side of things we had a lot more to choose from, including the new version of *MakeCD* and a new ATAPI CD writer.



Ultra Violent Worlds and *MakeCD3.2* both struck Gold. I'll let you work out which is which.



BEST GAME: *Ultra Violent Worlds*, 60%
BEST SERIOUS: *MakeCD3.2*, 94%
QUOTE OF THE MONTH: "We are all slaves to the clock" - the most unlikely utterance ever to pour forth from Andy "Morning everyone, is it time for lunch yet?" Smith.

No babies were harmed in the composition of this feature, our lawyers have told us to say.

Review wise, Ben took a look at the award winning *NetConnect2* and claimed "it's as much use to those veterans who had to deal with complicated text configuration files in the bad old days". We also had a review of the wonderful-looking *Elastic Dreams*, and some familiar faces at *AF Towers* found their features rearranged accordingly.

Someone who might have benefited from a face change was Andy Smith, who was forced to apologise profusely to a number of readers who called him "lazy and inept" and "incompetent in the extreme" over the inaccuracies in his *Genetic Species* review.

BEST GAME: *Quake Resurrection*, 92%
BEST SERIOUS: *NetConnect 2*, 96%
QUOTE OF THE MONTH: "I also created two posters" – Petro Tyschtschenko, listing his Amiga achievements.

AF116 November

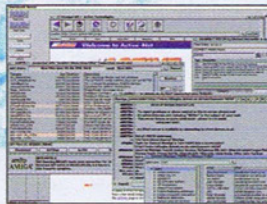
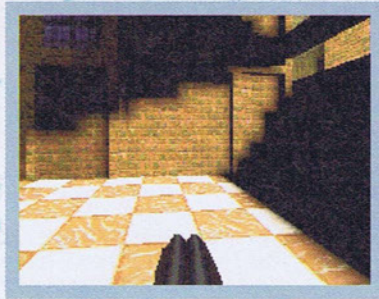
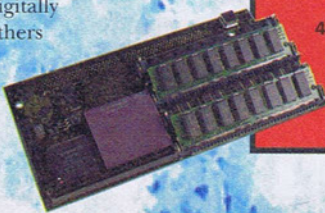


It was an interesting month with regard to news. We broke the news about BT's Digital Highway and what it could mean for your Amiga. Several months later and we're still waiting for BT to sort out the line so we can test it. We also had a few details about Workbench 3.5, what it was likely to contain and who might want to buy it.

In order to keep you more up to date with the very latest in news, we also launched our *Amiga Format Bulletin* service. This is an email service which enables us to send you details of what's in upcoming issues and to keep you abreast of major news developments. If you'd like to join up and get the latest news, you can email af-bulletinrequest@futurenet.co.uk and put "subscribe af-bulletin" in the body.

We were also rather lucky to have a huge feature on digital convergence, written by a certain Fleecy Moss, which at least cleared up some assumptions about what the term actually covers. If you wanted to digitally converge with others

The Blizzard PPC, the fastest A1200 expansion.



Wolverine (below) tried to make it big on the Amiga, courtesy of Quake.

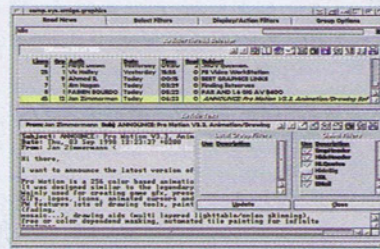


Sixth Sense Investigations proved to be surprisingly good.

The year ahead...

Last year we managed to achieve a rather tremendous success rate on our predictions, in that we managed to get more than one right. I'm sure we can't manage it two years in a row...

1. The November Box will arrive. This is now officially rescheduled to appear in February. We reckon it will be more like March and it will probably get a reasonable bit of outside press attention.
2. An OS for the new Amiga will be announced. This is a fairly safe bet, but we'd like to go further out on a limb and suggest that the chosen OS will be rather similar to AmigaDOS in terms of multitasking and efficiency, and one which is not in widespread use at the moment.
3. Multiprocessor PPC accelerator cards will appear. Well, we already know they're in the works, but we reckon they will become fairly commonplace, and that they'll have plenty of software support.
4. Workbench 3.5 will be good. A bit tricky this one, but we reckon that when it arrives, it will actually be worth upgrading.



NewsRog (above) achieved a whopping 97%.

on the Internet, you might have benefited from a browse through our IRC feature.

The games section had a double-dose of *Quake* add-ons in the form of *After Shock* and *X-Men*, plus the long awaited adventure, *Sixth Sense Investigations*, which acquitted itself admirably.

On the serious side of things, the previously unheard of *NewsRog* romped away with an *AF Gold* for bringing new readers up to date. We also took a rather belated look at the *CyberStorm III* and discovered that it wasn't that bad, really.

BEST GAME: *Sixth Sense*, 82%
BEST SERIOUS: *NewsRog*, 97%
QUOTE OF THE MONTH: "On a good day, Kevin and Zoe on Radio 1 wake me up around 7:30. There's no point in getting up any earlier..." – Dave Cusick adopts a rather roundabout way of reviewing PD software.



AF117 December



Workbench was foremost on our minds. There had been a lot of talk about the interim 3.5 version of Workbench, which apparently would be

released now. We thought somebody might be interested in what we, and most of our readers, thought should be in it.

Ironically, just as we were going to press, details of the new Workbench were announced by Amiga Inc. I'm not sure if it was good timing or bad timing.

A voice from the past also surfaced this month as Carl

Sassenrath released *REBOL* simultaneously on a number of platforms. You can read what programming guru John Kennedy thinks of it right after this feature.

We also went a bit show mad. As well as a huge preview of the Cologne show, we also had reports from around the world on other Amiga happenings: Infomedia '98, Pianeta Amiga and the Midwest Amiga Expo.

Games-wise, *Gunbee F-99* and the conversion of *Abuse* recorded reasonable scores but failed to capture the imagination. A number of more interesting games appeared in Previews, including a *Tomb Raider* lookalike.

In serious terms, both the *CyberVision PPC* and the *Picasso* add-on card, Paloma, sparked some interest, but the most interesting new product was the oddly named *Kylwada*. This took Simon Goodwin a good few hundred words to explain before he could start reviewing it. Still, some things never change...

We get plenty of *Abuse* in this office, I can tell you.



BEST GAME: *Abuse*, *Gunbee*, 80%
BEST SERIOUS: *Kylwada*, *Aminet 26*, 92%
QUOTE OF THE MONTH: "At the risk of having this column killed off, I'd like to have a chat about the iMac" – Tony Horgan treads dangerously in his first column for *AF*.



Latest News in Brief

APOLLO 060/66 51 MIPS Accelerators back in stock

We have purchased the remaining stocks of 060/66 Accelerators - the fastest 68xx accelerator available for the A1200. These units have genuine Motorola 60MHz parts, so are a little more expensive than the over-clocked 50MHz units previously sold by us and other dealers. Stocks are strictly limited - see page 2 of this advertising feature for details.

New Purpose-built case for EZ-VGA Mk2 & Plus Flickerfixers/Scandoublers

All new units are now shipped in these cases. Existing users can purchase the cases (to fit themselves) for just £6.95 plus carriage.

Eyetech 'Home Highway' ISDN Packages

... from £199.95 including ISDN Terminal Adapter, 10 email addresses, 100% local call access.

NO ONGOING INTERNET ACCESS CHARGES - EVER!

Also available with 56K modem for existing analogue lines from £129.95.

New Apollo 040/40-SE Accelerator - just £169.95

A limited quantity of 040/40-MHz A1200 accelerators with MMU and FPU are now available for just £169.95. (Note these are 33RC-marked processors tested and guaranteed for 40MHz operation).

Monitors down in price again

Following further falls in the price of monitors due to better exchange rates with the Far East, we have been able to reduce the price of SVGA monitors even further:

14" now £89.95 15" now £119.95 17" now £229.95

In all cases there are special offers on Scandoublers/Flickerfixers purchased with monitors, starting at just £45.00.

EZWriter A1200 CD Burner comes out top in latest comparative review

The concluding remark in the review of a rival CD writing system in the October Edition of CU Amiga is "For my money I would opt for the Eyetech (EZWriter) system"

Need we say more?

The EZWriter-SE is available complete with software and 100 PSU for £269.95.

The rewritable version - the EZReWriter-SE is also available for just £299.95.

New Amiga Motherboards now in stock

We have obtained a limited quantity of new Amiga International 1200 motherboards (excluding ROMs), complete with metal shield and 12 month warranty. The boards are priced at just £129.95.

A replacement motherboard is usually the best long term solution if you have a damaged or unreliable A1200.

Elbox IDE Flyer 'spacers' available for early A1200's

Some A1200 motherboards were shipped with an 'over-populated' clock port connector, requiring the IDE-Flyer to be raised by around 4mm to avoid short circuits. These spacers, if needed, are available to Eyetech IDE-Flyer customers for £4.50 (normally £8.95).

The Elbox IDE Flyer - which improves hard disk transfer rates by up to 600% and gives large (over 4.3GB) hard drive support - is priced at just £59.95 from Eyetech.

Amiga Format rated The Elbox IDE Flyer at 98% in a recent review.

New ProGrab/EZGen Bundle

A special 'video' promotion is available this month for the first 50 purchasers of the ProGrab (parallel port) video digitizer.

Buy a ProGrab and PSU for £119.95 before Christmas and have the option to purchase an EZGen Amiga Genlock for just £50.

Amiga Magic Upgrade Packs available in limited quantities

The ideal way to update your Commodore A1200:

- ◆ 3.1 Kickstart ROMs
- ◆ Photogenics 1.2SE
- ◆ 3.1 Workbench (6 disks)
- ◆ Personal Paint 6.4
- ◆ Wordworth 4.5 SE
- ◆ Organiser 1.1
- ◆ Turbocalc 3.5
- ◆ Pinball Mania & Whizz Games
- ◆ Datastore 1.1
- ◆ Workbench 3.1 manuals
- ◆ Magic Pack application software manuals

..... all for just **£49.95!!**

NEW EZPC A1200 TOWER EXPANSION CONFIGURATIONS

3 new pre-configured systems to suit different applications and pockets

Eyetech's EZPC-Tower integrates a highly specified PC and your A1200 in the same EZ-Tower via the Siamese RTG 2.5 Ethernet system. It uses the best aspects of PC technology - low cost, high performance peripherals, retargetable graphics, number crunching speed and networking capability - to add to the Amiga's intrinsic strengths - user-friendly, stable operating system, true multi-tasking, real-time response, low system overheads and ease of setup - all areas where PCs struggle severely (and often fail!).

It's important to note that the EZPC system works by making the PC motherboard act as a slave processor to your A1200 - looking after the operation of the systems accessories whilst you and your Amiga get on with creative work. (You can of course use the PC as a computer in its own right if you really insist!)

It's also important to understand that EZPC A1200 expansion system is based on a real Amiga and is not at all com-parable with other PC-only systems running a clever, but slow, Amiga emulator as a PC application.

In fact there are such a range of applications that the EZPC system can open up to an Amiga user that we have introduced three systems pre-configured for different types of use. These are:

A1200 EZ-PC TOWER-HSE (Home Studio Edition). £999.95

The most economic way to get serious Amiga power for your graphics, dtp and internet publishing projects. The HSE configuration comes complete with TV tuner with cut-and-paste teletext facilities, 24-bit video frame grabber and video clip capture card, 30 bit colour scanner, 56K modem and unlimited internet access at local call rates - as well as the standard EZPC system components - see below.

A1200 EZPC TOWER-DVE (Digital Video Edition). £1369.95

An A1200 expansion platform which is purpose made for video and audio editing. It is fitted with a purpose-designed, hardware-based MJPEG non-linear video editing suite for home/professional video production. It also comes with built-in CD Writer/ReWriter (with drag-and-drop CD writing software) for producing your own audio and video CDs.

A1200 EZPC TOWER-XLS. £1995.95

This must be the ultimate creative multimedia expansion platform for your A1200. It comes equipped with non-linear video editing hardware and software, A4 30-bit flatbed scanner, DVD ROM hardware & MPEG 2 decoder (for DVD video playback), CD ReWritable drive, 15" Colour Monitor, 56k data/fax/voice modem with voicemail and internet software - and much more.

All these three packs are designed for you to fit your existing A1200 in the EZPC Tower and connect it up. This normally takes around an hour, but if you would prefer to receive your system ready to use, we can arrange to collect your Amiga, do the work for you and ship your new system back all ready to plug-in to mains and phone outlets! Please ring for details.

A1200 EZPC TOWER-3.1+. £395.95

Finally, if your A1200 is feeling a bit tired we can supply your chosen EZPC Tower system with a brand new Kickstart 3.1 A1200, complete with Magic Pack software, 24 Speed CDROM, 2.1 GB hard drive, EZCD Mk4 interface and EZIDE software ready installed and connected up. All you need to do is to slot in your existing accelerator, switch on and start using your new A1200 EZPC Tower system.



Removable HD bay takes your existing 2.5" or 3.5" drive

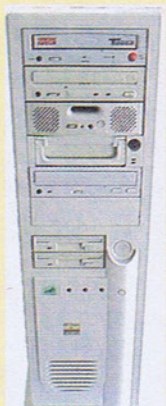


The EZPC Tower system showing the A1200 and the PC motherboard in its slide out frame.

Using your EZPC to render 3D raytraced scenes using the PC's CPU

When you buy an EZPC-Tower we will give you a special voucher which entitles you to buy the full PC Version of Cinema 4D v4SE from HiSoft for just £129 - a saving of £400 on its normal price of £529. With this installed you will be able to:

- ◆ Model your 3D objects and scenes on the Amiga in Imagine, Cinema 4D etc.
- ◆ Save the models to the PC drives directly from your Amiga application
- ◆ Import the Amiga file models into Cinema 4D on the PC side
- ◆ Render the files on the PC side (at anything up to 100 times the speed of the Amiga side)
- ◆ Save the rendered images for viewing on your Amiga.



CD ReWriter

DVD ROM / CDROM

Monitor amp/speakers

Removable HD bay

A1200 CDROM

Blank for LS120 etc

EZPC-Tower Model	HSE	DVE	XLS
EZPC-Tower/250W psu/PC mouse/HD floppy	Yes	Yes	Yes
EZ-Key k/b adapter PC k/b & rem switch	Yes	Yes	Yes
Ultra DMA hard drive 4.2GB	Yes	Yes	Yes
DVD-ROM (inc 20x CDROM) / CDROM	32x CDROM	n/a	DVD-ROM
CDReWriter (inc 6x CDROM) & s/w	n/a	Yes	Yes
10 x blank CDR's 650MB	n/a	Yes	Yes
100MHz bus PC m/board w/64MB	Yes	Yes	Yes
High perf high res 3D Gfx card w/MPEG-I	Yes	Yes	Yes
TV/teletext/framegrabber	Yes	n/a	n/a
Hardware MJPEG Video Editor	n/a	Yes	Yes
Hardware MPEG-2 Video decoder	n/a	+£59.95	Yes
CD-quality sound card with MIDI	Yes	Yes	Yes
Software controlled Amiga/PC audio mixer	Yes	Yes	Yes
Internal 60W PMPO monitor speakers	Yes	Yes	Yes
Siamese RTG2.5 software	Yes	Yes	Yes
Amiga PCMCIA & PC ethernet cards/cabs	Yes	Yes	Yes
30-bit high res A4 flatbed scanner	Yes	+£59.95	Yes
Internal 56k data/fax/voice modem	Yes	+£99.95	Yes
Unlimited access Internet package	Yes	inc w/above	+£49.95
15" SVGA monitor	+£109.95	+£109.95	Yes
17" SVGA monitor	+£199.95	+£199.95	+£99.95
Win 9.x/Lotus SmartSuite bundle	+£99.95	+£99.95	Yes
Miami Amiga TCP/IP stack	+£24.95	+£24.95	Yes
75%-off Cinema-4D/PC voucher	Yes	Yes	Yes
Cost with options as specified	£999.95	£1369.95	£1999.95

Eyetech's unbelievable Amiga Internet packages (ISDN packages are Home Highway ready)

All packages include:

- ◆ One-time account set-up fee included in the price
- ◆ 25Mb of your own web space
- ◆ 10 different e-mail addresses of your choosing
- ◆ Full Newsgroup access
- ◆ 90 days free internet technical support from the ISP
- ◆ 100% local call access (0845) within the UK
- ◆ High service quality - the ISP only makes money (from local call charges) if you use the internet!
- ◆ ISDN and modem (56/33/28 Kbaud) dial up access
- ◆ NO MONTHLY ACCESS CHARGES - EVER!

EyeNet 1 package -

- 64/128K bps ISDN terminal adapter and RS232 cable **£199.95**
- 56K bps voice/data/fax modem and RS232 cable **£129.95**

EyeNet 2 package -

- As EyeNet 1 plus PortJnr high speed serial interface **+£30.00**

EyeNet 3 package -

- As EyeNet 1 plus IBrowse 1.22 & Miami 3.0 Web s/w **+£50.00**

EyeNet 4 package -

- As EyeNet 1 plus IBrowse/Miami/PortJnr **+£70.00**

Award-winning UMAX SCSI Flatbed Scanner

- 600 x 300dpi optical resolution, single-pass 24-bit A4 flatbed scanner
- Comes with PhotoScope (Amiga) and Mac software. Compatible with all modern SCSI interfaces - including PPC, Blizzard & Classic Squirrel (but not Surf-Squirrel)
- PCW 'Best Scanner of 1998' Award - July 1998; PCW 'Best Scanner' September 1998
- Highly-acclaimed ArtEffect-SE v1.5 (normally £59.95) free with this bundle whilst stocks last.

Amiga UMAX Scanner & PhotoScope Bundle
now with FREE ArtEffect-SE v1.5 - still just **£179.95**

New Products & Xmas Prices for this issue

DIY EZ-Tower+PC kbd+mkb i/f - £99.95; EZCD-SE buffered interface & s/w £10.95;
170MB Hard Drive A1200 Magic Pack £228.95; 14" monitor+scandoubler £134.95;
EZWriter-SE external CD burner+MakeCD £269.95; 56Kmodem & unlim net access £129.95;
ISDN T/A & unlim net access £199.95; Scandoubler with full flickerfixer (int or ext) £89.95;
CamControl digicam s/w £29.95; Elbox IDE-Flyer High-speed 4 dev buffered i/f £59.95;
Award winning Umax SCSI scanner with PhotoScope and FREE ArtEffect-SE v1.5 £179.95

Eyetech EZTower System - from just £79.95

Thinking of towering up your A1200? Then you should certainly be considering the unique Eyetech EZTower System

	Backplate kit	DIY* EZTower	Full EZTower
DFO: face plate & ribbon cable	Yes	Yes	Yes
Custom backpanel w/SCSI, audio KOs	Yes	Yes	Yes
A1200 power & LED adptrs	Yes	Yes	Yes
CE-approved metal PC case	n/a	Yes	Yes
No of bays/PSU capacity	n/a	10/250W	10/250W
Directly accessible PCMCIA slot	Yes	Yes	Yes
DIY assembly instructions	Yes	Yes	n/a
Installation instructions	Yes	Yes	Yes
PC board/Siemens compatibility	Yes	Yes	Yes
Assembled & A1200-ready	No	No	Yes
Eyetech installation option	No	No	Yes
Cost with options as specified	£39.95	£79.95	£99.95
With EZKey2 & PC k/b	n/a	£99.95	£119.95

*With the DIY EZ-Tower you have to remove the PC tower back plate and some internal shelving and fix the new backpanel in place

- ✓ The easiest way to re-house your A1200 by far
- ✓ Expand your system with EZPC or Zorro slots
- ✓ 250 W PSU with PC and Amiga power connectors
- ✓ Available in 4 models to suit different skills and budgets
- ✓ The only tower allowing both PC & A1200 in one case

"This is definitely one of the easiest solutions to building your own Tower" - Amiga Format
"The Eyetech Tower offers clever solutions with a Velcro easyfit mentality" - CU Amiga

Expand your CD32 - send for details!



SK32 Mk2	£149.95
SX32 Pro50	£269.95
SX32 Pro40EC	£199.95

The Top-Rated Eyetech CD-Plus Range for the A1200

24-speed just £84.95; 32-speed just £94.95!

"Eyetech have come up with a real winner with this new CDROM drive" - Ben Vost, AF

- ✓ Whisper quiet 24 or 32-speed CDROM mechanism
- ✓ EZCD-Mk4 4-device buffered interface, 3-connector 40-way and 2-connector 44-way cables included
- ✓ CDPlus driver software specially written for Eyetech by the author of IDE-fix
- ✓ Optional Amiga and CDDA audio mixer with Gold phono audio jacks - just £19.95 each
- ✓ 20-watt CE-approved PSU complete with 13A plug.
- ✓ Optional upgrade to MiniTower or Desktop case with 230W PSU (which can also hold extra drives and power your Amiga) just £20 extra!
- ✓ 2 Free CDs whilst stocks last



AMIGA SVGA MONITORS

For use with Amiga Zorro & the new PPC Graphics Cards, Scandoublers & the EZPC-Tower system

- ✓ All monitors come with a 3-year warranty and at least 1 year on-site maintenance - call for details.
- ✓ Special pricing on scandoublers/flickerfixers bought with monitors from just £45 extra
- ✓ Monitor specifications are quoted as the highest vertical refresh rate at the maximum resolution. Higher refresh rates (>=72Hz) at lower resolutions are available and give a more visually relaxing display.
- ✓ Scandoubler/flickerfixers have resolutions governed by the Amiga's AA/AGA chipset and are restricted to a maximum vertical refresh of 73Hz and a maximum usable resolution of 724Hx566V. The PPC Bvision supports 1600x1280@72Hz.

14" SVGA 0.28DP, 1024Hx768V @ 60Hz	£89.95
15" SVGA 0.28DP, 1024Hx768V @ 60Hz	£119.95
17" SVGA 0.28DP, 1280Hx1024V @ 60Hz	£229.95
17" SVGA 0.26DP, 1600Hx1280V @ 75Hz	£399.95

phase5 PowerUp PPC + '040/060 Accelerators

Without SCSI (not upgradable)

A1200	160 MHz 603e PPC	'040/25/MMU/FPU	only £261.95
A1200	160 MHz 603e PPC	'060/50/MMU/FPU	only £497.95
A1200	240 MHz 603e PPC	'040/25/MMU/FPU	only £387.95
A1200	240 MHz 603e PPC	'060/50/MMU/FPU	only £617.95

Add ~ £60 to the above prices for factory fitted on-board Fast SCSI II Interface

Blizzard Vision Permedia 2 PPC Graphics Card

Unbelievable quality and speed - 1600x1280@72Hz!

No Zorro slots needed!

4mb card - £178.95 or just £158.95 with a PPC

Join the Digital Imaging Revolution with Eyetech

Amiga Digital Imaging Software from Andreas Gunther

ScanQuix4 & PhotoScope Software

- just £59.95

- ✓ 24 bit scanning with full range of editing options
- ✓ 'Scan-to-disk' option in Jpeg or IFF
- ✓ Stand-alone use or integrates with your Art package (AdPro, ArtEffect, PPaint, Photogenics, ImageFX, XLPaint, Pagestream 3, DPaint5) via AREXX
- ✓ SQ4 - for Epson, HP SCSI & Epson parallel scanners, PhotoScope for UMAX 610S/1210S

CamControl Amiga Digital Camera Software

- now just £29.95

- ✓ Serial connection versions available for most popular models of Kodak, Minolta, Olympus, Casio & Fuji digital cameras
- ✓ Picture transfer, camera control & slideshow options (camera dependant)
- ✓ Stand-alone use or integrates with your Art package (AdPro, ArtEffect, PPaint, Photogenics, ImageFX, XL Paint, Pagestream 3, DPaint 5) via AREXX
- ✓ Selectable serial device for use with high-speed interfaces like the PortJnr

TurboPrint 6 - The essential partner for your digital imaging work

- ✓ The most comprehensive, fastest replacement printing system for all WB2.x+ Amigas
- ✓ Supports the latest Epson, Canon, HP printers - including the Award-winning Epson Stylus Photo
- ✓ Integrates seamlessly with ScanQuix/PhotoScope scanning software and CamControl digital camera software
- ✓ Poster printing, image tiling, colour correction, print spooling, photo optimisation etc, all included as standard
- ✓ Selectable parallel device for use with high-speed interfaces such as the PortPlus (see below)

£38.95

PortPlus

2 x 460 Kbd serial + 1 x 800 KB/s Parallel

£79.95

or just £70 if bought with TurboPrint 6

PortJnr

1 x 460Kbd serial port

(for attachment to the A1200's unused 'clock' port)

£39.95 - or just £30 if bought with CamControl software

A1200 EZWriter and EZReWriter CDROM Burners

- ✓ Both are IDE/ATAPI reader/writer units with MakeCD Amiga writing software
- ✓ EZWriter units cut 'Gold' CD blanks at 2x speed & read CDROM's at 8 speed
- ✓ EZReWriter units cut 'Gold' CD blanks and CD rewritable disks at 2x speed and read conventional CD's at 6 speed
- ✓ Gold 650MB CD blanks (for use with either model) are available at ten for £10 at time of purchase
- ✓ CD rewritable disks are just £5 each when bought with the EZReWriter



EZWriter/EZReWriter Options

EZWriter-Bare	for A4000 or A1200 Tower (bare drive - no MakeCD)	£209.95
EZWriter-INT	for A4000 or A1200 Tower (with MakeCD)	£249.95
EZWriter-SE	External A1200 unit with separate 100w PSU	£269.95
EZWriter-Gold	External A1200 unit with int 40w PSU, Gold Audio skts	£299.95
EZWriter-MT	Mini-Tower-cased unit with 230w PSU which can house an additional LS120/Zip/CDROM & power your A1200	£299.95
EZReWriter-Bare	for A4000 or A1200 Tower (bare drive - no MakeCD)	£229.95
EZReWriter-INT	for A4000 or A1200 Tower (with MakeCD)	£279.95
EZReWriter-SE	External A1200 CD ReWriter with separate 100w PSU	£299.95
IDE interfaces if required ...	EZCD-SE I/F, 44-way & 40-way cables & CDROM s/w - add £20 EZCD-Mk4 I/F, 44 & 40-way cables & EZ-IDE s/w - add £30 IDE-Flyer or IDE-Express I/F, cables & s/w - add £50	

Apollo Accelerator for the A1200

Turbo 1230LC '030EC/33MHz (7 MIPS)

WITH FPU AND 4MB ONLY £59.95

Options: With MMU (non-EC version) +£5.00
With 8MB +£7.50

A1240/25	'040/25MHz/MMU/FPU*	(19 MIPS)	£127.95
A1240/40SE	'040/40MHz/MMU/FPU*	(30 MIPS)	£167.95
A1240/40	'040/40MHz/MMU/FPU*	(30 MIPS)	£187.95
A1260/50	'060/50MHz/MMU/FPU*	(39 MIPS)	£287.95
A1260/66	'060/66MHz/MMU/FPU*	(51 MIPS)	£367.95

*To 32MB. Optional 2nd simm socket (tower only) offers 64MB total

4MB - £12.95 8MB - £19.95 16MB - £29.95 32MB - £39.95

Tip: Buy your memory with the accelerator to ensure full compatibility

A1200 HARD DRIVES - LS120, ZIPs

Thinking of buying a BIG drive? Don't waste your money on ANY DRIVE OVER 4.3GB as the Amiga 0/S doesn't support it! (2^32-1 bytes actually).

They appear to work but overwrite the RDB after 4.3GB into the drive.

- ✓ All drives come ready to use with WB3.0 pre-installed & WB2.x install script
- ✓ All drives over 200 MB come with over 45 top quality utilities (not shovelware) and MME multimedia authoring s/w pre-installed, configured & ready-to-run

TowerDrives (3.5" drives, 25mm high):

1.7GB - £89.95 2.1GB - £94.95 3.2GB - £109.95 4.3GB - £129.95

LS120 & Zip Drives (ATAPI i/f - EZIDE needed):

LS120 (HD Floppy/120MB Cart) - £79.95 3 x 120MB carts - £29.95

Zip Drive (Mac emul'n compat) - £79.95 3 x 100 MB carts - £29.95

2.5" Instant Drives for the A600/A1200 SX32

20MB An entry-level drive for the SX32/A600 £29.95

170MB An entry-level drive for the SX32Pro/A1200 £59.95

260MB An entry-level drive for the SX32Pro/A1200 £64.95

720MB A drive for serious A1200/SX32 Pro users £99.95

1.4GB A high performance drive for power users £129.95

1.8GB Top-class drive for the A1200/SX32Pro £149.95



Complete A1200 IDE solutions . . Prices down on Interfaces & Software . .

EZCD Buffered Interfaces

4-Device Buff Interface & CDROM Software	£18.95	£28.95
CDROM s/w, 3x40 & 2x44-way cables	£28.95	£38.95
EZ-IDE s/w, 3x40 & 2x44-way cables	£38.95	£48.95

EZ-IDE Amiga IDE, ATAPI, CDROM & removable media driver s/w £34.95

If bought with any EZCD, I/F, Zip or LS120 Drive £9.95

Upgrade from Eyetech CDPlus/IDE Fire Software £14.95

(trade in & proof of purchase required)

Abridged Guide to Buffered Interfaces

Interface	Max Xfer	Suitability
EZCD-SE	2MB/s	030/40 Accelerator or slower/none
EZCD-Mk4	3MB/s	030/50, 040/xx, 060/xx
IDE-Express	5MB/s	040/xx, 060/xx, UDMA HD & 24 speed+CDROM
IDE-Flyer	8MB/s	040/xx, 060/xx, UDMA

Elbox IDE Flyer I/F & CDROM file system (>4.3GB HD Support) £59.95

IDE Express Interface & IDE-fix Express Software £59.95

Send SAE for IDE Interface Fact Sheet

❖ This symbol means that prices may be subject to exchange rate variations. Please call for latest information. ❖

Interfaces and Adapters: EZ-Key & DIY Tower Components

ADPT-EZK2	Mk 2 Amiga/PC k/b → A1200 kbd direct connect	28.95
ADPT-EZK2-A4K	A1200 EZKey Mk2/6p → Sp adaptor/A4000 kbd bdlie	58.95
ADPT-EZK2-W95	Mk2 Amiga/PC k/b → A1200 rib cab+Win95 kbd	38.95
ADPT-HD-2/3	2.5"/44way → 3.5"/40w+4w & mtg bracket	11.95
ADPT-HD-3/5	3.5" Zip/SyQuest/FDD/HD brkupl → >5" bay	5.95
ADPT-KBD-SP6P	Amiga/PC k/b adapter 5p din/F → 6p mdm/F	5.95
ADPT-KBD-6P5P	Amiga/PC kbd adapter 6p din/F → 5pD-M	5.95
CAB-KBD-MF	5p DIN M - 5p DIN F k/b ex cable 1.2m	7.95
ADPT-DF0-FP	Tower faceplate adapter for A1200 int FD	6.95
ADPT-DF0-TWR	34-34 way cable and faceplate for DF0	9.95

Interfaces and Adapters: A1200 Ethernet, SCSI

ADPT-ETH-BNCT	BNC T-piece 2xM + 1xP	4.95
ADPT-ETH-TERM	Ethernet BNC coax terminator 50R	4.95
ADPT-PCM-ETH-C	PCMCIA ethernet card with Amiga/PC drivers	79.95
ADPT-PCM-ETH-H	Hydra PCMCIA ethernet card with Amiga drvs	129.95
CAB-ETH-60C	Ethernet coax/BNC/F 60cm for Siamese	9.95
CAB-UPT-X60C	Crossed twisted pair/RJ45 for Siys 60cm	6.95
ADPT-SCS-CSQR	Classic Squirrel PCMCIA SCSI i/f 50pCM	59.95

I/F & Adapters: Flickerfixers, Genlocks, Video Digitisers VGA Adapters, Monitor Leads

ADPT-VGA-BV4M	BVision 4MB gfx card for A1200 (needs PPC)	178.95
ADPT-VGA-BMON	Auto Amiga/BVision m/sync monitor switch	39.95
ADPT-VGA-M2SD	EZ-VGA-Mk2 external s/doubler PLL upgradable	69.95
ADPT-VGA-PLFF	EZ-VGA-Plus external flickerfixer 23F-15F PLL	99.95
ADPT-VGA-SDUG	SDBL2 to SD-flickerfixer u/g	40.00
ADPT-VGA-INSF	EZ-VGA internal A1200 s/doubler non-upgrade	48.95
ADPT-VGA-INFF	EZ-VGA internal A1200 flickerfixer	89.95
ADPT-VGA-SEFF	EZ-VGA-SE flickerfixer 23F-15M Xtal	78.95
ADPT-VGA-15M23M	VGA 15pHD-M → 23pD-M Amiga RGB adapter	14.95
ADPT-VGA-15M9F	Adapter from 15p HD-M to 15p 9pD-F	9.95
ADPT-VGA-9M15F	Monitor adapter 9p D-F to 15p HD-M	9.95
ADPT-VGA-UNBF	Amiga 23 pin(i/f)-15 pin HD(f) VGA adapter	12.95
ADPT-VGA-BUF	Amiga 23pin-F to 15pinHD-F buffered adapter	16.95
ADPT-PGB-24RT	ProGrab 24-RT Amiga parallel port video digitiser	119.95
ADPT-GLK-COMP-SP	EZ-Gen Video Genlock purchased with ProGrab	50.00
ADPT-GLK-COMP	EZ-Gen composite video Genlock for A1200	99.95
ADPT-VGA-AMON	Auto Amiga/CV643D m/sync monitor switch	39.95

I/F & Adapters - IDE/ATAPI, Serial, Parallel & Floppy Drive

INT-IDE-FLYR	Elbox 4-dev high performance buf'd A1200 IDE i/f	59.95
INT-IDE-XPRS	IDE-Express 4-dev high performance buf'd A1200 i/f	59.95
ADPT-FLR-SPC	ROM spacers for Elbox IDE-Flyer	8.95
ADPT-FLR-SPC-SP	ROM spacers for Elbox IDE-Flyer pur w/IDE-Flyer	4.50
INT-12I-EZCD4	Mk4 4-dev buf IDE i/f w/A1200 CD s/w	28.95
INT-12I-EZCD4/CE	Mk4 4-dev buf IDE i/f w/3x40, 2x44 13cm cabs	38.95
INT-12I-EZCD5/CE	Economy 4-dev buf IDE i/f w/A1200 CD s/w	18.95
INT-12I-EZCD5/CE	Econ 4-dev buf IDE i/f w/3x40, 2x44 13cm cabs	28.95
INT-12I-EZCD5/CE	Econ 4-dev buf IDE i/f w/3x40, 2x44cabs, EZIDE	38.95
INT-4K1-CD4	4-devide IDE i/f for A4000 w/CDROM s/w	18.95
INT-FDD-DF0	Interface for std Sony FDD for FDD 880KB	9.95
INT-SER-PTJR	Portjunior - 460KB serial i/f for A1200	39.95

Cables & Cable Adapters: Audio & Mains

CAB-AUD-CD	CDROM inv'd T audio cab .6m + 2xRCA plg	9.95
CAB-AUD-MIX	RCA(phono)-M → RCA-M+RCA-F 'Y' mixer lead 1.8m	6.95
CAB-AUD-2M2M	RCA(phono)-2xM → RCA2xM stereo lead 1.8m	4.95
CAB-AUD-MJ/PH	3.5mm st miniajck → 2xphono-M plugs 1.2m	5.95
ADPT-AUD-RCA	RCA(phono)-M → 2xRCA-F adapter 'Y' mixer	2.50
ADPT-AUD-RCA-G	RCA(phono)-M → 2xRCA-F gold plated adapter 'Y' mixer	3.50
CAB-IEC-15M	AC power cable 13A plug → IEC sct 1.5m	2.95
CAB-IEC-4X13	AC powerstrip 1xIEC-M → 4x13A-F mains sct	19.95
PLUG-IEC	Re-wirable IEC monitor plg for PSUs/MT/DT	4.95

Cables & Cable Adapters: Serial, Monitor, SCSI, Printer

CAB-SER-EX2M	DB25-M → DB25-F RS232 extn cab 2m	7.95
CAB-SER-EX30C	DB25-M → DB25-F RS232 extn cab 3.0m	6.95
CAB-SER-NUL2M	Null modem cable w/ D9F & D25F at each end	9.95
ADPT-SER-25F9M	25p-F to 9pM serial RS232 adapter	4.95
ADPT-SER-25M9F	25p-M to 9pF serial RS232 adapter	4.95
ADPT-SCS-50C2F1M	50pin Centronics 'T' 2x F to 1 x M SCSI adapter	14.95
ADPT-SCS-50F50C	Centronics 50p-F to Centronics 50p-F (for Squirrel)	14.95
CAB-BT-EX10	10m BT extn cable + 2 way phone adapter	9.95
CAB-BT-MOD	FC684/6 to BT4 modem phone lead 1m	5.95
CAB-SCS-25D/50C	SCSI cable DB25-M → Cent50-M 1m	9.95
CAB-SCS-25D/25D	SCSI cable DB25M-DB25M mac type	9.95
CAB-SCS-50C/50C	SCSI cable Centr50M → Centr50M 1m	9.95
CAB-SCS-50H/50C	SCSI-2 cable 50H/pDM → Centr50M 1m for PPC	19.95
CAB-SCS-50H/25D	SCSI-2 cable 50H/pDM → 25D-M 1m for PPC	19.95
CAB-PAR-FULL	Bi-directional printer cable all pins connected	9.95

Cables & Cable Adapters: VGA, Keyboard, Switchboxes & Cables, Scart Cables

ADPT-SW-SIX	Dual monitor & k/b switchbox	19.95
ADPT-SW-SIX/M	Dual monitor, k/b & mouse switchbox	24.95
CAB-KBD-MF	5p DIN M - 5p DIN M k/b cable 1.2m	7.95
CAB-VGA-MF	15p DM-HD - 15p DF-HD VGA ext cable 2m	9.95
CAB-VGA-MM	15p DM-HD - 15p DM-HD VGA cable 2m	12.95
ADPT-SCAR-CMP	Amiga comp video (RCA)+2xAudio to SCART	9.95
ADPT-SCAR-RGB	Amiga 23p+2xRCA to RGB TV SCART + audio	12.95

Cables: HD, CDROM, Floppy, Clock Port Data & A1200 HD Power

CAB-PD-40F4F	2.5" (44f) to 3.5" (40f) data cab adapt for A1200	9.95
CAB-PD-2F	Power splitter/floppy drive to hard cable + floppy	9.95
CAB-PD-30C	44→40way 3.5" HD data & pwr cabs -A1200	14.95
CAB-HD-KIT	A1200 full 3.5" hard drive fitting kit	24.95
CAB22-2W-9C	22way-Fx2 A1200 clock port cable 9cm o/a	5.00
CAB34-2W-50C	34way-Fx2 FDD ribbon cable for tower	9.95
CAB40-2W-20C	40 way IDE cable 2 connector 20cm	5.00
CAB40-3W-1M	40Way IDE/HD/CD cable 3 connector 1m o/a len	9.95
CAB40-3W-60C	40w-F x3 HD/CD/IDE cable 20+40=60cm o/a	9.95
CAB40-CUST	Custom cable 3x40way IDE up to 1.5m	19.95
CAB44-2W-13C	44way (2.5" HD) cable 2 ctnr, 13cm o/a	9.95
CAB44-2W-60C	44way (2.5" HD) cable 2ctnr, 60cm o/a	9.95
CAB44-3W-12C	44way (2.5" HD) cable 3 ctnr, 12cm o/a	12.95
CAB44-3W-24C	44way (2.5" HD) 7+17cm, 3ctnr, 24cm o/a	14.95
CAB50-CUST	Custom cable 3x50way IDC SCSI + 1xCent50-F 60cm	19.95

Cables: HD, CDROM, Floppy Power Splitters - Tower Systems

CABPW-1W-1F	Power converter cab HD-M → FD-F	4.95
CABPW-2W-1H1F	HD/FD pwr splitter HD-M → 1xHD-F/1xHD-F	6.95
CABPW-2W-2F	HD/FD power splitter 4p-M → 2x2F-D	6.95
CABPW-2W-2H	HD/CD pwr splitter 4p-M → 2x2 4p-F 15cm	6.95
CABPW-3W-2H1F	HD/FD pwr splitter HD-M → 2xHD-F/1xHD-F	8.95
CABPW-3W-3H	HD power splitter HD-M → 3xHD-F	8.95
CAB-HD-PWXTN	4p-M → 4p-F HD/CD power cab ext 0.9m	9.95
CAB-HD-FD4	23p-M-floppy → 4p-F HD/CD pwr 0.9m	9.95

New - ISDN Term Adapters, 56k Modems & Net Access Bundles

NET-EYE-1	128Kbps ISDN T/A - unlimited, no subs i/n access	199.95
NET-EYE-2	128K ISDN T/A, w/ no subs i/n access, Portjnr i/f	229.95
NET-EYE-3	128K ISDN T/A, w/ no subs i/n acc, lbrs, Miami	249.95
NET-EYE-4	128K ISDN T/A, w/ no subs i/n acc, lbrs, Miami, Pjtn	269.95
NET-EYE-5	56Kb fax/voice modem u/ unlimited, no subs i/n access	129.95
NET-EYE-6	56Kb fax/voice modem, u/ no subs i/n access, Portjnr i/f	149.95
NET-EYE-7	56Kb fax/voice mdm, u/ no subs i/n acc, lbrs, Miami	169.95
NET-EYE-8	56Kb fax/voice mdm, u/ no subs i/n acc, lbrs, Miami, Pjtn	189.95

CDROM Systems including EZ-Tower & MT/DT Bundles

CD-SE-24X	CDPlus-SE system 24 speed with CDROM s/w	84.95
CD-SE-32X	CDPlus-SE system 32 speed with CDROM s/w	94.95
CD-DT/MT-24X	CDPlus Desktop/Minitower 20 x with CDROM s/w	104.95
CD-DT/MT-32X	CDPlus Desktop/Minitower 20 x with CDROM s/w	114.95
ADPT-AUD-CDSE	CDPlus-SE A1200/CD audio mixer/adaptor	19.95
CAB44-CD-13C	44way (2.5" HD) cable purch with CD/HD 13cm	6.00
CAB40-DDC	A1200 IDE sct adptr 40F-40M with mtgs 15cm	9.95

CDWriter/ReWriter Systems inc. EZ-Tower & MT/DT Bundles

CDWR-IN-2x8	EZWriter 2/8x with MakeCD for A4000/Tower	249.95
CDWR-PL-2x8	EZWriter-Gold external 2/8x with MakeCD	299.95
CDWR-SE-2x8	EZWriter-SE external 2/8x with MakeCD	269.95
CDWR-DT/MT-2x8	EZWriter Desktop/Minitower 2/8 speed with MakeCD	299.95
CDWR-BARE-2X8	EZWriter Mechanism (no MakeCD)	209.95
CDWR-IN-226	EZWriter 2x2x6 w/MakeCD for A4k,Twr	279.95
CDWR-PL-226	EZWriter-Gold external 2x2x6 w/MakeCD	339.95
CDWR-SE-226	EZWriter-SE external 2x2x6 w/MakeCD	299.95
CDWR-BARE-226	EZWriter Mechanism (no MakeCD)	229.95
CDWR-CDSE-UJ	EZCD-SE-40+44way cabs + CDROMs/s/w w/CDR	20.00
CDWR-CDM4-UJ	EZCDM4k+40+44way cabs + EZIDE s/w w/CDR	30.00
CDWR-CDFL-UJ	IDE-Flyer high-speed IDE i/f, s/w, cabs purch w/CDR	50.00
CDWR-CDXP-UJ	IDE-Express high-speed IDE i/f, s/w, cabs purch w/CDR	50.00
CDWR-DSK-10	Recordable CD media (WORM) 650MB x10	19.95
CDWR-DSK-10-SP	Recordable CD media 650MBx10 pur w/EZWriter	10.00
CDWR-DSK	Single CDrewritable disk 650MB	9.95
CDWR-DSK-SP	Single CDrewritable disk 650MB pur w/EZWriter	5.00
DVR-MCD-TAO-P	MakeCD TAO (P) Amiga CD rec s/w w/ATAPI	38.95

EZ-Tower Systems, MiniTower/Desktop Cases & Accessories

CASE-FT-SLE	DIY EZTower, 250W PSU, EZKey, PC kbd lim. stock	99.95
CASE-FT-I200	Full A1200 Tower 250WPSU/LED adpt.FD cab	99.95
CASE-FT-EKXT	EZ-Tower conversion kit - No PC Tower	39.95
CASE-FT-KIT	EZ-Tower kit w/ bkpln for self conversion	79.95
CASE-FT-PLUS	Full A1200 EZTWR, EZKEY i/f, PC kbd	119.95
CASE-DT	Desktop case with 200W+ psu for HD/CDROM	29.95
CASE-MT	MiniTower case with 200W+ psu for CD/HD	29.95
ADPT-AUD-EZTWR	EZTwr audio mixer/adaptor for A1200/CDROM	19.95
ADPT-SCSI-EZTWR	EZTwr SCSI adpt 30cm 2xCent50F, 1xIDC50F	19.95
CAB-SER-SSQ	9pDM → 9pDF Surfqs EZTwr ser extn cab 50cm	9.95

SVGA Monitors - require Scandoubler and/or Flickerfix to use all Amiga modes

MON-14-28	14" dig SVGA 0.28DP 1024x768@60Hz - 3yr.O.S.	89.95
MON-15-28	15" dig SVGA 0.28DP 1024x768@60Hz - 3yr.O.S.	119.95
MON-17-28	17" dig SVGA 0.28DP 1280x1024@60Hz - 3yr.O.S.	229.95
MON-17-26	17" mon 135MHz, 0.26DP 1600x1280@75Hz	399.95
ADPT-MON-SEFF	EZVGA-SE ext flickerfixer purch w/ monitor	75.00
ADPT-MON-M2SD	EZVGA-Mk2 ext s/dblr u/g'able purch w/ monitor	60.00
ADPT-MON-PLFF	EZVGA-Plus ext flickerfixer purch w/ monitor	90.00
ADPT-MON-INSF	EZ-VGA internal s/doubler purch w/ monitor	45.00
ADPT-MON-INFF	EZ-VGA internal ffixer purch w/ monitor	85.00

Digital Cameras and Amiga Digital Camera Software

CAM-FUJ-D57	Fuji D59 cam, psu, LCD disp, mem crd w/ s/w (lim stock)	199.95
DVR-CAM-CAS	CamControl s/w for Casio QV100/100/300	29.95
DVR-CAM-FUJ	CamControl s/w for Fuji D55/D57	29.95
DVR-CAM-KOD	CamControl s/w for Kodak DC20/DC25	29.95
DVR-CAM-MIN	CamControl s/w for Minolta Damage V	29.95
DVR-CAM-OLY	CamControl s/w for Olympus 420L/820L/1000L	29.95
INT-12I-PTJR-SP	Portjnr hi-speed ser i/f pur with CamControl s/w	30.00

Amiga CDROM, CDWriter, IDE/ATAPI, Printer Software/Drivers

DVR-EZIDE	EIDE/ATAPI HD/CDROM/ZIP/LS120/SyQst drr	34.95
DVR-EZIDE-CU	Pix upgrade to EZIDE from competitive product	14.95
DVR-EZIDE-SP	EIDE/ATAPI enhancer/CDROM Software Bundle Price	9.95
DVR-MKCDP	MakeCD (P,TAO) Amiga CD writing software	38.95
DVR-ENPR	EnPrint. Amiga printer driver for pre-03/97 Epson Printers	9.95
DVR-TBPR6	TurboPrint 6.x Amiga printer driver (English)	38.95

Amiga Scanner Software, Scanner Bundles and Adapters

SCN-FBA4-BDL3	UMAX award-winning SCSI A4FB scanner with PScope	179.95
ADPT-SCS-CSQR-SP	Classic Squirrel PCMCIA SCSI i/f 50pCM pwr w/scnr	49.95
ADPT-SCS-50C50F-SP	Centronics 50p-F to Centronics 50p-F (SQ) pur w/scnr	7.50
DVR-SQ4	ScanQuix4 with 1 Amiga Driver (Epson or HP SCSI)	59.95
DVR-PHS	PhotoScope UMAX-SCSI Amiga Scanner Driver	59.95
CAB-SCS-25D/50C-5	SCSI cable DB25-M → Cent50-M 1m pur w/scnr	5.00
CAB-SCS-25D/25D-5	SCSI cable DB25M-DB25M mac type pur w/scnr	5.00
CAB-SCS-50C/50C-5	SCSI cable Centr50M → Centr50M 1m pur w/scnr	5.00
CAB-SCS-50H/50C-5	SCSI-2 cable 50H/pDM → Centr50M 1m for PPC pur w/scnr	10.00
CAB-SCS-50H/25D-5	SCSI-2 cable 50H/pDM → 25D-M 1m for PPC pur w/scnr	10.00
ADPT-SQ3-PAR	SQ3 adapter Epson scanner → parallel port cable	9.95
CAB-PAR-FULL	Bi-directional printer cable all pins connected	9.95

Hard & Floppy Drive, CDROM, LS120 & Zip Mech. & Cases

CD24-BARE	Bare 20 speed CDROM mechanism for twr/A4k	39.95
CD32-BARE	Bare 32 speed ATAPI CDROM mechanism	44.95
FDD-ITL-1200	Replacement A1200/600 int FDD 880KB	24.95
FDD-ITL-BARE	Bare 1.44/880 Sony FDD for tower (needs i/f)	19.95
FDD-ITL-DI/C1	Twr int 880KB FDD (Sony/EZDFD/cab bundle)	29.95
FDD-ITL-DI/1	Twr int 880KB FDD (Sony/EZDFD) No cable	24.95
HD2-21	21MB 2.5" hard drive 90 days warranty	29.95
HD2-170	170MB 2.5" hard drive	59.95
HD2-260	260MB 2.5" hard drive	64.95
HD2-720	720MB 2.5" hard drive	99.95
HD2-1.4	1.4GB 2.5" hard drive for Amiga	129.95
HD2-1.8	1.8GB 2.5" Hard Drive	149.95
HD3-2.1	2.1GB 1"x3.5" non-InstantDrive for twr	94.95
HD3-3.2	3.2GB 1"x3.5" IDE drive for tower	109.95
HD3-4.3	4.3GB 1"x3.5" IDE drive for tower	129.95
HD3-LS120	Panasonic LS120 floppy/optical 1.4/120MB	79.95
HD3-LS120-CT1	Single 120 MB cartridge for LS120 drive	14.95
HD3-LS120-CT3	3-pack of 120MB (nominal) ZIP LS120 carts	29.95
HD3-ZIP-CT1	Single 100MB (nominal) ZIP cartridge	14.95
HD3-ZIP-CT3	3-Pack of 100MB (nominal) ZIP cartridges	29.95
HD3-ZIP-IDE	Bare ATAPI/IDE Zip drive internal	79.95
CAB44-CD-13C	44way (2.5" HD) cable sold with CD/HD 13cm	6.00
CASE-ZIP	Metal slim case-FDD/IDE/ZIP/SyQuest/LS120	9.95
CASE-HD-ECON	External 3.5" HD case no psu	19.95
CASE-HD-REM	Removable drive case for 3.5" HD (metal)	24.95

Keyboards, Mice, Trackballs, PSU's, Misc. Hardware & Software

FAN-60MM	Cooling fan for A1200 60x60x25mm 5/12v	14.95
KBD-A1000	A1000 keyboard with 6-pin mini-Din ctnr*	39.95
KBD-A1200	Replacement A1200 k/b w/ribbon cable*	24.95
KBD-A4000	A4000 keyboard with 6-pin mini-DIN plug*	34.95
KBD-WIN95	Windows 95 keyboard with 5-pin AT DIN plug*	19.95
MOU-WHI	Amiga mouse - white/cream - with mousemat*	6.95
TKB-AM	Amiga trackball 3-button replaces std mouse*	14.95
PSU-100	100w PSU for Amiga (fit your old lead - inc cntrs)	29.95
PSU-200	200w PSU for Amiga (fit your old lead - incl cntrs)	39.95
PSU-230	230/250w replacement PSU for MT/DT/FT	29.95
PSU-A1200	A1200 23W PSU (original) 90 days warranty	19.95
SPK-16W	16W PMPO speakers w/ PSU 3.5mm jack	10.95
SPK-60W-INT	5.25" Bay Internal mounting 60W PMPO speakers/amp	24.95

* NB Items subject to mechanical wear & tear are limited to 90 days warranty on those components

REBOL



John Kennedy talks about this revolutionary new language.

AFCD34:-In the Mag-/REBOL

The name Carl Sassenrath should need no introduction to most dedicated Amiga owners. Carl was a key software engineer in the development of the Amiga's operating system, and that alone elevates him close to sainthood in the eyes of many.

He was also involved with Viscorp's failed attempt at bringing the Amiga back as a vacuum cleaner lookalike/set top box, where he developed the kind of software needed to make the Amiga talk to the outside world.

Beyond his Amiga links, for the past twenty years Carl has wanted to develop a new programming language. His aim was to create a language quite unlike anything currently available: a language which was much more than simply a different way of writing the same old software. Drawing up the specifications for the language led to several goals:

SIMPLICITY

Some languages are just too complicated. This makes them difficult

for beginners to learn how to use and difficult for experts to do complicated things. It also makes it hard to maintain larger projects.

COMMUNICATIONS

Networking is vital these days. From local networks sharing resources to the global Internet, computers talk to each other. Any new language must have a way of sharing information as an integral part of the way the program works. The difficulties involved in moving a simple text file from one platform to another are crazy. The new language is designed to make sending messages as easy as possible and you're going to be surprised when you discover how easy that really is.

INDEPENDENCE

Microsoft seem to be anywhere and everywhere at the moment, but not

REBOL

REBOL A messaging language designed for networks and the Internet.

Carl Sassenrath: the man behind REBOL and most of the Amiga's power.



The new language had to be readable by humans as well as by computers. To put it in the words of the computing pioneer Alan Kay, "Simple things should be simple, and complicated things should be possible."

PRODUCTIVE

The point of any language is to get something done and a good language will make it easy to get things done quickly. Carl's new language is certainly powerful. It's described as a first class, functional, symbolic language with a rich selection of built-in DataTypes, object support, incremental refinement, integrated networking and automatic storage management.

everyone wants to be locked into one proprietary system, no matter how large the company behind it. Breaking free of particular platforms was obviously very important to an ex-Amiga man.

HUMANITY

It sounds rather grand, but today the Internet links us all together. We live in a world which routinely passes information and money across national boundaries. Any language fit for the new millennium must be happy dealing with international standards, currencies and time-zones.

REBOL WITH A CAUSE

After many years of work, the result of these design parameters is REBOL. The REBOL language was launched into a waiting world in October, ready (and free) to download and use on a wide range of systems. REBOL stands for Relative Expression-Based Object Language, which is an acronymic way of saying that the language is made

Continued overleaf ➔

up of groups of words which are evaluated to produce a result.

Like ARexx, *REBOL* is an interpreted, script-based language. It's free form, which means you don't have to worry excessively about punctuation, taking a new line, using line numbers and so on. Words are grouped into segments using the square brackets, and the long list of built-in command and functions have obvious names.

Unlike ARexx, *REBOL* is completely and utterly network and Internet ready. *REBOL* has networking in its blood. In fact, sending an email is a simple one line operation in a *REBOL* script: could you even imagine how to begin going about this using existing Amiga programming languages?

Theoretically, using *REBOL* and a graphical user interface language (something like good old *CanDO!*), you could create your own email program in an afternoon.

For example, the *REBOL* code to download and display the contents of a web page can be expressed in one line:

```
read http://www-rebol.com
```

Once it sees the URL, *REBOL* knows that it needs access to the Internet and so it goes looking for the file. It's obvious, but impossible in a language like *C* or ARexx without a lot of behind the scenes messing around. Likewise, sending someone a file as an email is a one-line operation:

```
send person@somewhere-net read  
%sendfile.r
```

Notice the "%" symbol: although *REBOL* keeps syntax to a minimum, this symbol is used when you need to tell the system that you're dealing with a file. *REBOL* is a strongly typed

language, which helps keep your programs in check. You can define dates, numbers, strings and files.

WHAT KIND OF THINGS CAN IT DO?

REBOL comes with a large collection of built-in functions, forming its core. This means you can quickly use it to perform mathematical operations and file manipulation tasks. The integral networking messaging means it's an ideal language to manage information systems such as web browsers and email applications. As web pages become

“The integral networking messaging system means it's an ideal language to manage information systems...”

more complicated, a lot of work is done in the background, creating pages “on the fly” and processing incoming information.

Again, like ARexx, *REBOL* makes a good macro language. It could be used to tie together other applications, adding new features and automating tedious tasks.

REBOL sports a feature called dialects, which makes it easy to customise to suit certain needs. While a beginner might be perfectly happy with the default, out-of-the-box language – and it does make an excellent language to learn with – an expert might create new and powerful functions designed with their own applications in mind.

CRITICAL EVALUATION

However, the point has to be made: do we really need another programming language? It's all too easy to be overwhelmed with the range of

languages available at the moment. While *C* and *C++* are still the leaders in application development languages, there are many others available.

Java was supposed to completely revolutionise the computing world by making it possible to develop everything from web scripts to complete application packages almost totally independently of the hardware platform. Relying on a “virtual machine”, a *Java* program could run on anything from an inexpensive terminal to a powerful web server.

However, even with the might of the giant Sun corporation behind it, *Java* is nowhere near as popular as the hype led us to believe. If Sun can't make it with *Java*, how can the relatively unknown *REBOL* even have a prayer?

Perhaps because *REBOL* isn't supposed to be the all-singing, all-dancing panacea to programming problems. You're unlikely to attempt to write an application like Corel's office suite in *REBOL*. Instead, *REBOL* is more of a “glue” language, like the scripting tool *Perl*.

REBOL VS PERL

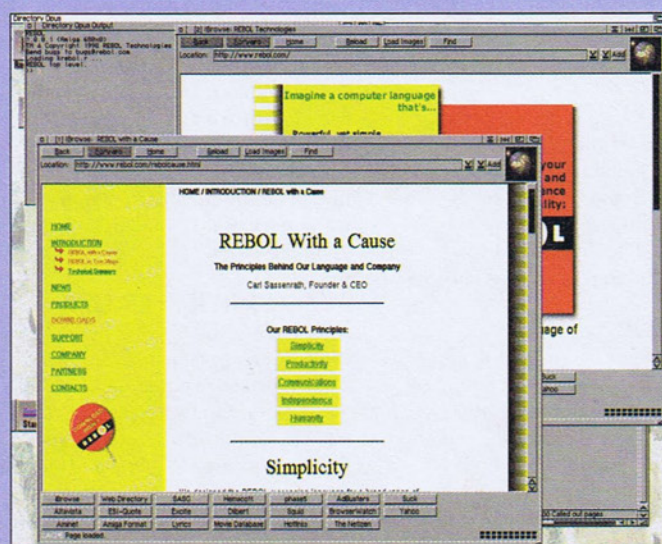
Perl is in use today on practically every website you visit. Behind the scenes, *Perl* programs are accessing databases, creating new web pages on the fly and looking after electronic transactions. It's this kind of low-level problem solving at which *REBOL* would be very good at.

REBOL has the distinct advantage that it looks a lot like English, whereas *Perl* looks like an accident in a printing factory. *Perl* can produce some of the ugliest programs you've ever seen, and yet it can also produce some of the most useful. The power of *Perl* is its use of Regular Expressions. This makes it very easy to quickly search through text and other files and pluck out the vital information needed.

Regular Expressions is something which *REBOL* currently lacks, although it does have the ability to analyse data structures called “series” very easily. *Perl* is also capable of running in a multithreaded way (performing several tasks at once) and this is very useful in a multitasking environment like the Internet. Crucially, *Perl* also has a vast library of proven modules for programmers to rely on. It has also been well integrated into the most popular web server (Apache) in the form of *modperl*.

Last but not least, *Perl* programmers are a dedicated bunch who wouldn't take kindly to having to rewrite all their scripts in a new language. There could well be the sense that since *Perl* looks so complicated (even though it's quite simple) the programmers have made themselves indispensable as no-one could ever reverse engineer their code to maintain or update it.

GETTING REBOL



The *REBOL* language can be freely downloaded from the Internet.

One of the many noble aims behind the *REBOL* project is to make it a language which as many people as possible can use. This not only means it's easy to understand and use, but also that your choice of computer platform shouldn't be an issue.

Of course, we're primarily interested in the Amiga and a version is freely available from the *REBOL* website at <http://www.rebol.com>.

It's also worth exploring some of the Amiga/*REBOL* home pages which have sprung up, including <http://www.mindspring.com/~timrue/> where you'll also find links to the *REBOL*/ARexx interface files.

In other words, *REBOL* will have an uphill struggle trying to get a foothold in this arena. *Perl* has been around long enough to evolve into a powerful tool and *REBOL* will have to prove its worth to gain some serious respect.

The growing library of *REBOL* functions on the *REBOL* website is an excellent start, and it's this kind of sharing, open attitude which will have to be nurtured if *REBOL* is to become a real success.

...it's this kind of sharing, open attitude which will have to be nurtured if *REBOL* is to become a real success.

CURRENT STATUS

At the time of writing, the current release of *REBOL* stands at 1.0.1 and it's obviously quite young in the grand scale of things. A message on the website says that version 1.0.2 is "coming soon", so hopefully that will be the version you'll be able to download when you read this. As is only to be expected, there are some bugs with the current release, and a fair amount of work needs to be

done to get it into shape. For example, a feature which is currently plaguing Amiga programs is that fact that the support for the Amiga's pipe device is broken – the pipe is an excellent way to pass data from one program to another. With *REBOL* supposedly being a messaging language, this is irritating to say the least.

On the other hand, a collection of code has been developed which allows ARexx and *REBOL* scripts to be linked. This effectively means that any current Amiga application with an ARexx port can talk to *REBOL* and make use of its advanced features. Ideally, of course, the applications would speak to *REBOL* themselves, but this is still a crucial step.

The Amiga is actually unique in being able to use *REBOL* as an interprocess communication language with existing applications right now.

I was disappointed to be unable to make *REBOL* talk over the (normally quite well behaved) *AmiTCP*/TP-based local area network in my office. As soon as *REBOL* tried to read from an

SHOULD I TRY IT?

Well, put it this way, you've got nothing to lose. The core of the system is free, and likely to remain that way. *REBOL* is easy to learn and comes with a good dose of documentation in electronic format (HTML). Typing help, followed by a command name, gives a concise description of how it works, which means you're never stuck for information. However, you should be aware that networking and message sharing is *REBOL*'s strong suit. If you don't have an Internet connection, you're missing out on one of the main reasons to use it.

external connection, it crashed out. Hopefully, tweaking my current set-up, trying a different TCP/IP stack or an upgrade will solve this problem.

PROGRAMMING THE REBOL WAY

REBOL programs can be executed in two different ways. Firstly, they can be executed from an interactive Shell which opens when you run the *REBOL* program. Using the familiar Amiga Shell interface in this way is great for learning, trying one-line programs and entering quickie expressions such as calculations.

Secondly, you can create standalone *REBOL* scripts – that is, plain text files containing the *REBOL* words entered in a

text editor. The script names can be passed on the command line to the *REBOL* program in the same way that the *RX* program will execute ARexx script. *REBOL* will execute the code line by line.

This is the more useful way to launch scripts, and this is basically how

your *REBOL* programs will be launched. For example, you might have a script which updates your website by uploading all your HTML pages to a particular FTP server.

You could initialise this program by typing something like "REBOL updatemysite.r" at the Shell. If you leave out the ".r", or if the script isn't in the right path and isn't found, *REBOL* will load its Shell system by default.

All *REBOL* scripts should end in .r, at the very least to remind you what they are. Important information, such as your email address, is stored in a file called user.r. This file is consulted by *REBOL* when it starts up, allowing you to store important or useful functions there for when they're needed. *REBOL* scripts must start with a particular header to describe its contents.

If you want to launch a script from within the *REBOL* Shell, all you have to do is enter:

```
do %filename.r
```

The "do" command is immensely powerful as it tries to evaluate everything you give it. In this case we've given it a filename (that % again) and so the file is loaded and executed.

REBOL has no graphical user interface at the moment – the most you can hope to get out of a *REBOL* script is a new file or some text displayed on the screen. This is likely to change as various extensions are added in the future. In the meantime, of course, existing Amiga GUI tools can be pressed into service, although this does start to get a little messy. Don't think that you'll be able to write a *Quake* clone just yet.

According to the website, plans for later versions of the program include multithreading, graphics, sound and multimedia, as well as a GUI. It will be very interesting watching the development of this language, and here's hoping that the Amiga version is kept as up-to-date as the releases on other platforms.



Christmas Giveaway

Win a new Workbench!

GPS Software, the wizards behind *Directory Opus*, have given us five copies of the latest version of the software – *Directory Opus Magellan 2* – to give to you! Just send a postcard to this address: **AF Opus Draw • Amiga Format • 29 Monmouth Street • Bath • BA1 2BW.**

AMIGA FORMAT

WORTH £250!

Stocking Fillers

Ho ho ho. Yes, it's that time of year again, when thoughts turn to gardening... Doh! **Ben Vost** looks at pressies for the whole Amiga-owning family.

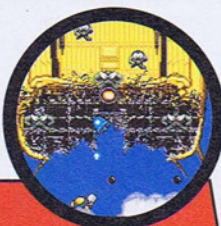
This year, rather than concentrating on really cheap presents for the Amiga owner in your life, we thought we'd have a mix of budgets, just in case you have the necessary dosh to splash out.

Under ten quid

GunBee F99 £7.99

Epic 0500 131486

We gave it 80% in the last issue and it really is great fun, especially if you get it in your Christmas stocking...



MegaMouse Plus

£9.95 **Gasteiner 0181 345 6000**

A three-button mouse is a real boon on the Amiga. You can use the middle mouse button for switching screens, opening Shell windows and loads more.



Time of Reckoning

£9.99 **Weird Science**

0116 246 3800

Since the price drop, Weird Science's TOR CD is even better value than ever.

Inkjet inks from £5.99

EMC 01255 431389

Inkjet refills are always popular, especially when you've used up all your ink on Christmas cards. Although the inks start at £5.99, the most expensive are still only £12.99, so it might be worth stretching that extra few quid.

Less than fifty notes

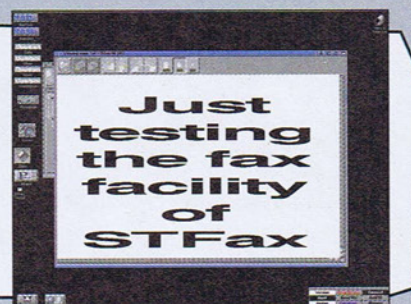
4Mb RAM board £39.99 **Epic 0500 131486**

If your loved one doesn't have any kind of upgrade to their machine, this will do. At the very least they'll get some fast RAM and a socket for an FPU. However, you may be better off biting the bullet and buying Power's Typhoon accelerator for twice the money.

STFax Pro £29.99

Active 01325 460116

If your Amiga has a fax modem then you should really do yourself a favour and get this software. Not only is it a superlative fax program (as the title hints), but it's also a great voicemail system.



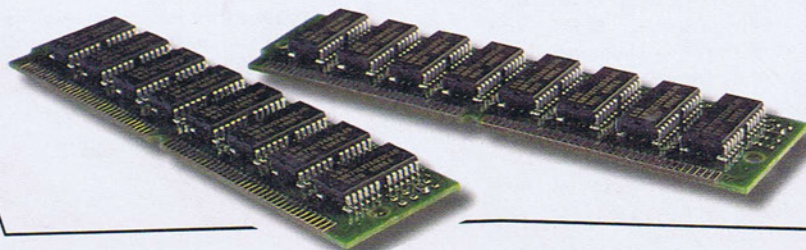
Kickstart 3.1

£25.95/£29.95 **Power 01234 851500**

Amiga Inc. have stated that you'll need Kickstart 3.1 to be able to upgrade your machine to OS3.5, so now's the time to buy the ROMs you need for your Amiga.

32Mb SIMM about £40 from everyone

RAM prices are falling all the time, so by the time you read this it'll probably be cheaper to buy a 32Mb SIMM than it is to buy AF!



A ton or less

CD-ROM drive

About £99 everyone

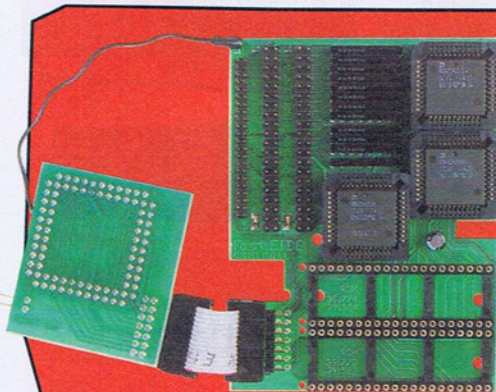
If you haven't got a CD-ROM drive yet, you really should, especially as the new OS will only be available on a CD and you're missing out on our excellent AFCDs. One hundred of your earth pounds will buy you a nice fast drive these days so you've got no excuse.



Power Flyer

£69.95 Power
01234 851500

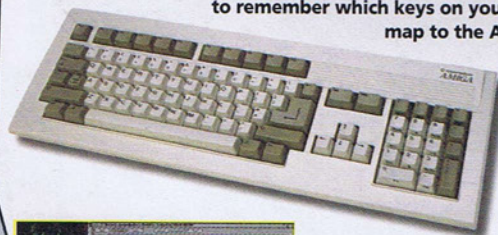
We said that it was probably the most important bit of hardware released for the A1200 this year, and sure enough we even gave it a massive 98% in the review. Perhaps you should get one and try it out for yourself?



A4000 keyboard

£49.95 Power 01234 851500

If you already have your Amiga in a Tower, you're probably fed up with having to remember which keys on your Windows95 keyboard map to the Amiga, Alt, Help and Ctrl



keys. This should solve that problem and also the one of being able to have more than one qualifier key held down at the same time (i.e. you can play *Doom* again!)



Directory Opus

Magellan II £49.95

Compute 0181 303 1800

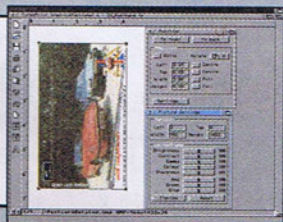
Workbench 3.5 is some way away yet, while *Directory Opus* upgrades your machine very

effectively right now. *Magellan II* should be out by the time you read this.

TurboPrint 6 £39.99

Compute 0181 303 1800

An essential if you really want good results from your inkjet printer. *TurboPrint 6* is easy to use and covers a wide range of printers.



Port Jnr. £39.95 Eyetech 01642 713185

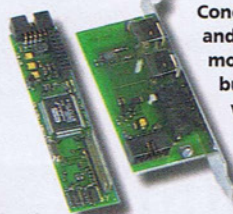
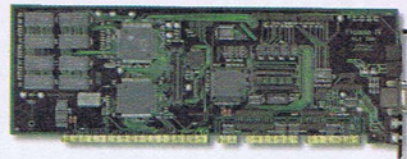
If you've got a modem and you've already got *STFax*, being able to send data faster is a must, and that's what the Port Junior gives you.

Got a monkey?

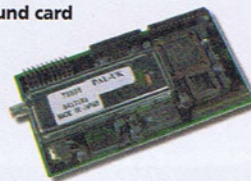
PicassoIV and the bits...

£449.85 Blittersoft 01908 261466

There's no doubt that the PicassoIV is the finest graphics card on the Amiga, especially since it now offers TV and 16-bit audio. The price stated gets you a PicassoIV with the



Concierto 16-bit sound card and Paloma TV module add-ons, but the Pablo video encoder will set you back an extra £70.



Power Tower

£129.95 Power
01234 851500

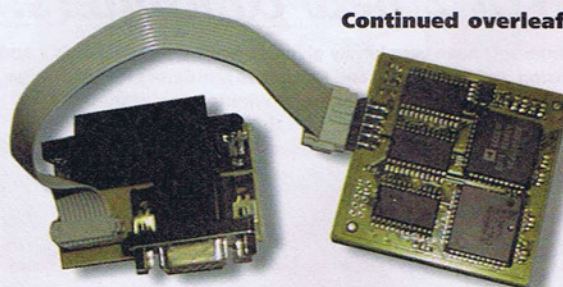
Towering up your A1200 is all the rage these days, and it certainly makes sense from a general clutter point of view. We think that the Power Tower is the nicest-looking of all the available tower conversions, but there are others from Eyetech, Blittersoft and White Knight to consider.



17" monitor and scandoubler about £400 everyone



What about a present for your eyes? Rather than having to squint at your TV screen to see what's going on in your Amiga, what about getting a decent monitor, as well as a flicker fixer or scandoubler so you'll be able to use it effectively on your Amiga?



Continued overleaf →

Stocking Fillers

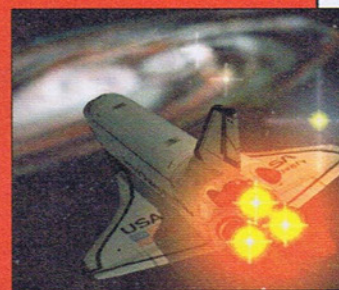
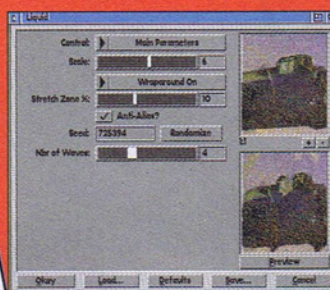
Eyetech CD-R or CD-R/W
prices vary, Eyetech
Eyetech (and others) do CD-ROM writer bundles at very reasonable prices. Make sure you get a CD-R that's capable of multisession and DAO writes, though.



ImageFX & Aladdin4D £149.95

Compute 0181 303 1800

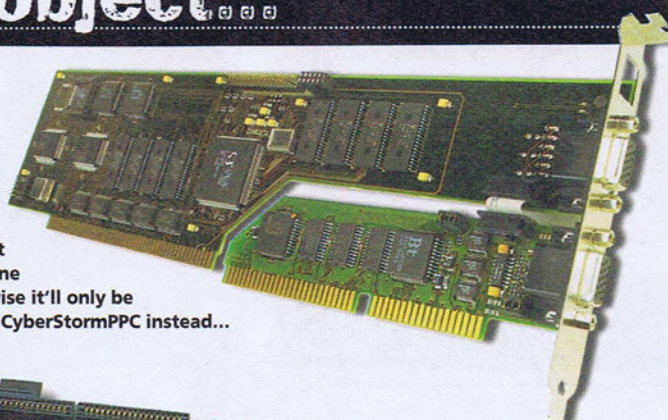
Two bits of great software from Nova Design that will really look good on your machine. ImageFX is a stunning image processing package and while Aladdin 4D takes some getting used to, the supplied clipart proves that extremely impressive results can be achieved.



Money no object

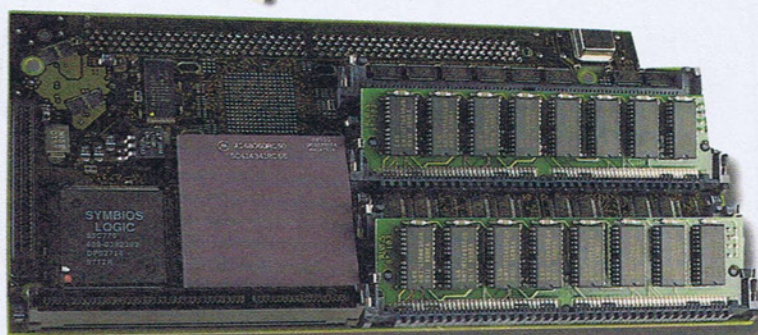
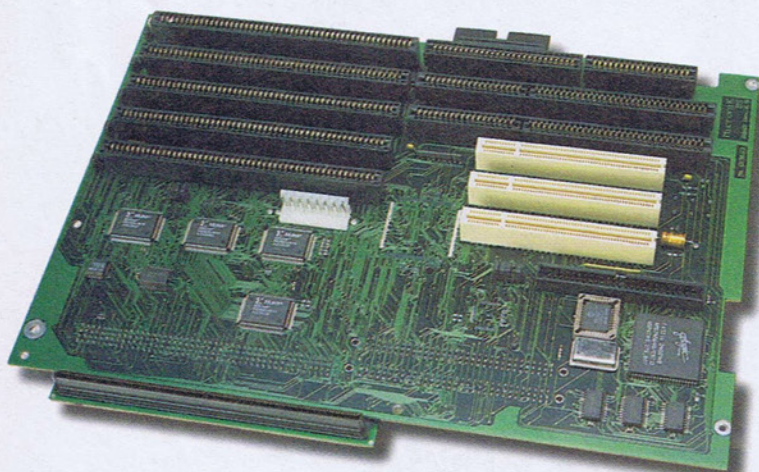
ZIII backplane and CyberStorm
prices vary, Blittersoft
01908 261466

Meanwhile, if you have an A1200, the best route is to get Micronik's Zorro III backplane and then a CyberStorm to drive it (otherwise it'll only be ZII). For the extra bucks you could get the CyberStormPPC instead...



CyberStormPPC with CyberVisionPPC
prices vary, White Knight
01920 822321

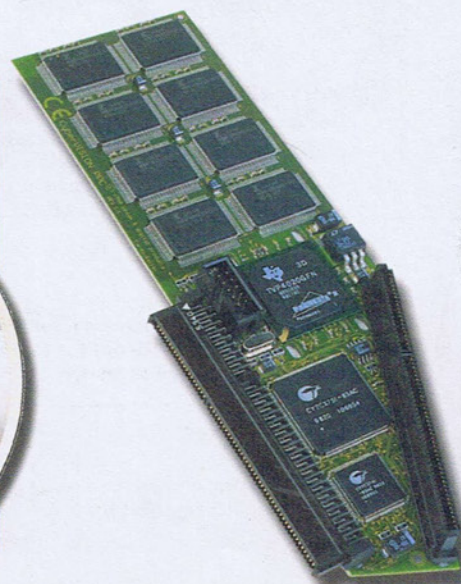
The ultimate in speed and performance has to be this combo from White Knight which gives you a potential 128Mb RAM and an 8Mb, 3D-accelerated graphics card.



Christmas Giveaway

Win 2 new computers!

Blittersoft have very kindly given us five copies each of PCx and Fusion, the premier PC and Macintosh emulators for the Amiga respectively. To stand a chance of winning one of these five bundles, simply send a postcard to this address: **AF Emulation Draw • Amiga Format • 29 Monmouth Street • Bath • BA1 2BW**



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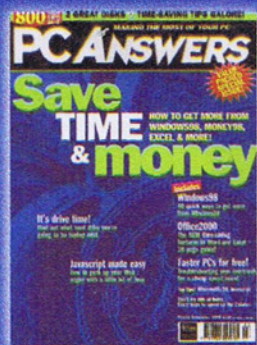
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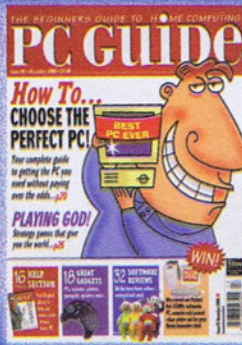
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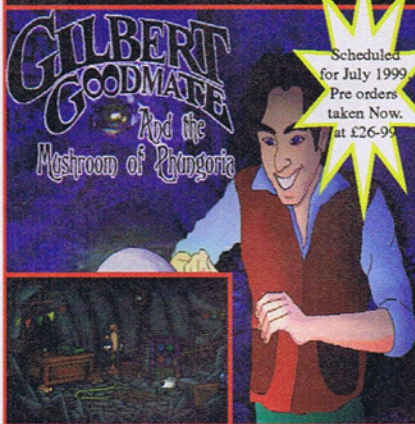
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Tank Goblins is scheduled for release in December 1998. RRP of £27.99. Pre orders can now be placed at £24.99. Those who place an advanced order benefit from receiving the playable demo's before general release. Plus a £5 discount voucher off any other Crystal Software game, (does not include pre order prices or AS subscriptions).

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Woooo... I am the ghost of Christmas future, woaaaagh... cough. Ahem. That's enough of that. But I do bring you news of the future, in the form of some of the games you're likely to be playing.

We finally got a version of *Descent* that works, and Nick Veitch has been cursing at it for a few weeks now. I'm not sure if that's because he's enjoying it or not, but he'll let you know on page 42.

In some ways I am a ghost though, because by the time you get this I'll be working full time on futuregamer, so I'll not be upsetting any of you here any more. Sniff. I did really exist though. Honest...

Andy Smith

AMIGA FORMAT'S REVIEW POLICY

WHAT OUR REVIEW SCORES MEAN

Every month we scour the world's software houses for the latest and greatest Amiga games. We try to ensure we keep you as up to date as possible and we'll stop at nothing to bring you the best, definitive, no-nonsense reviews of the games that matter.

90+%	The crème de la crème. Only the very best, most playable and original games are awarded an AF Gold – the most highly prized rating there is.
80-89%	These games are very good, but due to minor flaws they're not the finest examples of their genre.
70-79%	Good games which are worth buying, especially if you have a special interest in a game type.
60-69%	Average releases with somewhat limited gameplay and appeal. Games in this category tend to be flawed.
50-59%	Below average games which are unlikely to impress your mates or your wallet.
40-49%	Overwhelmingly poor quality games with major flaws and appalling gameplay.
Under 40%	The absolute pits.

38 PREVIEWS

Nick Veitch looks at the games you should be saving your Christmas cash for.



Operation: Counterstrike, a new C&C clone (left) and Lambda, a stunning Wing Commander clone (above).

40 W.I.P.

Our second look at how Space Station 3000 is developing.



Fighting in space and fighting with robots. We like fighting. Mmm.

41 FOREST DUMP

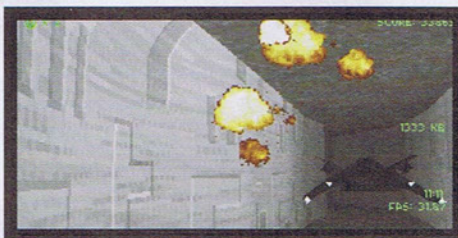
Classic platforming? Ben Vost decides.



It could be called *Forest Dumb*. We're not sure.

42 DESCENT

Nick Veitch gets down with this conversion.



Doom-like blasting in a mine, in space, in the future, on your Amiga.

44 READER GAMES

Mark Wheatley gets to play with a really mixed bag of homemade games this month, from the wonderful to the weird...

- George** Victor Bell
Boulderdash revisited.
- Blockout** Steve Bailey
Boredom revisited.
- Breakout 2000** P. Chapman
Erm, Breakout revisited.
- Donkey Patrol** Tim Sycamore
Weirdness revisited.

Previews

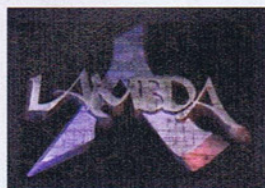


Nick Veitch brings you another selection of the games you can look forward to playing in the New Year.

Lambda



Lambda **TBC**
Release Date **TBC**
Publisher **None yet**
Requires **TBC**



Lambda is a graphically intense *Wing Commander* clone, and as you can see from the images here, the designers are intending it to be graphically awesome. There are only sketchy details on the structure of the game itself, but lots of info on the graphics engine.

It's 256 colours throughout, includes texture mapped, shaded polygon objects, translucent explosions and projectiles, multiple

of RAM, although an '040 is recommended.

According to the developers, it should run comfortably at over 40 frames per second on an '060 machine.

There will be support for graphics cards, of course, but there isn't going to be any card-specific support. They're also not planning on a PPC version, partly because they don't have a PPC card and partly because when the project started there was too much bickering about which PPC kernel was the best.

A playable demo is expected to be ready very soon, and the developers are certain that we'll be able to include it on a forthcoming AF coverdisc.



You can't deny that the lighting effects look excellent.

light sources and loads of real-time audio effects. The developers are even working on an event scripting language and compiler to add to the game's engine.

Considering all this, it's surprising that they expect the game to run on an '030 with FPU and 4Mb



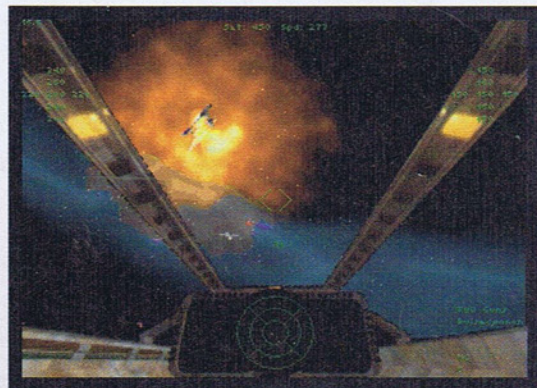
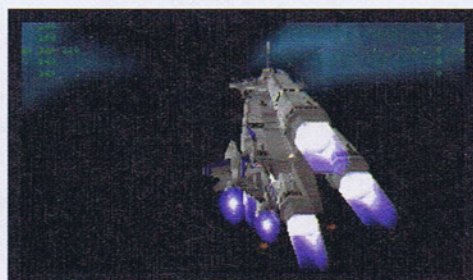
Die, die die! What an incredible-looking explosion!



The *Wing Commander*-style cockpit has been adopted to give you a real pilot's-eye view.



Of course, the real test of the game will be how it plays, but these stills look great.



Someone seems to have escaped from that one.

Tales of the Heaven

Darkage Software have apparently been getting a lot of emails about this 3D *Mario World* clone since a demo of it was released. We can't actually manage to get the demo to work properly, but the still shots of the game certainly look interesting.

The objects used in the game

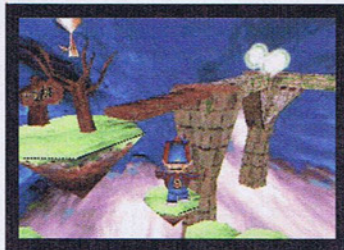
have all been modelled in *Lightwave* and the extensive texture mapping is thanks to some new software which Darkage developed to help them with the game, and which they'll also be releasing separately as a development tool.

The demo is currently available from the Amiga Flame website, as

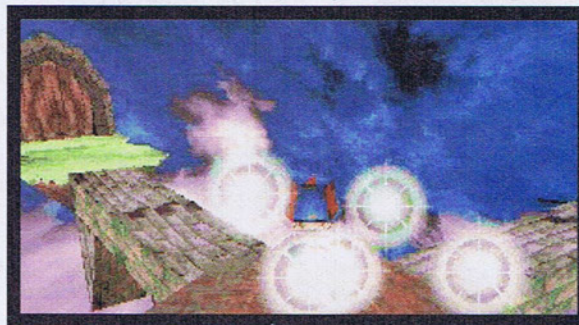
are links to email the authors, so if you're net-capable I suggest you take a look for yourself:

<http://www.amigaflame.co.uk>

Tales of the heaven TBA
Release Date TBA
Publisher None yet
Requires TBA



Marioesque platform fun awaits you if you play the demo from the Amiga Flame website.

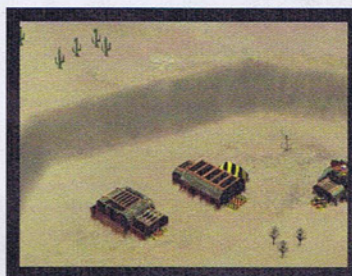


Operation: Counterstrike

Blue Black Solution's stand is one which will probably have been worth visiting at the Cologne show because they were planning to have a demo version of *Operation: Counterstrike* running.

Although it's based around the

likes of *Dune* and *Command & Conquer*, it seems to be developing quite differently to ClickBOOM's *Napalm*. Apart from a few screenshots, there isn't an awful lot to show for the work the team has done so far, but apparently the game



Counterstrike will feature a variety of terrains to fight your way across.

is progressing well. We'll keep you up to date on this one, but you might like to check out the developer's website at

<http://www.thesnakepit.demon.co.uk> for more regular updates.

Operation Counterstrike TBA
Release Date TBA
Publisher Sadness
Requires TBA



If the gameplay matches these stills, it should be really fantastic.



The game will feature plenty of rendered intro sequences, anyway...



One day soon we might find out what all these units are and what they do.

Space Station 3000

Work In Progress

In the second instalment of this work in progress, Digital Images' **Stuart Walker** gets down to details.

Adding an action part to *Space Station 3000* was one of our main aims. We wanted to add some action to make it more interesting than your standard business sim, so we thought about this for a while. Lots of ideas were scrapped, simply because they weren't interesting enough.

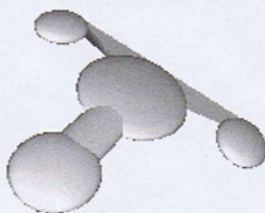
You're then given control of your robots and you will fight it out with the other team's robots until one team has been totally annihilated.

We've also included plenty of FMVs to make the game more interesting with space battles, aliens, robots and just about everything else. Next month should be the final WIP and I'll tell you how the whole game has come

66 Instead of having normal soldiers, you're given some big robots, armed to the teeth with any weapons you can afford. 99



This is a screenshot from the main menu, where you control everything.

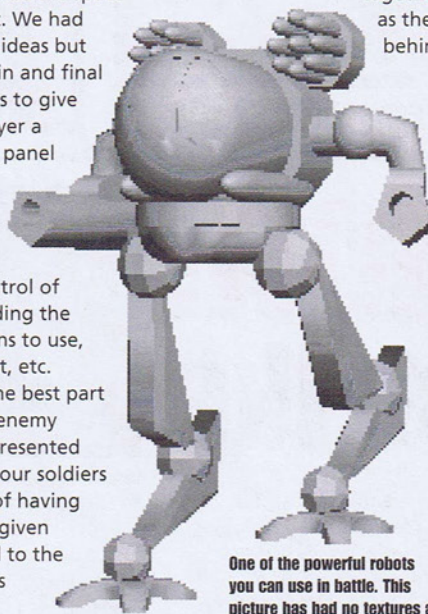


A quick screenshot of one of the Starfighter series of starships.

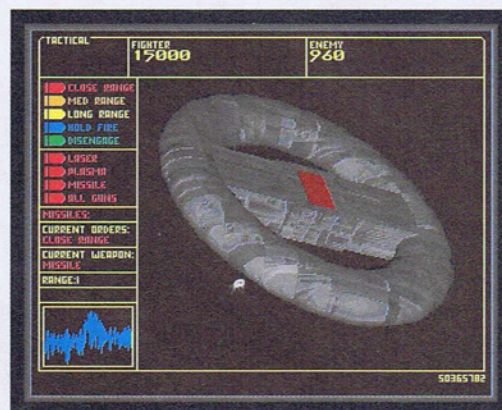
The first thing we added was the space combat. We had several ideas but the main and final one was to give the player a control panel which would give them full control of

the fighter fleet, including the option of what weapons to use, what range to attack at, etc.

I personally think the best part is when you board the enemy ships, where you'll be presented with an FMV showing your soldiers going aboard. Instead of having normal soldiers, you're given some big robots, armed to the teeth with any weapons you can afford.



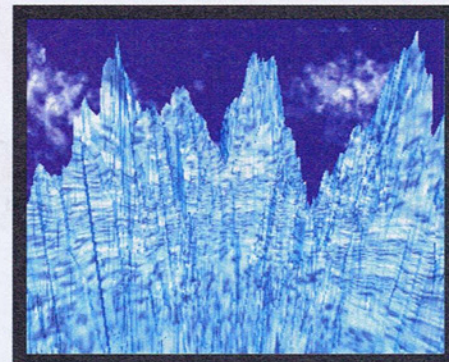
One of the powerful robots you can use in battle. This picture has had no textures added yet.



The tactical controls – orders can be sent to the fighter from here.



A UFO heavy battle cruiser is fast, deadly and dangerous.



The mountains of an alien planet.

Christmas Giveaway

All of Aminet!

Weird Science have three exceedingly generous offers for you this Christmas. You'll find them scattered all over, but if you want to win one of five copies of Aminet Set 7, you'd better send a postcard to: **Weird Science • Aminet Draw • Q House • Troon Way Business Centre • Rumberstone Lane • Leicester • LE4 2SE**

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Worth
£140!

Contacts

You can look at the Digital Images website at:
<http://www.digital-images.demon.co.uk>
 You can also send emails to:
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 If you would like to be added to our mailing list, then just send an email with 'SUBSCRIBE' in the subject line.

Digital Images

Forest Dum(b/p) Forever!

After last issue's old skool shoot-em-up, **Ben Vost** gets to look at a traditional platformer.

You may be wondering why this game has the strange name it does. It stems from our confusion as to what to actually call it, since on the packaging it is listed as *Forest Dump*, but the game itself reports it to be *Forest Dumb*. For the sake of the obvious, I shall refer to this as *Forest Dump* throughout this review, just to make things simpler.

In case you were under any illusions, *Forest Dump* is a jump and run game, and like *FaYoh 2* on our coverdisk, it's deeply inspired by Sonic and Mario's adventures. There are no weapons to be powered up, merely an unfeasibly high jump employed by the eponymous hero to dispatch bad guys. Like Sonic, Forest's run gets faster if it's performed over any great distance and he'll skid to a halt if you reverse his direction.



This is the second level. Apart from the increased amount of coins you need to collect, it's the same.

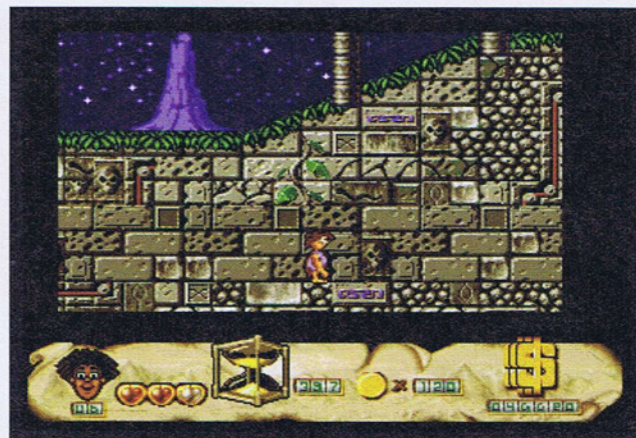


A glitch or a secret passage? Actually, it seems as though it's the latter.

However, it's not really a run as you can feel the program behind the action, and he just slides while his animation frames cycle. Jump and you can almost sense the joystick control in the program going, "Ah, he's moved the joystick right now. Move char=right."

It's hard to describe how this feels in practice, but it isn't right. There's no more sense of attachment to your character than if it was a piece in chess. Giving you umpteen lives to counteract the poor collision detection is of no benefit either – I'd rather only have a few lives but not be frustrated by the fact that because I was a pixel away this time it's killed me, unlike the last time.

To be brutally honest, you'd have



more fun if you bought *GunBee*, or if you really wanted a platform game, registered the game we have on our coverdisk. *FaYoh 2* at least seems to be consistent, while *Forest Dump* certainly isn't. You get large quantities of bonuses and the coins



66 About the only nice thing I can say about *Forest Dump* is that it has platforms which gradually appear... 99

you need to collect in one place, and in others you just get large quantities of monsters – there seems to be no justification for either. About the only nice thing I can say about *Forest Dump* is that it has platforms which gradually appear and disappear so you can get higher.

However, this really isn't a good enough reason for you to go out and buy this game. AF

What you can see in the three screenshots here is essentially the whole game. If you like this kind of thing, you'll be in your element...

DEVELOPED BY: APC&TCP
SUPPLIED BY: Epic Marketing (0500) 131486
PRICE: £7.99
RELEASE DATE: Out now
REQUIRES: AGA

Pros and Cons

- ☒ Nice fading platforms.
- ☐ Bad collision detection.
- ☐ Bad controls.
- ☐ Mediocre graphics.

OVERALL VERDICT:
Get a different game.

30%

Descent

Nick Veitch lowers himself to review another PC conversion...



A blue key will open, surprise, a blue door. There are usually three keys to be found on each level.

We've had *Doom*, we've had *Myst*, we've had *Quake*. We've even had *Abuse*, so it's hardly surprising that we now have a conversion of that other high-profile PC game, *Descent*.

A few years ago the PC world went crazy over this game. There were competitions, websites full of home-made levels, it got onto the TV and radio and it was nearly as big as *Quake*. So how does it translate?

Well, the first thing that really needs to be said is that if your Amiga



You might be able to make out some of the mapping errors in both pics above – they're worse in motion.

Down a tunnel

The basic plot behind *Descent* is that you have been contracted by a mining corporation to clear out their mines of robots who have gone wrong. You are to rescue any workers and eliminate the threat these metallic monsters pose by blowing up the main reactor at each mine. You basically fly down tunnels and blow things up.

In this respect it's rather similar to a game like *Doom*, only in a 3D spatial environment. In the ultra-low gravity of the mines there's effectively no up or down, no floors or ceilings and, consequently, a disorienting sense of now knowing where you are or where you're going.

The enemies you'll encounter vary from small, nippy little spacecraft to huge, slow-moving but devastatingly powerful behemoths. The reactors



The obligatory invisible enemy is tricky to spot, but not too difficult to kill.

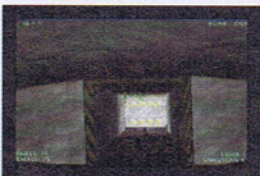
themselves will also fire streams of unpleasant-looking orange plasma orbs at you, even after they have gone critical.

Once you've located the reactor and given it a taste of your lasers, a countdown will begin. Once the clock starts ticking you've got to head directly for the emergency mine exit



Hmm... a red door. I wonder what colour key I need to open this?

66 You are to rescue any workers and eliminate the threat these metallic monsters pose by blowing up the main reactor... **99**



Most doors open when you fly into them, but the cunning may want to shoot them from a distance in case evil robots lie beyond.

can't handle *Quake*, it won't be able to handle *Descent* too well. Although it will theoretically run on an '030, you might as well save yourself the effort.

On an '030 with no graphics card you'll be talking seconds per frame rather than the other way around – you might as well be watching a slideshow. However, we'll come back to speed later...

You'll also need the full PC version of *Descent 1.1* as, like *Doom* and *Quake*, the conversion needs the original game files in order to work.

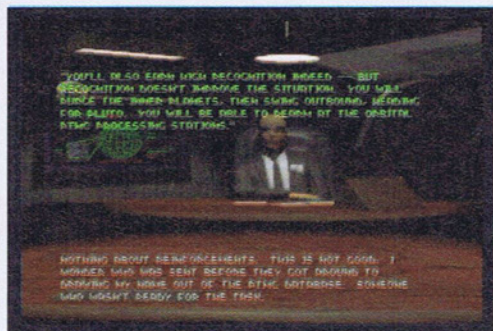
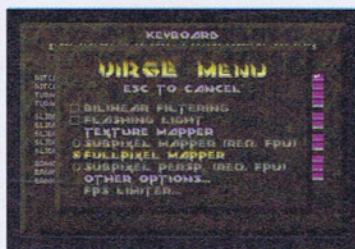
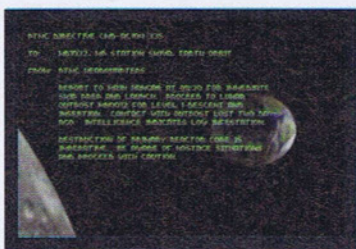
Christmas Giveaway

An award-winning CD!

EMComputergraphic, the creators of the Phase range of CDs (we gave away Phase 1 and Phase 2 last year), are giving us ten CDs to give to you. To win one of the ten Phase 4 CDs that EMC have given us, simply send a postcard to: **AF Christmas CD Draw • EMComputergraphic • 8 Edith Road • Clacton-on-Sea • C015 1JU**

AMIGA
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Worth
£200!



The Automap isn't a great deal of use, but it is better than nothing.



Help! They want to be rescued but they're not critical to the success of your mission.

(which hopefully you made a mental note of when you discovered it earlier in the level) and get out of there before the whole thing blows up.

In a tube

In the traditional way of these games, weapons and power ups are left lying around, carelessly distributed through the mines. More powerful lasers, different missiles and shield and energy boosts will be gained by flying over the appropriate objects. There are also, rather predictably, keys to be found in order to open certain doors.

An automapping feature is available, which will open a new screen on the Amiga. You can rotate the view of the map using the flight controls, but given that the mines are normally complex, sprawling structures which have no up or down, it isn't that helpful. They mostly all look like wireframe plans of Embankment tube station without any hidden line removal.

It's hard enough to find your way around, but a lot of the tunnels are cunningly concealed so you whizz by without noticing them. And, of course, you have to watch out for all the stuff that's concealed in the ceiling and on the floor too.

On the floor

As usual, a great deal of time has been spent on creating textures and rendering subroutines to make the mines look realistic and atmospheric, as well as to help conceal entrances. It's just unfortunate that the Amiga versions often have problems with the texture mapping.

The Virge version allows various different routines to be used, but you mostly have a choice of the textures swimming and giving you a headache when you get too close to them, or having varying amounts of corruption.

All versions suffer from the close-up problem to varying degrees, which only makes things even more confusing when you're stuck in a corner with several enemies shooting at you. This isn't to undermine the efforts of the programmers, it's simply, for the most part, a fairly severe hardware limitation.

What is a programming flaw is the PPC version's inability to use third party levels. Like *Doom* and *Quake*, a level creation system exists (on the PC) and many people have designed their own devilishly complicated levels, most of which are freely available.

Knocked out

The box shows the versions of the Amiga loaders we based this review on. There are some differences between them in terms of options and features. Most unfortunately, the current version of *ADescent* for PPC won't work with any of the third party levels we tried.

However, these versions are still very much early incarnations. It was several months before the fastest and best *Doom* ports became available, and the likelihood is that *Descent* will take just as long to mature. In the beginning, the fact that it works at all is more important than how well it works.

Without a PPC, or at the very least a CyberVision 3D card, I reckon the game is pretty much unplayable, at least in the way it was intended to be played. Even with an '060 it becomes rather difficult to aim accurately because the frames chug slowly past.

Leaving aside the pros and cons of the various different loaders, how does the game itself measure up? The confusing 3D environment isn't as much of a new experience as you might think. It's still very much like *Doom*, but in one more dimension, which I suppose makes it trickier.

In practice it becomes frustrating, and the map is very hard to follow, no matter how long you spend spinning it around. A head to head game might be more interesting, but this is because of the extra competition that's derived from playing another human being, not through any intrinsic merits of the game itself.

Even if you have an extremely fast machine, this is little more than a mixture of *Wing Commander* and *Doom*, a mixture which has no great depth of its own. It might be technically proficient, but it lacks the spark which would make it a really great game.



Enemy ships normally wait in corridors, knowing you'll come around the corner eventually.



The Glowing blue ball (above and middle) will replenish your shields.



There are a variety of enemies to fight, but they do get a little tedious after a while.

SUPPLIED BY: Alive Mediasoft (01623) 467579

PRICE: £14.99

RELEASE DATE: Out now

REQUIREMENTS: AGA or graphics card, 8Mb memory, '020 or better. 68060 or PPC recommended

Pros and Cons

- + Excellent audio through AHL.
- + Huge number of levels available.
- Quirky graphics performance.
- Lacks real depth

OVERALL VERDICT:
A different take on *Doom/Quake*, but it isn't as good as *Nemac IV*.

80%

Versions tested

VERSION	AVG. SPEED	REQUIRES	COMMENTS
ADescent	0.7	8-18fps	'020, 8Mb
ADescent	0.7v	10-25fps	As above, plus CV64/3D
ADescentPPC	-	30-42fps	PPC, 12Mb

All versions were tested on 320x240 screens (though the PPC version's screen is slightly smaller) with a graphics card (CV64/3D).

Behind the last door on **Mark Wheatley's** advent calendar are the little crackers known as the...

Reader Games

AFCD34-ReaderStuff-/ReaderGames-

ON THIS

MONTH'S CD

Ho, ho ho! In true Christmas spirit, Nick has let me out of the production cellar of *Amiga Format*, where I'm forced to scour the magazine for rogue apostrophes, and has let me loose on the Reader Games. Fun at last... I get to play the best homemade games the Amiga

world has to offer and, even better, I can be vindictively sarcastic about the shoddier efforts.

Of course, that's not just because I'm a spiteful and twisted individual, it's meant to spur on the writers of those games into producing something better. A further incentive

is offered in the form of a £50 prize for the best game every month.

Have a look at our Christmas shopping guide in this issue, decide what you'd like to spend 50 quid on and get coding...

£50 Winner!

GEORGE

George is a peculiar little chap with NHS specs and a skinhead, who spends his time running around mazes collecting jewels. Yes, this is a *Boulderdash* clone, but it's been done superbly.

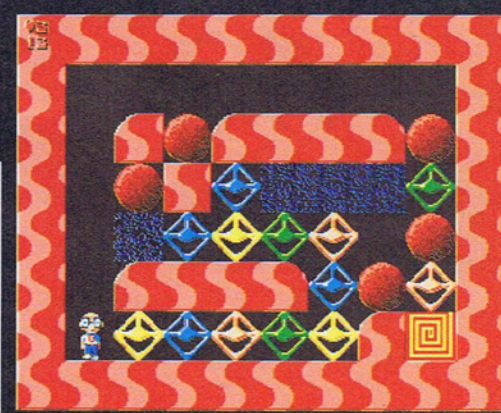
Of course, there are the usual obstacles to prevent George from completing his collection of spangly goodies, mainly in the form of large boulders. Carelessly knock the earth away from underneath a rock and you could find yourself trapped or squashed, or find that the exit or certain jewels have been blocked off.

Some jewels are hidden behind locked

doors which are opened by the blue blobs which wander round the levels, always sticking to the left hand side. Put a carefully placed boulder in their path and they should unlock the door for you, although they're deadly to the touch.

George is a very simple game - collect the jewels and head for the exits. There's no music and the sound effects are sparse, but the graphics are great and the scrolling is silky smooth.

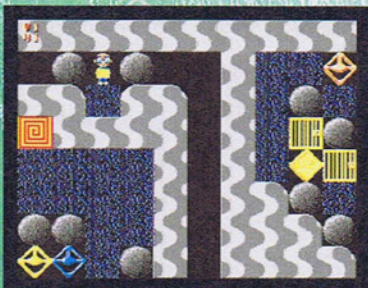
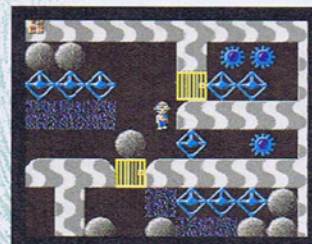
There's even a very handy feature which allows you to stand still while you scroll the screen around larger levels, allowing you to plan ahead. This stops the game from becoming frustrating as any mistakes you make are down to your own poor planning, not because you can't see what's around the corner.



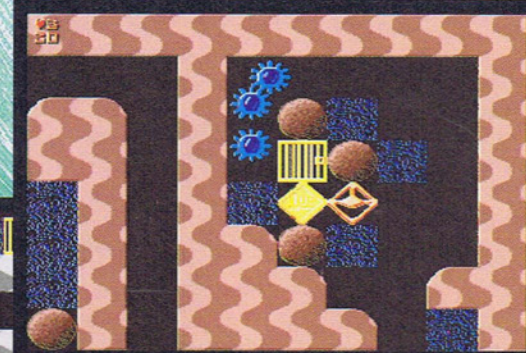
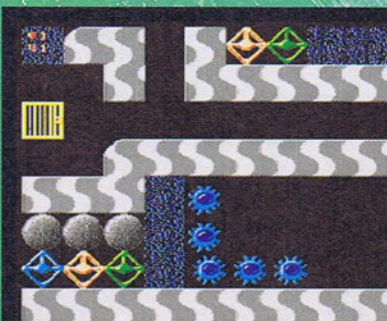
Some of the levels are fairly simple one-screen efforts (above). Collect the jewels and get to the teleporter. Just watch out for those boulders...

George is incredibly addictive, with puzzles

and arcade action mixed together. It might prove to be a bit short for the experts out there, but it's a fine way to while away a couple of hours and it's a worthy winner of this month's £50 prize.



When you hold a yellow card (above) you can scroll around the larger levels and keep an eye on the wandering blue things.



AUTHOR: Victor Bell
LANGUAGE: Unknown
VERDICT: Looks great and works well, this is top puzzling fun which will keep you enthralled for a while.

READER WARRANT

When you're sending in your submissions make sure you also give us:

1. An address where you can be contacted.
2. Details of the language used to create the game.
3. A recent photo of yourself.

The address to send your stuff into is:

Reader Games • Amiga Format • 30 Monmouth Street • Bath • BA1 2BW

Everything included on the AFCD must have a reader warrant with it. Just cut it out off this page, sign it and send it in to us with your game and a recent photograph of yourself. A last reminder: if you don't include this warrant we simply won't be able to put your game on the CD - that means you won't be able to have it judged by other readers.

In respect of all material which forms my reader contribution to Future Publishing's *Amiga Format*, I hereby warrant that:-

1. The material is original and does not infringe any other material or rights;
2. The material does not contain any material which is defamatory, obscene or indecent and is exempt from classification under the Video Recordings Act 1984;
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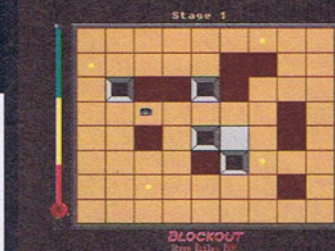
Signature: _____

BLOCKOUT

This is another game which involves pushing blocks around, but that's where the comparisons to *George* end. You have to guide your little chap around single-screen maps to collect a number of yellow spots. Once you've got them all, you've got some blocks to push into a big hole. Push a block into a corner where you can't move it and you're stuffed. And that's it.

Blockout is played against the clock, but it's still painfully dull. Your character strolls about slower than an asthmatic sloth and there's just not enough going on to keep you engaged. Sure, there's a quite nice animation if you fall down the hole where you're supposed to put the blocks, but killing yourself for a moment of fun shows how drab the rest of the game is.

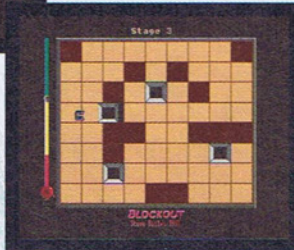
Basically, there's not enough happening, and what does happen is too slow. Some more things to avoid, say bad guys wandering



The screens are all fairly dull, but you get a great scream when you fall down the hole for the blocks.

around, some pits in the floor, anything, would make it a bit better. There's a level editor so you can design your own maps, which you'd be advised to do because the ones provided won't hold your attention for long.

Everything works fine in *Blockout* and, as such, it's got the potential to be a good game. At the moment it just needs a bit of



excitement, something to make you want to play it.

The background in *Blockout* is beige. Beige is the most boring colour on the planet. This isn't quite the most boring game on the planet, but, as it is, it's not good enough to make you want to play it more than once.

AUTHOR: Steve Bailey

LANGUAGE: Amos Pro

VERDICT: It works, there's stuff to do, but a game should be fun and this isn't.

BREAKOUT 2000

From a game with not enough going on to one which is too frenetic for its own good.

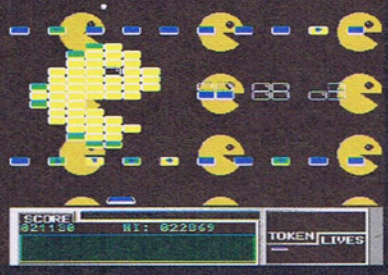
As the title suggests, this is yet another *Breakout* clone. Mr. Chapman must have read our comments in the last few issues about games which just rehash classics without adding anything extra as there's a mind-boggling array of bonuses in this version of the old 'use your bat to hit the ball to destroy all the blocks on the screen' game.

Some blocks release tokens which may make your bat grow or shrink, turn invisible, get reverse controls, raise it up the screen, turn on an autopilot, give you bonus points, shields or guns, make the ball smash through blocks, give you multiple balls, speed up or slow down the game, and so on. Phew!

Actually, the speed ups may not be triggered by collecting tokens, but it's hard to

tell because there's just so much going on. This certainly makes the game interesting, but it also makes it very frustrating. When the balls are flying at full speed it's impossible to tell which power ups do what, and so you might find all your hard work undone when you collect a token which does something unexpectedly nasty to your bat.

This reduces that essential element of skill and makes *Breakout 2000* too much of a game of chance. A few less bonuses or more clearly marked power ups would help to make this a lot more playable.



Left: The Pacman level on easy - we only managed to get this far once. (Above) A bigger bat helps a lot...

You can choose a range of difficulty levels, from Easy to Well 'Ard, but we couldn't tell the difference - it's hard and it's irritating but, at the same time, you'll still keep coming back to it, and for that it almost won this month's prize.

AUTHOR: P. Chapman

LANGUAGE: Blitz Basic 2

VERDICT: Depending on your temperament, you'll either be unable to stop playing *Breakout 2000* or you'll smash up your Amiga in frustration.



DONKEY PATROL

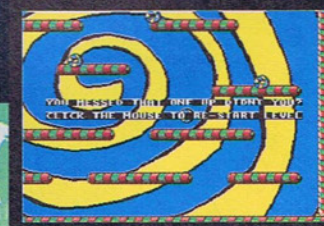
This is from the author of *Lion Attack*, a game which featured no lions at all but which impressed Andy Smith way back in *AF106* with its combination of *Asteroids* and *Tempest*. The sequel is just as weird, seeming to feature a donkey chucking doughnuts around against a psychedelic background.

Your mission is to hop around the platforms, pick up the bad guys and throw them at other bad guys of the same type, causing them to disappear. Once all the nasties have gone you can move onto the next level. This isn't the smoothest level progression either - you're dumped back onto your Workbench screen while it loads up.

Donkey Patrol looks okay and the levels are well designed. They're all small, in a *Bubble Bobble* sort of way, but there are 50 of them to work through. Unfortunately, I didn't get past

the first five. Why was this? Well, for once it wasn't anything to do with my lack of hand to

co-ordination, it was because the controls in *Donkey Patrol* are far too frustrating to use. It'll take you a good ten minutes just to work out how to jump from platform to platform. Often when you chuck one of the little nasties at another one, instead of them disappearing, one will hit the other one, nothing will happen, then they'll both roll into you, robbing you of your last life. Back to the Workbench screen while the game reloads. Your attacks have to be pinpoint accurate and you'll lose many, many lives before you get the hang of it.



The game is bright and looks great, but you'll be seeing the screen above far too often.

If you've got the patience of a saint or you're a platforming genius then you might get a lot further than I could stand to. Maybe the gameplay will become more varied and engaging on the later levels too, but somehow I think most people will give up long before they get that far.

AUTHOR: Tim Sycamore

LANGUAGE: Blitz Basic 2

VERDICT: It looks great and it should be an enjoyable platform romp, but it's let down by the control system.



Everyone's doing it...

FACTFILE

What is Arcade?

Arcade is Future Publishing's biggest new games launch since Official PlayStation Magazine.

It's a witty, intelligent multiformat mag for PlayStation, PC, Nintendo 64, Game Boy and Dreamcast, but one that mixes the games stuff up with bits on films, videos and music too. Why? Because games don't exist in isolation, and neither should you.

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Arcade is headed up by Matt Bielby and Neil West, two names you might have heard of. Neil was, until recently, editor of Next Generation magazine in California - it's the US version of Edge, so you know he knows his games. Matt previously launched Amiga Power, Super Play, PC Gamer, .net, SFX and Total Film, so you know the magazine's going to be great.

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PD Select

Dave Cusick trawls through another PD and Shareware mailbag in search of some more choice catches.

Apex Utilities #1

BY: Dave Kirk
WARE: Free
PD LIBRARY: F1 Software
NUMBER OF DISKS: 1
PRICE: 80p plus 75p P&P

This disk contains four utilities by the same chap. None of them are particularly new but they're all quite well put together, making this collection worth at least a brief look.

Stock Controller Pro is designed to help manage invoice creation and orders. It utilises three databases – for customers, suppliers and stock items – and it also incorporates an invoice/order editor.

The version supplied on the disk is a demonstration since *Stock Controller Pro* is actually Shareware. Consequently, a few features scattered around the program aren't fully implemented and after five minutes a registration notice appears. However, the full version only costs a

fiver, which makes it a bargain for small businesses wanting a convenient means of organising their invoicing and ordering systems.

Highwayman is designed for people about to take their driving test. It's essentially a highway code tester, presenting a series of multiple choice questions. To be honest, some of the answers you could choose are totally ridiculous (cue the old "beware of low flying motorcycles" road sign-type jokes), but it certainly couldn't hurt to

SCALOS 1.1

Since it's been around in practically unchanged form for more than five years now, it's no surprise that Workbench is starting to look a little bit long in the tooth. Version 3.5 of Workbench may only be a few

months away, but if you're tired of Workbench 3.0 or 3.1 then there is another alternative to *Directory Opus 5*.

Scalos is a Workbench replacement which is designed to allow true multi-window

multitasking. It also throws in a whole host of other improvements over the standard Workbench environment.

Under *Scalos*, windows not only function entirely independently, but they also look a lot nicer than under Workbench. You can use all sorts of different backdrops. Furthermore, *Scalos* employs an icon DataType system, supporting *NewIcons* and *MagicWB* icons as standard (they both look nice together provided you're running in a colourful screenmode). In theory, with the correct DataTypes, Mac and PC icons could be supported too.

Scalos also offers things like completely configurable menu bars and configurable pop-up context menus. It'll take a while to get things set up exactly how you want them, but when you have you could have a killer desktop GUI.

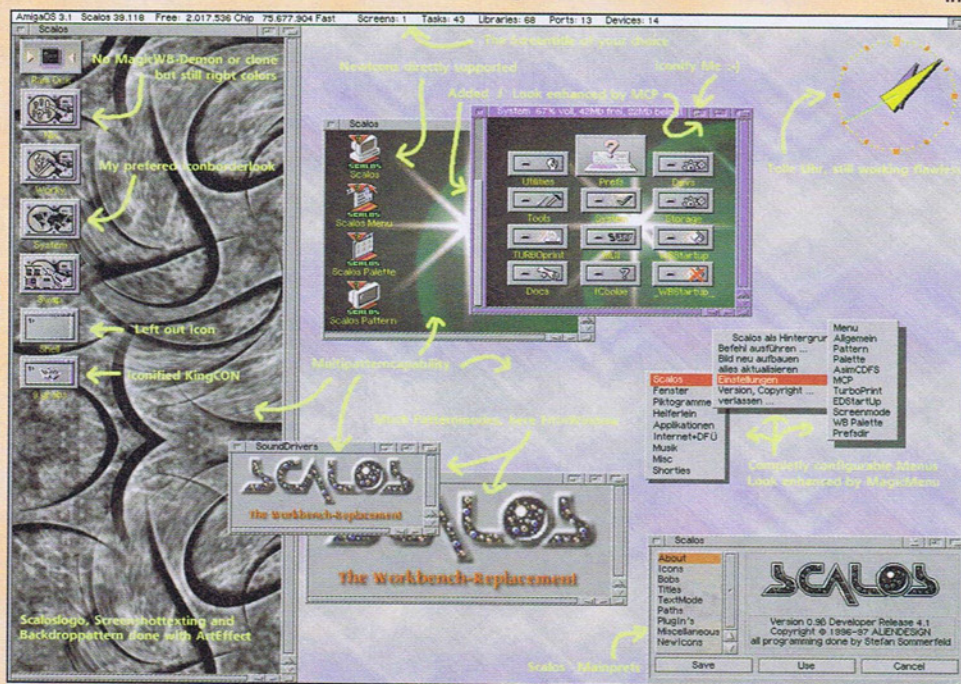
The idea is that *Scalos* is 100% compatible with Workbench so you should be able to run all your usual software. However, I did experience quite a few problems with my system, so unless I've got a completely freaky set-up, you may need to be prepared to do some serious troubleshooting initially. Still, if you're cautious and careful, you may be able to get a lot out of *Scalos*.

To begin with, you can only run the program on top of your Workbench. If you like it and decide you want to use it to completely replace the Workbench then you'll need to register. Registration costs 30DM or US\$20.

BY: Alien Design

WARE: Share

AVAILABLE: www.aliendesign.net
 or on Aminet in util/wb



If you can't wait for Workbench 3.5, *Scalos 1.1* could be the alternative you're looking for.

Selection of the month

BALLMASTER



Tetris really started something big, didn't it? Since its Russian creator first unleashed it back in the eighties, we've been treated to a million and one "simple yet addictive" puzzle games. This is a description which applies particularly well to *Ballmaster*, a clone of an old Kickstart 1.3-only game called *Logical*.

There are two versions of the game available, one being for ECS machines and the other for those with the AGA chipset. Neither features particularly stunning visuals, and as far as the music is concerned, I'm afraid it's yet another case of having to reach for the volume control. If you're partial to the sound of an innocent audio chip being strangled then you'll doubtless love it, but for the rest of us the title "tune" is nothing short of an aural assault. But then, presentation is really secondary to addictiveness in games like this, and *Ballmaster* certainly keeps you coming back for more.

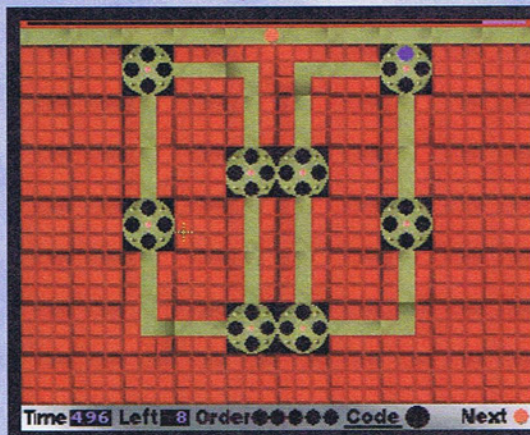
The action takes place on a single screen, featuring various wheels connected together by tubes. At the top of the screen there's a tube down which small coloured balls come rolling. The objective is to fill each of the wheels with four balls of the same colour. You do this by

rotating the wheels and clicking on a particular ball to send it shooting along a connected tube. When you fill a wheel, all the balls in it will disappear and you'll earn a green light at the bottom of the screen. To progress to the next level, you must light up a whole series of green lights.

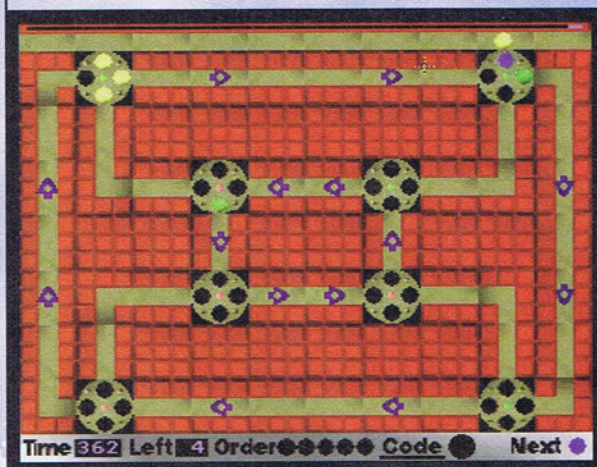
To further complicate matters, some levels feature special wheels and tubes. Some wheels rotate clockwise, some anti-clockwise. There are autowheels which spin on their own and tubes which will only accept balls of a certain colour or will only transport them in one direction. There are also colour machines which recolour balls passing through them and teleporters which transport balls from one side of a level to the other.

Ballmaster is an engaging and thoroughly absorbing action puzzle game which will provide hours of entertainment for those who like games which tax their brains rather than their trigger fingers. Since this is a Shareware demonstration of the full

game, if you like it you're obliged to send the authors £7 to receive a keyfile via email, or £10 to receive a keyfile in the post. This will also buy you an extra ninety levels for you to tear your hair out over.



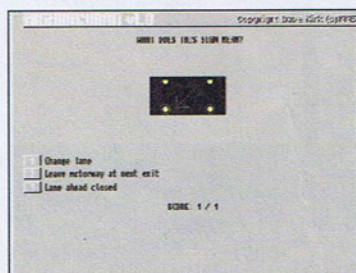
Fill up the cogs with the correct balls in a race against the clock in this addictive puzzle game.



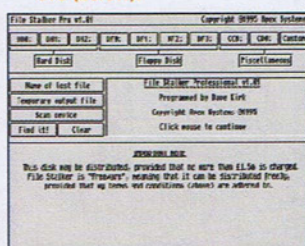
BY: Digital Amiga Dream
WARE: Share
PD LIBRARY: Classic Amiga Software
NO OF DISKS: 2
PRICE: £2 plus 75p P&P

try this out if you've got your test coming up soon.

Map Editor is a simple program which Mr. Kirk originally wrote for his own use, and so it's a little rough around the edges. It could be useful for games programmers wanting a convenient means of designing levels for their projects, though. It's



Brush up on your highway code with *Highwayman* (left) and find those lost files in *File Stalker Pro* (below).



functional, but don't expect the height of user-friendliness.

Finally, *File Stalker Professional* is a little program designed to help you locate lost files on drives. Again, it's not the height of sophistication, and being written (like all of the programs on the disk) in AMOS, it looks a little clunky. Still, it works, and if you don't already have a decent file finder then it couldn't hurt to try this.

Apex Utilities #1 is by no means an essential purchase and the four programs it contains are nowhere near the cutting edge of software design. That said, *Stock Controller Pro* is reasonably polished and could prove useful to some.

Beta Scan 1.02

BY: Svend Daugaard Pedersen
WARE: Free
PD LIBRARY: Classic Amiga Software
NUMBER OF DISKS: 1
PRICE: £1 plus 75p P&P

Scanners are groovy machines. By enabling you to get drawings and photographs from paper into your Amiga, they open the door for digital image manipulation. When you've scanned a photograph into your machine, and when you've got the right photo editing software installed, there's very little you can't do to it. From simple airbrushing to the wholesale

Continued overleaf →

combining and altering of pictures, almost anything is possible.

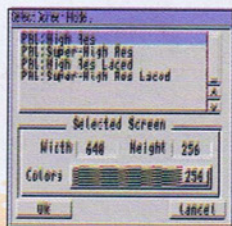
The problem with scanners is that in these PC-dominated times, a great deal of them only come with Windows drivers. Most scanners connect to a parallel interface, others through a SCSI interface, neither of which should cause a problem with the Amiga. It's actually getting your Amiga to communicate successfully with the scanner that's the difficult part.

There are a handful of scanner drivers available on Aminet, such as *ScanTek* and *ArtecScan* (both reviewed a few issues ago), *MUISnapscan* and *ScanTrax*, but the problem is that different drivers need to be written for different scanners.

BetaScan is actually a general scanner program through which you can fiddle with settings and actually obtain scans. However, since only one driver exists for the time being, it's effectively rather limited in scope.

If you own a Microtek Scanmaker E3 then you're in luck; otherwise it's back to the drawing board.

BetaScan is a general scanner program that might solve your compatibility problems.



ONLINE UPDATE

The big news online recently has been the release of version 2.1 of Olli Wagner's world-beating *AmIRC*. In my humble opinion, it's long been the best Internet Relay Chat client available, not just for the Amiga but for any system, and since version 2.0 it's sported a host of new features that raise it even further above the competition.

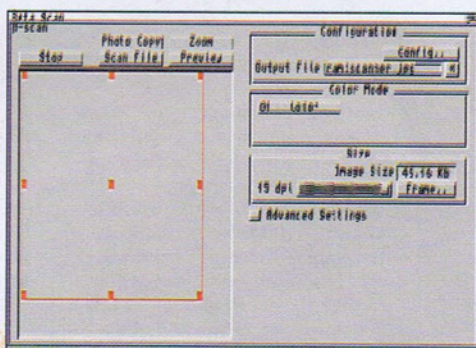
This latest release adds a single window mode in which you can chat in several IRC channels without needing to have multiple windows open, automatic checking for new releases of the software and a settable scrollbar buffer size. The range of available plug-in API calls has also been expanded, which should be good news for plug-in programmers.

As ever, the latest public release of *AmIRC* is available from the Vapor Web site

(<http://www.vapor.com>) and from Aminet. Since it's Shareware, regular users are obliged to register and this now costs £20.

Meanwhile, release 5.0 of Dietmar Eilert's excellent text editor, *GoldEd*, offers a completely overhauled interface and much more besides. The program can automatically detect and correct common typing errors, incorporates *Roget's Thesaurus* and lets you record and export sequences of operations as macros. Targeted primarily at programmers, this is a high-powered piece of software which is at its best on higher spec machines.

Unlike previous versions of the software, *GoldEd 5.0* is only available on CD. However, you can download a free copy of version 4.7.3 from the *GoldEd* website: (<http://members.tripod.com/goldd/goldd.htm>).



BetaScan uses a simple and not especially elegant interface, but it's very easy to get to grips with and it does put all the controls right at your fingertips – there are no menus and all your currently selected options are shown on-screen.

If the author manages to produce some more scanner drivers, *BetaScan* could appeal to a much wider audience. As the author points out though, "It seems to be very difficult to get information about scanners," which is rather a shame.

THE CARE BEARS SUMS

When I was a young computer nut in the mid '80s, beaver away on my Acorn Electron producing turgid BASIC games of severely limited appeal, my younger sister was still a wee nipper. She was a My Little Pony fan. As I understood it, in the world of girlie toys you could either be a Pony person or a Care Bear lover, but not both. Liking both would have been like listening to Spandau Ballet when you were really a Duran Duran fan – it would have been something akin to heresy.

I think the reason my sister didn't like Care Bears was because, even as a small child, she was aware of the fact that bears tend to be rather less caring towards humans in real life than the makers of this dreadfully twee cartoon series were willing to suggest. Those who come across bears in real life, perhaps while out camping in British Columbia or in an American National Park or somewhere, are lucky if they survive to tell the tale.

Bears can easily rip humans limb from limb. By contrast, there are an awful lot of horse lovers

around, people who care for horses and in return earn the love and respect of the animals. You wouldn't see someone skilfully coaxing a brown bear over a series of hurdles and then lovingly congratulating it for a job well done, and you certainly wouldn't let a bear eat sugar cubes out of your hand.

But there were those willing to accept the inherent lie at the heart of this children's television programme featuring cuddly, colourful bears smiling, laughing and generally piddling about. Care Bear toys sold like hot cakes and there was even a movie (though I'm reliably informed that the My Little Pony film was better!).

All this, of course, was a long time ago. Now, more than a decade on, it's difficult to imagine that kiddies of today would have even heard of these strange creatures. Still, if they're prepared to accept that a badly animated, bright yellow bear would be interested in

freeing a collection of wobbling blobs

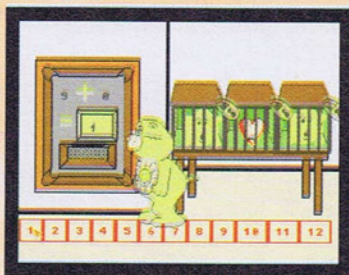
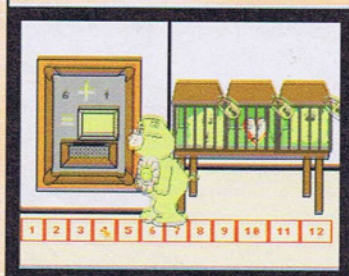


from three garish green cages, they'll probably derive some pleasure from this disk.

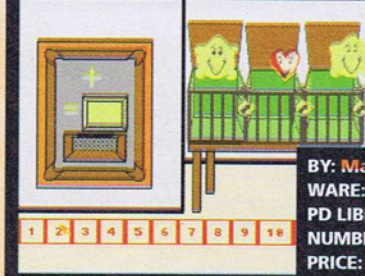
Simplistic mathematical questions are the order of the day here, interspersed with lengthy pauses while our yellow bear friend (what was the name of the yellow bear with the sun on his/her stomach, anyway?) thinks about strolling off the screen, presumably to squeeze in a quick fag before the next question is presented.

Thrilling stuff it isn't, and I shouldn't think young minds will have a great deal of patience with it for long, but there we go. Oh, and turn your speakers down before you load it because the music's terrible and seems to loop after about twenty seconds.

The cages are open, the blobs are liberated and everyone will live happily ever after.



Use basic arithmetic to aid the not-so-caring bear on his mission to free his wobbly pals.



BY: Mark Murray
WARE: Free
PD LIBRARY: Classic Amiga Software
NUMBER OF DISKS: 1
PRICE: £1 plus 75p P&P

TELECHUBBIES

This one's been knocking around for a few months now, but it's an entertaining variation on the *Armchair Assassin* theme so I thought it was worthy of a mention. *Revenge (Armchair Assassin 2)* was reviewed in this column a couple of months ago (AF116), and to be honest it's a better game than *TeleChubbies*, but this is still an entertaining enough little blast-fest.

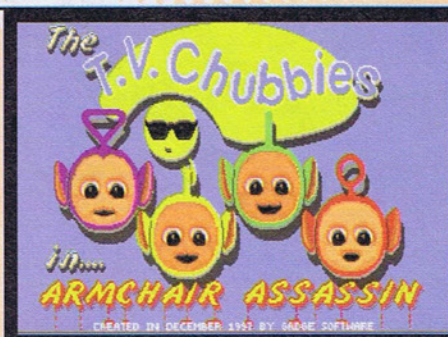
As the name suggests, *TeleChubbies* stars brightly coloured alien things which bear more than a passing resemblance to the stars of the BBC's ultra-successful kiddies programme, *Teletubbies*. Here though, instead of taking a fascinating peek into a weird world of tubbystard and watching a short live action film twice in quick succession ("Again! Again!"), your role is much more involved. You're no longer a rather mystified observer – now you're an assassin.

In *TeleChubbies*, your sole objective is to

annihilate as many fluorescent aliens as you can in as little time as possible. In order to achieve this with the maximum efficiency and ruthlessness, you've got a variety of interesting weaponry at your disposal.

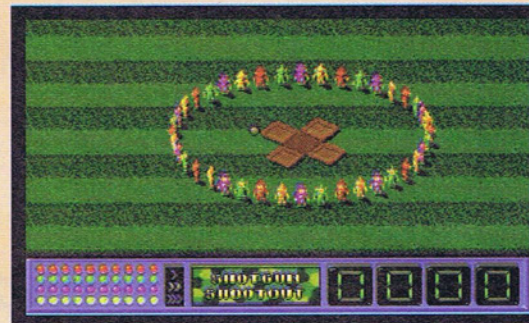
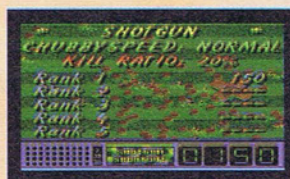
Teletubbieland is actually a farm in deepest Warwickshire, on which four individuals in ten foot high suits run about and act like pre-school aliens. It's a land of high intensity colours, giant bunny rabbits and a quite sinister sun baby. By contrast, the *TeleChubbies* run around on a deep green lawn which looks far less attractive, but hey, who cares? After all, you're only going to create hundreds of craters in it.

If it's sophisticated gameplay you're after, *TeleChubbies* is one to avoid. It can also prove rather



frustrating at times because the *TeleChubbies* move quite quickly and it can be really difficult to actually hit them. Still, if you're as crap at the game as I was, you can always adjust their running speed.

At the end of the day, it's very simplistic but it's quite good fun. If you have a soft spot for Tinky Winky, Dipsy, Laa Laa and Po, you can always imagine that the bright sprites racing around your screen represent Toyah Wilcox sporting various ghastly, early '80s haircuts. The sun is setting in the sky; *TeleChubbies* – time to die...



Annihilate the *TeleChubbies* from the comfort of your armchair.

BY: Gadge Software
WARE: Free
PD LIBRARY: Classic Amiga Software
NUMBER OF DISKS: 1
PRICE: £1.00 + 75p P&P

AmiCheck 1.85

BY: Douglas M Dyer

WARE: Free

PD LIBRARY: Classic Amiga Software

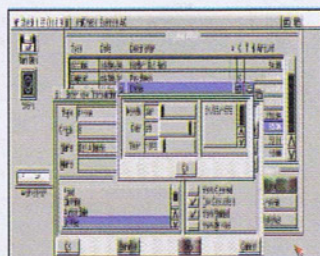
NUMBER OF DISKS: 1

PRICE: £1 plus 75p P&P

AmiCheck had a familiar feel about it when I first loaded it up, so much so, in fact, that I spent some time checking through my records to see if I'd already reviewed it in PD Select. I couldn't find any mention of it, so unless my records are completely screwed up, I think it's safe to assume it's never graced these pages before. The program certainly feels like something of an old friend, though.

Apparently, users of other account and chequebook management programs (the Check of the title being the American spelling of Cheque, of course) were consulted during the design of *AmiCheck*. This would go a long way towards explaining its instantly accessible, strangely recognisable interface.

Let your Amiga take care of your disorganised financial comings and goings.



This latest release of *AmiCheck* is just a fortnight old at the time of writing, and it's now a Freeware program (it was formerly a Shareware product).

It's designed to be easy to use but powerful at the same time, and it's not short on features either. Filters can be applied to the interface so that you only have to view the entries you want to. You can also sort the entries in numerous different ways.

The program allows you to create templates, which are essentially pre-filled-in transaction entries but without any dates or cheque numbers, so you can quickly enter details of new cheques when required. Templates can even be tied together using scripts. It sounds a little strange, but it's a very simple system once you get used to it.

AmiCheck greatly simplifies the task of keeping track of your accounts and it's highly recommended for anyone who could do with a little bit more financial organisation in their lives.

More advanced budgeting and graphing features are promised in the future, and the author also wants to collect AReXX scripts which make use of *AmiCheck* so they can be bundled with new releases of the software.

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Issue 117

FIASCO 2.2

The latest version of this database, featuring virtual fields and the ability to use interacting databases.

GUNBEE F-99

Bees, bells and blasting mayhem in this fantastic, revamped and renamed shoot-em-up.

We look at Workbench 3.5 and explain what should and shouldn't be included in the new operating system.

AFCD33

There's a FastQuake patch to speed up Quake, the latest demo of ClickBOOM's Napalm, more websites and HD installers, an .mpg encoder, a demo of FaYoh 2 and loads of your stuff...



Issue 116



Issue 114



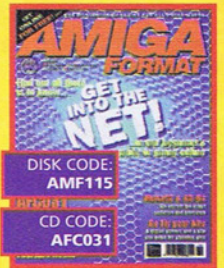
Issue 112

Coverdisks:
Seven top utilities every Amiga owner should have, plus top platform, lolly-chucking action in Pati's Quest.

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Issue 115



Issue 113

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Bloomin' Christmas! as a certain Raymond Briggs character might say. It's all very well, but it usually means that when we're writing our Christmas issue, there's actually a dearth of decent products available because everyone's waiting for a bit nearer the time to release their new oeuvre.

However, we've got some cracking products for review in this issue, from the somewhat scary *PFS2* that Andrew Korn seems to be quite taken with, to *GoldEd 5* which I'm less enamoured of.

Along the way we've got everything from hard drives to videos to look at, so I hope you enjoy the lot. Since I'll be at Cologne next month I should come back with some real goodies for the next issue. Ho, ho, bloomin' ho!

Ben Vost

AMIGA FORMAT'S REVIEW POLICY

...is very simple. *Amiga Format* is written by nearly all of the most experienced Amiga users in the world and what we say goes. OK?

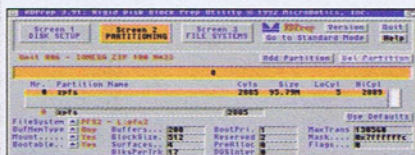
WHAT OUR REVIEW SCORES MEAN

90+%	The crème de la crème. Only the very best, most versatile and effective products are awarded an AF Gold – the most highly prized rating there is.
80-89%	These products are very good, but there are minor flaws or areas that could be improved upon.
70-79%	Not a bad product but quite possibly one that needs a serious update.
60-69%	Average products with somewhat limited features and appeal. Products in this category tend to be flawed.
50-59%	Below average products which are unlikely to impress your mates or your wallet. Avoid.
40-49%	Overwhelmingly poor quality products with major flaws.
Under 40%	The absolute pits.



56 PFS

Andrew Korn completely replaces *FFS*, just for you!

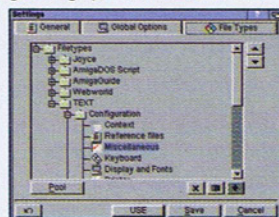


How else do you illustrate a file system? *RDPrep* and a bunch of icons seem to fit the bill.



58 GOLDED 5

Ben Vost tries to get to grips with *GoldEd*, but finds it somewhat alien to use.



No! It's an Amiga product, I promise!

60 GET CONNECTED

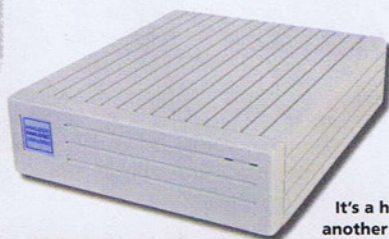
Another way to get on the net. Ben Vost says, "Can't you lot take a hint?"

Miami, yesterday.



62 ANALOGIC STUFF

Nick Veitch looks at a big box and a smaller one.

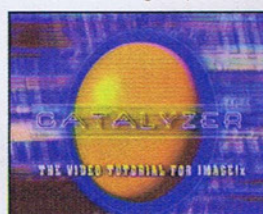
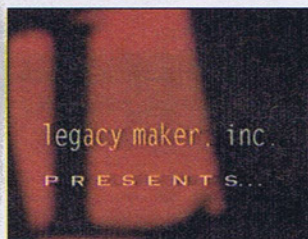


It's a hard drive. And another! And a CD-ROM!



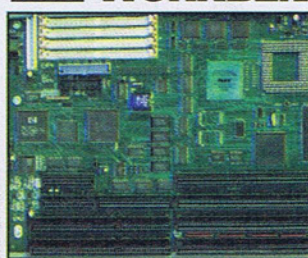
64 CATALYSER

Nick Veitch might spend too much time in front of the box, but this time it's for a good cause.



Bohus Blahut gets all didactic on yo' ass.

68 WORKBENCH

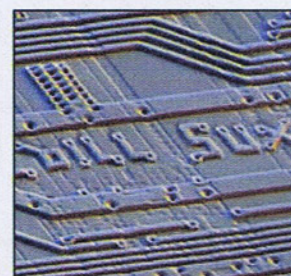


A BoXeR. With problems.

See that? That's a BoXeR, that is. John Kennedy explains...

72 AMINET

Dave Cusick gives you the truth behind this amusing screenshot. Or does he?



It's true we tell you! It is!

Professional File System 2



Andrew Korn

to find out if **PFS2** deserves the hype.

monkeys around with his hard drives

First, I have a confession to make – I'm a serial hard drive abuser. I throw all sorts of rubbish at them, I save multiple files to them simultaneously, I leave them writing logfiles without rest for months on end and I have an impatient tendency to power down my computer without bothering about petty details like the drive light flickering away.

What's more, I get away with it. The reason I can do this without continually losing data and waiting half an hour every time I switch on my computer for the hard drives to revalidate themselves is because my hard drives have been formatted with *AmiFileSafe*.



virtually impossible to corrupt the directory structure.

Fourth Level developments are no more, but earlier this year the rights reverted to the original author, Michiel Pelt, who has now released an updated version, *Professional File System 2*, or *PFS2*.

INSTALLATION

Installation of *PFS2* is a two-stage operation. The first is as usual, done from a standard installer, but the second is a little more involved.

Although all you basically need to make *PFS2* work is a single file in your L: drawer, you need to use the installer because as well as copying documentation and a few tools, it



Kang Fu, a free bonus with *PFS2* – if it can be called a bonus!

It gives your hard drives more capacity and makes them go faster; it makes your Amiga more responsive...

AFS was an alternative to the Commodore *FastFileSystem*, the standard handler the Amiga uses to organise data on disks. It's faster, more efficient and cleaner than *FFS*. It's also far more efficient in space usage than *FFS* and it's

serialises the handler for copy protection. Putting *PFS2* in your L: directory isn't enough to take advantage of it as your disks have to be formatted specifically to use it. This means backing up all the data from your hard disks and reformatting them, using something like *RDPprep* or *HDTtoolbox* to change the file system parameters.

In complex mode, either of these will allow you to load an alternative file system from a requestor and set an appropriate dostype. This can then be written to the RDB (rigid disk block, the header of a hard disk) so the hard disk can then be reformatted and booted in *PFS* format. This may sound a bit technical for some, but *PFS2* is actually very simple to use.

You probably use several alternative file systems already. Check your mountfiles in *devs:dosdrivers* and you'll see that your CD will use something like *AmiCDFs*, a file system for CD-ROM data. PC0: uses *CrossDosFileSystem*, which is able to read disks formatted under the MSDOS disk structure. Once the appropriate *PFS2* handler is installed in your L: directory, using it can be as simple as editing a mountfile.

If you use one for Zip disks, all you have to do is load it into a text editor and change the file system entry to read "L:pfs2" instead of "L:FastFileSystem", and the dostype from 0x444f5301 to 0x50465302. Any disk you then format will be in *PFS* format, so remember to keep your original mountfile to read your old *FFS* disks.



The icon drawer from Hell, a tough test of *PFS2*.

The same basic procedure holds for floppy disks, using the *floppyPFS2* variant of the driver. Great Effect Developments forgot to supply a pf0: mountfile in the first release of the CD, but that should be corrected by the time you read this.

FloppyPFS2 isn't as big a step up as *PFS2* on hard drives and, frankly, DD floppies just aren't exciting any more. Once you have the first *PFS* partition formatted, the first thing you notice is that your disk appears to have shrunk. This is because *PFS2* needs to steal some space to work its magic. Once you've copied your data back, the advantages start to become clearer.

First of all, data copied to a *PFS* drive takes up less space than the same data on an *FFS* drive, so although there appears to be less space on the *PFS* drive, you can actually fit more onto it. Secondly, *PFS* drives are faster – in some cases, stunningly so.

SAVING SPACE

FFS allocates blocks on the hard drive according to a bitmap per file basis, while *PFS* keeps a list of block pointers, allowing several over a single block. This can make a big difference, particularly when you're dealing with small files. In tests, a 21.5Mb file took up 22,256,640 bytes on an *FFS* disk and only 21,942,784 bytes on *PFS2*. A 21.5Mb collection of icons (8,000 files) took up 27,460,096 bytes on the *FFS* drive and 23,347,200 bytes on *PFS*, a saving of nearly 4Mb. Impressed yet?

It gets better, because *PFS2* is also fast. The 8,000 icons took less than half the time to copy under *PFS* than *FFS*; the large single file was 25% faster. The directory structure is so much more efficient under *PFS* that listing a directory can speed up fantastically too.

Opening drawer containing 500 icons was three times faster under *PFS* than *FFS*, and if you take the icon drawing out of the equation then the difference is even more pronounced. On an *FFS* Zip disk, a directory listing took 11.35 seconds, while under *PFS* it took less than a second.

SAFETY FIRST

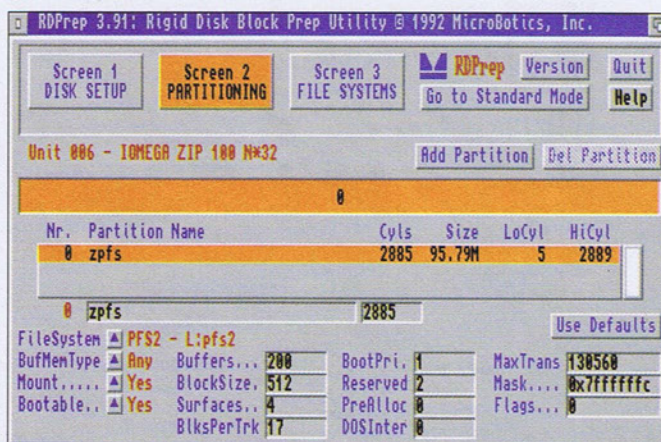
So, *PFS2* is more efficient and faster. How about safer, too? All *PFS* partitions have a hidden directory called .deldir. When you delete a file, a copy of it can be found in this drawer, via the Shell. It isn't a real copy, just a record of the data on your disk, leaving space available for the file system to write to. As long as that part of the disk hasn't yet been written over, you can just copy the file out of the .deldir and it's back.

Data on a *PFS2* disk or partition is also safer from errors. If you're writing to an *FFS* disk when your machine crashes or resets, you'll lose all the data and the next time you reboot you're likely to hear your hard drive thrashing

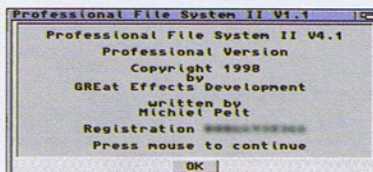
THOSE ALL-IMPORTANT FIGURES...

TEST	FFS	PFS2	SFS
21.5Mb small files copy	1264s	592s	927s
Drive Space usage	26.2Mb	22.3Mb	22.5Mb
21.5Mb small files delete	193s	43s	failed
21.5Mb single file copy	57s	42s	40s
Effective drive space usage	22.5Mb	21.9Mb	22.6Mb
21.5Mb single file delete	14s	>1s	>1s
Large directory listing	11.35s	>1s	>1s

DiskSpeed was also used and reported fairly similar results, but with a few odd discrepancies. *DiskSpeed* reported around a 100x dirscan improvement for *PFS* over *FFS* and significant improvements on file create and file open. It gave *FFS* a slight edge in deletion and, oddly, a tenfold advantage in seek rate, something I suspect to be an artefact of the test program. *SFS* is John Hendrikx's *SmartFileSystem*, a rival to *PFS*. It's looks promising but it's only in beta state at the moment and so it's clearly less stable.



Setting up a *PFS2* partition with *RDPREP*.



around for ten minutes or so while it validates. Because *PFS2* doesn't commit a change that affects the file structure of your disk until it's finished, a crash mid-save just doesn't bother it. In fact, with *PFS* you can be writing over an old file with a new version while it crashes, and the chances are your old version will still be there when you reboot.

People running a multithreaded desktop, such as *Directory Opus*, will be even happier as *PFS2* works much better than *FFS* for simultaneous access. Two parallel copies to an *FFS* partition run at about half speed each, so no time is saved, while on a *PFS2* partition two simultaneous copies barely take any longer than one.

THE DOWNSIDE

There are other nice features to discuss, like the way the directSCSI version allows you to get around the 4Gb partition limit, but I really ought to mention the downside of *PFS2* before I run out of space. It's totally compatible at a file system level but it organises data on the disk differently, so any software that addresses the hard drive directly won't work, and this includes most disk recovery software. For

example, *Quarterback* will happily back up your *PFS* partitions as it reads the files via the file system, but *Quarterback Tools* won't find a valid bitmap and therefore will be unable to fix a damaged disk. In the early days of *AmiFileSafe* this was a real problem, but later versions have proven very resilient over years of use; I have no problems trusting *PFS* with my data.

The second downside is that *PFS2* only supports a 1024-byte blocksize. This will only affect spooling of large files, such as with direct to disk

sampling where much larger block sizes are often used. *PFS2* will actually cope much better than *FFS* at the same blocksize, but musicians take note.

PFS2 is one of those programs that are hard to really believe in until you've tried them, so do yourself a favour and give it a try. It gives your hard drives more capacity and makes them go faster; it makes your Amiga more responsive; it totally transforms Zip disks, which just don't take to *FFS* too well; it makes your data safer. Farewell *FastFileSystem*, rest in peace.

SUPPLIER: Weird Science, (0116) 246 3800
PRICE: £29.99
REQUIREMENTS: OS2.04 or higher

Pros and Cons

- ☒ Faster drive access.
- ☒ More efficient use of space.
- ☒ Makes disk errors very rare...
- ☐ ...but they're harder to fix.

OVERALL VERDICT:
 A major system upgrade for a very good price.

93%

GoldEd 5

Here's a new text editor for you to play with. Ben Vost tries his hand.

VERSIONS

This review is based on version 5.0.1 of the software. At the time of writing, the current version is 5.0.4, but the copy we received for review couldn't be used with updates so there may be bug fixes that we don't know about.

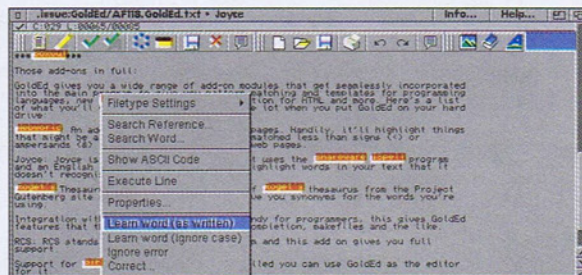
As you may know, I've long been a devotee of *Turbotext* when it comes to text editing. However, it doesn't have an undo – a serious omission for us journo types – and it's not as fast as *CED*. So, it's time to look for something new. The question is, does *GoldEd 5* have what it takes to replace *Turbotext*?

It certainly looks the part. Its interface is clean and tidy, although it's a bit "Windowzy" because you have a new GUI to deal with that uses the pluses and minuses associated with Windows' listviews. Admittedly, there isn't a *GadTools* standard for nested lists, but perhaps using the arrows that *MUI* uses might have been slightly more Amiga-like. The same goes for the other buttons in the interface.

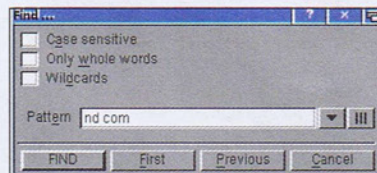
It seems that Herr Eilert likes Windows95 since he even goes as far as to implement a registry idea for *GoldEd*. It may be a massive and complex program, but does it really need one?

66 Its interface is clean and tidy, although it's a bit "Windowzy" because you have a new GUI to deal with... **99**

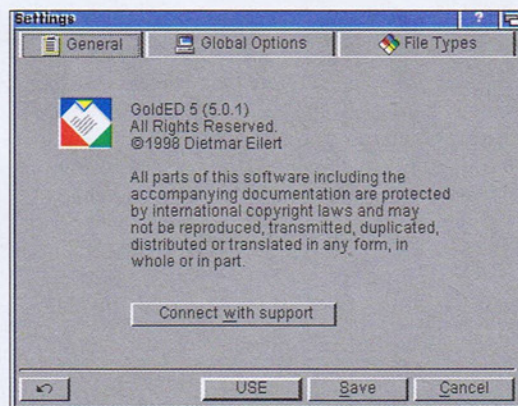
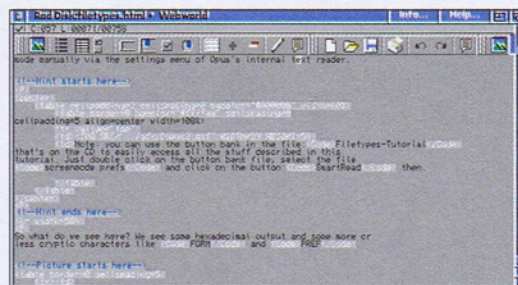
The confusion continues with the configuration programs. In *Turbotext*, everything was done with text files –



GoldEd's fine spellchecking system in action. Notice how a right mouse button click opens up this pop-up menu.



GoldEd's handy find routine (above). An HTML script with the highlighted areas marking HTML (below).



WHAT'S IN THE BOX?

WEBWORLD: This is the HTML add-on that gives you a wizard to write your own (simple) web pages and also highlights the HTML syntax.

JOYCE: Joycel is a spell-as-you-type (if you wish) spellchecker that uses *ISpell*, a Shareware spellchecker with English and German dictionaries included.

ROGET'S THESAURUS: This is based on the freely available version of Roget's that you can get from Project Gutenberg at <http://eff.org>.

INTEGRATION WITH SAS/C AND STORMC: Support for both these C packages means that you may wish to use this editor instead of the ones built into those programming languages.

RCS: GoldEd has full support for revision control, if you already have RCS installed.

SUPPORT FOR STFax: If you have *STFax* installed then you can use GoldEd with it to write your faxes.

PCL PRINT UTILITY: GoldEd features a direct print facility for PCL printers, a standard supported by all Hewlett Packard laser printers.

Some of these features were available for the previous version of *GoldEd*, some are new, but they're all included. Previously you had to get these add-ons separately.

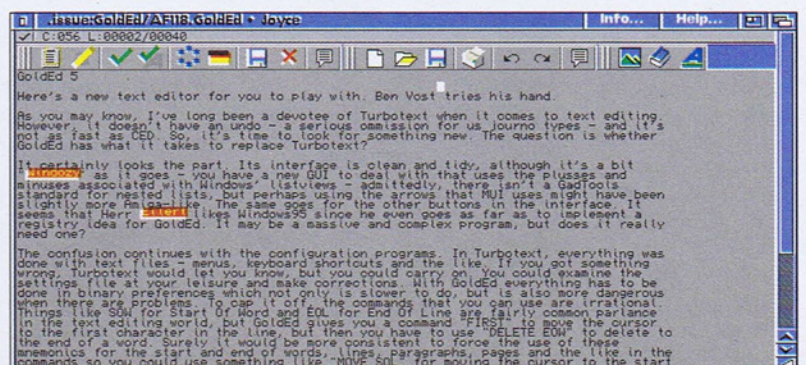
menus, keyboard shortcuts and the like. If you got something wrong, *Turbotext* would let you know, but you could carry on. You could examine the settings file at your leisure and make corrections.

With *GoldEd*, everything has to be done in binary preferences. This is not only slower to do, but it's also more dangerous when there are problems. To cap it off, the commands that you can use are irrational. Things like SOW for Start Of Word and EOL for End Of Line are fairly common parlance in the text editing world, but *GoldEd* gives you the command "FIRST" to move the cursor to the first character in the line, but then you have to use "DELETE EOW" to delete to the end of a word. Surely it

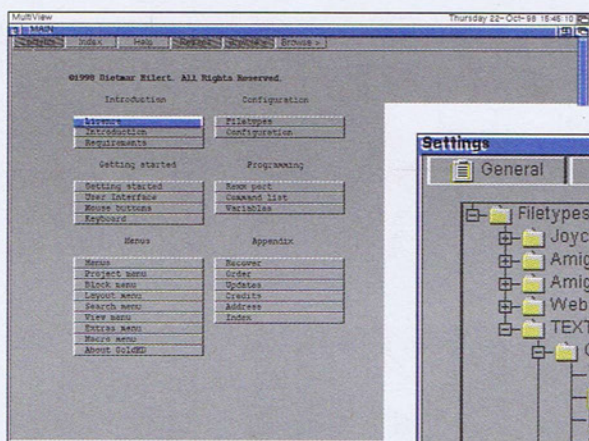
would be more consistent to force the use of these mnemonics for the start and end of words, lines, paragraphs, pages and the like in the commands, so you could use something like "MOVE SOL" for moving the cursor to the start of the line, rather than having to remember things like "FIRST"?

I know it's a new program so I'll have to get used to the way it does things, and I'm already used to *Turbotext*'s way of doing things, but this just seems illogical.

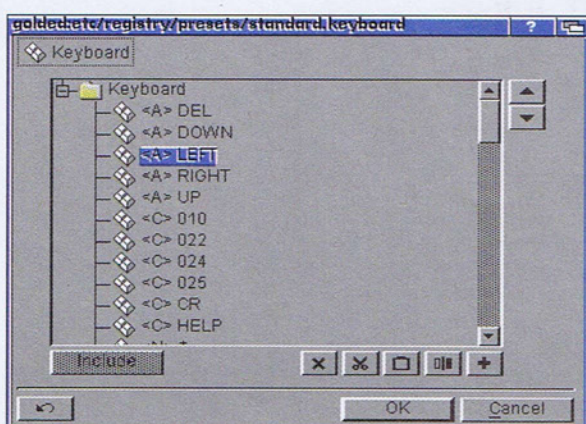
Another thing that's illogical is the way the user interface is used. In the configuration program you need to double click on an entry to edit it, but then you



It looks nice, but it isn't as user-friendly as you might think.



GoldEd's manual is sparse and doesn't really give you any help.

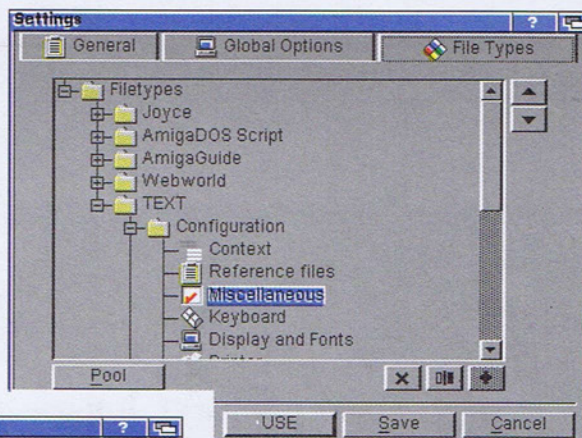


have to "linger-click" to actually edit the commands. If your item needs more than one command, hitting "add" puts it at the start of the list of commands, forcing you to move it to the end. This means you either waste your time at the mouse, or you have to think backwards.

I know it seems that I have a real downer on what was a Shareware program that has grown and grown to becoming this very professional commercial offering, but look at the version number. This is release five of this package and it still has these quirky features, which seems very strange. It might just be the legacy of earlier, less professional offerings, but why not have aliases for these old ARExx commands

These shots show GoldEd's preference settings. You need to remember that <A> means Alt, not Amiga.

like FIRST, in addition to more sensible commands, and why on earth pick Windows95 as a model for a user interface? I'm sure that there will be a



lot of people who won't want to use GoldEd 5 on that basis alone, which is a great shame since it's really very good.

So far I've really only concentrated on the way GoldEd works as a text editor, but its main use will surely be as a programmer's editor, and for that it is ideally suited with support for both SAS/C and StormC. I'm no programmer so you won't get the best of feedback from my review of this package, but I know several people who are and they tell me that it really gives you a good programming environment with its coloured labels and the like.

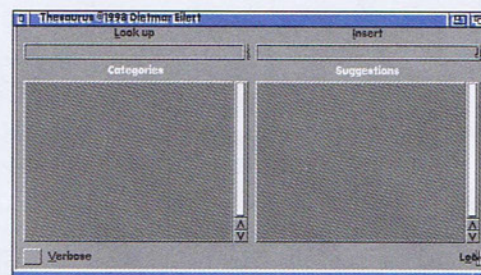
However, I do write a lot of HTML, one of the other add-ons included for the programmer. GoldEd is a huge help when it comes to

preparing HTML pages, from its recordable macros for often-used HTML sequences to its highlighting of HTML code so that it's easily distinguishable from the actual content of your page. Unfortunately, there's trouble in paradise even here because the parsers are fixed. You can add or subtract things from them, so a new version of HTML with additional commands, or a new version of StormC with different syntax, will either mean using the source code supplied to augment your parser or waiting for the release of the add-on for GoldEd.

I guess the real deal is that I'll probably carry on using Turbotext. I don't make that minny mistakes after all, so I don't have a problem with it not having an undo feature, but that's because I have the choice.

Cygnus Ed aficionados will probably decide to stick with CED too, once they've had a look at GoldEd. However, those without a text editor who need one, and those that don't but are interested, are well advised to get a copy of this and see what they think. It's not that expensive, after all.

In this reviewer's opinion, GoldEd is a masterpiece, but a flawed one. I really look forward to version six.



GoldEd's thesaurus has problems with my screen font.

DISTRIBUTION DEALS

At the time of writing this review, the author of GoldEd was involved in discussions with GTI, Europe's largest distributor of Amiga CDs. If the negotiations pay off, you should be able to buy GoldEd from Weird Science (0116 246 3800) in the UK, or from any of the dealers who use them as a distributor. The price will be about £35.

SUPPLIED BY: Dietmar Eilert
Dietmar.Eilert@post.rwth-aachen.de.
PRICE: 99.90DM including postage in Europe, but see boxout.
REQUIRES: 68020, 2Mb RAM, 5Mb free HD (25Mb for a full installation), AmigaOS3, CD.
TESTED ON: A4000, '060, 80Mb fast RAM and A3000, '060, 128Mb fast RAM, PicassoIV.

Pros and Cons

- ✚ It's very fast and it's got multiple undos.
 - ✚ Provides support for lots of add-ons.
 - ✚ Completely configurable interface (eventually).
 - ✚ Too much like a Windows product.
- OVERALL VERDICT:** Very impressive, but still a few glitches here and there, plus a non-standard interface.

80%

Christmas Giveaway

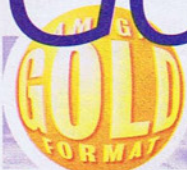
A large cup of tea!

Sorry, that should be win one of three Typhoon '030 accelerators from Power Computing. They have a 40MHz 68030 and FPU, 8Mb RAM on the board (leaving the SIMM socket open) and built-in SCSI. If you'd like one of these cards, send a postcard to: **AF Typhoon Draw • Amiga Format • 29 Monmouth Street • Bath • BA1 2BW**

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Get Connected



Now you have no excuse not to be online. Ben Vost shows you why.

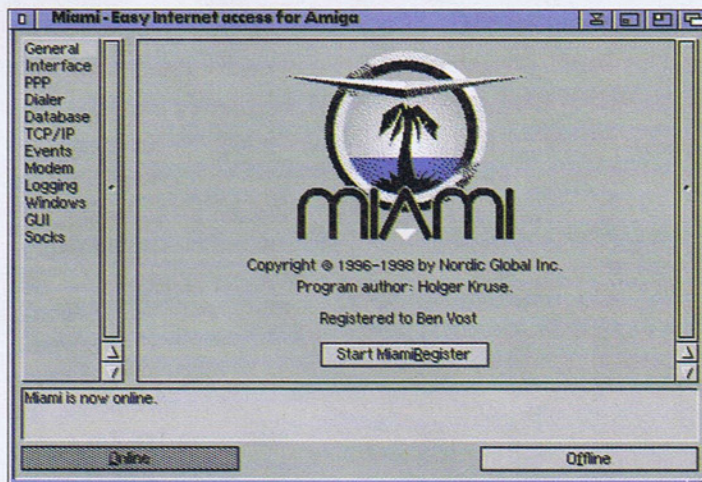
A few months ago, *NetConnect 2* came out. It's a fantastic product, but people looked at it and said, "This is too expensive for me. I still have to buy a modem and connect to the Internet. Moan, moan."

For those of you who think that the price you pay for *NC2* is too high, there's now an alternative. *Get Connected* is Weird Science's contribution to getting everyone online. It consists of a registered version of *Miami*, a registered version of *iBrowse* and both the latest (preview 6) and the stable (version 1.3.5) *YAM* (which is Freeware anyway).

Now if you were to ignore both this and *NetConnect 2* and just register your copy of *Miami*, and buy *iBrowse* separately, you'd be spending nearer sixty quid than forty – the same argument applies to *NetConnect 2*, so both are good value for money.

It consists of a registered version of *Miami*, a registered version of *iBrowse* and both the latest and the stable *YAM*...

Get Connected scores with the fact that *Miami* and *iBrowse* are the most popular Amiga TCP stacks and web browsers respectively, used by more



See? My name is in the registration details. Of course, it would have been cheaper if *Get Connected* had been available three years ago...

Amigans than anything else, but *NetConnect 2* scores on the fact that it's all integrated for you – once you've installed it, *Voyager* talks to *Contact Manager* and *X-Arc*, *Microdot* talks to *Voyager*, *Contact Manager* and *X-Arc*, and so on. There isn't that sense of getting a complete package with *Get Connected*, and it doesn't have the docs or the icon toolbar that you get from *NetConnect*.

However, these things aren't a deterrent. There's a wide number of people online who don't have *NetConnect 2* and are very happy with

Installation is a matter of going into the individual drawers on the CD and installing the parts of the disc that you want, or double clicking on the install icon at the root of the CD. This is a wrapper for all the install scripts and it asks you which parts of the CD you want to install.

It then runs the install program for that individual part, which means that if you decide you don't want to install at a particular time, you need to click abort for every script that you've chosen.

Also, unlike *NetConnect 2*, you've only got a partially registered *Miami*. You still need to go online to get the second key as part of an anti-piracy measure instigated by *Miami*'s author, Holger Kruse. This isn't a big deal because anyone who registers *Miami* has to do it and it doesn't take long for the reply to come back, but it isn't necessarily what you expect to have to do once you've forked out your cash for a product.

Overall though, *Get Connected* is good value for money and it gets you the most popular net software for your Amiga – fully registered, cheaper and more conveniently than if you had to buy them separately.



CD MEANS FIXED IN TIME, NO?

No. Weird Science are able to offer the very latest of versions every time someone orders *Get Connected* because of the fact that each CD is built for each individual order. Of course, this means that your order is sent on a gold disc, although that isn't quite true since the disc's underside is actually more like a "proper" CD-ROM and is silvery in colour.

The printing on top of the disc also contributes to the impression that you've got a mass duplicated disc since it's richer in colour than most duplicated discs.

The eagle-eyed among will note that this is *YAM2p5* – it's not a mistake.

their choice of *Miami*, *YAM* and *iBrowse*, even though they don't talk to one another in quite as cliquey a way as the *NetConnect* crowd. Individually, these are very good pieces of software, they've all won *Format* Gold awards and *YAM* was awarded the honour of being about the first piece of PD that we've ever reviewed as though it was a commercial package – it's that good.

SUPPLIER: Weird Science (0116) 246 3800
PRICE: £39.99
REQUIRES: WB3+, hard drive, CD-ROM drive, some fast RAM

Pros and Cons

- Includes the most popular net software.
 - You're guaranteed to get the latest versions.
 - It's not as integrated as *NetConnect 2*.
 - You still have to register your copy of *Miami*.
- OVERALL VERDICT:**
 It's a good solution for people who want to get online.

90%

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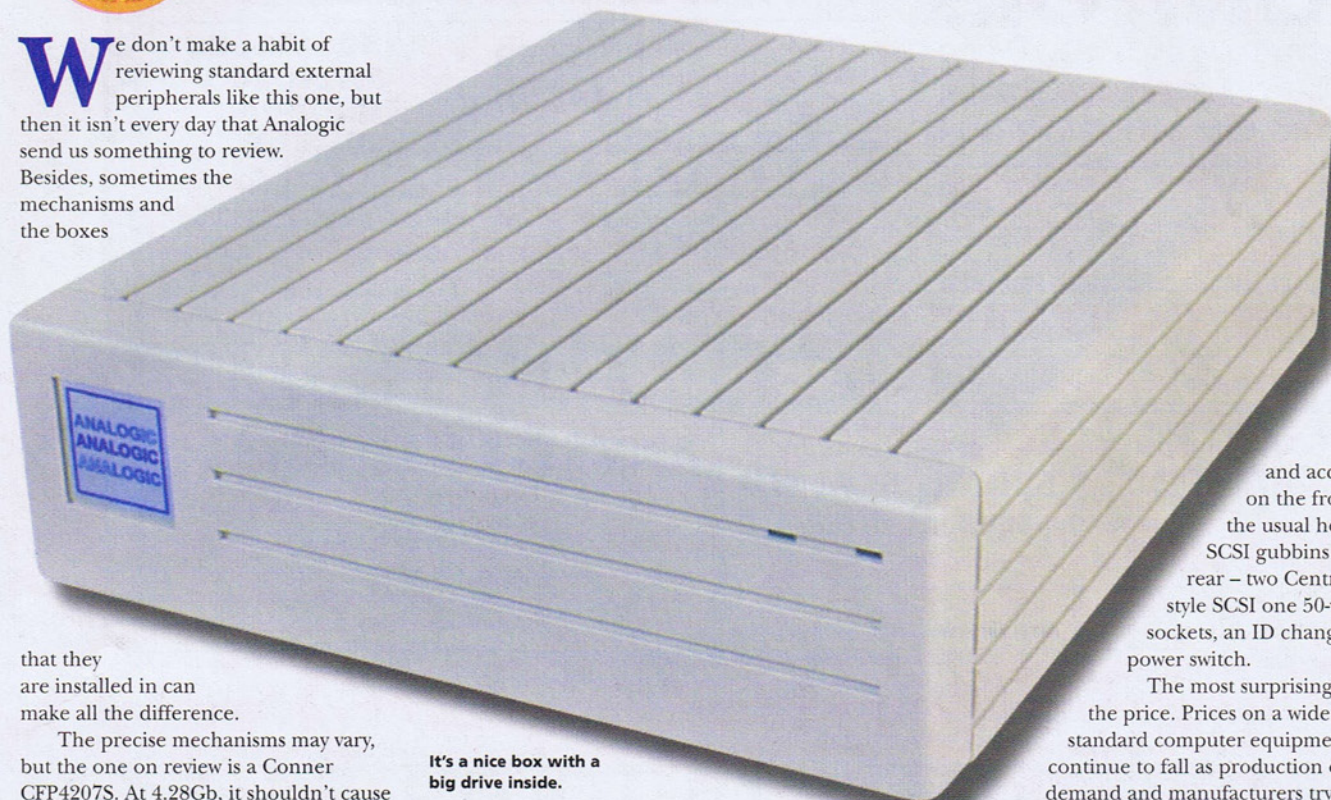


Analagic SCSI HD



External SCSI devices never go out of fashion, and neither does **Nick Veitch**.

We don't make a habit of reviewing standard external peripherals like this one, but then it isn't every day that Analagic send us something to review. Besides, sometimes the mechanisms and the boxes



that they are installed in can make all the difference.

The precise mechanisms may vary, but the one on review is a Conner CFP4207S. At 4.28Gb, it shouldn't cause any size restriction problems with your machine and it seemed to work fine (as

It's a nice box with a big drive inside.

There's a minimal power and access light on the front and the usual host of SCSI gubbins at the rear...

you would expect) with every SCSI interface we tested it with (Oktagon, CyberSCSI and CyberPPC).

Unlike the somewhat temperamental IDE "standard", SCSI mechanisms will usually work on any SCSI bus and with any other SCSI device without any major problems.

Speedwise, we managed to get 4Mb/s out of this drive when connected to the PPC SCSI interface – your speed may vary depending on what it's connected to.

The box is rather nice and a little understated. There's a minimal power

and access light on the front and the usual host of SCSI gubbins at the rear – two Centronics-style SCSI one 50-way sockets, an ID changer and a power switch.

The most surprising thing is the price. Prices on a wide range of standard computer equipment continue to fall as production outstrips demand and manufacturers try to convert inventory into cash, so it isn't really surprising that the prices of SIMMs and drives continue to fall. I remember when a 1Gb drive would have cost you more than £1,000, and it wasn't too long ago, either.

Having said that, a 4Gb SCSI drive in a proper external case for under £200 is still a bargain.

SUPPLIER: Analagic (0181) 546 9575
PRICE: £199.95
REQUIREMENTS: SCSI interface

Pros and Cons

- + Quality box.
- + Good value.
- + Fast mechanism.
- + No drive size problems.

OVERALL VERDICT:
Great value.

90%

Christmas Giveaway

Get Online!

Active Technologies have given us five copies of their excellent NetConnect 2 to give away this Christmas. To win one of these five CDs, you just need to send a postcard to: **AF NC2 Draw • Amiga Format • 29 Monmouth Street • Bath • BA1 2BW**

Analogue External



Twice the SCSI fun with
Nick Veitch.

Twin drive bay

Although somewhat larger than some other dual external cases, to the extent where you might wonder whether you could actually fit three devices inside, it is a lot sturdier. This might not be an issue for you, but it could be important if you're thinking of putting anything on top of the case or if you intend to travel about with it.

It's also worth thinking about if you have an untowered A1200.

Although adding a SCSI interface is easy enough, adding the actual SCSI drives can be a bit more complicated because they all need a power supply and a case.

This box is the obvious solution to such problems and the power supply included is beefy enough to power the most coulomb-hungry of devices.

Apart from being large and heavy, the case has pretty much the same features as above. Oddly, there is only one SCSI ID selector on the rear of the case and, even more oddly, in our case it wasn't connected.

The unit on test included a quad speed IBM CD-drive, which certainly



It's huge but well made.

There are some blanking panels on the back of the case should you want to connect some audio outs...

lived up to its specs. There are some blanking panels on the back of the case should you want to connect some audio outs from the CD drive.

The hard drive included is a 1Gb

mechanism (an M2694S to be precise) from Fujitsu, and from our experience it's one of the more reliable mechanisms. Under the right conditions you should be able to achieve similar transfer rates to the drive mentioned previously.

For a small extra cost, Analogue will fit a 2Gb or 4Gb mechanism for you, and other CD-ROM drives may be available, so it's best to give them a call. At a touch under £200 for the unit mentioned here though, this would seem to be another bargain.

SUPPLIER: Analogue (0181) 546 9575
PRICE: £199.95
REQUIREMENTS: SCSI interface

Pros and Cons

- + Beefy power supply.
- + Plenty of room inside.
- + Very heavy.
- + Only one ID server.

OVERALL VERDICT:
More great value.

90%

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Catalyser Videos 1&2

Getting to grips with some complicated software could be as easy as watching TV, or so **Nick Veitch** hopes.

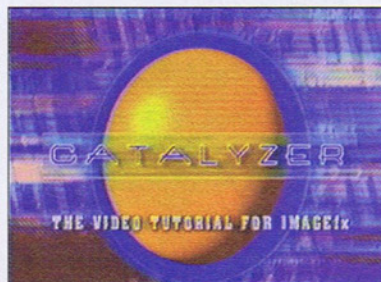
The opening of the first catalyser video seems to resemble some venerable rice-opera, with the sensei dishing out philosophical maxims the young student must master: "Use this video as your catalyst, and even so may you become more creative." However, we soon get down to some useful on-screen tips.

At this point I should say that the videos we looked at weren't the final ones – they were simple NTSC to PAL conversions of the ones released in the USA by Legacymaker. Due to the conversion process, the image quality isn't perfect. It isn't too terrible but sometimes it is difficult to see exactly what's being typed in, so it's just as well there's a running commentary on everything. The final release videos will be remastered from the original Betacam tapes so the quality should be vastly superior to the ones we watched.

...you can learn an awful lot about the way the software works and how to use it to your advantage.

As tutorial videos go, and I have seen a few in my time, this one is pretty well scripted and the projects they carry out gradually expand to take in a great deal of *ImageFX*'s features. The only real problem is that the delivery is often too quick, so you'll often find yourself having to pause or rewind the tapes.

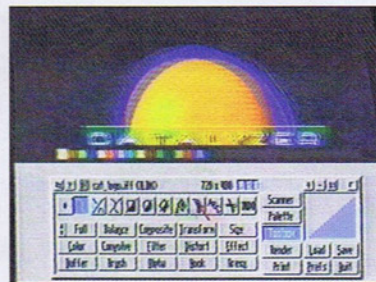
The first volume deals mainly with what I'm tempted to call the basics. They're basic sort of operations but you can learn an awful lot about the way the software works and how to use it to your advantage. There's a lot of discussion about text and text effects and a rather comprehensive roundup of the ARexx macro capabilities of *ImageFX*, which is amply demonstrated using the lightning demonstration macro. All the macros mentioned are included on a



Bohus Blahut introduces you to a range of effects, like Picture in Picture (above).



The second tape deals with compositing and matte effects for video work.



applicable to *ImageFX* 2.6, there is a lot of stuff about the CineMatte feature of *ImageFX* 3.x here too.

This is very welcome because the Cinematte, although incredibly powerful, is a little confusing too, with all the various sub-options. As it can also be a bit slow, learning by trial and error is strictly reserved for those with a lot of time on their hands.

Presentation wise, although Bohus Blahut



probably knows more about *ImageFX* than Nova Design, he still delivers it a little too quickly at times.

Having said that, both videos enable you to get to grips with *ImageFX* much faster than reading the manual or relying on the online help.

These videos were supplied to us by Media Clips of Denmark, who will be taking care of the conversion. Media Clips will be selling these videos direct, but they're also looking for distributors throughout Europe.

AF

companion disk so don't worry about having to type loads of stuff in.

The video also shows you how to quickly and easily create your own ARexx macros, which is handy, and it also delves a little bit into how to edit them to make them do exactly what you want, which is better.

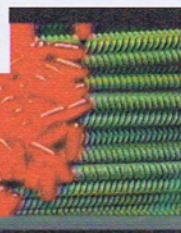
If you've never actually managed to get the hang of *IMP* or *Autofx*, you'll be pleased to know that the first video includes quite a lot of information about these, and soon you'll be confidently processing hundreds of images at one sitting.

TAPE TWO

I suppose that leads very nicely into the second tape, which concentrates more on video-related matters. It also

contains an excellent tutorial on compositing and using brushes too, but there is a lot of emphasis on the video side of things too.

While the first tape is equally



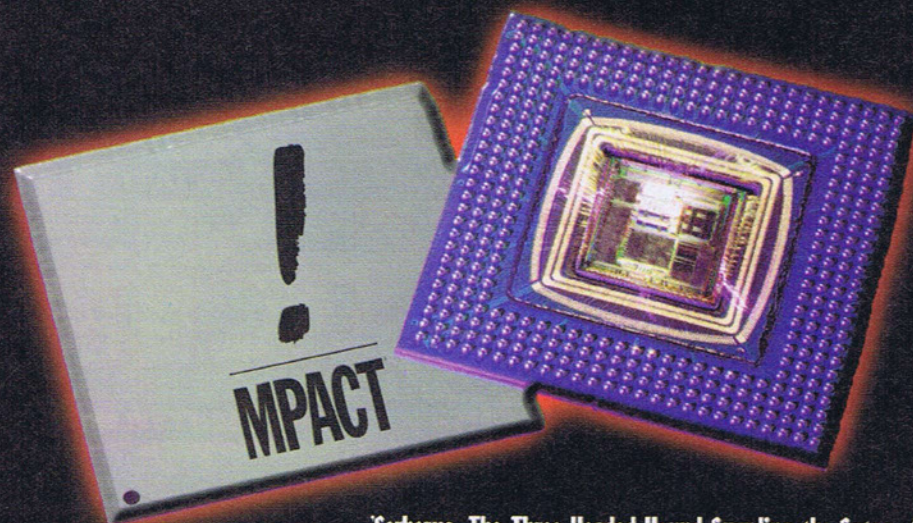
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PRICE: \$40 (or equivalent) + VAT.
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Pros and Cons

- ☒ Real expert guidance.
- ☒ Long running-time.
- ☒ Scripts included on disk.
- ☐ A bit too fast at times.

OVERALL VERDICT:
A great way to get to grips with the *ImageFX* software.

88%



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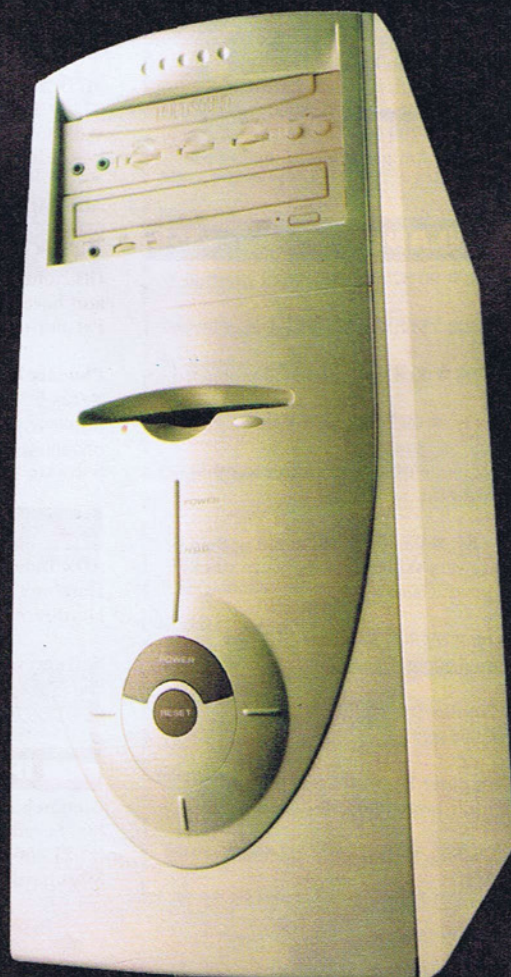
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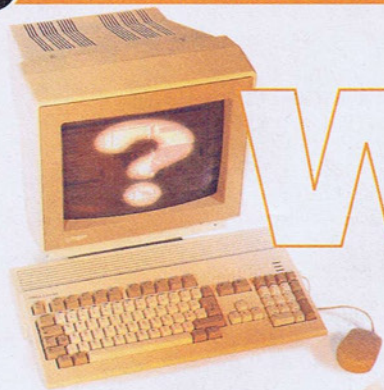
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Send entries to: Shopwatch • Amiga Format • 30 Monmouth Street • Bath • Somerset • BA1 2BW.



Workbench

"Bah, humbug!" says John Kennedy, as what he thought was a sack of Xmas cards turns out to be more Amiga problems. Write to: **Workbench • Amiga Format • 30 Monmouth Street • Bath • Somerset • BA1 2BW.**

I WANT TO BREAK FREE

Since 1991 I've been the proud owner of an A500 (yes, the one that came in the Cartoon Classics pack). It's still in perfect working order and does everything I could possibly want from a computer – games, animation, word processing – indeed, this very letter was typed on it.

The thing is, technology is moving on and my Amiga isn't part of it and every month your magazine features new hardware and software that I'd very much like to have. I want to stick with Amiga computers, not only because of their ease of use and flexibility, but because I want to keep hold of the large collection of software I've built up over the years and still enjoy using today. My three main queries are these.

- 1 What, in your opinion, is the best way for me to upgrade (and don't worry, I'm aware an A500 isn't likely to feature in the equation)?
- 2 Will I still be able to run my old software on whatever I end up with?
- 3 How much is all this likely to cost me? I get too much use from my Amiga to want to part with it and I would appreciate any help.

Matthew Smith
Somerset

1 Easy. Lift up your A500, kiss it tenderly and then chuck it out the nearest window. Sadly, its little 7Mb 68000 and standard graphics chipset just isn't up to



One of the cheapest and best ways to upgrade your machine is to look for bargains in our Reader Ads section.

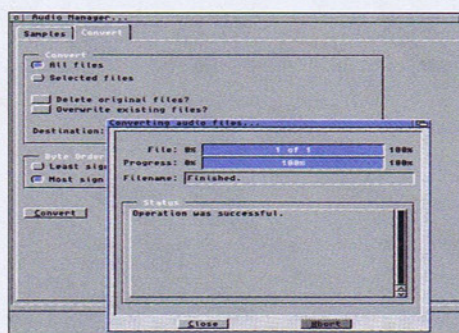
2 You'll be able to run almost all your existing software, but more importantly you'll be able to run a lot of newer software as well. It's possible to "degrade" the A1200 by running special utility software to get almost all stubborn older software to work.

3 It's a buyer's market so haggle until you get the system you want for the amount you want to spend.

CUTTING ALBUMS

I have an A1200 with Blizzard 1230TV, 16MB fast RAM, Power Tower, 2.1Gb IDE hard drive and 4-way buffered interface, with IDEFix97 (not installed

Find the best way to cut your own CDs.



but came with it), Squirrel, 2x CD-ROM and second floppy disk, 1942 multisync, buffered adaptor and X-Link V336

modem. I want to duplicate and create my own Audio CDs of my band and back up all my vital files to CD. I know I need a CD-R (I'm not bothered about CD-RW), but I am confused about many things, so here come the questions:

- 1 My first query is, quite simply, SCSI or IDE?
- 2 Which make and model is best for audio compatibility (and which isn't too expensive)?
- 3 The big one: which software and how much is it?
- 4 As I already have a 2x CD-ROM, can I do CD to CD duplication, which would be the main use for my band?
- 5 Should I buy a cheap CD-R from a PC mail order company and get software separately or spend a bit more and get a hard and software bundle from a lovely Amiga supplier?
- 6 Is CD creation/duplication difficult and fraught with danger, as many would have me believe? I hope you can help me with this, and you can be sure that you'll get an exclusive CD track or two, not to mention my website sent to you on CD as soon as I'm up and running. Thanks again for your time.

Jonathan Uttridge
via email

(And hello from all the other members of the band Charmadon, who can be emailed at Charmadon@juracid.demon.co.uk for more information, a gig guide and demo tapes, sound samples, etc.)

- 1 Entirely up to you, and your system. It's more important to check that the drive mechanism does all you want it to do.
- 2 All CD-R and CD-RW machines will produce disks which will play back on standard audio hi-fi CD players. It's impossible to buy one which won't, it really is that simple.

3 The choice isn't staggering, but our editor swears by the MasterISO software from AsimWare.

4 Copying from CD to CD is actually a little more tricky. The best way by far is to arrange the audio tracks on your hard drive and then write them to the CD from there. Copying from a CD to a CD depends on the software you use and the capabilities and interfaces of the drives – basically, it's not recommended.

Christmas Giveaway

Faster, faster!

Extreme hardware bods Gasteiner have given us a single 32x IDE internal CD-ROM drive and it's up for grabs to those who send a postcard to the following address: **AF Gas Draw • Amiga Format • 29 Monmouth Street • Bath • BA1 2BW**

BACK TO BASICS

I recently purchased an Amiga 1200 for my daughter to do her homework on, using the keyboard via the printer. We seem to have great problems actually getting to the screen where we can type information to be printed and getting it printed. As you can tell, neither of us are computer buffs.

However, when we now switch on the A1200, all we get is a blank screen with a message at the top left: Amiga Dos, with Amiga ROM operating system and libraries. We can't escape from this screen and if we did, could you explain how we get to the screen that enables her to use the printer via the keyboard? Please could you help us to find the answer to this problem?

Kenneth Bagguley
Carnforth

Where to start? Perhaps a good place would be the manuals - I hope when you bought the A1200 you bought the instruction books which came with it because you're going to need them. The Amiga, like almost every other computer, has no software built into it which allows you to enter text and send it to the printer (and that software is called a word processor, by the way).

You need to load this software into the computer first. Before you do that, you effectively need to give the Amiga some brains by loading what is called the Amiga Workbench. This is the software which provides the windows and looks after the mouse. You should find that your Amiga came with a collection of floppy disks: one of these should be labelled Workbench, and after you switch your computer on all you need to do is pop in this into the drive on the right hand side of the machine.

After a few moments you should see something which looks a little more useful: the desktop, ready for you to load software, such as a word processor. If the Amiga came with a printer then there is a good chance the previously owner had a word processor, so look around for the right disk. When you put a disk into the Amiga it will appear on the desktop as an icon: you'll need to use the mouse to click twice on it and "open" the icon to display its contents. At this point you should really be reading the manual.

5 If you're certain that you can get all you need with the CD-R from the PC supplier (case, cables, PSU) then there's no harm in it. Check you're getting exactly what you need, and remember - don't expect the PC dealer to be able to give you any support.

6 No, CD creation is pretty easy. On the other hand, duplication is something best left to the professionals with their own specialist kit. If you want to make quite a few, talk to one of the advertisers in the back of *Future Music* or *The Mix* magazine.

MEMORY, DRIVES AND PLAYSTATIONS

I have an A1200, 68030, 40MHz, 32Mb RAM accelerator, 8x SCSI CD-ROM drive, HP 670C DeskJet printer and Kickstart 3.

1 Most of the software I'm buying on CD-ROM fails to work because it wants IconX and can't find it. Neither can I so I couldn't install it, even if I had a hard drive.

Could you please tell me how you install it? I know it resides in the C: directory but I don't know how you access the C: directory.

2 I've installed my HP printer and can't get it to print in colour. I've checked to see if there's a cartridge in and there is, so could it be that I need TurboPrint 6 installed on a hard drive?



Can you emulate a PlayStation on your Amiga?

3 Sometimes when I load up Workbench 3.0 an icon appears with "RAM 0" under it, and when I open it, it says "RAM 0 0% full". What does this mean and what should I do with it?

4 I want a hard drive but which is best, SCSI or IDE?

5 I've heard that with enough memory (32Mb should be enough) and a CD-ROM drive, you can get a PlayStation emulator and get PlayStation games to work on the Amiga. Is this true, is 32Mb enough and where can I get the emulator from?

6 My accelerator is a Viper 68030 40MHz with 32Mb of RAM. Can I add another 32Mb of SIMMs?

7 On *AGA Experience 3*, when opening the icon, it says, "This icon has no default tool." Why, and what can I do?

8 I can only boot up CDs via *CD Boot* or from my CD32. Is there any way of getting the CDs running via Workbench 3.0 disks?

9 My Amiga had to go in for a repair as the internal disk drive had seen its last days. First Computer fitted an internal high density drive, so could this have anything to do with why I keep finding disks which have read/write errors on them?

10 Is there any way of cancelling the AGA chip? The reason I ask is that I also have an A500 and there are games like *Shadow of the Beast 2* that I like to play and can do on the A500 but can't on my A1200. I want to get rid of the A500 and therefore want old games of that type to work on my A1200.

11 Now for a piece of advice. My Amiga was crashing on the odd occasion so I put this down to the accelerator. I bought a fan and had it fitted and now it never crashes.

L. I. Lewis
Heywood

1 Accessing the C: directory is easy. For example, from the Shell you can enter "dir c:" to list all the files. From Workbench, just make sure you've switched on the option to view all files

(Window/Show/All Files) and then open the Workbench disk. You'll see a directory called C and again, open it and you'll see all the files. IconX should be there.

It's possible that IconX is missing from your C: directory, but it's more likely that the CD-ROM software is looking at the wrong C: directory. Make sure you click on any icons called "Click me first!" or similar as these will re-assign the paths to make sure the software looks in the right directory.

2 How well your printer works depends on the printer driver you have for it. The existing Amiga drivers are out of date and won't let you make the most of the printer. TurboPrint will solve this problem as it has many drivers for modern printers.

Feedback

Re Philip Williams' question regarding IBM hard drives and software failure (August 1998). I've also had these problems since buying my new drive and I've successfully managed to fix the fault. In the response, you recommended setting the Max Transfer settings lower.

However, this didn't solve my problem so I got out my manual to my old, dead 85Mb Seagate drive and Fastprep/Expertprep by GVP, where it states: "Mask - the mask value is used with the fast file system. The hexadecimal number entered into this field provides a mask for DMA controllers. It specifies the memory range in which the controller may safely work when transferring data."

"The default value 0xFFFFFFF allows DMA transfers within the extended 16Mb range offered by GVP Series II and G-Force accelerators. If your system cannot perform DMA access to Extended RAM use the value of 0x00FFFFFF instead".

When I checked my DMA Mask setting it was set to default. I tried lowering it to 0x00FFFFFF where I found that it fixed the problems and I've had no trouble with the drive/software since. It's possible that Philip has a similar Default setting on his IBM drive and by correcting it to 0x00FFFFFF it might just solve his problems too.

N. P. Rowe
Plymouth

3 This is a "recoverable ramdisk". If you look in the *Deus/Dos Drivers* drawer on your Workbench disk, you'll see this device. If you don't want it, drag it to *Storage/Dos Drivers* instead. The new icon is a new disk drive which stores files in memory instead of on a hard or floppy disk.

Unlike the standard RAM disk, it can survive a warm reset. You can use it to store your Workbench disk and speed up booting times slightly. I don't tend to use it very often.

4 The best hard drive is the largest one you can get, fitted to your Amiga in the simplest way possible. There is little difference, at least from the point of view of most users, between the performance of IDE and SCSI drives. They each have advantages and disadvantages. IDE drivers are cheaper and easy to interface to a stock Amiga as the Amiga already has an IDE interface.

SCSI drives can be handy if you already have a SCSI interface and, as your CD-ROM is SCSI, you certainly do. Shop around and get the best deal: it doesn't matter which type you get as they'll do the same for the Amiga - speed it up and make it more useful.

5 I've haven't tried the PlayStation emulator myself, but I didn't think it had got much further than being able to display loading screens. No matter: the custom chips in the PlayStation would have to be emulated in

Continued overleaf →

← software on the Amiga, and that means only one thing: it would run so slowly as to be unplayable. That's not even getting into the legally dubious business of getting the copyrighted PlayStation ROMs.

6 That depends on whether you have another socket for a SIMM on the accelerator and if the card electronics support it. I'd be interested in what you planned to do with 64Mb on an Amiga – remember, you don't have to run Windows.

7 Which icon? Click on the Icon and select Information from the Icon menu. Have a look in the Default Tool setting: is there anything there? Is it pointing to a file which the system cannot find? Have you followed all the instructions and made assigns by clicking any programs called "Click here first" or similar?

8 Not sure what you mean there. When you place a CD-ROM in the drive it should certainly appear on the Workbench as an icon. If not, you haven't got the CD-ROM filing system and CD0: defined properly. Try re-installing the CDFS programs on the Amiga Format cover CDs.

9 Yes, probably. If your old drive was starting to fail, it's possible that its heads were slightly out of alignment. The new drive would look on the disk for the data and fail to find it, resulting in the occasional error. You can sometimes read the data if you keep retrying, in which case you should re-save it as soon as possible. Alternatively, keep a look out for a second-hand external Amiga disk drive: maybe a different drive would be able to read your old disks.

10 Yes, there are many programs called "Degraders" which can switch off the AGA chip set. And don't forget your Amiga has one built in: when you hold down the two mouse buttons on re-boot, select the Display Options button. Click on Original to do away with many AGA features.

11 Ta! A useful tip for Amiga owners getting too warm.

CANADA CALLING

1 Although the basic Workbench can be greatly enhanced by various PD/Shareware add-ons, I find some of the alternatives, such as *DOPus*, *Scalos* and *p.OS*, interesting and I'm considering exploring the advantages of each of them. Would I be correct in thinking I can simply install each OS to a different partition and simply choose which partition to boot from in the Early Startup screen? If so, do I make only my main Workbench partition bootable under *HDTools* or must each partition be configured as bootable?

2 The new BoXeR Amiga looks great but my only need for Zorro slots would be for a graphics card, so might I be better off with a towered up A1200 with a Blizzard PPC and the new BlizzardVision graphics card?

3 In your estimation, will the new BlizzardVision graphics card be as good or better than a PicassoIV or CyberGraphX? Will it use the same RTG software?

Workbench
⌵ ⌶ ⌷ ⌸

10 things to do when:

You want to stop your Amiga crashing

1 Is it a hardware or a software problem? Does your Amiga crash if you don't even boot Workbench or just leave it running for a while? If so, that's most likely a hardware problem.

2 Do particular programs always crash? For example, a ray-tracing program may be expecting a maths co-processor (FPU), and if your system doesn't have one it will crash. Likewise, if you try to run a 68020-only program on a 68000 it will fail. That's a software problem.

3 Keep cool! An Amiga can overheat if stuffed with drives, extra memory and faster processors. Make sure it's not in direct sunlight and that air can circulate around it. Being covered in dust and sitting on the carpet doesn't help.

4 A lack of power is a common Amiga problem. A seriously expanded Amiga can suck more power from a PSU than is recommended. The PSU can run dangerously hot (it will feel very hot to the touch and may smell) and the Amiga will fall over regularly. Buy a beefier PSU as soon as possible.

5 Sometimes hardware problems are hard to diagnose as a particular chip has become thermally unstable. The best way to check is to take off the lid, run a program and then squirt a jet of aerosol coolant at each chip in turn. If the system crashes you've found your dodgy chip.

6 Obscure hardware. The Amiga was always designed to be a self-contained system. If you've added a dozen different type of disk drives (CD, removable and so on), a graphics card and a new sound system, you'll have to expect some problems.

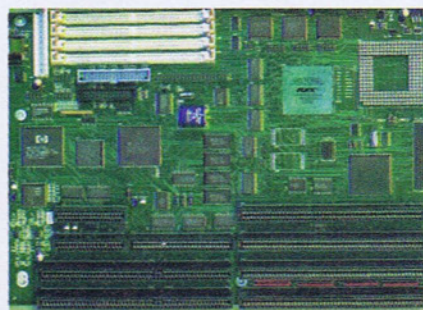
7 If you have a well-expanded system which is misbehaving, remove one component at a time and try different combinations to find the guilty peripheral.

8 Chips get warm when they are used and cool down when switched off. This cycle can cause them to creep out of their sockets. After grounding yourself to remove traces of static electricity, press down gently but firmly to make sure all chips are seated properly. Modern surface mount chips don't have this problem.

9 Is the memory fast enough? If you have a super-fast accelerator card, make sure your memory is rated fast enough to work with it. RAM with a rating of 60ns is needed for the fastest accelerators.

10 Check your hard drive. Crashes while loading or saving could be down to a failing or badly configured hard drive. Check the MaxTransfer settings, perform a diagnostic scan with suitable repair software and then check all of the leads.

If your only need for Zorro slots is for a graphics card, the BoXeR may not be the best solution.



4 The Power Tower looks like it will be the best tower option but since I live in Canada I need to know if I order the basic kit whether the PSU that comes with it is switchable to run on our 120 voltage? Will it work with our NTSC A1200 motherboards?

5 Can you use one of the new Syquest SparQ IDE drives with, say, a buffered IDE interface/IDEfix kit? Zips are great but I think a SparQ would be a more useful hard drive backup.

6 I'm really sick of using slow, low capacity floppies and I figure that since most new software comes on CD anyway, I'm going to totally phase out my use of floppies. However, if my hard drive crashed, I assume I'd always have the backup of my floppy to load my backup program since the backup of my OS would contain the drivers my

Amiga would need to recognise a SparQ, Zip, etc. Can you suggest an alternative to this?

7 Does buying the official version of *Quake* and *Doom* for the Amiga give the ability to use Wad files, conversions, add-ons, etc, or do I still need a registered PC version?

8 I'm interested in the manipulation of graphic images. If I get *ImageFX*, would there be any point in also getting *Elastic Dreams* or *PhotogenicsNG*?

9 Do you think we'll get USB (Universal Serial Bus) support on the Amiga? With the new, successful iMac helping to make it a cross-platform standard, USB peripherals would be great for the Amiga too.

10 Speaking of the Mac, I've noticed many commercial and PD products for networking Amigas and PCs which allow the Amiga to access the PC's devices. Are there no Amiga to Mac networking products because of the Amiga's great Mac emulation or has there simply been no demand? Can you network them?

Rob Daviau
Canada



Cynicism is healthy where the Internet is concerned, says
Dave Cusick.

We all know that the Internet is global, and that in theory the people visiting our websites, sending us email, or chatting away to us on IRC could be anywhere in the world.

However, it can be very easy to forget when you're sitting there in front of your monitor, collecting information from all sorts of remote sites or exchanging opinions with an IRC friend, that often hundreds or thousands of miles can separate two networked machines in the real world.

66 The surfer has to learn to sift reliable sources from those which are being economical with the truth... 99

Checking through my website hit logs, I was quite surprised to find plenty of visitors were in countries as far apart as Qatar, Belize, Iceland and Malaysia. It's one thing to know that something's possible; it's quite another for it to actually happen.

I tell you this to remind you of exactly what it is you are becoming a part of every time you fire up *AmiTCP* or *Miami* – it's something incredible that even quite recently was the stuff of science fiction novels.

I also tell you this because it's what I was ruminating upon in an IRC channel when the theme for this month's column came to me.

You see, at this juncture my out-loud musings were interrupted by a suggestion that I should write a article on accidents which have befallen Amigas. You know the sort – beer is spilt on the keyboard, a spectacular shower of sparks ensues and a dead Amiga is the result.

I replied that, as a Psion 5 user, I'd read on a Psion website that a fairly common cause of death for Personal Digital Assistants was for them to be

CONTACT POINT

I can be reached with comments, suggestions and feedback at dave@dcus.demon.co.uk, or via my website at <http://www.dcus.demon.co.uk/>.

dropped into the toilet by businesspeople who had been working while, as it were, dropping their load. And this made me think.

IS THE TRUTH OUT THERE?

The point is that we can all believe what we read or are told on the Internet, but we have no way of knowing whether it's really the truth. Sometimes we're naturally sceptical about things we hear, particularly on IRC or in the newsgroups, but equally, sometimes we accept things at face value when we perhaps should not.

The reality is that the Internet is the perfect medium for rumour-mongering. Ever since the earliest days of the Internet as we know it (that is, the 1980s, when the American academic institutions were getting online), net folklore has abounded. There are still places on the Net where you can read the rumours circulated in those days.

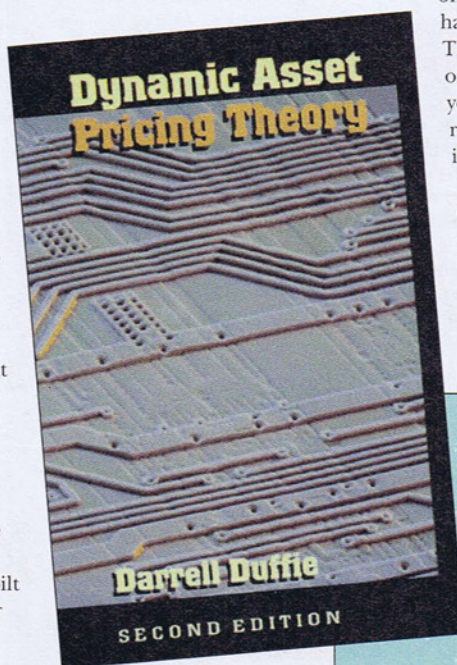
For instance, the Wiretap archive contains a selection of computer-related rumours which were doing the rounds between

1986 and 1990. There's the one about the guy who handled the payroll of a large company and who modified the software so that fractions would always be rounded down, with the remaining amount being paid into the account of the last name on the list – his name – and in the end he became a millionaire.

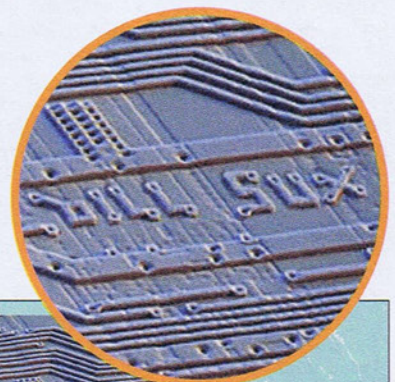
There's the one about the students who devised an efficient alphanumeric office record numbering system, only to realise later that it led to some mailing labels stamped with codes containing rude words – they hadn't thought to remove the vowels so words wouldn't accidentally appear within codes.

The best source for more general rumours is the alt.folklore.urban group, which is full of fascinating stuff. In fact, it's so fascinating that I'm certainly not the first writer to draw attention to it.

In her book "Surfing on the Internet", American writer J.C. Herz writes about it at some length. Herz presents many examples of the type of



The Bill Sux microchip story was a hoax, with the original image taken from Darrell Duffie's book cover.



It's a clever prank playing off the idea that a couple of Apple aficionados could surreptitiously sneak an anti-Bill Gates message onto the world's most popular CPU, where it could be seen only through a powerful microscope, but it's a hoax. *Time* ran no such article, there is no news bureau called "API" (a fictitious combination of AP and UPI), and Intel denies that anyone was fired. The image is a clever digital manipulation of an image that appears on the cover of Darrell Duffie's book *Dynamic Asset Pricing Theory*.

73

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CREATIVE

The indispensable guide to getting the most out of your Amiga

Ho ho ho, Very funny, Colin. I'm sure the readers aren't taken in by the obvious photomanipulation of my stomach area.

Anyway, it's Christmas, and at this time of year most of the magazines we produce tell you how to make seasonal things, like cross-stitched Christmas penguins or Christmas cards made out of PD clipart.

In the spirit of the season, this month we'll be showing you how to make, er, a Christmas website look colourful, how to digitally track-bounce your favourite carols, set up your graphics card for optimum yuletide performance and write a family game where everyone can join in, shooting at each other. Merry Christmas everyone, I'm off to harvest my sprouts. Ho ho hoe.

Nick Veitch

SEND IT IN!

WE NEED YOUR INPUT.

Is there something that you would like to see covered in one of the current tutorial series? Why not send your suggestion to us at the magazine. Here are some things you might like to think about:

PROGRAMMING

Is there a language you can't get to grips with? Or maybe you want to know how to do a specific thing in C or AREXX? You might never find the answer unless you write in and tell us about it!

UNDER THE BONNET

Unsure of how your Amiga really works. Not sure if you are getting the best from your hardware - write to us.

GRAPHICS

Is there something you desperately want to be able to draw? Drop us a line! Contact us at:

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Bath • Somerset • BA1 2BW
Or email: amformat@futurenet.co.uk
putting "Creative" in the subject line.

76 HTML

Bring the wonderful world of technicolour to your HTML, with **Neil Bothwick**.

Standard HTML colour names

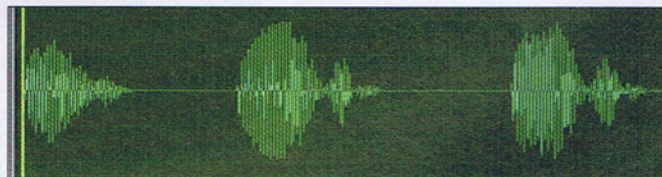
Name	RGB	Colour
aqua	#00FFFF	
gray	#808080	
navy	#000080	
silver	#C0C0C0	
black	#000000	
green	#008000	
olive	#808000	
teal	#008080	
blue	#0000FF	
lime	#00FF00	
purple	#800080	
yellow	#FFFF00	
fuchsia	#FF00FF	
maroon	#800000	
red	#FF0000	
white	#FFFFFF	

And you thought you'd never need to know your hex tables.

78 SOUND ADVICE

Tony Horgan shows you how to bounce tracks, and we're not talking trains here.

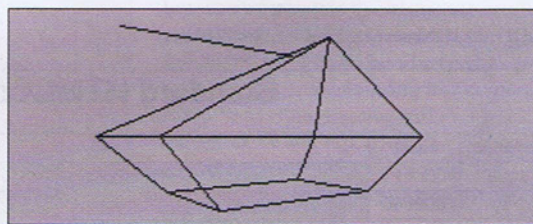
This is a sound sample.
Probably of Yesterday.



80 C FOR YOURSELF

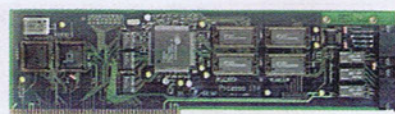
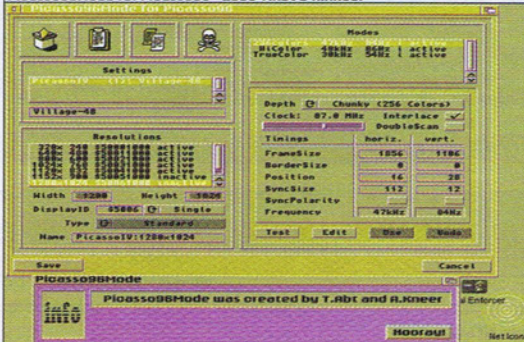
John Kennedy tries to steer clear of copyright infringement as he shows you how to write a classic.

Relive the days of monochrome vector graphics by creating your own game.



82 UNDER THE BONNET

PicassoMode for Picasso96 v1.096 T.Adt & A.Kneer



Simon Goodwin enlightens us about getting

display devices working properly and efficiently.

Could configuring these cards be more complicated?

Using HTML

Have a browse through
Neil Bothwick's guide to putting words on the web.

A web browser will display plain text without regard to formatting, and all line breaks, spaces and tabs are rendered as single spaces. It's up to your HTML to tell the browser about formatting.

Last month we looked at the <Hn> tag to present text headings in larger or bolder type, and the <P> and
 tags to break text up into paragraphs.

When you're using coloured text, be careful that you don't overdo things and make the page unreadable...

However, there are times when you want to make particular text stand out from the rest, either by physical separation or by altered appearance, and HTML provides a range of ways to alter the text display. These fall into three main categories: formatting tags, style tags and font tags.

TEXT FORMATTING

Text is normally left justified. The <DIV> tag allows you to align text centrally on the page or flush with the right margin, which is more flexible than the non-standard CENTER tag of Netscape. The usage is:

```
<DIV ALIGN=setting>some text</DIV>
```

Contents

Chapter 1: Introduction

Chapter 2: Text styles and fonts

Chapter 3: Using images

Chapter 4: Lists

Chapter 5: Tables

Chapter 6: More to come...

If you've missed any tutorials in this series, call our back issue hotline on 01458 271102.

where "setting" is LEFT, RIGHT or CENTER. Any other tags can appear within the <DIV>...</DIV> container and you can include any other tags within this, even the whole page. The ALIGN attribute also works with the <Hn> heading tag, so it is really easy to centre headings.

Sometimes you don't want the browser to reformat the text. You may be importing some text that is already laid out or you might simply want to include a large text file without having to insert all the paragraph breaks throughout. Text between <PRE> and </PRE> is displayed without any layout changes and this is extremely useful when you're including some text from elsewhere that you don't want or need to reformat.

STYLE TAGS

There are two types of style tag – logical and physical. Logical tags are the original method, and the most flexible, including tags such as (emphasis, usually rendered as italics) and (strong emphasis, usually shown bold). If you specifically want the text shown as bold or italic, use the or <I> tags. In many cases it won't matter which you use, but make sure you're consistent or your pages will look strange in some browsers.

There are many other logical style tags which are used to show sample output from a program, commands you should type in or that the text is a quotation. There are others too, although it's unlikely that many people will use more than two or three, but they all use the same principle that the tag flags the text as a particular type of text, rather than specifying exactly how it should be displayed. This lets the page author define a block of text as a quotation, for example with the <CITE> tag, while letting the user set how his browser will show that text.

FONT TAGS

To satisfy the demand for more control by the author over how the document is displayed, the tag was introduced. This gives control over size, colour and typeface, although none of the current Amiga browsers support the typeface attribute. Both the size and colour can be specified in two ways.

Look in your browser settings and you'll see that you can specify seven text font sizes: 1 to 7 in AWeb and IBrowse, -2 to 4 in Voyager. The normal text size is 3 (0 in Voyager).

Standard HTML colour names

Name	RGB	Colour
aqua	#00FFFF	
gray	#808080	
navy	#000080	
silver	#C0C0C0	
black	#000000	
green	#008000	
olive	#808000	
teal	#008080	
blue	#0000FF	
lime	#00FF00	
purple	#800080	
yellow	#FFFF00	
fuchsia	#FF00FF	
maroon	#800000	
red	#FF0000	
white	#FFFFFF	

These are the 16 named colours which are defined in HTML.

LINKING TO OTHER PAGES

A web page on its own is of little use for most purposes. The web is useful because of the way pages, sites and files can all be linked to each other. The tag used to create a link is `<A>`, the anchor tag, and it the HREF attribute when linking to another page or file, like this:

```
<A HREF="nextpage.html">Next page</a>
<A HREF="games/index.html">Index page of games
directory</a>
<A HREF="http://www.wirenet.co.uk">A separate site</a>
```

The text between the `<A>` and `` tags is highlighted in the browser and will jump to the address given in HREF when you click on it. The address used by HREF is relative to the current page: the first example jumps to a page in the same directory, the second jumps to a page in the games sub directory of the current directory and the third jumps to a completely different site because it contains the full URL.

Most web servers run on *Unix* filesystems and there are a couple of differences between *Unix* and AmigaDOS that you need to be aware of to be sure that your pages will work from the server in the same way as from your hard drive. The first is that *Unix* is case-sensitive – `NextPage.html` and `nextpage.html` are different files in *Unix*, and this has caught a lot of people out when uploading their pages. The safest approach is to keep everything in lower case.

The second difference is the way of specifying the parent directory. On the page in the second example you may want a link back to the home page. The Amiga way of doing this is `/index.html`, but *Unix* uses `..` to represent the parent, so the correct link is:

```
<A HREF=" ../index.html">Return to Home Page</a>
```

It's usually a good idea to include such a link in most of your pages because it makes life much easier for people viewing your site.

You use the size attribute to specify the size absolutely with `` or relative to the current size with ``.

These two will have the same result if you haven't previously modified the font size, but using the first one a second time will still give size 5 text, whereas two instances of the second will give size 7.

The `` tag is a container so it must have a closing `` and it only affects the text between the two. You can also use the `<BIG>` and `<SMALL>` tags to change the size of the text, but these alter it by a different amount on various browsers so it's usually safer to use ``.

FONT COLOURS

As well as changing the size, you can also change the colour of the text with ``some text``, where `rrggbb` is a hexadecimal colour number. Many people aren't comfortable working with hexadecimal numbers (does anyone know the colour value for azure without looking it up?) so the HTML standard defines 16 standard colour names, listed on the previous page.

Most browsers actually recognise a much larger set of colour names, but these 16 are standard. You can also specify shades of grey from `gray0` (black) to `gray100` (white).

Just to confuse things, larger numbers mean smaller type in `Hn` tags but larger type in `FONT` tags

This is H1

This is H2

This is H3

This is H4

This is H5

This is H6

This is FONT size 1
This is FONT size 2
This is FONT size 3
This is FONT size 4
This is FONT size 5
This is FONT size 6

This is FONT size 7

A typical display of font and header sizes.

The `SIZE` and `COLOR` attributes can be combined for extra highlighting:

```
This is normal text but <FONT
SIZE="+3" COLOR=red>you can't miss
me!</FONT>
```

`` only affects text up to the closing ``, so what if you need to change the text of a whole page? To change the text colour, use the `TEXT` attribute of the `<BODY>` tag.

```
<BODY BGCOLOR=black TEXT=white>
```

will render the page in reverse, with white text on a black background.

The `<BASEFONT>` tag takes the same attributes as `` but affects

all text that follows it. Use this to change the default size for all text.

```
<BODY BGCOLOR=black>
<BASEFONT SIZE="+1" COLOR=white>
```

will also render the entire page in reverse, but it also increases the size of the text because white on black is a little harder to read than black on white.

When you're using coloured text, be careful that you don't overdo things and make the page unreadable. In particular, make sure there is enough contrast between the text and the background. The `<BODY>` tag has a `BGCOLOR` attribute that specifies the background colour, using the same colour numbers and names as ``.

HTML also allows you to specify an image as a backdrop, but the reader may not have images enabled in his browser so you should still specify a `BGCOLOR` when using a background image. We'll cover this next month.

CHANGING LINK STYLES

So far we have only considered altering the style of the general text of a page, but it's also possible to change the appearance of links. Most of the time this isn't a good thing because people get used to a link appearing in a certain colour and changing this makes it less recognisable as a link. However, if you're changing the general text colour, you may need to change the link colours to help them to stand out.

The attributes used are: `LINK` for unvisited links, `VLINK` for visited links and `ALINK` for active links (the colour the link changes to as you click on it). Most browsers use blue to show links, so if you want your page to use blue for the body text you may do something like:

```
<BODY BGCOLOR=gray80
TEXT=darkblue LINK=red
VLINK=blue>
```

Don't make your link colour the same as the text colour because pages designed like this can be difficult to follow as the links aren't obvious.

Text tags

FORMATTING TAGS

<code><P></code>	Paragraph break
<code>
</code>	Line break
<code><DIV></code>	A block of text for alignment
<code><NOBR></code>	Marks text not to be line wrapped
<code><PRE></code>	Displays text as given, with no formatting by the browser
<code></code>	Uses this font size and colour
<code><BASEFONT></code>	Specifies font size and colour from here on

LOGICAL TAGS

<code><H1...H6></code>	Paragraph headings
<code></code>	Emphasis
<code></code>	Strong emphasis
<code><ADDRESS></code>	An email address
<code><CITE></code>	A quotation
<code><BLOCKQUOTE></code>	A block of quoted text
<code><CODE></code>	Program code
<code><KBD></code>	To be typed at the keyboard
<code><SAMP></code>	Sample output
<code><VAR></code>	Variable names
<code><XMP></code>	Example

PHYSICAL TAGS

<code><BIG></code>	Larger font
<code><SMALL></code>	Smaller font
<code></code>	Bold type
<code><I></code>	Italics
<code><U></code>	Underlined
<code><STRIKE></code>	Strike through
<code><SUB></code>	Subscript
<code><SUP></code>	Superscript
<code><TT></code>	Shows in a monospaced font

SoundAdvice

If it's true what **Tony Horgan** says, apparently you can have as many sample tracks as you like once you've mastered the art of digital track bouncing.

Let's be honest for a minute – if you make music with a tracker, you've never got enough tracks available, have you? Sure, in theory you can have as many as you like, but that means reducing the sound quality with each additional track. Take it too far and you'll end up losing your music in a cloud of nasty, grainy background noise. Well don't give up just yet – the miracle of digital track bouncing is here to save the day.

Track bouncing is a trick used to record the contents of a number of individual tracks onto a single track or stereo pair, thus freeing up the other tracks for further use. It's a popular method for cash-strapped musicians who want to put together demos using a four-track cassette recorder.

Now that you've squeezed all those sounds into one sample you're free to use a higher quality real-time output mode.

A typical situation would see the musician record bass guitar on track one, drums on track two and lead guitar on track three. These would then be recorded to the fourth track, leaving the first three to be re-recorded with vocals and any other remaining parts.

Got the idea? The trouble with doing that on a cassette recorder is that you end up with a lot of background noise. Do it digitally and you end up with much cleaner results.

QUICK AND EASY

You might be thinking all that sounds like a lot of effort for a couple of extra tracks, and if we were going to record a five minute section of drums and then go back and do the same for each remaining part, you'd be right.

Fortunately, we can take the theory and apply it in a much more dynamic and immediate way, working on small sections at a time to keep the creative process flowing.

The key to it is something we discussed in the previous issue – using your tracker's ability to record parts direct to the hard drive. *OctaMED* *SoundStudio* is my chosen tool for the job but it can be done with certain

Contents

Chapter 1: Hard Disk Recording

Chapter 2: Digital Track Bouncing

Chapter 3: Noise Reduction Techniques

Chapter 4: Original Sample Manipulation

Chapter 5: Best Value MIDI Equipment

Chapter 6: Music Production & Mixdown

If you've missed any tutorials in this series, call our back issue hotline on 01453 271102.

other trackers too. The quickest way to see just how useful track bouncing can be is to put your tracker into its 'mixing' mode (as opposed to straight four-channel replay mode), then build up a bar or two of drums using as many tracks as you feel necessary. Once you've done that, switch the output to record to disk and hit the play button.

You'll end up with a sample on your hard drive that can then be reloaded into your tracker and played back on a single track. Bingo: one set of tracks bounced down to a single sample with no loss of sound quality.

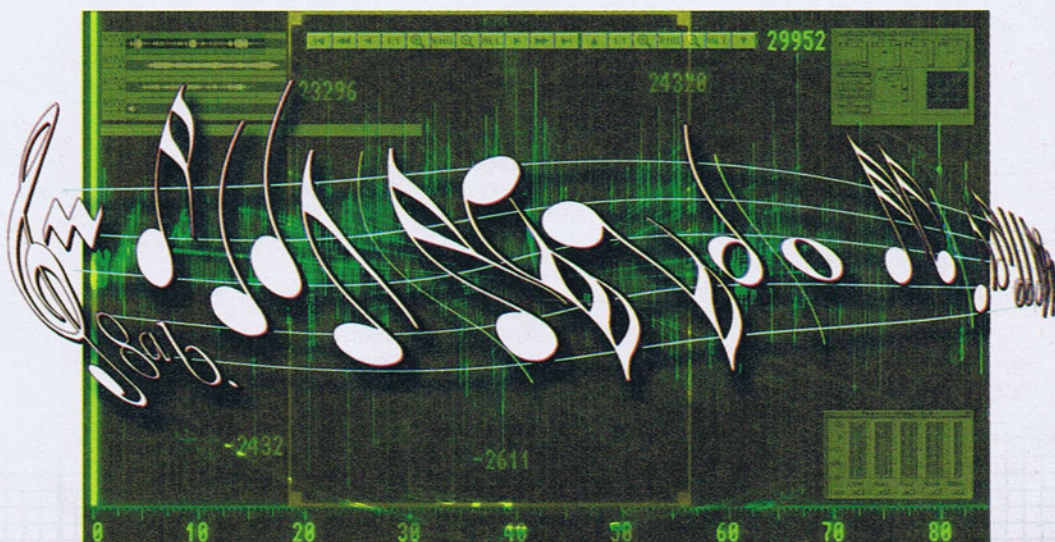
Now that you've squeezed all those sounds into one sample you're free to use a higher quality real-time output mode, such as straight four-channel internal 8-bit (which is always cleaner than mixed 14-bit output) or mixed output via a 16-bit sound card. If you're ultimately going to output in real-time

via a sound card, now you won't have to use lots of tracks and a low mixing rate and you might even be able to turn on the 'smoothing' option, which is normally too power-hungry to use with more than a few tracks.

FREQUENCY FACTORS

It's important at the time of recording parts to disk that you bear in mind which real-time output method you're going to use. If you're using a sound card, it's best to mix the tracks to disk at a rate of 44701Hz – your sample will then replay at its original pitch on note F-6. Sound card users can also output stereo samples if required.

If you're using standard, non-mixed Amiga output you should record to disk in mono at a rate of 27928Hz, which replays on note A-3 in non-mixed mode. Also remember to choose an 8-bit or 16-bit sample format accordingly.



WHAT'S ON OFFER?

Digital track bouncing is a good idea for lots of reasons:

- High quality output with no sound card.
- Improved quality output with a sound card.
- Use as many tracks as you like.
- Even works on the slowest Amigas.
- Build up your own library of original sample loops.
- Lets you make the most of all your audio software.

your tracker on its own track, which would have the advantage of keeping the bass drum punchy and also allow you to drop it in and out of the track wherever you like, independently of the rest of the percussion.

The same theory can be applied to all parts of your song. You can bounce your rhythm synth, chords and lead lines down to disk, then give them some delay and reverb or put them through

through the internal sound channels and the other to use the sound card).


TAKING IT FURTHER

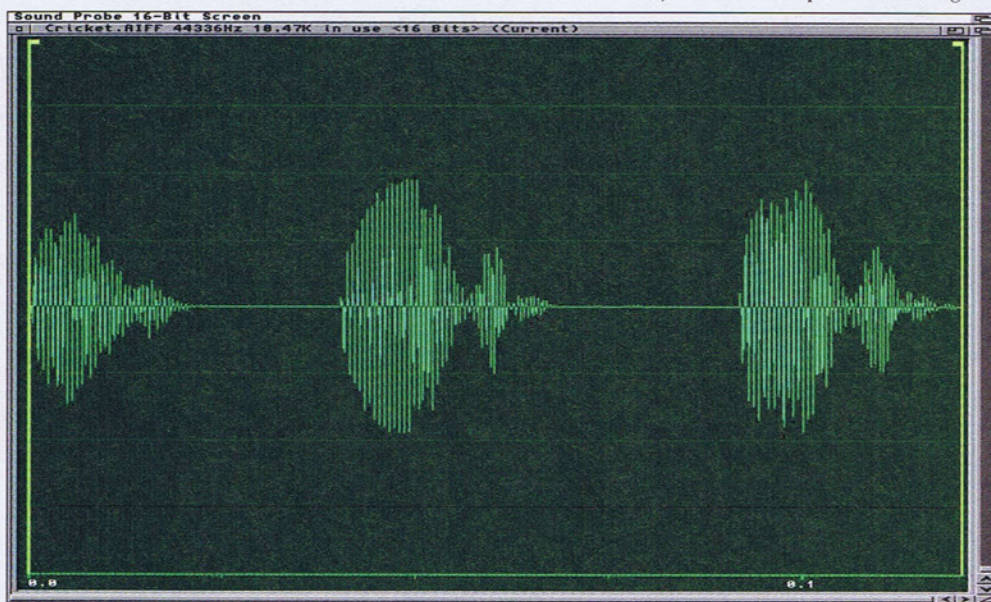
You can go on bouncing tracks indefinitely. Although a bit of forward planning would be involved, there's no reason why you couldn't assemble a section of a song made from bounced samples and then bounce all of those down to a single sample. If you're going to do this, the main thing to remember is that your first set of bounced tracks should be saved to disk at a sample rate that corresponds to a note frequency in mixing mode, rather than normal mode. Check your tracker's documentation for specific frequencies used to replay notes in mixing and normal modes.

Here's a quick way to find the replay frequency of any note in *SoundStudio*: open the sample editor window, click and hold down the mouse over the button on the right which displays the current playback frequency, then use the keyboard to select a note – its frequency in Hz will appear in the box just below.

Finally, there's one other very handy use for this bouncing thing. I bet at one time or another you've wanted to incorporate two different songs together, but have never really been able to do it without a great deal of messing about, saving, loading and scribbling down of notes. For example, you might have written a song which had a really funky drum pattern in it, made up of lots of complex and subtle programming. Transporting that into your latest composition would seem like an impossible task, but in fact all you need to do is bounce it out to disk and load it back into your other song.

Well that's it from me for this issue, except to let you know that, while we're on the subject, a mate of mine once tried to break the pogo stick bouncing world record – but had to go in for his tea after 2,387 hops. I think there's a lesson for us all in there somewhere.

I'll be back next issue when I'll be going on about noise reduction. 



If you pick a sample rate that doesn't correspond to a specific note, you'll find that the tempo of your module won't match that of the sample you've created.

NOW THE GOOD BIT

That's the hardest part out of the way. Now you're free to compile more parts for bouncing or switch your attention to the samples you've already created. One of the best things about this whole method of working is that it allows you to process each bounced part with its own individual effects.

For example, you could record all of the percussion except for the bass drum, then load the sample into *Sound Probe* and give it some extra sheen by adding some reverb and a phaser effect.

Then you can add the bass drum in

Sound Probe can be used to add effects to individually bounced parts of your song, which can then be added to your tracker.

Sound Probe's resonant filters before reassembling it all in your tracker.

Even though it sounds like you'll be doing a lot of chopping and changing between programs, remember to play to your Amiga's strengths. *SoundStudio* has an option in the Project menu to free up the internal audio channels for use by other software, so using this you can have both *SoundStudio* and a sample editor running at the same time, and you can switch between the two by simply flicking screens (using the Amiga-m keyboard shortcut). This makes it very quick and easy to export a sample from one program and load it into the other.

If you're using a sound card you can do the same by altering the output mode before you switch (or you could have one program set up to output

Christmas Giveaway

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Weird Science have given us five copies of the hottest strategy game to hit the Amiga yet – *Napalm*. Best of all, we get to give them to you! If you're interested in winning one, you'd better send a postcard to: **Weird Science • Napalm Draw • Q House • Troon Way Business Centre • Humberstone Lane • Leicester • LE4 2SE**



**AMIGA
FORMAT**

**Worth
£150!**

Tony's Tips

- Set the output volume boost to get maximum signal-to-noise ratio without distortion.
- Remember that note frequencies differ in mixing and 'normal' mode.
- Make progressively 'fuller' versions of each part to allow for easy build-ups and drops within a single sample track.
- Transform a 'static' sounding synth riff by processing a number of versions of it with differing resonant filter settings (and some reverb and delay).
- Bounce all of those unfinished mini-compositions and drum tracks you've done to disk for later use in bigger projects.

C for Yourself

Game on! Use your new-found C programming skills to develop something really useful – some entertainment software. **John Kennedy** shows you how.

First a warning: writing a game is one of the hardest programming projects you can undertake. It requires the ability to access almost every aspect of your computer system's hardware, as well as a talent for graphic design, sound recording, planning, and, of course, the ability to predict what makes for addictive game play.

If your Amiga game is a huge hit, moving it to another (lesser) platform might be easier than you think.

Sadly, I don't have any of these skills in the degree necessary to avoid having to work for a living, but I can help to provide you with the tools you'll need to let you discover if you have them for yourself.

Writing a game program in C is a brilliant way to learn the language and it also gives you some very useful and marketable experience. After all, C is a very portable language and it's very easy to keep all the machine-specific portions virtually hidden away. If your Amiga game is a huge hit, moving it to another (lesser) platform might be easier than you think.

As you might imagine, games programming is an immense discipline in itself. Trying to cram it all into a single tutorial would be asking a little too much. The good news is that Nick has agreed to let this C tutorial run on for a few extra months so we can squeeze a few more bits and pieces in.

We'll also try to get all the source code onto the coverdisks at some stage, and probably onto the Internet too.

AMIGA SCREENS

So far, all our example programs have created a display by opening a window on the desktop. This approach is all very well but it doesn't suit every application and it really doesn't suit games very well at all. Thankfully, the Amiga has a very, very (very!) flexible approach to graphic displays and, as well as defining windows, it can allow you to define entirely separate new

Contents

Chapter 5. Simple (OS legal) graphics

Chapter 6. More graphics

Chapter 7. Menus

Chapter 8. Gadgets

Chapter 9. Simple 3D graphics

Chapter 10. A game! (To be continued...)

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screen displays. Your Workbench display could be open on one "screen" (complete with window) while a different program, using a totally different screen resolution, is open on another. You can freely swap between screens using the Amiga-M and Amiga-N keyboard combinations.

The point behind opening your own screen is that you get total control

over the display properties. You get to choose the resolution, the number of colours and any special graphics modes. You can create dual playfield screens, screens which scroll and screens with thousands of colours. You can double-buffer screens to reduce flicker.

By the way, you can also draw directly to a screen without opening a window first. Alternatively, you can open a window on the screen which has no border and draw to it, as we'll be doing. The topic of Amiga screen displays could fill another book as, thanks to the Amiga's copper (display co-processor) chip, it's possible to program effects which are totally unexpected.

For our purposes we'll stick to opening a simple, low-resolution screen and using that to display our graphics. While a professional game would use the copper to add split-screen effects, re-defined colours and

resolutions, sprite hacks and so on, we'll leave that for the time being. It's more important to get a game up and running and then you can return to it to enhance the graphics.

OPEN SESAME

Let's start right away and create a program which opens a new screen. As you should be able to see, the code looks vaguely similar to the code required to open a window. After all, it's still only data structures and built-in Amiga operating system functions so we really shouldn't expect much else. Again, we'll use tag lists to open the

Listing 1

```
/*
 * Game Project
 */

#include <exec/types.h>
#include <intuition/intuition.h>
#include <intuition/intuitionbase.h>
#include <intuition/screens.h>

#include <clib/exec_protos.h>
#include <clib/dos_protos.h>
#include <clib/intuition_protos.h>

struct Library *IntuitionBase;

void main()
{
    struct Screen *myscreen;

    IntuitionBase = OpenLibrary("intuition.library", 37);
    if (IntuitionBase != NULL)
    {
        if (NULL != (myscreen = OpenScreenTags(NULL,
            SA_Width, 320,
            SA_Height, 256,
            SA_Depth, 2,
            TAG_DONE)))
        {
            Delay(50);
            CloseScreen(myscreen);
        }

        CloseLibrary((struct Library *)IntuitionBase);
    }
}
```

How can you say this is a dull picture? It's our custom screen!

screen as this greatly simplifies the coding. The great thing about using tags is that the OS will use default values if you don't specify all the settings yourself. Please consult the Amiga documentation for a list of all the available tags.

66 The default Window tags will open the window up to its largest possible dimensions on the screen... 99

Listing 1 opens a new screen, 320 pixels wide, 256 lines tall and with two bitplanes (four colours). It then pauses for a second and shuts down. This is a Custom Screen, so called because it's

Listing 2

```
void main()
{
    struct Screen *myscreen;
    struct Window *mywindow;

    IntuitionBase = OpenLibrary("intuition.library", 37);
    if (IntuitionBase != NULL)
    {
        if (NULL != (myscreen = OpenScreenTags(NULL,
            SA_Width, 320,
            SA_Height, 256,
            SA_Depth, 2,
            TAG_DONE)))
        {
            // Screen open, try for Window

            if (NULL != (mywindow = OpenWindowTags(NULL,
                WA_CustomScreen, myscreen,
                TAG_DONE)))
            {
                // Window open!

                Delay(50);
                CloseWindow(mywindow);
            }
            CloseScreen(myscreen);
        }
        CloseLibrary((struct Library *)IntuitionBase);
    }
}
```

built to our specifications. We could also have created a Public Screen, which is a screen which other applications could share by using it to open their own windows – obviously a bad idea if we want to write a game.

There are various data structures created when we open the screen and we'll often need to access them when we want to draw anything or access the screen in any way. These structures are:

■ **The ViewPort structure:** this is the structure which stores the overall information on the screen.

■ **The Bitmap structure:** this keeps track of pointers to the individual bitmaps, which are the memory areas that are storing the graphics.

■ **The ColorMap structure:**

this is where the colour table information is stored – when you use a pen to draw on the screen, the pen looks to the table to see what colour it should use.

■ **The RastPort structure:** we'll use this structure the most because it contains a handle used by all the Intuition drawing functions, as well as a pointer to the Bitmap structure.

Before we get into these drawing functions, let's re-visit one of our first programs and see how to open a window on this custom screen. Again, we'll use the tags method and we're assuming that the same code outside the main() loop is present. The key is to use the WA_CustomScreen tag

```
// Screen open, try for Window
```

```
if (NULL != (mywindow = OpenWindowTags(NULL,
    WA_CustomScreen, myscreen,
    WA_Backdrop, TRUE,
    WA_Borderless, TRUE,
    TAG_DONE)))
{
```

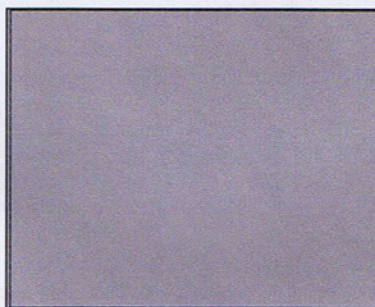
```
// Window open!
ShowTitle(myscreen, FALSE);
Delay(50);
CloseWindow(mywindow);
}
```

The only snag is that making a window into a backdrop window allows the screen's own title bar to appear. We call the ShowTitle() function to prevent this, or add an SA_ShowTitle tag to the screen's tag list.

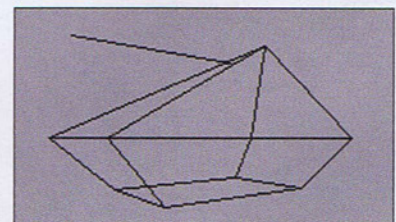
READY FOR ACTION!

Now that we have a window open on a custom screen, we can return to our 3D drawing routines. You shouldn't have too much trouble taking the code we developed last month and plonking it right into the listing.

You might also take the time to create something a little more exciting than a simple cube. Have a look at the screenshot below and I think you'll get the idea of the kind of game we're working towards...



Borders will be a thing of the past, thanks to the Euro. Or is it the WA tag list?



No prizes for guessing what our new game might be about.

MANUALS

If you're looking to buy some of the official Amiga manuals, evandel@cix.compulink.co.uk has some spare, so drop him an email if you want to get your hands on these essential works.

Christmas Giveaway

Investigate this Kart!

Epic Marketing have given us ten CD copies each of *Sixth Sense Investigations* and *Virtual Karting 2*, so if you send us a postcard to the address below, your Amiga can finally become the games machine that everyone says it is! Send your postcard to: **AF Epic Draw • Amiga Format • 29 Monmouth Street • Bath • BA1 2BW**

Under the Bonnet

Simon Goodwin explores retargetable, compatible graphics and sound.



Retargeting is the generic term for getting information out of old software and onto new hardware. It's a challenge that has bedevilled Amigans since the first graphics cards were developed and broke pre-existing software.

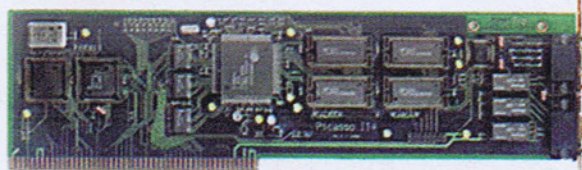
Salvation came from retargetable graphics libraries, implementing a less hardware-specific set of system calls...

HARDWARE COMPATIBILITY

The problem is that many programmers write directly to the Amiga hardware. This is less common now Amiga configurations vary in power by a factor of 1,500 times from slowest to fastest, but when Amigas were much of a muchness it was easier to get consistent results by hitting the metal – programming hardware directly – than by calling a buggy, incomplete and poorly documented operating system.

The only way to support metal-bashing programs on new systems is to include all the original hardware, implementing extras in a 'transparent' way so old programs can safely ignore them. Compared with other manufacturers, Commodore made a good job of this, from the OCS (Original Chip Set) through ECS, with twice the pixels or colours on screen, to AGA, typically offering four times the original Amiga's performance.

This was a tall order as 16-bit Amigas support 32 palette registers, each allowing 4096 colours, while AGA permits 16 million colours in 256 registers. The solution splits the AGA palette in sixteen banks, mapped into the old 32-word space. Extra control bits allowed selection of any of eight groups of colours, separated into high



Picasso 2+ is slow but it supports the most RTG schemes.

AFCD34: In the Mag/Under the Bonnet/

Contents

- Chapter 7. Multitasking – keeping it all going at once
- Chapter 8. Memory Mapping – what it's for
- Chapter 9. Memory Management – dynamic mapping
- Chapter 10. Retargeting – the test of system friendliness
- Chapter 11. Redirection – networks and file systems
- Chapter 12. Exceptions – getting along with Gurus

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and low order groups to double the number of colour bits. This bodge requires AGA programmers to switch colour sets around on the fly, but it preserves OCS register compatibility.

Problems might still occur if hardware switches aren't configured for backwards compatibility, so Motorola and Commodore engineers included interlocks. These are controlled from the Early Start Up menu, displayed if you press both mouse buttons while

program terminates, your computer regains its full specification.

NoAGA has more options. It can force low resolution sprites, map CPU vectors to address 0 for 68000 (and *Alien Breed*) compatibility, preserve real-time clock settings and restrain crunching loaders that make dangerous assumptions about memory.

Some games depend on display timings, and glitch or run at the wrong speed on a different TV system. US displays have fewer lines and update 60 rather than 50 times a second. The default can be set by a motherboard jumper or overridden by programs like *PALmode*, *NTSCmode* or *ModeSwitch* for bigger, faster, smoother-scrolling US shoot-em-ups.

Degrader has options to switch the audio filter, hide memory or drives and force PAL or NTSC screen modes, as well as ECS and cache controls. It can also patch MOVE SR instructions which otherwise cause exceptions on processors after the 68010. It takes time-consuming experimentation to make best use of *Degrader*.

SOFTWARE COMPATIBILITY

Even system routines like *audio.device* and *graphics.library* are closely tied to the Amiga hardware. Few sound cards

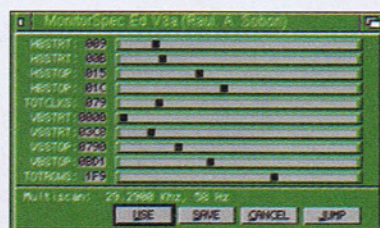
your AGA Amiga resets itself. You can switch them later if necessary.

To run old games like *Lotus 2* from floppy on A4000/'060s, disable CPU caches (vital for *Elite*) and drives other than DF0: from the Boot Options screen. For titles sold in the USA, select NTSC display and Original or Enhanced chipset for pre-AGA releases. Boot with no startup to avoid the SetPatch data cache and MMU setup.

DEGRADING

Aminet has a rich collection of programs to 'degrade' AGA systems for backwards compatibility. These include *KillAGA*, *Degrader* and *Embedder*. *KillAGA* is the simplest to use. Start programs from the Shell, prefixing the command name with *KillAGA* to run in ECS mode with processor caches disabled.

WBKillAGA is an icon-friendly Workbench equivalent. When the

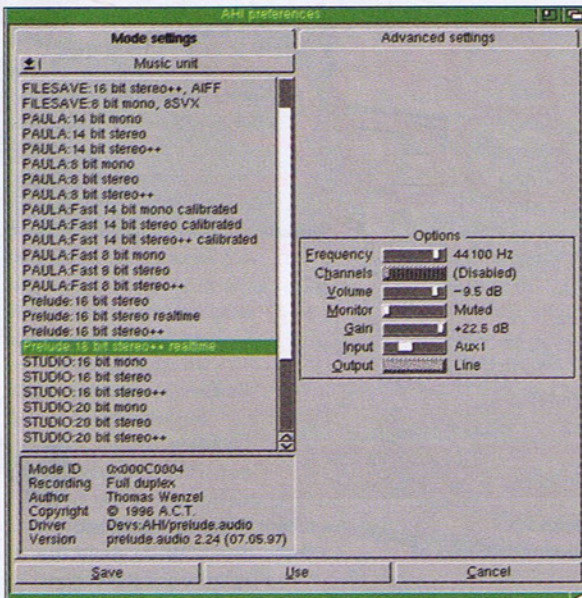


MonEd lets you roll your own AGA screenmodes.

ON THE CD

AFCD goodies: *AHI*, *BumpPpr*, *CyberGraphX* (including PPC, AGA plus PicassoIV), *Degrader*, *HiGfx*, *[WB]KillAGA*, *ModePro*, *NewWPA8*, *NoAGA*, *PatchWPA8*, *Picasso96* (1.40), *Promotor*, *RTGmaster*, *SetChipRev*, *SoundDT* and *Soupa72*.





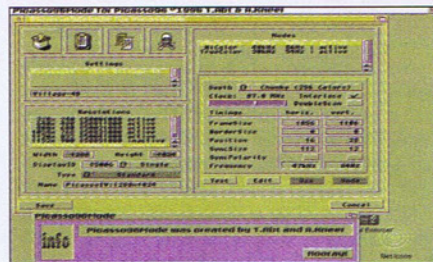
support all the sample rates offered by Paula, let alone channels linked to modulate one another. Graphics cards lack genuine Amiga features like dual playfields (scrolling overlays) and multiple sprites. Ideally, programs would be retargeted by replacing the original graphics.library with a new one, but in practice this cannot work as the hardware's just too different.

Graphics cards favour chunky pixels – one or more bytes per displayed dot – while Amigas have individually scrollable bitplanes. Byte-per-pixel modes are standardised, with 256 colours preset from a palette (usually 18 bits rather than 12 for ECS or 24 for AGA), but consistency goes out of the window for high-colour and true-colour modes which allocate arbitrary bits for red, green, and blue.

This is complicated by endian conversions, so even cards with the same ex-PC chip might assign bits differently.



Tune your audio redirection with AH! Preferences.



RTG needs configuration for each card and monitor.

NEW LOOKS

Early cards came with custom code and sank or swam on the strength of third-party support. Everything had to be written anew for each card: mode editors, screen grabbers, image viewers, animation players – the works.

A few cards acquired comprehensive support, notably VillageTronic's Picasso 2, but many flopped for want of compatible applications.

Salvation came from retargetable graphics libraries, implementing a less hardware-specific set of system calls, or an API (Application Programmer Interface) with low-level drivers for each card. The first was EGS, a brave effort but inevitably a hack, built on Workbench 2's nascent support for RTG, the database initialised from sys:devs/monitors.

MONITOR TYPES

Monitor icons are readily extensible to new modes and display hardware, so well-written titles like *Mand2000*, *Fusion* and *FinalWriter* offer a list of modes from the monitor database. *Soupa72* and *HighGfx* allow web pages made for 800x600 pixels, or even 1024 x 768, to display correctly on AGA, if you don't mind interlace flicker. Workbench 3 was

reworked for AGA, giving Commodore engineers an incentive to make it retargetable, although it wasn't until version 3.1 for the CD³²

that chunky pixels acquired Akiko hardware support. Today's RTG favourites are *CyberGraphX* and *Picasso96*, both of which share a core API with custom embellishments.

RTG CHOICES

Until recently, *Picasso96* favoured VillageTronic products and *CyberGraphX* endorsed phase 5, but now *Picasso96* supports 3D CyberVisions and *CyberGraphX* supports PicassoIV, so comparisons are practical. See *AF101* for my tips on running several RTG schemes on one system.

Picasso96 lacks screen dragging but it has the best support for up to 16 colours as it supports planar displays on ex-PC graphics chips. This suits serious applications like *Samplitude Opus* and mono DTP where extra colours just

waste bandwidth. *CyberGraphX* only uses chunky pixels, even for two-colour modes. Uniquely, *CyberGraphX* also supports retargeting to AGA, although it's painfully slow, even on PPCs.

This is 'currently not technically possible' for *Picasso96*, according to author Tobias Abt, and Laszlo Torok's plan to go ahead and do it anyway has apparently foundered.

RTGMMASTER

RTGmaster offers a neat approach for new software: an API that retargets to *Picasso96*, *CyberGraphX*, ECS, EGS and AGA. It's used by *Genetic Species*, *AmigaDoom* and *Napalm* and promises to allow games programmers to write for all Amiga users, without limiting themselves to the lowest common denominator machines.

AUDIO RETARGETING

As with graphics, audio retargeting is tricky because the standard Amiga hardware is very versatile. It interacts with the video mode so a multisync Workbench will allow sample rates up to 56KHz, but it upsets many programs – if you get choppy or repeated samples, switch to PAL or NTSC first.

The Freeware solution, *AH!*, works hard to convert sample rates and generate extra channels for audio converters derived from HiFi, Mac and PC systems. Supporters include *Genetic Species*, *Nemac IV*, *PCx*, *ShapeShifter* and *MPEGa*, all of which give it plenty of competition for processor power.

AH! needs lots of CPU time and careful setting up for Amiga and Zorro hardware as it's not automatic. For best results, match the hardware and software sample rates, or use integer ratios, and re-read my feature in *AF102*.

Aminet *ProTracker* and *Sound DataTypes* retarget to *AH!*. Tocatta emulation is also possible and *AH!* can generate 14-bit stereo through Paula, but sound retargeting still lags behind RTG. The answer is *ARTAS*, a major *AH!* extension scheduled for Workbench 3.5, which supports streams and filters. I'm vetting the specifications and will write more on this as soon as it's finalised.

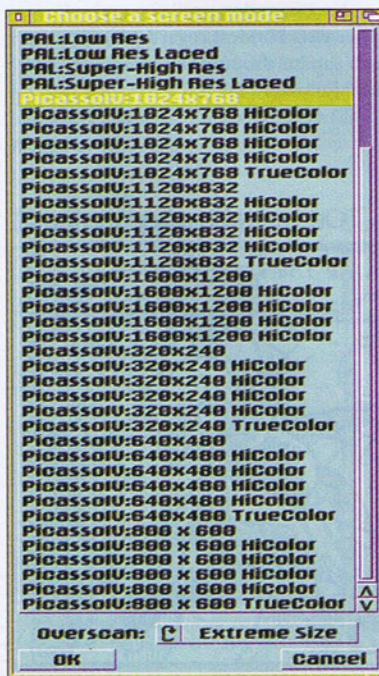
NEXT MONTH

So much for graphics and sound, but what about other peripherals? Files, printers, controllers and pointing devices all benefit from retargeting, so they're going to be the focus of *Under the Bonnet* next month, in the penultimate tutorial in this series.

WEB CONTACTS

AH!	http://www.lysator.liu.se/~lcs/ah!.html
ARTAS	http://artas.amiga-software.com
CyberGraphX	http://www.vgr.com/cybergfx
Picasso96	http://Picasso96.home.pages.de
RTGmaster	http://gene.wins.uva.nl/~tfaasen/dyad_roth/rtgmaster.html

ShapeShifter is a natural candidate for *Picasso96* retargeting.





MailBag

Send your letters to: **Letters To The Editor**
• Amiga Format • 30 Monmouth Street • Bath •
Somerset • BA1 2BW or email: amformat@futurenet.co.uk
 – putting 'Mailbag' in the subject line.

PLEAS AND DEMANDS

It's a sad time for Amiga businesses. The alternative magazine should have dropped disk versions and forced everyone to upgrade to CD. OK, it would have wiped away sales in the short term but we would have found out who the real enthusiasts were, instead of vanilla Amiga gamers, who never use their machines constructively, never pay Shareware fees, never buy anything, pirate games and expect everything for nothing.

These people don't care about what Workbench/AmigaDos/OS is or what it is capable of, and you know who you are. You're holding the rest of us back.

Amiga International are bringing new machines out in about two years, which is great, but they've overlooked one serious issue. I hope I'm wrong but the current Amiga market hasn't got two year's life left, with magazine closures and the like.

With all the CU Amiga-only readers having no choice but to swell your ranks (don't judge me, I buy them both every month and I'm not taking sides), this should be enough encouragement to your employers that to continue until then is a viable proposition, and I demand as a matter of urgency that you

As we keep stressing, the future of Amiga Format is as secure as that of any other computer magazine around.



X SPARE US

- Your ideas for Workbench 3.5
- Hate-mail regarding former members of the CU Amiga team
- Death threats
- Whinges from sysops
- Technical questions (which should go to Workbench)
- Utter drivell

SEND US ✓

- Your ideas for Workbench 4.0
- Constructive criticism about the magazine and its sections.
- Nice presents
- Your BBS contact details
- Letters about the Amiga market, the mag or your experiences.
- Whatever the opposite of that is

publish a feature outlining the key differences why you will survive the next two years while others haven't managed to, and what policies your employers operate under.

I really hope we make it through, for all the people who don't wish to see a total market dominant eclipse of Wintel boxes. If you went into a car showroom you'd be disappointed if you could only buy one sort of car, or if you were forced to eat chips every day for the rest of your life. It's the same for all computer shops that have total ignorance of the existence or importance of any other platform.

I see the current range of PCs are now 433MHz pushing on 500MHz, but this will not continue. You see, the Intel blockheads are now having to overcome one big barrier – that barrier being the law of physics. You cannot

infinitely increase speed and packing density that much further now. It generates too much heat and there's also the question of infinitesimal size.

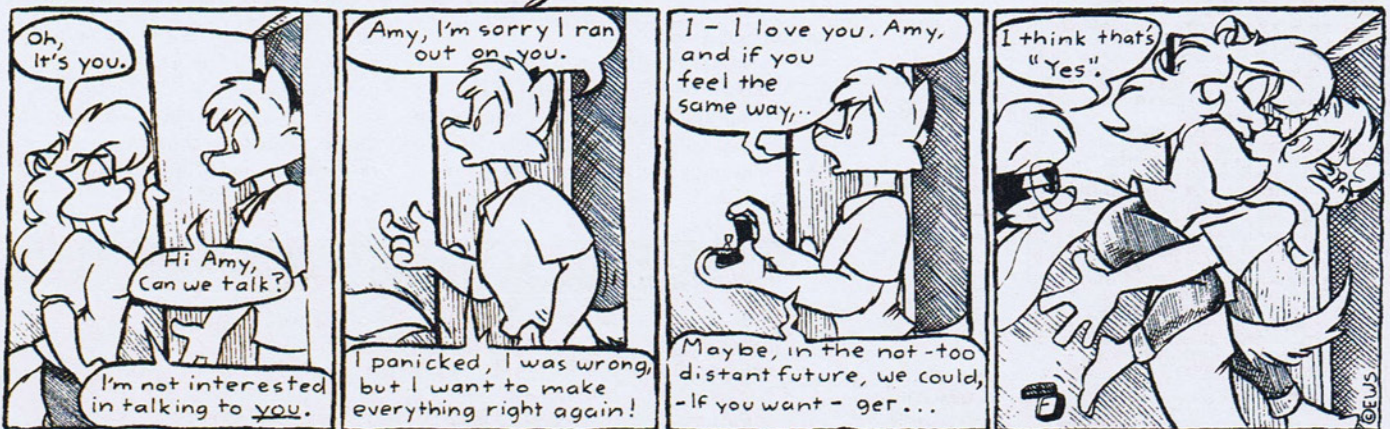
They are already approaching the end of the road with the Pentium architecture, which leaves A.I. to step in on the wake of the millennium bug, where it is estimated that if people work from now until New Year's Eve 1999, 80% of the machines and equipment around the world will still fail. I hope we're still around to witness it.

Do people change technology or does technology change people? In the case of the Amiga I think the latter is the case. We are the people with true creativity, passion and individuality. The PC is just a tool.

No surrender, until the end or otherwise. Fondest regards to everyone with similar thoughts and feelings – you have helped to keep the dream alive.

K.C. Harrison
Bridlington

Sabrina Online by Eric W. Schwartz ©1998



Check out Sabrina Online at <http://www.comicnet/people/eric/>

Well, I remember when Commodore first went bust there was a lot of speculation about whether the market would be able to survive long enough for whoever picked up the pieces to produce a new machine. In the event, as you know, a succession of companies have picked up the remains from their predecessors, and all have singularly failed to do anything of any significance whatsoever – and yet we're all still here.

Of course things are different now, and the market has obviously contracted somewhat, but this market is also particularly resilient and I can't see why it can't last for another few years, especially if we have interim developments and releases, like a new version of Workbench for PPC machines.

We went on at great length last issue about why we aren't likely to quickly follow CU Amiga into the publishing void of "suspension", and I trust that many of you will have read and understood what we were trying to say. The future of computing is uncertain, as much for PC users as for anyone else.

ANGEL DELIGHT

Just thought I'd send you a quick e-note to inform you how helpful the Amiga community is. I needed *Installer v43.3* and had failed to download it from Aminet. I couldn't find it with *AmFTP* and *Voyager* downloaded a corrupt file that I couldn't do anything with.

In desperation I emailed four Amiga Angels with a request for assistance, and within 24 hours I'd received 12 emails with a copy of *Installer-43_3.lha* bolted to them.

I also received advice on browsers, ISPs and other software. I was surprised with the response I got and it's speed.

Tony Stanney

I'm glad they could help, Tony. The latest version of installer is also on our cover CD, as are many other, newer versions of files.

BETTER LATE THAN NEVER

I seem to remember once, a long time ago, you were running a kind of "Spot-the-Amiga" competition. Well, I would like to submit a very late entry. The Program in question was the BBC's *Blue Peter Night*, and while they were discussing the script they had an A600 running on the desk. I now claim my AFSweatshirt (I believe that was the prize).

Robert Johnston
via email

A very old Amiga Format sweatshirt is on its way to you...

A WALK IN THE COUNTRY

I run a BBS bulletin board system for the Amiga and I'm sick and tired of everything being PC these days. Most computers come with software connecting people to the Internet, but very little is ever mentioned about BBSes.

Compare the Internet to a BBS. The Internet is like a maze of motorways, like getting stuck on the M25. If you don't know where you're looking then it's easy to get lost. A BBS is like strolling down a country lane.

Most BBSes advertise what they offer and there's a sysop at the other end if a user gets stuck. They can go into chat mode with the sysop and the sysop can help them find what they want there and then. It's more of a happy family environment. A BBS may be a long distance call compared to the net, but it could still work out cheaper spending 10 minutes on a long distance call than an hour on a local call trying

to find what you want. Would be possible to do a feature in your magazine on BBSes, especially with Christmas coming up and people getting new computers?

The BBS scene is dying and it should be revived, along with FIDONET. If there's any chance of a feature with a list of BBSes then can you please enter my details? They are:

Bill's BBS, ☎ 01229 434393 or 0870 7878615, online 24 hours a day. FIDONET mail network available. Free email to all FIDONET points, monthly prize competition, loads of files and online games for everyone. Validation normally within an hour or two.

Perhaps it would be easier to check out my web page and follow the links for the BBS: <http://cumbria.cjb.net>.

I'm trying to keep the BBS scene alive and really could do with your help. I buy your magazine each month and have done for some time but I never see a mention of BBSes and FIDONET. We really do need to do something to keep the Amiga Scene, BBSes and FIDONET alive. Many many thanks.

Bill Clark

Email bill.clark@ukonline.co.uk
billsbbs@cornerpub.com or
karaoke@bonbon.net

SUPERHIGHWAY

I have a few words that your readers may be interested to hear. Firstly, I started up an Amiga-only mailing list in September 1998 and it has been a great success. There are currently 145 members on board, with many top names including: Gary Peake of Team Amiga; Tim Corringham of RamJam Consultants; Oliver Kastl of IDEfix fame; Hans Joerg, one of the authors of *ADESCENT*; the editor of *Amiga Survivor*; the editor of *Amiga Information Online* (me), which the list is in association with; plus many other people who can help or are happy to chat about anything from games, utilities, the Internet and everything on the Amiga. If you want to join, just visit <http://www.onelist.com/subscribe.cgi/just-amiga> and fill in the required details.

The next thing I have to tell your readers is that as I run the AIO magazine, I'm trying to buy a registered web domain for the magazine to improve readership. As it is around £188 to

purchase this, I'm asking any readers if they can help out by donating £5 UK or 10 US\$. If you donate, you're entered into a competition to win:

PROFESSIONAL FILE SYSTEM 2 (worth £28 UK/US\$57, with free *Kang Fu* game).
AGA EXPERIENCE 3 CD (worth £14 UK/US\$32).
REGISTERED COPY OF CHEATZONE V1.4.3 (Worth £5 UK/US\$12).
TECHNODATABASE98 CD (worth £14 UK/US\$32)
UROPA2 CD (worth £25 UK/US\$52).
TOTAL PRIZE WORTH £86 UK/US\$180
(p&p paid by AIO).

If you can donate any money, please make cheques payable to C. Brown and send them to: Chris Seward, 10 Scafell Close, Eastham, Wirral, Merseyside, L62 9EU, England. Kind Regards! Chris Seward, Editor of *Amiga Information Online*. Email amiga@thefree.net

Continued overleaf ➔

Sabrina Online by Eric W. Schwartz ©1998



Check out Sabrina Online at <http://www.coconetpeople.com/>

← I quite agree that the BBS scene deserves some attention. I've written replies to letters like yours several times, asking BBS sysops to send us their details so we can compile a list of BBS sites around the country.

Quite frankly, the response has been underwhelming, so once again I throw it back to sysops everywhere – send us your details and we'll publish them.

MAKING TRACKS

I have an Amiga 500 and I'm making music using the *Protracker* program. In my Amiga handbook it says that a MIDI interface connection is available which will enable me to connect my synthesiser to the Amiga through the RS232 port. I'm having trouble finding the cable and wondered if you have one or could advise me where I might be able to get one. Also, is it possible for me to get a copy of the *Protracker* program in Spanish as I sometimes struggle with the English?

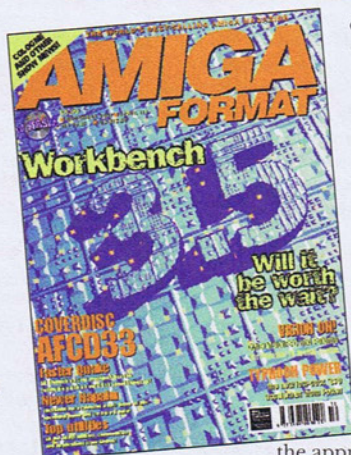
Miguel Hernandez
Blackwater

You actually need a MIDI interface, not just a cable, which you can get from HiSoft (☎ 0500 223660). You might think about getting some more up to date software too – *Protracker* is very old and there are many Shareware alternatives.

THE NEXT BIG THING

In the November issue of *Amiga Format's* MailBag section, you said to send in ideas for Workbench 3.5. Well, honestly, it will probably be too late in influence Workbench 3.5 because it is expected out early next year, but maybe the things I suggest here will influence Workbench 3.6 or 5.0.

The first suggestion I have is about the Amiga icons or .info files. First, they should probably be some type of an IFF file with full palletes for every frame they display. The IFF format is technically able to save multiple types of data into one file. Instead of simply two pictures, there should be several looping animations saved into the file, one for non-selected,



What would you like to see included in Workbench 3.5?

one for selected, and one for when it is executed. The selected and executed animations could also include a sound set in a ToolType. I also noticed that many files downloaded from the Aminet include a number of alternative icon sets from the author or a third party. For instance, your *Doom* game could give a four-colour MWB, a small *NewIcon* or a large *Newicon*.

You have to rename the .info file you want to use to the appropriate name and then delete or store the others. This could be fixed by making it so the new icon format could hold an unlimited number of

P.S.

Can I add a footnote to your review of the CyberStorm MK3 (AF116, November)? Simon Goodwin moans that he doesn't like this new-fangled Ultra-SCSI nonsense and is terribly upset that he can't connect his ex-RAID drive to it.

Well, there are little boards that you can plug into SCSI SCA 80-pin drives which give you 68-pin Ultra-SCSI (and SCSI-2 if you prefer), a normal power connector, ID jumpers and even access LED pins. In a desktop 4000 these have the added advantage of moving the hard disk power connection to the left hand side, out of the way of the CD drive.

My local PC dealer sells these boards for 21 quid. You can also get cables and terminators for less than half the 90 quid stated in the review. This can turn out to be a fairly economical way to set up your system, as there are quite a few medium-sized (4Gb and 9Gb) ex-RAID drives around at the moment. I've installed a 4.3Gb Quantum Atlas II for less than 200 quid. RawSpeed says it runs at about 9.2Mb/sec (way off the scale) on the same settings as Simon Goodwin used.

Mr. Goodwin also marks the card down for being expensive to add RAM to. How can this be when until last week (the second week of October) you could buy 32Mb 60ns SIMMs for 25 quid?

I would strongly urge anyone who has any vacant SIMM sockets in their Amiga to fill them up now, as SIMM prices

look like they're going to rise rapidly very soon.

Duncan Gibb, Edinburgh

Thanks for your comments. The prices given in the review for getting terminators and adaptors were based on our experiences of getting these items from mainstream suppliers. Of course, it is possible to get them cheaper if you shop around, but not everybody has the luxury of living in a city with more than one electronics shop.

Thanks for your info about the adaptor boards too. I think the point about the RAM being expensive was that 60ns RAM is generally more expensive than 80ns RAM, but you're right that RAM is pretty cheap at the moment.



Simon Goodwin liked the CyberStorm 3 enough to give it an AF gold – Duncan Gibb likes it even more...

icon sets, not just one. Then by reading an environmental variable set in the startup-sequence or a prefs program, the appropriate icon would be chosen for display. That way only one .info file need be included with a program, and depending on how you set up your machine, a different icon could show up on the screen.

Some people might prefer simple, single-frame, low-colour icons, others like mid-sized animation and others like huge multi-coloured, sound-laden eye candy. Of course, a ToolType could be set to override the prefs setting when a user wants to choose a particular icon in a set. This way you could even edit an icon to make personal changes, but the original icon would still be intact.

I realise this method would probably use lots of memory and CPU power, but OS5.0 will probably only run on Amiga's with gobs of memory and incredible amounts of horsepower compared to today's standards.

Another suggestion for the new OS would be a standardised method of emulating CPUs. The new Amiga line will obviously have 680x0 emulation built into the software and the specs for the mystery chip said it had hardware based on 80x86 emulation.

This got me to thinking that the emulation market, which is where PPC support seems to be strongest today, will probably also quickly grow on the new Amiga. We therefore need to make the new Amiga OS "emulation friendly". Right now, when a person writes or

Christmas Giveaway!

3D Explosion!

Weird Science have given us five copies of the superb *LightROM 6* to give to you lot as Christmas presents. If you fancy winning one, send a postcard to: **Weird Science • LightROM Draw • Q House • Troon Way Business Centre • Humberstone Lane • Leicester • LE4 2SE**

ports an emulator to the Amiga, they usually end up writing emulation code for the CPU and support chips they need over again. Every time someone wants Spectrum emulation they write the Z80 emulation over again, duplicating someone else's efforts from the past.

What if you wrote some system similar to .library files for the various chips in existence? 80486.library, a 6502.library, a Z80.library, Paula.library, etc?

I know there is already a SID.library for C64 emulators to use so they don't have to re-write the sound emulation every time a new C64 emulator is made. This would make emulation programs faster to write and the libraries could be highly optimised to the Amiga CPU they were running on (680x0, PPC or MMC, MMC II), instead of the slow, generic, C-coded monsters currently used in MAME, Stella, MESS and other emulators.

It also makes upgrading emulators that have no or little support from the original author possible, because if someone writes a more optimised CPU emulation, all programs using that CPU would benefit.

On a final note, with built in 80x86 emulation in hardware and powerful graphics, the new Amiga would probably be an ideal system for a PC-Task or PCx-like program to run high speed PC emulation. It would be crazy for Amiga Inc. not to include a simple software-based PC emulator in the OS to run MS-DOS, Windows, BeOS, Linux, etc. in a window on the Workbench. This is especially true considering that many big market PC manufacturers who may want to sell the new Amiga have contracts with Microsoft that say all new computers they sell must include Windows.

Having a PC emulator with Windows on it would fulfil this contract, and then we could see Amiga clones being sold by Dell, Compaq, etc. This would make the new Amiga more marketable to sheep-like companies and consumers who won't consider any computer that doesn't run Windows. Once they have an Amiga in their office we can wean them from their Windows addiction with the Amiga's capabilities.

Mathew R. Ignash Warren
Michigan, USA

mignash@rust.net
<http://www.rust.net/~mignash/>

Thanks for your suggestions. I can assure you that this magazine is read by the key decision makers at Amiga Inc., so I'm sure they are taking note. Personally, I don't like

GOING WELL

I'm writing to say thanks (again). I've just started my user group in Portsmouth and the response from my advert in your mag has been enormous. I have had many calls from all over the place, ranging from a 63-year-old to a 14-year-old, from as far as Bristol to the Isle of Wight. The group would not have made it if not for your mag.

The group will have its own Internet site from October. I believe this will be the first Amiga user group in the south with its own Internet site (sorry if this is incorrect). It will be at <http://www.poweramiga.demon.co.uk> hopefully. Keep up the great work and I hope that the mag will keep going from strength to strength.

Richard Blair
Southsea

I'm glad everything has been going well. Keep in touch and let us know when your website is active.

the idea of having huge, all encompassing icon files, filled with all sorts of different formats (and by the way, micons - moving icons - are quite an old idea) and probably ending up larger than the applications they represent. We may inherit a future of GHz processors and Terrabyte RAM, but what's the point if all the power is used up deciding which icon to draw? That's exactly where Microsoft have gone wrong. If they spent a bit of time sorting out their whole OS and optimising it, instead of adding on layer after layer of junk, it might actually work at a reasonable speed.

Your idea about processor emulators being coded as libraries is a very good one. In fact, there isn't any reason why you couldn't start now by writing a Z80 library for the 68K. Then when you'd written the 68K library for the "megachip", you would have Z80 emulation already.

SPEAK UP

As a recent convert to the Amiga after four years using the Atari STe, I'm very keen to make sure in my own small way that this platform doesn't suffer from the same breath of complacency.

On a visit to my local Asda store I noticed the November issue of AF was on the shelf. I returned the next day to purchase one, only to find that it had been removed from the shelf and wasn't going back on it. After a heated complaint I was supplied with a copy.

The other copies are now back on the shelf with a promise to look into the matter. I find it quite alarming that this should happen only one week after the folding of CU Amiga.

The shelf space for magazines in this store is quite large, with PC titles and other gaming platforms going well into double figures on display, so please urge your readers to complain if they get similar treatment. We have a voice and need to be heard.

Victor Herriman, Chesterton

Well, in view of your sterling service, we'll overlook your shady past. As you probably know, shopkeepers up and down the land don't see AF as the excellent and informative lifeline to the Amiga community that it has become, but merely as another product, and they treat it as such. If it goes off the shelf and nobody bothers to ask for it, it will stay off and won't be re-ordered.

Virtually every newsagent can have a copy of AF to sell. If your local newsagent doesn't stock it, it's because he doesn't think he'll be able to sell it, a misapprehension that will persist unless somebody asks for it. If they claim they can't get hold of it, give them Future Publishing's phone number (01225 442244) and tell them to ask for the circulation department.

GERMANY CALLING

I recently purchased an Amiga 2000 with various disks. The only problem is that I don't have an operations manual and I was wondering if you had any idea where I could purchase one. I'd also like to enquire about the possibility of using my computer as a PC and also what I would require so that I could use CDs.

Another question I have is whether it is at all possible to receive your magazine over here in Germany as a civilian? For six years I had an Amiga 500 and was then in the army and could purchase your magazine through the army newsagents.

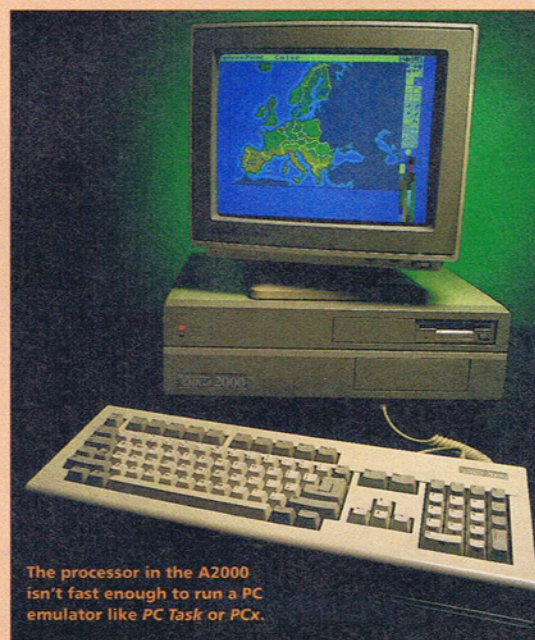
Since 1994 I have been a civilian working in Germany and I'm not able to enter army camps. My mother sent me your issue for October so I could find a few addresses I could write to and enquire.

Kevin Grove
Gelldorf, Germany

Your best bet for an A2000 manual is actually Amiga International themselves (0531 31089 0) who are based in Braunschweig. When you say you want to "use it as a PC", do you mean you want to run Windows, etc? In that case you'll need an emulator such as PC Task or PCx, but you'll also need a much faster processor than the 68000 in the A2000.

To use a CD-ROM, all you need to do is buy a SCSI CD-ROM drive and attach it to your SCSI interface. The software to drive it

should come with any drive you buy from an Amiga dealer, or there are various Shareware programs around, such as AmiCDFS. Amiga Format isn't distributed through newsagents in Germany because of difficulty with censorship laws in that territory, but you can still subscribe (see page 48).



The processor in the A2000 isn't fast enough to run a PC emulator like PC Task or PCx.

Reader Ads

Buy, sell and exchange your Amiga hardware and software in the best free ads pages around.

FOR SALE

Theme Park £10, World Class Rugby £2, Soccer Team Manager £2, Nighthawk F-117A Stealth Fighter £5, Pirates! £5, Indiana Jones and the last Crusade £5, Red Heat £2, Football Director 2 £1, WWF Wrestlemania £5. Plus £1 each for p&p (in UK). If interested, email Shiels@hotmail.com

A4000/040, 10Mb RAM, 120Mb hard disk, 1942 monitor, keyboard, mouse, various software. Offers. \Rightarrow Greg 01480 891845.

A4000 CyberStorm 2 68040/40, 50Mb RAM, 400Mb hard disk, Emplant Deluxe, Cybervision 64/3D and scandoubler, Mac OS and ROM, 14" monitor, Oktagon SCSI, 4x SCSI CD-ROM, video digitiser, sampler, software. \Rightarrow Jim 01527 526840, want £1,500 ono.

A1200, 10Mb RAM, 68030/40MHz, 340Mb HD, 4x CD-ROM, 100W powered speakers. External floppy drive. Loads of software, including Wordworth and Worms DC. Boxed with manuals, £150. \Rightarrow 01738 625022 (Mon-Fri, 4pm-8pm). Buyer must collect (Perth) or pay p&p.

Amiga Power Tower, A1200 motherboard, Zorro III busboard, HD, internal SCSI-II interface, external connector, software. Pristine condition, unused. Cost me over £750, sell for £670 ono. \Rightarrow 01494 562387 (High Wycombe).

A4000 EC/030 upgraded GVP 4000 DT-060 12Mb RAM, 1Gb HD and 250Mb HD, 4x CD-ROM, Opalvision 1942 monitor, all boxed. Hand b/w scanner, Final Writer, Scala, copious software, magazines, CDs. Bring large car - must go. \Rightarrow 01234 741546.

Wordworth 7 with licence (floppies), £25 plus postage. Microvitec 1438 multisync monitor (minor fault), £35 plus postage. Swap Lightwave 3.5 for Cinema 4D 4 or W.H.Y.? \Rightarrow 01405 860798.

A500+, GVP 530 80Mb HD, accelerator, 6Mb, 40MHz, colour printer, monitor, metal workstation, two joysticks, mouse and mat, lots of games, programs and manuals. £200. \Rightarrow 0181 6513662 (Croydon).

HP Laserjet II printer. New cartridge fitted, cables and two font cartridges. Excellent condition, £125. \Rightarrow 0181 4442515.

Amiga 1200, 18Mb Blizzard 1230 50MHz with FPU, 4x CD-ROM SCSI interface, external disk drive, 250Mb hard drive, Philips 8833II monitor, loads of games and serious software, £400. \Rightarrow Alan, 01747 823963.

Overdrive CD-ROM, £30. Hawk accelerator board, £20. ABC dot matrix colour printer, £35. All boxed. 1438S colour monitor, £75. \Rightarrow 01433 621731.

Quake Amiga, unopened, £15. 200W PSU converted PC supply for A500/600/1200 and peripherals (CD/HDD etc), £30. CD32 (base only) spare/repairs, £10. Email lraiton@yahoo.com or \Rightarrow 01482 343642/320461 after 6pm.

Amiga games, £5-£15 plus 4Mb RAM and FPU expansion card (33MHz), £40. \Rightarrow 01458 253957 (ask for Tim).

CD32 plus FMV £120, Philips CM8833 monitor £60, Amiga 1081 monitor £60. Above items buyer collects or pays p&p. Amos Pro, never used, still sealed, £15. Many games. \Rightarrow 01502 732248.

BUY AND SELL HARDWARE & SOFTWARE... FOR FREE

The editor reserves the right to refuse or amend ads. We accept no responsibility for typographical errors or losses arising from the use of this service. Trade ads, including PD advertising will not be accepted.

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Please tick to show required heading

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Bath • BA1 2BW

Unfortunately we cannot guarantee insertion in a particular issue. I have read and understood the conditions for the inclusion of my ad

Signature:

Use one space for each word. Only the words in this section will be printed

Amiga 1200 and A500, 8Mb RAM, 120Mb HD, Viper Mk II accelerator, Prograb 24 frame grabber, CD-ROM, second drive, Scala 400, loads of software, games, books, videos, CDs, etc. Panasonic printer, Videotec 3010 enhancer. Value £1,500, sensible offers considered. ☎ 01256 862455.

Canon Bubblejet printer, BJ105X. New ink cartridge recently fitted, £40. ☎ 01843 832612.

A600 with 1Mb, £60. CD32 with Network 2, cable and three CDs, £80. A1500 WB3.1, 8Mb RAM, multi port card, SCSI controller, 80Mb HD, 2x CD-ROM, £150 ono. ☎ 07775 610480 (daytime) and (01303 241546) evening.

A1200, 68030 40MHz, 32Mb RAM, 120Mb HD, 20x CD-ROM in desktop, 230W PSU, CM8833 mk II colour monitor, printer, joysticks, CD-ROMs and games. £500 ono or swap for Audiolab 8000 amplifier. ☎ 01529 413118.

Amiga Shopper mags. Full set, including all cover and subs disks. VGC. Offers. ☎ 0161 9412369.

Blizzard 1220/4 4Mb, 28MHz accelerator (AF gold rating). Sale because of upgrade, £50 in original packaging with manual. ☎ George 01856 876717/875700.

A500 with colour monitor, some software, £40 ono. Oxford area, buyer collects. ☎ Mike 01865 730382 (after 6pm).

WANTED

40Mhz 68040 CyberStorm, Warp Engine or similar processor daughterboard for A4000. Email sharvey@cybertron.u-net.com or write to Sven Harvey, c/o 108 Norman Road, Smethwick, B67 5PU.

Pirates! Must include original colour map. Top prices paid for one in good condition. No pirates (ho ho!). Contact Amiga Format and ask for Nick.

Digita Organiser v2, complete with instructions. Fair price paid. ☎ 01257 234013 (evenings, ask for Mike).

Wanted urgently: AmiToRTF or similar to transfer docs from Protext to MS Word 6. Will collect if local to Colchester or can pay postage. ☎ 01206 212864 (ask for Patrick).

Wizz kid for Amiga 1200, must have the bonus game, Wizzeroids, at the end. ☎ Mary 0181 2991478.

Old AF and CU CD-ROMs wanted, pre September '98. Write to me with details. Nik Williams, 85 Croyland Road, Peterborough, England, PE4 6HJ.

Desperately need Vidi Amiga digitiser. ☎ 0171 6225576.

Premier Manager 2. My disk three has died. Can anyone help? ☎ Peter 0181 4669405.

RPGs, adventure games to buy/swap. Also, manual for Abandoned Places needed. Your list for mine. Please write to Sarah Moon, 71 Ennerdale Road, Cleator Moor, Cumbria, CA25 5LJ.

Amiga items wanted: 1050 RAM for A1000, also 1010 and 1020 floppy drives. Will buy or swap. ☎ 01202 256927.

Urgently needed: MusicX 2, boxed with manual, £15. Yamaha CS1X Editor, £5. ☎ David 071 85292 (Ireland).

Air Link project from CU Amiga. Either built or all the parts must be working. Will pay £20 for built, £12 for parts. ☎ 0161 7247348 (ask for Mark).

Moonstone, the game. Must be fully working. Will pay. Email oyvindha@colargol.tihlde.hist.no.

A4 flatbed scanner for A1200, complete with manual, leads and software. ☎ 01222 712382, evenings only.

Help! Desperately seeking Amiga Format cover CD number one! Have all the rest and it's driving me mad. Will pay post, packing, small fortune, whatever! Magazine not necessary. ☎ 01332 700482.

Battle Squadron, Murder, F18 Interceptor, Battlechess, Supercars, Barbarian, Star Wars, Battlechess II, Player Manager. ☎ Lee 0113 2713532 after 6pm.

I am looking for Universe by Core Design. Can anyone help? If so, call Brent after 6pm, ta. ☎ 01902 340097.

Full instructions for A1200 Blizzard SCSI module. Photocopy will suffice. ☎ 01204 305855 (Bolton, Lancs).

Epson GT5000 scanner with software and cable for A1200. Reasonable price paid. Also, Iomega Zip drive plus cartridges for Amiga Squirrel interface. ☎ Bill 01773 828679.

PERSONAL

Also see the AmigaAngels document on our CD.

Amiga contacts wanted. 100% reply. Send disks list to Craig, 30 Seabrook Road, Sheffield, S22 R2. Fast reply.

Contacts wanted for swapping games and ideas. Contact Mr. G. Emery, 3 Scott Avenue, St Budeaux, Plymouth, Devon, PL5 1HQ. Must be reliable. I own an A1200.

Amiga services. We offer help, advice and other useful services. For more information, send a SAE to Amiga Services, 6 Station Street, Wakefield, West Yorks, WF1 5AF.

Desperately seeking 'No Click' CD games to swap, sell or borrow from reliable Amiga fans. No time wasters please. ☎ 0191 5108230 (7pm-midnight).

Is there a programme or game you need, or need help with? Give me a call and we can help each other. Hoping to hear from you soon. ☎ 01752 268386 or 0958 910296 (mobile).

Swap Foundation CD game for similar priced CD game. ☎ 01274 616884 (Bradford, West Yorkshire).

USER GROUPS

User group ads will be printed for three issues.

Medway and Maidstone Amiga Collective. Monthly meeting, monthly news guide, advice at all levels, beginners welcomed. ☎ David 0961 809466.

South Wales? Anyone in Llanelli/Carmarthen area interested in an Amiga user group or club, or just a chat and advice? ☎ Owen 01269 861438 (Llanelli area).

United Amiga User Group, est. 1986. Non profit making. Offers: magazine, book, free PD, digitising, scanning, helplines, technical support for A500, A500+, A600, A1200. Free membership. ☎ 01788 817473, 7pm-9pm, for details.

Italian Amiga CD-ROM user group. Write for news: Casella, Postale 7009, 47100, Forlì 7, Italia, or email amigacdc@lycosmail.com.

Norwich Amiga Users Group meets alternate Tuesdays at the Belvedere Community Centre, off Dereham Road, Norwich, at 7pm. All welcome. ☎ 01604 867663 for details.

Calling Somerset's Amiga owners! All the user groups are out of our realm so if you would like to contact other Amiga people around Somerset, ☎ Leo Hancock 01963 350397.

Are you interested in helping other Amiga users? Are you stuck on a particular aspect of the Amiga (hardware/software)? If so, join the free Amiga helpline. ☎ Terry 01709 814296.

New Northern Dales user group. Would anyone interested in joining/participating in a new group in the Catterick/Rickmond area contact Ian Aisbitt. Email iana@zetnet.co.uk or ☎ 01677 4505646 (between 9-5, Monday to Friday).

Are there any Amiga users in the east Manchester area – Ashton, Hyde, Stockport – who want to start a user group? Is there anyone out there? ☎ Paul 0161 3686433.

New user group starting up for programmers. If you're interested in Basic, Amos, C or Java, ☎ Ross 01705 645311 (afternoons or evenings).

Online? Then visit my revamped site at <http://www.shepherd.home.ml.org> for loads of Amiga news, downloads, charts and Star Trek and football info. We need your input.

Kickstart, Surrey Amiga user group. Meets last Monday of month in Ottershaw, Surrey. All Amiga users welcome for fun, help and general Amiga usage, tutorials and Amiga surgery. ☎ Rob Gilbert 01932 562354 or email gilbia@arrakis.u-net.com.

Anyone interested in opening a club in the Plymouth and Sounding area to swap and chat in, helping each other? ☎ 01752 268386 or 0958 910296.

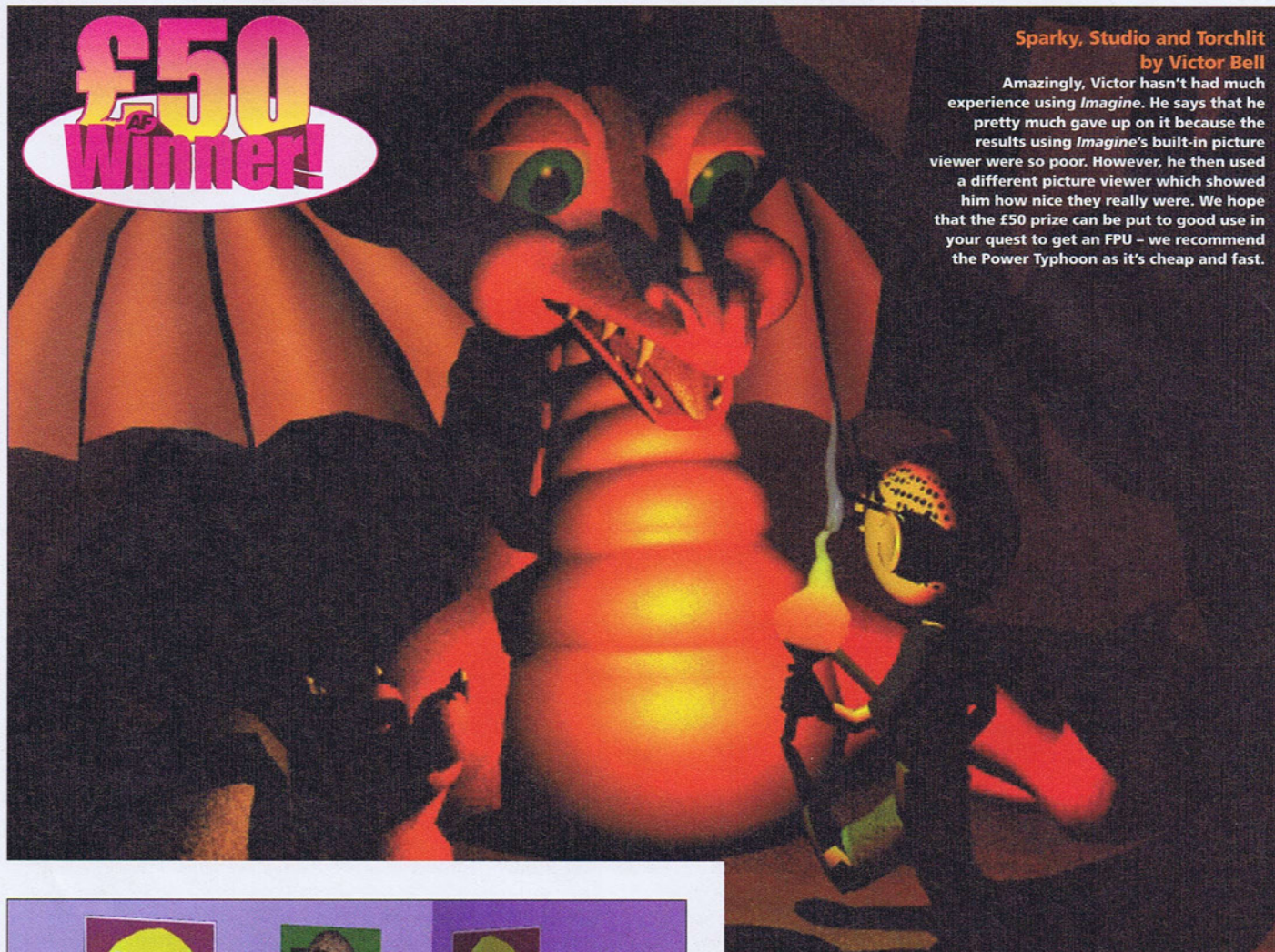
Amiga Design Workshop, UK. Anyone welcome. Monthly newsletter, run by readers, database, stored lists of animations, art, music, etc, which are sent to software houses/websites, competitions, resource panel which offers support and equipment. ☎ 01892 870483 (outside office hours) or write to: 2 Morden Cottages, Chiddingstone, Causeway, Tonbridge, TN11 8JB.

The Gallery



AFCD34:-ReaderStuff-/-Gallery-

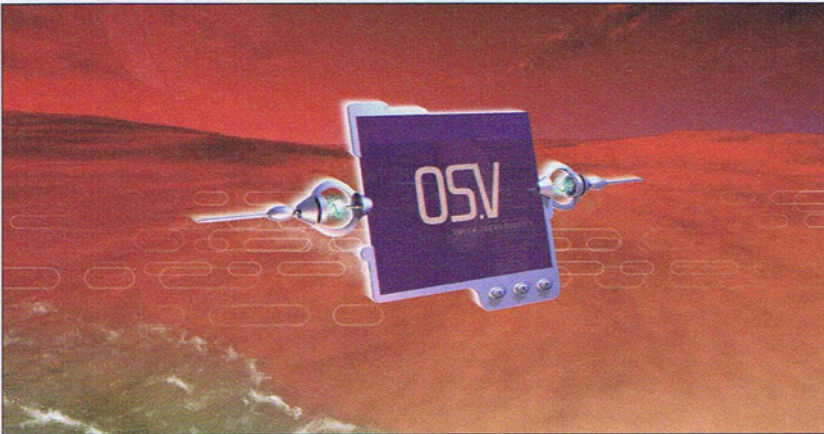
The quality of the artwork sent in to the Gallery seems to get better every month. **Ben Vost** is very impressed.



Sparky, Studio and Torchlit
by Victor Bell

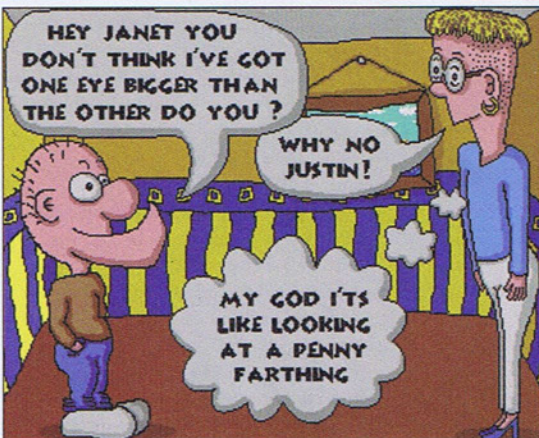
Amazingly, Victor hasn't had much experience using *Imagine*. He says that he pretty much gave up on it because the results using *Imagine*'s built-in picture viewer were so poor. However, he then used a different picture viewer which showed him how nice they really were. We hope that the £50 prize can be put to good use in your quest to get an FPU – we recommend the Power Typhoon as it's cheap and fast.





Red Skies by James McEwen

James has furnished us with another superb picture, made all the more incredible by his lowly machine. He says that he finds the tools used on other platforms are rather sterile and he looks forward to the time when he can get *Photogenics NG*.



Justin and Janet by Guy Rodgers

Guy wants to use us to get back at his colleagues, so we had to think about putting this picture in the gallery (and the animation that's on the CD), but in the end we came to the conclusion that at least Guy was an Amiga user, so he deserved all our support...



In the End and Butterfly by Scott Brimley

Scott has given us several of his atmospheric, monochrome graveyard images that he photographed, developed, scanned and combined (using *Photogenics*) himself. However, we decided to only include one in the Gallery section itself - we included his butterfly picture instead of some of the others because it's a bit more cheerful!

SUBMISSIONS

Send your Gallery artwork to AFCD Submissions, Amiga Format, 30 Monmouth Street, Bath, Somerset, BA1 2BW, or email them to afcdsubs@futurenet.co.uk. Please don't send any files over 1Mb in size. Also see the submissions advice file on the CD for further options.



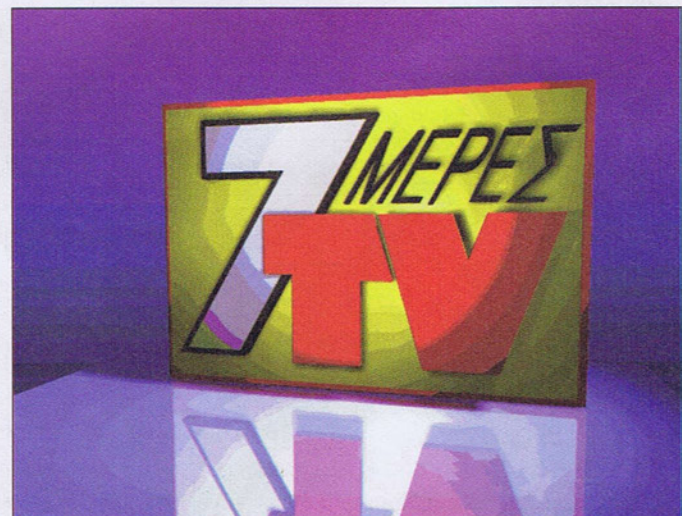
KGS by Les Ottoway

This is Les' first entry to the Gallery, and while he deprecates himself by saying that his images aren't good compared with others we receive, we like the detail in this limited-resolution picture.



Enemies of the System by Ben Wright

This hand-drawn image just exudes menace, in a *Valhalla*-kind of way. It was drawn in *DPaintIV* but Ben gives us no other details.



7meresTV by Panagiotis Zigouris

Our Greek readers constantly come up with nice images for the Gallery section - kali mera Panagiotis! This image was produced using *Lightwave 4* and retouched with *Photogenics*. It's nice, but we think it would have been better if it had been dithered when reduced down to 256 colours.

Serious disk

AMIGA FORMAT



Balance your accounts and make sweet music with this month's coverdisk. **Dave Taylor** gets you started with new versions of three popular Amiga packages.

Ultra Accounts 4.6

Years ago, when *Ultra Accounts* first appeared, it had the makings of a fine home accounts package. The authors have worked hard to develop the program into the sophisticated system it is today, but it retains a simplicity of use that should have your finances in order by sundown.

When you've installed the package and started it, the first thing you need to do is confirm the date. As a finance package, it needs to ensure that today's date is set correctly. By default, the program will ask you this every time you start it, but if you have a battery backed clock you can suppress this by changing the icon ToolTypes.

When you get to the main screen you'll see that there are different sections with different buttons. Before you can go any further you need to set up at least one account as you obviously can't have any transactions unless you have an account.

In the Edit section, choose Accounts. A new requestor will pop up which has a Create and Exit button on,

with no accounts listed. Click on Create and the Account Details requestor pops up. Here you have to define the name of the account – this is the handle that you'll use to recognise it elsewhere in the program. You can call it what you want – Dave's Account, Saver Gold Plus, Dimland Bank, whatever.

You then enter the opening balance and any minimum or maximum amount; the minimum can

“Tags are convenient references you can create for groups of transactions that involve a common theme...”

TAG, YOU'RE IT!

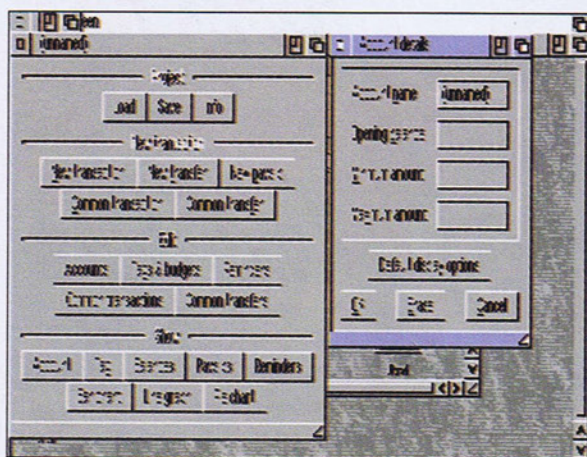
Now you can dive straight into creating transactions, but to do so would be to miss out on a very useful feature of *Ultra Accounts*, so it's worth taking the time to set up a few more personal details. In the Edit section again, click on the Tags & Budgets button.

Tags are convenient references you can create for groups of transactions that involve a common theme, like motoring, leisure, etc. By using tags you can not only set up a view of all transactions of one type, you can also define a budget, either globally or defined differently for each month. *Ultra Accounts* will warn you when you're going to exceed it.

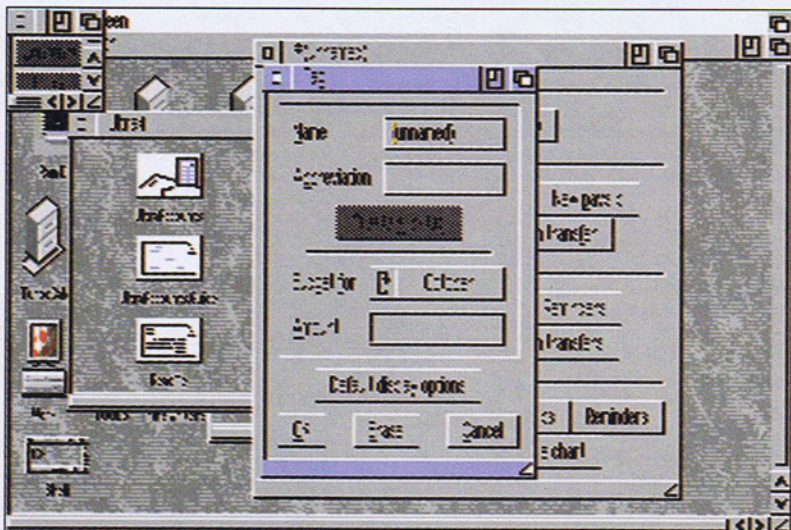
Like the Accounts, the requestor allows you to create new tags and none of these are defined by default. When you create one, you give it a name and also a three letter abbreviation that will allow you to recognise it when it's attached to a transaction.

There's also a scrolling button labelled "Budget for". This allows you to define a budget for each month. You can enter a different amount for each month or you can choose All Months to

be negative if you want to allow for overdrafts. When you've approved the details, exit the Account requestor. Your new account's name should now be displayed.



The first screen, where you set up the new accounts and where you access all the other parts of the program.



The Tag creation requestor – each tag is used to represent a set of transactions for one type. For each transaction you can assign one of the preset tags.

make the budget global. The amount you enter is the total amount of transactions for that tag that you're budgeting for each month, so £200 would be each month, not per year.

There are three more different sections that you can set up. The first is Reminders. These aren't financial transactions, they're simply notes that you can set to pop up. You can set a day of the month and define if the reminder is repeated each week or month and if it is shown any days in advance. Use these to remind you of important transactions you might need to make, such as "Rent due today".

Along these lines, there are two buttons for Common Transactions and Common Transfers. You can use the first to set recurring transactions in or out of your account, such as pay (though there is a special Transaction button for setting up pay slips if you want), standing orders, etc. Common Transfers are for inter-account movement – for example, if you have a set amount going into a savings account each month or a regular payment onto a credit card.

BALANCING ACT

You can now start using your accounts. If you want to use one of your common transactions or transfers, click on the appropriate button in the New Transaction section. The requestor will pop up, showing the action. You can edit these here if that particular transaction sways away from the norm you defined. If you open the requestor and it appears with what look like small empty fields, it's because the requestor is too small to display the information. You can use the resize handle at the bottom of the requestor to enlarge it.

Simply enter the transactions as you would expect to, using the buttons. They'll all be added and subtracted from the account and should any make the account go over budget or exceed the minimum or maximum amounts defined, a warning will be displayed. If an action corrects this and puts it back into credit, for example, then you'll also be informed.

You don't see the accounts from here. To see the account and its transactions, click on the Account button from the Show section and choose which account you want to see. You can also view the transactions by Tag so you can see all the money spent from all accounts on one area. The Balance button gives you a quick view of the state of all accounts and there are several graphing tools that allow you to see how the money flow is going. Pie Chart is particularly useful for seeing how your money is spent.

This program is Shareware and the author asks for £10 to register it, though reduced registration fees are accepted for certain cases – see the documentation for more details.

Digi Booster 2.19

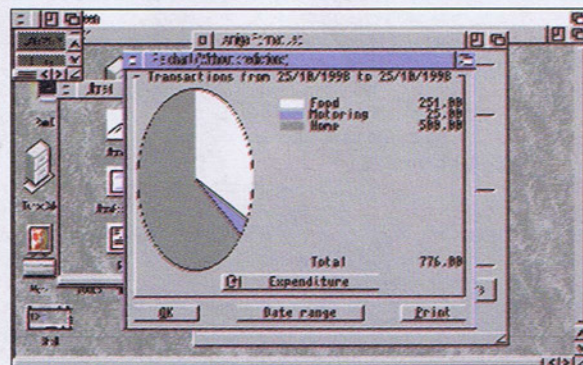
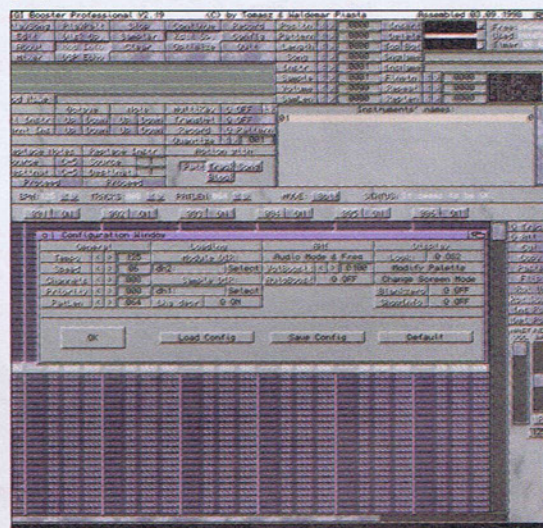


The Sample Editor allows you to load and convert samples and make changes to the instrument.

This music package allows you to edit samples and music modules in one package. When you open the package you'll see that the top half of the screen contains all the buttons for the different features and the bottom half is the notation area. As with many music packages, the notation is divided into several channels. You can have one instrument playing at once in each channel. To get started, it's best to load the sample module that comes with the package. Not only can you play the module to get an idea of the power of *DigiBooster*, it will load in the instruments so you can have a play.

In the top half you'll see a button with an up and down control, labelled Instr. This shows the Instrument number currently selected. You can scroll through the instruments and press a variety of keys to play different notes with that instrument.

DigiBooster Pro is powerful but easy to use so even the novice can make music modules quickly.



Pie Chart can show you each transaction set, as defined by the tags, so you can see if you're spending a disproportionate amount of money on one thing.

AKCC 5.3

This is a collection of additional Amiga CLI commands that is installed and made available through the normal Shell. Once installed, you can simply use the commands in the same way as the normal ones. There's a full AmigaGuide with descriptions of all the functions of the new commands, but some of the highlights are: *DOSRequest* for asking for user input in batch files (scripts), *Kassign* (an extended assign command), *NewDir* (an improvement on *MakeDir*) and *Kscrller* (for text effects in a CLI).

Games disk



**AMIGA
FORMAT**

Alien experiments, night sights, air strikes, shotguns... They're all here, in the most gratuitous game ever coded. **Dave Taylor** takes aim.

Revenge AGA

So is shooting a hen-type creature in the back any way to spend your time? The answer, when you've played *Revenge AGA*, is quite simply yes.

The game is simple enough. When you start it up there are a few options you can tinker with – use the cursor keys to go up and down and press Enter to choose an option. You need to do this to start playing the game proper as well.

When the game starts, control switches to the mouse. Press the left button and the crate in the middle will start a countdown in a *Lemmings*-esque pitch. The box explodes and a huge array of miniature victims scatter across the screen. They have only one purpose in their electronic life, and I'm sorry to say it is to get shot by you in one of a variety of amusing ways.

The aim of the game is simple. Shoot the lot of them. There's a clock ticking away in the right hand bottom corner and though efficiency is rated, it's only time that matters.

As you knock off each figure, an X will mark them as dispatched in the score sheet along the bottom. If you hit a figure straight on then you'll kill them, but if you don't then you might just wing them. Maimed victims drag their feet as they try to gamely stagger on, so do

them a favour and finish them off.

Once you've got a taste for the game it's time to go back to the main menu and play with some of the features which it has to offer.

“Maximum Mayhem is the default game and it just involves you shooting everyone indiscriminately.”

SHOT TO HELL

On the main screen you can change the options by using the cursor keys and Return. The first option is the victim speed, with a range of 1 to 5. This defines how quickly the victims move around the screen.

The next option is Game Mode. Maximum Mayhem is the default game and it just involves you shooting everyone indiscriminately. Sequential Slaughter requires you to shoot the



For that personal touch, you can shoot your victims one by one...

blighters in order. The next victim you need to hit will be lit up with a light bulb above their head.

The Chat Time, next down the list, defines the number of seconds that victims will spend chatting to each other when they meet on screen. The result of the meeting will either end in friendship, where the two will go off together for a walk, or hatred when they will storm off in opposite directions. The extended chat time can help you with weapons that take time to deploy.

The Ground Type simply chooses the backdrop, but the Edit Victims takes you to another screen where you can choose the characters to appear on the

WEAPONRY

You have ten different weapons at your disposal, selected by using the F keys along the top:

- F1: SHOTGUN** – The old favourite.
- F2: ARNIE-GUN** – A very large machine gun, like a chain gun. Excellent for packed areas, but it reduces your efficiency as it has a high fire rate.
- F3: PHOTON TORPEDO** – Has a time delay before it hits, but has a blast zone and a cool sample.
- F4: PULSE LASER** – Quick fire and effective.
- F5: NIGHT SCOPE** – Strap on the goggles and load the rifle. Precision shots for the armchair assassin.
- F6: BFB** – A large bomb.
- F7: ELECTRIC SHOCK TREATMENT** – A cloud gathers and you can lightning strike those who displease you.
- F8: ALIEN DNA EXPERIMENT** – Now this you have got to try. Zap a victim and transform it. It will infect anyone it comes into contact with and though they're immune to other weapons, they will in time infect more and victims, who will either die or recover. It's good to have a few walking around infecting others.
- F9: FIREBALL** – Flame war.
- F10: AIR STRIKE** – Saving the best until last... Left click for the start of your strike and right click for the end position. The air support team will bomb between the two points. Place them close together for a concentrated shot or spread them out for more coverage, but you risk missing any targets who don't stand around waiting for you to bomb them.
- Q** – Quit game (ends the game if you've shot everything and you've finished playing with their heads).



Some of your weapons can take out a lot of the little chaps in one go.

screen. By default, there are eight times six victims. You can scroll down the list and add more victims of any type shown, up to a maximum of sixty, but only eight victim types are available in one game.

To add a victim, scroll down to the victim type and then press the right cursor key. If you want to use a different victim from one of the eight types pre-selected, choose the type you want to swap out and press the Return key. You'll swap to the bottom menu where you can choose a new victim type to be substituted for the type that your arrow key had selected. There are several pages of victims and you can move through those using the left and right keys. When you're done, select Done.



THE GENERATION GAME

Included with the game is a default template of victims. This is a standard IFF image file and you can load it into a paint package and create your own victim heads. Note the dimensions. All you need are four direction shots (left, right, above and below).

You can then load the victim generator program, which is also included, and create new victims. This allows you to choose the colour of their clothes and the sound sample to accompany their doom. You can then save them out and add them into a game by using the Edit Victims mode.

As we hope you've guessed, the cartoon capers of *Revenge* are intended to be comic and the game is purely for laughs. There's no great gameplay, just mayhem, so have fun with it.



The Alien Experiment (above left) is just one way to cause carnage and destruction.

FAYOH 2 DEMO

A green blob. Nope, not my cold, but the unlikely hero of this engaging game demo. Grab the joystick and help control the little fellow around one of the confusing worlds that are included. As you'd expect, the directional controls are simple and up makes you jump.

When you start the game you'll be in a hallway with a set of locked doors. There are some without a padlock on them and you can walk to these and pull down to enter that section. When you go through a door you'll be in a new area that needs completing. As you go along you'll come across some bricks above you. You can headbutt these by jumping up and they may reveal some goodies.

There are yellow bricks with smiley faces that conceal collectable items, including the faces that you need to collect. Other bricks may also have things hidden in them. There's only one way to find out. If you've jumped on top of a block, jump up and pull down and FaYoh will stomp on the brick and crack it.

The collectables give you power ups and extra lives and the stars are the keys to the end of a level, so you basically need to find everything in a level and pick it up. Things you might find yourself able to power up to include underwater breathing and a flying suit.

You have no weapons of any kind, so true to platform laws you jump on any enemies' heads to teach them not to mess with you. If you mis-time a jump when aiming to crush a baddie, you'll lose a life and start back at the beginning of the sub-level.

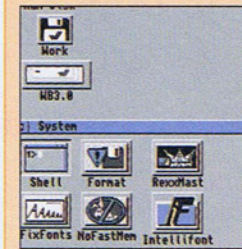
There are more details of the game and its features in the documentation, as well as details on buying the full version.

Collect the fruit, explore the levels and jump on your enemies... ahh, it's a traditional platformer alright.

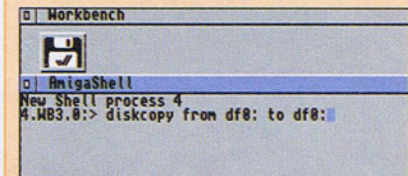


BACKING UP YOUR COVERDISK

Copying your Coverdisk is really very simple. Just follow the stages below...

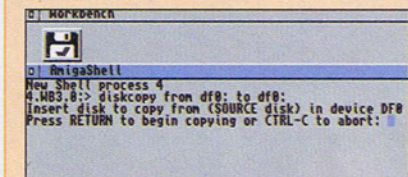


1 Boot up with your Workbench disk and find the Shell icon, in your system drawer. Double-click on this to go into the Shell.

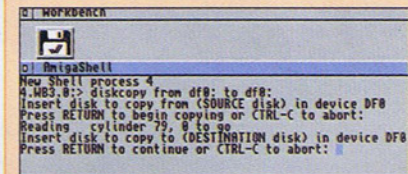


2 Type in the following line (with a zero, not the letter O), taking care to put the spaces in the correct places:

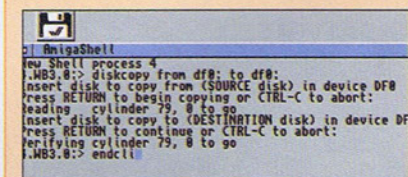
DISKCOPY FROM DF0: TO DF0:



3 When asked for the Source disk, insert your write-protected Coverdisk and press Return. All of the info on this disk will then be copied from the disk into memory.



4 Once your Amiga has read the info, it will ask for the Destination disk. Insert it and press Return. All information on this disk will be destroyed.



5 On an unexpanded machine, the Amiga may ask for the source disk again, because it copies in chunks. Finally, type endcli to close down the Shell.

DISK NOT WORKING?

We take every care to test the Coverdisk software, but Future Publishing cannot accept any responsibility for any damage occurring during its use. If your disk is faulty, send it back, with 2x26p stamps and an SAE to:

Amiga Format (insert name of disk)
TIB PLC • TIB House
11 Edward Street
Bradford • BD4 7BH

If there is a manufacturing error then the stamps will be returned with a replacement disk.

Cover disc

AMIGA FORMAT



Hidey ho! Mr. Hanky walks and talks and leads you through the wonder that is our Christmas edition of the AFCD.

Since this is such a special time and we're all here, lovin' and sharin' and havin' a fine time... Crrk! Bzzt! Sorry, couldn't allow him to continue. Ben here again, ready to share with you the details of what's happening in *AFCD34*, but not willing to do any of that Christmas-type stuff.

First up, we're very happy with the CD now, and it seems you are too, judging by the responses you've given to the *AFCD_Survey* that's on the disc. If you haven't yet sent us one, why not give it a go – you'll find it in the *+System+/Info* drawer. Edit it, print it out and send it to us, or send it via email – we'd love to hear from you.

Secondly, we have no Christmas stuff on our CD so you can be content that we don't expect you to spread the season's cheer and goodwill just because you've got our CD. What was that? You're kidding... Okay, it appears that we have a large selection of Christmassy-type fonts from *EMComputergraphic* on the disc, along with a special offer of some description. Johnson! I thought I told you that this CD was to be a Christmas-free zone! Bah, humbug...

AMIGAWRITER

-Seriously Amiga-/Commercial-/AmigaWriter-Demo

The first new word processing package for the Amiga has finally arrived. The demo on our CD has to be installed to your hard disk for you to be able to use it, but since it uses the standard *Installer* program, this is easier than Pi.

Warning!

If you can't see the icon for *AFCD34*, don't be worried, it's there, probably just down at the bottom right-hand corner of your screen. Simply clean up your Workbench or turn on the *BackDrop* function in the Workbench menu to see it.

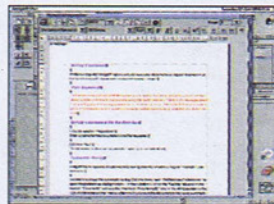
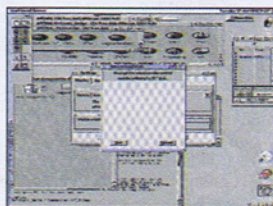
WHAT'S CHANGED?

In truth, not much on this CD. However, we're now even harsher with those who supply websites to us and each website will only appear once on our CD – if people want it to appear on consecutive CDs they'll need to send the website again.

This means that the only stuff that gets repeated on our CD from issue to issue is the *System* drawer, which is less than eight per cent of

the CD's contents. Everything else is new stuff.

We've also tried to resolve the problem with the demo browsers giving "Disk is write protected" messages by forcing the caches to RAM: but the best solution will always be to move the browser to your hard disk and make sure that you've set up *AFCDPrefs* to use that one, rather than the one which is on the CD.



AmigaWriter – a new contender for easiest-to-use word processor.

Although this version seems a little sparse, purchasers of this current version of *AmigaWriter* will be offered version 2 at little or no cost. This ensures a ready and willing market for what is essentially another word processor in a market that is obviously happy with *Wordworth* and *Final Writer*.

AmigaWriter isn't feature-rich right now, but it is easy to use and seems reasonably fast. It has some lovely touches too, our favourite of which is the tool to enable you to get

the right dot pitch setup for your monitor and the screenmode you're running *AmigaWriter* in. It simply asks you to size a window to the same shape and size as a normal 3.5" floppy disk. This is an easily understandable standard that anyone can deal with, rather than having to measure your

screen from corner to corner and work out how dense your dot pitch is because you're running a 1024x768 screenmode, and so on.

If you get an error message while starting it up saying that you need a newer version of *Setpatch*, you should be able to take the one from the C: drawer of this CD.

YAM 2 PREVIEW 6

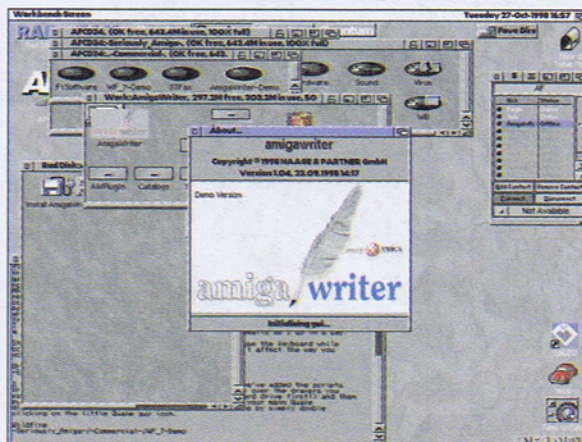
-Seriously Amiga-/Comms/Other/YAM2P

The latest version of this superb email program came out just as we were finishing the CD, but we just had to have it on here for two reasons. One is that it's simply a cracking program, the other is that people have been gagging for a new release since preview 5 came out what seems like ages ago now (it was the end of July, fact fans).

The new version fully implements YAM's AReXX port and seems slightly faster in operation – the fact that you no longer need to pre-load all the folders to be able to see how many messages are contained within is a great boon.

However, notwithstanding all the improvements made to it, I have to say that I've gone back to preview 5 for one main reason, and that's because in preview 6 Marcel has taken out all the single-letter shortcuts from the toolbar. This means that instead of hitting 'w' to write a new message, I now have to hit 'RAmiga-n' instead. It might not seem like much, but it makes a difference when you have to read and write as many emails as I do in a day.

Still, see what you think. It may be that you rarely use the keyboard while controlling YAM, so the lack of toolbar



Your Stuff!

£50 Winner!

I'm going to break the rules this time and head straight for the winner of this issue's reader prize. For his great-looking index to issues of *Amiga Format*, Timm Rutland wins the £50 prize. He's created a *CanDO* program, which he says is his first, that shows various issues of *AF* with plenty of details about what's in the issue.

He covers issues 68 to 115 (with a few omissions) and it could develop into a very useful resource. As it is, this project has more scope than the ones he sent us a while back which used *MME*, and Timm plans to keep updating it. Keep up the good work Timm, and I'm sure we'll be having more cover images on the CD before long.

Workbenches. I think that to make it more interesting you'd have to include a text file explaining what commodities and the like you use to get your WB looking like that (including where to get these programs from).

What do you think? Start sending them in to "WB-snapshots" at the usual address since they're going to be a bit different from normal CD submissions. Online bods can send them the usual way. Matt Briggs has sent

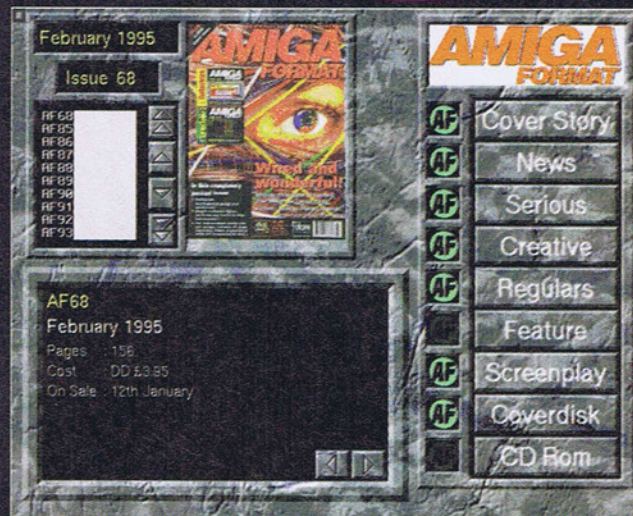
us a couple of (slightly derivative, to be polite) games and a text adventure creator, while for those with the best graphics card on the market AND its TV tuner - I'm talking about the PicassoIV and the Paloma here - Pete Sullivan has written a new remote control program for it. It looks nice, but let's have one that's shaped like a real TV remote.

Finally, good old Bernard Cain graces this CD with the latest in his



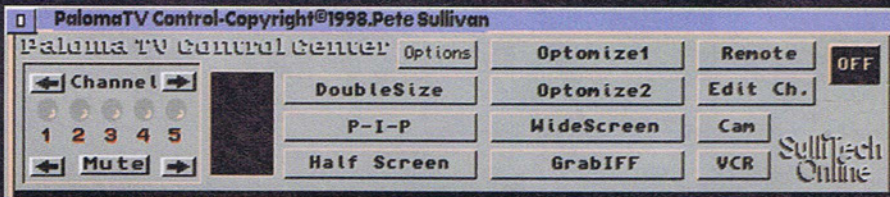
Would you be interested in seeing more people's Workbench screens? Read the text and follow the instructions...

Our reader award-winning game from Simon Hitchen seems to have really stirred people's imaginations because young Samuel Brookes is not the first person to send us victims for it, but he's also sent us a couple of games he's written as well. Panagiotis Zigouris has sent us a couple of grabs of his Workbench and some *Sensible Soccer* icons. I'm wondering if we should have a special drawer in Reader Stuff where we can have grabs of people's



Our winner for this CD is Timm Rutland for his *CanDO* issue browser. If you think it takes a while to update each issue, you should try writing one...

project to make an easy-to-use Business Card design package. It's definitely getting there Bernard, especially with the drawing tools, but running it on a HighRes screenmode means that lines look much fatter horizontally than they do vertically. Perhaps it would be a better idea to put it on a HighRes Laced screen instead?



If you have Paloma TV for PicassoIV, this remote control from Pete Sullivan might appeal to you.

shortcuts won't affect the way in which you work. If that's the case, *YAM* preview 6 is a doozy.

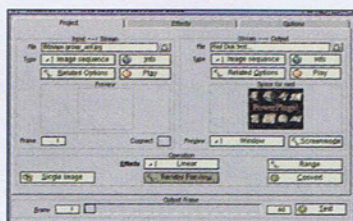
WILDFIRE

-Seriously_Amiga-/Commercial-/WF_7-Demo

In the early days, this program had a typically German interface. I don't mean that in a nasty way, but all the power was on the surface which meant that it was very difficult and time-consuming to get to grips with. *WildFire v7* will be officially released at the Cologne show, which is still two weeks into the future as I write this, and it's guaranteed to be a top seller.

The interface has been completely redesigned and instead of the old,

WildFire's new MUI-based interface is much nicer to use than the old-style one from earlier versions.



complex look, it now has a clean, friendly interface that is due in part to its use of *MUI*. It's also less daunting to use, with clear buttons (and bubble help, should you need it) and previews of functions to give you some idea of how your effect is going to turn out. It's also fully PPC native to really take advantage of phase 5's hardware.

In case you're unaware of what *WildFire* is for, I can tell you that, like many other PPC programs, it's a graphics manipulation package designed to give you the kind of animated effects that you see for video manipulation on the telly.

There are other pieces of software that do this kind of thing - *ImageFX* springs to mind instantly - but they aren't PPC native and while *ImageFX* can do these things, *WildFire* is designed solely for this purpose. As a result, it can do them more effectively.

OH NO, NOT MORE QUAKE!

-ScreenPlay-/OtherStuff/QuakeStuff

I know, I know, a lot of you are sick of it now, but we've added the scripts that you'll need to run the add-ons.

Just copy over the drawers you want (but make sure you have plenty of room on your hard drive first) and then pull the little *Quake* guy icon out of the drawer and into your main *Quake* directory. You should then be able to run these add-ons by simply double clicking on the little *Quake* guy icon.

ICONS

-Seriously_Amiga-/WB/Archéologicons - Seriously_Amiga-/WB/Arthropodicons

It's not often we put stuff on our CD that's been lying around the Aminet for a while, but I saw these icons and just

Continued overleaf →

At your fingertips

X-ARC FREED

-Seriously Amiga-/Archivers/X-Arc1.2

Previously, if you wanted to use X-Arc, a WinZip-like program, you had to get NetConnect2, but now Vaporware have released it as a separate program that you can use on its own. X-Arc deals with most archive formats in a clear and obvious fashion, so dealing with cryptic command line arguments in order to display the contents of some LhA file or other is now a thing of the past.

ARCADE POWER!

-Seriously Amiga-/Emulation/NAME

The new version of the Amiga's biggest emulator package is on this issue's CD. With it you'll be able to have a nostalgic glow as you play all those games you used to play while you should have been revising for your O-levels.

Of course, to really get to play all these old arcade games you need to be in the lawless Internet where the copyrighted games are available for download from a variety of sites. Just don't expect them to appear on an Amiga Format CD any time soon...

had to have them. Although it's hard to think what use you might put them to, they are some of the nicest hand-drawn *NewIcons* we've ever seen, and if you can use them, I really think you should.

Savage Installer can make *Installer* scripts look nice, but it's still a beta.



SAVAGE INSTALLER. GRRRAAH!

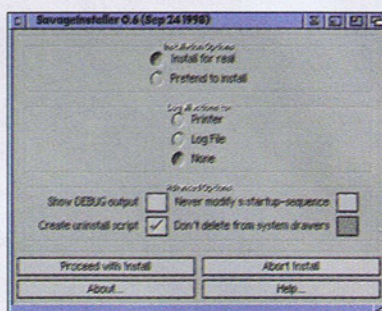
-Seriously Amiga-/WB/SavageInstaller

Commodore's *Installer* program broke a lot of the rules they lay down in their

Some of the most gorgeous icons ever to grace an Amiga. Well done, Lyle!

User Interface Style Guide. It wasn't font-sensitive, it didn't handle localisation well, and so on. It seems funny that although there have been a lot of MUI replacements for other programs, no-one saw fit to try to replace *Installer*. Until now that is.

Savage Installer by Jens Tröger uses MUI to give you a good-looking interface for what is one of the ugliest programs in Workbench. It's only an early beta version at the moment though, so be aware that it could have some problems. Having said that, when we put later versions on our CD you can guarantee that *Savage Installer* will become very popular indeed.



STORM IN A TEACUP

-Seriously Amiga-/Graphics/Raystorm

RayStorm is one of the Amiga's overlooked wonders. It's a fully functional 3D modelling and rendering package that has some features that are superbly advanced, including, in the version we have on the CD this time, OpenGL support, proper 24-bit support for the working interface and a full PPC native version. Compare that to *Lightwave*, which still hangs on with its shabby AGA interface that's looking increasingly old-fashioned.

In addition to this, the authors, Andreas Heumann and Mike Hesser, have managed to get a boost of 10-15% in rendering speed.

The demo version that we have on our CD only has one limitation - you can't save images.

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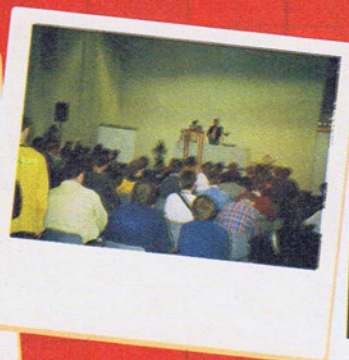


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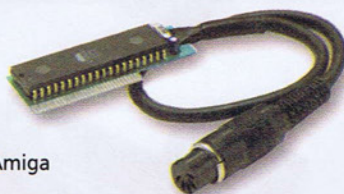
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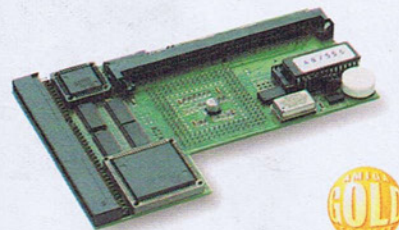
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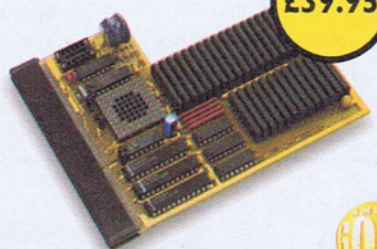
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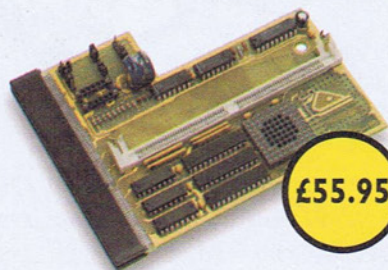
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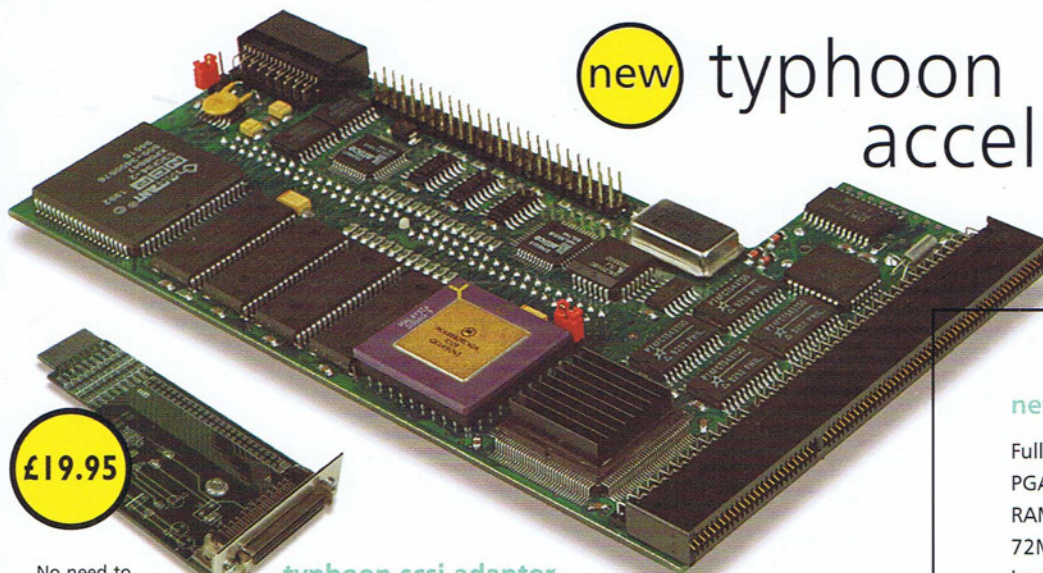


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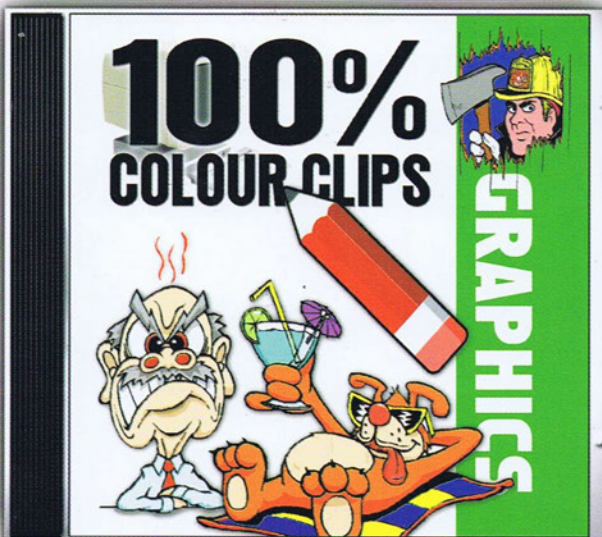
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