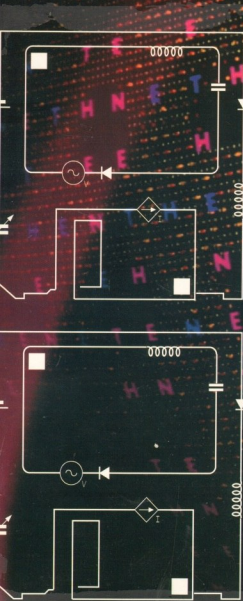


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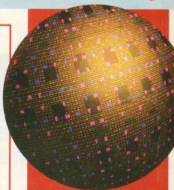
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Software that matches your Hardware

10011101
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11110000

Programming

HiSoft BASIC 2 £79.95

HiSoft BASIC 2 is the new BASIC system for your Amiga, fully compatible with all Amiga from a Workbench 1.3 A500 up to an A4000 tower system running Workbench 3.

This exciting package sets new standards for BASIC programmers on the Amiga with full AGA and Workbench 3 support through the use of extensive and complete libraries.

This is the system for those who want to program real applications and utilities on their computer - a professional BASIC interactive compiler with an easy-to-use, multi-window editor and medium level debugger, producing super-fast, compact code in memory (or testing) or direct to disk.



The HiSoft BASIC 2 package runs on all Amigas with 1Mb of memory or more and includes an extensive, 640-page user manual with tutorials, many examples and a complete reference section.

Upgrades are available from HiSoft BASIC version 1 and Power BASIC - please call for details.

Get the Amiga BASIC of the 90s today!



Utilities

Maxon Magic

The Maxon Magic screen saver works in all modes, even with graphic cards, and offers you a choice of 20 different amusing and entertaining modules such as Aquarium, Flying Bead-List, Fireworks, Crazy Worms, Messages, Clock etc.



This is the utility that you simply must own! Maxon Magic is a fantastic combination of 20 different animated screen savers, a system event sound manager and many amusing sampled sounds that will not only be incredibly useful but will give you and your friends endless enjoyment as well.

As if that isn't enough value for money, Maxon Magic also lets you assign sounds to most system events including Window/Screen open & close events, Alerts, Keys, Mouse clicks, and many more. Choose from the built-in sounds provided or sample your own sampled HIFI, stereo or hi-fi sound sampler such as Musical Instruments!



Only £29.95

With HiSoft BASIC 2, your Amiga will never look boring again!



Video/Music



VIDEOMASTER



The best-value real-time video digitiser you can buy! VideoMaster gives you the ability to record real-time monochrome video with sound at 25 frames per second as well as quality full-screen stills from your camcorder or video recorder. VideoMaster RGB includes our new colour splitter, ColourMaster, and produces amazing quality colour stills. VideoMaster AGA works on the A1200 and A600, connects via the PCMCIA slot for extra speed and freedom to use other peripherals, allows high quality stereo sound and supports HAM6 and HAM8 up to 640 x 512 resolution for stills.



ColourMaster is a new electronic colour splitter which works in conjunction with VideoMaster for stunning colour stills.

Clarity



Clarity16 is our premier sound sampler allowing rates up to 32KHz in 16 bit stereo and up to 48KHz in 16 bit mono on an A500; accelerated machines can handle faster sampling rates. The software provides extensive features including full edit control, a MIDI keyboard emulator, a sample sequencer, many special effects and FFT analysis. Version 1.5 has an up-to-date Workbench 3 look, in its own window and is fully compatible with faster Amigas.



Megaloud is the new 8-bit, stereo, direct-to-disk sampler package; the software is packed full of easy-to-use editing features, special effects and extras such as the ability to print waveforms and sample information. The package allows sampling up to 84KHz mono and 50KHz stereo to memory and up to 21KHz stereo to hard disk on an A1200. Supplied with a hardware volume control and an extensive 144-page manual, Megaloud is impressive value at only £34.95.



Simulation

ProFlight

The classic Tornado simulator that works on all Amiga computers and provides maximum realism while being tremendous fun to play.

ProFlight is one of the most accurate, and therefore most flyable, aircraft simulators currently available for home computers - everything is there from the correct effect of the tailfins, elevators and rudder through complete navigational aids with auto-pilot up to sophisticated weaponry such as Sidewinder missiles and fly-by-line bombs. The accuracy of flight is top-notch, try this test with your other favourite simulator - turn the aircraft on its wing tips; most will continue to fly straight and level - the ProFlight Tornado will lose altitude, just like the real thing.



ProFlight comes complete with a professional, ring-bound, 190-page flight manual, detailing all aspects of flying this exciting aircraft including a full tutorial and a history of the Tornado with archive photographs.

Limited Special Offers

As a special offer to Amiga Computing readers we have some amazing bargains, available only until 31 July 1994 and while stocks last. Order by phone or by mail and quote AC794CZ when ordering; please add £2 P&P.

Clarity16	£79.95
VideoMaster A500	£49.95
VideoMaster AGA	£59.95
VideoMaster A500 RGB	£89.95
VideoMaster AGA RGB	£99.95
ColourMaster	£49.95
ProFlight	£10.00

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CBM confident of Amiga buyer

COMMODORE has remained quiet about who they are holding talks with regarding a buyer for the company, the Amiga technology or both.

When the manufacturer filed for protection of the Bahamian courts at the end of April, management were confident that a financial backer would be announced within two weeks.

But as we went to press almost two months later, Commodore was still unable to confirm which company would be taking them over.

However, the company continues to claim that an announcement on a take-

over is imminent. According to reports in the computer trade press, at least four potential buyers have had talks with Commodore bosses during recent weeks.

Speculation on bulletin boards and within the computer industry has named practically every electronics giant as a company ready and interested to take on the Amiga technology.

Many industry pundits believe Far Eastern manufacturer Samsung to be the most likely buyer.



CBM Takeover talks continue

Cheaper words from SoftWood

SOFTWOOD has slashed the prices and increased the availability of its word processing and desktop publishing packages Final Copy II and Final Writer.

The company says that a recent customer survey revealed that while users were satisfied with the software, many had difficulty in finding a local supplier.

To end this problem, SoftWood has set-up a department to sell directly to Amiga owners and dealers, and at the same time has passed cost savings on to buyers.

Products will be delivered free of charge and a no-risk guarantee promises to refund customers if they find the software doesn't live up to advertised claims.

SoftWood's product manager Tony Bullock said: "Our latest steps mean that all Amiga owners now have easier access to the best Amiga word-processor/publishers at the best possible prices."

Final Copy II can be bought for £49.95 and Final Writer 2 costs £74.95 from SoftWood Direct on 0773 521606.

Owners of either program can upgrade to Final Writer 2 at special prices.



SoftWood Direct: Selling straight to Amiga owners

Amitek modulators restart Amigas

DEALER Silica Systems (081-309 1111) is now able to replace faulty Amiga modulators.

Commodore's A520 has been unavailable for some time, but the new Amitek device can get people back into action using their TVs and colour composite monitors.

It comes with an easy-to-follow manual and a cable to connect to a standard television aerial socket.

Silica spokesman Mark Blackham said the company had been staggered by public demand for the new £34 modulator. "We're selling hundreds every week."



Modulator: Amitek replacement for faulty devices

NEWS BRIEFS

WB3 explained

BRUCE Smith Books (0923 893493) has published another Amiga book – this time a guide to Workbench 3's features.

Amiga Workbench 3 A to Z describes everyday use of the graphical interface in step-by-step terms and there are more in-depth tutorials on setting up the computer via its utilities.

The 256-page book costs £14.95 and should be available now.

Fonts in colour

DISKOTECH (0591 2242) has announced details of a large collection of animated colour fonts for the Amiga.

The firm claims each font is compatible with art programs such as Deluxe Paint II and works with all models of the computer and in every screen resolution.

They can be used for animated and static titles and extra graphics enlarge the mix and match capacity. A Moviefonts two-disk package costs £15 and includes five fonts and a catalogue.

Tighter law call

THE Federation Against Software Theft (FAST) recently to tighten existing copyright laws.

The computer industry is concerned that an estimated £300 million is lost each year through illegal software copying, and this could increase with the emergence of new technology.

Projecting images

CITIZEN has launched a colour video projector for home and small business presentations.

The 30PC LCD Colour Video Projector can also be used as a home cinema device by connecting an Amiga via a suitable genlock. Images can be between 6in and 100in.

Price £799 from Visual Products on 0494 890601.

Shopping with Scala

A LARGE video wall controlled by a Panasonic video recorder and an A4000 running Scala InfoChannel has just been installed in a Jerusalem shopping centre. The wall faces a restaurant area and displays advertising which includes animations and video sequences.

It was built in Israel by Elbit, a company who plan to deliver several other systems using the InfoChannel software.

Meridian take 3D graphics system

MERIDIAN Software (081-543 3500) has just taken on UK distribution of Impulse's Amiga raytracing software Imagine 3.

The latest revision of the 3D animation rendering system has scores of features. Among them is a range of object creation tools which include spin, sweep, extrude, bend, taper, shear, pinch, fracture and split.

A spline editor enables PostScript fonts to be imported into the software, has automatic bevel control and allows spline manipulation of curves.

There are more than 100 procedural textures, a wide variety of attribute tools, kinematic states and a stage editor to make animations and realistic movements easy.

Emerald Creative Technology (081-715 8866) are selling upgrades for owners of Imagine 2 (including

CoverDisks) and users of any other 3D program for £93.45.

The recommended retail price for those new to rendering is £95.



Imagine 3:
Meridian take
top 3D system

Entertainment reviews
added by CompuServe

REVIEWS of Britain's most popular films, books and theatre productions are the latest addition to the CompuServe (0800 289378) online database.

The service – based on information from Central Press Features – also carries reviews of the most popular video and previews on six TV soaps.

It is one of more than 80 Basic Services which subscribers can have unlimited access to for about £6 per month.

"Our UK products now include forums, news and travel services, company information and historical stock pricing," said CompuServe's Andrew Gray.

"We will be adding more of these services on an ongoing basis."

CompuServe

CompuServe
Add more to UK
subscribers

RSI sufferers find Tabby relief

SOME users of the Tabby stylus and pad computer control are finding the device relieves Repetitive Strain Injury (RSI) symptoms, according to manufacturer Micrograf International.

The firm claim that Mr Leyland of Manchester wrote to them saying he had been suffering from considerable wrist and hand pain which meant he couldn't lift his arm.

He wrote: "The symptoms cleared up while taking a month's holiday only to return when I resumed using a mouse."

"But since receiving the Tabby, the problem, the pain and the inconvenience has disappeared firmly and definitely."

Tabby was developed as a more natural and easier to use alternative to the mouse, although Micrograf had not foreseen a possible medical benefit.

Colour inkjet for £239

AMIGA owners wanting to produce high quality colour printouts are among those targeted for Integrex Systems' Colourjet 600 inkjet printer.

The £259 machine has a resolution of 300 x 600 dots per inch in colour, with mono output at 300 x 300dpi and up to two pages per minute in a wide range of fonts and

Virus disk prevents
widespread infection

A COMPILATION disk containing some of the best virus checkers has been put together in an attempt to prevent the spread of the destructive programs among Amiga users.

Called simply Virus Checker Compilation, the disk has been compiled by Wolverhampton man Craig Holmes and its contents include Virus Checker 6.4.1, LVD 1.75 and Virus Z II 1.07.

Other utilities are available on request, and the disk is updated immediately upon the release of a newer version.

Craig commented: "There is a need for virus checkers to be spread amongst the Amiga community, thereby preventing the situation on PCs where viruses are a continual problem."

The disk can be bought by sending £1.50 or greater to Craig Holmes at 23 Rostetter Avenue, Wednesfield, Wolverhampton, West Midlands WV11 3AU.



Colourjet
600: Printing
in colour for
£239

point sizes. It is HP DeskJet 500c compatible and a driver for the Amiga can be provided. An automatic sheet feeder to hold 70 sheets of A4 paper is available as an optional extra.

Derbyshire-based Integrex can be phoned on 0283 550880.

Viper 68030 Turbo

Amiga 1200 accelerator board

£159

Standard (no FPU)



The amazing Viper 030 board is a feature packed accelerator card which outclasses the equivalent competitors 030 boards at a fraction of the cost.

The Viper will give an amazing 440% overall speed improvement over your Amiga 1200, making it even faster than an Amiga 4000/030! Some processor operations have speed increases in excess of fifteen times.

Some floating point operations are an incredible sixty seven times quicker, faster than an Amiga 4000/040!

Viper Features

- Full 030 with MMU running at 28MHz
- FPU running up to 50MHz (PLCC or PGA)
- Industry standard 72 pin SIMMS
- RAM, upgradable to 8MB using 1, 4, 8MB SIMMS
- Full kickstart remapping (FASTROM option)

- Optional SCSI-II adaptor
- 68882 maths co-processor
- On-board battery backed clock
- Faster than an Amiga 4000/030
- Supports instruction + data burst
- 50% cheaper than competition

Viper 2MB (no FPU)

Viper 4MB (no FPU)

Viper 8MB (no FPU)

20 MHz FPU

33 MHz FPU

40 MHz FPU

50 MHz FPU

SCSI-II Adaptor

£239

£309

£479

£25

£60

£80

£120

£79



Power Drive

Why buy second best?



AWARD WINNER

Power Drive is the most impressive disk drive of its kind on the market. This award winning drive has the backing of the 'Commodore Quality Seal of Approval' to ensure complete compatibility with Commodore computers.

The drive includes a strong aluminium casing, an anti-click device, virus blocker, Cyclone compatible chip and the latest built-in backup hardware which allows X-Copy to copy and verify.

£60

Power Drive

£15

Cyclone & Blitz



Beware- Flickering LED's on your disk drive mean that the drive has not been modified by Sony for 100% Amiga compatibility.



Features	Power	Amitek
Anti-click	●	●
Anti-virus	●	●
Aluminium extrusion	●	●
Sony mechanism	●	●
Isolation switch	●	●
2 year guarantee	●	●
Thru port	●	●
Upgradable to 1.76MB	●	●
Cyclone compatible chip	●	●
Built-in backup hardware	●	●
Amiga Format Gold	●	●
Disk drive modification by Sony to stop flickering LED	●	●

Power Computing Ltd

Prices are valid for the month of publication only.

44a/b Stanley Street Bedford MK41 7RW Tel 0234 273000 Fax 0234 352207

Prices include VAT. E&OE.

World wide distribution required

Productivity gains for ReSourced

INTERACTIVE disassembler ReSource has been improved to make the software more productive, more system compatible and to give it a better graphical user interface.

The new interface uses floating tool windows rather than the old menu driven system, and v6 of the program enables users to run their favourite utilities on

ReSource's screen.

Among other features are a new command line, Workbench option flags including a Screen Mode requester and the displayable character set now including all printable characters.

Needing at least 2Mb of memory, the program costs £130 from Helios Software on 0623 554828.

DICE tools ease program creation

PROGRAMMING language DICE has been upgraded by its American developers to provide an integrated system of tools designed to ease the creation of Amiga programs.

Version 3 of the C compiler offers beginners an intuitive visual approach to making programs and includes several examples.

And programmers of all levels will appreciate how DICE integrates with text editors, offering tools and information at the touch of a button.

The latest version is claimed to focus on getting code from the keyboard to execution as quickly as possible.

It includes a 450-page manual, online help, visual compile environment, and several bug fixes and enhancements such as ANSI compatibility and extra tools.

There is a source level debugger, bonus tools to help find bugs in code and a compression system for use on floppy disk systems.

DICE 3 costs \$150 from Obvious Implementations on 010 1 919 859 7407.

Spotlight feedback prompts future shows

ORGANISERS of the Spotlight 94 exhibition held recently at London's Novotel are looking at the possibility of future shows following positive feedback from visitors.

Some companies who attended said the small two-day event was more profitable in their markets than the large consumer shows.

It was arranged by London-dealer Gasteiner Technologies and sponsored by Amiga Computing and sister magazines *Atari ST User* and *Atari ST Review*.

More than 3,200 visitors attended and were able to pick up hardware and software at discounted prices, as well as receive free technical advice on everything linked with the Amiga.

HiSoft boss David Link said it was "a brilliant show with a good standard of customer."

MAT brings mouse fun

MAT is the name of the Data Business' new range of mouse-mats, which the firm says has been designed to make it fun to use the Amiga rodent.

Among the unusual mat shapes are Boobs and Chesterfield, along with a pig, frog, owl and a coffee cup. They are available for £6.99 each by phoning 0865 842224.



Animations to be shown worldwide

A CONTEST giving animators the chance to show their work to the rest of the world and to win computer hardware and software has just kicked off.

The Animation Contest 1994 is being run by California-based Fresno Video Production, who are accepting submissions for 2D and 3D graphics sequences to be put on a video tape.

Entries will be judged on originality, creativity and use of equipment available.

They can be put together using any computer and software and then put onto tape. Anyone who has their

submission accepted for inclusion on the tape will be able to have their name, studio name and phone number advertised in the closing credits free of charge.

It is hoped that 100s of entries will be included on the video which will go on sale before Christmas in various television standards, including NTSC, PAL and Secam.

The closing date for entries is October 14, but write for more information to Anim Contest, PO Box 9839, Fresno, CA93794 USA. Alternatively, telephone 010 1 209 277 1188.

Guide explains scanner tasks

A FREE illustrated colour guide explaining the basics of owning, operating and making the most of desktop scanning is now available from Epson.

The 100-page guide shows how scanners capture text and images before translating them into a form which can be handled by a computer.

It explores the ways of acquiring, manipulating, using and storing images as a means of increasing productivity and creativity. All forms

of scanner technology are covered, including sections on optical character recognition and practical advice about displaying images on screen and printing in colour.

The Totally Scantastic Guide to Desktop Scanning is part of an Epson education and training programme aimed at helping people realise the potential of computer hardware and software.

For a copy of the guide telephone 0442 61144.

ELSPA warn of illegal CD flood

COMPUTER and video games trade body ELSPA have warned of a flood of illegal compact discs containing pirated and pornographic material.

The warning follows police raids initiated and spearheaded by ELSPA's new Crime Unit, which have led to investigations into alleged criminal conspiracies to produce and supply illegal CDs.

Three police forces are carrying out further investigations and six arrests have already been made.

Discs uncovered by the investigations have contained up to £20,000 of business and leisure software on a single CD - with titles as diverse as Lemmings and AutoCAD PC design software.

"Not long ago, software publishers saw the use of CDs as a way to combat piracy due to the prohibitive cost of the copying equipment needed to cut CDs," said ELSPA's John Loader.

"ROM writing equipment used to chemically write on special gold-coloured CDs, called CD-Rs, costs as little as £2,500.

"The huge capacity of CDs, combined with this low copying cost, now pose a real threat to the entire commercial and leisure software industry."

Anyone with information on illegal software is asked to contact ELSPA's Crime Unit on 0386 830642.



The lost Amiga chronicles

Now that Commodore's US office is all but shut down and nearly everyone has moved on to other things (Dave Haynie, designer of the A2000, A3000, and much of the A4000, has joined many other former West Chester workers at SCALA's US office), the lid has been pulled off some of Commodore's "Skunk Works" secret projects of the past. And it's a disappointing story for Amiga users.

According to Haynie, Commodore had been smoothly on track for the release of AGA computers in the Spring of 1992. Unfortunately, some personnel changes at the top of the company (including the hiring of the man responsible for IBM's colossal flop — the PCjr — as head of Commodore's engineering division), caused a change of plan and AGA was delayed for more than six months.

The following are the machines we might have seen had it not been for some very bizarre management decisions:

● **A1000+** — An \$800 32-bit AGA system with IDE hard drive in an updated Amiga 1000-style box with separate keyboard.

Forging on

Apex Software, creators of the incredible Essence series of 3D textures for Imagine, has announced a new product called Forge that lets you use Essence textures in any graphic program on the Amiga.

Forge, which runs independently of and doesn't require Imagine, allows you to load any Essence texture and modify and preview it in full color.

As you change the sliders, the patterns of the texture change interactively in real time, taking much of the guesswork out of texture creation.

You're not just limited to rendering flat textures either. You can also render spheres, seamless tileable surfaces, as well as pre-distorted spherical maps which can be wrapped in a 3D program to create realistically looking, rotatable textures spheres.

Forge supports ECS, AGA, Picasso II, EGS, OpalVision, Firecracker24, and other 24-bit display boards.

Forge retails for \$60 but is available for \$29 direct from Apex. Essence volumes I and II, \$140 retail, are available from Apex at \$85 each. The best deal is the bundle of Forge with both Essence volumes for \$175.

Contact Apex, 405 El Camino Real, Suite 121, Menlo Park, California 94025, USA; phone (415) 322-7532; or send email to spworkley@netcom.com.



Denny Atkin reveals Commodore's secret developments that never made it past the starting line

● **A3000+** — An Amiga 3000 updated with a 68040 microprocessor, the AGA chip set, SCSI on the motherboard and an AT&T 3210 DSP chip. This machine would have offered much better performance than the A4000 at about the same price.

Instead, the engineers were allocated to work on the Amiga 4000 Joseph "Augi" Augenbraum. A former Commodore hardware engineer who had worked on the A1000+, said that one of the main reasons for the redesign of the A3000+ into the IDE-based A4000 was that Commodore management had an emotional attachment to the case design, which was originally created for a Commodore PC that was canceled.

The Amiga 600 was originally going to be known



as the A300, and was to be an ultra-cheap computer that would have filled a low-end market below the A500 Plus, which would have continued to be produced.

Instead it was redesigned into the A600, which ended up costing more than the A500.

The engineers were also told to design another computer that was so bad, none of Commodore's divisions would order it: The A2200. This was a stripped-down, IDE-based Amiga 3000 that was so disdained in and out of engineering that employees referred to it as the "A1000jr."

Another one bites the dust

Another American Amiga developer has closed its doors permanently. New Horizons Software of Austin, Texas shut down in mid-May.

The company was one of the oldest third-party Amiga developers, having developed ProWrite, the first graphics-oriented word processor for the Amiga, back in 1986.

Its other products included the QuickWrite and the Flow outline processor. New Horizons acquired Central Coast Software a couple of years ago and distributed the popular Quarterback and Quarterback Tools packages under the Central Coast name.

As of press time nobody had picked up New Horizons' product line. This leaves SoftWood as the only American company producing a word processor, and Intelligent Designs Inc. as the only US company marketing hard drive tools.

Intelligent Designs is offering an upgrade for Quarterback and Quarterback Tools products to its Ami-Back backup products. The company is offering Ami-Back and Ami-Back Tools for \$24.95 each, or a combo pack with both programs for \$44.95. (Add \$15 for overseas shipping; outside of the US they only accept credit cards or money orders.) In an unrelated announcement, the company mentioned working on a clone of the popular Quicken home-finance program for release later this year.

For more information, contact Intelligent Designs, Inc., 2925 East Colonial Drive, Orlando, Florida 32803 USA; phone (407) 894-1031; fax (407) 894-2384.

Wait and (what happens?

In other disappointing news, SAS Institute, producers of the popular SAS/C Development System with C++ compiler, has announced that due to Commodore's liquidation the company has halted development on the Amiga-specific parts of its compiler.

Incremental upgrades may still occur as much of the compiler code is shared with versions on other platforms, and the company could resume development if the Amiga is picked up by someone else.

There is a little good news here, though. SAS has dropped the price of its compiler system dramatically. The new prices are as follows:

Version 6.50	\$199.00
Upgrade from version 6	\$59.00
Upgrade from versions 4 or 5	\$99.50
Academic discount price	\$99.50
Marx trade-in price	\$99.50

For more information, write to Amiga C Marketing, SAS Institute Inc., SAS Campus Drive, Cary, North Carolina 27513, USA; or send electronic mail to ts4sasca@unix.sas.com via the Internet.

You can be as politically correct as you like, you can rant and rave about free speech, you can even make references to the nudes used in classical art, but no matter how you cut it the worst kind of pornography is still plain old filth.

Just as it is an abuse of freedom of speech to make racist remarks, it is an abuse of freedom of expression to depict children in sexually explicit poses.

It's an unfortunate fact that most people who make a lot of noise about liberal ideas such as "free speech" haven't actually thought about what these ideals mean in practice.

If the British National Party ever won enough share of the vote, would you allow them the usual five minutes on BBC for a party political broadcast?

If not, then you are a supporter of censorship in one form or another, and you would be damn right. Those who write to computer magazines and newspapers expressing their disgust that, when writing on the subjects of porn and violence, we are attacking free expression are usually people who simply draw their lines a little further down the scale.

Tolerance is a wonderful virtue and one which is sadly lacking in many parts of the world, but to accept anything and everything is not tolerance; it is indifference.

We can only be tolerant of things we don't agree with or don't like, because we can hardly say we are tolerant of something if it is of little moral or social interest to us.

In other words, to claim to be a tolerant person one must first decide what one cannot tolerate. Once this line is drawn it is much easier to debate on issues such as pornography and violence in computer software.

Start from first principles as the mathematicians do and you can't go wrong, but start with a nebulous notion of what you will allow and you can soon tolerate yourself out of existence.

This point has been completely missed, both by most tabloid newspapers and by the majority of those who wrote to *Amiga Computing* to complain that our recent pornography article was an exercise in moral crusading. We weren't crusading, we simply drew our line and printed it.

Now that the debate is more generally public, the usual two distinct extremes have emerged. There are those who will happily thump whichever religious tract they adhere to and lecture us about morality, and there are the

A step too far

With Elspa's recent suggestion that magazine CoverDisks and even printed articles might one day be age-classified, Stevie Kennedy wonders if the porn and violence debates have been hijacked by moral panic



individuals who, with seductive arguments about supposedly liberal thinking, will tell us that all forms of censorship are wrong.

In the middle, organisations such as ELSPA (European Leisure Software Publishers' Association) are in the unenviable position of having to react to shifting public opinion which is influenced on one side by ranting tabloids and on the other by wet liberal "free thinkers".

The latter group are the most dangerous, those woolly-headed throwbacks to the 60's or latterday libertarians who think less about what they believe than what they say about their beliefs, and who take a pride in being "broad minded", an easy non-specific label to slap on yourself.

X-HEAD

Without so much as a second thought for the consequences of what they support, such people will parade a near-religious fanaticism for the removal of all censorship, claiming that free speech is a "right".

Free speech is, of course, the easiest right to support because most supporters of it don't realise that it is a physical act which can have as many damaging effects as a hundred kicks and punches.

However, it is clear that they don't even understand the concept of rights themselves,

because every right carries with it a duty.

Were we to concede that pornographers had the right to express their art through the medium of the computer disk, we would be taking on a duty to stand up for those same pornographers and to fight side-by-side with them for their right to publish and be damned.

Most of us will shrink at the thought of actively supporting horny dog animations, so why are we so reluctant to go against the politically trendy "rights" movement?

Since the 1960's, a decade which billions of us didn't live through, the western world has been badgered again and again by pseudo-intellectual rubbish from those who tagged along behind the hippy bandwagon spouting a lot of badly thought-out nonsense.

Even the word "moral" has been twisted around, and to many now conjures up an image of rowing Victorian middle class respectability. I, for one, am sick and tired of this sort of attitude from both the trendy left and the trendy right.

If the dogmatists and kneejerk specialist would shut up, noise levels would drop and the level of debate would rise, so do us all a favour and think before you preach, eh guys?

The AC team

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De-archiving applications - Workbench 2.0 and above

Always boot from your CoverDisk when de-archiving applications. The installer programs can be located via the install icon with the appropriate name in the WB_2&3_Only drawer.

The de-archiving procedure has been much improved and now combines the power of the official Commodore installer program with that of Workbench 2.0 and 3.0.

The installer program is designed to be powerful yet simple for the beginner and features a user-friendly interface allowing you to de-archive programs with a minimum amount of fuss. The installer programs for Workbench 2 and 3 users can be located via the icons named:

Install[program name]

eg:

InstallIPFM

To run, simply double click on the icon which will load up the installer program.

Using the installer

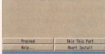
Ignore the buttons that appear when the installer program boots up and simply click on the Proceed button. The program will then copy the necessary files to RAM.

Once this has finished it will inform you that it is about to format a disk in DF0. Click

Don't forget to insert a blank disk at the prompt and before pressing Proceed



Just click on Enter to your User-Startup or Disk II to go back to the menu bar. This will mount the disk to be in your C: directory.



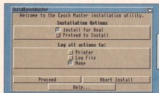
Any commands that need to be added to your User-Startup can be done with the press of a button

on Proceed, at which point you will be told to insert a blank disk ready for formatting.

Once you have clicked on Proceed, the installer will indicate that it is formatting the disk in DF0. When this has finished, click on Proceed again to start the de-archiving procedure. When the application has been de-archived you will be told where the de-archived files are. Click once again on Proceed to finish.

If at any time you are unsure as to whether you want to continue installing, you can click on the Abort Install button.

Occasionally, utilities may need to add instructions to your User-Startup file located in the S directory so that they will function correctly. If you want to add the instructions, click on Proceed when prompted.



Don't worry about the installer options. Simply click on the Proceed button



The Workbench 2.0 and 3.0 installer icon

De-archiving applications - Workbench 1.3

Always boot from your CoverDisk when de-archiving applications. The installer programs can be located via the install icon with the appropriate name in the WB_1.3_Only drawer.

Install[program name]_1.3

eg:

InstallIPFM_1.3

When you load up the 1.3 installer the program will first prepare itself ready to de-archive the program to a



After inserting a blank disk press y to continue or "n" to abort

blank disk(s). You will then be asked to insert a disk to be formatted into DF0 and either press y to continue or n to abort.

Provided you answer y, the disk you insert will be formatted and the application de-archived.

Installing utilities

You should first run the MakeUtilitiesDisk_1.3 to format a blank disk called ACUtilities which will be used to store any utilities you eventually install.

This disk can be used with future CoverDisk utilities until it becomes full. The MakeUtilitiesDisk1.3 program will be a permanent feature of the CoverDisk.

To install any utilities, boot your machine with your CoverDisk inserted in DF0. Utilities can be installed by clicking on their install icon found in the appropriate drawer in the WB_1.3_Only drawer. You cannot specify their destination and any additions to the Startup-Sequence must be done manually.

When installed the utilities are copied to a drawer called ACUTILS on the ACUtilities disk.

getting started



The Amiga Computing CoverDisk is designed to be as simple to use as possible. Follow these instructions and you'll be up and running in no time!

We have now managed to fix the problem with AmigaDOS displaying a "disk is write protected" requester when a write-enabled disk is inserted. Just make sure you insert a blank disk when the installer programs tell you - and not before or after.

Installing utilities

The procedure for installing utilities is much the same as installing applications, except that you can boot from your hard drive or Workbench disk. As utilities don't need to be de-archived, you are asked to specify a directory on your hard drive or Workbench disk where you would like to install them.

If you don't want to install to the default directory you can change it by clicking on Change Destination. The Show Drives button will allow you to select a new device and directory. You can create a new drawer for your utility to go in by clicking on the Make New Drawer button and typing in the name.

You can also make a utilities disk by running the MakeUtilitiesDisk1.3 program located in the WB_1.3_Only drawer and installing your utilities to there. At times you may be asked if you want to install a utility's documentation. A tick box indicates that the documentation is selected for inclusion, but you can click on the box to ignore it or simply click on the Skip This Part button.

The utility installer programs can be found in the appropriate program drawer in the WB_2&3_Only drawer.

You can easily install documents and create new drawer thanks to the installer's user-friendly interface



The Devpac tutorial

020, 030 and 040 users will not be able to follow the Devpac tutorial fully due to the architecture of their machines. Most of the explanations will work but you are advised to follow the assembly language tutorial in the Amiga Guide pages of Amiga Computing instead.

This guide will show you how to create a PacMan clone in assembly language using Devpac. Back issues are available by phoning the Reader Offers General Enquiries line on 051-357 1275. Check out the Reader Offers pages in the magazine for more information.

Devpac is the Amiga's most popular and powerful super-fast assembly language development system. This particular package, given away free with Amiga Computing, features a full macro assembler, full screen editor, linker and all the necessary include files that allow you to interface with the Amiga's operating system.

Once you have successfully de-archived the two Devpac disks boot your Amiga with disk one. Instead of Workbench loading, the disk will stop execution at the CLI window where you will see the following prompt:

1>

It is from here that you must run the Devpac programs.

The purpose of Devpac is to allow you to write assembly language programs and then assemble them into self-sufficient programs.

Most commercial software, both serious applications and games, is written using Devpac, so you have the power to create programs as good as any available commercially.

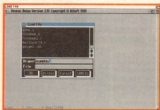
However, the following tutorial expects you to already have a knowledge of 68000 assembly language. If you are new to assembly check out our tutorial in the Amiga Guide section.

What follows is a very brief tutorial on the basic working of GenAm2, Devpac's editor and assembler.

At the CLI prompt type in the following:

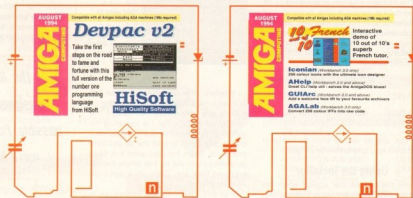
```
cd examples
genam2
```

Don't forget to hit Return after each



Before you begin experimenting with Devpac it is recommended that you load the examples file, demo.s, and follow the tutorial!

THE Cover



Where fantasy becomes reality

Get on a one-to-one with your Amiga and turn your ideas into reality with the number one assembler package from HiSoft

command. When the program has loaded you will be presented with a blank window ready for you to either create a new file or load a previously saved one.

Load a file by holding down the right mouse button and moving the mouse pointer over the Project menu. Select Load, at which point a file requester will appear requiring you to select a file.

Find the file called demo.s, click on the name and then on the OK button. After demo.s has loaded it will be displayed in the window ready for editing.

The first thing to do is assemble the code. Move the mouse pointer to the Program menu and select Assemble. A dialogue box will appear which should be left alone at the moment except for the button labelled None

which must be clicked on. If the dialogue box appears okay click on the Assemble button.

The assembler will report the following:

```
Error instruction not recognised at line 42
42 00.0000003C mov.l _D0Base,a1
```

Press any key to return to the editor where you will be positioned at the incorrect line - line 42. This line should be changed so that mov.l reads move.l. Correct this mistake and then select Assemble from the Program menu again.

This time click on the Memory button in the dialogue box. The assembly run will inform you that there are no errors. However, there is still a hidden problem that will crash your Amiga if the program is run.

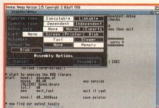
Disks



You don't really need to understand exactly what the demo program does as the tutorial concentrates more on using Devpac.

To check the integrity of the code we need to invoke the debugger. Select Debug from the Program menu, at which point you will be taken to the main display.

The debugger features three windows, each of which tell you different things about your program. Window 1, titled Registers shows the Amiga's registers and their values.



You can assemble your code in different ways, accessed via the Assembly dialogue box

Window 2 – Disassembly PC – shows your code and allows you to single step through it. Window 3 – Memory – shows the contents of memory in ASCII and hexadecimal. Phew!

Window 2 will show the listing with the current instruction marked with a < sign. The first line should read:

```
start      <MOVEA.L dosname,a1
```

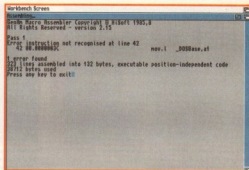
In order to catch any bugs we need to execute the program via the debugger. Press Ctrl-R to begin execution of the program.

After a while you will see the message Address error at the bottom of the screen, with the disassembly window indicating the corrupt instruction.

This command causes an address error because the location dosname is at an odd address that cannot be accessed with the MOVE.L instruction. There should be a hash



If you can't remember GenAm2's keypresses you can call up the Help dialogue box



Once you have written your code, hypothetically speaking you can assemble it and check for typos

sign before the dosname to put the address of dosname into the register a1.

To return to the editor press Ctrl-Q to stop the program and then Y to kill it from memory. We can now fix the bug from the editor.

Press the right Amiga key and T together to go to the very top of the code. Select Find from the Search menu and enter move.l in the Find dialogue box.

On clicking on OK the cursor will be positioned at the first occurrence of move.l which happens to be the instruction we wish to change. Change the line to read:

```
start      <MOVEA.L      dosname,a1
```

Now assemble the program again. If you select Run from the Program menu you should briefly see a message (very briefly) in a window which will then be closed, after which you will be returned to the editor.

Now that the program works we can use the debugger to single step through each line and check that each command is doing the right thing. Select Debug from the

Paths to assembly

The assembly dialogue box allows you to specify how you want to assemble your source code and to what device. Below is a brief description of each button in the dialogue box.

Program Type – lets you select between executable or linkable format output.

Symbols Case – lets you select whether labels are case dependent or not. If case Dependent is selected then Test and test would be different labels. If case Independent is selected they would be the same.

Debug Info – if you wish to debug your program using your original symbols you can select Normal or Export debug modes.

List – selecting Printer will divert the assembly listing to the PRT: device and selecting Disk will send the listing to a file based on the source filename but with the extension LST.

Assembler – normally, this option should be left as Fast selected. But, if the assembler runs out of memory select Slower. This forces the assembler to use as little memory as possible, thus slowing down things like reading include files.

Output To – this lets you select where the output file is to be created. None means it is thrown away – ideal for syntax checking a program. Memory means it is assembled into a buffer, allowing it to be run or debugged instantly from the editor without having to create a disk file. Disk means a file will be created.

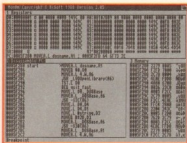
The first two options in the above list may also be specified in the source file using the OPT directive. To invoke them you would type in:

```
OPT C-      ;Case insensitive labels
OPT D+      ;debug
```

Having selected your required options you should click on the Assemble button to start the assembly. At the end of assembly you should press any key to return to the editor.

If any errors occurred the cursor will be positioned on the first offending line. If you are keen to learn assembly language or would like to apply what you already know to producing a game, check out our assembly language tutorial in the Amiga Guide pages in which Mark Jackson explains how to create a Pac Man-style game.

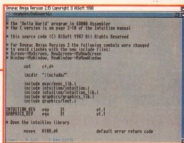
We also recommend that you take advantage of our upgrade offer for Devpac 3 and the excellent Mastering Amiga Assembler.



Once any typing errors have been corrected you can then switch to the debugger to check errors in the code itself



The windows indicate the hardware registers, the disassembled code and hexadecimal to ASCII conversions



There are other source code examples which you can load and run

Program menu. Labels, such as start only appear if the debug option is switched on in the code.

This makes debugging much clearer and allows you to see your program running as it was written.

The three windows are activated by pressing the right Amiga key and the number keys 1, 2 and 3 respectively. Make sure that the Memory window is selected at present.

Press the right Amiga key and A simultaneously. This will bring up the address dialogue box in which you can specify the start address of the Memory window display.

Type in the following and press Return:

```
string
```

The contents of the Memory window will change to show the address pointed to by the label string that you can see in the editor. The ASCII interpretation should read:

A Program written with HiSoft's Deupac Amiga

You can use the above procedure to view the contents of any address locations.

We can now single step through our tutorial by using Deupac's single step ability. Switch control to the Disassembly window so we can work on the code.

To single step through the instructions we need to press the Ctrl-Z keys. This will execute the present line, indicated by



De-archiving Deupac

Deupac comes as two disks, both packed onto CoverDisk 1. To de-archive them you will need to have two blank disks ready. Run the installer and follow the on-screen instructions as they appear.

Both disks are packed using DMS so de-archiving should be a lot quicker than with Lha.

If you have a 1Mb Amiga and have a second disk drive it is recommended you remove the second disk drive while de-archiving Deupac.

<, update and display the registers in the Registers window and then move onto the next instruction.

Continue to press Ctrl-Z until you come to the instruction:

```
JSR _L00open.library(A6)
```

This is a call to the exec.library. All calls to the Amiga's operating system have the same form. We don't want to single step this - we know that AmigaDOS works (well, at least most of the time). To treat this system call as one instruction use Ctrl-T.

Continue pressing Ctrl-Z until you get to:

```
JSR _V00output(A6)
```

This is a call to the dos.library to find our output handle. Use Ctrl-T to skip over this. Use Ctrl-Z to continue single stepping until you get to:

```
JSR _L00write(A6)
```

This call will actually write the string to the screen. d1 should have the output handle that came back from the Output call in d0. d2 should contain the address of the message.

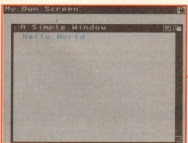
If you look across from d2 in the register display you will see the ASCII bytes of the string.

Now use Ctrl-T to skip over the Write call. To check that it worked press the V key, then press any other key to return to the debugger.

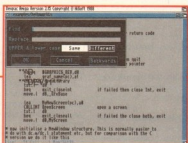
You can Ctrl-Z and Ctrl-T to the end of the program, indicated by:

```
RTS
```

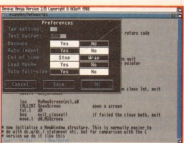
When RTS is executed with Ctrl-Z the debugger will be closed and control will return to the editor.



Here is the finished result of the example called HelloWorld.s. Not great, but a start nonetheless



GenAm2 features all the common functions you would associate with a high-end word processor



You can define the program to suit your own requirements via the Preferences dialogue box

HelmiLite - Workbench 1.3

Unfortunately, due to the late arrival of HelmiLite on last month's CoverDisk we were unable to get the program working on Workbench 1.3 Amigas. Thanks to Gary Wall from Tyne & Wear we now have a fix so that 1.3 owners can use the superb HelmiLite program without any problems.

First boot with your Workbench 1.3 disk and when it has loaded insert the HelmiLite program disk. Users with only one disk drive will need to swap between the Workbench and HelmiLite disks several times during the loading process.

Some users of 1Mb Amigas may experience memory shortages during the unpacking of the HelmiLite program and Examples disk.

To avoid this problem simply unpack the examples disk manually, typing the following commands in the CLI window:

```
copy examples.dos to ram:
cdos write ram:examples.dos
```

Insert a blank disk at the prompt and the Examples disk will be successfully unpacked. Special thanks again to Gary Wall.

We apologise for the lack of a HelmiLite tutorial this month. Expect to see it in the disk pages of next month's Amiga Computing.

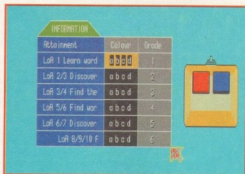
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10 out of 10 French allows you to monitor your progress and tells you in which areas you need to improve

Iconian

Author: Chad Randall
Workbench 3.0 only

At some time every Amiga user feels the need to alter the Workbench, change the font, load a background and most importantly of all, edit the icons.

Unfortunately, the supplied designer, IconEdit, is about as much use as a heater in the desert. With its limited tools, lack of flexibility and annoying bugs, designing icons becomes a real nightmare.

Enter Iconian, probably the best icon designer in the World - well, maybe. Iconian is practically an art package that allows AGA owners to create any type of icon with ease.

All the tools associated with fully-fledged art applications such as Deluxe Paint are available including brushes, fills, zoom in, zoom out and a fully-definable palette requester.

On loading Iconian you will be presented with the four control windows, including the main editing window.

The palette requester will reflect the amount of colours you have presently selected in the Screenmode preferences - 2 to 256 - with the current colour displayed at the top of the window below the RGB bars.

The most important area is the editing window where the design of icons is actually performed. The edit window is divided into three areas - the toolbar, status panel and editing area. To familiarise yourself with the Iconian displays look at the illustration.

As well as the editing windows, Iconian also has a wide selection of menu options which you can select in order to set certain attributes within the program. What follows is a brief description of the most important menu options.

You can set the type of icon you are editing from the Project Icon Type option. There are eight icon types altogether, the default being Tool. Remember to change this setting to

reflect the type of icon you wish to use.

Iconian allows you to actually load in IFF pictures and convert them to an icon. As an example, you could have an icon using your Workbench image. The Images Load menu item will let you load in a picture and scale it to the size of your icon.

Just like your favourite paint package, Iconian lets you grab brushes and draw with them. From the Brush menu you can scale and flip grabbed images and even add text as a brush. If you make any mistakes, Iconian features four levels of undo, more if you register.

The Paint menu specifies certain attributes about the way you paint using the allocated tools. Drawing Mode simply lets you select the tools from a menu. Bevelbox Type, however, allows you to specify the type of bevelbox which will be drawn when that particular tool is selected.

Bevelboxes are great for creating button effects and there are four different types of bevelbox - single, button, ridge and drop box. Bevelboxes can be filled and recessed by selecting the options below the types.



Now A1200 owners can create icons in an incredible 256 colours



French

Author: 10 out of 10 Educational
Software - All Amigas

The 10 out of 10 series of educational programs have become very popular with the Amiga fraternity wanting to broaden their educational horizons.

10 out of 10 have kindly supplied us with a demo version of their French Tutor program in which you can participate in a spaceship game where you must link as many pictures as you can to their French translations.

On loading up French you will be presented with specific information regarding the demo version. Click on the cross in the top-left corner in order to play the demo.

Before you begin, click in the box labelled New Player. This will allow you to enter your name so that you can keep a personalised record of your performance. Hit the Return key to return to the main menu. You will see the currently selected player's

AHelp

Author: Joe Cassara
Workbench 2.0 and above

When the Amiga first appeared there was very little coverage of AmigaDOS, the Amiga's powerful operating system and therefore most users tended to shy away from it.

With the advent of the A500+ came a selection of high-quality books on the subject of AmigaDOS, intending to educate the Amiga user.

Rather than write a book on the subject, Joe Cassara has decided to condense all AmigaDOS commands and syntax as an AmigaDOS command.

The core to AHelp is the Help.Library which resides in the Libs: directory on your disk. This is a massive text file which the Help command reads every time it is run. The library features a full run-down of nearly all AmigaDOS commands.

Using AHelp couldn't be easier. Open up the CLI or Shell and type in:

```
Help
```

This will list the entire commands that AHelp knows. Once you have found the command you wish to view type in the following:

```
Help (command)
```

e.g.

```
Help addbuffers
```

Once the command has been found in the Help.Library it will be displayed in its format, template and path. An explanation of the command will also be displayed along with an example.

e.g.

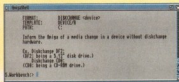
```
FORMAT:      ADDBUFFERS 12
TEMPLATE:    DRIVE/X, NUMBER/N
PATH:        C:
Add cache buffers to a drive.
Ex. Addbuffers DFD: 30
```

You can add other AmigaDOS commands to the Help.Library simply by editing it in your favourite text editor.

The example below shows how you should add new commands:

```
#
ask          FORMAT:      ask
            TEMPLATE:    PRORNT/X
            PATH:         ROM
            Obtains user input when executing a
            script.      Ex. Prompt Best Pathbench (T/N)?
#
```

So, as AmigaDOS improves so will you.



Now you need never get that AmigaDOS command wrong thanks to AHelp

name at the bottom of the selection menu.

Click on the Rescue icon (the picture of a spaceman) to begin the demo. You will be taken to a new menu which will allow you to set certain criteria prior to the actual game.

You will begin on grade one and can find out exactly what this grade includes by clicking on the Information button. You will see that grade one requires you to learn words by associating them with pictures. Click anywhere to return to the Rescue menu.

You can challenge yourself by changing the Timer and Hits allowed value. Once you are happy with the set-up click on the Play Rescue button.

Before you actually press the mouse button to start Rescue, it may be a good time to become familiar with the rules and the screen layout. You are presented with a French word that is linked to the classroom. Using your spaceship you must travel up the screen, flying over the image that represents the given word.

As an example, if Les maths were shown you would need to fly over the blackboard containing mathematical figures and diagrams. If you fly over the wrong image twice then the correct image is shown alongside the French translation.

The screen panels indicate the amount of time remaining – if the timer has been set – your present score which is saved to disk as a permanent record, and status information such as the current grade and your performance on the present stage.

Once you have fulfilled your task or the timer reaches zero the game will end and you will be shown your performance chart. On display will be your score, a percentage indicating how many words you guessed correctly and some useful advice on your progress.

Once you have progressed above a certain level you can attempt to play grade six which is for the more experienced Frenchie. Click on the Grade button and you will see



what we mean. The entire program switches into French. The set-up of this Rescue game is exactly the same as grade one but this time you are required to fly over the missing words.

A sentence is displayed with a word missing and you must hunt it down and click it into place by flying straight over it. The rules for grade one still apply. You'll be amazed at how quickly you will pick up the basics of French.

AGALab

Author: Martijn Boekhorst
Workbench 3.0 only

If you're interested in programming the Amiga in assembly language you'd be wise to check out our beginner's guide where you can learn to write your own game.

So that all you would-be programmers and professionals can create stunning AGA graphics for your masterpieces, we have provided the best IFF to RAW AGA converter program.

AGALab features a fully on-board help option where you'll find all the instructions on using the program. Have fun.

GUIArc

Author: Patrick van Beem
Workbench 2.0 and above

Why is it that so many of the Amiga's premiere archivers can only be executed from an output window? Well, initially archivers were intended only for programmers but soon became an essential element in most Amiga user's software collection.

Fortunately, for those of you who avoid the Shell like the plague (see the AHelp program) this graphical front end for the most popular archivers will prove invaluable.

The major elements in the GUIArc display are the source and destination directories indicated by two large windows. Below these windows are the buttons which will allow you to add, view, extract, test, move and delete files.

The major strength of GUIArc is its ability to use almost all archivers – the default being Lha from Stefan Borge. To archive files all you need

to do is select them in the source directory, set a destination directory and then click on add. When you have entered an appropriate name for your archive hit Return and away you go.

The file ArcTypes, a text file which should be present in the same directory as GUIArc, contains information about other archivers you wish to use. The GUIArcTypes document contains a list of different archivers which you can command GUIArc to understand. Lha is not supplied with GUIArc.



Forget the Shell because you can now do all your archiving and de-archiving from the friendly interface of GUIArc

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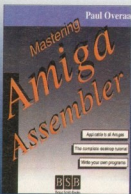
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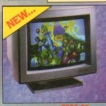
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PROFESSIONAL FOOTBALL MASTERS 4

Quite simply the best football management game for your computer.

We have served thousands of satisfied customers during our 4 years of trading. Over 100,000 man hours (during 5 years) has been dedicated to the production of this constantly improving game. It is one of the most realistic and accurate representations of a professional football managers annual challenge to tactically outwit and conquer every opponent.

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The Match: Real time scoreboard reporting goals & injuries yellow/red cards. Sound effects. Interventions permitted at any time to change tactics, formations and make subs.

Other: Physical graphical penalty participation (optional). Over 80 different releases.

Physical: Fast load/save. Printer access. 20 Options to set various game preferences, Instruction book. Easy to play. Technical support.

Plus: Over 700 other metallic refinements impossible to list here.

Editor: Allows you to amend various items in saved games. £12 Extra

Scottish: Dedicated version full details upon request.

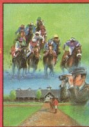


STABLE MASTERS VERSION 2

This game has been designed to be as close to real racing as possible. Five years of development by a clever racing expert has led to the second revision of this Flat Horse Racing Simulation.

Up to 4 players can participate as Owner Trainers with the primary objective of becoming the top rated trainer, in respect of prize money won, at the end of each racing season (March to November). There are up to 35 other intelligently controlled computer trainers to compete against and compare your personal performance. To achieve this aim you must discover a potential champion and train them so that they become capable of competing well and winning any of the 47 big prize money races (Handicap and Group) etc. The Derby. To give you an idea of the tools provided in this game to assist you reaching your objective we have listed the main features below:-

- 250 horses each with over 60 independent variables.
- 25 different race courses (2 all weather), real life characteristics mirroring the diversity of scenarios in the UK (descriptions provided).
- Favourite and Win Summary Cards cover the previous 200 races.
- Animated race display or just the result. View Declaration list for races.
- 20 jockeys who vary in ability and booking fees, Odds & Feedback.
- Very informative report by Head stable lad. Tipsters. Bookmakers.
- Racecards similar to racing press. Real life Handicaps & Race Types.
- Injuries & Vets. Load/Save game. Many other items included.



ORACLE RACING SYSTEM

NEW REVOLUTIONARY HORSE TIPPING SOFTWARE YOU COULD HAVE WON

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Winners based on a maximum stake of £100.

During the period 01/01/93 to 31/12/93.

ONLY using the main meeting of the day.

245 Recommended Bets, 146 Wins, 62 Placed.

Statistics & details available upon request.

Open National Tipping Competition: Organized by Racecall, fully regulated, this program achieved great success. This led to a serious approach from a well known national bookmaker. Rejected in favour of supporting the public.

Betting Formula: This program tells you exactly what to do. You are NOT permitted to amend our system unlike so many other similar programs. How confident can you be in something that involves overconfidence?

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Monthly Updates: Recommended optional extra and if it fails to break even we'll send the next one free of charge.

Program Price: £39.95 Buy now before success increases.

Computers: PC Compatible, Atari ST and Amiga.

Latest Press Comment:

CU AMIGA MARCH 1994

"Oracle is, without a doubt, the most impressive one I have ever come across."

"Oracle is stunningly accurate"

"If you're really serious about your game gees, there's no better package to buy your hands on."

CRICKET MASTERS

This is a purely managerial cricket manager game that concentrates on strategy and includes plenty of realistic statistics. The game has been designed and developed by a true fan of the sport. It replicates everything that a real manager has to contend with and it's a totally unique production that all Cricket fans should experience.

A summary of the main features is shown below:-

- AXA EQUITY & LAW 18 league county teams, 50 overs per game.
- 4 Cup competitions including Benson & Hedges, Nat West.
- 27 different match umpires with accurate names and stances.
- Accurate player details: Name, height and age.
- 27 different player attributes. Most skills have a direct impact on the effectiveness of each individuals actions during a simulated match.
- Easy player selection. All game text is clearly presented.
- Batting and bowling averages. Top batting and bowling tables.
- 3 different training intensities to boost batting, bowling or fielding.
- Weather, pitch and light often make an impact on ground conditions.

- Full match highlights let you watch the action ball by ball with full graphics and/or realistic sampled sound effects for significant events (Fours, Umpire decisions, etc.). Interventions are permitted at any time to change batting tactics or fielding placements.
- 3 Batting/Bowling classifications.
- 15 different field placements.
- Full scorecard (Results with best batting and bowling figures).
- Other staff (Physio, Groundkeeper, Scout) can be hired and fired.
- Annual league features listing. Current week and last league results.
- View current cup competition draws and historic records.
- Real time transfer market. Player contract and wage negotiations.
- Sponsors, Finances, Poor ground fines, Manager rating.
- 15 Options to alter game prefs., Load & Save game, Printer access.
- Full instruction book with plenty of examples. Plus Many More.



WORLD CUP CRICKET MASTERS

A fantastic graphical and/or tactical representation of Cricket that has been completely written by a traditional fan. You can physically participate with batting and/or bowling or leave it to the computer to automatically handle. See full feature list below:-

PLAYER VARIETY

- Rated on 8 adjustable factors.
- Left and right handed players.
- Range of batting types.
- Editor to amend game stats.
- Bowler types include seam, swing, change and both types of spin with 8 speed levels.

GAME OPTIONS

- 1 Day limited overs or test.
- White or coloured clothing.
- Three Cricket grounds.
- Load/Save game. Skill levels.
- Computer/Human players.

FRIENDLY CONTROLS

- Icon driven with point & click.
- Large 3D scrolling screen covering the entire playing area.
- Mouse controls bowler's line, length, direction field settings.
- Joystick control of batsman's attack level, strokes and running between wickets.

STATISTICS

- Scorecard & bowling analysis.
- Weather and ground reports.
- Wagon Wheel
- Manhattan Chart.



VARIABLE CONDITIONS

- Surface and pace of pitch
- Rain, bad light, cloud cover, temperature and humidity.

ANIMATED ACTION

- Sound Commentary.
- Umpire signals.
- All the strokes cut, pull, drive, etc.
- Appeals, dropped catches, run outs.
- Bouncers, wides and no balls.



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STABLE MASTERS V2		24.95	
ORACLE RACING SYSTEM		75.00	
CRICKET MASTERS		24.95	
WORLD CUP CRICKET MASTERS		24.95	
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SPORTS RELATED PROGRAMS AND PROGRAMMERS WANTED

Surviving the Internet

There was a time, like all "early adopters", when I had an Amiga and there was nobody else interested in it, nobody to talk to about it. Now the country, indeed the world, is heaving with people who want to talk about it.

The same was also true of the Internet. When CIX got its Internet feed a few years ago very few people leapt up and down about it. Then slowly everyone was talking about it, and soon it had all of us in its grip.

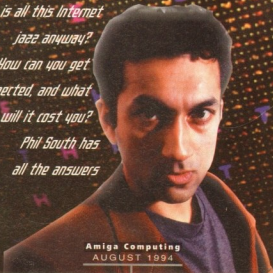
All of us except those who didn't have access, of course. And that is what this article is all about - giving you access to the Internet. What is it, how do you get it, what do you need and how much does it cost? All the hard questions.

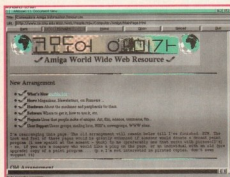
In the 1960s, experimentation began with the linking of computers to each other and to people through telephone

*What is all this Internet
jazz anyway?*

*How can you get
connected, and what
will it cost you?*

*Phil South has
all the answers*





The ultimate in hypertext via the world wide web

systems. This was funded by the US Defence Department's Advanced Research Projects Agency or ARPA.

They wanted to see if computers in distant locations could be linked using a technology called "packet switching." This is a process by which data to be sent to another place is broken up into little chunks, each with its own "forwarding address."

ROUTING

This had the ability of letting several users share just one line. And more importantly as it turned out, it allowed for the creation of computer networks that could automatically route data around a network of computers.

ARPA didn't intend to create the first international electronic community, but in fact was bent on creating a data network that could survive a nuclear attack. Funny how things turn out. So anyone who paid taxes in the USA in the '60s basically paid for all the R&D on the Internet.

This new system allowed computers to share data and the people to share electronic mail, or e-mail as it became known. As this system – soon to be known as ARPANet – grew, some college students found a way to use it to

A world-wide network that links computers across national boundaries

have on-line conferences.

Although these started as discussions based around studies, the talk soon shifted to every subject known to man as the users realised the usefulness (and the fun!) of being able to talk to hundreds or thousands of people around the network.

The next step was that in the '70s ARPA supported the development of protocols for transferring data between different types of computer Networks.

These "inter-networking" protocols (or Internet protocols) made it feasible to develop the world-wide Internet, as it became known – a world-wide network that links computers across national boundaries and sheer mind-boggling geographical distance. This was really when the Internet

Further reading

If you want to know more about the Internet, then simply check out these books at your local computer book shop or on the Internet.

The Internet Yellow Pages (Osbourne/McGraw Hill) by Harley Hahn & Rick Stout, £21.95

A brilliant guide to the various resources available on the 'Net. My copy is never far away from my computer.

The Internet Complete Reference (Osbourne/McGraw Hill) by Harley Hahn & Rick Stout, £21.95

A companion volume to the Yellow Pages, and what the Internet is and does.

Zen and the Art of The Internet by Brendan Keyhoe

This is a file available on-line at a stunning variety of Internet sites, and is an invaluable (if slightly technical) guide to what the Internet is and how to use it. A lot of the reasons why things work are here. FTP to and look in the /pub/net/zen directory.

The Big Dummy's Guide to the Internet by Electronic Frontier Foundation

Much bigger and better than Zen is the BDGL. Lucidly written and full of interesting data. Also free by FTP from in the /pub/EFF/papers/big-dummies directory.

See also:

The Internet Navigator (John Wiley & Sons) by Paul Gilster
The Internet Guide for New Users (McGraw Hill) by Daniel Dem

was born. In the '80s the Internet expanded, with thousands of colleges, research companies and government agencies connecting their computers to the world-wide 'Net.

ACCESS

Some folks who couldn't pay the costs of Internet access learned how to link their own systems to the Internet, although at this stage only for e-mail and conferences. Some of these systems began offering access to the public.

Today the 'Net continues to grow, and some say the volume of messages going through the 'Net grows 20 percent a month. There are fears that we may be heading for a crash, as the data speeds will have to

What do you need?

All you need to get you started is a modem (fast as possible, check), a computer (nice big Amiga, check) and access to a service which provides some form of Internet access (account details sorted, check).

The software can be something as simple as the shareware NComm or as complex as the Demon Internet software. Either will provide you with access but what you use depends on the type of service you subscribe to.

CIX and the Direct Connection are BBS systems (very big ones) which also feature Internet access. It's not full Internet access, although you do have many ways of accessing the Internet.

You can use FTP to transfer files back and forth from any of the thousands of computers on the 'Net – you can even telnet to any computer on the 'Net and use it as if you were calling it up locally.

To transfer files you get them from the remote computer, have them sent to CIX and then you download them from CIX to your machine.

Demon Internet is a full Internet connection however, which means there is no intermediate computer between you and the 'Net. So when you use FTP to transfer files from a remote computer host, the files come directly to you and nothing is stored on your behalf at Demon.

Similarly, Usenet is flowed directly into your computer from Demon when you log on, as all nodes get Usenet news if they ask for it, and without any prompting from you the news comes onto your hard disk ready to be read when you finish your session.

The other thing you can do on a full connection that you can't do on a second-hand connection is run multiple sessions. You can be FTPing from one site and then step back a stage and telnet to another site; you can even send mail and other things, and be receiving Usenet news, all in the same call at the same time.

UNIX machines (of which the Internet is mostly composed) are multitasking computers, just like your Amiga, and they allow you to take advantage of this with your 'Net access.

Although the Internet is easy to use it is very big, and you really need some tools to help you get around and find what you're looking for.

Gopher – almost every site on the Internet has a Gopher server. Gopher is a list-based system which enables you to choose menu items from the list, which then takes you off to another site via the 'Net (hence the name, go for this, go for that...)

For example, imagine you see a list and an item on it takes your fancy. Simply select it and you are then presented with another list, this time more detailed. Using this process you can use the menus to narrow down what it is you are looking for.

Sometimes Gophers incorporate a WAIS (Wide Area Information Search) or perhaps a Veronica system. These help you find files and sites of interest by using a keyword and searching all the Gophers it knows about for any info on that subject.

WWW – a similar concept to Gopher, except World Wide Web is a hypertext interface rather than a list-based system.

Most systems also have WWW servers as well as Gopher, so the choice is yours.

The graphic interface for WWW is called Mosaic which accepts files from the Internet sites in a special hypertextual form called HTML. This translates to the screen as text and pictures which can be clicked with the mouse to navigate around the 'Net.

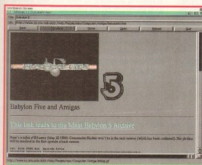
Amiga 'Net Tools – considering the Amiga's multitasking abilities, nobody has, it seems, really taken advantage of the Amiga as a 'Net machine. There is a distinct lack of a decent front-end for the 'Net – except for Macs and PCs.

There are Amiga versions of almost all the software you need and of FTP, IRC and Mosaic software, although it has to be said they are far less developed than they should be by this stage.

It's long overdue that someone made a really nifty Intuition-based do-it-all Internet interface for the Amiga, like Cello on the PC. (Only without the crap graphics of Cello! Art!)

Most services provide free software (or at least shareware) so you can get up and running in an afternoon.

Navigation aids



In depth information on just about any subject at the touch of a button

keep increasing to keep pace with the increasing traffic (something road users will be able to grasp without difficulty).

The original transfer rate around the 'Net was 56,000 bits per second. In recent years the speed was increased to 1.5 million bps and later 45 million bps.

These days people are thinking in terms of shifting up a few gears to move at around 2 billion bps, which I think you'll agree is knocking on in anybody's language.

CONNECTIONS

Nobody knows how many computers and networks make up this 'Net, although some say there are 5,000 Networks connecting nearly two million computers and more than 15 million people around the world.

The Internet is rather like a road network of large motorways connecting large cities, along which huge trucks and coaches travel.

From these large cities come smaller A roads and B roads carrying company reps in fast cars, linking together smaller towns and villages, where everyone drives their Morris Minors along narrow roads and tracks.

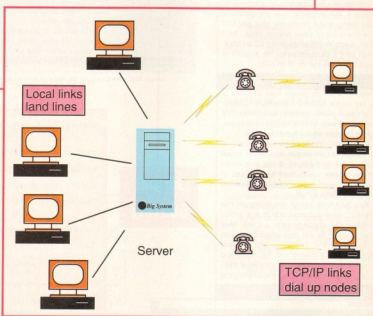
The Internet is the big motorway. Connected to this stream of data whizzing

along at blinding speed are computers that use a system of transferring data at high speeds.

In the US, the major Internet network can move data at rates of 45 million bits per second, which is fast considering your modem at home probably has a top speed of roughly 9,600 to 14,400 bits per second.

Connected to this 'backbone' (as they call it) are smaller networks serving particular geographic areas, moving data at speeds around 1.5 million bits per second.

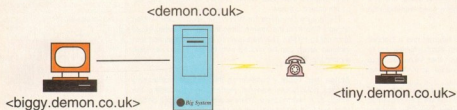
Feeding off these smaller networks are even smaller networks or individual



computers. Unlike other types of networks, there is no one central computer running the Internet. It is impossible for the entire 'Net to crash, as even if one computer goes down, the rest of the network keeps going.

The sheer size and weight of the 'Net makes it very difficult to navigate and find what you want. It is only fairly recently that 'Net users have developed tools to help them find what it is they are looking for, using interfaces like Gopher, WAIS, and World Wide Web.

The cost of joining the network depends



ALL NODES ARE CREATED EQUAL

who you buy your connection from, but compared to behemoth commercial systems like CompuServe, which can cost you a fortune for practically no usage, the Internet is free, pretty much.

It costs you to subscribe to a service to access it, but these services are generally quite cheap and it need only cost you £10 plus the cost of your phone calls. As I recall, a phone call costs about £2 an hour, which isn't a lot considering the amount of 'Net surfing you can do in an hour.

CONVERSERS

About 15 million people from all walks of life are on the network – scientists, computer programmers, doctors, astronauts, TV people, writers, artists, actors, plumbers, bakers, lumberjacks... need we go on.

A fair-sized chunk of the entire Earth is connected to the Internet, and as we speak there are only parts of Africa and other remote regions which don't have a feed of some kind, even if it's only the odd Usenet group and some e-mail.

You can talk about anything on the Internet, from subjects which are pretty harmless like whose records you like, what food you like to eat and which films you enjoyed recently, to discussions of great importance, like talking with top AIDS and cancer researchers, lists of alternative therapies, sexual problems, psychological

defects and newsletters about the Hubble Space Telescope.

In order to discuss things over the Internet you have to have access to Usenet, a series of newsgroups – hundreds of them – about all manner of different subjects. It's like a set of topics from a BBS, only this time beamed around the world so everyone can join in.

Most points of access to the Internet have a Usenet feed, and you join any groups which take your fancy and read and reply to any messages that appear there.

There are things stirring on the Information

Highway, and not all of them are good. The bad guys want control of the 'Net and they're trying everything to gain control.

This might sound like paranoid balls to you, but hold up. The FBI and the CIA are already tapping into the 'Net and writing screening software to filter out any subversive elements on the Internet.

Big business are trying to figure out ways they can make you pay through the nose for this service, calling it a product and packaging it in different ways, then trying to impose the first toll booths on the Infobahn.

It'll take them a while to set all this up,

Jargon busting

ARPAnet – how the Internet started. Founded in 1969 and funded by the US Defence Department's Advanced Projects Research Agency, hence the name.

Baud – the speed at which modems transfer data. One baud is roughly equal to one bit per second.

Bounce – what your e-mail does when it cannot get to its recipient.

Domain – the last part of an Internet address, such as 'cix.compulink.co.uk'.

Download – copying a file from a host system to your computer.

E-mail – electronic mail. A method to send a message to somebody else on the 'Net. Oddly this word is used as both noun and verb.

Emotion – (see smiley)

FAQ – Frequently Asked Questions. Many Usenet newsgroups have these files which are posted once a month or so for beginners, as they are list of the most frequently asked questions. This helps to keep the annoying chatter down to a minimum.

Finger – an Internet program that lets you get some bit of information about another user, provided they have first created a plain file, and provided their domain is on-line.

Follow-up – a Usenet posting that is a response to an earlier message.

FTP – File Transfer Protocol. A system for transferring files across the 'Net.

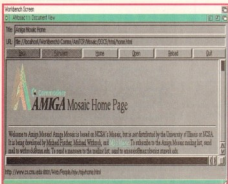
Host system – a public-access site; provides 'Net access to people outside the research and government community, i.e. you and me.

Mailing list – the same as a conference or newsgroup in which messages are delivered right to your mailbox, instead of to a Usenet newsgroup. You get on these by sending a message to a specific e-mail address, which is often a computer that automates the process and sends the list on automatically.

netiquette – a set of common-sense guidelines for not annoying others on the 'Net.

Newsgroup – a Usenet conference. Where people join and talk about a given subject.

Off-line – when your computer is not connected to a host system or the 'Net, you are off-line.



The Amiga's home from home on the Internet

Contacts



Okay so you want an Internet connection of some kind, who can you contact to let you have it? It's simple. Call up these friendly vendors, and they'll be happy to take your cash for a parking spot on the Information Superhighway.

CIX - 061-390 8446

CIX stands for Compulink Information eXchange, and it's one of the best stand-alone systems to belong to. The system has extensive conferences to join and e-mail around its own system, but it also has external mail, allowing you to e-mail other systems via the Internet.

It also has a full read/write Usenet news feed, Telnet and FTP access to the Internet, Gopher and WWW systems, E-mail and fax gateways, and files to download in the hundreds of thousands.

Costs: £25 registration, plus £2.50 per hour off peak and £3.60 per hour peak rate.

THE NET

Demon Internet - 081-349 0063

A full Internet connection service, including your own Internet node and lots of free software to get you up and running. Full Internet connection means you can use the graphic Mosaic interface to access World Wide Web.

You also have access to some newsgroups on Usenet which are otherwise unavailable, and while you are connected to Demon you are part of the Internet, with Usenet feeds coming in all the time. People can even FTP and Telnet into your system while you are on-line.

Costs: £12.50 registration, plus £10 per month. Yep, that's all.

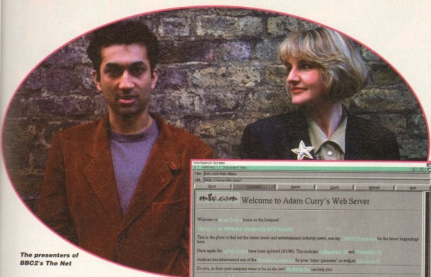
THE NET

Direct Connection - 081-317 0100

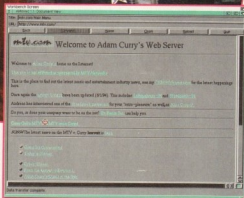
Although not so hot on the conferencing and such, the Internet access is top notch. WWW and Gopher access, FTP, Telnet, electronic mail, fax gateway, all the bells and whistles, all for a simple monthly fee.

Also has a really fast and comprehensive news facility compiled from the mainstream and computer news services running 24 hours a day. You can search for news using a keyword, and save off files which relate to that news story. Nice service.

Costs: £7.50 registration, plus £10 per month or £20 per for enhanced Telnet.



The presenters of
BBC's The Net



Customised access to the Internet via your very own Web server

mainly because they've only just realised what everyone was doing. We're safe for the moment, as they can't stop us doing what we do. But you can be sure that if they can find a way to charge everyone for access to the Internet, they will. Be vigilant.

On-line - when your computer is connected to an on-line service, bulletin-board system or public-access site.

plan file - a file that lists anything you want others on the 'Net to know about you.

Post - to send a message to a Usenet newsgroup.

Protocol - the method used to transfer a file between a host system and your computer. Such as Kermit, YMODEM and ZMODEM.

README files - files found on FTP sites that explain what is in a given FTP directory.

Server - a computer that can distribute information or files automatically in response to specifically worded e-mail requests.

sig file - sometimes signature file. A file that, when placed in your home directory on your public-access site, will automatically be appended to every Usenet posting you write. (Tip: don't create big sigs! It annoys other users.)

Smiley - a way to describe emotion online. Look at this with your head tilted to the left, like so: :-) or grumpy: :- (or with a moustache and glasses: B-|

Snail mail - the regular postal service, so called because it is much slower than e-mail.

TCP/IP - Transmission Control Protocol/Internet Protocol. The particular system for transferring information over a computer network that is at the heart of the Internet.

Telnet - a program that lets you connect to other computers on the Internet.

UUCP - Unix-to-Unix CoPy. A method for transferring Usenet postings and e-mail that requires far fewer 'Net resources than TCP/IP, but which can result in considerably slower transfer times.

Upload - copy a file from your computer to a host system.

User name - on most host systems, the first time you connect you are asked to supply a one-word user name. This can be any combination of letters and numbers. So for example "amigacomputing" is our user name, and "cix.compulink.co.uk" is our domain. Put it all together and you get our e-mail address: amigacomputing@cix.compulink.co.uk

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Never a big development area on the Amiga, networking has enjoyed a recent boost due in no small part to the establishment of the new SANA-II standard (Standard Amiga Networking Architecture) and the release of Commodore's Envoy software.

Liana is supplied as a very simple package containing a disk for the Envoy software and Liana drivers, a cable, and a 35-page manual. In its basic configuration, the network consists of two Amigas linked via their parallel ports using the supplied cable, but the addition of an ethernet card such as Commodore's A2065 makes far more complex systems possible.

Installation takes a few minutes, but at this point many networking beginners will find all the talk of users, groups, hosts and so on a bit overwhelming. The Liana manual, though very brief, does manage to lead one through the first few steps with reasonable clarity.

It helps that Liana is a peer-to-peer system, which means that all Amigas on the network have the same status and there's no messing around with host and slave machines.

Just set up a few user names, decide which drives or directories are to be shared from one machine to the other, and networking can begin within half an hour of opening the box.

Setting up the network is a step-by-step process starting with the host machines. As each Amiga on the net is a host, this simply involves choosing a network name for each machine.

Users can be added, each with their own passwords, and assigned to groups, but for the simplest of cases there is a default user called "admin" with the same password.

Next, just decide which devices or drives each machine will make available to the network, at which stage a set of users or groups can be given access on an individual basis.

For example, the user group "programmers" could be given access to another machine's source code hard drive, but the drive could be locked from interference by other users without

Hands across the desk

the relevant password. Once the initial setup is complete, connecting to another Amiga's available devices is a simple matter of using the filesystem import program to select them.

Any logical device such as "pics:" or "text:" can be shared, so it is possible to make a drawer on dh1: available without leaving the whole drive open to browsers.

As a connection is made, the user can decide whether to make it a permanent link. If this option is chosen the drive or device icon will appear on his or her Workbench screen on every boot-up under the name "A2000-dh1" and so on.

SHARING

Any icons left out on the original machine can be left out on the connecting machine's Workbench, making it a doddle to share expensive programs such as Imagine 3.0 or ProPage.

The only problem with this is that if, say, Directory Opus is a left out icon both on the host machine and the one to which it is connected, two Opus icons appear on the Workbench — this can be a bit of a clutter when half a dozen left-out icons start to double up.

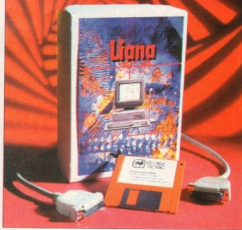
File transfer is quick enough, and I timed an 850k file at about 50 seconds, but the Envoy software still has a few bugs. The most annoying of these is the Envoy filing system itself. This is used for all devices accessed across the network and could do with some development.

Printers can be shared with ease, though, and a separate mailing package is available to

Liana's most critical weakness is that it isn't totally compatible with normal Amiga filesystems, and Quarterback 6.0 for one will not work with Liana.

While attempting to back up a remote hard drive to a DAT streamer attached to the office A4000, Quarterback 6.0 failed to make contact with the drive and froze the entire system.

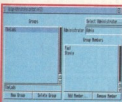
This is a fault of Envoy's rather than Liana's, but it's still frustrating not to be able to carry out one of a network's most basic functions.



Networking can be as simple or as complex as you like with VillageTronics' Liana, as Stevie Kennedy found out

send user messages across a network, so it's not all bad. When more complex setups are required, such as connecting an A1200 to an A4000 which uses an ethernet card to connect to another machine, Envoy can be used to set up a gateway, in this case on the A4000, through which Liana can access machines on the attached ethernet.

In all, Liana is a neat and simple solution to the simple two machine network, and has the potential for expansion one would expect of a LAN system.



Creating groups is a simple way of giving lots of users the same access privileges



The services available through the network can be added to, turned off, or on as desired

SYSTEM ESSENTIALS

RED = Essential BLACK = Recommended

2.0+

Workbench



Hard drive

Verdict

The bottom line

Product: Liana LAN
Supplier: Bittersoft
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Price: £59.95

Implementation 8
Ease of use 7
Value for money 8
Overall 8

We've all done it to a certain extent. Copied a music tape for a friend, transferred a high-price package on to a mate's hard drive as a favour and even made a copy of a particular film.

This may be criminal behaviour in the eyes of the law but in the eyes of Joe Public, it's just being generous. Any thoughts about what it might be doing to the industries concerned is never queried – after all, what can one copy do to a multinational company?

On the official release date of a games title, software companies readily expect to lose somewhere in the region of £25-30,000 because of piracy, and every single illegal transaction adds to that figure.

Release six titles in a year and you're looking at a substantial loss – the industry does not look kindly on any kind of generosity of their financial control.

"School yard" copying though is just the tip of the iceberg.

Many articles, features and interviews have been written on the subject of pirating on a mass scale and, on the whole, have only managed to flirt round the story, talking about but never talking to the real profiteers and racketeers who knock thousands off software house's profits on a monthly basis.

INSIDER

Amiga Computing managed to track down an industry insider whose experiences within the worldwide network of international piracy are substantial. For reasons of confidentiality, our interviewee will be referred to as Jim throughout the article.

Jim started piracy as a student, copying the odd game here and there for friends. After leaving school, he found employment that involved the use of computers, modems and various bulletin boards.

Having a natural interest in the information highway, he decided to buy his own kit for personal use at home, therefore having more time to explore the various conferences and software on offer.

During this time he continued swapping disks with friends and came across a game that had been "cracked" by a cracking group.

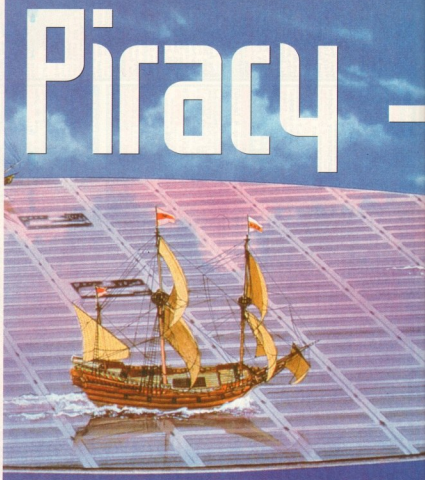
Jim believes that while he was operating as a pirate there were some 15 to 20 cracking crews in operation, each owning many bulletin boards. These teams are made up

of individual expert programmers who break through the security devices within a piece of software and remove any "fingerprinting" codes left by the original authors.

These "fingerprints" are simply a way for the software companies to keep a track on where individual titles go when released into the industry – for example, games

testers, magazines and so on. During the assembly stages of a games production when all elements are pulled together into one program, various segments of code are liberally placed throughout the title's programming.

This in turn creates a "fingerprint" completely individual for that particular copy of



Cracking crews and their opinions

Using a modem and computer, Amiga Computing decided to send out a series of questions globally to any cracking crews that wanted to make a response to some of the accusations leveled at them.

We received a selection of responses and below is a reply from an ex-cracker and reformed software buyer.

Q What was your involvement within the piracy scene?

A I used to be involved in piracy from the age of 15 until 19-20. Machines covered were the BBC micro, Commodore 64 and Amiga. I am now a respectable shareware user.

Q Why did you do it?

A Interest in the machine for starters. Piracy is a great way to learn about the workings of your machine and is a satisfying intellectual exercise, especially for younger people. I never, ever sold games. Period.

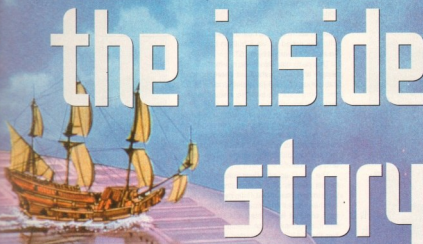
Most of the people I dealt with never sold games either. It was seen as pretty lame, as selling games was one step away from being a software dealer.

Q How do you feel about the damage you have caused the software industry?

A Well, although I can see some damage I still feel the figures are vastly inflated. At the height of my involvement I had over 1,000 titles on the Amiga – out of those I might have bought two or maybe three if I'd not had access to pirated software.

The other aspect is that in order to get on in the swapping business you have to have a big list. Most of the games never get played, they're just collateral for swapping with other pirates.

Q Who supplied you with games, sometimes before they had even been released?



the inside story

*Software pirates
have been with us from
the very beginning, resulting in
condemnation, outrage and a severe loss of profits.*

Adam Phillips talks to an ex-pirate to find out why they do it

the game. Any subsequent discovery of illegal copying with a fingerprinted title allows the company to track down the owner who received the original disk.

With coding expertise and practice, cracking groups are able to remove all traces of these prints so that themselves and their sources – usually people within

the industry – are protected from detection by the authorities. Jim decided to try and contact the game's cracking group via their bulletin board number: "The actual bulletin board numbers were displayed at the beginning of the game, saying which group cracked it and it gave you a list of bulletin board numbers where they could be

A Mainly contacts made through bulletins boards and Compunet (Godrest their souls). New games were often bought by older pirates and then distributed.

Many came from testers, even game developers (I know of at least one guy on Clix I used to swap with who's a professional games developer). A lot of stuff these days comes from US BBSs, due to reduced cost of modems and increased amount of telco fraud... (I still know several pirates, I just don't bother dealing any more).

Q Were you ever caught?

A No. And no-one I know directly has even come close.

Q Is piracy an easy business to break in to?

A I had a friend at school who was also a bit of a computer nut. The first game we cracked was the BBC version of Elite (in two days after its release!).

We ended up moving onto writing some decent utils for the Beeb. The guy I bought my 64 from was involved with a local group and he introduced me to a few contacts. I also got several from Compunet.

Q Do you have anything you would like to say to software companies?

A Cut the prices, produce better games and make more playable demos. Most games are crap and not worth the disks they're stored on...

For the authorities opinion, turn to the Devil's Advocate

reached."

To be allowed in to the board itself required permission from the bulletin board's system operator.

"You have to give three names of people you know in the industry. For example, they might say 'give the names of three of the main bulletin boards' system operators and so on and they can then check with those system operators to see if they know who you say you are."

In this particular case, Jim managed to strike up a conversation via keyboard input with the board's system operator, a young teenager still at school ("his mum used to answer the phone – she knew all about it") and, after giving him details of his job, Jim managed to convince him that he was not there to cause any trouble or inform FAST (Federation Against Software Theft).

He was then granted access to the bulletin board. It not only contained public domain titles but, on closer inspection, some of the programs listed were in fact fully-fledged commercial games available, on certain conditions, to anyone.

Some of these titles weren't even available to the consumer yet. It was apparent that pre-production copies had been leaked, via people within the computer industry, to the cracking groups.

The system operator offered Jim a deal which involved the use of a meg league – the more data you uploaded to a bulletin board, the more you could claim back from them.

EXCHANGING

If the program you were uploading didn't equal or exceed the memory of the title wanted, there was no chance of downloading it to your system.

With this enticing promise of available, unreleased titles for motivation, Jim was in a position to offer goods aplenty in return.

Subsequently, he contacted other cracking groups, offering them healthy amounts of fresh gear and his reputation grew as a reliable source.

"As soon as you get on to a bulletin board your name is spread around so the cracking groups know about you and consequently they're a lot easier to get on with. As you become better known and seen as reliable, the ratios of exchange become better and better for the supplier."

Indeed, Jim's name and position not only spread throughout the country but all over the world. Cracking groups from America and Sweden began to call in the early hours of the morning, offering deals for game exchanges – throughout all his dealings, money was never mentioned.

Different arrangements were offered to him by the various cracking groups. More tempting ratios of exchange were negotiated and the competition was further increased.

"Because bulletin boards don't all have the same stuff, as soon as you get a title off one you can upload it to another board. This, in turn, gives you credits with that particular board and you can take some-

FAST

Promoting the legal use of software

The Federation Against Software Theft deals mainly with business software piracy and have recently called for stricter anti-piracy measures from the government

thing from their library.

"You can load something as soon as it gets into the network and then you can try and upload it to the other bulletin boards to get there first – even if you haven't supplied the cracked game, it's down to who's the quickest uploader. The more you do, the more you have to use in the ratio exchange. And it just keeps on going."

Jim ended up with the ideal arrangement. He could download as much as he wanted as long as he provided a minimum of a game a month. To aid him financially with his exchanges, the American bulletin boards offered Jim AT&T cards.

These would have enabled him to call as much as he wanted completely free of charge by simply phoning the AT&T operator and quoting the AT&T card number.

Software was also offered to gain access to the 0800 freephone numbers used in the States. Telephone calls made from Britain are unable to connect with these numbers, but through the use of the package the user is able to fool the telephone system into

The ability to lay hands on any titles without having to wait months for the official release date

believing that the UK-based user is, in fact, phoning in from a location in America.

Jim turned both these offers down, deigning them unnecessary, but it underlined how hungry the cracking crews were for ripe material.

Any fears of being caught were not dwelled upon. He had heard of one pirate who was tipped off via a bulletin board that he was to be raided by FAST.

This particular information listed people and groups that had been raided in the last month and possible candidates for the immediate future who should watch their backs.

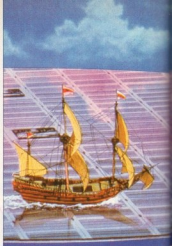
In this case, the man had subsequently moved all his gear out of his house and on the day the authorities turned up, there was nothing to find: "He set it all back up again within a couple of weeks using the same phone number".

The illegal up and downloading went on for six months. A constant stream of software moved back and forth between Jim's machine and the various teams until one day, while at work, his employees called him into the head office. It was explained to him that FAST had contacted the company concerning his dealings outside of company hours.

He was threatened with a £25,000 fine for each game uploaded illegally. Within six months he had managed to upload 15 titles and had received over 300 in return – the threatened fine would have added up to £375,000.

He was subsequently given the sack but, fortunately for Jim, no further legal action was taken. With fingers well and truly burnt he decided to sell off all his equipment and leave the piracy scene altogether. "It all just got out of hand."

On questioning him about the motivation to do it, he was adamant that there was no money to be made. The main attraction was



the ability to lay his hands on any titles he wanted to without having to wait months for the official release date – "Get any game you want and you keep doing it and doing it."

"You could get hold of games that even the magazines hadn't previewed yet. For example, I got my hands on a nearly finished version of Flashback a year before it appeared in any mags".

Another important element was the speed of sending and receiving software – using a modem is a fast and efficient way of distributing information. At one stage in his short-lived career, Jim sent an



The C64 may have seemed like the answer to piracy but, as usual, somebody somewhere found a way to get round it...

Software Houses - System 3

If there is one company that has had a rough deal from the pirates, it's System 3. Until a year ago, the software house was a prolific developer of titles for the Amiga. This was until Myth – a platform adventure that was set to be a world-wide smash on the Commodore machine.

On its completion, the game was given out to the industry internationally for playing seven weeks before it's official release date. Unfortunately, there was a delay with the packaging that caused a further four weeks of sitting on the shelves in certain industry offices.

In that time, the game was passed out of the office either intentionally or unintentionally, and was soon travelling the world via the modem lines, cracked and ready for mass distribution.

Tim Best, Operations Manager at the company, believes that the piracy accounted for a 45% loss of profits on that game's first few weeks of sale.

With this kind of occurrence, System 3 decided it was time to concentrate on the console market ("piracy exists there but not in this country to any great extent") for a year to reassess the Amiga scene and how it's specific problems could be targeted. The net result has been the introduction of a comprehensive profit share scheme for all employees, from receptionists through to senior artists.

This acts as an incentive for staff to stay loyal to the company by making any loss of profit directly affect how much they earn from the scheme. Best is sure



Piracy accounted for a loss of 45% in first week sales on System 3's Myth...

that System 3 are one of the only companies that do this and it has acted as a safeguard against internal piracy.

Another measure has been aimed at the magazine industry. They are re-entering the Amiga market with Putty Squad on the 1200 and have drawn up a



uncracked game down south to a contact on a bulletin board. This contact, in turn, sent the title across to the States. Within three hours, it was back in Britain, cracked and ready for circulation.

As far as the cracking crews and how much they may earn, he isn't as clear. Most users, once accepted into the system, are allowed half-an-hour a day to exchange whatever wares they have. To increase this time to a full hour, an extra £10 had to be paid.

BUSINESS

As for those not fortunate enough to be in a position to offer exchanges, they had to pay £30 a month to download for 45 minutes a day.

This may sound like a paltry sum individually, but put on global scale someone out there is making a serious profit.

As Jim states: "It's a massive business, a lot bigger than anyone realises. There's one bulletin board which is supposed to be the biggest and it's been going for about ten years. It has ten to 17 modem lines which cater for Amiga, PC, SNES and Sega pirated gear."

Those of us holding out idealistic hopes that CDs would actually stop illegal copying, are sadly mistaken. CD copiers can be

bought for as little as £3,000 each and compact discs crammed with CD32 games are available to anyone willing to hunt them out.

Jim also talks of the fierce competitiveness between the international cracking teams and that gaining glory from dismantling a particularly tricky title is of vital importance to the motivation behind each group.

It seems from the research and discussions had during the course of writing this article that the problem of illegal copying will never truly be solved by tracking down those individuals and cracking groups that persist in damaging the industry – the laws in their current state would appear not to be a strong enough deterrent for offenders.

"If the industry wants to crack down on piracy, the penalties need to be tougher. A £200 fine is not enough". Jim may have stopped but for every person that steps out, there's another ready to step in.

However, his opinions on how to stop the illegal copying of unreleased software are, focused on the industry itself and how it operates. Unfortunately, all roads to piracy lead back to the original publishers of each title.

Someone within that company has to make the move to give the title out to the pirates, whether directly or indirectly by handing it to someone who cannot be trusted.

"There always seems to be a dishonest individual in each company – sometimes even the programmers themselves. It only takes one."

To blunt the cutting edge of profit loss, perhaps software companies, magazine publishers and other industry-related sectors should stop pointing an accusing finger at the consumer so much and start looking at how the industry operates itself.

If each company had stricter rules for their employees and the disks that were sent out, there might not be the problem that exists today and we would be a step closer to cracking international piracy.



Piracy – a problem that is growing day by day...



strict set of guidelines. For preview purposes, magazines will only receive three to four of the 60 levels to play through and a video showing later levels.

For a full review, writers will have to travel to System 3's headquarters and play the game there under the supervision of senior staff.

Ocean did the same with Jurassic Park and one look at these sales figures show that a system like this may cost the company money in the short term and a headache for magazines but, in the long term, it pays out in dividends.

PRICES

Tim Best's opinions about the state of piracy and how it is operated are wide and varied. With regards to the Amiga piracy scene he stated: "I wish we could stop them because it would mean we could lower our retail prices. Therefore we would ultimately sell more products and that would be good news for everybody."

"There's a severe piracy problem at every level from schoolyards to car boot sales markets and everything in between. I have been to a sale that had one guy selling brand-new pirated games with badly photocopied manuals for £8.95."

His views on the individuals and the cracking teams are just as varied: "I personally think that it's one of the most wasteful talent resources that I've ever come across, because some of those guys are brilliant grass-root level

programmers. "I would love these crackers to give me a call and I'd like to employ some of them because I think they could make a lot of money – so do reputations, who cares? They could actually make a very good living."

"I know two or three hard-core crackers and they are intensely competitive. Those guys will go without sleep for days to crack a program just so they are the first to do it."

"The problem is in order for their reputation to be heightened and enhanced they have to spread the product round for them to be seen to be good – that's where the problem is because it gets spread round everywhere."

"It's impossible, I believe, to defeat these people with software protection because they're that good."

They will always hack out dongle routines, serial number routines – you name it, they'll hack it out.

I think they are getting an easy ride because there isn't a sufficient enough clarity in the law – I don't think electronic copyright has been fully sussed out yet". On the future of piracy Best sums up: "It will never go away".



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The human touch

Of you've developed your skills in the tactile world of pen and paper, the surreal concept of on-screen editing can often seem a very alien environment.

Unfortunately, until now the only acceptable solution has been to make a very sizeable investment in a dedicated graphics tablet – often costing in excess of £600.

In addition, such devices invariably only work with a very specific range of software – 24-bit paint packages being the norm. If the expense of such a tablet is simply too much to bear you could always opt for a stylus or tablet that plugs directly into the mouse port.

Unfortunately, this sort of mouse emulation invariably lacks the feel and accuracy of its serial-based counterparts.

Now, thanks to Tabby, any Amiga artist can have the best of both worlds with the accuracy of a serial device plus the flexibility to work on any package, and all for a very affordable £49.95.

As you can see, Tabby isn't exactly the biggest graphics tablet in the business. However, what it lacks in size it certainly makes up for in style. The whole thing is nicely finished with a slightly sloping drawing area which is secured to the desk via four rubber feet.

Without doubt the most important part of any tablet is its accompanying stylus, which in this case connects to the tablet via a small cable.

At the business end of the cable awaits a well thought out stylus, boasting a single micro-switched nib rather than the usual button and nib system synonymous with most tablets.

APPARACH

Strangely enough, simply pressing down on the nib is the only direct means of control. I found this a much more natural approach than the array of nib and button combinations I've experienced on other tablets.

As you've probably surmised, with just one switch on the stylus normal Amiga operation would be tricky to say the least. As a result the stylus concentrates on the left button, using the usual click, drag and double-click to open – just as you would with a mouse.

For right-button selections you simply depress the nib while holding down the Alt button. Better still, a combination of Ctrl and a nib click emulates a double-click with the left mouse button – a feature which is particularly useful when selecting individual items or

words in a DTP package or word processor.

As for ergonomics, there's no complaints whatsoever. Towards the front the stylus is squared off and a small rest added to accommodate your forefinger – all very comfortable.

A slightly unusual design element is the addition of a small metal strip along the back of the stylus. Because the tablet uses low intensity magnetic fields to locate its position, the aforesaid strip provides a means of earthing the pen to minimise magnetic distortion during use.

Aside from the tablet itself you also receive a handy clip-on holder to store the pen when you're busy typing. OK, it looks great, it feels good and the accuracy is excellent, but what about Tabby's drinky proportions.

SPACE

Well, at first I must admit I was slightly concerned about the lack of space, but surprisingly enough the 128mm x 96mm working area is perfectly acceptable and shouldn't be too limiting for even the most delicate painting or touch-up operations.

Like all serial controlled tablets, Tabby requires a special driver to be installed on your system. Fortunately this is taken care of by a nicely implemented Tabby control utility, which is installed in seconds via the ubiquitous Commodore installer.

Once kicked into life or executed via WStartup, Tabby leaps into life providing absolute control of pointer positioning. In other words, wherever you place the stylus the pointer replicates on screen.

And better still, thanks to the generic driver any package can enjoy Tabby input. The only program which did crop up was a slight problem with TVPaint. Although a massive improvement on mouse input, Tabby did become slightly confused concerning the screen size.

As a result, it appeared to be working in relation to the existing Workbench resolution – which of course was considerably smaller than that of the Harlequin. Therefore, it was occasionally necessary to adjust the pointer with the mouse and then return to Tabby to apply the paint.

Unfortunately I didn't have access to a

Paul Austin makes out the prescription for anyone ill at ease with mouse input



RTG card such as Retina or the EGS Spectrum, but I'd be surprised if they would suffer the same fate thanks to their affinity with Workbench.

Although briefly mentioned, the ability to team-up the mouse and Tabby simultaneously is another very useful by-product of Tabby's serial connection.

Thanks to this dual input option you're free to pick and choose between the two with impunity.



SYSTEM ESSENTIALS

RED = Essential BLACK = Recommended



The bottom line

Product: Tabby
Supplier: First Computer Centre
Price: £49.95
Tel: 0532 319444

Ease of use: 9
Implementation: 9
Value for money: 10
Overall: 10

Verdict

As you've probably gathered I'm impressed. The combination of accuracy and ease of use is excellent and when this is added to the flexibility of being able to work on any package, Tabby becomes a must for any serious Amiga artist.

The only slight irritation is the occasional need to alter the refresh delay and the task priority. By adjusting the two settings you can maximise the feedback and accuracy of the tablet.

However, if the settings are pushed too high CPU times can suffer dramatically. During testing the

Mips – millions of instructions per second – on a 40MHz 030 dropped from 12 Mips down to just 2.3.

Obviously for most applications such overheads are simply unacceptable. Thankfully, you're provided with a Pop-up hotkey requester to adjust the setting to suit your requirements.

In fact if you're willing to sacrifice super-smooth tracking it's possible to reclaim almost all the Mips eaten up at higher values, while still providing acceptable results for the more mundane mouse operations.

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Amiga's best asset stolen?



Over the years, as the debate about Amiga vs PC vs Mac has raged, we have always been told that multimedia and video are the Amiga's aces in the hole, that the PC and Mac are behind or they can't compete with the Amiga's multimedia talents, but that's a load of old cobblers, isn't it?

I've just been sent to a multimedia seminar by my company, and the presentations I saw there were based entirely around the PC and Mac. They had Scala, digitisers, samplers, sequencers, you name it! So where's the Amiga's great multimedia lead gone?

Admittedly, the systems I saw were expensive, but they did everything one could possibly want to do, and in a very professional manner.

It worries me that one of the bulwarks of the Amiga has been stolen by the opposition, and I can't see how high-end Amigas, with the A4000's ridiculously high price, can compete.

Please tell me I'm wrong. When I asked the demonstrator about the Amiga, he just smirked.

James Ferrell, Worthington

You're wrong. Yes, it's true that on the corporate side the PC and Mac have come a long way in multimedia and it's true that both formats are now well served by a range of quality products, but both machines remain very pricey solutions to the problem.

So long as companies are promoting the Amiga in the multimedia field, it will continue to offer a superb and competitively priced alternative to much more expensive Macs and PCs. There are a couple of very good reasons for this.

First of all, the Amiga is a multimedia machine from the off, and needs little in the way of extra equipment to make it a viable option. The easy and efficient multitasking, the ease with which Amigas fit into existing video-based setups, and the low price of hardware and software mean that in competition with other formats the Amiga can usually do the same thing (or better) for much less cash.

Companies with common sense rather than Amiga blindness (usually caused

by IT managers who can't be bothered to look at anything other than a PC) will always recognise the advantages of saving thousands of pounds with the Amiga.

If they see the AD516/Bars&Pipes Pro combination acting as the centre of a multimedia control deck just once, they'll know what a powerful machine the Amiga really is.

Such combinations of superb hardware and software on a machine born for multimedia could be the European version of the Video Toaster, in that this third-party hardware could sell thousands of Amigas.

It's just a pity that Commodore wouldn't know a marketing strategy if it bit them on the bum.

Sea change

I have recently noticed a change in the attitude of some software publishers, with more and more games they release being hard drive installable.

For my son's birthday I bought Zool 2 (A1200 version) and Brian the Lion, and have been able to install both games on my hard drive. I would like to commend this change in attitude.

It certainly seems that A1200 games are more likely to be HD installable than normal A500/A600 games, as six out of my ten A1200 games go on HD whereas only 16 of my 56 standard games are installable.

My disappointment, though, has been Europress Software, who insist that their AD1 junior series, though excellent, remains floppy only, even though in the same



manual there are instructions to install the software if you have a PC.

It's not just Europress. Ocean should be shot for ruining Jurassic Park with the amount of disk swaps (it very rarely gets played), and I refuse to buy Space Hulk from Electronic Arts for the same reason.

I think it's insulting too when the PC instructions for installing to hard disk appear in the same box, but I am forced to play from floppy. Use code wheels if you want to stop playground copying, not on-disk protection!

Gary Bryant, St Leonards on Sea

Blake's 7

With the appearance of the NewTek Toaster over here recently, Amiga Computing has printed a few articles on the Toaster and the work of those who use it within the film industry.

One of the people interviewed by Phil South in the February issue was Ron Thornton of Foundation Imaging.

Could you supply me with the address of

Fob off

After reading the letter "warranty woes" in issue 69 I must agree with everything that B Howarth had to say. We purchased an A1200 in February and on taking it home found it would not load the disks.

We returned it immediately and were given another in exchange. Three weeks later it appeared to have a faulty disk drive and from the middle of March, Wang fobbed us off week after week, saying that they were waiting for a "bit".

It will be five weeks before this repair is done - if their promise is not broken again for the fifth time. I felt inclined to warn anyone wishing to buy an A1200 to think again, and if it wasn't for the fact that my son has spent a lot of

money on disks I would wish for a refund (if that were an option).

Mrs S Marson, Leeds

Your Amiga should have arrived with a warranty from ICL, who took over the operation from Wang last year, so the pack you bought must have been sitting on a shelf for a while.

So far we haven't received any complaints regarding the standard of service offered by ICL, and we can only hope that new owners don't share your experiences. A past record of less than perfect after sales service from a company which no longer provides A1200 warranties should be no reason for prospective owners to ignore the Amiga.

Foundation Imaging? The reason behind this is that one series he worked on some years back was Blake's 7 (a classic - Ed). Believe it or not, a fan club still exists for this series, which still has a large number of members, particularly in the US.

Like any fan club, we were always looking to interview anyone who was in the series - hence my need for the Foundation Imaging address. I would be most grateful for any assistance you can give on this.

Bruce Parks, Wolverhampton

Ron Thornton worked as a designer on Blake's 7, and it was he who built the model of the Liberator starship used by Blake and his band of escaped convicts fleeing the Federation.

You could say that without Ron, Blake's 7 would not have been the same. To set up an interview phone number on 0101 805 257 0292, so don't call until about 5pm our time.

Bundle botch-up

Why has the A4000 never been sold with a decent bundle of software? I'm an A4000/030 owner, which means I've spent considerably more on Commodore hardware than an A1200 owner, yet my A1200-owning friends got three or four games, a paint package, and a decent word processor with their machines. I got nothing.

Does this strike anyone else as a bit unfair? To get the most from my Amiga I had to buy Final Writer, Brilliance, and Superbase Personal 4 at a cost of hundreds of pounds!

To get the most from their A1200s, my friends just plugged them in and used the freebie software.

I am unchuffed to say the least.

R Kenny, Wolstanton

Commodore presumably didn't bundle software with the A4000 because it is a machine most often bought with specific high-end applications in mind, or at least for more expensive productivity tasks.

While it is affordable to pay for bundled software such as games or a word processor, Commodore certainly couldn't have afforded to bundle the sort of packages you ended up buying.

It would be nice, I suppose, for the



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No
approval



I hope that Commodore's Seal of Approval is backed by the same engineering expertise that gave us the bulky external drive for tank simulations, the A590 bus-friendly hard drive with expansion port pass-through, the A570 bus-friendly CD-ROM drive with expansion pass-through, and the A600 flight simulator for pilots that didn't want to look back.

As an A500 and A500 Plus owner with an A570 stuck on the side, I am glad that David Pleasance wants "to give users reassurance when they invest in a machine" and eagerly await my RAM and SCSI modules for the back of the A570, or even the circuit diagram so I can make my own connections.

I am sorry to hear that the test equipment is in their offices - it must make

Shabby shops

A4000 owner to receive the same software bundle as the A1200 owner, but from your own shopping list it appears that you'd have little use for floppy disk-based games in any case.

FMU's for me

Okay, I'll admit that when I saw the news of Mpeg, Full Motion Video, VideoCD, or whatever you call it, I was very sceptical. I own a Laserdisc player and the thought that I would be asked to swap it for a VHS-quality disc holding only 74 minutes of video was laughable.

However, having seen it demonstrated at a computer show I have changed my mind. Yes, it's still poorer quality than Laserdisc, and yes it still doesn't offer a long enough program, but the quality I saw displayed was great for music videos (Eurythmics didn't seem to suffer for it) and the collected array of large companies prepared to support VideoCD made me stop and think.

If this Mpeg stuff takes off, can we expect to see an entire Amiga Computing issue on a CD for us to play on our CD32s or standalone VideoCD players at home? It would certainly make flicking through the issue a lot easier, and storing old mags would be a doddle.

Pete Benson, Preston

The future of FMV seems pretty secure, with dozens of VideoCD titles being released every month and a long list of movies lined up to take advantage.

Japanese companies should soon be releasing VideoCD players for not much more than standard audio CD units, and when that happens the format will become just another piece of household technology.

Don't expect magazines on disc, however, as we wouldn't survive the law suits brought on by causing blindness in our readers. TV screens don't make for the best text viewers, you know.

I'm fairly new to the Amiga scene, and don't know much about the Amiga, but a few issues of Amiga Computing and a bit of experimenting gave me the bug, so I trooped off down to the high street to have a look at the A1200.

I won't tell you which shop I went to because they're probably all the same, but the assistant, though helpful, was even more ignorant of what he was selling than I was!

Three minutes into a demonstration the Amiga - a shabby model which had obviously been on display for a while - crashed and the poor man couldn't find the power switch.

It turned out to be hidden away from tinkering hands, but I noticed that every time he put a new disc in he turned the machine off and on again.

Thinking that this was an anti-virus procedure I said nothing until he tried to sell me a PC and promptly stated using the PC's own three key combination to reset the machine.

I then realised that he didn't know about the Control-Amiga-Amiga trick, and when I pointed it out he was very embarrassed. How many more so-called trained shop assistants are actually computer-literate?

Needless to say, I left the shop (part of a large chain) and went to the smaller, though slightly more expensive shop up the road where the staff knew a lot more about their products.

Jill McKenzie, Glasgow

Most larger chain stores employ staff who have to sell everything from washing machines to CD players, and though some have computer sub-departments with staff who receive some computer training, there are those who wouldn't know an Amiga from a hole in the ground.

Anyone thinking about buying an A1200 would be wise to follow your example and go somewhere you can be guaranteed at least the minimum of expert advice.

things very noisy - but then perhaps the only test is that the cheque clears. Trust Commodore?

Francis Clarke-Rowland, Sheffield

Do I detect a hint of sarcasm in the air? Yes, Commodore failed to deliver on the upgrade modules for the A570, but remember that the drive was a very poor seller, and though it is no compensation to those who bought the A570 in good faith, there would have been strong commercial pressure to concentrate development on other projects. Perhaps the new owners of the Amiga will put cash into such developments, but I wouldn't hold my breath for a peripheral which has passed on by.

INTERPLAY

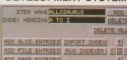
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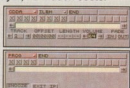
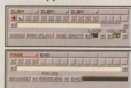
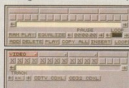


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Bad blocks

 I have an A1200 with an Amitek board (4MB RAM and 33Mhz FPU) and an external drive.


I have tried following your tutorial on AmigaDOS 3.0 - make your own auto-booting disk - but when I started June's tutorial the problems began.

On typing in the first line, Copy c:\echo to MyDisk:, the computer responded with "Not Deleted: directory not empty" and then informed me that MyDisk had a write error on disk block 889.

I also have problems with Imagine 2. As soon as I begin to render a system requester pops up informing me that "Imagine 2 has a write error on disk block 880, click on Cancel Imagine 2 is full."

I hope you can help me with these matters as they are proving very frustrating.

T. Alexander, Yorkshire


 Sorry to cut your letter Mr. Alexander but your problem became immediately apparent when you mentioned about copying echo to the c directory on MyDisk. It would appear you have a virus, and a nasty one at that.

I believe that the virus which is infecting your disks and systematically trashing them is called Saddam. One of the effects of the Saddam virus is to rename the copy command to delete and the delete command to copy.

Therefore, when you run the copy




It is vital that all Amiga owners keep up to date with the latest Viruses. Virus Checker kills all known viruses - dead!

 I have the answer to the shrinking pointer preferences window in your May issue that Mr. A. Leak (is that his real name?) is having problems with.

This problem depends on the amount of colours the Screenmode prefs is set at. If the number of colours is set to 2, 4 or 8 the Pointer Preferences appears as a 340x200 lo-res screen.

If the number of colours is set to 16 or more it appears as a 348x205 window. I have included some screen grab IFF pictures of this which you can print if you so desire.

R. Lane, Essex


 So you have, and jolly nice they are too. Seriously though, thanks very much for your help and hopefully Mr A. Leak (yes, that is his real name) can get some sleep at last.

command instead of the specified items being copied they are deleted.

It is vital that you get yourself a virus killer such as Virus Checker and check all your disks before continuing to use your Amiga. The block errors may be the after effects of Saddam damage or could be the result of a damaged disk drive.

The June issue features the latest version of the Amiga's premiere virus killer - Virus Checker V6.34. Neutralise the virus and then you can check for the possibility of a dodgy disk drive.

Terror below waves

 When I owned an Amiga A500 and GVP hard drive, one of the many programs I used was the game SSII (Silent Service II) which I installed onto a partition called Workbench 1.3, in its own drawer, created by the game's own install routine.

I now own an A1200 with an internal hard drive, extra RAM, an accelerator and FPU (Floating Point Unit).


I transferred my programs across to my Workbench 3.0 partition using Quarterback. However, I now find that SSII runs just too fast with the accelerator so I wish to delete it. This is where the problems begin.

I have deleted all the files in the SSII drawer but when I try and delete the drawer itself I get the message "Icon in use".

I assume the problem is to do with assigns in the original start-up sequence but I have checked the user-startup file on the A1200 and there are no assigns to SSII.

This is no great problem but I would like to delete the drawer if I can. Any suggestions?

M. Staples, W. Sussex

 The "Icon in use" response is certainly being caused by some kind of assign to the SSII drawer, but as no assigns exist in the User-Startup file I cannot see why you can't simply delete it.

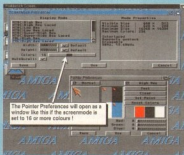
It may be worth checking the Startup-

Yet another mixed bag of computer worries comes under the surgeons knife in time for a speedy recovery



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The right solution




The Pointer Preferences will open as a window like this if the screenmode is set to 16 or more colours!

This is serious. Look at that star-spangled workbench. This could be the start of a competition!



Several readers sent a solution to the pointer preferences problem but R. Lane got there first!

DogFight death

 I am experiencing problems with DogFight in your June issue. For some strange reason I cannot get plane 2 to take off – it just blows up when I press fire.

I have tried using the keyboard but to no avail. I have even tried disconnecting the mouse.

Could it be something to do with RAM expansion in my A500+? I have 1Mb of RAM and no external hardware. Please help me.

M. Wadham, Cornwall



DogFight was tested fully on an A500+ and worked fine so I wouldn't imagine there's any problem with your machine or RAM expansion.

When taking off, try not to pull the plane off the runway too early. Each plane must gain enough speed before it can lift successfully.

You should also remember that it is the left and right keys, or joystick directions that pull the plane off the runway, not the fire button.

Check to make sure you haven't got the same control method for more than one plane, as this will cause problems when taking off.

➤ Sequence in Ed just to see if SSII actually makes assigns every time it is run.

My only other suggestion is that you boot your Amiga and hold down the Ctrl and D keys together until the Shell window appears with a break. Doing this will interrupt execution of the Start-up Sequence. You can then type in:

```
DELETE SSII
```

Hopefully, this will delete the drawer successfully.

Hard drive horror



Having recently upgraded from an A500 to an A1200 I now have a couple of questions which I hope you can help me with:

1. I own a 210Mb hard drive which is causing a few problems with back-ups – the Commodore utility is already asking for 60 disks! Is there a way to backup the hard drive to a video or audio tape?

2. The hard drive was partitioned by the retailer as DH0 for a small Workbench directory and DH1 as a larger work directory.

I now have a problem with a couple of my games, MicroProse Golf and Railroad Tycoon. The hard drive install program which came with these games will only install the games to DH0 or SYS.

Is there a way to install these games to DH1, or will I need to re-partition my hard drive?

P. Dobson, Essex



The good news is you won't have to re-partition your drive.

Fortunately, AmigaDOS caters for naff installer programs with the Assign command which resides in the C

You got problems too? Then drop a line to Amiga Computing Reduce Service, Europa House, Adlington Park, Macclesfield SK10 4NP and we'll move heaven and earth to help in these columns. But sorry, we cannot reply personally, so save those SAs.

directory of your Workbench.

Assign simply directs a specified label to a location on your hard drive of Workbench disks. Before running the installer open up the Shell and type in the following:

```
Assign SYS: DH1:
```

This will direct any copying to or from SYS: to DH1:. Keep the Shell window open. When installation is complete you will need to assign SYS: back to DH0:. Type in the following:

```
Assign SYS: DH0:
```

You may have to follow this procedure every time you run either Golf or Railroad Tycoon. However, you could create a script file and attach the game's icon to it via IconX.

A script file to load MicroProse Golf may look something like this:

```
echo "Loading MicroProse Golf. Please wait..."
Assign SYS: DH1:
CD DH1:Golf
Golf
Assign SYS: DH0:
```

The last Assign re-directs SYS: to DH0: when you eventually quit out of MicroProse Golf. You should be able to apply this script file to Railroad Tycoon also.

Green fingers



I would be grateful if you could please tell me whether Europress Software intends to produce an Amiga version of the BBC 3-D Garden Series program that is available for the PC range of computers.

If it is, could you tell me when it will be released and how much it will cost? P. Jones, Swansea

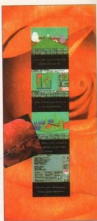


At present there are no plans to release Gardener's World on the Amiga as the program was created on a PC specifically for PC owners.

However, Alexa Czechowski, Marketing Manager for Europress Software stated that if they have a good response from Amiga owners regarding an Amiga-specific Gardener's World they would certainly consider porting the program across.

If you would like to see Gardener's World on the Amiga write to the following address: Europress Software, Creative Lifestyle, Europa House, Adlington Park, Macclesfield SK10 4NP. Please don't call as the guys and gals at Europress Software are very busy indeed.

There are no plans as of yet to write an Amiga version of Gardener's World, but if there is enough response...



Vista no-go

I have an A1200 fitted with 4Mb RAM, a 20MHz FPU and 210Mb hard drive with a DH1 partition and a DH0 partition.

I have successfully installed VistaPro V3.0 with its accompanying installer into DH0. However, when I try to run the program I get the following error "Program failed (error 8000000B) Wait for disk activity to finish."

I have formatted my hard drive and re-installed both Workbench and VistaPro but the problem continues.

P. Huxley, Warwickshire

I have experienced the particular crash you describe several times in the past and it is almost certainly due to your maths co-processor.

Amiga accelerator boards, in my experience, aren't always reliable and I have had three that have proved faulty in the past.

Provided you are installing the FPU version of VistaPro correctly, I can only assume that your FPU is faulty. Try removing the FPU and running the non-maths co-processor version of VistaPro with just the 4Mb RAM. If this works, replace the FPU and try again with the maths co-processor version.

If all fails, contact the dealer that you purchased the expansion board from and ask them how you can go about getting a replacement board.

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Graphics: Enter data directly or load from the spreadsheet or database; produce pie charts with exploded segments; display bar charts side by side or stacked; overlay your graphs on an imported IFF picture; add a 3D view; add text or lines...and more!



Disc Utilities: Avoid the confusion of Workbench, create bootable files, format discs, copy files from disc to disc, make directories, delete and rename files, make multiple copies of your discs...and more!

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Mini Office works on all Amigas with 1 megabyte RAM, can read Amiga IFF files and for US users, fully supports the NTSC standard.

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Amiga Computing

AUGUST 1994

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Picasso II

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Pablo Video Encoder



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It's a kind of magic

Paul Austin fires up Maxon

Magic, a commercial screen

saver and sample player

that could add a touch of

class to any system

the F keys and the Amiga control keys.

Individual programs can also have their own samples assigned, so every time you fire-up a package the appropriate alert will sound.

Next up come possibly the most useful application samples. From the Text button it's possible to assign a sample to trigger whenever a particular string of text appears on-screen.

This alone will sell the software to many serious users. For example, it's possible to assign a sample to a word or phrase that appears when a particular process has finished, or perhaps when an error has occurred.

CALLING

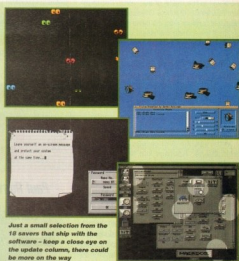
A perfect application would be when your favourite ray tracer finishes a frame. Thanks to MM the machine could actually shout "I've finished," or "come and get it," thereby avoiding countless trips back and forth to check on its progress.

The same could be done for software failures, finished batch processes, errors or whatever else. The choice is yours, just add the appropriate string and sample and sit back with a coffee until the machine calls you back.

Last in the audio button bank comes time control. From here you can add a sample to the particular hour of your choice, every hour, every half hour, three quarter or quarter.

As you've probably gathered, you're not limited to the supplied samples, although standard 8-bit IFF samples must have a .SND appendix in order to be recognised by the software.

By default MM uses samples in the HSN format - which isn't generally supported on



Just a small selection from the 18 savers that ship with the software - keep a close eye on the update column, there could be more on the way

the Amiga. However, this is only in order to make sample sharing with other computers more straightforward.

Both the PC and Atari support the format and can therefore share their sounds with MM. However, during testing there appeared to be no perceivable difference between the two formats. As long as the appropriate appendix was added to the file everything worked perfectly.



Software set-up

Like almost all modern utility programs, MM can run either from its icon or via the WB start-up drawer. Once active, the software simply sits in the background awaiting a hotkey command to pop up its control panel.

From the control window you're given a choice between 18 assorted savers, access to the sample set-up, plus a modules window with which to customise the chosen saver, assign user hotkeys and adjust the all-important global parameters.

Courtesy of the global options, you can set the time delay before the saver kicks-in, the volume of the samples played, the task priority of the saver, mouse acceleration and the CPU idle setting.

The application of user definable task priority and CPU idle are particularly nice touches. Thanks to these two settings it's possible to minimise the blunders effect on your system by ensuring that more important calculations comes first.

As a result even ray tracers shouldn't suffer a drop in performance while MM is active. And if the CPU usage is higher than the figure you've defined, the screen will still turn blank at the appropriate moment - no CPU time required.

The bottom line

Supplier: HiSoft
Phone: 0525 718181
Price: £29.95

Ease of use: 10
Implementation: 10
Value for money: 9
Overall: 9

Verdict



In general the 18 supplied savers are a big improvement on their PD counterparts, providing a mixture of functional and decorative examples, each with its own definable parameters courtesy of individual module controls.

As for the audio side there's no complaints, and in fact sample handling is, in my opinion, the high point of the overall MM package.

Basically, if you're undecided about investing in a new game or gadget don't bother, buy yourself a copy of Maxon Magic. It's probably the best gizmo in the business and is guaranteed to give you a lot more entertainment than the latest arcade clone - highly recommended.

Although the Amiga has been generating state of the art animation for several years it's always suffered in the playback department. Unfortunately even the fastest 040 machine simply cannot achieve the necessary 25 fps at full frame in the kind of resolutions that professional videographers demand – until now.

With the help of the latest release from ProDad, the holy grail of Amiga animation is now within the reach of everyone. For regular readers the name Clarissa may seem vaguely familiar – as it's been mentioned on and off ever since the release of ProDad's first animation utility, Adorage.

For those unfamiliar with both programs, Adorage was the first program to feature the new SSA – super smooth animation – format which, in the case of Adorage, enabled the package to generate pseudo DVE's – digital video effects – from still images.

FORMATS

Although the end results were indeed animations, Adorage did not offer any means of converting normal Amiga image sequences of finished anims into the new SSA format.

Now, with the arrival of Clarissa, conversion couldn't be simpler and literally any animation can enjoy the infinitely superior playback offered by the new format.

However, before we delve headlong into the software it's perhaps worth explaining what makes Clarissa and SSA anims so special.

Well, most important of all is the increased speed of an SSA anim in relation to its Anim5 counterpart.

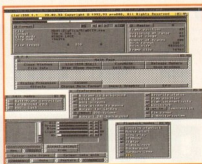
On average an SSA anim is at least twice as quick. Secondly, because Clarissa uses a form of field rendering to compile its animations, it's infinitely smoother during playback.

Thirdly, because SSA anims can use a different colour palette for every frame, there's no problem mixing different

As you've probably guessed I'm amazed at the overall improvements offered by the program, but like anything else there's still room for improvement. In the case of Clarissa the only missing option is the ability to employ virtual memory.

Although a form of virtual memory can be used when compiling anims, actual playback requires the entire animation to be resident in memory.

If ProDad could add the option to use a hard drive as a virtual memory partition, Clarissa would confirm its place as one of the most important software releases ever to arrive on the Amiga.



All the control options any serious animator could want in one evolving interface

*Paul Austin discovers
Clarissa – the ideal
woman for any Amiga
animator. Silky smooth,
fast and friendly*

What's missing

animations and colour palettes together. Add up all of the above and you have, quite simply, a vastly superior format which, if adopted by other third-party developers, should supersede the old style Anim5/7/8 formats entirely.

Okay, you've had the background, now it's time to look at the software. On boot-up you're presented with a familiar array of WB2 style requesters and windows.

At the top of the screen you're presented with the main control window offering a slider which can be dragged to select or display a particular frame in the animation.

Directly below awaits a similar range slider which, as the name suggests, shows any range selections you may have made prior to a cut, paste and copy operations you may have planned.

On the left of the window you're also supplied with a toggle box which can evolve

between three separate control panels, enabling you to monitor the state of your system, adjust the screen position of the anim and finally list the details of the anim in the particular buffer you're working on.

This brings us nicely to the right-hand side of the screen which allows you to negotiate between the four source buffers and the master.

Thanks to the multiple buffer arrangement you can load a series of animations and then append, edit and merge them together with total freedom – and of course, because there's no problem matching palettes, the end results are always pixel perfect. All you do is select a

buffer or a range within its particular anim, select the appropriate cut and paste of special effects and compile it into the master. It's literally that simple, just select the option you require and answer a few yes/no questions prompted by the software.

GADGETS

Assuming you've loaded an existing Anim5 animation or a series of individual frames into a buffer, all that's required is a click on the record gadget and Clarissa sets to work converting the animation into the SSA format, automatically moving it into the master buffer ready for playback – via the usual tape-deck controls.

Besides the main control panel there's another ubiquitous element, namely the MFG or multi function gadget window. As the name suggests, this provides an impressive array of macro functions which can be toggled by a main control button.

From here you can do basic project management such as adding your own default



Silky smooth 24-bit playback. Just add a DCTV and you're off and running – quite simply the software we've all been waiting for

Verdict

On initial boot-up I was bracing myself for the usual disappointment, in the sure and certain knowledge that yet another saviour of Amiga animation would fall flat on its face.

All too often I've eagerly experimented with a new anim format, only to find it sadly lacking in some vital area which effectively renders it useless for the kind of videographic productions so many want from our machines.

However, after exploring the interface and experimenting with the excellent macros, multiple buffers and cut and paste controls, I slowly began to warm to Clarissa's charms.

Mixing anims – and therefore palettes – was a wonderful experience, while playback remained consistently smooth and fast.

I'd done the guided tour, and it was time to attempt a full frame animation. As a test I rendered a 200 frame Lightwave animation at 736 x 566 and then scaled and converted the images with ADPro to produce Lo-res interlaced Ham images with full video overscan.

These were then loaded as a sequence and converted to produce an SSA anim file, which when compiled measured approximately 6.9Mb.

On playback I was pretty impressed – only when the transition between frames was really big did a slight stutter appear. Nevertheless this was enough to cool my enthusiasm. Admittedly, if Clarissa had been reviewed prior to the PAR card I would probably have been jumping around the room.

With a little less camera movement and slightly less vigorous colour changes between frames, I'm sure it could have achieved perfect 25 fps. With the fairly successful Ham anim

safely stored away I gave Clarissa one last chance and turned my attentions to DCTV.

After going back into ADPro and converting the original 736 x 566 images into 3-bit plane DCTV files, I returned to Clarissa to load and convert the sequence – fully expecting yet more stuttering. After all, these were all hi-res interlaced images.

However, after conversion I discovered the anim size had actually shrunk to just 4.3Mb for the same 200 frame sequence. Intrigued I hit the play button and sat back as a perfect 24-bit, 25 fps anim glided across the screen without a single glitch or stutter.

After years of tinkering I'd finally discovered something which could do the job. Although impressive in assorted Amiga modes and resolutions, SSA is quite literally spectacular in concert with a DCTV. If you've already got a DCTV or are planning to get one, Clarissa is an absolute must.

In fact playback is so good the only problem is to make sure your anim is the correct length. One of the few limitations of both Clarissa and its standalone anim player is their inability to offer a wide variety of playback speeds – basically the speed's there, it's your job to tailor the anim around it.

With the exception of RAM for playback, Clarissa is very nearly the ideal woman. The interface is professional and harbours virtually all the processing features a serious animator could wish for.

Basically, if you can't afford a PAR card Clarissa is the only viable alternative – quite simply Amiga software at its best.

codpiece



paths, and the creation of a run-time disk. Alternatively, you can toggle to colourisation effects and add flashes, fades and colour cycles.

If you're anim needs a few whistles and bells you can opt for the effects screen and perhaps stretch or shrink your creation to better suit the playback speed, mix two animations together for a weird DVE look or perhaps add ping-pong or looping effects.

If format conversion is required it's also possible to convert a non-interlaced anim into interlace – a vital step before generating an SSA animation.

In addition, you can convert from one image format to another, although I must admit the options are pretty limited. As a result a dedicated image processor such as ADPro or ImageFX would definitely be a wise investment.

If you want to import other software or hardware there's also an impressive range of options including a direct link to ADPro, alongside single or sequential

importation direct from VLab. The program even comes with its own screen grabber, so you can grab images direct from any program or public screen running on your system.

Finally comes the all important edit window, which as you may have guessed has a close affinity with the range options mentioned earlier. It's here you set the range areas for the assorted cut, paste and special effects mentioned previously.

ADJUSTING

To set up an edit you simply grab the range slider, select the beginning and end points of your range and click a couple of buttons. If you need to make any adjustments you can click directly on the ranged area and drag left and right to adjust its size and position.

From then on the choice is yours. You

can add a special effect, drop in a section from another anim or whatever. In short, complete non-linear editing of multiple anims form up to four sources.

If you have a hard disk attached the software will automatically use virtual memory techniques, enabling you to build a finished production from a variety of existing files without eating up valuable Ram in the process.

SYSTEM ESSENTIALS

RED = Essential BLACK = Recommended

3 Mb
RAM

Hard drive

4 Mb
RAM or above

2/3
Workbench

030/
040

The bottom line

Product: Clarissa

Supplier: BVG

Price: £79.95

Tel: 0874 611633

Ease of use: 10

Implementation: 10

Value for money: 9

Overall: 10

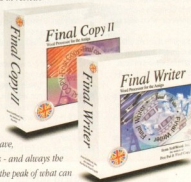


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Final Copy II Release 2


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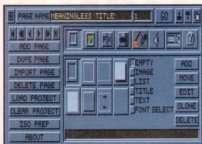
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Create a number of different box styles with relative ease, then use images to spice them up



Once anims are loaded, you can play sound samples over them and alter their timing

Since the dawn of time, or so it would seem, we've been talking about the compact disc and what it will do for computers. Huge storage capacity, long-term data safety, ease of use and transport, full-motion video – the list is endless.

The Amiga has seen CDTV, the A570, CD32, and a trickle of CD-ROM drives for other models, but the software for these formats has to come from somewhere, and with Optonica's Interplay package it could come from any Amiga user with 4Mb RAM and a big hard drive.

Interplay is billed as a multimedia authoring system, which means about as much as any other phrase including the 'M' word (not a lot).

In reality it is a piece of software very similar in approach to packages such as Scala, Heim, and Hyperbook, but instead of producing a computer-based point of sale, edutainment, or information system, Interplay's function in life is to save a huge digital image of the entire shebang to hard drive from where it is transferred to a CD mastering studio.

DESIGN

From the word go this is a very easy piece of software to use, and has been designed to make the authoring process as quick and painless as possible.

All the difficult time-consuming work should already have been carried out before Interplay is used, and as long as the animations, backdrops and so on have been created, it really is a matter of minutes to knock up a presentation.

The program's control panel is a plain little beast sporting nothing more than a bank of icons to access the main authoring tools, transport controls for flipping through your creation, and a few buttons for adding pages and loading projects.

These are made up of pages in the usual

In the relatively short time that it has been available, Interplay has been used for a variety of commercial work including Optonica's Insight series of education CDs, the Pandora's CD, and a clutch of Amiga magazine cover-mounted CDs.

Those who have used the package, including London-based Premier Vision (authors of two magazine cover discs) report that when the chips are down and work is needed quickly, Interplay's no fuss approach reaps dividends.

Interplay from Optonica is the first Amiga package dedicated to CD mastering. Stevie Kennedy sharpens his laser on it

Track record

Scala-esque fashion and as a project will end up on a 650Mb disc, each should ideally be saved to the root directory of a large hard drive dedicated to the task.

Just about any type of image or sound file can be used in a project. Interplay supports all AGA modes, Anim-5 and Anim-8, VAXL and CDXL, SMUS, Protracker, 8SVX, Mpeg (using the CD32 FMV cartridge), and CDDA, so users can take advantage of a wide variety of data sources.

Stitching the data together consists, in the main, of creating buttons which can have one of six primary functions. Buttons can be any size, in any position on screen and can be rendered a little brighter by the addition of an image.

Once graphically sound, they can be set to play an animation, display an image, play samples or modules, or trigger a CDXL or Mpeg segment.

When setting up a button for playback, it is possible to use the program's timing facility to pause animations at certain frames or slow them down, and it's a doddle to synchronise the playing of a sound sample at a chosen frame.

Any sound sample attached to a button as a secondary action (there can be up to

four) is automatically timed by the program so that the user knows how long it is, down to the last hundredth of a second.

This facility is perfect for sampled voice-overs, one of the most popular CD multimedia tricks, and can give other anims or even CDXL segments a special touch by adding the odd sound effect or just a backing track in the form of a tracker module.

All animations can be looped as many times as desired and if small enough they can be set to play from RAM instead of being spooled direct from the disc.

Audio samples, too, can be set for pre-loading to RAM, thus avoiding the need to spool both anim and sample from disc simultaneously (a difficult exercise), making it easier to get the sync bang on.

In addition, samples can be stopped after one play so that voice overs don't loop, even when the anim over which they are playing loops ten times or more.

SPEED

Spooling has been optimised to wrest as much performance as possible from the slow transfer rates of the CDTV, but when Ham8 or other large files are being spooled on a CD32, Interplay automatically detects the newer machine and switches to double CD speed to take full advantage of the hardware.

In combination with the software's acute attention to the free memory limitations of CDTV and CD32 (700k and 1.4Mb respectively), this sensitivity to the CD medium sets Interplay above the crowd of non-CD-specific authoring programs competing for the current market.

Another nice touch is the user-definable

dreafull disc which, though stuffed with information, fought tooth and nail with the user to keep it under wraps.

Interplay's list entries can be used to trigger any of the events available to buttons, so they can be used to present a list of images or animations, information screens, and so on.

My only gripe is that there is no quick way to jump up and down a long list, making scrolling through some of them a real bind.

Moving between pages is a simple matter of setting up a button and linking it to any page number. When a page jump is the selected action, one of 12 page transitions can be chosen as the in or out for that page.

The transition effects are a bit clunky and not particularly modern, but as there are a dozen, including venetian blinds, bounce, and so on, there's enough variety to glitz up the finished application.

As a bonus, they work quite smoothly and don't need lots of free chip RAM in which to strut their stuff.

For final debugging, the program offers an on-line script viewer which presents the user with a description of every page, button and list in the project, page by page, with all errors or potential memory overflow problems highlighted in red. This is an immensely useful feature, particularly just before the expensive business of cutting a gold disc.

ATTENTION

If something as simple as an animation over-stretching the CD32's available RAM is allowed to get through to mastering, then a lot of money will be wasted for nothing.

By providing users with the facility to eradicate such basic problems before going any further, Interplay again demonstrates its single-minded attention to the CD medium.

Once happy with the project and debugging is finished, the user hits the ISO Prep button so Interplay will start the lengthy process of reading in all data and producing a huge digital image file of the finished CD.

At this stage, the user has the option to make the disc usable on both CDTV and CD32 or just CD32, an important choice because CD32-only discs will boot much faster.

If you happen to have a CD cutter available (they cost about £3,000 these days) you can cut a gold disc straight away, but other

Chunky graphics

Though Interplay will display any bitmap IFF in any resolution up to the highest AGA modes, its own screens can only be drawn in lo-res non-interlace, the Amiga's chunkiest and most old-fashioned looking display.

Fair enough, you can design HAM or Ham8 backdrops in DPaint and import them before slapping buttons on them, but in this resolution most images tend to look less than their best.

Minimising the amount of detail used on control screens can cut down the impact of the lousy lo-res on-end users, but Interplay really needs a higher resolution option.

In addition, a few more page transitions or the odd snazzy extra, such as animated buttons, wouldn't have gone amiss when the package's gob-smacking price tag is taken into consideration.

Interplay is a well-thought out product, but perhaps its greatest asset is that it stands alone in the market as a dedicated CD system. When a few more appear it might fall down badly.

TOPICS


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Browse

Creates a presentation screen using images loaded from another package such as DPaint, then put buttons on them

users will have to take their hard drives to someone who can cut the disc for them. This means that an external 1Gb hard drive is the best choice for serious Interplay users, so start saving those pennies.

In all, a pretty painless process, and if someone had told me six months ago that producing a CD-based point of information system would be so simple, I would have laughed. With Interplay and enough hard drive space it can be just that easy. 

SYSTEM ESSENTIALS

RED = Essential BLACK = Recommended

4 Mb

RAM

Hard drive

8 Mb

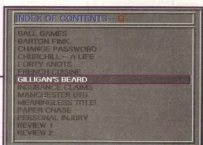
RAM

The bottom line

Ease of use 9
Implementation 7
Value for money 4
Overall 7

Supplier: Optonica Ltd
Phone: 0455 558262
Price: £995

Lists are an easy to produce, if drab looking, alternative to screens full of boxes and buttons



Jargon buster

Gold disc: when a CD is first mastered it is cut on a disk whose surface is coated in gold. This makes it cheaper to master just one CD for testing, but gold discs don't last long and are useless for other purposes.

ISO: International Standards Organisation. The guys who sit around deciding the guidelines for each format such as ISO 9660 (CD-ROM) and ISO 10072 (VideoCD).

CDXL: a custom quarter screen animation format originally developed for CDTV and a forerunner of sorts for today's full-motion video Mpeg.



Cracking Down...

From cracking crews to car boot sales, the pirates always seem to be playing the winning hand. Adam Phillips talks to John Loader, head of the recently formed crime unit at ELSPA and asks if they are doing enough



John Loader, head of the recently formed crime unit

Up until two months ago, FAST (Federation Against Software Theft) was the only piracy watchdog of the entertainment industry. Its main focus however was the business side of software which left a gap that needed to be filled to suit the games industries own particular needs.

Recently, the ELSPA council (the European Leisure Software Publishers Association) decided to create the crime unit (as reported in the news section last month).

This is an independent organisation designed to specifically combat the ever increasing black market for illegal games software.

The Devil's Advocate decided to pay John Loader, the principle figure of the new organisation, a visit to find out where pirates stand in the eyes of the law.

Q As head of the Crime Unit, is your job to focus specifically on the games industry?

A Yes, as you well know, there is a lot of piracy within the games industry – car-boot sellers, mail-order pirates, computer clubs, CD-ROM copiers, cartridge-to-disk copiers and so on and they are all problems that need focusing on.

Obviously we have limited resources but having said that, we are trying to make an inroad in to all the different areas so that people are aware that they just can't get away with piracy.

If you never do anything about people who break the law, then they begin to believe that it's okay to break it. The problem is that if you get people young enough, they get brainwashed into believing it's alright to steal software.

We're talking about kids here as young as eight or nine who are happily swapping games in the playground and think it's perfectly okay. They don't even realise that there's anything wrong with it.

Q You're hardly in a position to be able to do anything about it though – you can't go in and arrest them can you?

A No, of course you can't. I'm not really harassing children. What I want to do is to stop the adults who are doing it so that we can get the message home to everybody.

Q So what can you do to stop the adults – sue, fine or imprison them?

A The situation is that there is a piece of legislation in the statute books – the 1988 Copyright Act. It has a criminal section in it – section 107 – which makes it a criminal offence to do a number of different things with copyright software such as selling, distributing, making and copying it.

All these different ways of infringing software are considered under this section. The section carries six months at the

magistrates court and in some cases, part of the offences are triable at crown court as well and the sentence goes up to two years.

On top of this, you can be fined several thousand pounds for each offence at the magistrates court or at crown court – virtually unlimited fines. So there's plenty of criminal redress in the copyright act. It's not something you can arrest somebody for but you can nevertheless summon them to court.

Consequently, we have developed a technique where, if we can get police or trading standards officers to take action on our behalf, we are happy to help them and encourage them to do it.

Because of ELSPA, members have put money in to an anti-piracy fighting fund. I can also make private prosecutions as well using outside investigators and our solicitors.

This allows us to go along to a car boot sale, take the guy's stock off him, take his name and address, give out a summons, take him to court and prove an offence against him. That's what we do.

Q What about the cracking crews and bulletin boards. How large do you perceive the network to be and how can you stop them?

A Massive question, massive problem. During my time at FAST, we encouraged three different police forces to take three different boards – there are still a number out there which need looking at. I'm still

looking at the situation but it's one of many problems we're trying to crack down on.

Bulletin boards are very much on my mind, particularly the pirate boards. They come and go of course and after we busted a couple last year, one disappeared completely, the other vanished for two or three months and popped back... I'm well aware of them.

Q If that's the case, why aren't they closed down more regularly?

A The difficulty is not in finding them but finding the resource to go after them.

Q The finances?

A No, it's an area where I would very much like to get the police involved. I don't like to do a private prosecution on bulletin boards because it is a very resource-hungry operation. We need the input of the crown prosecution service and some very technical people involved.

I'm well aware of the identity of most of the major pirate boards. I could get in to them tomorrow with the help of people that

phone me from time to time with little bits of information.

There are quite a few people out there that are interested in stopping this as well. These include members of the public that see what's going on and don't like it - they frequently phone me, sometimes on an anonymous basis. With their help, I'm able to get in to these boards and find out about all these different things.

From time to time, we like to do a headline grabbing bulletin board and then we go back to doing what else we're doing.

Q So you would like more support from other sectors?

A I'm very keen on getting the police involved as far as the bulletin boards are concerned.

Q Have they shown an interest?

A Yes, on the three occasions I've done bulletin boards, I've managed to find a keen police officer or police department that's said "yes, we'll do this, this sounds interesting and different" and they have made a good job of it.

It's been a good result. As far as catching the cracking crews concerned, that's like... I don't want to talk in clichés but...

Q It's like trying to find a needle in a haystack?

A (Laughs) Well, finding them isn't that difficult again but there's so many of them. Because it's a young man's game - despite the amount of older people in it - as fast as you get onto one group and think you've identified one or two of the members, you get all the youngsters coming along and the names change and you think "crikey, what happened then?"

I have to say that a lot of the cracking crews themselves are kids who are in for the kicks and for the fun of the thing.

I think the majority of them wouldn't dream of stealing a bottle of milk from a doorstep but they'll happily steal thousands of pounds worth of software without blinking an eye.

They won't see it as theft of course, they'll see it as a dare, as a bit of fun.

the only purpose of arrest is to make sure that somebody comes before a court.

The unit covers all members of the European Leisure Software Publishers Association and deals with every avenue of piracy



Car boot sales - a well used venue for selling pirated software

Q Do you feel that software companies and publishers could play a larger role in cutting back on unreleased pirating titles? All roads to this kind of piracy lead back to the software houses themselves - one dishonest individual can cause a severe profit loss.

A I think it's a very difficult thing for them to do - they certainly would do if they could. For example, you have quoted pre-released disks handed out to journalists - there are a number of software houses that actually have a policy in place of not releasing programs to journalists unless under the strictest of supervision.

Q We have also heard that people such as programmers and PR reps themselves are handing gear out. Can't companies do more than just "fingerprinting" the disks which are easily removed by cracking crews?

A "Fingerprinting" is a good system and I don't think the cracking crews could do much about it. We're talking about one byte in several million.

Q According to the crews we've been talking with, isn't it possible?

A I would be interested to talk to someone who knew exactly what you meant by that because I'm not a programmer I'm a policeman, so I wouldn't really know what a fingerprint on a disk looked like if it jumped out and bit me on the nose.

One job I did for one of the well-known companies involved tracking a fingerprinted disk and I was able to do it. I defy anybody to find that fingerprint because it was literally one tiny little mark.

Q The removal of the fingerprints is what we've been told is done. Is this true?

A Well, it certainly caught this guy

because he didn't know that it was there.

Q But surely isn't that the challenge of the cracking crew?

A Well, yes, of course it is.

Q What powers would you like to have to deal with pirates - would you like to go up to their front door and arrest them?

No, I don't think the power of arrest is high on my shopping list. The only purpose of arrest is to make sure that somebody comes before court.

For example, if you came across somebody committing an armed robbery, it wouldn't be satisfactory simply to summons him because he's clearly going to run away if he's facing fifteen years.

With someone who's only facing a lower court fine, it's perfectly acceptable to summons them. So the power of arrest isn't important. What is important is that I would like to see more police officers have their basic training include computer crime which at the moment it doesn't.

Q What is the kind of sentence a cracking crew should expect if they are caught?

A If you could show that a group of people criminally conspired to contravene the copyright act, and that in doing so they had inflicted financial damage to the tune of six or seven figures on to the software industry, I seriously believe you could expect them to get custodial sentences. It wouldn't be difficult to prove if it was a successful crew that had nabbed a few decent early releases.

Thank you for your time

If you have any views on the interview, send them to the Devil's Advocate at the usual address.



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As a basic machine, the A1200 is extremely crippled and this is why more and more users are now improving their Amiga's performance with accelerators and the addition of Fast RAM.

The latest addition to A1200 power-ups is the Blizzard 1230-II Turbo Board whose predecessor, the 1230 Turbo, sold extremely well and is now one of the most popular accelerator boards for the A1200.

There are two versions of the 1230-II board available and both offer incredible speed increases. The lesser board includes a 68EC030 CPU with a 40MHz clock rate giving performance increases between 300% and 400%.

The more powerful of the two houses a 68030 CPU with MMU and a clock speed of 50MHz with increases between 400% and 500%.

As well as an 030 power house, each board boasts an array of functions which will allow you to adapt it to your own particular requirements.

There are two 72-pin SIMM sockets on which you can upgrade the amount of FAST RAM by the use of standard 32-bit SIMMs. The board itself has auto-configuring memory and an optional MAP-ROM function which you can enable, via the jumper switches, so that the ROM is copied into Fast RAM. This makes the Workbench a pleasure to use.

Both PLCC and PGA type 68882 co-processor sockets have been provided on the board so that you can further enhance the speed of your A1200 by installing an appropriate FPU (Floating Point Unit).

UPGRADE

The final, and probably most welcomed additions to the board are the DMA expansion port connector and Feature Connector. The DMA will allow owners to upgrade the 1230-II with a Fast SCSI-II controller, giving access to a wealth of SCSI devices. The Feature Connector has been provided for future expansions such as Mpeg Decoders and CD32 compatibility modules.

On booting up your Workbench you will notice a massive speed increase immediately. The board is fast, very fast and you'll soon find yourself breezing around the Workbench with minimal effort.

This speed increase will prove invaluable to those of you who like to run Workbench in no less than 16 colours, especially if you have some kind of screen and window pattern.

However, the 1230-II really comes into its own with raytracing and other graphic-intensive applications. With the addition of extra Fast RAM, imagine 3.0 was rendering complex images in no time at all, although it did crash several times.

For those of you who use graphic applications a lot the 1230-II is like a kick up the pants and is an essential upgrade if you want to produce large images quickly without the restrictions of 2Mb Chip RAM.

Another popular application that benefits immensely from the board is Wordworth 3. Almost unusable on a basic A1200, the 030 kicks it up a gear and exposes what A4000 owners have been telling us – an extremely powerful word processor. The bottom line is

faster than lightning?

The accelerator market hots up with yet another expensive A1200 030 upgrade. But does the speed justify the cost?

that no matter what application you are running the 1230-II will shock it into greater things that will have you grinning for a week.

As well as an application thrust, simulation software also benefits considerably. I tested the 1230-II on what is probably the most intensive A1200 game to date, Tomado from Digital Integration.

A PAL screenmode and 256 colours were sure to overpower the 030 but I was wrong. Although certain attributes were disabled such as the visibility range and ground shading the action was fast, furious and very smooth.

What was previously unplayable became playable and it finally dawned on me that I was now seeing the A1200 as it was originally intended to be – a fast, powerful and colourful home computer.

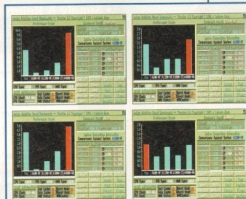
The board that I was sent did not include an FPU so I would imagine an even greater increase in speed than I was already experiencing. I was somewhat surprised to find that certain simulations that worked with previous accelerator cards would not work with the 1230-II.

There were also some pretty spectacular crashes and at one point I thought my A1200 would melt with the amount of heat the board was generating – it would have easily fried an egg. The lack of heat dissipation is not



Tomado is the first true A1200-specific simulation but without an accelerator it is practically unplayable. The 1230-II Turbo makes it an almost true-to-life flight experience

Under the spotlight



A1200 provides us with an Amiga showdown. And just look how well the 1230-II Turbo performed. In all tests it matched the A4000 and even beat it in the LineTest. With the addition of an FPU and the execution of FPU specific tests, expect to see your A1200 overpower the competition greatly

helped one bit by the neglect of ventilation windows in the A1200 case. In my experience, the hotter accelerator boards become the less reliable they are and this is a continuing problem.

Apart from the few problems mentioned above, the 1230-II Turbo performed admirably. Robust in design, it allows for a fair amount of adaptability to suit the owners requirements.

It is certainly not cheap, costing more than a new A1200, but such is the ludicrous price these days it is something you cannot avoid.

It is, however, very powerful and therefore must take the title of the best all-round A1200 accelerator available at present.

The bottom line

Product: Blizzard 1230-II Turbo
Supplier: Gordon Hanwood Computers
Tel: 0773 836781

Price: 1230-II 40MHz no Fast: £244.95;
1230-II 50MHz no Fast: £329.95

Ease of use 9
Implementation 9
Value for money 7
Overall 8

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Horses for courses

PhotoLite

Hot on the heels of last month's review of Photowork comes another European PhotoCD viewer program, this time designed to work both with CD32 and CD-equipped AGA Amigas. PhotoLite comes on a CD and acts as a driver program which, when run, prompts the user to insert a PhotoCD disc.

English and German languages are available, but for some reason the program defaults to German, and the user has to hold down the blue button on the CD32 joystick to boot in English (serves us right for being so mono-lingual, I suppose).

Once running, PhotoLite is so basic as to be simplistic, and even if we are generous and allow that the designers were catering for non-computing audiences, the program is virtually a feature-free zone.

Acting as a slideshow utility, PhotoLite can be set to run in carousel mode where each image is loaded and displayed in sequence, or the user can flip to any image using an on-screen LED cursor.

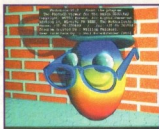
Unfortunately there is no preview function

CD32 owners can now view their holiday snaps on screen, but will they want to? Stevie Kennedy wonders...

and no thumbnails, so you'll have to remember which of the 50 or so piccies on a disc was the one where auntie Margaret's skirt blew over her head on the church steps.

Loading times are excruciating and can vary between 60 and 90 seconds, depending on the size of the image. To an extent this is the fault of the slow transfer rate of CD and the fact that images have to be decoded from PCD to HamB format in software, but even so there's no reason for the process to take as long as it does.

Image-manipulation tools consist of a landscape/portrait flip switch and a facility to alter the brightness of pictures. These could come in handy for badly taken amateur snaps, but again are so slow that they are almost a waste of time. On a faster Amiga with CD drive, the 68030 and 68040 processors would help a great deal, but Eureka haven't done CD32 owners any favours.



Basic and slow, PhotoLite fails to impress

The bottom line

Product: PhotoLite
Supplier: Eureka
Phone: 010 31 4637 0800
Price: £56.17 (inc VAT)

Ease of use	8
Implementation	5
Value for money	7
Overall	6

Oracle racing system

Stevie Kennedy sets out to make his fortune with the latest horse racing tipster program

There are those who base their betting and tipping systems on bizarre and wonderful theories about solar eclipses, ley lines, or the promises of politicians, but for most of us a much more trustworthy system is in order, and that's where the Oracle tipster comes in.

Developed by ESP software over several years, Oracle is written in Basic and has a text-based front-end, but the program's lack of graphical glitz shouldn't put off the determined punter.

Hidden behind the simple interface is an involved and complex analysis program capable of producing a wealth of statistics on courses, horses, jockeys, and trainers.

For the system to work, a certain amount of manual effort is required to build as clean a picture as possible of races and results, and though a lot of information is included about courses, the user has to supply his or her own input for each race.

This can be quite time consuming and the

program demands a great deal of information on which to make its analysis. First off, we select the course from a list of all national hunt or flatrace courses, then enter details on the weather, the going, number of horses, and so on.

After this, we input the horse names and tell the program if any of them benefit from a jockey/trainer combination which has already been successful on this course.

STATISTICS

Once this is done, we tell the program the horse's weight, three most recent results, whether or not it has won at this course or this distance, whether it is wearing blinkers for the first time – the list is endless.

The result of all this racing statistical typing is an analysis of the possible race outcome and a recommendation on how much to bet based on the starting price of the horses.

Within the confines of a review period it is difficult to judge how accurate a program such

an analysis of the possible race outcome and a recommendation on how much to bet

as this can be, but there are plenty of statistics already available.

Between May and December last year, Oracle was used to place 245 bets from which it chose 146 winners and 62 places, leaving only 37 losers.

That's a strike rate of 60 per cent wins, a huge improvement on simply betting on the favourites every time which manages about 33 per cent.

Oracle covers enough variables to bring a definite touch of science to the esoteric art of tipping, and for those with the demonic patience and hunger of the racing gambler, it is recommended as an alternative to divining rods and losing your mortgage.

The bottom line

Product: Oracle
Supplier: ESP Software
Phone: 0702 600557
Price: £99.95

Ease of use	6
Implementation	8
Value for money	9
Overall	8



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Germany
Tel.: +49 (0) 6171 85937
Fax: +49 (0) 6171 8302



Both of the Jumping Bean Company's Noddy packages start with a driving game, but each with a different road pattern. Toot the horn and wave at pedestrians



Here is the little yellow taxi parked in Noddy's garage. The screen scrolls across to the right to reveal all manner of animations and sound effects.



The main menu screen from Fun School 4, 7 to 11. The six different applications are easily selected, and the little spy gets to work sorting out the solutions to problems

School's out, back to work

Wilf Rees takes a critical look at software intended to enhance learning

Other than the games market, the biggest growth area in software development is probably the education/entertainment dimension. There is an obvious desire for parents to want to offer the best possible opportunities for their kids, and the companies producing software dedicated to enhance learning have mushroomed.

The danger for prospective buyers is to be able to spend their cash without risking the acquisition of something which is either inappropriate or over-priced.

Let's see if we can do something to remedy that by picking out what I know to be really good products with distinguished pedigrees, relevant content and sensible cost.

I have chosen to approach this task by taking the chronological route, as opposed to the subject-based option. The principal reason for this is that titles dedicated to early years are quite specific in targeting areas of learning.

However, as subject content broadens and learning capabilities differ, the exact

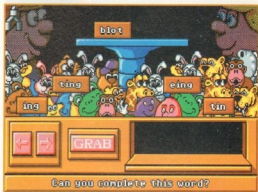
relevance of the software becomes unclear and the pertinence to specific age groups blurs. By recommending software for particular age-groups it avoids you, the reader, from wondering if it is appropriate to your needs.

By far, the 'nappies to nine-year old' age-range is the best provided for when it comes to volume. The market is saturated with all manner of packages, most of which are aimed at the old three Rs.

FAVOURITES

Straight in at the deep-end, and to introduce one of my personal favourites, The Jumping Bean Company have two products which are definitely worth a mention. Both are well supported with excellent graphics, sound and friendliness.

Noddy's Playtime is aimed at three to seven-year olds and contains all the Enid Blyton characters, combined to give eight different learning activities around Toytown. Each activity has three different difficulty levels and the subjects covered vary from pre-



Fun School Spelling, showing how 'endings' are taught by multiple choice.

Ich parl e espanol

If your concern is to help your child begin to learn a foreign language in advance of confronting such at school, or maybe even for yourself, then I think LCL have the best kit.

Not only is there a disk full of animations, pronunciations and grammar, but you also get a cassette of languages spoken by a native to practice with and a splendid 100-page phrase and useful expressions booklet, with each of the courses offered in French, German or Spanish.

Excellent quality, way ahead of the competition and sensibly priced, LCL are the best for providing help in this area.

Other titles from LCL worthy of note are: Micro English (eight years to GCSE) and Primary Maths. Both these titles have 24 programs covering and identifying all the appropriate National Curriculum AT's.

school reading to number skills.

Much better still is Noddy's Big Adventure. As with the previous package, the game is started by driving Noddy around Toytown in his little yellow taxi and parking at various places to enter the assorted applications.

There are seven separate learning programs at four locations, each of which again have three difficulty levels, but compared to Noddy's Playtime, the quality, diversity and educational value of the applications in this package are far superior.

Included with Noddy's Big Adventure is a junior word-processor, which in itself justifies the price. This is a brilliant package, put it on your shopping list. Eurospare Software have

lots to offer the school age group. Recommended is the Fun School 4 series which falls into three categories, namely under fives, five to seven, and seven to 11.

The under fives package offers six activities covering a basic painting program, a simple addition application, a colour learning feature, an object/word recognition test, a simple music program and an object identification task.

Moving on to the five to seven-year old package, the emphasis is on money, maths and letter skills. Again there are six applications, covering limited coin handling, alphabetical ordering, opposite words, keyboard skills, simple addition and subtraction and number and letter series.

TESTING

Finally the seven to 11 section of this suite uses a spy theme to unite the six elements of this program, and is the most successful of the three in achieving all it sets out to do. This opinion could of course be coloured by the fact that I found I was struggling with some of the tests!

Subjects covered are geography – identifying oceans, continents and cities; time – understanding the departure and arrivals at an airport; exchange rates; general

knowledge; proportions – looking at percentages, fractions and decimals, and finally History – where questions on historical dates are offered as multiple choice options.

Visually and aurally, these are three very suitable choices, with relevant National Curriculum content.

As a result of market research, Europress offer two specials in the Fun School range. These are Fun School Maths seven to 11

and Fun School Spelling seven to adult.

Both packages follow the named subjects into greater detail than the aforementioned Fun School 4. In addition, a Fun School Paint & Create package provides support for developing keyboard skills, musical composition, graphic design and jigsaw puzzling.

Each of the 'special' range is more visually and aurally entertaining, as well as being more subject specific.

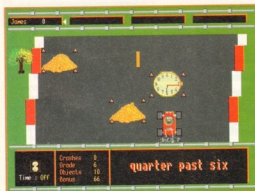
Finally from Europress, I would recommend the relatively new arrival on earth of the endearing little alien – Adi – who will help with four packages, namely Adi Junior Counting 4/5 and 6/7, and Adi Junior

At a glance

Title	Subject	Age	Stage	Value
Noddy's Playtime	general	3+	1/2/3	75
Noddy's Big Adventure	general	3+	1/2/3	95
Fun School 4 – under 5	general	>5	1	85
Fun School 4 – 5 to 7	general	5-7	1	85
Fun School 4 – 7 to 11	general	7-11	2/3	90
Fun School Spelling	english	7-11	2/3	85
Fun School Maths	maths	7-11	2/3	85
Adi Junior Reading 4/5	english	4-5	1	80
Adi Junior Reading 6/7	english	6-7	1/2	80
Adi Junior Counting 4/5	maths	4-5	1	80
Adi Junior Counting 6/7	maths	6-7	1/2	80
Fun School Paint and Create	general	5-11	1/2	60
Hooray for Henrietta	maths	5-11	1+	90
Henrietta's Book of Spells	english	5+	1+	95
Spellbound	english	5+	1/3	80
Count and Add	maths	>6	1	75
Early Essentials	general	>7	1	85
Junior Essentials	general	5-11	1/2	80
Micro French	lang	>16	3/4	92
Micro German	lang	>16	3/4	90
Micro Spanish	lang	>16	3/4	90
Micro English	english	>16	3/4	90
Primary Maths	maths	3-12	3	80
Adi GCSE Maths	maths	11-16	3/4	90
Adi GCSE French	lang	11-16	3/4	90
Adi GCSE English	english	11-16	3/4	90
Fun Learning French Vocab.	lang	>11	3+	80
Fun Learning French Grammar	lang	>11	3+	85
Fun Learning German Vocab	lang	>11	3+	80
Fun Learning German Grammar	lang	>11	3+	85
Fun Learning Spanish Vocab	lang	>11	3+	80
Fun Learning Spanish Grammar	lang	>11	3+	85
Fun Learning Ticket to London	lang	>11	3+	75
Fun Learning Ticket to Paris	lang	>13	3+	75
Fun Learning Ticket to Spain	lang	>13	3+	75
Fun Learning History	history	11-16	3+	75
Fun Learning British Politics	politics	>14	3+	80
Fun Learning Comparative Politics	politics	>16	n/a	85
10 out of 10 Maths Algebra	algebra	>16	>4	90
10 out of 10 Maths Number	arithmetic	>16	>4	90
10 out of 10 Maths Statistics	statistics	>16	>4	90
10 out of 10 French	lang	>16	>4	85
10 out of 10 English	english	>16	>4	85



The Environment screen, common to all of the Adi Junior range. Everywhere there are items which can be animated by pointing and clicking



Racer from Early Essentials is a game requiring the rapid collection of assorted articles without touching the obstacles and set against time

Reading 4/5 and 6/7. These really are first class packages, embracing all that is good in quality educational software. All use an initial screen, called the Adi Environment which is packed with programs, little noises and animations.

Leading off from here, and triggered by

entering the cottage on the screen, are the assorted applications relevant to each of the subject and age-specific programs.

There is loads to do, all very entertaining, reinforcing learning patterns and guaranteeing hours of concentration. Don't let your kids miss out, they are excellent.

Telephone numbers

Jumping Bean Co. 0602 790838
Europress Software 0625 859333
Lander Software 041-357 5034
 10 out of 10 0742 780370
 LCL 0491 579345

Fun Learning: Bridge Consultant 081-777 0638

Docs	Presentation	Overall	Supplier	Price
80	85	80	Jumping Bean Co.	£29.99
90	95	95	"	£34.99
80	80	82	Europress Software	£24.99
80	80	82	"	£24.99
80	80	85	"	£24.99
80	80	82	"	£25.99
80	80	82	"	£25.99
80	85	82	"	£19.99
80	90	87	"	£19.99
80	90	87	"	£19.99
80	90	87	"	£19.99
70	85	70	"	£25.99
85	85	87	Lander Software	£34.99
90	85	90	"	£34.99
85	90	80	"	£34.99
70	70	72	"	£34.99
65	85	80	10 out of 10 Ed. Systems	£25.95
65	85	80	"	£25.95
98	80	95	LCL	£24.99
98	80	95	LCL	£24.99
98	80	95	LCL	£24.99
98	80	80	LCL	£24.99
98	80	80	LCL	£24.99
80	90	85	Europress Software	£34.99
80	90	85	"	£34.99
80	90	85	"	£34.99
70	50	75	Fun Learning	£21.95
70	50	78	"	£21.95
70	50	75	"	£21.95
70	50	78	"	£21.95
70	50	75	"	£21.95
70	50	78	"	£21.95
70	50	70	"	£24.95
70	70	70	"	£24.95
70	50	70	"	£24.95
70	50	75	"	£24.95
70	50	78	"	£24.95
85	80	85	10 out of 10 Ed Systems	£25.95
85	80	85	"	£25.95
85	87	87	"	£25.95
80	80	80	"	£25.95
80	80	80	"	£25.95

A company which has definitely arrived with panache is 10 out of 10 Educational Systems. Two packages are obvious choices in this category and will provide excellent assistance in supporting the development of any child.

Early Essentials tackles the pre-seven-year old development of visio-spatial understanding, graphical design, early numbers, the alphabet, time telling and simple vocabulary.

Six different activities, arranged as both games and tests, achieve these ends by clustering six different skills into each of the six different activities.

Junior Essentials moves on to the five to 11 age group with much the same structure, but this time clearly identifying the specific National Curriculum Attainment Targets and Levels for each skill.

Six different activities are included as with the former package, and the areas covered are so thorough and diverse as to not need

The Scottish connection

Way up in beautiful Glasgow, is Lander Software, and they have four titles worthy of a mention which are all labelled under 'The Gold Series'.

Hooray for Henrietta is targeted at improving number skills. It has four main game screens and eight levels of difficulty. There is an almost infinite possibility of questions being generated by the computer. A teacher/parent section allows access to setting appropriate levels and viewing and printing the recorded results. Graphics, sound and animations are all comparable with similarly priced products and the documentation is particularly good, with a large section dedicated to giving direction and educational advice, as well as clear identification of National Curriculum areas covered.

Henrietta's Book of Spells is a sister package. I think Lander have one of the best combinations of entertainment allied with education and is demonstrated admirably here.

Designed to improve spelling, vocabulary and language skills, the program allows direct input into the database of questions, offering an inexhaustible supply of possible permutations.

There are five sections within Henrietta Book of Spells - a complete the missing vowels task, a code breaking game, a word recognition and memory game, an anagram puzzle and a version of hangman.

Two other packages from Lander worthy of note are Spellbound, and Count and Add. Spellbound is a helicopter-comesubmarine flying game, the object being to travel around a maze, shoot assorted creatures and collect letters in the correct order to spell a given word. Subsequent levels increase in difficulty, as does the nature of the craft and the maze.

Count and Add is a 'first maths' package which allows changes by the parent or teacher, thereby adjusting the complexity of the gameplay. Five different games add to the value of this ideal starter pack.



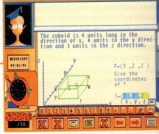
Henrietta's Book of Spells. To solve the anagram, letters have to be entered into the spaces. As the word emerges, the treasure chest is dragged towards Henrietta, away from the nasty wizard.



Junior Essentials uses the unique method of recording achievement. Categories are colour coded for quick reference



With the new Adl GCSE from Europress came a brand new Adl Environment. There are multiple features on the screen which can be activated by mouse



Probably the best of the Adl GCSE packages. Adl GCSE Maths is guaranteed to help any student struggling with this most frustrating of subjects.

listing. Both packages have an excellent means of recording achievement via a progress report giving detailed facts on degree of success, or lack of it!

With regards to examinations, Europress have added three new titles to their extensive range of packages for this aspect.

That friendly and helpful alien by the name of Adl again returns to earth with a new suite of GCSE packages targeted at Maths, French and English.

Each share the same 'environment' front-end filled with an assortment of activities to occupy time, as used in the previous Adl Junior titles.

With this new 'environment' release we are invited into Adl's living room which contains a collection of assorted objects. In the centre of the room is an image of a TV, with four click buttons allowing access to some of the environment activities and applications.

This route also provides access to the subject-specific applications. Along the bottom of the screen are a collection of gadgets which provide additional provision for support.

Accrued points in the applications section persuades the program to offer a range of games to play, growing in complexity as the points increase.

Two additional facilities provide means of

Getting wise to the intricacies of statistics can be aided with the use of 10 out of 10's Maths Statistics package, aimed at the six to 16-year old market.



text recording. A Diary, which is password protected, and a simple letter writing program, also password protected, allow save and read options.

A simple calculator can be called on at any time to assist with work and a control panel allows date, time, sound, colour scheme and clock design to be altered.

The three applications of Maths French and English offer a range of well presented and appropriate tasks for each subject.

On line help, increasing complexity, recording achievement and amusement run throughout the applications, and the content is excellent.

SUPPORT

Again in this category are two specific titles from Europress. Paint and Create is a graphics package intended for seven-year olds to adult, but has lots of capability for any student wanting to add gloss to essays or assignments, and Fun School Spelling gives support to those of us who rely on spell checkers on word-processors.

Bridge Consultants, up here in Geordieland, are the distributors of a range of software which is based on a suite of American Corporation Titles, but completely re-written for our domestic market.

The 16 titles in the collection cover English, Languages, History, Politics and Government, Geography and Geology. All the programs share the same graphical front-end.

Each package contains 350 questions, organised into 35 topical lessons of ten questions each. The questions are presented as multiple choice, filling in the blank space or true/false format.

Two attempts are allowed at each question before the correct answer is given. Completion of a set of questions builds up a points tally against a game, such as hang-man, to be played.

With each of the packages, a front-end menu allows the individualisation of that event to each user. After this, a further menu gives choices regarding starting, printing questions, creating new lessons or exiting. All entry is by keyboard and an on-line help provides assistance when needed.

Of the 45 lessons in each package, the first 35 are pre-determined. The remainder can be changed at will, providing all impor-

tant features of flexibility.

During the activity in the main part of the program, continuous information is given on the current question number, performance and the score value of the question.

Reinforcement practices are employed by repeating incorrectly answered questions at the end of each lesson. All of the questions can be printed out, minus answers, providing an invaluable tool for parents or classroom teachers to generate either quiz activities or tests. European characters are available for foreign language entry.

Not exactly software with brilliant graphics, stunning sound or excellent animations, but deceptively flexible and surprisingly well structured, as well as sensibly priced.

I must mention 10 out of 10 again, which have a broad range of packages aimed at this age bracket.

Maths is covered by three different offerings, Maths Algebra, Number and Statistics. Each are intended for the six to 16-year olds but better employed for the older age group.

As with the 'Essentials' range, there is the same division into six activities, each addressing six different AT's. French is also tackled under the same format as well as English. All of these are well presented and excellent value.

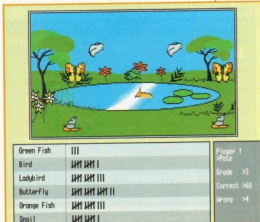


Don't forget

Any of the packages I have mentioned will provide that extra help you might want to offer and give the advantages so necessary in today's world - but a concluding word of both advice and caution.

You will provide 10 times the value of any of these packages if you look through them yourself and then offer advice and guidance to your child on how to get the best from them.

Give them merely as a gift and forget and you risk not enjoying the benefits and subtleties, often untouched because they are just encountered.



With the advent of digital media such as direct-to-disk sampling and of course digital video, the demands on Amiga storage is now heavier than ever before.

Unfortunately the price for digital perfection is a heavy one, especially when it comes to long-time storage. With the average digital video sequence eating up a gigabyte every ten minutes, the problem of storage is fairly self-explanatory.

The answer is of course large-scale backup on either DAT or via a tape streamer. Although both mediums have been around for some time, they've previously been primarily the domain of business systems which require large-scale backup on a daily basis.

Now the Amiga has begun to demand the same degree of security and long-term storage, and that's where Tapeworm plans to make its mark.

Unlike normal tape back-up systems, Tapeworm offers the unique ability to operate as an interactive part of the Amiga's operating system.

Normally tape streamers and DAT systems are used by a specific package such as QuarterBack or Ami-Back. In such conditions the software will interrogate the SCSI device, allowing you to select tape device and make your back-up.

The only problem is that the back-up files are specific to the software and remain completely inaccessible to any other package and the Amiga's operating system.

Tapeworm, however, offers a radically different approach to back-up which actually transforms a dumb tape device into a logical AmigaDOS volume.

Like the other back-up utilities, the program still interrogates any SCSI devices on the system to select and set-up the tape or DAT.

But once configured, and the machine safely rebooted, a new disk pops up on the Workbench. Just like a standard floppy or hard drive, the tape device becomes a fully-functioning part of your system.

You can copy, delete, move and generally manage the tape as normal. The only difference is that you'll have between two and eight gigabytes of storage to play with.

It's not even essential to have a working knowledge of the Shell or CLI. Directory managers and the drag and drop offered by Workbench all work perfectly.

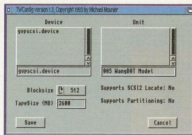
In fact there's virtually no noticeable difference, the only exception being that because tape drives are WORM volumes – write once

Background

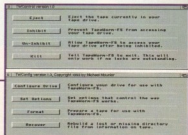
To put Tapeworm to the test I decided to back up an identical 60Mb volume with Tapeworm and Quarterback 6, using exactly the same Wang DAT for both.

After a brief set-up procedure, Quarterback managed to back-down the volume in roughly 20 minutes – give or take a second or two. I then reset the system and repeated the procedure using Tapeworm.

A little over two and a half hours later it was still happily plodding along – at which point I gave-up! Obviously speed would improve on a SCSI II system, but even so the overheads are still likely to be too much for anyone working commercially with the Amiga.



Set-up couldn't be simpler, a couple of clicks and you've got 2.6 gigabytes to play with



Total control via the config and control screens

Serious storage

With ever increasing demands on disk space

Paul Austin asks if Tapeworm could be the ideal vehicle for Amiga mass media

read many – they do not allow you to write twice on the same section of tape.

This simply means you never recover space on the volume, even if a file is deleted. However with the amount of space available it's not exactly a massive problem.

Of course, if you do need to discard the contents of an entire tape you can always re-format and start from scratch – a procedure which thankfully only takes a matter of seconds.

On the face of it, this is a seemingly perfect system, but alas there's a catch, which in the case of Tapeworm is absolutely appalling speed.

In fact transfer rates appear worse than those of a floppy disk. Alas, this has unfortunate repercussions on both the day-to-day use of applications and also large-scale back-ups.

TRANSFER

For the average power user – who after all are the target audience – sitting around waiting minutes for an application to load is quite simply out of the question.

On the other side of the coin is the problem of mass transfer. Although simplicity itself to implement either via a directory manager or the Shell, the time taken is astronomical – see background box.

A buying decision boils down to degrees of desperation. If you're tearing your hair out for mass storage and are willing to wait for it, Tapeworm could certainly offer a solution.

However, given the drawback, why not opt for a little less convenience in exchange for infinitely better speed and plumb for either Quarterback or Ami-Back?

To be fair, Tapeworm's accompanying

control does offer the option to release the device, allowing standard back-up utilities to access the disk – which is a possible solution for the problem of slow large-scale back-ups.

Verdict

The question is, does the added functionality offered by Tapeworm's unique file system make up for the horrendous lack of speed. As it stands I seriously doubt it. Although the option to have direct access to the tape is appealing, the overheads are simply too high.

SYSTEM ESSENTIALS

RED = Essential BLACK = Recommended



Tape streamer/
DAT drive



SCSI2 controller

The bottom line

Product: Tapeworm
Supplier: Ramiga International
Tel: 0690 770304

Ease of use: 8
Implementation: 5
Value: 5
Overall: 5

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PRICES

1. *Journal of the American Medical Association*, 1997; 277: 1039-1043.

Note: Prices are per disk and not per set

[illegible]

public



sector

*Tina Hackett invites you to step inside
the spinning cube of life and take a look
at the big, wide world of Public Sector*

From music demos with Morphing Cindy Crawfords to slide shows with muscle-bound warriors, the Public Sector has something to suit everyone. Whether you're after a quick blast-em-up or a useful utility, the Public Sector is alive and very much kicking.

Faculty-Lethal
Dose, AGA

Programmed by: Scribe
Available from: Online PD

A music demo that actually uses some new ideas is refreshing to see these days. Originality transpires in Morphing Cindys – more interesting I'm sure to the males than a Spinning Cube! Wrapping Vectors and



A two-headed morphing Cindy?

Holodeck 3, Spanning the Generations, AGA

Programmed by: Phil Inness Chaytor
Available from: Jorvik PD (costs £2.50 + 50p p&p)

For those Star Trek fans out there this disk will provide a real treat. But for those who aren't that way inclined then these pictures will prove no more than a reasonably competent attempt at showing a lot of star and spaceship pics.

The pictures are of quite a high quality though, and thankfully you don't have to wait an eternity for each screen to load. There is a great deal here to look at, with many pictures included.

However, if you don't know your Enterprises from your elbow then they may just look like a collection of similar spaceships.

The dramatic sci-fi accompanying music does create some atmosphere though and fits in well with the pictures.

The graphics are well created by Tobias Richter, among others, who you may remember for his other work which includes some great animations and his PD Star Trek-type game.

Pictures include: Romulon Warbirds, Borg attacking a Klingon K'Vort Class Ship and Spacedorks. There are also some pretty dire caricatures of Scotty, McCoy and the like, so this one is for true-trecksy only!



High-quality graphics for Trecky fans everywhere



Although rife with clichés, Shed Tears is of a high quality

Bezier Curves make for a very interesting effect that creates an almost hypnotic effect.

Dot Cubes, Dot Tunnels and Dual Vectors give a strange, dreamlike display, whirling and twisting across the screen

along to the dramatic music. The atmosphere changes when the music suddenly alters from this moody tune to a fast-paced dance track.

A great ray-traced animation of an unidentifiable cutesy animal playing a guitar is also included. Smooth scrolling and 256 colours give a fine, if rather brief 16 frame animation. Well recommended.

Shed Tears, AGA

coded by: Polson and Hann
Available from: Jorvik PD
Disk No. 550289

Although Shed Tears doesn't differ much from other slide shows with regards to its inspiration behind the pictures – in other words the old "mythical creatures and large-breasted warrior women" formula – they are very well created.

The good use of colours and fine

GAME
of the
MONTH

Sensible Massacre

Programmed by: James Hall
Available from: J.Hall

An original and brilliant PD game, Sensible Massacre takes its inspiration from Sensible Soccer and adds blood, guts and bomb-em-up mayhem! You are the Goalie and it is your job to stop the rival team getting past your Goalposts by bombing them.

Mayhem ensues as disembodied heads fly all over the pitch, and limbs scatter the field. It's great gory fun – good for a laugh.

Sprites and even the pitch look uncannily like the visuals in Sensible Soccer. Aim a crosshair at the enemy as they race down the pitch, stop them in their tracks by pressing the mouse button and release the bombs disguised as footballs.





The activity section gives children good ideas on things to make

attention to detail make them well worth a look. Bold reds, and murky blacks create devil-like images which add variety to the colourful, serene, yet clichéd, pictures of women.

And fortunately, what does make this slide show different is that the women actually get their fair share of semi-clad males! For instance, Conan the Barbarian types stand provocatively over slayed beasts in defiant looking poses.

And although there aren't that many pictures, they are all of a fairly high quality and worth a look, despite lacking in a great deal of originality.

Tom's Story Book

Programmed by: Thomas Newsom
Available from: Roberta Smith DTP
Disk No. E053

Tom's Story Book was written with the intention of being aimed at the author's two young sons to enable them to read proficiently and aid computer skills.

Although not the full version, this demo is absolutely crammed packed full of stories and activities for children. All the old classic fairy tales and rhymes are included, with many others being promised on the full release.

A collection of three classic games have also been included which is a great idea as children now, with all the new technology games, are reluctant to go back to the pen and paper versions.

The ones included here are Noughts and

Perceptions

Programmed by: Ashley Willis
Available from: A. Willis
(costs £3.50)

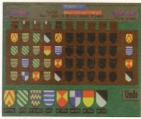
Based on the Waddingtons board game of Mastermind, Perceptions, although not exactly a new concept for a PD game, includes a two-player option, selectable sound and three variants on the game.

The idea is to crack a colour code set by your opponent (human or computer) by making guesses, improving the colours they give in the form of black and white pegs.

Black pegs indicate a correct colour in a correct place, white pegs show a correct colour but in the wrong place. No pegs mean you have guessed incorrectly.

And that's basically it. But this simple concept works well and makes for some thought-provoking and challenging gameplay.

Graphics are clear and adequately convey the game. Variety is added to the basic concept by employing other symbols which can be used, rather than sticking to the pegs each time. These can be changed from Flags and Heraldry to Words.



Change to the Heraldry theme for variety

Crosses – a two-player only game. It's a great shame a computer opponent could not have been included, as it means a child has to find someone else to play every time.

This also happens with Four in-a-Row. A game similar to MB Games' Connect Four, you take turns to place colours in rows until one of you wins by connecting four colours.

Hangman completes this collection and enables the player to name a word by guessing letters. Life is made easier as the computer draws the 'Hangman' for you, but as the words are not linked in any way it takes away some of the fun.

And another annoying, if perhaps trivial point, is it does not tell you what the correct answer is if you get it wrong.

The main part of the program, the story

Calling all PD libraries....

...and individuals with anything remotely worth my while having a peek at. If you want something released as PD, or you're a library with stacks of hot new stuff that you haven't seen reviewed yet, why not drop me a line with a copy, full documentation and everything clearly labelled? I promise I'll at least look at your work.

Tina Hackett, PD Submissions, Amiga Computing, Europa House, Adlington Park, Macclesfield, SK10 4NP.

book, contains many fairy stories and traditional rhymes aimed for children to read. Although most of the stories have nice, easy-to-read text, some of the stories written in Italics may cause problems.

The stories are well written though, and it's a good thing for a young child to acquaint themselves with these classic fairy tales that will always stir a child's imagination.

Into the bargain you also get a well-thought-out activity section on things to make, from Desk Tidies to Salt Dough models. There is also a section on jokes that will amuse the young gameplayer.

The full version can be obtained for £5 and contains 25 stories and rhymes, 100 jokes and 30 things to make. It is well recommended for keeping the youngsters amused over the long summer holidays.

Joe's Typing School

Programmed by: Alistair Lyons
Available from: A. Lyons

As the name suggests, Joe's Typing School is a teaching utility for those who want to learn to type, to the proficient typist who wants to improve skills.

This demo version shows only the Beginners and Novice courses but the full versions contains Professional and Professional Plus levels.

On the levels demonstrated, a keyboard is shown on the screen and as each letter is highlighted you mirror the sequence and type in the letters via your keyboard.

Points are awarded for each letter correctly typed. You progress from typing



The game starts to look even sillier with the 'Pink' pitch options and the daft groundsman that appears along the bottom of the screen.

Options available include being able to choose from how fast the men attack, to the level of gore you wish to see! Sound effects such as explosions and 'Urghs' and the like as the men explode add humour. Also bundled in with this game is Missile Command by Max Bithead – a rather basic version but good fun never the less. The aim of this is to stop the missiles before they hit the towns.

Highly addictive, Sensible Massacre is well recommended and with the added extra of a bonus game you'd be foolish to miss out on this one.

Blood and guts,
explosions, head-
less forces – great
fun in Sensible
Massacre

Type on each letter
as instructed by the
on-screen keyboard



single-letter sequences, as in your basic 'asdf's and your 'jkl's, to full sentences.

This works well and would be an excellent teaching aid to improve typing or to learn typing from scratch. A good aspect of this program is that each course takes you through it gradually, giving you chance to build on your skills.

In the full version you can design your own course and print out and save results to keep track of your progress.

Pearl: Satisfaction Guaranteed

Coded by: Netrunner

Available from: Jorvik PD

(Make cheques payable to D. Bateman, costs 99p+50p p&p.)

A rather short but sweet demo, Pearl: Satisfaction Guaranteed does work surprisingly well. There are the obligatory and becoming increasingly irritating Spinning Cubes but all this can be forgiven by the brilliant effect of a rotating corridor.

These are created with squares and as they move into the distance you feel as if you are actually moving with it. After



Swirling kaleidoscopes create a hypnotic effect

minutes of staring at the screen, the effect of feeling as if you are travelling along this corridor is quite weird.

The colours change from greens to blacks, whites and greys, resulting in a quite bizarre effect. The rest of the demo fades into blatant awesomeness though, with the normal spinning coloured circles that go on that bit too long to hold interest.

The mellow, harmonious music turns to a very bad Jean-Michel Jarre attempt and all in all this is a competent but unoriginal demo.

The corridor effect does, however, stand out, making this demo something a little bit different and worth a look.

ZAM - Issue 4

Programmed by: Gears

Available from: Kewell Software

A disk magazine in the style of university Rag Mags, ZAM (Zircon Amiga Magazine) is rather hard to judge. On the one hand it's

Sound Samples

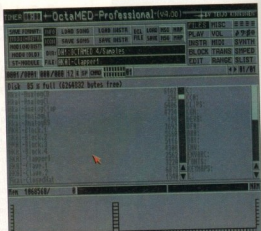
Available from: Northern Amiga Users Group

These two disks of sound samples are taken from Northern Amiga Users Group's Professional Collection. The collection totals 50 disks of high-quality sound samples for the Amiga.

Percussion Disk one contains around 80 samples from Sleighbells to Shakers. A wide range of sounds of the same instrument have also been provided, for instance there are even seven different Tambourine sounds.

The Effects disk contains all manner of weird sounds, including Bottieburs and Boings to an audience clapping to Ducks.

Very realistic and of a high quality, they are a recommended buy to the musically-minded computer user.



Shown here playing through Octamed, these samples give a wide range of sounds to use in your musical masterpiece

nice to get some light-hearted humour on a disk magazine, but this verges on the immature in places. And while some of the jokes do raise a smile, others are older than some of Bernard Manning's best.

There is quite a lot to read, but after a while the novelty soon wears off. Topics range from articles such as 'Don't say this during sex' to 'Quotes of Nuclear Power Stations', all of which could be potentially funny but the humour doesn't quite come across. An innovative idea of an 'instant reply service' makes the magazine slightly more agreeable. By means of a simple text editor you can write your comments onto a provided section of the disk so you can get your thoughts about an article down straight away.

You can write anything from adverts, to complaining about articles or writing your own - then send it back to ZAM and they may publish it in the next issue.

This may be the magazine's saving grace and if people do this they may actually get

some half-decent material. But at present they seem to be struggling for new gags and ideas.

Lay your hands on me

Please note: The review of "Titanic" AMC74 said it was available from Educational Software. It should have been "Your Choice". They can be contacted at: 39 Lambton Rd, Chorlton-cum-Hardy M21 0ZJ.
Tel: 061 881 8994.

Online PD

1 The Cloisters, Halsall Lane, Formby L37 3PX. Tel: 0704 834335.

Jorvik PD

22 Hemlock Avenue, York YO3 9DG.

A. Willis

9 Scotland Farm Cottages, Dry Drayton, Cambridge CB3 8AU.

Roberta Smith DTP

A. Lyons, 18 Braehad, Bo'ness, W. Lothian EH51 9DN.

Northern Amiga Users Group

P.O.Box 151, Darlington, County Durham DL3 8YT.

Kewell Software

P.O.Box 672, South Croydon CR2 9YS
Tel: 081 657 1617.

D. Jones

23 Grendon Dr, Avon Park, Rugby CV21 1UA.

J.Hall

1 Chequers Close, Buntingford, Herts SG9 9TB.



Initially a good idea but unfortunately the humour doesn't come

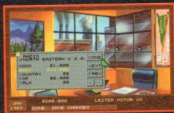
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Impressions Software, Unit 2/12, Chelsea Garden Market, Chelsea Harbour, Lots Road, London SW10 0XE

SYSTEM

Your essential guide to the world of Amiga gaming

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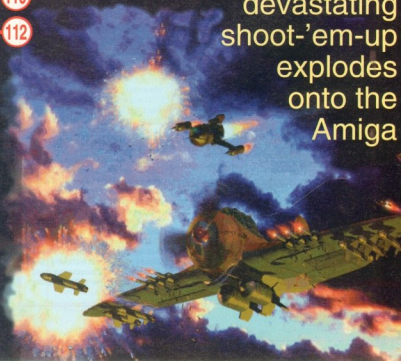
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CORE BLIMEY!

Banshee, Core Design's
devastating
shoot-'em-up
explodes
onto the
Amiga



Domark at Fever Pitch

Available from Domark at the end of June is the Championship Manager end-of-season data disk. The data disk allows you to update the best football management game on the market, to include all of the player data and team statistics of the 1993/94 season.

The disk includes all the latest transfers and management changes up until the end of the season, as well as

promotions and relegations, so teams such as Crystal Palace will be in the Premiership and Oldham will be in the First Division.

The package costs £15.99 and also includes the award winning book "Fever Pitch" by Nick Hornby, which is acclaimed by people in the know as the best football book ever written.



system online

The latest news from the exciting and interesting world of Amiga games brought to you in glorious technicolour with the added advantage of Dolby surround sound



Coming in July, Gremlin's superb animated spectacular for the CD32



Wonder round the levels to the luxury of a full CD cinematic soundtrack

Better Divil you know

Billed as the world's first truly interactive cartoon, Gremlin have finally announced the release date of Lital Divil. Coming in July, this CD32-only game has been in production for longer than I can remember.

The story follows the quest of Mutt the Lital Divil as he ventures forth into the Overworld and through the Labyrinth of Chaos to bring back the Mystic Pizza of Plenty.

There are five huge levels to explore and over 50 different puzzle and quest rooms to negotiate, all presented with stunning backdrops and amazing animations. Lital Divil also has a full CD cinematic score coupled with a whole host of wacky sound effects.

CD32 owners out in gamesland had better make sure you've got £29.99 and start watching the shop shelves now, because this could be the game you've all been waiting for.

Poptastic Pinkie

Millennium are set to invade the world with one of their forthcoming releases. You won't be able to go anywhere without seeing pink! The platformer Pinkie is collaborating with Little Sister to release a "hit" record.

Called Play It, the single has been produced by Station 2 Station who were responsible for taking Mr Blobby to number one in the UK charts last Christmas and in the past have

worked with top pop stars like Right Said Fred.

Play It will be targeted at the 11-16 age group and released at the end of June, followed by Pinkie on the various Amiga formats plus a super enhanced CD32 version.

A second single and TV show featuring Millennium's new character are also being planned. Expect a full review of Pinkie within these pages very soon.



13-year-old, Kelly Smith sings "Play It" accompanied by Millennium's latest star, Pinkie



Pinkie - the game arrives at the end of June on all Amiga formats

System Technology

The section of the news that informs you of what else is happening in the fast-moving world of the computer industry!

● Sega have announced that the Mega Drive 32-bit add-on will be launched in Europe in time for Christmas. Sega showed the unit at the recent Tokyo Toy Fair along with the Saturn which will not be released until the middle of next year. Sega Japan is currently working on around a dozen Mega Drive 32 titles.

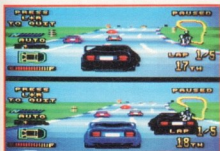
● Nintendo is targeting 1994 as the Game Boy's biggest ever year in the UK, with sales of the hand-held machine up 15 per cent on last year already.

Game Boy currently claims a 72 per cent share of the UK Handheld consoles market and Nintendo claim that this figure will rise to 80 per cent by the end of the year.

● Nintendo is also releasing the Super Game Boy add-on unit in early autumn. This device enables gamers to play Game Boy games on the SNES, with the added benefit of seeing the games in colour.

● Mega Drive and SNES software both suffered a drop in the market share by units while the Amiga and PC both moved upwards. Market research firm, Gallup, found that Sega's Mega Drive still topped the market, even with its share reduced from 25.8 per cent to 23.0 per cent. The Amiga now moves into second place with its share increased from 19.6 per cent to 21 per cent.

● Japanese hardware giant NEC has developed a new voice recognition system and is planning to use it in video games. NEC is confident of building advanced voice recognition features into a whole variety of products such as games consoles, personal organisers and even VCRs and microwaves.



The rough and tumble of road racing is revealed in Gremlin's Top Gear 2

Top Gear from Gremlin

Sheffield-based software house Gremlin claim that their latest release, Top Gear 2, will become the fastest ever Amiga racing game. Packed with twice the programming power of the original, you can burn through 64 cities in 16 countries at speeds of over 200mph.

Top Gear 2 differs from the pack because unlike its competitors you are able to upgrade your car which actually makes a difference to your performance. You start off with a basic car at first, so you'll have to rely on some nifty driving to win you enough prize money for an upgrade.

There are 36 different bits of kit altogether so you'll have to make the right buys to stay in the championship, not forgetting your opponents will be upgrading too!

When Top Gear 2 was released on the SNES in America it won the coveted 1993 Games Player SNES Racing Game of the Year award. The Amiga version promises to be better than the SNES version, with a whole host of new features added.

Top Gear 2 appears on the A1200 format only and will cost you £25.99. Drivers, start your engines!



Top Gear 2 won the coveted 1993 Games Player SNES Racing Game of the Year award and it promises to be even better on the Amiga!

Sensible World of Soccer arrives in September with a whole host of new features



Sensible get worldly wise

Undoubtedly the most eagerly awaited football sequel is on its way. Sensible World of Soccer retains all the playability of the original, but a whole bundle of new features have been added.

As well as having an odd kick around you can now go into a full management simulation. The game features over 1,400 football teams from every league in every country around the world.

With over 22,000 players, the game now features an international transfer market,

so you can build up an elite team from around the globe. Other new touches include the introduction of referee and physio sprites plus brand new international sampled crowd chants.

Sensible World of Soccer goes on sale in September for £25.99, but for those gamers who can't wait there is a Sensible Soccer International Edition on sale now for £19.99 which features all the teams and players taking part in this year's World Cup.

System Selections

System casts its eyes over the last 3 months and brings to you our selection of the best games available for your Amiga



Hero Quest 2: Legacy of Sorasil

Legacy is very easy to pick up, using a point-and-click system in conjunction with the mouse. This is typical of every aspect of Sorasil - generally it's easy to use and even easier to find yourself absorbed within.

This combination of D&D style rules blended in with the visual aspects of combat and spell-casting will make Hero Quest 2 an instant success with RPG lovers.

K240

OK, so it might not have spectacular graphics or sound, but it has it where it counts and that is in the gameplay and addition departments. I'm finding it really hard to fault K240, but I suppose if you play enough it will eventually get a bit unvaried, but the later aliens are incredibly tough and will take a lot of experienced K240 playing to beat.

Gremlin's space strategy is a truly engrossing game that will keep you awake until the early hours and I heartily recommend it as this month's game to get your mitts on.



Beneath a Steel Sky

Revolution Software have surpassed the amazing Lure of the Temptress with their latest adventure and I congratulate them on making such a fine adventure game. Everything about it oozes quality and over the last couple of weeks it's been a real pleasure to play. The graphics are good enough to marry and have children with and the gameplay and actual storyline are first-rate. If it doesn't go to the top of the software charts then I think there is simply no justice in this world.

Darkmere

This must surely rate as one of the best 3D isometric adventures ever to appear on the Amiga. It possesses a haunting style that is completely unique, and seldom achieved in many computer titles.

Darkmere is a pretty classy title. The graphics create such a mood that it gives the adventure an immediate head-start over everything else it competes against. It's contained in a huge playing area and has objectives and puzzles that will hold your attention for a good while.



Arcade Pool

Arcade Pool can now be added to the list of Team 17 budget successes. The game may have very nice graphics but it's in the playability department where it excels. There are so many different game styles that you'd be hard pressed to become bored with this piece.

For just under a tenner it is an amazing bargain, especially when you consider that it has actually been in development longer than most full-price games.

James Pond 3

Highly original it might not be, but fans of the previous games and platform lovers will be absolutely besotted with the third instalment.

For sheer enjoyment and lastability you'd have to go far to find a better platform game than Millennium's tasty third fishy adventure. If you're yearning for some fast, frenetic platform jumping fun then I suggest you splash your cash on James Pond 3. You will not regret it!



The scores on the doors

System has a different scoring system than any of our competitors, so before you continue reading the mag, glance at the words below to find out exactly how it works.

In our opinion review scores have lost their context as a percentage; some products receiving scores which were only a few percentage short of being the "perfect" game, when in truth they were only marginally above average.

OK, so the scores might seem unnaturally low at first, but that's only because other scoring systems tend to be on the high side and perhaps not as comprehensive or honest as they could be. In the long run you'll receive a more concise and reader-oriented review that's geared towards the consumer.

- 0-20 This is given to the lowest of the low
- 21-30 An all-round poor game that may have a single saving grace
- 31-40 Just below the average, perhaps let down by a few indiscretions.
- 41-55 Games of this score are roughly average with 50 being a perfectly average score.



- 56-66 This is an above average game and is worth buying. For this reason it would be awarded the BRONZE award.



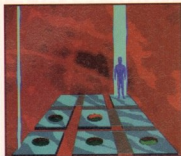
- 67-77 A game of high quality that we have no reservation in recommending. Anything of this ilk would be given the SILVER award.



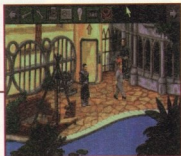
- 78-89 A brilliant title. Definitely worth buying and almost the definitive of its kind. This standard of game would receive the GOLD award.



- 90-100 The best in its genre. This benchmark title receives the PLATINUM title.



Wandering around LINC-space can be quite confusing due to it being so damn surreal, but follow this guide and your problems will be solved



Talking nicely to Mrs Piermont will allow you to get past that troublesome guard later on in the adventure



Outside Mrs Piermont's apartment, but talking to the gardener or small boy won't give you any clues about how to get in it

00000

beat the system

Jonathan Maddock guides you through the second and final instalment in our complete guide to Virgin's excellent graphic adventure, *Beneath a Steel Sky*.

Last month we left you entering the factory to find Anita again. Pick up and wear the rad-suit that's hanging in the middle locker and go right. Access the control panel and select two.

Exit the factory and enter the reactor room. Just to the right of the core reactor, you will find Anita's card on the floor. Pick it up, leave the room and close the door with the control panel.

Go left and change back into your coat. Leave the factory and go back to the LINC-space interface via the Security station's lift. Use Anita's card in the interface slot and sit in the chair.

Once in LINC-space go right and use the blind program in your inventory with the eyeball. Quickly go into the upper exit. Go up again, then use the playback program with the well. Go through the upper-right exit and use the blind program on the eye and pick up the tuning fork.

Now disconnect from LINC-space. Leave the Security buildings, go to the ground level and chat with the gardener outside Mrs Piermont's house. He'll tell you that his name is Eduardo. Go left and left again, until you reach St. James Club.

Once inside, walk up to the jukebox and activate it. When Colston, the club manager, gets up quickly, go to his table and grab his glass. Examine the metal plate next to the door at the back of the club, then leave. Go

Beneath

to Burke's Bio Surgery via the lift. Make your way inside and give Burke the glass. Leave and go back to the St. James Club. Once inside, go to the door near the back of the club and use the metal plate next to it.

Go through the door, use your metal bar on the packing case, then move the wooden lid over to the box. Get on the box and use the metal bar on the grill. Now use the secateurs on the grill and climb through into the narrow passage.

Go right and then move through the top-right exit. Go right once more, then save

your game as a precaution - although I hope you've been doing that throughout the adventure. Do not walk past the hole in the wall until you have located the light

Bob's Bad Day

More codes to add to last month's for this quirky puzzler...



Level 40 = QEAIIVNJ
Level 50 = NDPICKWPL
Level 60 = LFFMLUNM
Level 70 = IDPONWPO
Level 80 = GFFQPLN
Level 90 = DEASQVPR
level 100 = BEAUSVNT

socket, which is on the handrail just to the left of the hole.

Use the light-bulb on the socket and go right, not forgetting to save your game again. Go right and immediately click on the lower-right exit in the passage - this enables you to run to safety.

Now look above the vein on the wall and you will see some plaster. Use the metal bar on the plaster and then on the newly-exposed brickwork. Pick up the brick that falls to the floor.

There is swelling on the vein somewhere. Find it and use the metal bar on it, then use the brick on the metal bar. Grab the metal bar and go through the right door as soon as it opens.

In the next room, look



Searching the lockers will reveal Anita's body, cruelly burnt by vicious amounts of radiation. Sniffle!



Examining this double door will reveal an old-fashioned lock. It can be opened with Reich's card



Placing the dog biscuits on that plank will lead to Mrs Piermont's dog doing the best triple-piked somersault you've ever seen



Wandering into the cathedral will reveal an abundance of dummies. Further examination will show that they are androids! Spooky!

a Steel Sky Part 2



Inside the reactor and things are looking brighter... literally! Search around and you'll find Anita's Security card



through the grill. Go through the upper-left exit and save your game once more. Access the control unit and select two to reduce the temperature. Exit the unit, then immediately climb onto the iris and yank the metal bar hanging from the ceiling.

Get off the iris straight away. Go left, right and then right again. Put Joey's circuit into the medical robot's slot. Tell Joey to check out the tank room. When Joey gets back, chat with him about everything.

Tell Joey to go and open the tap on the nutrient tank and wait for him to return. When he does get back, go through the upper-left exit. Once in the tank room, go through the upper-right exit, then the next upper-right exit. Use Reich's card with the terminal and select two, then one. Exit the terminal and head left.

After the sequence, get Joey's board from the medical robot, and take the I.D. card from Gallagher's corpse. Go back into the top-right entrance and use Gallagher's card in the interface slot.

Access LINC-space. Go right, use the blind program on the eye and then go up. Now use the divine wrath program on the crusader. Disconnect from LINC-space, then use Anita's card in the interface slot. Re-access

LINC-space. Go right, blind the eye and go up, then head right again.

Use the oscillator on the crystal and pick up the helix. Disconnect and go left, then go through the bottom-right door. Use Anita's card with the console. Now pick up the tongs to the right of the glass tank and use them on the glass tank.

This freezes the tissue. Go right, open up the cabinet to the right of the middle android and place Joey's board inside. Access the console and select two, then nought and finally three. Chat with Joey, then retrieve his board from the cabinet.

Go right and ask Joey to place his hand on the lock sensor. Simultaneously place your own hand on the other hand panel. Go right and right again.

Use the cable on the pipe support, then climb down the rungs.

Use the tongs on the orifice, then save your game again. Right-click on the cable to swing into the room.

After this scene finishes, tell Joey to sit in the chair. Now all you have to do is simply sit back and watch the rest of the story unfold to its conclusion.



Open the middle locker and you'll find a rad-suit. Put it on and walk into the reactor room on the right



A

game written in 13 weeks by a company that have never produced a game before sounds like a recipe for disaster. Being new to the scene and writing a game that they claim to be the first ever Amiga speech adventure is certainly an ambitious task for Portsmouth-based Software house, Vulcan.

But - against all the odds - the result, Valhalla and the Lord of Infinity, looks to be a very competent and capable attempt indeed.

INTRODUCTION



Starting your quest in the Crypt, you soon find out how easy it is to fall through a trap door



An adventure game that talks to you? Tina Hackett wonders if she's going slightly mad as she explores the dingy depths of Valhalla



Unfortunately this dire story screen must be endured each time

Valhalla and the Lord of Infinity

STORYLINE

The land of Valhalla was a peaceful town ruled by a fair and just King. All was well until his evil brother, wanting to take the throne from him, and started a war in which the King was killed.

His son was taken into exile and the brother ruled. The young Prince has now come of age and wants to avenge his father's death.



Viewed from this unusual 3-D perspective, controlling your character is rather clumsy

OPINION 58%

Valhalla is one of those strange titles that is hard to really like or totally dislike. On the one hand the puzzle element has been very well executed, containing logical and unusual puzzles and the graphics, while not absolutely stunning, are attractive and create atmosphere.

Where it does fall down, however, is through the one element that is supposed to be the games main selling point: the speech! Although it is an excellent idea, the fact it becomes so irritating cannot be forgiven. In some places the words are not easy to make out and have to be listened to a few times.

Another aspect working against it is the clumsy and awkward control of the character. Only being able to move your character in four directions sometimes results in falling down traps.

This is a negative aspect because on some levels you can't see the traps. This problem is resolved by using maps but

GRAPHICS

Graphically unusual, Valhalla uses a mixture of styles. While the characters are in a rather light-hearted cartoon style, the backdrops have been created in such a way as to realistically convey the dingy atmosphere of the surroundings.

This works surprisingly well with the cute, nicely-animated sprites contrasting to the realistic backdrops, the overall effect being of an almost cinematic, story-telling cartoon.

The limited colours used, with the murky browns and greys, create the setting of the castle well.

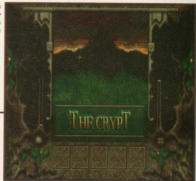
However, although the game looks attractive, the overall layout of the screen has been poorly designed with the main action area being obscured by the ornate, but impractical, borders.

67%

Each level has been cleverly contained on separate disks



Puzzles are logical and relatively straightforward



SOUND

Being the first Amiga speech adventure the game is likely to be judged, in the main, on the quality of the speech samples. However, despite having the excellent and original idea of replacing the usual textual information by the main character talking to you, the novelty does wear off very quickly.

Although he has a wide vocabulary of over 1000 words and his phrases develop over the duration of the game (for example, if you look at a wall he will tell you that it is a wall, but if you're still examining the wall later on he will say "You've seen this before" or "I'm not telling you"), it does become rather irritating.

And while at first this is all quite amusing, it starts to come across as patronising rather than funny. His high-pitched tone of voice (strangely reminiscent of a winging Porky Pig) will also grate on your nerves after a while.

Other sound effects, such as the background noises, are very good however, and create the atmosphere well. From rippling streams to pounding footsteps, they are all authentic and would sound at home in any serious adventure title.

65%

The Lord

Publisher: Vulcan Software

Developer: To House

Disks: 8

Price: £29.95

Genre: Adventure

Hard disk install: Yes

Control system: Joystick

Supports: A500/A600/A1200/A4000

Recommended: 500KB upwards (1MB required)



The main action area is poorly designed with large, pointless borders taking up a great deal of the screen



you do actually have to find them first!

The icon panel is another unnecessarily frustrating part and it is quite fiddly trying to click on the icons with the joystick. These are perhaps trivial points but they do hinder what could be really smooth gameplay.

The storyline is revealed through an intro sequence. At first this is quite charming as the little Prince character imparts his tales of woe.

However, this screen, along with the credits, cannot be skipped and every time a new game is accessed this increasingly irritating and long intro has to be watched.

The save game option and the way each level is cleverly contained onto one disk – saving you from tedious disk swapping – does give the game some credence though.

Overall the game is a very proficient attempt, especially when you consider that this is the developers first effort.

The idea is fresh, the puzzles are fun but unfortunately the longevity is marred by the irritating features. It will certainly set an example for other games of this nature and it's great to see some new ideas coming forward.



The animation's of the characters have some charm but do become irritating

FLASHBACK

There is little to actually compare this title to. It is unusual in both the graphical style and being a speech adventure. In this aspect it seems to be creating a totally new genre and will lead the way forward.

Other adventures using the "type-in-text" method will possibly benefit from using this new speech approach, especially the atmospheric, serious titles – imagine the kind of results possible in something like Beneath a Steel Sky or Darkseed if your main character spoke to you!

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Fancy rescuing a colony of small chaps from incarceration and perpetual imprisonment? Well, now's your chance to guarantee yourself a place in heaven as the most generous of benefactors

Psygnosis have had quite a tough time just recently. Their CD32 enigma, *Microcosm*, was digested by reviewers like a thrush trying to swallow a Doctor Martin boot – despite its pioneering technology.

Likewise, their film licence products have taken an absolute pasting. Both *The Last Action Hero* and *Cliffhanger* have been tried and found guilty (and rightly so) by reviewers of breaking the trade description act in calling themselves computer games.

Now, Psygnosis are returning to the software fray with *Digital Illusions*, the Swedish programmers who introduced Amiga owners to such delights as *Pinball Fantasies*.

INTRODUCTION

Deep within the walls of an Egyptian pyramid, Ben spots a couple of incarcerated Merry Men



On the forest level you have to bounce from tree to tree to reach your tiny friends



STORYLINE

Benefactor finds us in the pleasant company of the Merry men of Lullyat. These jolly little soles possess a love of practically everything and anything. In fact they are the proverbial soft touches.

A love of their homeland led them to develop their protective rainbow which fills the Lullyatian daytime sky with a cascading array of visual beauty.

The rainbow is produced by a machine, aptly called the rainbow machine. This has a dual-edged purpose because apart from creating pretty colours, it also controls the climate which stimulates the minds of the Merry Men.

But were they the cerebral high climbers that they supposed? We think not, because one particularly merry day the Lullyatians invited the people of a neighbouring planet, Minniat, for a guided tour of the planet and the rainbow temple.

The dignitaries of Minniat took one look at the awe and splendour of Lullyat and decided they wanted it –

obviously no holiday brochures on Minniat. A plan was hatched, and by the cover of darkness the Minniatians positioned a spaceship over the temple, stole the machine and imprisoned the Merry Men that guarded it.

Imprisoned on the six moons of Minniat and guarded by the Minniatians' favourite pets, the plight of the Merry Men seemed hopeless. That is, until one day some of the Merry Men escaped and sent an SOS into deep space.

At this point the ex-happy little chappies got extremely lucky because their plea was picked up by none other than Ben E. Factor.

Lucky is somewhat of an understatement, because Ben is equipped with just about every hard man skill available apart from the obvious ones like punching, kicking or shooting guns.

Playing Ben you must rescue the Merry Men from the six moons using your acrobatic skills and puzzle-solving abilities, the overall aim being to retrieve the rainbow machine.

Benef

GRAPHICS

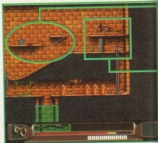
Digital Illusions has given a very Lemmings-esque style to *Benefactor*. The character sprite is minute, and perhaps sets a record for the smallest character to appear on an Amiga product.

Despite his size, our hero Ben E. Factor is extremely well animated. His movements are concise and leave the player in no doubt as to what is supposed to be happening.

Aside from the usual jumps, flips and rolls that our pint-sized superhero meticulously carries out, he is also capable of other, surprising feats of athletic graphical ingenuity.

During play don't be surprised to see Ben bungee jumping from treetops, swinging from bars or being wound from platform to platform with a trapeze.

The Lemmings comparisons are not only due to the miniaturised character sprites that occupy play. The second similarity stems from the amount of each level that's visible on-screen at one given moment.





Ben indulges in a little bank holiday on ice magic



The overall aim of the game is to unlock something small and furry



Cranes, pulleys and mummies are all the staple diet for Ben E. Factor

actor



The graphics are small but beautifully formed



In comparison to the minuscule characters, the backgrounds and platforms that fill Benefactor are supremely drawn. They add an extra depth to the title and what's more, make the game look very attractive.

There are over 60 levels that make up Benefactor and they place you in a variety of locations. For instance, there are ancient Egyptian levels, cave, ice and even mud levels.

Each level has a slightly different look to it, features different foes and has different puzzles to work out before you can continue.

70%

GAMEPLAY

The basic aim of Benefactor is to free an imprisoned group of furry Lemming-types from their evil captors. To achieve this act of mercy you have to use Ben's acrobatic skills in conjunction with the help of your furry little friends.

While you, playing Ben, jump and roll to avoid falling to your death, the Merry Men gladly operate lifts and other machinery that aid completion of the level – which is a hell of a relief after the complete idiocy of the moronic Lemmings.

While it's up to you to solve the level and place the tiny Merry Men in the correct position, the overriding sensation is that there is an element of teamwork in Benefactor.

For instance, to help you the Merry Man can operate winches and a whole range of mechanical devices, that is, if you can negotiate the little critters into the correct position.



SOUND

Each of the levels has a rather snappy little synthesiser tune attached to it. News like this might have you reaching for the ear plugs, but fear not.

On the whole the tunes are a happy collection of ditties, they won't have you throttling your monitor after the first half hour of play and actually seem to add atmosphere to the game.

66%

OPINION

80%

Benefactor is the best thing Pygnosis have released in a long time. It feels like a montage of Flashback (the US Gold title) and Pygnosis' very own genocidal pets, the Lemmings – indeed there's a Lemmings tribute level on the Egyptian world.

Both the graphics and sound have been implemented very well. The variety of both location and puzzle aspect of Benefactor make it an engrossing challenge.

This is a title with a very unique feel to it. In many respects Pygnosis and Digital Illusions have created somewhat of a curiosity in Benefactor.

But, I predict that Benefactor will be snapped up by the games-playing public and will become something of a classic.

Benefactor is the type of title that will keep the most dextrous platform freaks and puzzle lovers alike twiddling well into the wee hours.

Publisher: Pygnosis
Developer: Digital Illusions
Units: 3
Price: £25.99
Genre: Platform puzzle
Hard disk install: Yes
Control system: Joystick
Supports: 6400/12800 – /112200/14000
Recommended: 8000



Football fever really has swept the nation and the vast array of souvenirs from footballs to cutesy teddy bears shows that it's a profitable venture to cash in on the World Cup.

Even software houses have realised the financial possibilities of all the football goings-on and that bringing out a multitude of soccer-based titles now will be a real money spinner.

But there is the temptation to sacrifice quality at the expense of

INTRODUCTION

trying to rush a game out in time to benefit from all the hype. It's important to keep a check on the many releases and to see which really are spot on goal and which miss by a mile.

Audiogenic, not ones to let an opportunity pass by, have produced this effort under the official Wembley moniker. So England need not feel left out of the World Cup after all.



Wembley International

SIMULATION

Although many of the moves take a fair bit of practice to work, once mastered they are very effective and provide a high degree of realism. The elements of the real game are well simulated and the overall title is complemented by a good tactical element.

The way 'set pieces' are taken is unusual and takes some getting used to, but enables you to produce accurate moves. For corners and throw-ins, for example, you control the player receiving the ball - take too long though and it'll be taken automatically.

The free-kick system is also a little confusing at first but does work well. You can control either the player taking the shot or receiving it.

The same applies to other moves such as barging and dribbling. Although they are pretty spectacular when they do work, they need practice unlike the more instinctive controls found in Goal and Sensible Soccer.

Wembley Soccer also employs a 'one-touch' football system, allowing you to pass to another player who will head or volley the ball rather than bringing it under control. This makes for a faster game and will help you set up spectacular goals.



The sprites are ideally sized to control moves



The detailed graphics create the grounds well

FLASHBACK

There are so many football games on the market now to compare this game to. The all-time classics in most people's books are Sensible Soccer and Goal and it is hard not to compare any new releases to these greats.

Both Sensible Soccer and Goal held such great appeal because of their instant playability and personality, being a bit of a Goal fanatic, I found it hard at first to really get into Wembley Soccer and become used to the slower gameplay.

Wembley Soccer is an excellent game in its own right but it's unlikely to become a classic to really rival Sensible Soccer or Goal.

Although Wembley Soccer does have plenty going for it, it doesn't seem to have anything significant or outstanding to really make the game shine and push it to the forefront of the competition this summer.



GRAPHICS

Graphically the game really does look the business. Views can be switched between the overhead and side-on. This works exceptionally well, allowing you to change the angle according to the action and the scanner feature enables you to keep track of the whole area. Animated sequences of the referee booking players and the like adds a nice touch.

Attention to detail has been paid to create a realistic stadium, even down to the line markings on the pitch looking worn away. The crowd details are adequate enough to create the impression of the spectators and the usual advertising hoardings are included to make the stadium look fairly authentic.

76%



Many pitch options can be chosen for variety

SOUND

Match atmosphere is an important quality in the football game and unfortunately Wembley Soccer is sadly lacking here. The usual crowd chants, reactions and cheers have been included but they are not of a particularly high quality, nor for that matter, even vaguely realistic.

Given that this title bears the Wembley name, you are led to expect something special in this aspect. Being host to the many important Cup Finals and play-offs, Wembley has earned a reputation for its frenetic match atmosphere.

It comes as a great let-down to see that the game doesn't even try to convey this, and the sound is more reminiscent of the noise heard in a public swimming baths rather than a manic football crowd.

Taking into account that this is a CD game, it really is appalling to use sound of such poor quality.

30%

Tina Hackett tackles Audiogenic's latest, Wembley International Soccer, and referees who will really win the World Cup of footy games this summer

Publisher: Audiogenic	Developer: In-Game	Disk: 1 CD	Price: £29.99	Genre: Sports	Hard disk install: N/A	Control: Joystick/Joypad	Supports: C32	Recommended: N/A

Soccer



Even the most lenient referees are very strict - don't expect to get away with any fouls!



Replay mode comes pretty much as standard now, but I've never seen a system this fiddly



The tactics editor lends an excellent strategy element to the game

OPINION

66%

On first playing Wembley Soccer it didn't impress me one bit. However, being one of those games where perseverance (and a close study of the manual!) pays dividends, I soon found there was more to it than meets the eye.

After playing for a while I began to see the merits of the unusual control system and found that once the controls have been mastered the game is very playable and the moves most rewarding.

Two-player mode works like a dream and with the 'one-touch football' system the gameplay can be fast and frantic.

The graphics are detailed and the two pitch views work well, almost providing two games for the price of one! But despite growing to like this game I still

have a few niggling doubts. For instance, the players pass to each other by showing a possible receiver in an on-screen box and although this is an original approach, it sometimes obscures some of the vital action.

The replay option also needs to be vastly improved as it is fiddly to operate, especially with the joystick. Incidentally the game can be controlled by both the joystick and control pad and is cleverly designed so that both methods work equally well.

An A1200 version of this title is also available and looks and plays exactly the same. Although the loading time is obviously a little longer, this seems to be the only difference.

The additional keyboard controls makes the replay mode easier to use and you don't end up accidentally pressing the different buttons, which sometimes happens with the CD controller. For example, it was too

easy to accidentally press the 'pitch view' button meaning briefly disrupting the flow of the game.

All in all though, this is a good football simulation for those who prefer an in-depth, accurate game rather than a quick kick about.

Containing a nice range of options and a good tactical element this is a great title. However, without having a crystal ball it's hard to predict whether it really is going to be strong enough to see off soccer giants like Kick Off 3 or The Sensible World of Soccer which promise to be tough competition.

AMIGA
BRONZE
AWARD

Someone explain to me why computer programmers and software houses are intent on the destruction of our mother earth? Practically every sci-fi-come-cyberpunk title pictures man fighting among himself, or at least mutated post-holocaust versions of himself.

If he's not doing that he's fighting off hordes of grotesque psychotic aliens whose solitary aim is to dominate and rape our planet.

Consider this. By the time any of the aforementioned attempt their masterplan of global domination there'll be nothing of any worth left

dominating. That is unless your average alien-com-mutated homo-sapien enjoys toxic rich carbon monoxide poisoned air that you can cut with a knife. Or revels at the thought of basking in the glare of a sun that tans your skin until it falls off.

Anyway, this topic still attracts a great deal of attention and probably always will. Let's hope that software houses keep up their optimistic stance concerning the future of our world.

Remember, titles about saving your planet give you a warmer glow than a hole in the ozone layer.

INTRODUCTION

Can this planet really be worth saving after a holocaust courtesy of the bomb? Better ask the nuclear family or join Simon Clays for a perusal of *Armour-geddon 2*

Armour-geddon 2: Codename Hellfire



Part of the introduction that kicks *Armour-geddon 2* off



STORYLINE

The year is 2083, and the planet is up to its stratosphere in trouble. Some 70 years previous the forces of EDEN (Earth Defence Network) and the radiation ravaged surface dwellers had pushed mankind within inches of total annihilation.

Fortunately for the human race, the Hellfire satellite malfunctioned before it could wreak havoc on the remnants of society.

Hellfire, being the last weapon of mass destruction known to mankind factions on both sides, started to believe that civilization may have earned itself a reprieve.

Thoughts of this nature were soon lost when it was realised that the Hellfire satellite was retrievable. Now EDEN's mission is to use all of its land and air forces in a bid to destroy it.

Unfortunately, EDEN's enemies, the surface dwellers, have other ideas. They want to bring Hellfire back to earth and use its power to destroy EDEN once and for all.

Controlling EDEN's forces, your task is to capture the installations necessary to develop a pod to destroy Hellfire.



Armour-geddon 2 uses a polygon based 3D environment to create the world of EDEN. It also boasts an extremely swift 3D engine, which updates itself with remarkably little judder.

However, while it may well be fast and smooth, the landscapes are simple and not particularly detailed. Compared with say, *Gunship 2000*, there are no undulating landscapes or any variation of colour in the terrain.

A nice touch is the way in which nightfall comes to your 3D world. Instead of the usual it's night-it's day-routine, the sky actually dims into darkness before the stars paint your views.

Within the engine for the 3D is the obligatory external camera, missile and tower views. These again are very smooth, look nice, make good screen shots, but little else aside.

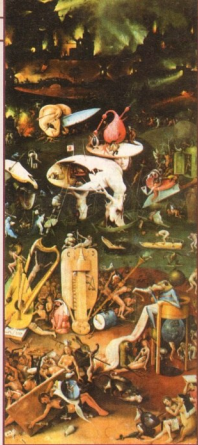
Armour-geddon 2 is a very slick title and has an appealing look to it. From the moment the introduction kicks in, the game convinces you that it's been worth the money.

Within the structure of the 3D battleground are what we'll term the battle management screens. Here *Psynosis* have given us both clear, concise and user-friendly screens to deploy EDEN's forces and control the tech department.

70%

GRAPHICS





Publisher: Polygram
Developer: In House
Units: 3
Price: £25.99
Genre: Strategy simulation
Hard disk needed: Yes
Control Options: Keyboard, joystick or mouse
Supports: VGA/1600 x 1200/16MB
Recommendations: 66000 onwards

SOUND

Because of the nature of *Armourgeddon 2*, it relies strongly on sound effects as opposed to in-game sounds. Each craft you pilot has a different sound effect, as you might expect.

While the jets and helicopters have the desired effect and manage to convince you of their authenticity, some of the tanks and all terrain vehicles make you believe you are piloting a Flymo.

63%

In the research screen you can assign scientists to develop weapons



Equipping your craft correctly is essential



Inside the cabin of your very heavy duty tank



From the map room you can plot waypoints and zoom in and out of the action

ADDITIONAL INFO

Armourgeddon takes its name from the Armageddon of biblical fame. Found in the New Testament, Armageddon is the place where the final battle between the nations that will end the world takes place.

The book of Revelations languishes heavily on this topic, and some take the view that this apocalyptic book is an insight into the future demise of mankind.

Armageddon will, according to Revelations, be instigated by the Anti-Christ who will fool world leaders into following him.

Revelations features many other important icons associated with hell and the Devil. The most obvious are references to '666', though there are many other images of multi-headed serpents and other such beasts.

OPINION **71%**

Pysnopsis have come on a long way since *Armourgeddon*. While *Codename Hellfire* resembles the original *Armourgeddon* graphically, the similarities end there.

Perhaps the largest improvement is the mission generator. In the original, your craft had one overriding objective; find the atom bomb (a must at Kiddies parties).

Now the campaign is staged through a variety of missions, with each mission having objectives which collectively meet the overall criteria for victory.

The conflict has left munitions and raw materials at a minimum, so a mission asking for the capture of a refinery or manufacturing plant will have very positive effects on the war effort. We could compare aspects of *Armourgeddon 2*

with its older brother all day, but how does it stand up in the face of other releases?

The answer is pretty well. *Armourgeddon 2* is a large title with many aspects to it, if you're hungry enough for it. It's not the type of title you can just pick up and go for a trundle around in, because you won't last two minutes.

If you're to be successful then you need to plan tactics, while thinking ahead about what equipment to research and develop.

It's this aspect that puts *Armourgeddon* ahead of many of its rivals. In the end it comes out as a blend of simulation and strategy, and lovers of these genres should enjoy *Armourgeddon* for months to come.

Perhaps a small niggle is the flight simulation aspect of the game. While it's appreciated that these are imaginary craft of the future, the planes seem capable of pulling the most incredible 'G's when banking or diving.

That aside *Armourgeddon 2* has plenty to offer.

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Speed	RAM	PUU	Cost
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40	0	0	£264.99
40	4	0	£335.99
40	0	0	£334.99
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STORYLINE

Set in New Angeles in 2025, the villain of the previous two games, Elvin Atombender, rears his ugly head again intent on ruling the world. To achieve this, for some reason he's locked himself in the top floor Penthouse Suite of a rather sprawling hotel and is refusing to answer the door to assassins, killers and other CIA covert agents.

Due to his paranoid delusion, Elvin has filled all the floors below him with robots and machines of death to dissuade any prospective visitors. Enter three characters willing to take on this sad, little man and destroy him once and for all at long last.

Felix the Riot Ranger, RAM the Renegade Robot and Tasha the Hyper Gymnast make up the motley crew of supposed heroes and heroine. They're supposed to have individual talents but it's purely superficial as far as I can tell.

Using one of the three, the building complex must be entered via the subterranean car park and ascended using the main lift. The game is split in to five huge levels – the car park, offices, computer zone, construction area and industrial zone.

Each of these is split into subsections and once complete, it's on to the final confrontation with Atombender himself.

INTRODUCTION

There were platform games before *Impossible Mission* – Manic Miner and Jet Set Willy were just two of the classics but the sprites moved as if they had a corn cob placed in the most delicate of places.

Then came the first in the series of *Impossible Mission*. Featuring smooth, almost life-like standards of animation on the central character, jaws suitably dropped and superlatives spewed out from the pens of reviewers in abundance.

The mixture of somersaulting over the enemy patrol robots and the puzzle sections involving reconstructing a pattern into its correct shape, gave birth to the thinking man's platformer.

The game has sparked off many variants and improvements – logically, *Impossible Mission 2025* should set a new benchmark, especially with Microprose behind it.

Impossible Mission 2025

GRAPHICS

The overall look of the game is quite sombre and dark. Different shades of grey make up the main colour scheme, with various searchable objects such as cars and petrol pumps adding a touch of colourful brightness to the overall look.

Because of the colour palette used, the graphics don't have that instant "wow" appeal and the presentation soon starts to become bland with its repetitive foregrounds and dull backgrounds.

The main character sprites move extremely fluidly but, unfortunately, don't appear to be rotoscoped and lack the flowing realism of Flashback, the benchmark for any animation in platform titles. A tad disappointing to say the least.

60%



A Chaos Engine – like character select screen. Unfortunately, the presentation of the whole title is not up to the same standards as the Bitmap Brothers classic.

The original made waves on its release on the C64 many years ago, but with the release of the third instalment, will the format continue to thrill players?
Adam Phillips reviews

Publisher: Microprose
Developer: In-house team
Bios: 3
Price: £34.99
Genre: Platformer
Hard disk install: Yes
Control System: Keyboard/Joystick
Supports: A1200
Recommended: 100/20



Starting from the bottom, the player begins his search for the key circuit...

SOUND

Like all hip and swinging games these days, Impossible Mission 2025 has an extensive range of rave soundtracks to blast out of your TV's speakers.

Subsequently, your footfalls are practically drowned out into obscurity. Fortunately though, the music is of a reasonable quality and the tapping of your own foot to the beat should make up for this.

One of the most fondly remembered sound effects from the original is the high-pitched, warbly scream every time you fell off a platform in to oblivion. This has been ported across and improved to include both male and female versions.

70%



...which can be found in cars, petrol pumps and tyres on the first level



There are a number of power-ups available to the secret agent, from disguises to jetpacks



If you can't find power-ups, earn them in either a Simple Simon clone or a very brief shoot-'em-up

GAMEPLAY

On each huge, scrolling level, the player must run and leap over platforms while avoiding the various enemy robots and droids. Uttered throughout these layers are various objects that need to be searched for the vital pieces of circuit that make up a key. This in turn is used to exit the level via the main lift.

Also up for grabs are a highly useful selection of power ups that range from guns and jetpack to elevator resetters and invulnerability. There are also several types of computer terminals dotted all over the place that serve different functions.

These include location computers that show the player where all these differing kinds of terminals are, and inventory select screens where you can decide what you want in your limited amount of three pockets.

The most interesting of the computers are the sub-games that earn the player more power ups. One is a basic Simple Simon, where a tune is played via a series of blocks and the sequence must be matched to gain access to the goodies.

The other is a basic shoot-'em-up where various attack waves of aliens must be destroyed - kill the end of level baddie and the riches are yours.

If you should ever tire of the latest version's massiveness, the original Impossible Mission has been kindly included. This retains the original graphics and sound from all those years ago.

FLASHBACK

There may well be an abundance of platformers available on the Amiga machine but there are very few "thinking man's" run and jump titles out there that include a little more mental stimulus than a jabbing fire button.

While Impossible Mission 2025 is a reasonably fun and addictive slice of action, it falls far short of the classic, Flashback.

Produced by US Gold and Delphine Software, this is still a hugely satisfying and tense game featuring rotoscoped graphics that are silky-smooth and highly realistic.

Prince of Persia is another viable alternative, even if it is showing signs of old age. Combining classic Arabian thrills and lush character movement, the gameplay is guaranteed to keep the user on the edge of their seat.

At a rather unsubstantial £9.99, this is a must purchase regardless of the other two titles you decide to buy.

OPINION

66%

Impossible Mission 2025 seems to have everything going for it - a classic game design to expand on, A1200 only and Microprose, a rather talented company - surely enough to bring the title leaping in to the nineties.

Unfortunately, somewhere along the line the opportunity has been either wasted, rushed or not thought through fully. While not being a bad title by any stretch of the imagination, it's not the classic it should have been.

The levels are massive which may sound ideal, but after running for a few minutes with everything looking the same, the mission becomes less

appealing.

The actual game mechanics themselves, while superb in the original, haven't been developed enough and have been superseded by the likes of Flashback.

What the player does get though is a relatively addictive platformer puzzle which requires both sharp reflexes and a little thinking.

Diehard fans of the original will probably fall in love at first sight, becoming viciously defensive when questioned on their unseeing admiration for the concept that is Impossible Mission.

The rest of us are left feeling that a great opportunity to set a new benchmark in platformers has been wasted. Roll on Flashback II.



It's all at sea for the first level



These hulking great bombers are the first big hazard you'll encounter

INTRODUCTION

It's hardly a brand new concept, but once again lone fighter meets invasion force and big explosions ensue. But wait, this shoot-'em-up is a bit special. It's A1200 only. And it's ace.

STORYLINE

It is 1999 and the world remains in a perpetual twilight world of stunted technology. No microwaves, videos or colour tellies, and aeroplanes are still of the propellor driven variety. Pretty freaky.

But it gets worse. Into this environment comes the wonderfully named Blardax Maldrear and his Styx republic. With a name like that he can only be after one thing. And he is. World domination!

Only one man stands in his way. His name? The equally tricky Sven Svardensvart and his oh-so-super Banshee fighter. Apparently Blardax also did unspeakable things to Sven's dad, for some trifling reason, thus giving our hero ample opportunity to look stern and mumble things about this being personal.

So we've got an evil empire, a stony-faced hero and a one-of-a-kind super fighter. And it's personal. Let us, as they say, shoot them up.



If technology never progressed beyond the propellor, then where did this thing come from?

Core Design's new addition to the shoot-'em-up genre gives Daniel Whitehead something to wail about

1 If you shoot a vehicle that's got people in it, you'll see them come screaming out on fire. Lovely

SOUND

As befits the beefiest of all shoot-'em-ups, the sound effects come bellowing out at you with a ferocity akin to a herd of rampaging buffalo.

The constant thunder of the guns unfortunately drowns out the other little touches worth mentioning. When the Banshee (or Banshees in two-player mode) swoop about, you're rewarded with appropriate screaming engine sounds and the various mutilated enemies all scream and yowl in suitably anguished ways.

No surprises, but the meaty sound adds punch to an already hefty game.

75%

Publisher: Core Design
Developer: Dave Humber and Friends
Disk: 4
Price: £29.99
Genre: Shoot-'em-up
Hard disk install: No
Controls: Joystick
Support: 11200/14000
Recommend: 88000 upwards



GRAPHICS

Oh, but this is nice. The graphics capture perfectly the weird sort of Blade Runner meets Biggles vibe that the story promises. Lots of subtle shades of grey and brown create an atmosphere not a million miles from The Chaos Engine, which also had a sci-fi meets bygone era theme.

Each level is absolutely gargantuan, stuffed with varied and well-



animated enemies intent on hammering your head in. At times the screen is just full of bullets, missiles, planes, helicopters and soldiers and the game doesn't even bat an eyelid.

As smooth as a freshly shaved snake, if you don't mind me saying so. There are oodles of neat graphical touches to look out for, all of them pretty gruesome.

Soldiers spurt blood, fishermen fly out of their boats in agony and cranes collapse onto the people below. It looks a treat. Big saucy levels, constant hassle from about three million different baddies and crisp animation. Yummy.

89%



One missile up the exhaust puts paid to their double-parking antics



Avoiding this thing is difficult enough, let alone shooting it!

FLASHBACK

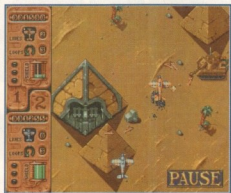
Take your pick. I mean, you don't seriously expect me to list every single vertical shoot-'em-up ever do you? Of the masses to choose from, Banshee is most obviously reminiscent of that creaky old arcade machine 1942.

In fact, it bloomins' well is 1942, right down to the loop-the-loops you can pull off in times of stress. Mind you, Core make no attempt to hide this debt to the past, so we'll let them off for being ironic and post

modern, or something. Stylewise though, Banshee takes its cue from stuff like The Chaos Engine and Xenon 2, with its subtle colouring and ladies of atmosphere.

But Banshee is light years ahead of anything else in this genre, as it uses all these games as starting blocks and then runs straight off the race track and invents its own race.

Expect every other shoot-'em-up for the next decade to be compared to this in future Flashbacks.



There's blood on the sand as the Banshee Boys walk like Egyptians on level three.

OPINION

89%

Well I do like this game and the weirdest bit is, I've never been a fan of shoot-'em-ups! They usually bore me to bits, but Banshee has that elusive quality that draws you in.

Each level reveals new challenges which are genuinely demanding, and the learning curve is just right. You get plenty of power ups at the start and then things slowly but surely start to get more and more frenetic, until you're literally gasping for breath.

Get another player involved



ADDITIONAL INFO

Banshee features nasty things. There's no point hiding the facts. You can shoot innocent fishermen and polar bears, and worst of all, women pushing prams get it as well.

Well, the women do and the prams just roll away in a belated nod to morality and decency. Needless to say this will be used as further ammunition in the fight to convict computer games of causing all known social ills, from teenagers not being nice to their parents any more to hoards of drug-addled monsters rampaging through our previously perfect country.

Absolute drive, of course, but that won't deter the righteous out there from blaming Banshee for whatever's bothering them at the time.

So here's my reaction to the more gruesome moments of Banshee. I laughed. Can you believe it? Yes, I laughed at innocent people being blown to bits by missiles.

Except, reality check, I didn't really, did I? No, I laughed at an amusingly-drawn sprite being hit by a computer-generated missile resulting in a ketchup scenario.

I don't laugh at the scenes from Rwanda to Bosnia on the news. Banshee, Mortal Combat, Cannon Fodder et al are, and here's a news-flash, not real.

It's the people who think they are that are dangerous. The person who thinks the little polar bears on level three are real and still shoots them – that's the person who's a menace to society, not the game.

Banshee, like any other game, will not turn sweet little children into slaving killers. And if anyone disagrees, I'll fly over their house in my big plane and shoot them. Except, this being the real world, I won't. Let's get some perspective people.

for even more fun, as the game gives you two power ups each time and you can only collect the ones that match your plane's colour.

This means that both players build up their ships at the same rate and over the top armageddon scenarios are always around the corner.

There are some bad points, it has to be said. The sheer volume of enemies can be literally overwhelming at times, and single players are going to have an almighty struggle on their hands to finish it.

It's also highly aggravating to lose a life and have your hard-earned power ups swiped from you, often placing you up the creek minus the paddle situation.

Niggles aside, this is an intense and extremely satisfying game that should tempt any games fan with an ounce of adrenalin in their veins. The Harvey Kettel of shoot-'em-ups.

Nine months ago Commodore released the CD32 to an excited and expectant general public. Surrounded by a blaze of publicity, the 32-bit "wonder" machine was heralded as the ultimate console to try to break Sega and Nintendo's stranglehold on the games market.

The CD32 is based around a 32-bit 68EC020 chip running at 14 MHz and it produces between three and five times the power of a 68000 as found in the A500 and A600.

The machine boasts other specifications such as 2Mb as standard and an AGA chip set which gives the CD32 the ability to show 256 colours from a palette of 16.4 million.

One of CD32's most promising and interesting features is the introduction of a full-motion video cartridge (FMV). Released recently, this little box of tricks enables the CD32 to play video compact discs.

Owners of Commodore's machine can now enjoy the visual delights of top quality films (such as Top

are taking a long time to hit the shop's shelves.

The majority of companies have simply re-jigged and enhanced existing floppy titles and flung them out to users begging for decent software for their newly-bought consoles.

Software houses seem to be split down the middle when it comes to answering why there aren't many "original" games available for the CD32.

ORIGINALITY

Ocean's PR manager, Nick Clarkson, puts it down to financial reasons. "There is a distinct lack of original titles available for the CD32, but you have to remember that software houses are in the business of making money and it's no good writing games for machines that have a relatively small user-base.

"This was certainly the case in the early days of the CD32, but there's now a larger following and many software houses are developing new games with the CD platform in mind." Team 17 development

I would expect a lag of about a year before actual CD32 dedicated games start appearing

**Keith Smith
Millennium**

game financially viable. The only way to make a CD-specific game is to spread across many CD platforms, like Pygnosis did with Microcosm."

Gremlin's Steve McKeivitt, on the other hand, states "CD32 owners have the chance to play classic games like Zool, Sensible Soccer and Elite 2. Surely they'd be more unhappy if they didn't have that option.

The great games will come when the platform has established itself. The best Amiga games weren't the first ones to be released."

Millennium were the first company to release an original title for the CD32, but their PR manager, Keith Smith, isn't surprised by the lack of original software. "I would expect a lag of about a year before actual CD32-dedicated games start appearing"

A year is a hell of a long time in today's current console climate though, and it might not be long before computer users start to lust after 64-bit technology such as Atari's Jaguar, rather than stick with

system analysis

With liquidation hanging over Commodore's head, it perhaps wasn't the best time for Jonathan Maddock to investigate the future of their wonder console, or was it?

Gun, Ghost and Fatal Attraction) and music videos (such as Pink Floyd, David Bowie, Queen), if they're willing to pay the £199 asking price.

With all these features in mind, on paper it looked as though Commodore had a guaranteed winning console on their hands.

At the time of the launch, Commodore's managing director, David Pleasance, confirmed this by saying "The Amiga CD32 simply wipes out the opposition. It's considerably more powerful, has better software support and best of all, costs less."

SALES

Actual sales figures for the CD32 are unknown, but sources within the industry believe that Commodore haven't sold any more than 60,000 machines, so it hasn't exactly wiped out the opposition just yet.

The reasons why CD32 isn't performed so well in the games console market are manifold. For starters, software houses seem to have been taken by surprise with the launch of the machine and original products

co-ordinator, Marcus Dyson, also points towards finance. "We are far from surprised at the lack of original software. CD-specific titles are more expensive and more time consuming to produce than floppy ones. "At present there are simply not enough CD-based Amigas out there to make such a



Microcosm is a recent example of what happens when you get the mixture between presentation and gameplay wrong



CD32 - the

32-bit. Millennium's Keith Smith thinks that developers are already looking to produce games for even bigger and more powerful machines. This could ultimately end up with CD32 games appearing on 64-bit technology anyway and would leave 64-bit machine users in the same predicament that CD32 owners are in now.

At the time of its release it was believed that CD32 games would be a lot more affordable than its floppy disk counterparts. Piracy has always been largely to blame for extravagant software prices, but as CD technology is so hard to reproduce it was assumed that prices would start to come down.

Alternatively, CD technology demands a higher standard of graphics and sound. Epic introductions and lavish CD-quality soundtracks are costing the game producers a lot of money and with such a small user-base, software houses have to make a profit by simply charging more for their products.

The average Joe or Joanne on the street would quite happily pay more for a superior standard of



Until designers put the playability of CD games first, the platform won't rise above its competitors

Nick Clarkson
Ocean

future?

game, but this type of product, apart from a couple of select titles, just doesn't exist as yet. To expect users to pay £25 for Sensible Soccer or even worse £40 for Elite 2 is just too much to ask.

Team 17 have always believed in quality games at quality prices and the CD games format is no exception. Just recently the Wakefield-based company have been packing two games onto one CD for only £24.99.

Marcus Dyson explains. "The games were older titles which had already been re-released as budget or special-edition titles on the Amiga, so we didn't believe it was fair to expect CD32 owners to pay £25 per game for them. There is no way any software publisher can ever justify charging a premium price for an old product just because it's on a shiny 5" disc!"

INDULGENCE

If other software companies could take a leaf out of Team 17's book then I'm sure the games industry would be looking a lot healthier and brighter.

As mentioned at the start of this feature, in terms

of specifications the CD32 kicks it's competitors into touch. However, software houses have got to watch the over-indulging in the audio and visual departments and forget about good 'ole fashioned gameplay.



Animated introductions, like the one seen in Zool 2, will eventually become more commonplace

Microcosm can be cited as a recent example of this over-indulgence. Although the game looked and sounded as though it should belong on the big-screen, the gameplay wasn't any more advanced than Space Invaders. Microcosm might have been the first CD32 game to suffer from a lack of gameplay, but I'll bet my life it won't be the last.

Ocean are one company in particular that's making sure it gets the mix of presentation and gameplay just right. Apart from Sleepwalker, the Manchester-based software house have been very quiet on the CD32 front.

This is because they are concentrating on producing brand new titles for the platform. Coming in September is TFX, Ocean's first CD32 "blockbuster" and one that will actually test the machine capabilities to it's limits.

Ocean's PR manager, Nick Clarkson, reckons that CD technology hasn't really proven itself yet. "The world went CD crazy, but so far we haven't seen anything that's particularly mind-blowing.

Sure, CDs can hold huge amounts of data including digitised sound and pictures, but access time is still pretty slow. Most CD games make too much of the presentation and then fall flat when it comes down to the gameplay. Until designers put the playability of CD games first, the platform won't rise above its competitors."

All the software houses I spoke to have got CD32-specific titles on the way before the end of the year, so things are looking up in that sense. At the time of writing this feature, Commodore's future is very

Britain's high streets." Team 17's Marcus Dyson virtually echoed this view, but added "We are reasonably happy with the amount of sales we are achieving on the machine, but for the Amiga CD to succeed as a format we need far more CD32s to be sold, or an A1200 CD drive to be brought to market very quickly."

Although this feature is called CD32 - the future? I can't, thanks to Commodore's liquidation, tell you

whether it's got one or not. If someone does buy Commodore then that company can expect, over the next year or so, a whole bundle of games from software houses that will, hopefully, show exactly what the CD32 is capable of.

If someone doesn't buy Commodore, then who knows what will happen to the CD32. A contender for the console that never happened award? Only time will tell.

Ultimate Body Blows



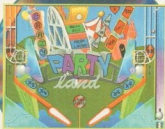
Chaos Engine



Brutal Sports



Pinball Fantasies



Bubba 'N' Stix



Wot no games?

OK, you've got a CD32. Everyone laughs at you because you haven't got any good games. Hey, wipe those tears away. They're out there, you just have to look harder. Here are System's Top 5 game recommendations for the CD32.

1. Ultimate Body Blows

The "Ultimate" version of Team 17's classic beat-'em-up which features just about every character that starred in it's previous incarnations. A pulsating soundtrack that will blow your ears away and some sumptuous graphics and animation to blow your mind. Nobody does it better than the Teamies!

2. Chaos Engine

Renegade's "wander around and shoot everything-'em-up" comes to the CD32. Boosted by an outrageous dance tune, the game comes alive when you grab a chum and a gun. One of the most addictive CD titles you can get your mitts on.

3. Brutal Sports

This super-enhanced version of the world's bloodiest game of American Football comes complete with fancy 256 colour graphics and a CD quality "rawk" soundtrack.

Put it on when you're A500/600 chums come round to play, watch them weep and then chops their heads off! Buy a copy before it gets banned by the government.

4. Pinball Fantasies

Good job you're not deaf, dumb or blind because to fully appreciate a game of mean pinball you'll need to see the delightful 256 colour graphics and sit back and listen to the top-notch CD soundtrack. You might only be dumb if it's not in your games collection yet!

5. Bubba 'N' Stix

There are plenty of platformers out there in CD32-land, but Core Design's cartoony and gag-packed bundle of fun is, in System's opinion, the best.

Admire the amazing cartoon introduction and then hop around to the excellent accompanying theme music. The most fun anyone's had with a stick and a CD32 joypad I bet!

Know your history

How successful have the Alien Breed games been? A glance through the annals of history, or the Amiga Computing back issues, will reveal all.

The original Alien Breed first crept stealthily into the light of day way way back in January 1992, which makes it a right old codger in games terms. We gave it a perfectly justified 91% and told you all to "buy it this instant".

It was then re-hashed and re-released in true Team 17 style and spent about a decade atop the charts again.

Fast forward now to January of this year, exactly two years after the original and you'll find Alien Breed 2 earning itself a lip-smacking 92%. Two games, and two exceedingly creepy reviews, so how has the series progressed? Well, Alien

Breed 2 is basically just the same game as its venerable ancestor but with all the blemishes sanded down, topped off with a nice buff and polish.

It is interesting to note though that in the original game, one of the characters is shown in the intro as a woman. By Alien Breed 2 they seem to have had, er, a rather special operation, as she is now very obviously a bloke. Just a little Alien Breed curiosity there, for all you anoraks and trainspotters.

Other than that the series has progressed in a satisfying, if rather unadventurous manner and Tower Assault should see that tradition continues in a most pleasing "value for money" kinda way.

system

analysis



Alien Breed 2 was a big smash with Amiga owners, but for its budget release Team 17 are doing something rather special. Daniel Whitehead joins them as they rewrite their own history

Alien Breed 2: Tower Assault



All new manga-mungous backdrops

Team 17 have something of a reputation for giving value for money. They are certainly one of the few software houses who remix their games for budget release.

However, for the budget debut of Alien Breed 2 they've surpassed themselves. Rather than just jiggling about with the update rate or the

collision detection, they've rewritten the entire game. Thus Alien Breed 2: Tower Assault was born.

This is basically a brand new title, Alien Breed 2 in name alone. It will feature completely new levels which are currently under construction at Team 17 Wakefield HQ.

Using a customised level editor, which has



The CD intro features the new Corretto weapon



created most of the company's previous smash titles, a whole new version is being developed. Taking into account the criticism and public feedback to the original AB2, there will be some revisions made to gameplay as well.

One of the biggest problems with Alien Breed 2 was that it had a phenomenally difficult first level which involved dodging helicopters. Due to a loop-hole in the graphical routines, the helicopters had to kill on contact rather than just take a bit of energy off.

LEVELS

As there are some people who still can't get past this stage, it's being chucked out of the window for the remake to allow more accessibility for beginners.

Some of the levels will also be more puzzle-based in their layout, so making for more strategic play. Team 17's level designer also means that everyone at the company can have a go at designing a level, and even members of the public can have a go (as you'll find out elsewhere, you lucky tinkers).

This means there should, in theory, be a greater variety in the layout of levels and thus a more lasting game. One of the things still to be decided is the

storyline, although the Tower Assault subtitle is a bit of a giveaway. So work it out for yourself. Chances are it'll involve a tower (surprise surprise) which gets over run by aliens (gasp!) and you'll have to move in and kill them all (cripes!).

There is a chance that the plot will involve a monkey, some pork and a milk float, but I'm putting my money on the shooting aliens theme. Whatever story they decide on, the only real effect it'll have on the game is that the between-levels animation

will show the blokes going up in the lift, rather than down.

CD32 owners are in for an extra special treat. For you lucky tinkers, Team 17 are going to create a bumper pack that will combine both the original Alien Breed 2 and the new Tower Assault levels for the ultimate Alien Breed experience.

The CD version will also feature a pretty darn stunning Lightwave-rendered intro that'll get all you techies hugging each other in glee. Unlike certain other CD32 titles that spring to mind, this should be a game that has the gameplay first, with the intro added afterwards.

IMPRESSIVE

This looks like being a continuing trend for Team 17's CD releases, as their budget hit Arcade Pool will feature an equally spanking animation based on the popular "I'm better at pool than you" Levis ad when it comes out on CD32 soon.

The cunning thing is, by rewriting the whole game Team 17 have made sure that everyone will want to buy it. If you've already got the original then here are some new levels, and if you didn't buy it the first time then this should show you the error of your ways and explain why you don't get invited to good parties any more.

More unscrupulous sorts would have called this Alien Breed 3 and charged twice as much, but luckily for you and the Amiga games market as a whole, Team 17 are thoroughly decent to the core.

Find out for yourselves when Alien Breed 2: Tower Assault comes out at the end of July. And now, flip to the competition pages for the ultimate interactive computer game media event ever.



Here's the tower, now assault it



NBA Jam in Alien Breed crossover exclusive



Faces, faces everywhere

Alien Breed -



Features list

- Start Point (can be a deck lift or other area)
- Locked doors
- Open doors
- One-way doors (any direction)
- Points where Aliens lurk
- Ammo pick-ups
- Cash pick-ups
- First aid pick-ups
- Computer units (working or not)
- Wall turrets
- Finish point (usually a deck lift)

1st Prize -

Your Level design to appear in the finished game + copy of Alien Breed 2

Runners Up prizes -

5 copies of Alien Breed 2

Enter this fantastic competition and achieve star status by designing your very own Alien Breed level which will appear in the finished version of Team 17's Alien Breed - Tower Assault game

Tower Assault competition



Send your finished level design and competition form to:

Design an Alien Breed Level Competition

Amiga Computing, Europress Publications

Europa House, Adlington Park
Adlington, Macclesfield SK10 4NP

Team 17 have given Amiga Computing readers the chance of a lifetime. This competition allows you, the Amiga Computing reader, to design a level for Alien Breed - Tower Assault.

The winning level designer, which will be agreed upon by Amiga Computing and Team 17, will have his or her level incorporated into the finished game and be appropriately accredited in either the manual or loading credits.

Team 17 aren't looking for flash graphics, just solid level design, although ideas for specific aliens and end-of-level bosses would be helpful and interesting.

Other features are up to you and Team 17 are looking for an imaginative "task" for the playing of the level. The finished level should ideally be action based with strategic undertones.

In the final version, Team 17 will attempt to reconstruct the level as closely as the current code allows. This competition is ideally suited to fans and players of the game because they will have a better understanding of how the game works.

As well as the actual design of the level there are several features which can or must be incorporated into the design. These are listed in the box on the opposite page entitled Features list.

The closing date is the 31st July which is only about four weeks away. This tight time-scale is to give Team 17 sufficient time to bring the winning level design to life, so get scribbling your ideas onto paper as soon as possible.

DESIGN AN
ALIEN BREED
LEVEL
COMPETITION

Name:

Address:

Postcode

If you win which version of Alien Breed 2 would you prefer?

☐ Alien Breed 2 A500/A600

☐ Alien Breed 2 A1200

Closing date: 31st July



Air Warrior allows players to customize their cockpits. Here we see a Spitfire customised by our own Steve White



One of the On-Line computers that handle dog-fighting callers from across Europe



Michael Hodges, co-founder of On-Line Entertainment

Get yourself

system analysis

Modem gaming is growing in popularity as communication equipment continues to fall in price, and companies like On-Line Entertainment develop state of the art multi-user software. Simon Clays investigates

The computer user, the computer gamer, call him what you like, but he's always regarded as a solitary figure. These sullen creatures of the night can often be seen in the monitor-lit shadows of bedrooms all over the globe in pixelated isolation.

But is this lonesome reputation that the gamer has inherited justified? In truth it is not, because all over bedrooms in the UK, sales managers and shop assistants alike are coming home from the office to dial into an electronic gaming community.

This online phenomenon has been popular in the United States for quite a few years now, and has built up a huge user base.

Implementation is simple enough. All a user needs to go live is a computer and a modem that can send and receive information down a telephone line.

As a user, all you have to pay for is the telephone bill and maybe a subscription fee to the BBS (Bulletin Board System) operators. Several years ago, the idea was imported into Britain by On-Line

Entertainment, and it has since attracted thousands of users. The brains behind On-Line Entertainment are Michael Hodges and Clem Chambers. Having spent time in the US, they were both convinced that modem gaming had vast potential for Europe. Michael Hodges reflects:

"We'd been dealing with some American networks for some time and saw how they'd been expanding. Meanwhile in Europe there was no game comms activity. So we started to create a market over here, and it's been slowly growing ever since."

The gaming environment created by On-Line Entertainment is the result of the latest in software and hardware technology. The games are specially written to run on communication equipment which allows more than one user to log in and select the game they wish to play.

The equipment needed to achieve this level of sophisticated gameplay consists of a network of



A typical training mission in an American P-47

Unix multi-processor systems which users log on to. The equipment and services are offered by On-Line 24 hours a day, but the majority of people tend to phone during cheap rate hours to keep their bill down.

Michael is quick to defend the costs though: "People think the phone is more expensive than it really is. A local call only costs about 86p an hour, which is a lot less than a pint of beer."

Many readers will be familiar with, and have taken full advantage of, multi-player link-ups like Falcon and Stunt Car Racer. But in comparison with the titles On-Line can generate, they pale into insignificance.

MERITS

Michael is also acutely aware of the other merits of modem gaming: "To use a computer can be a lonely thing. Also, computer opponents in traditional computer games can be very predictable and boring."

"The only way to change this was to get other people to join in. This is where we came in. We want people to change the way they look at their computer - there's a world out there where people can play, talk and be friends."

The most popular example of On-Line's games is their flight simulator Air Warrior. This allows more than 40 people to pilot planes and jets from various eras in aviation history.

Other titles include Federation 2, an adult fantasy



The main menu allows you to choose from a wide range of planes

connected



Success! An enemy plane loses part of its fuselage as a result of lead from your plane

role-playing game where players interact in a simulated galaxy; Multi-User Dungeon (MUD 2), the original multi-user D&D game from the early '80s updated; and Interneine, a huge text-based adventure.

Work is in progress at On-Line on more advanced multi-user titles like Battletech, where players team up in huge droids travelling around a play area attempting to blow each other up.

Although modem technology hasn't really exploded yet in the manner it has in the States, the next five years could see a massive swing as technology and modem costs fall in Britain. This is a fact that On-Line knowingly acknowledges.

"We are in the process of expanding our service in terms of product and availability," says Michael.

"Recently we switched on a new game called Land of the Crown, and now we offer a full Internet service giving our users access to a wealth of information and software. "We are expanding our service into Europe with direct links to other countries. We also have a new link going into Finland, so we'll soon see squadrons and adventurers from Finland playing."

Glem and Michael have also been quick to seize other opportunities that CD technology has made possible, and are confident that they can contribute to a multi-playing future.

"All of our products are available on CD-ROM. This medium is about to take off in a major way and when recent developments such as Mpeg become generally available we will be able to go beyond the boundaries of TV or film."

"At that point we won't be restricted to computer graphics and sounds, but we will deal with real images and sounds - maybe even create the mystical interactive TV that people have been talking about for years."

For further details contact:
Michael Hodges
On-Line Entertainment
642a Lea Bridge Road
London E10 6AP

Tel: 081-558 6114
Host: 081-539 6763

Flying tonight

Air Warrior allows users to join one of three nationalities who are constantly at war with one another. The countries have a variety of primary and secondary air-bases dotted around the war zone, and also have use of aircraft carriers to take off from.

The warring countries own various surplus aircraft which means the user has a wide choice of American, British, German or even Soviet planes to fly.

Once you've logged on to the Air Warrior menu, you can access instructions and help. Help comes in two shapes: a training area where users can carry out a little target practice, and weekly training sessions run by expert pilots.

Once your wings are a formality, you'll probably start hanging around the conference rooms. Here, players from all nationalities can talk to each other or see who is flying.

It's in these rooms that teams are formed and tactics formulated. For example, a team wanting to fly a B-17 bomber have to assign crew to various gunning and bombing positions.

Besides the general conference rooms, each country has a room at its headquarters, where more sensitive tactics can be discussed.

Also, each major airfield has a briefing room in which pilots ready for take-off can chat. To add further realism, there's even a radio facility enabling users to communicate with other players on the ground or in the air. The radio comes equipped with 999 different channels and a squelch facility to block out unwanted ears.

But this is just the beginning, because the world of Air Warrior is truly massive with a number of different locations and combat terrains to fight in. European and Pacific environments come complete with rivers, bridges and ground installations such as radar towers and ack-ack guns.

There are also a number of strategic installations such as refineries, cities and supply convoys to attack. Destroying these targets affects the opposition's war effort, and they suffer inconveniences with things such as ammo supply.

Air Warrior is a truly massive and sophisticated simulation which is full of detail and realism. Options such as controlling ground or air-based machinery give it a long and entertaining shelf life.

But by far the most addictive aspect of Air Warrior gaming is the totally unpredictable nature of your opponents. Being 100% organic, they provide gameplay that will never ever become tedious or repetitive.

Air Warrior creator Michael Hodges sums this dimension of play up to a tee: "Each time you play it's different, different people to play against in different situations and in different moods. If someone's had a bad day at work then you know it."

"There's no such thing as a predictable computer opponent, just real people that want to win."



Publisher: Ubi-soft
 Developer: Blue-byte
 Disks: 1
 Price: £9.99
 Genre: Sports sim
 Hard disk install: Yes
 Control system: Joystick
 Supports: A500/A800/A1200/A4000
 Recommended: 68000 upwards

00000

system essentials



Tired of a life of ease and tranquility? Simon Clays buttons up his wrestling suit, picks up his racquet and indulges in a flurry of heat-'em-up sports sim madness

Jimmy Connors: Great Courts 2



Another demon serve is about to be unleashed in Jimmy Connors' Great Courts 2

Originally released as Pro Tennis Tour Two, Jimmy Connors: Great Courts Two comes to you courtesy of Ubi-soft's budget range, which is hitting the shops at the bargain price of just under a tenner.

Following the rules of tennis to the letter, Great Courts 2 allows you to participate in just about any form of tennis you might desire.

For instance, you can compete one-on-one against a human opponent or the computer, play doubles with a friend against two computer opponents or a variety of other combinations. Along with the vast range of play combinations that Great Courts offers, you also get numerous types of courts to play on.

This option allows players to battle for court supremacy, playing a serve-volley game on the low-bouncing speed of grass, using your stamina in the long rallied day or exercise disciplined control on the asphalt surface.

Before you begin swinging your racquet against opposition, the best bet is to indulge in a little training. Here, a machine simulates strokes and serves at you, so you can improve your game.

Once you've perfected the co-ordination necessary to lob, smash, and, most tricky of all, serve, you'll want to start competing. One of the games' greatest features is its ability to allow you to enter the world's leading tournaments. Effectively, the computer simulates a normal tennis year, with you competing in all the major events that make up the calendar.

As you progress through the year your character's abilities improve and you are privy to some enhancements like improved court coverage.

Aside from excellent gameplay, Great Courts 2 looks very good. Viewed from behind the base-line slightly above the play, it contains some extremely pleasant looking sprites which, while being aesthetically pleasing, do not confuse the player.

Great Courts 2 is a classic, and at present is probably the definitive Amiga tennis title. The gameplay is extremely engrossing, terribly addictive to boot, and is probably best enjoyed playing with and against human opponents.

For just under a tenner, Great Courts 2 is unmissable and still shows its class when compared to products released years later. A true gamer's game bulging with playability.



89%^o

Ultimate Body Blows

Following on from the success Team 17 achieved with Body Blows and Body Blows Galactic, the Wakefield-based software house have produced a version for the CD32.

Ultimate Body Blows combines the characters from both floppy-based titles, throws in beefed-up sound, 256 colour (like the A1200 version) and extra options for the style of play you employ.

As a beat-'em-up, Ultimate has much to offer this much criticised and media-encrossed genre. It features 22 different characters, all equipped with individual skills and personality traits.

Ultimate can be configured in a number of ways. Putting aside all of the obvious settings, like player versus computer and two-player fights, you can play such things as tag-team.

This feature allows up to 11 different



Take on up to 21 different opponents in Team 17's class beat-'em-up, Ultimate body Blows

characters on each side to fight against one another. This, coupled with the turbo mode and the sheer volume of moves your characters can exhibit, make Ultimate the prize champion of Amiga beat-'em-ups. Indeed, when compared to the lack-lustre Amiga conversion of

Streetfighter Two, and the almost-as-bland world of Mortal Kombat, Ultimate Body Blows wins hands down with a karate kick to boot. While realising that owners of floppy-based machines will already probably own earlier versions of Body Blows, CD32 owners as yet will not have them their appetites.

My advice, forget waiting for CD-based versions of the aforementioned beat-'em-ups. Go out, get yourself a copy of Ultimate Body Blows, and bring a coin-op quality title into your front room.



86%^o

Publisher: Team 17
 Developer: In-house
 CD's: 1
 Price: £29.99
 Genre: Beat-'em-up
 Hard disk install: N/A
 Control system: Joypad
 Supports: CD32
 Recommended: N/A





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LEVEL 104: THE DIAMOND RING



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Up and Running 130

Ocean's Nick Clarkson reveals how to get your first programming masterpiece off your hard drive and into the shops



Home video 134

The first of a six-part series in which Gary Whiteley reveals all you'll ever need to know about producing high quality home video



Classifieds 141

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Milking the



I've come a long, long way since the early days of the home computer. Back in the early 1980s when the machines to own were the Sinclair ZX81 and the Commodore VIC 20, it was relatively cheap and easy to set yourself up as a software publisher.

A small classified advertisement in the likes of Your Computer or Computer and Video Games would have aroused enough interest in your game to bring these orders flooding in.

Well, maybe not flooding in, but you would have certainly recouped enough to satisfy your meagre wants. Adverts of this ilk started springing up regularly every month. Classic titles such as, "3D Monster Maze" and "A Can of Worms" are just two that spring to mind.

The very fact that the ads kept reappearing proved that someone out there was earning money from writing and publishing their own games.

Within a couple of years both Commodore and Sir Clive had moved up a gear and the state-of-the-art home computers were the now legendary Commodore 64 (Now, a full 64K) and the Sinclair Spectrum.

During the early stages of these machines' lives, the adverts for "home-grown" games were still to be found in the computer press. However, businesses dedicated to producing computer games soon started springing up.

These new "software houses" offered a more professional image. Not only were their games of a higher quality (well, usually) but they also offered better availability and support. Some of the early software houses are still around today: Ocean, U.S. Gold and



Development artwork for Core Design's *Helmdall 2*



Gremlin are three that spring to mind.

As home computers became more sophisticated and the technology moved forward, so the number of individual entrepreneurs decreased. Software houses began to employ programmers to work from their offices and write nothing but games. Since then nothing much has really

changed. Games have become more involved, presentation has improved and software has become more readily available.

From its humble beginnings the software industry as we know it has mutated from a tiny cottage industry to a multi-million dollar business. So how can you get a slice of this money machine? Designing games is not

widely thought of as a full-time profession. In reality, software houses don't employ anyone to design specific games.

Usually a group of programmers, artists, musicians and developers comes up with the ideas in fevered meetings and it's then down to the game's producer to decide what goes in and what's left out.

Despite there being a lack of games designers, many individuals do submit their game designs to software houses. While this is certainly one way of presenting your ideas it certainly isn't the best.

DESIGNER

As a rule, less than one percent of submitted ideas make it to becoming a full-blown game. Don't be too disheartened though – the guy who thought up Pacman earned an absolute fortune.

If you have a particular skill at programming, graphics or computer music, then you could be just what a software house is looking for. Add to this a love of games and a will to work in the computer games industry and you could have what it takes to be behind some of the world's best loved games.

Software houses are always looking for new talent and you certainly shouldn't be afraid to write to them enclosing demos of your work. Most companies won't necessarily be looking for a fully blown game, they'll be more interested in your abilities.

If you're a programmer then send examples of your scrolling routines, logic routines, etc. Artists can submit sprite shots, backgrounds and animations.

Musicians should give examples of different styles of their work, both full-blown scores and effects. Like would-be game designers, it probably pays to send yourself a copy of anything you want to submit before you offer it to a software house.

In addition to software houses, programmers, artists and musicians can also try offering their skills to development houses. Companies like Probe, Bullfrog and Teque all write games, the only difference is that a software house publishes them.



Successful games can appear on practically every format

Copyright

There seems to be no hard and fast rule when it comes down to protecting your game designs from would-be plagiarists. I've heard of many people who sent their ideas to software houses only to receive a letter of rejection and for part of their game idea, allegedly, to turn up as part of a different game.

While you could argue your case until you were blue in the face it is pretty difficult – near impossible – to prove an idea has been stolen. Naturally, there are exceptions.

If your idea concerns a new type of gameplay (forget any style of game you are familiar with now) then it might be possible to prove you've been wronged.

Also if a games publisher uses your characters and so

on then you should be able to demonstrate its origins. The best way of protecting yourself is to copyright your designs.

While this process may seem complicated it is not. Simply put a copy of your designs in an envelope and send them to yourself. Better still, send them to your solicitor.

When you receive them back keep the envelope, unopened. The post-mark will prove the date when you copyrighted the designs. Only when you've got a dated copy of the designs should you send them to software houses for consideration. Don't just stick to one or two companies either, try them all.

money machine

Breakthrough

Software houses are always on the look-out for talent. If you've got what it takes then apply to every company you can think of. Keep an eye out for adverts in both the national and specialist press (Monday's Guardian and Edge magazine are usually the best).

Try and discover the name of the software evaluator or the producer at a software house and send examples to them. Don't forget the self-addressed envelope trick. And finally, keep trying.

Another way of entering the games industry is to set up your own programming team. Usually comprising of around four or more people, a programming team will develop their own commercial games.

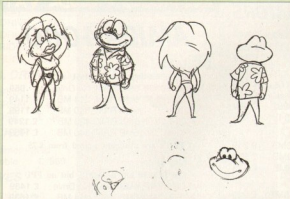
This process will involve everything, from the creation of the idea at the way through to its final programming and presentation. However, new development teams may find it difficult to find a backer to take their game.

Software houses aren't looking for just anything. If a game is to capture their interest it will have to be something new and exciting. Another shoot-em-up isn't going to have them pounding on your door with a blank chequebook at the ready.

A game offered to a software house should have that special something that makes it stand out from the rest of the crowd.

Because of this it also pays to know your market. Don't just write what you want, write something you know the games playing (and buying) public will want. Even if your game isn't quite what a company is looking for, it should at the very least make them aware you exist.

Many games available on a single format are often converted onto others. Conversion work can be easy as the tool of games design is taken out of the process.



The more thought goes into design, the more effective your animations will become

While sending demos of your games to various different software houses is one way of getting your work seen, it's better to actually visit a software house to present it.

Obviously you shouldn't just turn up on their doorstep, but if you can get an appointment then you know you've at least got a fighting chance.

OPINIONS

In addition to getting the views of a developer or software manager, it's good to get the views of other programmers, musicians and artists. Try and find out their names and send them demos too. Constructive criticism could just make the difference to your next game.

At the end of the day it all comes down to money and if your talents are accepted by a software house there'll come a time when you have to talk about the green stuff.

This process can be a tricky one and I'm sure if you talk to existing programmers you'll hear stories of how they've been 'ripped-off'.

While some of these tales may be true,

larger software houses do treat their potential employees fairly. If your skills are needed in-house then you'll probably receive a monthly salary and a contract.

If, however, you are a member of a development team then you'll probably be placed on a payment system, whereby you'll receive regular cheques as your team reaches set goals or milestones.

Many software houses also offer a royalties scheme where those involved in the creation of a certain game will get an extra payment that depends solely on the number of units sold.

When negotiating a rate of payment for your talents don't sell yourself short, but it's equally important that you shouldn't price yourself out of the market.

Programming teams should also be aware

Nick Clarkson, Ocean Software's PR manager and ex-editor of both ST Action and Game Boy Action, plots the rocky route to commercial coding success

Publishing games

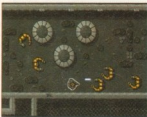


of who will hold the copyright on a game. Successful games on a single format often find themselves sneaking onto other platforms.

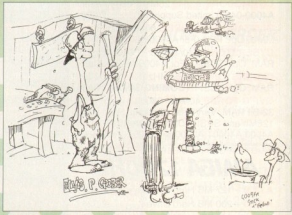
Take Bullfrog's Populous for example: PC, Amiga, ST, Super Nintendo, Game Boy and MegaDrive - six formats in total!

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Don't forget we're running a competition this month for the design of one level of Team 17's forthcoming release, Alien Breed 2 - Tower Assault. If you fancy your game-designing talents, check out our competition page for full details on how to enter this unmissable chance to break into the games business, and have your level test the skills of thousands of gamers.



Get in on the act with Team 17



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AVAILABLE NOW

Over the next six issues I'll be taking you through many of the ways an Amiga can be used in a home video production. Not just for titling and graphics, but for image gathering, animation and simple editing too.

I'll also be offering practical advice on what you need to achieve your aims – and what you might expect to pay for the privilege.

I'll start with our basic production tool – the Amiga itself – and also look at some of the more important types of software that we'll be employing in later episodes.

Ever since the A1000 first saw the light of day in the mid 1980s, the Amiga has been involved in TV and video production. Today's Amigas are no exception, but they now have the advantage of strong hardware and software support and a widely-established user base all around the world.

Amigas are in daily use in countless TV and video operations worldwide, as well as animation houses, educational establishments, government services, sports stadiums and many company training and information departments, including IBMi Amiga-generated graphics have even won major film and TV awards.

And there are literally millions of Amigas in households around the world. True, most are being used for nothing more interesting than games, and many are probably festering away in dusty corners after their owners succumbed to the pressures of advertising and bought into some more fashionable games technology.

But don't believe the hype, because the Amiga isn't just a games machine. It's also capable of many other applications, and even

the humblest Amiga can be pressed into video production, sometimes at a professional level.

Don't despair if you've only got an old A500 with a modulator, because with the right software it can still be used for titling and simple graphics. But only up to a limit. And that goes for all of the basic Amigas – even the newer Amiga 1200 and 4000 models.

These limitations are mainly down to lack of memory. An Amiga 1200 comes supplied with 2MB, but this can be quickly eaten up by the operating system and the more powerful graphics software on the market today. Not to mention the injudicious use of multi-coloured Workbenches and backdrops.

Memory shortage is the most common barrier to Amiga graphics creativity and most experts will tell you that the first extra you need to buy is more RAM – whatever Amiga you own.

But there's no need to break the bank. A couple of MB will solve most problems (unless you're into 24-bit or AGA graphics, serious DTP applications or like to use large, high resolution graphics screens).

Remember though, that even a standard A500 can play its part in a video production.

Other hardware extras are optional, depending on what software you want to run and what kind of output you require from your particular Amiga.

The basic minimum configuration throughout this series will be an Amiga 1200 with an RGB monitor and a second disk drive – which is probably the average setup for many recent Amiga owners.

Take

Your home videos could be the start of a career in film production. Gary Whiteley shows you how in the first of a six-part series



Still one of the most versatile graphics programs, Deluxe Paint IV is a must for every Amiga video producer

However, owners of other Amigas shouldn't feel left out, because all can be used for video production purposes, limited only by how expanded they are.

My 2000, for instance, has 10MB of RAM, 2MB of chip RAM, 240MB of hard drive, 2 floppy drives (including a high density drive), a 40MHz 68030 CPU and 68882 FPU and an Opalvision 24-bit graphics card.

It's a pretty good system which fulfils most of my needs, and over the years has cost me a lot of money. Others have even more powerful systems, so take this series with a pinch of salt as far as minimum requirements are concerned.

What is important is that you recognise every Amiga has its limits and that when you reach them you must either adapt, accept or spend more money. That's all there is to it.

Actually, that last line is something of a lie. There's a lot more to video production than just having an Amiga. You'll also need access to some video hardware (camera, VCR, monitors/TV), a genlock, perhaps a digitiser or scanner (see next month's exciting episode for more details) and maybe a few other bits and pieces such as lights, microphones and vision mixing equipment.

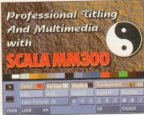
It should be obvious that even the most powerful computer will remain a useless lump of chips and circuitry if it lacks the software to bring it to life. Software is the

"life force" which animates the computer's body.

Video production requires certain kinds of software, like graphics, animation, 3-D, titling and presentation programs. If you have a basic A500 or A600 you'll find yourself quite restricted, though there are programs, such as Alternative Image's Big



For sheer variety and ease of use there's little to touch the Scale range of presentation and multimedia programs



Production line

There are many ways of getting hold of video equipment. You might live near a community arts or video facility which can help out with hired kit. Or you may find a video enthusiasts' group where members co-operate with each other to co-produce projects, each contributing their own particular skills or equipment in return for help and/or experience.

Ask for your library or local information office for names and addresses of likely contacts and take it from there. You never know where you'll end up!

For example, some years ago a talented young lad made contact with the Arts Centre where I worked and shot and edited many of his video productions there with help from staff, local talent and volunteers.

We all worked hard, learned a lot, had plenty of fun, and moved on. Now, after a spell at the National Film School and with several TV commissions under his belt, he's in Hollywood directing Sylvester Stallone in a multi-million dollar movie version of Judge Dredd!

This proves that if you have what it takes, and enough determination, you can start from humble beginnings and make it all the way to the top. I even did some Amiga titles for him once.



Scroll2 works well, even on basic Amigas like the A500 and A600

two

Part 1

An Amiga 1200 is much more powerful than an A500, but it will still need expanding for more complex applications.

Alternative Scroller, which will run fine even on these machines.

Even taking into account the relatively limited power of our specimen 1200 setup (which is actually pretty powerful compared to a standard A500 or A600) there are plenty of applications which we can use such software for. Here are a few examples:

- Producing title and credit screens for all kinds of video productions.
- Making small animations – perhaps illustrative or cartoon-like – which can be used to spice up presentations.
- Do scrolling or crawling text, or add subtitles and captions.
- 3-D programs can be used to make flying logos – though they'll only be very simple with this limited Amiga setup.
- Multimedia programs such as Scala can control the playback of a presentation while it is videotaped or displayed.

So you'll need to buy some software if you want to start making graphics for your videos. As a bare minimum, consider buying a paint package which also has animation functions. Electronic Arts Deluxe Paint IV, or Digital Creation's Brilliance are two examples which spring to mind.

With such software you'll be able to design and lay out text screens (assuming you have a reasonable collection of typefaces), do graphics, and also make simple animations.

Deluxe Paint currently has the most extensive animation facilities, and makes short shrift of flipping and rotating brushes over time. With some work, many interesting effects and animations can be produced with these programs.

They'll also serve you well for producing static screens, especially if you can use Hi-Res AGA screens for semi-photographic quality – though eight colours in Hi-Res overcan will often be enough for most simple graphics and titling jobs.

But paint packages won't scroll or crawl text – scrolls move vertically, like credit sequences in films, while crawls move a single line of text across the screen. Nor will they do transitions between Amiga text or background screens.

TITLING

This is where programs like Scroller2, the successor to Big Alternative Scroller and the Scala collection come into their own.

Scroller2 is what it says – a scroller. It also does crawls, and some limited transitions, but its raison d'être is to shift text smoothly up (or across) the screen, which it does well enough, even on the more limited Amigas.

The Scala programs (Scala HVT, Scala Classic and ScalaMM300) provide a range of presentation and titling functions which expand as the cost of the software increases.

Scala HVT (Home Video Titler) is the cheapest, and hence simplest, of the three and is suitable for even the lowliest Amiga.

Though it is limited to only eight colours, it can still do quite a lot of tricks and is well worth considering if you want to improve your video's image on a shoestring budget, especially as it does scrolling text and quite a few transitions. Scala Classic and ScalaMM300



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A set of good typefaces, such as this selection from AGFA's Video Unlimited set of Compugraphic fonts will make a big difference to your presentation style

add more bells and whistles (more fonts, colours and transitions, backgrounds, sound, control for some VTRs, genlocks and other hardware and more options for creating screens and presentations), so cost proportionately more.

Scala MM300 is probably the best multimedia program currently available on any non-workstation computer platform. While the Scala programs can do some special effects, they can't break Amiga images into pieces, spin them into fancy shapes and then animate them back

Home video



together again. But ProDAD's ADORAGE software can. It's easy to use, and quite fast, and the results can be spectacular – but it won't work on all IFF images. Nevertheless, if you want to do something a little out of the ordinary with that special title then ADORAGE is worth a look.

Of course that's not the end of what you'll need, but unfortunately it's the end of this instalment. Next month we'll deal with putting your Amiga in the picture and putting pictures in your Amiga – genlocks and digibits explained.

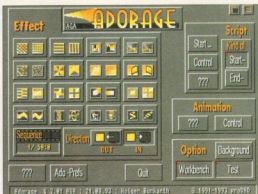


The costs

Like everything in this world, video production isn't cheap, but at least you can do more with an Amiga than just work. Costs for the simple, but fairly adequate Amiga system specified in the article are approximately as follows:

- Amiga 1200 £290.
- RGB Monitor (e.g. C-10845) £200, 2nd disk drive £50. Total around £540.

If it's fancy effects you want, ADORAGE can provide them – though you'll need a powerful Amiga to get the best from it



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If you've been following the column over the last few issues you'll have realised that ARexx communications are, at their grass roots level, based on facilities provided by Exec.

This of course is the part of the Amiga's operating system that controls multitasking, interrupt management and many other related system housekeeping jobs.

Coming to terms with the internal side of the ARexx port handling coin is not easy, but for most users a detailed understanding is not necessary.

All that is required is a general appreciation of how the messaging system works in practice and its most immediate high-level ARexx connections.

The key elements here are these: Exec provides a message-passing mechanism based on the use of software entities called 'ports' which act as receiving stations for blocks of information that need to be passed around the system.

If, therefore, a program needs to communicate with another it will do so by setting up one or more Exec-style message ports. When issuing a message it will allocate some memory, fill it with the appropriate data items and then 'send' that data packet to its destination.

In actual fact nothing really gets 'sent' at all. What happens is that the block of memory allocated for the original message gets linked into the message port of the destination program and sits there, waiting for attention from the program in charge of the port.

The program 'reading' the message doesn't then get a copy of the information – it actually reads the data from its original location.

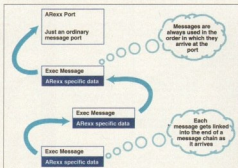
Nevertheless, everyone talks in terms of these messages being sent and received because that, in a logical sense, is what's happening. Information is being passed from one task to another.

Put simply, ARexx messages are just ordinary Exec-style messages that have various ARexx-specific data items tagged onto them, and an ARexx port is just a standard Exec port used for receiving ARexx messages.

Ports need to be named and must be made visible to the system by adding them to an Exec-maintained public ports list. However, these matters are taken care of automatically by all programs that contain ARexx interfaces.

About the only things end-users need to be

ARexx ports of refuge



ARexx is clever – but behind the scenes it is Exec that is responsible for the basic message-handling work!

aware of as far as ARexx ports are concerned, are that firstly they must be recognisable to ARexx at the time you try to communicate with them, and secondly that their names are case-sensitive.

One reason why you may get a 'host environment not found' error message from ARexx is that you've attempted to communicate with a specified host too soon.

You may, for example, start up an ARexx controllable program from a script (eg. you might be running a tracker module player program such as OcsMEDPlayer).

If you kick off this program and then immediately expect to be able to communicate with it you'll be disappointed, because it takes the O/S time to load and run the program.

ARexx does, however, now provide a special command utility, called WaitForPort, which waits for up to ten seconds and only returns with an error code if the specified port does not appear within that time.

The idea is that you use this utility in your scripts immediately after you have loaded and run a program, but before you start sending commands to it.

On the case

Case sensitivity is an easy nut to crack because if you are in any doubt about the exact case style of the name of the port, you can always list all public ports using this sort of script:

```
/* ports.rexx */
say Show('P')
```

If you want to produce a list that gives each port name on a separate line, then the trick is to use a linefeed as the pad character in the function call like this:

```
/* ports.rexx */
LINEFEED='0A's
say Show('P',,LINEFEED)
```

Do remember the double commas in this letter form of the Show() call – they're needed as placeholders because the pad character has to be recognised as the third parameter of the function!

Early versions of the Show() command, incidentally, didn't appear to work properly. In fact, in order to list port names it was necessary to use the equivalent rexxsupport.library>ShowList() function.

So, if you are running an oldish version of ARexx on a 1.3-based machine you might have to get your list of ports using this sort of code:

```
/* ports3.rexx */
LINEFEED='0A's
if 'Show('L',,rexxsupport.library')
```

then do:

```
ZL = call AddLib('rexxsupport.library'),0,-
30,0)
one
say ShowList('P',,LINEFEED)
```

Name tags

Finding the port name of an application is easy enough but it is also important to use the name with the proper case specification within your scripts, otherwise ARexx won't be able to locate the port in the Exec public ports list.

This usually means defining the current host name using a quoted static string like this... address 'SomePortName'. If you forget the quotes and write... address SomePortName then something odd happens.

ARexx regards the port name expression as a variable and, because it has not been explicitly initialised, sets it to a default value which is the uppercase equivalent of the variable name itself.

Occasionally you can get away with such loose coding but more often ARexx will complain that it cannot find the specified port.

The bottom line is simple enough: if you ever hit port-related ARexx snags then the chances are that either the port you were trying to communicate with didn't exist at the time you sent it a command, or you had the host port's name or case wrong and this prevented ARexx from finding it.



Paul Overaa explains a little more about those 'ports' we've been dealing with in recent issues

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fter a brief sabbatical, the old man of the Insight section returns to the fold with yet more titillating video trivia. This month I'll be concentrating on Clarissa, a package which quite literally sets new standards for Amiga animation.

As you may have discovered, thanks to the Clarissa feature the software is only really at its best in combination with a DCTV. However, you can see from the performance chart that quite a number of normal Amiga modes are also capable of impressive playback – especially in resolutions lower than the video standard of 736 x 566.

Unfortunately, if a full-size video image is an objective, Lo-res interfaced Ham6 is the only real option. Measuring 368 x 566, it's ideal for video and provides playback performance almost on a par with a Hi-res 3-bit plane DCTV anim.

Basically, choosing between the two is a case of balancing the books. The DCTV option has the advantage of higher resolution, better playback and a much wider 24-bit colour palette, while the Ham option doesn't require any additional investment – and of course is accessible to anyone.

However, for the serious videographer I'd certainly advise the DCTV option. As you may already know, a DCTV is basically a 24-bit board which delivers a composite only output.

Obviously this isn't exactly great news for those working primarily in S-VHS, but if you consider the terrifying financial alternative to the Clarissa and DCTV combination – namely the PAR card – composite output suddenly doesn't look like such a huge compromise after all.

Another benefit of the DCTV approach is its ability to send a composite signal direct to tape. Literally all that's required is DCTV, a phono lead and of course a VCR and you're in business.

Not surprisingly, Clarissa also requires a reasonably speedy machine, but unlike many other videographic

Clarissa in close-up

applications an 040 is by no means compulsory.

In fact, playback of the 200 frame DCTV anim mentioned in the Clarissa feature was identical on both an 030 and 040 machine.

It must be stressed that for full-frame animations an 030 is the slowest CPU that should be considered. This is not only to guarantee acceptable playback but to ensure that Clarissa's image processing and special effects are generated at a reasonable rate. During testing I found that the DCTV/Clarissa system requires roughly 4Mbs of Ram for five to six seconds of animation at 25 fps.

Although this may sound pretty insignificant, I suggest you keep a close eye on the next So-Fi movie you come across where I guarantee most of the computer-generated sequences will rarely exceed this sort of length per edit.

Although the aforementioned Ram requirements are the norm, it is possible to vary the degree of compression in order to squeeze more frames into the same amount of Ram, or alternatively lessen the compression ratio to further improve playback.

Roughly speaking the two additional settings provide approximately 20% either way. Obviously, to retain smooth playback the degree of colour transition between each frame has to be taken into account.

The only other element worth considering is to ensure that the images used as part of the

animation are at the correct saturation for use within a composite signal.

Unfortunately Clarissa doesn't offer any internal filtering of frames during SSA compilation, so initial colour control is down to you.

To ensure that the source images do not contain colours which exceed 192 – or approximately 12 – in the Amiga's colour register, there's two possible solutions to the problem. You can try limitation during the design stage by careful selection of colours.

However, this isn't always possible, so you're left with the alternative which is to use image-processing software such as ADPro or ImageFX to filter the frames individually, so conforming with composite saturation tolerances prior to compilation into a DCTV or Ham SSA anim.

That's about it for this month. If you have any specific videographic questions that need answering, or perhaps would like to see a specific piece of hardware or software covered in the column, please feel free to write in with your ideas to the usual address, marking them for my attention.

Product: Clarissa

Supplier: BVG

Tel: 0874 611 433

Price: £79.95

Formats and speed

Format	Normal	Overscan	Video
Lo-res	320 x 512	362 x 560	368 x 566
Hi-res	640 x 512	704 x 560	736 x 566
SuperHi-res	1280 x 512	1408 x 560	1440 x 566

Old Chipset						
Bitplane depth	1	2	3	4	5	6 (Ham/EHB)
Lo-res	++	++	++	+	+	+
Hi-res	++	++	-	-	n/a	n/a
SuperHi-res	—	-	n/a	n/a	n/a	n/a

AGA Chipset							
Bitplane depth	1	2	3	4	5	6 (Ham/EHB)	7 8
Lo-res	++	++	++	++	++	++	+ +
Hi-res	++	++	+	+	+	-	- -
SuperHi-res	++	+	+	-	—	—	— -

DCTV	
Bitplane depth	3 4
Hi-res	++ —

All speed ratings based on a 25MHz A3000

VIDEO



To compliment this month's Clarissa spectacular, Paul Austin spotlights the finer points of this revolutionary release

Key

++ Very good
Excellent playback even with large frame transitions

+ Good
Good playback except during extreme colour transitions

- Satisfactory
Will not display large frame transitions without jerking

— Bad
Frame transitions in excess of 30% will induce jerking

n/a None
Playback not possible in this format



any companies provide ready-made, sequencer playable songs in Midi file format these days and the compositions are invariably supplied as GM (General Midi) based arrangements.

In other words, your equipment needs to be configured to the GM standardised voice settings because the Midi file tracks will contain program change numbers intended to select voices from the GM standardised set of voice sounds.

GM is a great idea and already you can buy sound modules – like the Roland Sound Canvas range – that support these standardised voice arrangements directly.

Unfortunately most Amiga users do not have set-ups based on GM-compatible Midi equipment. One of the consequences of this is that many users need to either continually edit the Midi file arrangements they purchase in order to make them work with their own equipment, or take the plunge and re-configure the settings of their synths and/or expander units to make them similar to the GM-based arrangements.

The latter course of action is doubtless the best long-term option but it is not always possible.

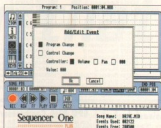
With some older Midi equipment that has fixed voice program-change relationships, users are forced down the Midi file program change

Change your tune

editing path whether they like it or not.

How do you tell what type of synthesiser voice a particular GM program change number should correspond to? You look it up – and that's where the table shown below will come in handy. Regard the voice numbers shown in the table as program change numbers, load the Midi file into your sequencer, then change each program change number on each track to a value that will produce a similar type of voice sound when transmitted to your Midi equipment.

If, for instance, a GM-based Midi file is using program change #2 event on channel 1, then the chart tells you that the track is meant to be played with a piano voice. You therefore need to edit that program change event, inserting a value that will produce a piano voice on your



Sequencer One Plus, like all Amiga sequencers, has easy-to-use facilities for program change editing

synth or expander.

These types of edit operations are easy enough to do with all sequencers.

Next month I'll tell you about a Midi file editing snag that for some users has become an absolute nightmare.

MUSIC



General Midi may be a good thing in the long term but, as Paul Dueraa explains, most Amiga Midi users are not having that smooth a ride with it at the moment...

Voice Number	Voice Name	Voice Number	Voice Name	Voice Number	Voice Name	Voice Number	Voice Name
(Piano)	(Lead)			(Bass)	(Synth SFX)		
1	Acoustic Piano 1	65	Soprano Sax	33	Acoustic Bass	97	Ice Rain
2	Acoustic Piano 2	66	Alto Sax	34	Fingered Bass	98	Soundtrack
3	Acoustic Piano 3	67	Tenor Sax	35	Picked Bass	99	Crystal
4	Honky Tonk Piano	68	Baritone Sax	36	Fretless Bass	100	Atmosphere
5	Electric Piano 1	69	Oboe	37	Slap Bass 1	101	Brightness
6	Electric Piano 2	70	English Horn	38	Slap Bass 2	102	Goblin
7	Harpsichord	71	Bassoon	39	Synth Bass 1	103	Echo Drops
8	Clavinet	72	Clarinet	40	Synth Bass 2	104	Star Theme
(Chromatic Percussion)	(Pipe)			(Strings/Orchestra)	(Ethnic)		
9	Celesta	73	Piccolo	41	Violin	105	Sitar
10	Glockenspiel	74	Flute	42	Viola	106	Banjo
11	Music Box	75	Recorder	43	Cello	107	Shamisen
12	Vibraphone	76	Pan Flute	44	Contrabass	108	Koto
13	Marimba	77	Bottle Blow	45	Tremolo Strings	109	Kalimba
14	Xylophone	78	Shakuhachi	46	Pizzicato Strings	110	Bag Pipe
15	Tubular Bell	79	Whistle	47	Harp	111	Fiddle
16	Santur	80	Ocarina	48	Timpani	112	Shanai
(Organ)	(Synth Lead)			(Ensemble)	(Percussive)		
17	Organ 1	81	Square Wave	49	Strings	113	Tinkle Bell
18	Organ 2	82	Saw Wave	50	Slow String	114	Agogo
19	Organ 3	83	Synth Callopie	51	Syn Strings 1	115	Steel Drums
20	Church Organ 1	84	Chiffer Lead	52	Syn Strings 2	116	Woodblock
21	Reed Organ	85	Charing	53	Choir Aahs	117	Talko
22	Accordion Fr	86	Solo Vox	54	Voice Oohs	118	Melo Tom 1
23	Harmonica	87	5th Saw Wave	55	Syn Vox	119	Synth Drum
24	Bandneon	88	Bass & Lead	56	Orchestra Hit	120	Reverse Cymbal
(Guitar)	(Synth Pad, Etc)			(Brass)	(SFX)		
25	Nylon String Gtr	89	Fantasia	57	Trumpet	121	Guitar Fret Noise
26	Steel String Gtr	90	Warm Pad	58	Trombone	122	Fl. Key Click
27	Jazz Gtr	91	PolySynth	59	Tuba	123	Seashore
28	Clean Gtr	92	Space Voice	60	Muted Trumpet	124	Bird
29	Muted Gtr	93	Bowed Glass	61	French Horn	125	Telephone 1
30	Overdrive Gtr	94	Metal Pro	62	Brass 1	126	Helicopter
31	Distortion Gtr	95	Halo Pad	63	Synth Brass 1	127	Applause
32	Guitar Harmonics	96	Sweep Pad	64	Synth Brass 2	128	Gun Shot

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SD005 Cantoons 1	SD022 Loops 2	SD030 Synths 5
SD006 Carillons 2	SD023 Loops 3	SD031 Synths 6
SD007 Drums & Snares 1	SD024 Loops 4	SD032 Synths 7
SD008 Effects 1	SD025 Percussion 1	SD033 Synths 8
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SD014 Harp 1	SD031 Piano 2	SD039 Synths 14
SD015 Keyboards 1	SD032 Piano 3	SD040 Synths 15
SD016 Keyboards 2	SD033 Strings 1	SD041 Synths 16
SD017 Keyboards 3	SD034 Strings 2	SD042 Synths 17

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It's nice to see that everyone is pretty much up to speed where the Internet is concerned. There was a time when I used to say to people "hey, have you been cruising around the Internet using the CIX gateway? Isn't it cool?"

They'd look at me with that slightly goofy expression on their face as if to say, "Well, he's really gone over the edge this time." It was because it took the best part of the last two or three years for everyone to get going and really understand what it was and what it was for.

Now EVERYONE bandies the name about like it's a sort of Ford Capri of computing. "Oh yeah, I got the old Internet... is that a mark one or mark two, mate?"

The trouble with the old Internet is that there is so MUCH info out there, you need a brain the size of Jupiter to store it all. So you just have to navigate around and try to find what you need.

But of course this would be impossible if it wasn't for information servers, little electronic cataloguing systems which enable you to seek out info using a hypertext or menuing format.

SERVERS

Two of the most popular at present are World Wide Web and Gopher. World Wide Web [otherwise known as WWW or W3] used to be a very useful collection of source material, but is now a massive hypertext-based search and destroy engine for finding info anywhere on the Net.

You simply navigate around the text and each highlighted entry takes you onto another menu until you arrive at the node or

Gopher this Gopher that

file you are looking for.

Gopher is a more familiar menu or list-based system, and this is in fact the easiest to access for most Net users. You have a list of entries and you step down them with the cursor keys and press enter to move down a layer. Then choose another entry from that list and so on until you end up where you want to be.

This is by far the best way to navigate the Net and find obscure information. Simply type "gopher" at a CIX ipso prompt and you'll be into gopherspace.

Find WWW on Direct connection or by telnet to CERN at <info.cern.ch>. There are also various

nodes you can access through gopher, mostly about the Mosaic WWW reader program.

WWW is based at CERN in Switzerland, but nodes for it and readers for it abound everywhere on the Net. It used to be a laborious list of technical texts [as far as I could see anyway] and was very dull to use.

Write On!

If you'd like to write about a comms matter, advertise your BBS, or blithely about something on the Internet which you're fed up with, then write to:

Phil South
Comms Almanac
Amiga Computing
Europress Enterprise Ltd
Europa House, Adlington Park
Macclesfield SK10 4NP

or e-mail him at:

snouty@cix.compulink.co.uk
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Simple and easy access to the Gopher

MTV is a registered trademark of MTV Networks
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Internet highways and byways

Ooops. It seems the love affair between MTV and its on-line counterpart, originally run by an MTV VJ, has hit a rough patch. The sycop quit his job at MTV and now has MTV's lawyers breathing down his electronic neck about use of the name MTV in the electronic domain. If you've got a minute, type:

finger mtv.com

and you'll get this little message or a recent update thereof:

ABOUT.MTV.COM

First and foremost, this site is not sponsored or affiliated with MTV Networks or its parent company Viacom [at least, that's what it was called this morning].

The site is maintained entirely by Adam Curry who, up until April 21 1994, was one of MTV's on-air hosts [VeeJay]. See mtv.co.uk/quit.txt for more on that one!

MTV Networks is aware of this project, but is making it increasingly difficult to use the name "mtv.com". They believe that it "belongs" to them.

We're working on the situation with attorney etc. Don't worry, this site will always be available, but there may be a name change involved. Death to corporate hogs I say! The purpose of mtv.com is to provide an easy distribution of music

and entertainment in all forms, across all physical boundaries of geometry. This includes video, graphics, audio and written text. mtv.com makes all of its content available through the ftp, gopher and WWW internet protocols. Accounts are not available. Another feature is the mailing lists and as of this mailing the following are available:

● Cyber-Sleaze - To subscribe send e-mail to: cyber-sleaze-request@mtv.com which gives the message line: subscribe CYBER-SLEAZE your real name here

● By far the best way to interact with mtv.com is to use the WorldWideWeb server. This is viewed with a www "viewer" or "browser" such as Xmosaic, or Mosaic [for macintosh]. There are several viewers available by anonymous ftp from ftp.ncsa.uiuc.edu.

● If you have a WWW browser, the URL is: http://mtv.com

We are always looking for suggestions to make mtv.com better and easier to use. Please mail me at adam@mtv.com with them.

Oh, by the way, this site will always be a free information provider to the Internet community.
Keep the Vibe Alive!

COMMS



Phil South looks at navigating in information space to see if the tools at hand really are the best thing since sliced bread.

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Disks)
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ED034 - Assassins Back To School +
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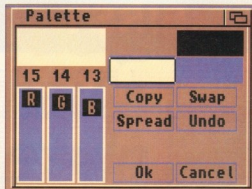
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This might sound a bit of a daunting prospect, especially if you're new to BASIC. In fact, learning

Universal recognition

So it looks like the program will be incorporated into the AMOS universe. Many thanks to T-Soft for writing a really clever program, and good luck with the sales, as I understand from Aaron he'll be asking the distributor of Shadow Software products to carry Liberator as well.



■ Using proper Amiga DOS front ends using the latest Amos add-on

Free spirit

```

If F (2)
VOID=F NEWCOL=F (2)
If NEWCOL
VOID=F
End If
End

```

which is a very simple and elegant program. That's good, but how about this. Most people who code in AMOS really hate the AMOS file requester, so how about using the `ask` library one? It's simple:

```

Title TAGS(T2) _DIR%="Run Disk:"&Chr$(0) :
Title%Please choose a file..."&Chr$(0)
TAGS(2)=80000000 : TAGS(1)=0 : Rem Left Edge
TAGS(3)=80000000 : TAGS(3)=12 : Rem Top Edge
TAGS(4)=80000000 : TAGS(4)=64 : Rem Width
TAGS(5)=80000000 : TAGS(7)=200 : Rem Height
TAGS(8)=80000000 : TAGS(9)=Varptr(_DIR%) : Rem
Dir
TAGS(10)=80000001 : TAGS(11)=Varptr(TITLE%) :
Rem Title
TAGS(T2)=90 : Rem TAG_DONE
VIOZF=0
If F (S7)
  HGETV(Q,Varptr(TAGS(D)))
  If R0
    FILE=V(REQ,D)
  If FILE
    Print "Path="+V(Req,R0+8)
    Print "File="+V(FILE)
  Else
    Print "No File was chosen!"
  Goto CLEANUP
End If
Else
  Goto CLEANUP1
End If
CLEANUP:
  HGETV(F,REQ)
  CLEANUP1:
  VIOZF=F
End If
VIOZF=0

```

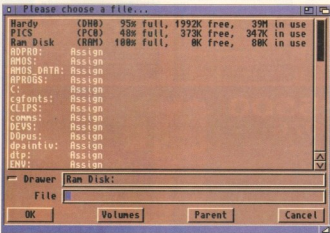
The requester can not only be called from AMOS but the result can be passed to an AMOS program and used, the file loaded and with no trouble.

Contact

Liberator is priced at £22.50 and is available from:
T-Soft, PO Box 598, Ayr Scotland KA6 6PJ
Tel: 0292 570373

Write stuff

If you have an AMOS question, or a routine you'd like to share with the world, then please write to Phil South, AMOS Column, Amiga Computing, Europa House, Adlington Park, Macclesfield, SK10 4NP.



System legal file requesters for Amos are no longer a dream

Behind the scenes a big argument is raging between the people who develop Amiga word processors and those who use them about whether style sheets are a good or a bad thing.

Anyone who spends a lot of time with a word processor formatting letters, reports, manuals and the like will tell you that they could not do it without style sheets, whereas your casual or home user will complain that style sheets are unnecessarily complicated and very much a case of overkill for their requirements.

So while word processors like Final Writer, Final Copy II and Protext have gone down the style sheets route, thus aiming for the more professional user, the UK's best known word processor, Wordworth, has resisted the urge and is becoming, rather sadly I feel, the people's champion on this score.

But that's neither here nor there because what we are going to look at this month, and next, is how to set up style sheets in Final Writer. I'm using Release 2, and if you are still on Release 1 call Softwood Products Europe and upgrade now while there are very cheap upgrade prices.]

Final Writer can have different style sheets for different built-in sections of a document – main, outline, contents, index and so on. Any new sections you create inherit the style sheet from the main section, so if you were dividing a book into chapters for example, each new section (chapter) you create will have its style sheet already set up from the first.

The initial step in creating a style sheet is to select Layout/Define Style/Main to get the Main Styles requester on the screen. Softwood has set up a few default styles for you, and you can either adjust these or zap them and start from scratch.

NAMING

To zap them, select a name in the Style Names list and hit the Remove button. Don't worry about deleting them as whenever you load Final Writer with a blank document these default styles will always be there.

Once the Style Names list is clear, select the New button. A text cursor is automatically placed in the Style Definition Name gadget for you to name your style.

You may use up to 19 characters. Rather than using the name of a font, it's better to use a name that describes the use of the style, similar to those which you zapped a minute ago.

The main text in a document is referred to as the 'body', so Body is always a good style name,

You got to have style

but some prefer Normal or Default as a style name for the main body of text.

It's up to you, but for heaven's sake don't agonise over it because you can always come back and change the name later. Call it Body for now.

After you press Return, notice that the text cursor has moved automatically into the Menu Position gadget. As this is the only style in the list, it can only be position 1, but later on you can use this gadget to sort style names into your preferred order.

Click the Define button under Paragraph Settings to put up the Paragraph requester. In here we set the indents, line spacing, justification and hyphenation for the style.

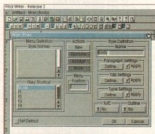
If you want the first line of each new paragraph in this style to be indented slightly, then enter the indentation distance into the First gadget (the bottom one of the three) – 0.25 would be a quarter of an inch indent, 0.5 would be half an inch, and so on.

If you want an 'outdent', (also known as hanging indent, or reverse indent) where the first line of each new paragraph stays flush with the left margin and all subsequent lines in the paragraph are indented, then enter 0 for First and the indentation distance for the rest of the paragraph in the Left gadget.

Should you require a style where paragraphs are narrower than the width of the page, then enter an indentation distance (from the right margin) into the Right gadget.

Normally you wouldn't do this for the main Body style because narrower paragraphs will be a style of their own, named Body Narrow for example, which would have all the same attributes as Body, plus an additional Right indent distance.

Line spacing can be Single, one and a half, Double or Variable. Normally you'll want Single line spacing, and the actual line spacing distance itself will be set later in the Type



After selecting the New gadget you may give your style a custom name of up to 19 characters

Settings requester.

Text Alignment is best set to Left or Full for body copy. If you set it to Left then disable hyphenation (select the No radio button), but if you select Full then you may find that words are sometimes too far away from one another, in which case you must switch hyphenation on.

SAVING

The Hot Zone figure tells Final Writer what distance from the right margin to start thinking about whether or not a word should be hyphenated – the default is a quarter of an inch, but you may need to alter this for different point sizes and different fonts.

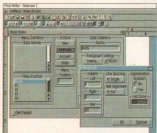
I shouldn't fuss too much about hyphenation. It is very easy to get obsessed with making words hyphenate exactly where you want them to, and I promise you that no one except you will notice. On the whole it is best to switch hyphenation off, even with flush (full) justified text.

With everything related to paragraphs defined, it's time to click the OK button to get the fruits of our labour recognised. At this point it is a good idea to save what we have done so far.

Style sheets get saved with the document, so to this end we must hit the Accept and OK buttons in the Main Styles requester, and then save the document.

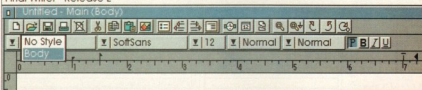
Next month we'll look at Tab Settings and Type Settings.

One of Final Writer's toolbars gives you easy access to style sheets, or in Release 2 you may have a floating styles palette



So that the first line of each new paragraph is indented, enter the indent distance into the first gadget in the Paragraph Settings requester

Final Writer - Release 2



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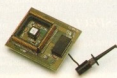
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