NOT an official Amstrad publication

BRITAIN'S BEST-SELLING MAGAZINE FOR THE AMSTRAD CPC GX4000 PLUS

ISSUE No. 80
MAY 1992
£2.50

AMSTRAD ACTION

ENTER IF YOU DARE...

PLUS:
Titus the Fox, Jetsons and Potsworth

The Crypts of Trogan – Gothic horror in 4096 colours! Read our special review feature on page 44...

- **HOW A GAME IS MADE**
  We drop in on Codemasters and watch *Seymour in the Wild West* take shape

- **FIVE pages of TECHNICAL FORUM, FOUR pages of TYPE-INS plus a BUYERS GUIDE to word processors**

- **READERS' POLL RESULTS**
  The best game of 1991, the best magazine... and the biggest idiot! *Our readers speak out*

ACTION

Has your covertape gone missing? Maybe it's cowering under a table somewhere? Don't be scared – ask newsie.

Future PUBLISHING
Your guarantee of value

9 770954 806034 05

ALSO ON DISK!

Want a disk version of the covertape? (6128 Plus owners take note) Check out the tape pages for details on how to order your copy.

Future Publishing Limited,
Beauford Court, 30 Monmouth Street,
Bath, Avon BA1 2BW
Tel: 0225 442244 Fax: 0225 446019

Editor Rod Lawton
Consultant Technical Editor Adam Waring
Staff Writer Adam Peters
Contributors Andy Price, Stuart Whyte, Phil Howard
Art Editor Angela Neal
Additional design Maryanne Booth
Norman Lamont's Economic Forecasts courtesy of Titchborne Infants School Music Dept.
Advertisement Manager Cheryl Beesley
Publisher Jane Richardson
Promotions Manager Michele Harris
Publishing Assistant Tamara Ward
Group Publishing Director Greg Ingham
Production Nicola Lucas
Subscriptions Christine Stacey, tel: 0458 74011
Mail Order Claire Bates, tel: 0458 74011
Circulation Director Sue Hartley, tel: 0225 442244

© **Future Publishing Ltd 1992** *Amstrad Action* is an independent publication. The company producing it – Future Publishing Ltd – has no connection with Amstrad plc. We cannot guarantee to return material submitted to us, nor can we enter into personal correspondence. We take great care to ensure that what we publish is accurate, but cannot be liable for any mistakes or misprints. No part of this publication may be reproduced in any form without our explicit written permission.

Future PUBLISHING

'YOUR GUARANTEE OF VALUE'

This magazine comes from Future Publishing, a company founded just six years ago, but which now sells more computer magazines than any other publisher in Britain. We offer:

- **Better advice.** Our titles are packed with tips, suggestions and explanatory features, written by the best in the business.
- **Stronger reviews.** We have a cast-iron policy of editorial independence, and our reviews give clear buying recommendations.
- **Clearer design.** You need solid information fast. So our designers highlight key elements by using charts, diagrams, summary boxes, annotated photographs etc.
- **Greater relevance.** At Future, editors operate under two golden rules:
  - Understand your readers' needs.
  - Satisfy them.
- **More reader interaction.** We draw strongly on readers' contributions, resulting in the liveliest letters pages and the best reader tips. Buying one of our magazines is like joining a nationwide user group.
- **Better value for money.** More pages, better quality: magazines you can trust.

Home of Britain's finest computer magazines.

Amstrad Action · Your Sinclair · Commodore Format · PCW Plus · PC Plus · PC Answers · PC Format · Amiga Format · ST Format · Sega Power · Total! · Amiga Power · Amiga Shopper · Public Domain *and also* **Classic CD · Mountain Biking UK · Cycling Plus · Photo Plus · Needlecraft**

ABC 37,120
Member of the Audit Bureau of Circulations
July-December 1991

LiNe UP

How a game is made

14

Who writes games? Where do the ideas come from? Who decides which games get published? We get the lowdown from a top software house

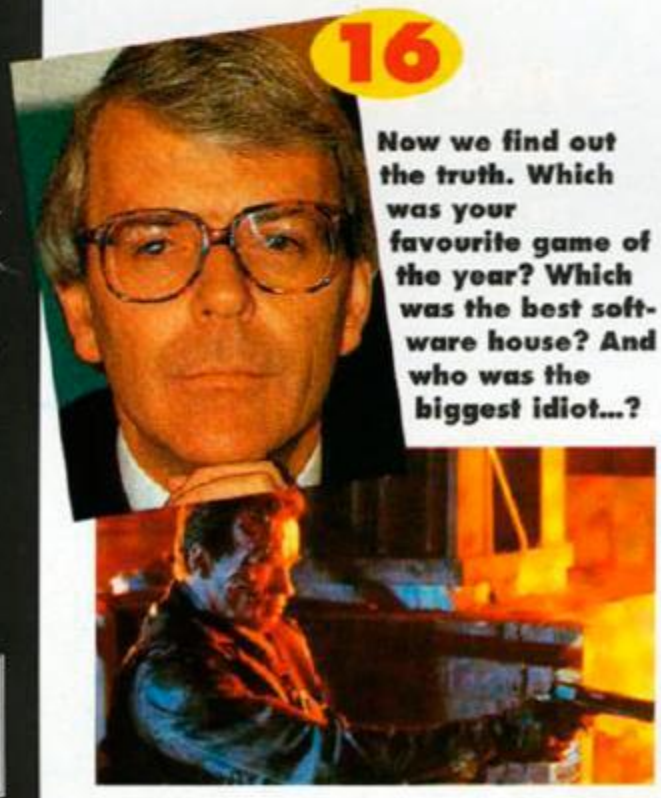
Titus the Fox

14

Titus the Fox is the mascot of French software house Titus. He's also enmeshed in a world of adventure and intrigue in North Africa...

1991 Readers' Poll

16



Now we find out the truth. Which was your favourite game of the year? Which was the best software house? And who was the biggest idiot...?

Buyers' Guide: word processors

54

The CPC may be the best 8-bit games machine around, but it's also excellent for lots of serious uses – like word processing. We review and rate the top CPC word processing progs

Cartridge round-up

32

Whatever happened to all those Amstrad cartridge games we were promised? Some came out with more of a whimper than a bang... we sort out the crackers from the damp squibs

Stryker and the Crypts of Trogan

44

They said it couldn't be done! A 4,096 colour palette, hardware sprites, enhanced sound... all the Plus/GX4000 goodies accessed from tape/disk! And Amstrad is going to let it happen...

serious

19 **MASTERING MACHINE CODE** Andy Price hasn't finished interrupting yet...

20 **TECHNICAL FORUM** Five pages of reviews, techie queries, techie helpline, Ask Alex and loads of tips!

42 **PUBLIC IMAGE** This month Adam Peters talk to international PD guru Richard Fairhurst...

50 **TYPE-INS** A big bag of readers' programs, plus Jerry Glenwright's ongoing BASIC tutorial

54 **BUYERS' GUIDE** Everything you ever needed to know about word processing software: what it does, where to get it and which prog is best

games

12 **ON THE GRAPEVINE** Wot, more joysticks? The latest Euromax wagglers under the spotlight

14 **HOW A GAME IS MADE** We talk to Codemasters about *Seymour in the Wild West*

27 **THE JETSONS** You remember that horrible little family in the TV cartoon? Well here's a horri ble little game based on them

28 **POTSWORTH** Another TV cartoon – and this one's got five million viewers (we're told)

30 **TITUS THE FOX** From, er, Titus. He's the French company's mascot, and he also has lots of fox-type adventures (but in the *Sahara?*)

32 **CARTRIDGE ROUND-UP** Whatever Happened To... (no. 298). Did you know that about two dozen cart games have so far been released?

35 **CHEAT MODE** What do all those covertape pokes do...? Plus another crop of tips

38 **BALROG** Part 4 of the Balg's *GAC* tutorial – come on, where are all these adventures you're writing?

44 **BUDGET SPECIAL** *Stryker and the Crypts of Trogan* – what sort of name is that? Who cares when it's got a 4096-colour palette...?

56 **BUYERS' GUIDE** The top ten puzzle games ever, for all you eggheads out there

regulars

4 **COVERTAPE** How to load this month's covertape and use the progs. Just over the page, in fact!

7 **AMSCENE** New maker of 3-inch disks! And Amstrad's change of heart over copyright...

8 **REACTION** Why can't we have a disk on the cover? Who is Karate Ken?

16 **READER POLL** The worst software, the best music and the biggest idiot of 1991! The truth must be told...!

26 **SMALL ADS** Buy buy buy! Sell sell sell! (Er, not at the same time, of course)

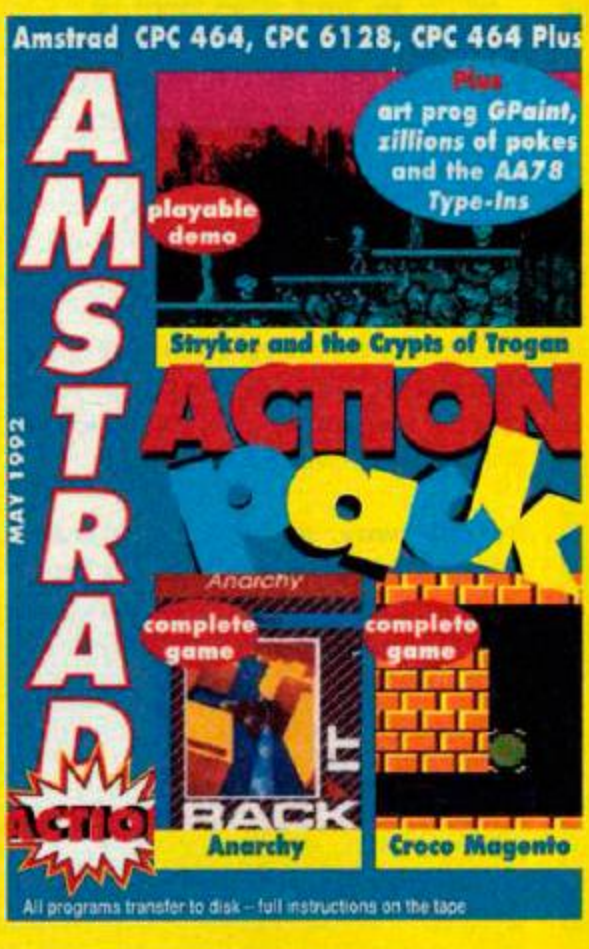
47 **SPECIAL OFFERS** We pick the best products, you pay the best prices

48 **SUBSCRIPTIONS/ BACK ISSUES** Free software when you subscribe!

58 **AAFTERTHOUGHT** So what's going in next month's issue? Here's a sneak preview...

ACTION PACK

14 covertape



- ***Stryker and the Crypts of Trogan*** **– fully playable demo of Codemasters' new game – plus extended palette for Plus owners!**
- ***Croco Magento*** **– stunning arcade puzzler from French demo team – full game**
- ***Anarchy*** **– tankbusting maze action – full game**
- ***GPaint*** **– an four-colour icon-drive art package from Germany**
- ***Type-Ins AA78*** **– Couldn't get AA78's *Type-Ins* working? Here's the complete set on tape**
- ***Pokes galore! Seymour Take 1, Firelord, Prince of the Yolk Folk*** **and a dozen more...**

HOW TO LOAD YOUR COVERTAPE

Loading the programs couldn't be easier! Type RUN" (followed by RETURN) and press a key to start the tape. (A shortcut way to get RUN" is to hold down CONTROL and tap the small ENTER key.)

A menu screen will appear in a short time. Select the program you wish to load. Press SPACE to highlight the program you want followed by RETURN to load the program.

Note that BASIC progams (e.g. the pokes) must be loaded direcly from BASIC with the RUN" command.

* If you have a disk drive connected to your machine you'll first have to type ITAPE to switch the machine to tape loading rather than disk loading. (The I is obtained by pressing SHIFT and @) The computer will load the next program.

3

Disk owners read this!

If you have a disk drive, you'll only ever have to load from the tape once – all programs are transferred easily to disk.

Insert a blank formatted disk into the drive and the covertape at the start of side one into your cassette player. Connect the REM socket if you have one (6128 owners) – it'll automatically stop the tape in the right places when accessing the disk drive.

Load the menu program in the normal way and select the TRANSFER TO DISK option. Follow the on-screen instructions and press a key when the computer asks you to. It's as simple as that!

If you have problems you'll be asked to rewind the tape and try again. If so, don't panic – follow the advice for tape loading troubles. Still no luck? Then Ablex will replace your tape. See overleaf.

disk offer

Owners of the 6128 Plus are unable to connect a cassette recorder to their machines. If these or any other users would like a copy on disk, simply snip off the coupon on the corner of this page and send it with a cheque/PO for £2.00 made payable to Ablex Audio Video Ltd to:

AA80 disk offer, Ablex Audio Video Ltd., Harcourt, Halesford 14, Telford, Shropshire TF7 4QD.

disk offer £2.00

1 Stryker and the Crypts of Trogan

playable demo

Loading: *Stryker* can be run direct from the main menu.

Get ready for the whole of the first level of this *Switchblade*-style platform exploration game. Plus owners in particular should get set for a shock, as you'll find all the extra cartridge hardware being accessed from tape.

The gameplay is pretty familiar, with lots of jumping and lots of hand-to-hand combat on the cards. And there's a plethera of power ups (including some snazzy spells and weapons) to be had.

The central objective of the full game is to collect sixteen parchments and kill chief evil dude Trogan. The aim of this first level is, er, to finish the first level. There's plenty more action to come of course, so if you've got £3.99 going spare you know what you need to do (rush down to your local computer store and say "can I have *Stryker* for the Amstrad please, chum.").

By the way, the big hard-to-kill skull you'll encounter isn't the end-of-level guardian. The end of the level? You've only just started, sunshine. For more info, see our special *Stryker* review feature on page 44.

NIGHT THOUGHTS

Guess what, readers? You know that skull on the front cover of this issue? It's a prop from some play or a model bought from a museum, right? Wrong. It's actually a real live human skull, from a dead person. It's about 200 years old (according to Maryanne), and we borrowed it from the Anatomy Department of Bristol University Medical Centre. But whose head did it use to belong to? No-one knows. Maybe Jack the Ripper, maybe Queen Victoria (or maybe someone else - ed). Sweet dreams, readers.

• *Stryker* controls

Joystick or keyboard control

Q	Up
A	Down
O	Left
P	Right
SPACE	Fire

tips tactics

STRYKING OUT

Here's AA's top three tips for newcomers to the Crypts...

• The best way to kill the baddies is with a low jab. Press Fire and hold the joystick at the relevant diagonal. Splat (hopefully).

• Avoiding the pokey things that shoot up from the ground is quite tricky. Move Up then Across then Down, very quickly.

• When facing off with the big skull, it is impossible to avoid getting hit. Move in close so you can zap him more frequently.

PICTURE THIS

freeze frame

We've frozen Stryker in mid stryke, to give you the SP on what's occurring on screen. Let's start with the obvious things, there's Stryker (a) and a couple of skeletons (b). On top of that, there's a big jug (c) and some power-ups (d). Out of the action zone we find two scores (e), the top one being your current score, whilst the bottom one is the number of bonus points yet to be transferred. The meters (f) are explained in full in the 'Meters Below' box. There's also an illustration of the weapon currently in use (g), together with the number of lives remaining (h) and what level you're on (i).

The bar along the bottom of the screen is dominated by six meters, which show the current state of play of six different items. These are as follows:

1 - PARCHMENTS COLLECTED This meter shows the number of parchments collected, out of a total of sixteen.

2 - LIFEFORCE METER Probably the most important meter, this shows how healthy Stryker is. When it reaches zero, he bites the dust (losing a life).

3 - BONUS MUSHROOMS Along the way you'll find bonus mushrooms scattered around. Eat them for bonus points. When the meter is full, the bonus is transferred onto the main score.

4 - AMMUNITION When Stryker has a weapon, this meter shows the amount of ammo left.

5 - COMBAT POWER This, er, shows the level of Stryker's combat power.

6 - EXTRA LIFE MUSHROOMS As well as bonus mushrooms, there are extra life jobbies. Once this bar is full, Strykie gets an extra life.

2 Croco Magneto

Loading: *Croco Magneto* must be run from BASIC. Type RUN"CROCO

Vive le France! *Croco Magneto* is regarded as the finest game in the public domain and it's easy to see why. Written in machine code, with simple yet addictive gameplay and a spot-on level of difficulty. Practice makes perfect, as they say.

In control of a small sphere (Up and Down are the only controls at your disposal), you must bounce around 24 screens, trying to collect up the 96 nuclear thingies scattered therein. Hitting one of the prickly balls results in death, and you've only got one life (eek).

complete game

The trick is to try and get it clear in your head where the blocks and circles are on each level. There are some positions that it's safe to bounce across while you're getting your bearings. This program was provided by Robot PD (as was *GPaint*), and the high score in the *AA* office is currently 71 (held by Adam P). Beat that, suckers!

• *Croco Magneto* controls

Cursor keys or joystick

WATCHING THE BALL

freeze frame

Quite simple to get to grips with, this one. You're controlling the sphere (1), and you have to destroy the blocks (2) without crashing into the prickly balls (3). The radiation meter at the bottom shows how long you've got left (there's a very strict time limit). Oh, and that's your score up top there. The thing with 'score' written in front of it.

3 Anarchy

complete game

Loading: *Anarchy* is on side two of the tape, and can be run direct from the main menu.

The idea behind *Anarchy* is a simple one – just blast away those blocks, pal. Of course, it's a little more complicated than that, as there are vicious enemies getting in your way, brick walls restricting your movement, and a very tight time limit (two minutes) in which each level has to be completed.

You need a 'run up' to shoot the blocks, i.e. you can't blow them away when you're standing right next to them. This means you can often only 'get at' a particular group of blocks from one side, and you'll need to get rid of one of the horizontal rows to give yourself space to fire at the vertical columns. If you see what we mean. (*No – ed.*)

Shooting a baddie will turn it into a (still lethal, but stationary) red cross sign. Keep shooting to move it further out of the way. There's loads of increasingly difficult mazes to pit your wits against (if you can handle it). There's nothing like a bit of *Anarchy* to make a brighter day.

• ***Anarchy controls***

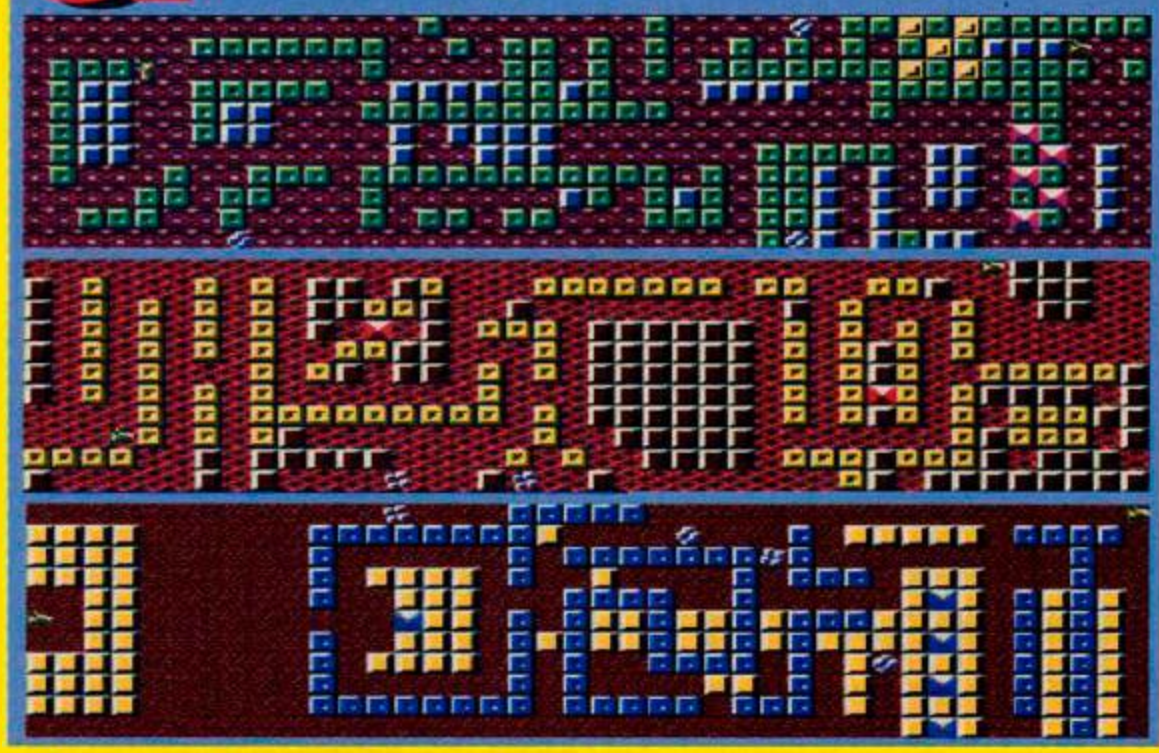
Keyboard or joystick control

Q.....Up
A.....Down
O.....Left
P.....Right
SPACE.....Fire

tips tactics

THE LIE OF THE LAND

One of the most important tactics in a game like *Anarchy* involves knowing where all the squares that need to be destroyed are, and working out the quickest way to get at them all. To this end, we have printed maps of the first three levels below. (Sometimes we're too kind for our own good.)



games pokes

5 Pokes

Loading: The pokes are on side two, and must be run from BASIC. Type LOAD" and the filename of the poke you want (printed in bold in the text below). You'll then need to have the original game tape/disk handy – see the *Cheat Mode* section (p 35) for full details on how to use these pokes.

Yep, it's another massive pile of pokes for you games-busting types. Let's see what we've got for you this time then:

AA77.GS Remember the *AA77* covertape? Still stuck on *Seymour Take 1*? Really? Most people finished it in half an hour. Oh well, here's infinite lives if you really need them, plus (slightly more useful) infinite lives for the *Firelord* game on the same tape.

CARTOON.GS If you've got the *Cartoon Collection*, you'll probably be quite keen on infinite lives for *Dizzy*, *Slightly Magic* and *Spike in Transilvania*. Oh yes, and *Seymour goes to Hollywood*.

DIZZYEX.GS Crikey, *Dizzy's Excellent Adventures* too! Infinite lives and apples in *Dizzy Down the Rapids*, no punishment in the dire *Panic Dizzy*, and infinite lives in everything else (*Prince of the Yolk Folk*, *Spellbound Dizzy* and *Kwik Snax*).

DRAG-TNT.AP + DRIV-TNT.AP + TOOB-TNT.AP + XYBO-TNT.AP Four separate pokes, but they all relate to games on Domark's first *TNT* compilation. Respectively, there's infinite lives for *Dragon Ninja*, extra time for *Hard Drivin'*, and infinite credits for both Toobin' and *Xybots*.

WINNERS.AP Some pokes for the *Winners* disk, providing infinite credits for *Blasteroids*, plus infinite lives for *Temple of Doom*, *LED Storm*, *Impossible Mission* and the first two parts of *Thunderblade*.

LOOPZ.RY Infinite lives for Audiogenic's tough puzzler *Loopz*. See *Cheat Mode* for some tips.

Next month's selection will be as much of a surprise for us as it is for you. It'll be fab though, that's for certain. Till then, happy poking.

SHOOTING PARTY

freeze frame

What's going on here? You're in the little spaceship (1), and your job is to blast away all the ordinary blocks (2) and pyramids (3). You can't destroy or drive through the waffle-like blocks (4), and there's lots of strange blue enemies (5) that kill on contact. You can tell where blocks have been waxed because the floor is a different colour (6). Shooting a foe will turn them into a first aid kit (7) for a few seconds, before they return to hassle you again. At the bottom lurks details of your remaining time (8), what level you're on (9), how many lives you've got left (10), and your current score (11).

TAPE WON'T WORK?

We go to great lengths to make sure that our covertapes work properly. They are checked directly after the master copies are made and then again once Ablex, our duplicators, have run off a series of test tapes. Only when we give the final go-ahead are the tapes on the front of the magazine actually produced.

However, a few of you may still have difficulty. If so, the problem may be with your equipment. Try the following:

- Try loading at several different volume levels if you're using an external tape recorder. Computers can be fussy about the volume they will load at.
- Clean the tape heads. This can be done with any commercially available cleaning kit. Or else use a cotton bud soaked in alcohol. Gently rub the surface of the heads and pinch roller to remove that layer of accumulated grime.
- Adjust the cassette recorder's head alignment. The alignment screw is located just to the left of the tape head, and is usually accessible through a small hole. Rotate it a fraction at a time with a jeweller's screwdriver. When the crispest sound is heard, the alignment is spot on.
- Sometimes the tape spools can jam or stick at a critical moment. Check the spools in your cassette rotate freely, if necessary giving the casing a slight tap against a table edge just to make sure.

If, after trying the all of the above, you still can't get the tape to load then you can return it for a replacement. Send the tape, along with a brief description of the problem with an SAE to:

AA80 Covertape Returns,
Ablex Audio Video Ltd,
Harcourt,
Halesford 14,
Telford,
Shropshire TF7 4QD

4 GPaint

Loading: *GPaint* is on side two of the tape, and is run from BASIC. Type RUN"GPAINT.BAS or RUN"GPAINT.HLP

You've been very good, so we thought we'd treat you. *GPaint* is undoubtedly the best art program in the public domain, and now it's all yours thanks to AA and our old mates Robot PD (send an SAE to: **2 Trent Road, Oakham, Rutland LE15 6HF** for a catalogue).

This brilliant German program features an icon-clicking control system. The titles are in German, but check out our glossary or run the excellent help file (GPAINT.HLP) for English explanations.

To use the program, simply 'click' (hit RETURN, COPY or the Fire button) on the icon representing the function you want to use. Most operations involve specifying position and size of a certain area (drawing a rectangle, selecting an area to copy etc). Simply move the cursor (cross) around the screen to where you want to first corner to be and hit Fire, then move to where you want the opposite corner and hit Fire again. Use DEL to undo mistakes.

To get to 16-colour mode (the program is initially in 4-colour mode), click on the 'extras' icon (bottom right) and change the mode to Mode 0. Our list of the functions should tell you everything else you need to know. And if you create a masterpiece, why not send it to The *Kitsch-In* (the readers' art bit in *Reaction*) and maybe win some dosh.

• *GPaint* controls

Use joystick or cursor keys, selecting options by clicking on the menu icon.

RETURN/COPY	Select (Fire button)
SPACE/ESC	Quit/Call up menu
A	Restart current operation
DEL	Undo last operation
C	Change colour

walk this way

A HOME OF OUR OWN

Join us as we create a work of art, readers...

We start with a few shapes. There are filled boxes, with other shapes (ie the roof) drawn as outlines and then filled with a colour.

One of the best features of the *GPaint* prog is the fact that once you've drawn a shape you can chuck copies of it in as many places as you like.

Now let's find a brick pattern to do a wall with. You can also design your own patterns. The smoke is drawn using the *punkt* (dots) option.

We round the whole thing off by drawing a stylised sun (using *strahl*) and adding some text. Isn't it lovely? (*Not really Adam, no - ed.*)

Sprechen Sie Deutsch?

Er, that means "do you speak German?" (apparently). If you don't, you might find understanding the menu icons takes a while, though the drawings give you a fair idea. The help file gives full details. Want us to print the details? Tsch. Oh, OK. Here you go...

Punkt draws dots (can be used for a 'spray' effect)
Linie draws lines
Rahmen draws a rectangle
Box draws a filled-in rectangle
Stift changes the brush size
Muster allows you to select (or edit) a fill pattern
Disk takes you to the disk menu (ESC or SPACE to quit)
Löschen erases the current picture (you will be asked for confirmation)
Farben to select (or re-define) a colour
Invers inverts an area, changing it to the current colour
Linien draws a series of connected lines
Strahl draws a series of lines from the same starting point
Kreis draws a circle
Schiebe draws a filled circle
Kopie copies an area of the picture
Füllen fills an area with the current colour
Lupe magnifies a small area

The **'two magnets'** symbol in the bottom right takes you to another menu, which allows you to select modes, enter text, rotatie, enlarge, reduce, set printing options, etc.

readers' programs

Type-Ins

Loading: The *Type-Ins* are on side two, and must be run from BASIC. Type RUN" and the relevant filename (printed in bold below).

Want to use the *Type-Ins* featured in the mag, but you haven't got the time to type them in? Or maybe you can't get them to work? Then fear not, because stating this month *AA* will be chucking the *Type-Ins* from two months earlier on to the cover tape.

Of course, those of you who like typing them in still have every incentive to do so. (Who wants to wait two months for something they could use tomorrow, right?) But for all you on-the-move people who haven't typed in the listings from issue 78 yet, you'll find the progs on the tape. Here's the details:

MUSIC.BAS Use the top two rows of the keyboard as a kind of mini organ, thanks to Dan Pidcock's neat little noisebox.

OSCILL.BAS What on earth is an oscilloscope? Something that makes pretty patterns (representing sound waves) on screen when you play a tape, apparently. That's what Rory O'Hare reckons anyway.

PASSWORD.BAS + CREATE.BAS Two programs that go together to make up a password protection system, to use in your own programs. Run the *Create* program and enter your chosen password. Include the *Password* listing at the beginning of your program. The password will now need to be entered before anyone can run your prog. Cheers, Noel Stephenson.

WORDPRO.BAS Here's a spanky little word processor from Martin Elliot of MPD Software. Full instructions are included on screen.

Phew! This month's *Type-Ins* will be on the July covertape. Next month, look out for *Pair Shape*, *Bin-Dig*, *Disc* and *Tracker* (from last month's ish).

amscene

ACU IS DEAD!

After years as the 'official' Amstrad magazine, veteran title *Amstrad Computer User* is to disappear for ever from the newsagents shelves.

ACU, the remaining competitor to *Amstrad Action*, was edited in its later days by Chris Knight, who has now left the CPC market altogether. "It was sad to leave", he told us. "The CPC is still the best all round computer as far as I'm concerned."

ACU's closure will be seen by many as further evidence of the decline of the CPC market. However, with *Amstrad Action* just having achieved its second-highest circulation figures ever, we'd dispute that!

Although *ACU* as we know it is to be closed, the latest in the magazine's succession of proprietors plans to launch a replacement. *CPC Attack* is intended to follow in the footsteps of the old *ACU*, offering much the same content in a different package. We can't tell you any more, since the publisher itself has no definite information to offer. Indeed, the last issue of *ACU* is carrying a recruitement advertisement for staff to work on the magazine.

Amstrad Action has now 'seen off' no fewer than three competing Amstrad titles since its launch in 1985. We're not ones to crow about our success, but we think this is due to our continued determination to provide the best magazine possible for Amstrad users everywhere. Other magazines may come and go, but as long as there are Amstrads, there will be *Amstrad Action*...

● **The last of *Amstrad Action*'s original competitors bites the dust.**

Fury over 'tape-only' games availability

AA readers have been complaining for a long time about the non-availability of disk games in the shops. While it's still possible to buy full-price games from independent computer stores, they're always on tape only!

It makes commercial sense for retailers to stock games on a format (tape) that *all* CPC owners can use, rather than one which only half of them can use (disk). So, we thought, it's just retailers being a bit canny.

Until we got a call from Mr. Roda of Dynamite Videos Ltd in London. Mr. Roda also sells computer games, including Amstrad games. But not on disk. Why not? "Because you just can't get them!" Mr. Roda's wholesaler insists they're no longer available, which doesn't please customers. "Over the past month I've had a dozen customers come in wanting Amstrad disk games. When I tell them you can't get them any more they're furious!" He then went on to explain that the local papers were full of ads for Amstrad machines, because, he thinks, "people can't get games for them any more". "So you think that's the reason they're moving on to other machines?" we asked. "Yes, of course!"

The games industry works like this: a software house produces a game and manufacturers a certain proportion of the total number of games on disk, the rest on tape. That proportion is governed by how many disk games they think they will sell – and this is decided by the orders from distributors and wholesalers.

It's a chicken-and-egg situation. If a publisher produces too few disk games, people are going to be unable to find them, disk sales will be down, the publisher will react to the trend by producing even less... and so on. Which is DAFT! Amstrad owners want disk games, we want disk games, the retailers want disk games... who's knocking them on the head?

We aim to find out! In the meantime, if you're having serious trouble getting hold of a specific disk game, write to us at: **Disappearing Disks, Amstrad Action, Beauford Court, 30 Monmouth Street, Bath, Avon BA1 2BW**. We want to know the scale of this problem.

Oops!

'Oops' number one relates to our joysticks Buyers' Guide (*AA79*). Konix called us up and explained (rather reasonably, we thought) that the standard Speedking has only one Fire button – we'd picked up the Sega version. Furthermore, Konix (not Spectravideo, as we said) is now distributing Konix products, and has been for a year. You can contact Konix at: **Unit 35, Rassau Industrial Estate, Ebbw Vale, Gwent NP3 5SD (0495 350101).**

'Oops' number two was a tiny bugette in the *Powerbase* program we put on the *AA79* covertape. This bug affected the saving and loading of files (ulp). Putting it right is dead easy, though. Edit line 241, changing the third 'and' (between the two graphic characters) to 'or'. Resave the program, and that's it!

'Oops' number three (good grief) is in the word pro program on the same covertape. It keeps saying Printer Off Line when you try to print. That's because line 2290 should be a REM line. (Just add REM at the start or a single quote).

Wacci winners smiling again

Not long after we ran our Shopper Show Treasure Trail competition (*AA67*), user group Wacci, with Steve Williams at the helm, ran into financial trouble. The result was that the three winners, each of whom were due the contents of the home-grown and CP/M libraries, plus a year's sub to the Wacci magazine, were left high and dry.

Not really anyone's fault, but the people who really suffered were the existing subscribers. However, Wacci was taken over by a group of dedicated CPC fanatics calling themselves 'The Management' and headed by our pal Clive Bellably.

Well not only has The Management raised enough money to refloat Wacci, it has come to the rescue of our Treasure Trail winners! *Amstrad Action* has supplied 50 3-inch disks to copy the software on to, and has footed the bill for the subs. Meanwhile, Wacci has copied all that software on to all those disks for free and has sent them out to the prizewinners. Well done, chaps!

reaction

Election fever has gripped the *AA* staff, we don't think. Only Ange and Adam W actually voted. (Ange voted Labour, Adam voted for the Raving Loonies.) Rod couldn't be bothered, Maryanne isn't registered, and ADAM PETERS is an anarchist who thinks all politicians should be shot (and he was busy doing *Reaction* at the time). Write to *Reaction, Amstrad Action, Future Publishing, 30 Monmouth Street, Bath, Avon BA1 2BW.* You could win £10 cash!

GOOD OLD LOGON

So Amstrad are not very pleased about Logon Systems' *B-ASIC* program (the software that 'unlocks' the extra features of the ASIC chip found in the Plus machines)? Why should we be worried about Amstrad's feelings, when they are effectively abandoning their 8-bit users by stopping the manufacture of 3-inch disks?

When you buy a computer that boasts such things as 4096 colours, hardware sprites/scrolling, improved stereo sound etc, you should reasonably expect to be able to use these facilities in your own programs. Amstrad surely have no power to stop their customers from harnessing the power of their own computers.

Good luck to Logon Systems. If anyone has seen 'The Demo', they will know what innovative programmers they are, and I for one am looking forward to finding out (from my favourite PD librarian, who knows these people) what sort of demos they can come up with on the 6128 Plus.

As far as I am concerned, Amstrad should stop whingeing about computers that they are no longer interested in, and concentrate on producing the next generation of affordable home computers to beat the Amiga and ST – and I don't mean the 386SX 'games' PC which costs over £1000.

Andy Gibbons
Peterborough

Adam: We were rather hastily 'guessing' at Amstrad's likely response to the program. Strangely enough, the company's lawyers have actually 'cleared' *Striker and the Crypts of Chaos*, Codemasters' Plus-busting new game, which hacks into the extra hardware in the same way as the *B-ASIC* prog. Time for the flood-gates to open? Turn to page 44 for the full story...

GOOD OLD AMSTRAD

Who says Amstrad never enter into correspondence? "Rubbish," I say. Enclosed is my proof, and believe it or not they actually used the 'sorry' word. If you want anything done you write to the top, i.e. Alan Sugar himself, and you get a reply in record time.

I think this information will be of great use to other GX4000 users out there who have experienced 'difficulties'.

Secondly, I liked the *French Connection* feature and can't wait for some of their games when they come over. I must say that, unlike other mags, *AA* is actually getting better. You've just got the balance right between serious and games reviews. The *French Collection* report only goes to prove my point. *Amstrad Action* is well worth forking out for another subscription.

Ghafare Mohammed
Warley, West Midlands

Adam: We thought we'd print your letter from Amstrad in all its glory, Ghafare. Amstrad Information Centre, 1 St James's Road, Brentwood, Essex CM14 4LF is the important address, folks. Incidentally, turn to page 32 for a complete round up of cartridge software for the GX4000/Plus. And no, we haven't set this up so that all the letters relate to features in the current issue. It's happening all by itself. It's weird.

AMSTRAD

Mr S Mohammed

Warley
West Midlands
B68 9LD

Ref:

4th January, 1992

Dear Mr Mohammed

Thank you for your letter dated 20th December addressed to Mr Sugar, which has been passed to us for attention.

I was sorry to hear of the problems you are experiencing in obtaining software for the GX4000 and apologise for any inconvenience caused.

However, please be advised that you can contact one of the following addresses, who may be able to supply you with the required items, on a mail order basis.

Amsoft
P.O. Box 32
Super Screen
Pelikan Industrial Estate
Sunderland
SR4 9ER

Direct Sales
Amstrad Plc
Plant House
River Way
Harlow
Essex

Tele: 091 510 8787

Tele: 0277 230620

I trust the above information is of assistance to you.

Yours sincerely,

Mrs K Scott
Manager
Amstrad Information Centre

If further assistance is required, please inform us in writing at the above marked address and quote the letter reference.

byte-size

I must say 'hi' to Jamie Spencer because he thinks he is very cool. He picks his nose in history (I have this from reliable sources).
Marcus Durham
Farnham, Surrey

Adam: Er, when we asked you to write in and grass up your class mates for their personal habits (*AA77*), we were... joking!

Regarding Mr/Mrs/Miss/Ms Anon's letter from *AA77*, I too know at least two people who deal in software piracy. One of these people [name and address supplied] has been copying Amiga games and giving then away.
John Harrington
Horley, Surrey

Adam: Er, when we asked you to write in and grass up people who were pirating software (*AA77*), we were... joking! Surrey lads, huh?

Do you like lard?
John Harrington
Horley, Surrey

Adam: Crikey, it's you again. No I don't like lard, mainly because it's made out of pig's bottoms, and I'm a vegetarian.

Personally I think tie-pins should be used to stop all our ties getting soggy in oxtail soup.
Richie Nevain
West Harrow, Middx

Adam: Oh no, everyone's gone totally bonkers. We wanted your views on *Type-Ins*, Richie, not tie-pins. Gah!

Should I paint my walls purple?
Ben Styles
Kingsbridge, Devon

Adam: Yes, we think you should. Rod suggests you use a deep gloss and have turps substitute on hand to clean the brush. A 2" brush should be about right to go around the window frames, and some overalls might be in order. Send us a photo of the finished job.

I love the new Genesis album.
Grant Taylor
Dunfermline, Scotland

Adam: Aaaaaargh.

SWEARING SOFTWARE 3

With reference to the letters in *AA* issues 75 and 78 about Ocean's swearing message in *Dragon Ninja*. I can confirm this is true. The message is stored at memory address &5353 of the main loading file, just below the credit message, and it is as follows:

I quote, "F*** OFF YOU B*******", unquote.

I think Ocean has an embarrassing problem to clear up, as this is both childish and detrimental to the company and its customers. A friend of mine was sacked because of a similar stupidity (no, not the same programmer). The message is for Hackers or Crackers who interrupt the normal loading procedure. Unfortunately *any* interruptions can cause the message to appear. It's not even XORed (encrypted), something Ocean usually do.

Len Townsend
Accrington, Lancs

Adam: Crikey. We rang Karate Ken at Ocean. He said this: "The programmer can't remove it now, it's too late. It went in without us checking for that. The programmer must have left in by mistake. It's a message for hackers hacking into the game. What can I say?" Er, try 'sorry'.

I'M NO LIAR!

I think that I should point out the following to that crasshead Eddie Oliver [*Reaction, AA78*]:

FACT: That letter was written before the reward for the cheapest console was set, so I didn't have any reason to lie.

FACT: Cowed Mawhr is one of the most popular markets in Britain, millions of people go there every year and it's not a place where nobody's going to check up on me. It's on every Sunday and it's somewhere just before Rhyll, and everything's mega-cheap there and you're welcome to go there if you want. (Just imagine the look on your mum's face when she finds you can get ten bog rolls, all looking surprisingly similar to sandpaper, for less than a quid.)

FACT: In Blackpool, there are thousands of arcades, nightclubs and computer shops, all with very similar names. It's not that I can't remember the name really, I just can't remember which name goes with which shop, and you can get into a lot more trouble by giving the wrong name than you can by saying, "I can't really remember". I visited loads of places while I was there and basically I haven't got a clue what the shop's name was. Something like '... and son, electrical goods'. There, that narrows it down a bit for you Mr Oliver, you suspicious-minded person.

If it'll really satisfy you, if I win the "cheap GX4000" contest then *AA* can donate my reward to charity or something.

Tony Hutchinson
Saltley, nr Chester

Adam: We believed you all along, Tony. But I have the feeling your £6.00 Cowed Mawhr console is about to become irrelevant in this contest...

CONTINENTAL CONSOLE

I think Eddie Oliver is just jealous because Tom beat his price, and he's just saying that because he hopes to win himself. I wouldn't lie about a price and neither would Tom. Whoever he is.

I saw a GX4000 being sold for £1.99 at Fublong's Stores in Switzerland! (Honest.)

Simon Crabtree
North Allerton, N Yorks

Adam: Fublong's Stores in Switzerland...? Now there *is* somewhere that people won't be able to check up on. Rod reckons you got the exchange rate wrong, but he's an untrusting tyrant in general. Can anyone beat £1.99? ▶

the big question

Every month we will answer whatever question about the magazine itself we've had the most mail on that month.

This month: Why can't *AA* have a 'disk version' with a disk on the cover instead of a tape?

The answer: Because it would push the price of the magazine up beyond what we could reasonably expect people to pay. So Amiga and ST mags have disks then do they? Well, blank 3.5" disks can be picked up in bulk for only 35p each, whereas blank 3-inch disks (like wot the CPC uses) cost £1.50.

We only get back around half the cover price from newsagent sales (the rest is snapped up by the newsies and the wholesale outlets). So if something puts £1.50 on the price of an issue at our end, that means putting the cover price up by double that – £3.00 – and that's before even considering duplication costs! The cost of the tape issue will also go up, because a lower tape run means increased cost per unit. So we're looking at £2.95 for tape issues, £5.95 for disk issues, and chaos as newsagents try to work out how many to order of each.

Doesn't it make more sense to include a tape-to-disk transfer utility, and offer disk copies of the covertape for only slightly more than the price of a blank disk (£2.00)? *AA* is the only mag with a disk offer like that (sister mags *Your Sinclair* and *Commodore Format* do no such deal). We think we're going about it all the right way. What do you think?

Oh, and our Assistant Publisher Julie Stuckes is checking up on the practicalities of offering a disk verion of the mag for subscribers...

maryanne's mail

Hello folks, I'm back! After a bit of an argument (in which I was forced to raise my voice on more than three occasions), Rod and Adam finally agreed to pass on my mail and give me another one-off spot in the mag. So here I am! And here's a few of your letters:

"Why does poor Maryanne have to work for both AA and Your Sinclair. Personally I think she should start her own combined Spectrum and Amstrad magazine." **Marcus Durham, Farnham**

It's certainly hard work Marcus, especially since I work on each magazine during the most hectic part of the production schedule (the two weeks before going to press). But I actually enjoy working on two different magazines, with different sets of staff, different readers, and different design styles. It's all good experience, and working on *YS* does give me a welcome break from Rod and Adam and all their nasty comments.

"Maryanne, you should start 'waxing' those 'orrid fluffy poodles and fairies, it'll get you a lot further with Rodland, stupid woman!" **M Blackler, Devon**

I don't think I deserve to be called 'stupid', just because I don't think it's fun to kill small animals. There are quite enough computer games out there, puzzle games for instance, that rely on brain power and clever tactics rather than brainless violence, and I happen to prefer games like that. Maybe you hold the opposite view. I don't agree with you, but I'm not going to call you 'stupid' or anything like that, because that's childish.

"Why are Adam and Rod so nasty to Maryanne? I know what it's like to be continuously picked on, and it isn't enjoyable." **Jennifer Blake, Surrey**

It certainly isn't Jennifer. What you have to remember is that people *who take part in bullying* do so because they feel insecure. Because they think you're prettier or cleverer than they are, and they feel they have to prove something to other people. Most bullies are just sad individuals with no friends who need to persecute people to make them feel superior to someone else. Just ignore them if you can, Jennifer, they'll eventually grow up and get sent to prison.

And that's my lot for this month. Thanks for all your letters. Hopefully I'll get another spot in *Reaction* soon. Send your correspondence (female readers especially) to *Maryanne's Mail* at the normal *AA* address.

Lots of love, *Maryanne* xxx

ANGRY LETTER

D Shearer, do you know why you're called 'the one and only'? I'll tell you why, because you can't count higher than 'one' and you're the 'only' one that can think up silly nicknames like 'crazy' and 'destroyer'. You also deliberately said you would fight Mr Clarry on Monday the 20th knowing that it would have passed by the time the letter was printed. Believe me, it costs a lot to get to London from Scotland and you're much further north than I am.

Michael Davies, you tell disk owners to shut up, saying that we were saying "down with tapes". Well I looked through every *Reaction* column since April 1991, and I could only find one letter saying anything like that. You were trying to start a fight, weren't you? Well you've got one. (*Where?*)

James Rylatt, when you complained about Scull PD you stated "Go on, give me a plug instead of that library north of the border". Do I detect a hint of prejudice in that?

D Ching, I've got two words to say to you...

Stuart Mainland
Ayr, Scotland

Adam: We've printed this letter to remind you that this is the sort of letter we're not going to print any more.

biro-buddies

Yo, international corresponding dudes, fancy a pen-pal in this land or elsewhere in this big throbbing globe of ours? Here are a few people waiting to hear from YOU:

I have an Amstrad 464 with tape only and I would like to contact other Amstrad users. I am a teacher of physics/chemistry in a secondary school.
Abderahman Boulatrous, 169 cite 01/11/54, 43240 Oued Athmenia, Algeria

English male pen-pal between 12-13 wanted. Must own CPC 6128 or 464. Also wanted: copy of *Type-Ins* from *AA* issues 9 or 41. Will pay good money within reason.
Donal, 010 353 21 361316 (Ireland) after 8pm

Wanted: A pen-pal aged 12-14 who will swap or lend games.
Tracy, 0905 352689

Anyone after a pen-pal in nuclear free New Zealand? CPC 6128 owner seeks pen-pals in England/France to swap software/demos & PD. All letters answered, assured. New Zealand users write, as well as overlooked owners in Egypt, Malta etc. New Zealand owners include return postage.
R Priest, 8 Motueka Street, Nelson, N Zealand

Pen-pal wanted to swap and lend games, age 14 (male/female). I own a 464 (tape) only.
Derek Altorjay, 6 Glenavy Street, Wentworthville, 2145 Sydney, NSW, Australia

If you would like to appear in this column, send your details on a postcard or stuck-down envelope to: Biro-Buddies, Reaction, Amstrad Action, Future Publishing, 30 Monmouth Street, Bath, Avon BA1 2BW. You know it makes sense. (Unfortunately we are only able to print first names and phone numbers for UK/Eire residents.)

time to get serious!

Worley's World

Peter Worley is back, and he's got a bee in his bonnet that's bigger than a very big thing. Is Peter a mad self-opiniated loonie, or is he the only man in Britain who talks any sense? Got any views on Peter's latest rant? Write to: PETER'S POSTBAG, Reaction, at the usual AA address...

Serious CPC users are under threat. The Amstrad has long been lauded by *Which?* magazine as the best home computer you can buy (Amiga et al included), largely because of its excellent combined serious and games use. Yet for the last couple of years Amstrad has been selling the machine as a 'games only' computer, and now we hear that the 'official' Amstrad magazine, *ACU*, is to follow suit, completely dropping its serious content in one fair swoop.

The Firmware Manual has been out of print for years... Technical back-up from Amstrad themselves is next to non-existent (an often useless 48p a minute phone line)... Serious CPC users are being left to rot. Our only hope is to get together and help each other.

This is starting to happen. The WACCI user group offers a telephone helpline and serious info in its monthly fanzine... The *Print-Out* organisation is producing its own firmware guide... Demo-writers on the continent are starting to push back the boundaries of the CPC's graphics and sound capabilities.

The CPC is the best home computer around. The games you can get for it are brilliant – I like *Pang* and *Chip's Challenge* as much as the next person. With newly emerging original software houses (Titus, Hi-Tec, etc), a great number of 'old' games yet to appear at £3.99, and a large games market in France, the Amstrad has years in it as far as games are concerned.

But it's time for the massed ranks of serious CPC users to ensure that they are not sidelined in the process. The call goes out to anyone interested in programming (whatever their level of expertise), anyone interested in word processing, business, art, writing games: Let us pool together our knowledge and skills, and channel it through the pages of the only remaining national magazine that serves us all – *Amstrad Action*. One for all and all for one. Thank you for listening.

Peter Worley
Ilford

Peter's postbag

I totally agree with Peter Worley. Aliens *should* be treated as people, instead of cosmic waste matter used only for target practice. Wouldn't we be worried if we thought that a race considering themselves superior enjoyed playing games involving exterminating "human junk from the planet Earth"? I would feel distinctly unwanted, and maybe this is how the aliens feel.

In fact, I am tempted to go further and say that they might even be seriously offended if they visited the planet, and their first impressions of humanity consisted of a set of barbaric, warlike customs. There would then be the possibility of a war, which I am sure we all want to avoid.

Finally, please bring back Emma Broadley.

Adam Lloyd
Tunbridge Wells

I would like to say that I entirely agree with the comments made by Peter Worley in *AA78*, apart from a few things:

1) What if NASA found a bunch of alien weirdos that looked exactly like armchairs or toothbrushes? How do you think they would feel if they saw their cousins slaughtered by a bloke (or blokess) with a ray gun?

2) What's wrong with killing animals and lower life forms? Just imagine, no more next door's dog to relieve itself on your garden fence.

3) Why has Peter got such a big nose? He looks like a flippin' elephant!

John Harrington
Horley, Surrey

Who on earth does Peter Worley think he is? Saying aliens are humans (or something like that). In most games nowadays the baddie aliens try to invade earth (or another planet), so what are you going to do? Ask 'em round for tea and biscuits? No, I wouldn't either.

Robert Forster
Leeds

Adam: Er, we said we were going to feature more of your letters on consoles this month. But we lied. That's going to be in next month's *Reaction* instead, along with Peter's second consoles letter. OK?

photo compo

KARATE KEN

Well what a disappointing response to last month's *Photo Compo* so far, chums. Mind you, the fact that these letters pages are actually being written a week before last month's issue first appears in the newsagents might have something to do with it (ahem).

In the meantime, here's a couple of video stills from Ken Locksley of Manchester. Ken is the product manager for top softies Ocean, and he's also a bit of a karate dude. He's in contention for the British karate team, apparently, so this is one bloke not to laugh at in the street.

However, this karate business is not without its hazards. Poor Ken got his nose broken (twice) in a karate tournie a few months ago, and here are a couple of clips from the video that was made of the whole event. There are some much gorier bits, with blood and bits of nose flying around in them, but our publisher wouldn't let us use any of those. Tsch.

Anyone who wants a video (certificate 18) of the whole contest, nurses, bandages and all, should send a cheque or PO for £49.99 (made payable to 'Mr K Locksley') to Ken's Broken Nose Video Offer (AA), Ocean Software, 6 Central Street, Manchester M2 5NS.

These pics form the first instalment of a – probably incredibly short – series of images of leading software industry figures sustaining injury in sporting encounters.

Next month: Richard Eddy from Codemasters breaks a fingernail during a game of tiddlywinks.

AA guide to germany

It's the third instalment in AA's 'waste of space' series on the European community. This month we aim our xenophobia at the country that gave us Adolf Hitler and long brown sausages.

Location: Hard to pin-point exactly. It's a sort of ink blot shaped bit in the middle of Europe somewhere.

Population: 78,043,714. (comprising 61,306,700 from West Germany, 16,737,000 from East Germany, and the 14 soldiers who patrolled no-man's land in Berlin.)

Language: It's only possible to speak in an authentic German accent with a phlegmy sore throat.

Currency: Marks. There's about three of these to the pound, and they're so named because you need a 'spencer' (that's German for thousand) of them to be able to afford to shop at Marks & Spencer. (*Are you sure about this? – ed.*)

CPCs: There's a few around, and a magazine *Amstrad PC International*. The country is dominated by local dudes Commodore though (grrr).

What to see: There was only ever one thing to see in Germany, the Berlin Wall, and they've knocked that down (it's the Berlin Pile of Rubble now).

Useful Phrases: "Vorsprung durch technic" (Er, I would like to buy a car, perhaps) "Achtung" (Excuse me sir, you're about to tread on a banana skin) "Goten dasch die toten hosen ein volkswagen golf" (Good morning)

Things to do: Buy a big pile of beach towels and travel the country chucking them on deck chairs. Put on a pair of stupid shorts and a silly hat and go to a beer festival.

Warnings: If you see a group of skinheads wearing swastikas coming towards you, cross the street. Don't wander the streets of Hamburg after midnight shouting "one Geoff Hurst, there's only one Geoff Hurst".

Famous Germs: Karl Marx, who believed that the working class should rise up and overthrow the forces of state power; Karl-Heinz Rumeniger, who believed that you should always go for the far post at a corner; lots of other people called Karl.

the kitsch-in

What's cooking in *the Kitsch-in* this issue folks? Yet again the AA offices have been bombarded with typical pieces of computer generated "art". Art Editor ANGELA NEAL passes judgement on the best of the bunch...

■ **This shapely young lady was created by Lee Simpson of Middlesex. Alough impressed by the realism of this piece I felt compelled to blot out the important bits in the interest of our female readers. Below is another of Lee's works – I like blue and think this is a pretty funky use of perpective.**

■ **Surprise of surprises Lee Simpson did this one. Characters from the sequel to *Dragon's Lair* (*Space Ace*) are pictured. Cool with me!**

■ **These two offerings were sent by Tom Ash of Bingley. This guy is regular contributer and won a wad in the Crap Poem of the Month compe in AA77. Good old Donald Duck, beats space stuff any day. Maryanne sent her likeness to her mother who now displays it proudly on her mantlepiece.**

■ **Above is this month's £10 winner drawn by S Thomson (who incidentally signs himself Yours Amstradly. What a freak). A breath of fresh Scandanavian air swept through the office as *Winter* appeared on my screen. My advice is buy some paints with your winnings and try selling something to Cadbury's.**

■ **Finally, from Simon Warford in London, a mean looking guy if ever I saw one. I'll be careful crossing the park tonight!**

letters readers letters readers letters readers

Meet the Team

We've got love in our hearts, and we'll share it with you. So put a smile on your face, here's the *AA* crew...
(Who let Maryanne write the intro? – ed.)

ROD LAWTON
My favourite cartridge game is ***Pang*** – it's simple, addictive arcade fun which uses the cart hardware to good effect. Lots of levels, lots of fun, especially for two players.

ADAM PETERS
My fave cart is ***Klax***, even though it makes my brain explode (which consequently messes up the office so I get told off by the cleaners). Mind you, fresh air often helps.

ADAM WARING
I like *Pang* because Rod likes it. I also like ***Burnin' Rubber***, which is a brill game, even though it was given away free. And I like rubbing my nose up against shop windows.

MARYANNE B
I like ***Operation Thunderbolt***. It's great, gunning down those scummy enemies and watching the blood spew from their twitching bodies. *(Hey, who wrote this? – Maryanne.)*

CHERYL BEESLEY
Pro Tennis Tour is ace. I play a lot of tennis. I'm also into aerobics. I swim twenty lengths before breakfast and jog six miles a day. *(I think I'm going to be sick – ed.)*

on the GRAPEVINE

What's happening in the wonderful world of CPC gaming this month then? The *AA* team (on the left) has been waggling like mad through the latest releases. ADAM PETERS brings you all the news...

JOYSTICKS AHOY!

No sooner had we put the finishing touches to last month's joystick survey, than another big box of 'sticks turned up in the office. We ripped open the box and all these lovely Euromax 'sticks came tumbling out.

First up was the **Prof Competition 9000** (£15.95), manufactured by Suzo but distributed by the Bridlington crew. It's a bit of a stiffie,

and is well outclassed by **The Arcade** (£19.95), which aside from looking like a marital aid also merits comment for an ideal mix of sturdiness and manoeuvrability. Nice one, if a tad expensive.

The **FlashFire** (£12.95) is the most worthy of comment, since it comes in a special Amstrad version, complete with splitter lead (allowing you to attach two joysticks to the CPC's single port). It's one of those bulky, suckers-on-the-table 'sticks, with three Fire buttons (two on the shaft itself).

And then there's the **Zoomer** (£39.95), which looks like the steering wheel of an airplane. Oh look, a press release from Bondwell, another joystick company. What is it up to then? Oh, it's got an airplane style 'stick too. It's called the **Quickshot Aviator 1** (£34.99), and it offers altitude and level indicators, four Fire buttons, and loads of other stuff. Crivens!

Euromax can be contacted on ☎ 0262 602541, while those Bondwell dudes live at ☎ 081-365 1993.

CAPTAIN DYNAMO

You remember what we were saying a few months ago, all about how superheroes are getting younger all the time (*Baby Jo* was the cause of that particular rant)? Well guess what, it's triple lemonade shandies all round cos our top mates at Codemasters are doing something to stem that tide. Their new superhero is an incredible... wait for it... 75 years old!

This is the plot: Mad professor Austen Von Flyswatter (age 72) has nicked all Lady Phillis Uppenhoofen's diamonds (she's 81, by the way) and has bogged off to the moon with them. So Ernest P Dynamo (our hero) bungs on a silly costume and shoots off to the moon himself.

The Word Is Out

Win a signed photo of Nigel Mansell!

"And... YES! I'm sure I heard a persistent, droning whine from the engine of Mansell's car as he passed the commentary box..."

"Er, I think you'll find that was Nigel himself, actually, Murray."

Oh, but we all love him really, don't we? 'Our Nige' is set for a decent shot at the Formula One drivers' title in 1992 after coming a narrow second to Senna last year (grr...).

This is so exciting that top softie Gremlin is to produce a game based on the Grand Prix exploits of the Brummie superhero. It'll be like a cross between *Lotus Esprit Turbo Challenge* and US Gold's *Super Monaco Grand Prix*.

But wait! The Gremlin crowd aren't sure whether or not to produce 8-bit versions of the game! They don't know how many people are going to be interested in another classic racing game, so they got in touch with Britain's leading CPC magazine, and asked us if we could find out what our readers thought of the idea.

But why? What's the point? Flyswatter hasn't hurt anyone, Upperhoofen had the diamonds insured so she'll get the money back, and why does Flyswatter have any less right to own them than she does? And what's he going to do with all these diamonds anyway? What can he buy on the moon (apart from cheese)? Daft plot, daft plot, daft plot (*calm down Adam – ed*)...

Anyway, *Captain Dynamo* is due out in the summer. It's a vertically-scrolling platform game with loads of puzzles and stuff in it. All we've got to go on so far is a line drawing of the main character, but we'll bring you more details when we get them.

Captain Dynamo (Codemasters) will be out this summer, priced £3.99 cassette.

GRELL & FELLA

Oh no, Codemasters has really gone and done it now. We all know its characters are pretty cutesie (they call Dizzy "a little lush"), but this one really takes the custard cream.

Grell & Fella is described as "the world's first garden-em-up", and it features (bleurgh) a fairy, (chunder) a goblin, and (heave) wabbits, froggies and tweet fluffy birdies. Aaaaaaaaargh.

Seeing as we're the sort of people who've been trying for weeks to amputate the head of Maryanne's teddy bear, *we're probably not the best people to comment on "tweet", "fluffy", "fairy" like* things. So we'll just print some extracts from the press release instead...

"Played as a horizontally-scrolling platform/combat game, the player can make use of both Grell and Fella's different capabilities. The aim is to reconstitute the [sorcerer's] garden by turning bad earth into healthy earth and giving the creatures their natural goodness back." Natural goodness, isn't that what breakfast cereal is made out of?

"Fella's supersonic flying and fairy dust sprinkling capabilities help the earth become good so healthy plants can grow when Grell runs along the landscape, in a beautifully animated fluid style, planting seeds."

Well there's only one thing we can say to that, and it begins with "we're going to throw" and ends with "up". Bleeuuurgh.

Grell & Fella (Codemasters) will be out in May/June, priced £3.99 cassette.

TOUCHDOWN!

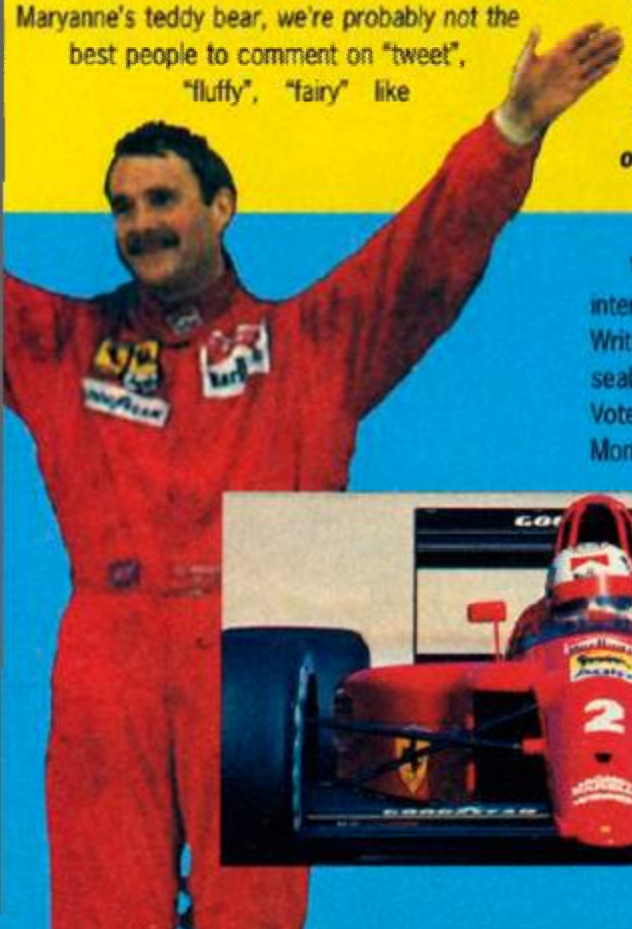
Yo American football fans! Get ready to rummy in the scrummy and '28-10-3-huh!' your way to 4th and 3rd on the home run line, because some groovy dudes called Strike Force Design up in Sunderland are about to release a CPC management game based on that game of rumbles and tumbles and great big shoulder pads, oh yes, oh yes, oh yes indeed.

(Pause for breath after unfeasibly long sentence.)

Touchdown! is a game of strategy. You take over any NFL team, make coaching decisions, buy and sell players, get info on the opposition from your scouts, scour the college leagues for new players, etc.

Unlike most management sims, *Touchdown!* also offers a lot in the way of graphics. We'll bring you a full review the moment we get hold of a copy of the game. So don't touch that dial...

Touchdown! (SFD) is due out soon, by mail order only, priced £5.95 cassette, £14.95 disk.



What do you reckon then, readers? Would you be interested in an Amstrad version of *Nigel Mansell*? Write your answer 'yes' or 'no' on a postcard or sealed-down envelope, and send it to: Nigel Mansell Vote-In, Amstrad Action, Future Publishing, 30 Monmouth Street, Bath, Avon BA1 2BW.

The first five replies plucked out of the bucket on 18th June 1992 will win their senders signed photos of Mr Moustache himself (hurrah!). We'll pass all your votes on to Gremlin, and hopefully so many of you will vote 'yes' that they'll have no choice but to produce the game. Watch this space...

The Charts

This chart is compiled by Gallup Ltd. (© European Leisure Software Publishers' Association Ltd. 1992)

FULL-PRICE

1. **WWF Wrestlemania** Ocean
2. **Dizzy's Excellent Adventures** C/masters
3. **Dizzy Collection** Codemasters
4. **Cartoon Collection** Codemasters
5. **The Simpsons** Ocean
6. **Terminator 2** Ocean
7. **Big Box** Beau Jolly
8. **Manchester United Europe** Krisalis
9. **2 Hot 2 Handle** Ocean
10. **Soccer Stars** Empire

BUDGET

1. **Italia '90** Tronix
2. **New Zealand Story** Hit Squad
3. **Double Dragon 2** Tronix
4. **Bubble Bobble** Hit Squad
5. **F-16 Combat Pilot** Action Sixteen
6. **Bubble Dizzy** Codemasters
7. **Rainbow Islands** Hit Squad
8. **Chase HQ** Hit Squad
9. **Robocop** Hit Squad
10. **Moonwalker** Kixx

making a game of it

Read about Seymour

PART ONE

Ever wondered how a computer game is put together? Wonder no longer. It's part one of our exclusive series on game development, and ADAM PETERS is on his way to Leamington to talk to Codemasters...

A damaged viaduct, they said. As it happens, this is one of the better excerpts from the British Rail book of excuses. Better than "leaves on the track", "the wrong kind of snow" or "elephants in the butter" at any rate. Not that a decent excuse is much consolation. Especially since the viaduct in question is the Leamington Spa viaduct, and I'm on my way to see Codemasters in, you guessed it, Leamington Spa.

Five hours of missed connections, cancelled trains, early terminations and standing around on platforms later, and a bedraggled and bedoggled figure crawls through the front door of Lower Farm House. I'm cold. I'm wet. miserable. I spot a familiar grinning, bloated white chap in the corner of the room, and stagger over to share my tales of rail travel grief.

Half an hour of pretty one-sided conversation later, someone comes over and points out that I have been talking to a stuffed toy. Humph. Richard Eddy and Paul Ranson show up on the scene, shake their heads in a perturbed manner, and usher me into a room where they ply me with cups of coffee.

The Leamington posse

Here's the Codemasters game development posse. From left to right: Paul Ranson (Development Manager, 25), controls game development from start to finish; Richard Eddy (PR Manager, 23), helps with development, liases with the press; Shân Savage (Creative Manager, 25), plans illustrations, monitors the graphics; Stuart Regan (Production Manager, 24), keeps everything to schedule.

Richard has a cold, his first illness for three years apparently, and Paul has been up all night working on 16-bit stuff.

Richard sits the stuffed toy down by his desk. We call him a potato (the toy character, that is, not Richard), the Codies if pushed call him a lard ball (the toy character, that is, not Richard), but you probably know him (the toy character, that is, not Richard) as Seymour, everyone's favourite arcade adventurer.

Paul Ranson is the man who originally gave birth to Seymour, while he was working for Big Red Software. Big Red had designed *Dizzy 4* (*Magic Land Dizzy*) and were asked to write the next Dizzy game, *Dizzy 5*, in time for the following Christmas.

What they created was a game that placed Dizzy for the first time in a non-fantasy environment. There was a tree hut section to tie it in with the previous game, but the main plot saw Dizzy as a movie star, travelling through lots of different movie sets, meeting up with all his Yolk Folk mates (who were playing the other characters).

softie spot

RAID THE PALACE

As well as his regular Codemasters trips, each month Adam will go shopping in a different town or city, and drop in on a software company while he's there so he can claim back his train fare. This month he visits Hyper Hyper in Kensington (London) and Palace software...

Shopping for trendy clothes in the capital? Try Hyper Hyper in Kensington High Street, two levels of stalls from some of the hippest club and street wear designers in the world. Better still (and more expensive), there's Newburgh Street – just off Carnaby Street – where you'll find serious big name designers peddling their wares; Junior Gaultier, Pam Hogg and John Richmond (the fab *Destroy* and *Love, Lies, Religion* collections), to name but three. For the best in rave clothing, visit Mash in Oxford Street, which is also the home of Passion FM, ace dance radio station.

Fancy a bite to eat? The West End is littered with pizza stalls which used to whack out slices of gungy pizza at only 99p a shot. The price recently rocketted to £1.30, which is still pretty reasonable value for money. The West End is also jammed full of record, tape and video shops: two Virgin Megastores (one at either end of Oxford Street), three HMV shops (two in Oxford Street, one in the Trocadero centre) and a Tower Records (Picadilly Circus).

Want some computer software to go with your *Destroy* jacket, vegetarian pizza and Jesus & Mary Chain CD? Then mosey on down to the Virgin Games Centre in Tottenham Court Road (part of the Virgin Megastore), which has a large stock of CPC software. Hurrah! And now to find a software company so I can get my travel money back.

Aha, found one! Lurking up a rusty set of steps in a Victorian courtyard, a stone's throw from King's Cross station, we find the bods and boddesses of Palace Software. Here comes a man with a moustache. It's Palace boss Pete Stone. Hello Pete.

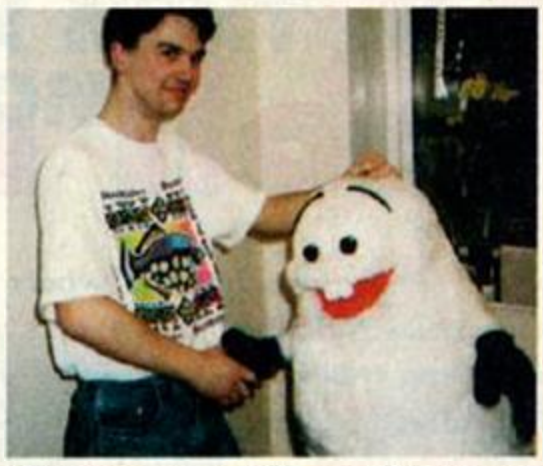
■ **Palace HQ, a throbbing, buzzing hive of throbbing and buzzing (oh yes).**

"Hello Adam."

What's the SP on this Palace/Titus business then?

"Both companies are owned by the same company and both have been going for some years, with Titus based in Paris and Palace based in London.

■ Some of the glamorous young things that hang around the Codies front office, in staged 'diary checking' pose.



■ Paul Ranson and Seymour finalise an international marketing deal. Seymour is currently writing a game about Paul.

***Dizzy in Movie Land* it was called**, and it was only a few days away from completion when someone up top decided that Dizzy shouldn't be taken out of a fantasy setting. Big Red had two choices; they could either scrap the whole (virtually finished) project, or else come up with a new character to star in the game.

A few sketches later and they had come up with a potato-shaped dude, which a passing person referred to as looking like a friend of theirs called Seymour(!). And so Seymour the superstar was born. All the other Dizzy characters in the game were replaced with human figures, and *Seymour goes to Hollywood* was the title on the loading scheme when the game eventually hit the shops (on the Cartoon Collection compilation).

After the arcade spin-off *Super Seymour* (christened *Bombjack 2* by the cynics), the time has come for the next 'proper' Seymour game. The Codies have become aware of three common criticisms of their arcade adventure games; the games are too big (there's too much boring walking), you don't know how far you've got, and you often die far too easily.

According to their research, *Prince of the Yolk Folk* is their most popular arcade adventure to date. It's also probably the shortest one they've done. With *Seymour in the Wild West* they intend to address the problems raised, creating a game that is split into separate (shortish) sections.

The game involves Seymour donning a cowboy hat starring in a *The Way West/ Big Country* style film. The film is all about Seymour's journey across America from the East Coast to the West Coast. The game will take place in bite size chunks, each section being a different day.

For instance, the first part will be day one of the filming, with Seymour travelling from the harbour to the railway station (where he buys a ticket and boards the train). The second day would see the train being ambushed by Indians. There would also be scenes of travelling on a wagon train, working in a gold mine, etc.

Or at least, that's probably what the game will be like. At the moment *Wild West* consists of nothing more than a graphic of Seymour in a hat and a few ideas scribbled down on paper. Over the next couple of weeks, the Codies posse will be thinking up puzzles (20-30 of them) to include in the game, and starting work on the map.

We rejoin the crew in five weeks time, and learn all about how they knock up the graphics. Don't miss next month's issue for the details...

Tracing the code

Codemasters was founded in 1986 by the very youthful Richard and David Darling, freelance programmers to the rich and beautiful. Rich and Dave recruited a few pals, including the 'famous' Oliver twins, and started banging out programs at £1.99 a shot (most games at the time were selling for a tad more, £9.99 usually).

■ It's Rich and Dave (or is it Dave and Rich?). CD Games Pack, grrrr...

Yep, the Darlings were singularly responsible for creating the budget games market, and the Oliver twins were singularly responsible for creating the little egg chap that became the Codies' biggest asset.

Today, Codemasters are the second biggest CPC software house (after Ocean), and their HQ (a farmhouse set in fields close to Leamington Spa) is getting bigger by the day. A further building is under construction there even as we speak.

■ Chez Codies. The concrete bungalow turned Tudor mansion that's home to Dizzy, Seymour and all their pals.

Palace distributes Titus software in Britain and Titus distributes Palace stuff in France."

We've heard that you've stopped doing Spectrum versions of games. Do you intend to continue producing stuff for the Amstrad?

"Yeah. The CPC is very strong in France and the tie-up with Titus means that it's worthwhile for us to do Amstrad versions of games where possible. But unfortunately some of the things we're working on are just not possible on any 8-bit machine."

Any plans to set up a budget label?

"We have been vaguely thinking about it. A number of Palace titles are coming out through Gremlin's budget label, GBH."

What other games might we have to look forward to this year?

"From Titus, one that I imagine is going to come out on the Amstrad is Crazy Cars 3. Palace is working on the third Barbarian game, Super Barbarian, which is also likely to appear on the CPC later this year."

Just then a strange laughing geezer wanders in. He turns out to be Charles Goodwin, the bloke who programmed the Amstrad versions of *Prehistorik* and *Titus the Fox*. Yo Charles, how long did the games take to program?

"About three months each, including the fine tuning (removing of bugs) at the end. The graphics are done first, drawing the sprites and backgrounds – these are the foundation for everything else."

The graphics look like a 16-bit version. How come?

"They're all converted from the PC or the Amiga. It's the same graphics, cut down with some sort of special program. The format of the CPC's screen is a bit of a problem, but then I suppose people say that about any screen format."

■ Look out kids, it's shadowy *Titus the Fox* (see p 30) programmer, Charles Goodwin.

■ Here's Pete Stone, the self-styled Palace boss. He knows the score.

Any problems getting everything to fit into the memory?

"Yes. Everything is expected to work on the 464, so you only have 43K to play around with. The map for the playing area takes up 16K of that. You always try to fit as much as you can from the 16-bit versions into the games. Every level fills up the memory, and there are large chunks of code specific to each level [ie multiload data]."

Cheers Charles, cheers Pete. I'm off down to Ministry of Sound for a bit of a bop. Next month I'm going to buy some shoes in Manchester (oh yes, and drop in on Karate Ken at Ocean).

Readers' poll results

Remember the poll on the survey form in AA77, where we asked you to pass judgment on 1991? Well, the ballot papers are in (all 1200 of them), the processing system (ADAM PETERS with a pen and paper) is up and running, and here come the results...

Best Full-Price Game

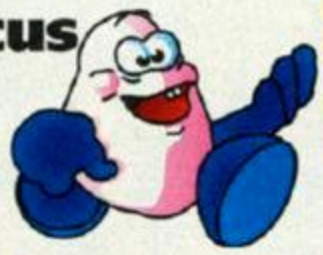
1. TURRICAN 2
2. Smash TV
3. Final Fight
4. Prince of Persia
5. Terminator 2

Worst Game

1. PIT-FIGHTER
2. Santa's Xmas Capers
3. 'Cisco Heat
4. Super Space Invaders
5. Teen Mut Hero Turtles

Best Budget Game

1. SEYMOUR GOES TO HOLLYWOOD
2. Magic Land Dizzy
3. Turrican
4. Continental Circus
5. Chase HQ



Best Magazine

1. AMSTRAD ACTION
2. Viz
3. Radio Times
4. Mean Machines
5. Shoot!

Best Software House

1. OCEAN
2. Codemasters
3. Gremlin
4. US Gold
5. Infogrames

Best Film

1. TERMINATOR 2
2. Robin Hood (Costner)
3. Home Alone
4. Robin Hood (Bergin)
5. The Addams Family

Best TV Programme

1. STAR TREK NEXT GENERATION
2. Games Master
3. Quantum Leap
4. Only Fools and Horses
5. Neighbours

Best Pop Star/Group

1. BRYAN ADAMS
2. Queen
3. Michael Jackson
4. Guns 'n' Roses
5. Hammer

Cool Dude

1. ROD LAWTON
2. Bart Simpson
3. Adam Peters
4. Arnie
5. Edd The Duck

Polls apart

Two weeks it took me to sort through all your replies, readers. Long nights spent scribbling numbers in a notebook when I could have been... er... I don't know, asleep or something. Sigh.

So what did you have to say for yourself then? The 'gamesy' categories were all fairly clear-cut with the winner easily identifiable after only a few replies. Your opinions pretty much mirror ours, with only one major surprise. Was *Teenage Mutant Hero Turtles* really that bad?

The Best Magazine category was inevitable going to be ours, if only due to the slight advantage of *AA* being the only magazine that everyone replying to the poll will have read. The actual figures came as a bit of a surprise though, with the mag picking up an astonishing 673 votes (second place *Viz* scored 21!) *ACU* and *White Dwarf* share 6th place with seven votes each.

Whilst the Magazine category saw the biggest lead, the TV one saw the bitterest battle. *Games Master* and *Star Trek* were always running neck and neck, with the latter eventually winning by a mere two votes. As for the Film category, how many of those *Robin Hood* voters meant to vote for *Prince of Thieves* (starring Kevin Costner) rather than the other version starring Patrick Bergin? If only we knew.

A certain amount of egotism came to the fore as over 25% of you voted for yourselves in the Cool Dude category, and a few of you voted for your own bands in the Pop Star category. (Colin & the Syco-Megas? Come on Colin, can't you come up with a better name for your group than that?) *The KLF* came 6th in the Pop Star bit.

The most ridiculous conflict of the whole shabang came in the Cool Dude category, where John Major and Edd the Duck did battle for 5th place, with Edd eventually coming through courtesy of a single vote (see, every vote counts).

A whole host of brothers, sisters, dads and bosses, together with a dozen maths teachers (maths teachers, crazy guys huh?) collected votes in the Idiot category, which, er, I went on to win. Cheers, folks. Awarding Rod the Cool Dude trophy only makes it worse. Grrr, just you wait.

Quite a few people voted their own birthdays as Event of the Year, though the best entries in this category were "my brother farted in a school play", "my sister smashed all the plates, ha ha", and "I exorcised Satan from my table-lamp, thus saving the world."

The best reply to any question was the chap who put "Walt Disney" down for Cool Dude, pointing out that the cartoon king is "in cryogenic suspension" and is therefore very cool indeed. Tsch. Oh well, roll on next year's poll. Here's hoping less of you vote then, these blisters on my fingers will take weeks to go away. Grumble, moan, whimper, etc...

Idiot Of The Year

1. ADAM PETERS
2. Timmy Mallett
3. John Major
4. Paul Gascoigne
5. Rod Lawton

Event Of The Year

1. THE GULF WAR
2. Christmas
3. AA getting covertapes
4. Release of hostages
5. Rugby World Cup

BrunWord

Guaranteed!

Peter Brunning writes:-

During a recent conversation in our village pub the question was put to me "You must have loads of expensive computer equipment?" I puzzled for a moment then replied "No! I write programmes that run on a low cost computer".

At Brunning Software we do have several other types of computers but 95% of our computing is done using the CPC6128 and 6128 plus machines. That's why we really can guarantee there is no better word processor or database system for these computers. Look at this advertisement. Typed into BrunWord (ROM), spelling checked, printed out at A3 size, and photographically reduced to A4 by a local firm. Every dot of ink in this advertisement, including the teddy and the picture, came directly from the programme via a 24 pin wide carriage printer.

Our orders are processed using Info-Script and programmes are written using BrunWord, all on 6128 machines, and before you Ho Ho, let me add that BrunWord 6128 is at the heart of all our programmes. The ROM has many more facilities and a great deal of convenience but all the editing, general text processing, and spelling checking are just the same in BrunWord 6128 (just £30!).

Case Histories

'Mr G of Nottingham' was mentioned in our Oct 89 ACU advert. I recall reading his first letter in June 89 and wondering if it was a setup. He was using the full Protext system on ROM and asked several searching question about Info-Script. He purchased Info-Script in July 89 and wrote back ***"big improvement on my Protext and Pro-filer.... vastly superior speed"***. In Oct 90 he upgraded to BrunWord Elite and wrote ***"Brilliant! Brunning have done it again.... unrecognisable DMP2000, I never realised it was capable of producing such clear accurate print"***. In Oct 91 he upgraded to BrunWord ROM and responded with a 30 minute telephone call full of praise for the ROM's new facilities.

'Mr L of Australia' was also mentioned in our Oct 89 ACU advert. He purchased BrunWord in July 88. When he took advantage of our update offer in June 89 (Yes! we do send update offers to Australia), he wrote ***"I found it a very easy word processor to use, and the more I use it the more I like it"***. In Oct 90 he updated to BrunWord Elite. In Nov 91 he updated to BrunWord ROM and in his letter he wrote ***"Excellent word processor, easy to use, without prolonged reading of the manual. Keep up the good work"***.

References

ACU	SEP	1990	Page 58/59	- Encryption.
ACU	OCT	1990	Page 56/57	- Headline.
ACU	DEC	1990	Page 24/25	- Info-Script.
AA	FEB	1991	Page 18	- BrunWord 6128
ACU	MAY	1991	Page 42/43	- BrunWord Elite.
ACU	JUN	1991	Page 60/61	- Elite Font Editor.
ACU	AUG	1991	Page 20/21	- BrunWord ROM Module.
ACU	DEC	1991	Page 44/45	- ROM Module Secrets.

(AA = Amstrad Action, ACU = Amstrad Computer User)

ROM Module £125

The BrunWord ROM is a black resin coated module which plugs directly onto the expansion socket of the CPC6128 or the 6128 Plus. Forget about ROMs and ROM boards, simply plug it on, type !BW and the entire BrunWord Elite system is instantly ready for use. 256K bytes of memory already loaded with programmes and data.

On the ROM we have BrunWord Elite for 9 pin and 24 pin printers, 10 'type setting' fonts for 9 pin printers, 8 'type setting' fonts for 24 pin printers, BrunSpell, 30,000 word dictionary and Info-Script (powerful relational database). KDS ROMDOS for 2nd 3.5 inch disc drives can be added for £15 extra (not 6128 plus), and remember that no ROM box is needed.

Quote

"It's totally brilliant..... carries on the extreme user friendliness of Brunning products to a very high standard.... I have one of these little gems plugged into the back of my CPC right now. As you can imagine, anything that passes through the ACU office can expect to come in for a hard time and, I can safely say that to date, the BrunWord ROM has performed in an exemplary fashion on all fronts".

Chris Knight (ACU Editor) - ACU August 1991.

BrunWord 6128 £30

Complete word processing package (disc) with word processor, spelling checker and card tiling programme. BrunWord 6128 out performs all other word processors for the CPC6128. It's high speed screen routine, gives it a very fast response and the editor features are logically arranged to be easy to learn. The spelling checker, with its dictionary, load into memory at the same time as the word processor, making access very convenient and exceptionally fast. It is supplied with a 40 page manual and a tutor file.

Info-Script £50

Complete data processing package (disc), including all the features of BrunWord 6128 and BrunSpell. The word processor and database can be resident together giving the speed and convenience of access with no disc delays.

9 Pin Elite £55

The Elite system for 9 pin printers (on disc) consists of BrunWord Elite, BrunSpell, Headline, 8 bit printer status port and 7 'type setting' fonts (fonts are 24 pin in size but for 9 pin printers).

9 Pin Elite+Info £92

The Elite system (on disc) as above but including Info-Script and a backup disc.

24 Pin Elite+Info £90

BrunWord Elite (on disc), BrunSpell, Info-Script, back up disc, 8 bit status port and 7 'type setting' fonts for downloading to a 24 pin printer.

'William Taylor'

This delightful line drawing by Chris Rothero is one of the illustrations in 'Strawberry Fair', a book of traditional songs and easy piano music, published by A & C Black Ltd. It was Dart Scanned into four 'screens' by agreement.

Send cheque/PO/Access, Visa, Connect number to:-

Brunning Software

138 The Street,
Little Clacton, Essex, CO16 9LS.
Telephone (0255) 862308

BrunWord 6128 with BrunSpell & DataFile. . . £30.00
Info-Script with BrunWord 6128 & BrunSpell. . £50.00
9 Pin BrunWord Elite £55.00
9 Pin BrunWord Elite with Info-Script. £92.00
24 Pin BrunWord Elite with Info-Script. £90.00
BrunWord Elite Rom Module with Info-Script. . £125.00

All supplied on 3in disc (except ROM module)
*** You must state 'CPC6128' or '6128 Plus' ****

All prices are inclusive for UK. Overseas orders sent insured air mail - Europe add £2.50 : Rest add £7.50

mastering machine code

We continue our journey into the world of interrupts this month with more discussion on last month's Split Mode program. The interrupt is an unknown path to take, so let ANDY PRICE be your guide!

Thus far, the fast ticker interrupt has been explained, but what about the many other types? The most useful interrupt, graphics wise, is the FRAME FLYBACK interrupt. This allows very smooth manipulation of characters and stuff. A simple demonstration on how useful this is can be found in Listings 1 and 2. The small BASIC programs show my point. (All right Rod, I'll do 20000 lines for using BASIC!)

Flyback into machine code: you can use the same firmware routine as in BASIC, i.e. CALL &BD19, which makes your computer wait until the next frame flyback or, in human terms, waits until the computer decides to update the screen. However, there is more control if your routine was executed using the FRAME FLYBACK list, rather than waiting for the next flyback to occur before continuing your program. This is where the routine at &BCD7 come into action...

If you do wish to start moving things around the screen, it is best to make use of the FRAME FLYBACK facility. It makes the difference between a really smooth program and something which looks like it was slapped together in two minutes... (by the way Adam, did your game use the FRAME FLYBACK? Not that it looked like it was programmed in two minutes! OK Adam, you can un-hook me from those electrodes now...)

Last month's program used the FRAME FLYBACK firmware routine to provide you with a smooth double mode display. Without it, you would probably need some aspirins! But how do we use it from machine code? Simple! Just have a wander below and all will be explained... with a re-cap on which registers you need to use!

HL holds the address of the fast ticker block
B contains the event class
C holds the ROM selection
DE holds the address of your program

Firmware address &BCD7 – NEW FRAME FLYBACK initialised and puts a block (a program) onto the frame flyback list. Only call this once.

If you wish to put another program into the list, CALL address &BCDA, which puts a block onto the list, ADD FRAME FLY. Put the address of your program into the HL register.

To remove a block from the list, use DEL FRAME FLYBACK at address &BCDD, using HL again with the address of the program.

Listing three shows the frame flyback routine in use. It makes the standard Amstrad cursor flash! It works by removing the cursor on every frame flyback. The cursor is replaced automatically by the computer straight after it is removed, that is, in between the frame flybacks. This produces this novel flashing effect! Also, you can refer back to the last issue and the Split Mode program and have a look at the PROG and ROUTINE sections of the program.

Well, that just about wraps up interrupts for the time being. Next month, we venture into the world of low memory vectors! (They are, as a matter of interest, the most under-used yet probably the most useful built-in routines which we can access. They actually allow us to carry out normally illegal operations... legally!) Until next month, happy hacking!

Don't forget – if you've got any machine code problems, send them in to: Code & Chips, Amstrad Action, Beauford Court, Avon BA1 2BW

LISTING ONE: A BIT ON THE ROUGH SIDE

```
{0vAx} 1'Movingacharacteringraphics
{LpBi} 2'modewithoutusingFRAMEFLYBACK
{NtAx} 3'Notethejerkymovements!
{FtAj} 4'
{LmAj} 10TAG
{FuAq} 20FORx=1TO500
{HnAs} 40MOVEx,200:PRINT"!";
{IkAj} 50NEXT
```

LISTING TWO: A SMOOTH EXAMPLE

```
{0vAx} 1'Movingacharacteringraphics
{HxBm} 2'modeusingtheFRAMEFLYBACKfunction
{InAv} 3'Notethesmoothness\
{FtAj} 4'
{LmAj} 10TAG
{FuAq} 20FORx=1TO500
{GvAp} 30CALL&BD19
{HnAs} 40MOVEx,200:PRINT"!";
{IkAj} 50NEXT
```

LISTING THREE: FLASHING CURSOR

```
ORG #9000

; Example on the use of FRAME FLYBACK
; FLASHING CURSOR, IN BASIC AND MACHINE CODE
; Mastering Machine Code, May, 1992

        LD DE,PROGRAM
        LD B,#81
        LD HL,FRAME_BLOCK
        CALL #BCD7          ; New Frame Fly
        RET

PROGRAM:
        CALL #BDD0          ; Remove cursor from screen
        RET

FRAME_BLOCK:
        DEFS 9
```

technical forum

Serious about your CPC? Then the following four pages are packed with info about your favourite machine. Products reviewed, problems solved, tips given... it's all here, presented by *Amstrad Action's* consultant technical editor ADAM WARING. And if you've got something on your mind that's been giving you sleepless nights for weeks now, then put it on paper and send it in to: Technical Forum, Amstrad Action, Future Publishing, 30 Monmouth Street, Bath, Avon BA1 2BW

IT'S ALL BLACK AND WHITE

I bought my son an Amstrad 464 Plus computer with a black and white monitor for his birthday in December 1991.

Can you please tell me if we can buy a modulator to plug the computer into a colour TV, and if so, where can we purchase one from?

Ron Pickering
Stockton-on-Tees, Cleveland

I'm afraid you're not likely to have much luck. Modulators were made available for the CPC range, but Amstrad has not produced them for the Plus.

The problem lies with the the socket that produces the monitor's display. On the CPC a 6-pin socket is used, while the Plus has an 8-pin socket. The signals they carry are identical, though.

If you're determined to plug the computer into a telly, it is possible to have a cable made that will link the Plus to a CPC modulator. You'll need to get hold of an MP1 or MP2 modulator. Take the diagrams that appear in both the computer's and modulator's manuals to someone who's handy with a soldering iron. They'll be able to wire up the cable for you.

BLANK EXPRESSION

I am the proud owner of CPC 6128 and have bought the game *Football Manager 2*. But to run the expansion kit I need a blank formatted disk. I have looked all over but cannot find one. Can you help me?

David Moreland
Clough, Northern Island

Blank disks have been getting in shorter and shorter supply recently, so if you're unable to get hold of them locally, I'd suggest you buy them through a mail order firm – check out the ads in AA to find a suitable supplier and the best prices. The type you need are Amstrad CF2 3-inch disks.

Once you have the disk you will need to format it. This can be done with the Diskit CP/M utility that came with your machine. Put side one of the system disk into the drive and type:

```
|CPM
DISCKIT3
```

A menu bar will appear with options to Copy, Verify and Format. You want Format, so hit function key 4 on the numeric keypad. It will then ask you to select which type of format you require. Go for Data format by pressing function key 6. Press Y, insert your blank disk, and then tap a key. The drive will whirr for a minute or so and you'll be the proud owner of a freshly formatted disk. Well done!

MY GREATEST TRIUMPH

Me and a friend are planning to make a variety of computer games for the Amstrad CPC 464 and we are writing to ask you some small questions. We hope you'll be able to answer them.

1. We want to make a word processing program called *Data Office*. We want people to be able to type letters, stories, jokes on it. How will I get the program so that they can type these things and print them?
2. The program I am working on at the moment is called *Commando Pig* and involves zapping aliens and ninjas. How could I make it with good graphics fairly quickly?

Tim Barry and James Gardner
Triumph games, Leighton Buzzard

Just a couple of 'small' questions, eh? I'm afraid the questions you're asking can't be answered in a paragraph or two.

What you're going to have to do is sit down and learn to program. This takes time, but with a little practice you'll be able to write your very own programs.

It's best to start with BASIC – check out the tutorial in *Type-Ins* where our old mate Jerry's new series takes you through the very basics of learning to program.

Virtually all commercial programs are written in machine code, though. To learn this requires a lot more time as it's far more complicated. The Mastering Machine Code series is designed to help you if you want to have a crack at it.

Basically, perseverance is the key. And I can't wait to see *Commando Pig* when you've finished it – there's some pretty original ideas you've got there, it sounds ace!

COLOUR CONFUSION

I wonder if you could ease my confusion a bit? I have a CPC 464 with a green screen monitor. I would love a colour monitor but I can't afford one at the minute. I've been thinking about buying an MP1 modulator, but my confusion stems from one friend saying using my TV would be just the same as using a colour monitor, another advised me against it saying that it would be a waste of money – the TV picture would be rubbish. A third has told me there would be a slight difference but nothing drastic.

Help! will you please give me your honest opinion as to whether it's worth spending my hard-earned cash on one? I'll be really grateful.

Susan Atherton
Cramlington, Northumberland

Oh, all right, as you asked so nicely I will. Friend three has the best advice – the picture will be slightly worse than if you plugged it directly into a monitor, but nothing bad enough to ruin your enjoyment.

Besides, I assume you want colour mainly for playing games with. In which case you can plug in the modulator for a joystick-busting session and revert to the green screen for more serious work. My advice is go for it – games look infinitely better in colour and you'll hardly notice the difference in picture quality.

SMELLS LIKE TEEN SPIRIT

I'm looking for a program on disk that will make back-up copies of protected disks, show hidden files, make files invisible, recover lost files, rename files and unprotect files. Preferably, all this from one main menu.

I have been reading *AA* for ages and have seen some really tough questions answered in *Forum*. Please answer my questions as I am sure they would be no trouble for you. I'll be your greatest fan!

John Forth
Ormskirk, Lancs

After all that buttering up, how could I possibly refuse? OK, you can get up off your hands and knees now.

A utility that makes back-up copies of protected disks? Now why would you want to do that, John? The only things protected like this, and I'm sure I don't have to remind you that copying commercial games is illegal...

As for the rest, any decent disk utilities package will do the job. The one I use, which does everything you want and a fair bit more, is *Nirvana* from Goldmark Systems (☎ 0707 271529).

ADVICE IN PRINT

I have bought an Amstrad CPC 464 and a Seikosha SP-1900 printer for the family. We know very, very little about computing but are keen to learn more. However, we are finding it difficult to get information about a number of problems. Could you please help with the following:

1. What is the best position for the DIP switches to be in on the printer?
2. What exactly is a 'Screen Dump' and is there a program we can use to produce one? If so, what is it?
3. In issue 78 of *Amstrad Action*, J H Cleal tells us how to underline headings etc in *Mini Office II*. How do we enter this program into our computer? Do we do it before loading *Mini Office II* or is this done after loading the tape somehow?
4. Are there any art programs available that can be used on the CPC 464 (with just the standard 64K) and where can we get them from?
5. What educational software is there for five to seven year olds and ▶

THIS ISN'T A GAME

Gareth Berry, who comes from Telford, has had his computer for some time now, but thinks it's about time he put it to some serious use:

"I got my CPC four or five years ago, and all that time I've just played games on it. I've come to my senses and realised that the computer's capable of a lot more, but the thing is I don't know a thing about computer jargon. I don't even know what a Multiface is. How can I learn more about my computer?"

About time too, Gareth! Games are great but there is so much more you can do, and the best way to do it is to read! Don't just read the games reviews in *AA*, but have a look at the more serious pieces as well. *Technical Forum* is a good place to start. By reading other people's letters, even though the problems may not be ones that trouble you, you can pick up a lot of information. I've certainly benefited from it and have learnt loads that I didn't know before.

How about learning to write games of your own? Sure, they're not going to be of the same standard of those you can buy in the shops, but even writing something simple will bring you a great sense of achievement. Take a look at the BASIC tutorial in *Type-Ins*. It's a real education.

There are plenty of programs that aren't games that you can use on your computer. You can draw pictures with art packages or write letters with a word processor.

Ask Alex...

Hello again, it's me, Alex van Damm, here to give a helping hand to those completely new to using their Amstrad. Don't worry if you think your question sounds daft – we all had to start somewhere – and I'll do my best to help, whatever the problem.

Just one thing – keep those questions plain and simple (*just like you Alex – Adam*) (*Oi, watch it, or you'll be getting a knuckle sandwich – Alex*), this section is for beginners only! Send your letters to: Ask Alex, Amstrad Action, Beauford Court, 30 Monmouth Street, Bath, Avon BA1 2BW

By the way, a Multiface is a little device that plugs into the back of the computer that can be used to freeze the computer's memory and allow you to tinker around with the program code. Amongst other things you can save games midway through and enter the Multiface Pokes that appear in Cheat Mode, so it's good for cheats like me!

Whatever you decide to use your machine for, have fun – you don't necessarily have to be playing a game to do so!

MEMORY OF A MOUSE

Mrs P M Martin from Bournemouth is our next reader in distress. Her son has a 464 and would like to use a mouse, but has read that he would need a 64K RAM pack to use it. She'd like to know the following:

"What is a 64K RAM pack, and why does my son need it to enable him to use a mouse?"

I think I know what's confusing you! The advert you've seen, from Datel Electronics, offers a mouse and the *Art Studio* drawing program as a package. You don't need a RAM expansion to use the mouse, but you do to use *Art Studio*!

A RAM expansion adds more memory to your machine. Some programs cannot fit in the 64K memory that your machine has and need extra to work. Plugging in a RAM expansion gives you the extra.

You can buy a mouse that doesn't come with *Art Studio* and there is software that will work with a mouse that doesn't require extra memory. Look through the ads for details!

HELP

Do you have a problem that may benefit from the help of some of our 37,000-odd readers? Or maybe you're desperately in need of a piece of kit that you simply can't find in the shops. On the other hand you could have expert knowledge that you're prepared to share with whoever phones you up ('cos that's the kind of guy/gal you are).

If so, drop a line to Technical Helpline, preferably on a postcard or sealed-down envelope. Don't forget to include your phone number – sorry, we're unable to print addresses. Send your entry to: **Technical Helpline, Amstrad Action, Future Publishing, 30 Monmouth Street, Bath, Avon BA1 2BW**

Has anyone got a copy of CP/M Plus Side 3 (DR LOGO and Help)?
Barry, 0752 661614

Could anyone supply me with AA33 or a copy of the joystick splitter project?
David, 081-876 9302 after 6pm

I need a TV modulator for my 6128. I will pay for postage costs to Ireland.
Anthony, 010-353 46 28623

Please help! Has anyone got an old Cub colour monitor or an old Amstrad colour one? Will swap for various items.
Michael, 04865 2350 after school hours

Wanted: Firmware guide for the 6128.
Richard, 0527 71452

Wanted: A CPC 464 manual to buy.
Mac, 0429 272449

Wanted urgently: Any Amstrad 464/664/6128. Colour or mono, Plus or CPC. Will pay up to £70.
Matthew, 0726 813084

DDI-1 disk drive needed. Will pay £90. Must include manuals and system disks.
Jethro, 08325 315

Wanted: A 64K RAM expansion for my CPC464. Will make generous offer.
William, 0896 831278 after 6pm

Uni student requires any unwanted damaged/broken disk drives (any size). Will try to pay a small sum but can't promise. Would be grateful for help.
Scott, 0475 35843 Sundays 1-4:30 pm

Can anyone help me transfer *Tasword 464D* on disk to my second drive? Also, does anyone have a 64K or 256K RAM pack going fairly cheap?
Simon, 0626 854339

top tips

Just discovered the greatest thing for the Amstrad since sliced silicon? Spotted the answer that stupid-pants Waring couldn't cope with? Whether you want to put the world to rights or are just plain greedy and fancy winning a tenner (we hand them out for the best tips printed in this section), send 'em in to: Top Tips, Amstrad Action, Future Publishing, 30 Monmouth Street, Bath, Avon BA1 2BW

FONT OF ALL KNOWLEDGE

I was very excited when I saw the selection of fonts on one of your cover-tapes... until I read on the tape pages that the new fonts couldn't be used in *Pagemaker*. I sat down and cried for three days and said: "This won't do!"

After a bit of thinking I worked out how I could merge the programs to produce an even better DTP prog. I thought that I'd share my discovery with the rest of the *AA* readers. Just follow these simple instructions:

1. Load the first part of *Pagemaker*. When it asks, "Thin font Y/N", press ESC and type `RENUM 500`.
2. Find the tape with the FONT LOAD program on it and type `MERGE ""`.
3. Type `EDIT 700` and delete the part that starts `SYMBOL AFTER 32`...
4. Save the whole lot to a fresh tape. Copy the next part of the *Pagemaker* program to the same tape.

Viola! Now you can choose which typeface you want when loading.

David Pinder (*AA78*) can't have his head screwed on straight. It is very easy to print out using *Pagemaker* and a 464.

Create your page and press TAB twice. You'll get to another menu. Press S for save (not V for save screen). Reset the computer and load your new *Pagemaker*. Choose a font and select Print. It will load the Print option and ask for a filename. Load your page and it will print out.

Thomas Faull
Newton Abbot, Devon

TO B OR NOT TO B

In the March issue of *Amstrad Action* you told Andrew Farrell that loading Multifaced games from a 3.5-inch drive B was impossible due to the Multiface loading only the first file. then switching back to drive A. This

review Citizen PN48

£380 ● CITIZEN ● 0895 272621

Printers, eh? Big, ugly, noisy, smelly things. Well, maybe not smelly necessarily, but the others are generally pretty true. Not so with Citizen's latest baby.

'Baby's' the right word – it's so small that your first reaction is to pick it up and cradle it in your arms and make 'coochy, coochy, coo' noises at it. (*I worry about Adam W sometimes – Ed.*).

Get over these maternal instincts, though, and plug it into your computer, and you're ready to roll. Or could be. It depends, really, on whether you have a Plus or a CPC. Because of the small size of the printer, the whacking great Centronics interface has been replaced with an itsy bitsy connector instead. A special lead is supplied to connect this to the computer, but is ended with a standard 25-pin jobbie. The CPC, with it's non-standard edge connector, won't hook up directly. You'd have to get a man (or woman – let's not be sexist here) in a shop to wire up a lead that converts the edge connector to the printer properly. Then again, the vast majority of printers don't come with a lead at all, but it could prove to be expensive as it's not an off-the-shelf item.

Single sheets of paper are fed in through a slot at the back. It needs to be pushed in quite firmly, then the printer takes over and pulls it into the right position. If you don't push it in firmly enough the printer sometimes gets tricked and starts to pull when it's not in properly, though this can be rectified by simply pulling it out and starting again – it doesn't do anything silly, like start to print, until you hit the 'On Line' button.

And when it starts to print you'll be gobsmacked – the quality is simply superb. The perfectly-formed characters are a match for the dead-expensive Laser Writers connected to *AA*'s Apple Macs. Though not as speedy as some printers, it moves at a fairly reasonable rate – certainly a lot faster than most printers can manage in their far-inferior NLQ modes.

The reason for the high quality output is the method of print – instead of hammering pins against a ribbon, a process called 'Non-impact thermal fusion' is used instead. The ink is heated and transferred to the paper as the print head makes a pass. The result is no dottiness, just beautifully crisp characters. It's quiet too, without that noisy clattering that dot matrix printers make.

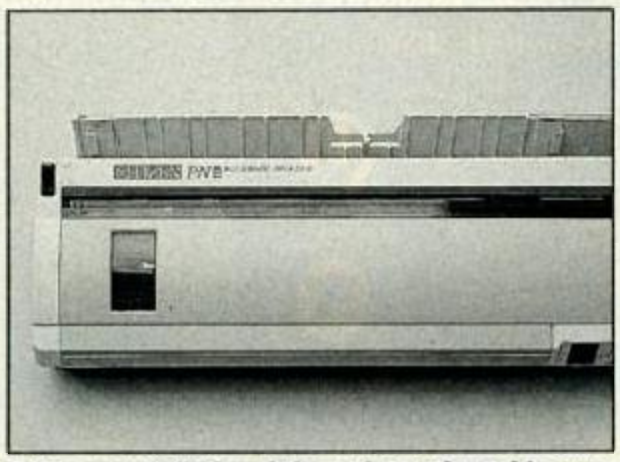
The ribbon is encased in a cartridge that looks a little like an audio cassette. It's very easy to change – it's just like slapping a tape into your tape deck – but the life is limited – 25 sheets of A4 for the single-pass cassettes and 100 sheets for the multi-pass cassettes (they can be turned over once you reach the end). At around £4 each it could prove to be expensive...

There's no tractor feed mechanism, so it's not the printer for you if you want to churn out reams of listings, but for top-quality business letters it'll impress no end.

Being so small, the printer is extremely portable. It has a built-in rechargeable battery, so should you happen to be on top of a mountain then the printer will function perfectly happily. You'd need a pretty long extension cable for the Amstrad, though.

With not much change from £400 it's quite pricey, but compares fairly well with a lot of 24-pin printers. Whether it's right for you depends on the kind of use you're going to put it to. For posh letters, nothing can touch it at the price.

If you're looking through listings of *Type-Ins* for all the mistakes you've made, however, then you'd be better off with a cheapo dot-matrix printer instead.



■ **You won't find a tinier printer than this anywhere! It's barely wider than an A4 sheet.**

■ **Printing isn't particularly fast, but the print quality is absolutely superb.**

Tech Specs

Number of fonts	2
Number of pins	48
LQ Speed 10cpi	53 cps
LQ Speed 20cpi	106 cps
Resolution	up to 360 dpi
Interface	Parallel
Tractor feed	none
Buffer size	4K

good news

- Exceptionally high quality output
- Cuter than Winona Rider

bad news

- Limited ribbon life
- No good for listings

85% VERDICT

top tips

what is the difference between *Fun Schools 1, 2, 3* and *4*?

We would all appreciate any help you could give.

P Grayson
Thetford, Norfolk

You don't ask for much, do you P Grayson of Thetford, Norfolk? Lucky for you that I'm in such a generous mood today.

1. The DIP switches allow you to configure your printer to work in a certain way as soon as it's switched on, rather than having to mess around with first sending control codes to set it up.

There is a certain degree of variation between printers and what their switches do, but many of the most common options you'll come across are:

Epson Compatibility: the closest there is to a 'standard' in the way printers work. Have this 'on', as most software communicates with these codes.

Automatic Line Feed: when this is 'on' a line feed is send every time the printer encounters a carriage return character. In other words, every time the printer reaches the end of a line it automatically advances the paper ready to start printing at the beginning of the next line. Have this switched on, but if you have problems with the printer leaving large gaps between each line when printing out then switch this option off.

NLQ Mode: most printers can print in NLQ (Near-letter quality) or draft modes. NLQ is achieved by overprinting each line so that a more solid-looking row of characters is created. Draft mode is more 'dotty'-looking because the the individual imprints made by each of the printer's pins are more visible, but is a great deal faster because it doesn't have to go back over each line.

If you produce a lot of output that's just for your own use such as program listings or shopping lists then it's probably for the best to stick to Draft mode. Most word processors will allow you to switch to NLQ when it's necessary to send a letter off to the Poll Tax Office...

International Characters: a combination of several switches selects the language the printer interprets certain characters as. Depending on the country you choose, the printer will replace certain characters with umlauts and accents. English is the one you want, unless you have regular correspondence with a Swedish pen friend.

Form Length: you can usually choose between a length of 11 or 12 inches. A4 paper is a foot long, so unless you've bought a job lot of paper from Dodgy Ron's paper products you'll be happier with a 12-inch setting.

Slashed Zero: it's not clear why computer folk decided to put lines through their zeros. If you prefer them without then switch this option off.

Line Spacing: determines the spacing between each line and therefore the number of lines that can be fitted on a page. Spacings can vary, but gaps of 1/8 inch and 1/6 inch are common. The greater the spacing between lines the better and more readable it tends to look, so going for the larger of the two isn't a bad idea.

Character Pitch: the number of characters that fit on a single line. Again, gappier text is easier to read, but the environmentally-conscious will save paper by using a denser pitch. They're given fancy names, such as Pica (10 characters per inch) and condensed (17 characters per inch).

These are the more common options that occur, your printer may have others. Note that all of these can be overridden by sending control codes to the printer. In fact, a lot of software will set up the printer to its own particular liking, ignoring the DIP switch settings altogether.

2. Where were we? Ah, yes, a Screen Dump produces a copy of what's on the computer's screen on the printer. Most printing applications send text to the printer, but suppose you've drawn a pretty picture that you want to put up on the kitchen wall? There's no in-built command to do this and so a screen dump program will replicate the image on paper for you. As the computer works in colour and printers are generally black and white, these programs often use various patterns of dots to represent the different colours.

Most art programs will produce the screen dump for you, but you'll find screen dump programs in the public domain and we've printed a few in the *Type-Ins* section in previous issues of *AA*.

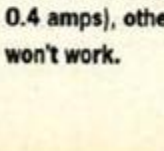
3. Enter the information directly into the document you want to produce the effects in. When *Mini Office II* encounters the '^' character, it will convert the characters that follow into control codes. As a reminder to those who can't be bothered to look it up for themselves, the control sequence to produce underlined text is:

```
This is a headline↑,27,65,1
_____↑,27,65,12
```

4. You need look no further than the covertape sellotaped to the front of this very issue. On it is a program called *GPaint*, which will work just fine with your 464 – what's more, it will print out too!

5. For a full listing of educational software, get hold of a copy of the catalogue produced by Rickitt Educational Media (%0460 57152), which costs £1. The *Fun School* range has been out for a few years now, and the number that follows simply means where it falls in the title. *Fun School 4* is the latest (and the best) of the packages – check out the review in *Technical Forum* last issue.

JOIN THE CUB



I have a CPC 6128 and a 664, but only one has a colour monitor. I have been given an old Cub monitor, so can you tell me how to wire it so that it will work on the Amstrad CPC?

Also, I realise that I'll have to power the keyboard separately. Am I right in saying that I need to use a five volt DC transformer with negative on the centre of the lead?

Q Hind
Reading, Berks

The easiest thing to do is get a cable made up for you. Any competent electronics shop will be able to make one, providing you supply them with the pin-out connections from both the CPC's and the monitor's manuals.

If you no longer have the manual, then you're going to have to resort to trial and error (unless some kindly reader has the info and is prepared to send it to us). The RGB output from the CPC has nothing that's going to hurt the monitor, and so it's a case of sitting down with a few hours to spare trying the combinations of each pin with the different connections. It'll be time-consuming, but you should get there in the end.

As for the power supply, you'll need one that can produce both 5 volts (at 1.7 amps) and 12 volts (at 0.4 amps), otherwise the disk drive won't work.

ADDRESS THE ISSUE

I am pleased to enclose all the poke addresses and call addresses to enable second drive owners to transfer all the covertapes onto drive B for the *Amstrad Action* covertapes up to issue 76. I wish to thank Philip Bowden for the outline of the program that appeared in *AA72*.

The pokes in the program change the default loading for the covertapes, so save the small program as 'loader' or something recognisable. Note that the contents of only one covertape can be stored on each 3.5 inch disk because it uses the same filenames.

```
10 'covertape number for reference
20 MEMORY &7fff:'set memory pointer
30 LOAD "MENU":'load menu program
40 POKE &834D,&C2:'poke address
50 CALL &80EA:'run the program
```

This will convert the *AA76*'s covertape to load from drive B. Other addresses are as follow:

Covertape	Poke	Call address
AA69	&82FA	&80D5
AA70	&831F	&80E8
AA71	&832F	&80E8
AA72	&832C	&80DC
AA73	&8353	&80F0
AA74	&834D	&80EA
AA75	&8328	&80D7

Substitute the POKE and CALL addresses in lines 40 and 50 with the addresses for the covertape you want to transfer. In all instances the number to poke will be &C2 – this is the number that selects the second drive.

David Pearson
York

SOFTWARE CITY

Unit 4, B.D.C, 21 Temple Street, Wolverhampton WV2 4AN Tel: 0902 25304 (Mail order only)

Call us on: 24 Hour Credit Card Hotline 0902 25304 VISA MasterCard Eurocard Amex Access

AMSTRAD 464/6128

1st Division Manager	3.99	Last Ninja 2	3.99	Toyota Celica	3.99
2 Player Soccer Squad	3.99	League Football	3.99	Tracksuit Manager	2.99
3D Pool	3.99	Magicland Dizzy	3.99	Treasure Island Dizzy	3.99
ACE 1 and 2	2.99	The Match	3.99	T.T. Racer	2.99
Action Fighter	3.99	Matchday 2	3.99	Treble Champions	3.99
Afterburner	3.99	Midnight Resistance	3.99	Turbo Outrun	3.99
Airborne Ranger	New 3.99	Mike Reid's Pop Quiz	2.99	Turrican	3.99
Altered Beast	3.99	Mini Office	2.99	Tusker	3.99
Arkanoid 1 or 2	3.99	Monty Python	3.99	The Untouchables	3.99
Barbarian	2.99	Moonwalker	3.99	Vendetta	New 3.99
Barbarian 2	3.99	Navy Moves	3.99	Wec Le Mans	3.99
Batman The Movie	3.99	New Zealand Story	3.99	Wonderboy	3.99
Bobsleigh	3.99	Nigel Mansell Grand Prix	2.99	World Class Leaderboard,	
Boulderdash	2.99	On the Bench	3.99	Leaderboard &	
Boxing Manager	3.99	Operation Thunderbolt	3.99	Tournament	4.99
British Super League		Operation Wolf	3.99	X-Out	3.99
Football	3.99	Outrun	3.99	Yogi & the Greed Monster	2.99
Bubble Bobble	3.99	Paperboy	2.99	Yogi's Great Escape	2.99
Bubble Dizzy	3.99	Pegasus Bridge			
Cabal	3.99	(War Game)	New 3.99	**SOFTWARE CITY SPECIALS**	
California Games	3.99	Popeye 2	2.99	Cyberworld (Cass)	1.99
Championship Golf	3.99	Postman Pat 1 or 2	2.99	Dark Fusion	0.99
Chase HQ	3.99	Powerdrift	3.99	Emlyn Hughes (Cass)	3.99
Chuckie Egg 1 or 2	3.99	Predator	3.99	Emlyn Hughes (Disk)	6.99
Colossus Chess 4	3.99	Pro Golf (Codemasters)	3.99	European Super	
Colossus Chess 4 (Disk)	7.99	Professional Footballer	3.99	League (128K)	3.99
Commando	2.99	Pub Games	2.99	European Super League	
Continental Circus	3.99	Q-10 Tank Buster	3.99	(Disk)	4.99
Cricket Captain	3.99	Quattro Adventure		Gremlins 2	3.99
Cricket Master	2.99	(Dizzy etc)	3.99	Kenny Dalglish Soccer	
Cup Football	3.99	Quattro Cartoon		Match	2.99
Daley Thompson's		(Little Puff)	3.99	Starstrike 1 or 2	2.99
Decathlon	3.99	Quattro Coin Ops			
Dizzy Panic	3.99	(Fast Food etc)	3.99		
Double Dare	3.99	Quattro Combat	3.99		
Double Dragon 1 or 2	3.99	Quattro Fantastic			
Dragon Ninja	3.99	(Pub Trivia etc)	3.99		
Edd The Duck	3.99	Quattro Power	3.99		
Euro Boss	2.99	Quattro Skills			
F-1 Tornado	2.99	(Int. Rugby Sim etc)	3.99		
F-16 Combat Pilot	3.99	R-Type	3.99		
F-16 Combat Pilot (Disk)	7.99	Rainbow Island	3.99		
Fantasy World Dizzy	3.99	Rally Cross	2.99		
Fireman Sam	3.99	Rambo 3	3.99		
First Past The Post	3.99	Red Heat	3.99		
Football Director	3.99	Renegade 1 or 3	3.99		
Footballer Of The Year 2	3.99	Rick Dangerous	3.99		
Forgotten Worlds	3.99	Robocop	3.99		
Frank Bruno's Boxing	2.99	Rock Star Ate My Hamster	3.99		
The Games Summer		Rugby Coach	3.99		
Edition	3.99	Rugby Manager	2.99		
The Games Winter Edition	3.99	Run the Gauntlet	3.99		
Gary Linekers Hotshots	3.99	Scooby Doo and			
Gauntlet 1, 2 & Deeper		Scrappy Doo	3.99		
Dungeons	4.99	Shadow Of The			
Ghostbusters 2	3.99	Beast	3.99		
Ghosts and Goblins	2.99	Shinobi	3.99		
Ghouls and Ghosts	3.99	Silkworm	3.99		
Gryzor	3.99	Snooker Management	3.99		
Hard Drivin'	3.99	Soccer Q	3.99		
Heroes of the Lance	3.99	Soccer Match	3.99		
Hong Kong Phooey	2.99	Soccer Rivals	3.99		
Ikari Warrior	2.99	Space Harrier 2	3.99		
Impossamole	3.99	ST Dragon	New 3.99		
Indiana Jones Last Crusade	3.99	Star Wars	3.99		
Inspector Hecti	2.99	Steve Davis Snooker	2.99		
Int Karate +	3.99	Strider	3.99		
International Manager	3.99	Striker Manager	3.99		
International Ninja Rabbits	3.99	Stunt Car Racer	3.99		
Italia 1990	3.99	Super Off Road Racer	New 3.99		
Jack The Nipper 1 or 2	2.99	Super Seymour	3.99		
Jaws	2.99	Switchblade	3.99		
Jimmy's Soccer		Sword and Sorcery	New 3.99		
Manager	New 3.99	Target Renegade	3.99		
Jocky Wilson Compendium		Thunderblade	3.99		
Of Darts	3.99	Thundercats	2.99		
Kenny Dalglish Soccer Manager	2.99	Titanic Blinky	3.99		
Kentucky Racing	2.99	Toobin	3.99		
Kick Off	3.99	Top Gun	3.99		

FULL PRICE	CASS	DISK
3-D Construction Kit	17.99	17.99
Battle Command	N/A	10.99
Battle of the Bulge	9.99	10.99
Colossus Bridge 4	8.99	9.99
Crete 1941	9.99	10.99
Double Dragon 3	8.99	10.99
Final Fight	8.99	11.99
Football Director		
2 (128K)	N/A	7.99
Fun School 3 (5-7)	8.99	11.99
Fun School 3 (7+)	8.99	11.99
Fun School 4 (U 5)	8.99	11.99
Fun School 4 (5-7)	8.99	11.99
Fun School 4 (7-11)	8.99	11.99
Gauntlet 3	8.99	11.99
Grand Prix (D&H)	7.99	N/A
Hero Quest +		
Data Disk	8.99	N/A
Hero Quest Witchlord		
Expansion	5.99	7.99
Jetsons	6.99	7.99
Manchester Unt.		
Europe	8.99	11.99
Multi Player Soccer		
Manager	7.99	N/A
North and South	8.99	11.99
Outrun Europe	New 8.99	N/A
Pit Fighter	7.99	19.99
Potsworth	6.99	7.99
Prince of Persia	7.99	10.99
Rodland	8.99	10.99
Sim City	8.99	19.99
Simpsons	7.99	10.99
Smash TV	7.99	10.99
Sporting Triangles	7.99	10.99
Super Space		
Invaders	7.99	N/A
Terminator 2	7.99	10.99
Titus The Fox	New N/A	10.99
Turrican 2	5.99	8.99
World Class		
Rugby	7.99	N/A
WWF Wrestlemania	8.99	10.99

COMPILATIONS

TWO HOT TWO HANDLE
Golden Axe, Total Recall, Shadow Warrior & Super Off Road Racer **Cass 10.99 Disk 13.99**

T.N.T. 2
Hydra, Badlands, Skull and Crossbones, Stun Runner & Escape - Robot Monsters **Cass 8.99 Disk 12.99**

4 MOST WORLD SPORTS
Grid Iron 2, Baseball, Uchi Mata Judo & Basketball **Cass 3.99**

MULTIMIX 5
Monty On The Run, Jack The Nipper 2 & Aug Wiedersehen Monty **Cass 4.99**

HIT PACK VOL 1
Kenny Dalglish Soccer Manager, Rally Sim, Maze & Para Assault Course **Cass 3.99**

SOCCER 6
Treble Champions, European Champions, World Soccer League, Euro Boss, World Champions & Trevor Brooking **Cass 7.99**

4 MOST BALLS, BOOTS & BRAINS
Soccer Challenge, Soccer Boss, Rugby Boss & Australian Rules Football **Cass 3.99**

SOCCER STARS
Kick Off 2, Gazza 2, Microprose Soccer & Emlyn Hughes International Soccer **Cass 8.99 Disk 12.99**

NINJA COLLECTION
Shadow Warrior, Double Dragon & Dragon Ninja **Cass 7.99**

DIZZY'S EXCELLENT ADVENTURE
Dizzy Down The Rapids, Kwik Snax, Bubble Dizzy, Dizzy Panic & Dizzy and the Yolk Folk **Cass 7.99**

KIDS PACK
Postman Pat, Scooby and Sweep, Popeye 2, Count Duckula, The Wombles & superted **Cass 8.99**

MAX PACK COMPILATION
Turrican 2, ST Dragon, Swiv & Nightshift **Cass 11.99 Disk 17.50**

TENGEN TRILOGY
Klax, Escape Planet Robot Monsters & Cyberball **Cass 5.50**

CHART ATTACK
Lotus Esprit Turbo Challenge, Supercars, Shadow of the Beast, Impossamole & Ghouls and Ghosts **Cass 10.99 Disk 13.99**

THRILLTIME GOLD 1
Paperboy, Ghosts and Goblins, Bomb Jack, Batty & Turbo Esprit **Cass 5.50**

AIR/SEA SUPREMACY
Silent Service, Carrier Command, Gunship, P47 Thunderbolt & F15 Strike Eagle **Cass 13.99 Disk 17.99**

CAPCOM COLLECTION
Strider 1 and 2, Ghouls 'n' Ghosts, Forgotten Worlds, U.N. Squadron, Dynasty Wars, Led Storm & Last Duel **Cass 12.99 Disk 17.99**

MOVIE PREMIER
Teenage Mutant Hero Turtles, Gremlins 2, Back to the Future 2 & Indiana Jones **Cass 10.99 Disk 13.99**

GRANDSTAND
World Class Leaderboard, Pro Tennis Tour, Continental Circus & Gazza's Super Soccer **Cass 10.99 Disk 13.99**

WHEELS OF FIRE
Turbo Outrun, Chase H.Q., Hard Drivin' & Powerdrift **Cass 10.99**

ADDICTED TO FUN
Bubble Bobble, Rainbow Islands & New Zealand Story **Cass 7.99**

HANNA BARBERA CARTOON COLLECTION
Yogi's Great Escape, Hong Kong Phooey, Huff and Ready & Beverley Hills Cats **Cass 7.99 Disk 10.99**

ITS T.V. SHOWTIME
Krypton Factor, Bobs Full House, Every Second Counts & Bullseye **Cass 7.99**

DIZZY COLLECTION
Dizzy, Fast Food, Fantasy World Dizzy, Treasure Island Dizzy & Magic Land Dizzy **Cass 7.99**

FIST OF FURY
Double Dragon 2, Shinobi, Dynamite Dux, Ninja Warrior **Cass 10.99**

SOCCER MANIA
Football Manager 2, Microprose Soccer, Football Manager World Cup Edition & Gazza's Super Soccer **Cass 10.99**

HOLLYWOOD COLLECTION
Robocop, Indiana Jones Last Crusade, Batman The Movie & Ghostbusters 2 **Cass 10.99 Disk 13.99**

THE CODE MACHINE
Full feature machine code programming development package. Editor/Assembler, Monitor/Disassembler 464/664/6128 **Cass only 5.50**

VIRTUAL WORLDS
Driller, Total eclipse, Castle Master & The Crypt **Cass only 5.50**

ORDER FORM AND INFORMATION

All orders sent FIRST CLASS subject to availability. Just fill in the coupon and send it to:- **Software City**
Unit 4, BDC, 21 Temple Street, Wolverhampton WV2 4AN.

ORDER FORM (Block Capitals)

Name .....

Address .....

.....

Postcode..... **Tel No** .....

Previous customer Y/N..... Reference No. .....

Name of game	Computer	Value
	Postage	
	TOTAL	

POSTAGE RATES - Please add 50p for post and packaging on all orders under £5.
EEC countries add £1 per item. Non EEC Countries add £2.50 per item
Paying By Cheque - Cheques payable to **Software City** **AA80**

CREDIT CARD NO. **EXPIRY DATE**

SIGNATURE **DATE**

EUROPEAN ORDERS ACCEPTED

Price Buster

READ THIS!

Fast 7 day delivery

AMAZING OFFER

SELECT ANY TWO GAMES FROM THE LISTS BELOW AT DISCOUNT PRICE

i.e. £2.99 + £2.99 not £5.98 but £5.60
£2.99 + £3.99 not £6.98 but £6.50
£3.99 + £3.99 not £7.98 but £7.40

AMSTRAD SELLERS

AMSTRAD FULL PRICE	Cass	Disk
3D Construction Kit	£16.99	£16.99
Captain Planet	New £8.99	£10.99
Cisco Heat	New £7.99	£11.50
Double Dragon 3	New £8.99	£10.99
Final Fight	£8.50	£11.50
Football Director 2	£7.50	N/A
Fun School 2 Range	£7.50	£9.99
Fun School 3 Range	£9.99	£12.99
Fun School 4 Range	£9.99	£12.99
Hudson Hawk	New £7.99	£10.99
Jetsons	New £5.99	N/A
Manchester United Europe	£8.99	N/A
Pitfighter	£8.50	£12.99
Potsworth & Co	New £5.99	N/A
RBI 2 Baseball	£7.50	£10.50
Rodland	New £8.99	N/A
Shadow Dancer	£7.50	N/A
Skull & Crossbones	£7.50	£9.50
Simpsons	New £7.99	£10.50
Smash TV	New £7.99	£10.50
Space Crusade	New £7.50	£10.99
Super Space Invaders	£7.50	£11.99
Terminator 2	£7.99	£10.50
Viz	£7.50	N/A
WWF Wrestle Mania	New £8.99	£11.50

BUDGET

3D Pool	New £3.99	Dizzy Panic	New £3.99
Airborne Ranger	New £3.99	Double Dragon	£2.99
Altered Beast	New £3.99	Dragon Spirit	New £3.99
Atlantis 4 pack	New £3.99	Escape from Planet of the Robot Monsters	New £3.99
Augie Doggie & Doggie Daddy	New £3.99	Fantasy World Dizzy	£3.99
Batman - The Movie	£3.99	Fast Food	£3.99
Big Nose's American Adventure	New £3.99	First Past the Post	£3.99
Blazing Thunder	£3.99	Footballer Of The Year 2	New £3.99
Bobsleigh	New £3.99	Fruit Machine 2	£3.99
Bubble Bobble	£3.99	Ghostbusters II	New £3.99
Bubble Dizzy	New £3.99	Ghouls & Ghosts	New £3.99
California Games	£3.99	Golden Axe	New £3.99
Championship Golf	£3.99	Guardian Angel	£3.99
Chase HQ	New £3.99	Hard Drivin'	New £3.99
Chevy Chase	New £3.99	Heroes of the Lance	New £3.99
Cricket Master	£2.99	Impossamole	New £3.99
Defenders of The Earth	£3.99	Indiana Jones + The Last Crusade	New £3.99
		Interchange	£2.99
Jocky Wilsons Compendium	£3.99	Super Off Road	New £3.99
Jimmys Soccer Manager	New £3.99	Super Seymour	New £3.99
Jonny Quest	New £3.99	The Games - Winter Edition	£3.99
Kwik Snax	£3.99	The Games - Summer Edition	£3.99
Last Ninja 2	New £3.99	The Match	New £3.99
Lotus Esprit Turbo Challenge	New £3.99	Tin Tin On The Moon	New £3.99
Magicland Dizzy	£3.99	Toobin	£3.99
Manchester United	New £3.99	Top Cat Beverley Hills	£3.99
Midnight Resistance	New £3.99	Treasure Island Dizzy	New £3.99
Moonwalker	New £3.99	Treble Champions	New £3.99
Multimix 1	£4.99	Turbo Outrun	New £3.99
Multimix 2	£4.99	Turrican	New £3.99
Multimix 3	£4.99	Tusker	New £3.99
Multimix 4	New £4.99	Vendetta	New £3.99
Multimix 5	New £4.99	Vindicator	New £3.99
Navy Moves	New £3.99	Wembley Greyhounds	£3.99
New Zealand Story	New £3.99	World Games	£3.99
Operation Thunderbolt	New £3.99	X-Out	New £3.99
Outrun	£3.99	Xybots	New £3.99
Paperboy	£2.99	Yogi & The Greed Monster	£2.99
Power Drift	New £3.99	Yogi's Great Escape	£2.99
Pro Golf	£3.99		
Pub Trivia	£3.99		
Puffy's Saga	New £3.99		
Puzznic	New £3.99		
Quattro Fantastic	New £3.99		
Quattro Fighters	New £3.99		
Quattro Skills	£3.99		
Quattro Sports	£3.99		
Quattro Power	£3.99		
Quattro Adventure	£3.99		
Quattro Coin Ops	New £3.99		
Quattro Arcade	£3.99		
Quattro Combat	£3.99		
Quattro Firepower	£3.99		
Quattro Racer	£3.99		
Quattro Cartoon	£3.99		
Quattro Super Hits	£3.99		
Rainbow Islands	New £3.99		
Red Heat	£3.99		
Renegade 3	£3.99		
Roadrunner + Wile E Coyote	New £3.99		
Robocop	New £3.99		
Rick Dangerous	New £3.99		
Scooby Doo & Scrappy Doo	£3.99		
Shadow of the Beast	New £3.99		
Shadow Warriors	New £3.99		
Snooker Management	£3.99		
Soccer Double 2	New £3.99		
Soccer Pinball	New £3.99		
Soccer Rivals	New £3.99		
Spy Who Loved Me	New £3.99		
ST Dragon	New £3.99		
Strider	New £3.99		
Stunt Car Racer	New £3.99		

COMPILATIONS

TOO HOT TO HANDLE
Golden Axe, Super Off Road Racer, Total Recall, Shadow Warrior **Cass £12.99**

NINJA COLLECTION
Shadow Warrior, Double Dragon, Dragon Ninja
Cass £7.50

CHART ATTACK
Lotus Esprit Turbo Challenge, Impossamole, Cloud Kingdoms, Ghosts + Ghouls, Supercars
Cass £10.50, Disk £13.99

MOVIE PREMIER
Teenage Mutant Hero Turtles, Back to the Future II, Gremlins 2, Days of Thunder **Cass £10.50**

DIZZY COLLECTION
Dizzy, Fast Food, Fantasy World Dizzy, Treasure Island Dizzy & Magicland Dizzy.
Cass. £7.50

DIZZY'S EXCELLENT ADVENTURES
Dizzy Panic, Kwik Snax, Spellbound Dizzy, Dizzy Prince of Yolk Folk **Cass. £7.50**

HIT PACK 1
Kenny Daglish Soccer Manager, Rally Simulator, Para Assault, Mountain Bike Racer
Cass £3.99

MEGA HOT 9 TITLES
Cass. £4.50

TNT 2
Hydra, Skull & Crossbones, Hard Drivin' 2, Badlands, Stun Runner.
Cass. £8.99 Disk £10.99

DIZZY CARTOONS
Dizzy, Spike In Transylvania, Slightly Magic, CJ's Elephant Antics, Seymour Goes To Hollywood **Cass. £7.50**

SOCCER 6
Treble Champions, World Champions, World Soccer League, Euro Boss, European Champions, Trevor Brooking's World Cup Glory
Cass £7.50

CALL US ON 24 HOUR CREDIT CARD HOTLINE
021 440 4108
Please state name, card number, expiry date & goods required

Expiry Date _____
Number _____
Signature _____
Date _____

ORDER FORM AND INFORMATION. All orders sent FIRST CLASS subject to availability. Just fill in the coupon and send it to: PRICEBUSTER Unit 23, 14/20 George Street, Birmingham B12 9RG

BLOCK CAPITALS

Name: .....

Address: .....

.....

.....

Postcode: ..... **Tel. No:** .....

Name of game	Computer	Value
	Postage	
	Total	

POSTAGE RATES: Please add 50p p&p on all orders. EEC countries add £1.00 per item. Non EEC countries add £2.50 per item. Cheques payable to: Price Buster

A SMALL SELECTION FROM OUR WAREHOUSE

CF2

3" DISKS

Box of 10 ..... **£17.95 + £1.18 p&p**
Box of 10 in plastic cases ..... **£21.95 + £2.36 p&p**
Ex - software house disks ..... **£11.95 + £1.18 p&p**

	PRICE	P&P
64K Ram Expansion CPC464 only	£39.84	£3.53
3.50" DS/DD Addxtra branded & boxed 10	£5.99	£1.18
CPC Centronics printer lead 1.5m	£7.64	£0.59
CPC Centronics printer lead 2.0m	£8.40	£0.59
CPC to video lead state BNC or phono plug	£7.14	£0.59
Expansion port adaptor for CPC 464/6128 plus machines (Widgit)	£9.40	£1.18
Advanced Art Studio CPC disk (requires 128K memory)	£16.41	£1.18
Genius mouse + advanced art studio	£40.86	£3.53
Amstrad, Microscript word processor, CPC464/664/6128 disk	£4.99	£2.35
40025, 464 upgrade rom	£25.03	£1.18
The Amstrad 12 pack, 12 games on cassette for the CPC464+	£3.99	£3.53
Pack Regalo Amstrad, Amstrad CPC Disk spanish game pack (8 games)	£3.99	£1.18
Amstrad Soft 158A - CPC464+ DDI-1 Firmware manual	£4.99	£2.35
Amstrad CTM644, Amstrad Colour monitor to fit 464/6128	£129.95	£10.58
Multiface 2, for CPC464/664/6128	£34.42	£3.53
Multiface 2, for CPC464+/6128+	£41.42	£3.53
Amstrad CI 1 Clock Radio fits neatly underneath your monitor	£8.68	£3.53
Wave Widgit, allows old CPC Peripherals to be connected to plus machine	£7.99	£1.18
Amscase 3 disk filing cabinet, holds 10 3" disks	£2.99	£1.18
AMS30L Disk box, holds 30 3" disks or 15 in cases	£7.28	£2.35
dBase II, CPC6128 relational database (req CPM Plus)	£30.64	£3.53

RIBBONS

	PKT	PRICE	CARR&INS		PKT	PRICE	CARR&INS
DMP 2000/3000/3160	2	3.88	0.58	KXP 1090	2	-	-
LC10	2	4.70	0.58	Citizen 120D	2	5.50	0.58
LC10 Colour	1	4.23	0.59	PCW9512 MS	2	4.72	1.18
LC2410/LC24200	2	6.32	1.18	PCW9512 FN	2	5.52	0.58
PCW8256/8512 FN	2	5.10	1.18	Epson MX100	2	-	-
Epson LQ800	2	-	-	Epson LX800	2	-	-

CPC CLEARANCE BOX
2 - Amsoft 3" Disks
1 - 3" Price List Disk
1 - Amstrad Joystick
1 - 3" Disk with mixed software
Total Value £76.88
Special £6.50 + £3.53 p&p
****** NO WARRANTY ******

Mixed pack of games PP6
15 mixed cassette tapes
1 free joystick
Pack value £150, Special £3.06+ £4.70p&p
****** NO WARRANTY ******

PLASTIC CASES FOR CF2 3" DISKS
Box of 10 £5.00 + £1.18 p&p

WAVE WIDGITS, SPECIAL OFFER
Old price £9.40
Special £7.99 + £1.18 p&p

Mixed pack of games (Pack 2) PP7
15 mixed cassette tapes
+ 1 free joystick
Pack value £150, Special £4.99 + £4.70p&p
****** NO WARRANTY ******

TURN YOUR MONITOR INTO A T.V. THE MP-3 T.V. TUNER NOW CHEAPER THAN EVER!

£24.99 + £3.53 P&P

THIS VERY SPECIAL OFFER IS WHILE CURRENT STOCKS LAST!

SEGA GAME GEAR HARDWARE & SOFTWARE

Sega Game Gear	£99.95 4.70 p&p	Gear to Gear Cable	£4.99 1.18 p&p
Woody Pop	£17.49 1.18 p&p	Joe Montana Football	£21.87 1.18 p&p
Put & Putter	£17.49 1.18 p&p	Columns	£17.49 1.18 p&p
Ninja Gaiden	£21.87 1.18 p&p	Space Harrier	£21.87 1.18 p&p
Solitaire Poker	£21.87 1.18 p&p	LeaderBoard	£21.87 1.18 p&p
Japanese titles Castle of Illution	£19.37 1.18 p&p	Outrun	£19.37 1.18 p&p

AMSTRAD SPARES

	PRICE	P&P
CPC464		
Service Manual - CPC464	£7.50	£1.18
Service Manual - Amendment CPC464/6128 + MP-3 & CT-1	£7.50	£1.18
CPC6128		
Service Manual - CPC6128	£11.00	£1.18
Service Manual - Amendment CPC464/6128 + MP-CT-1	£7.15	£1.18
AM190005 - Replacement Disk Drive (Internal)	£50.00	£3.53
AM190005 EXC - Replacement Disk Drive (Internal) Exchange	£35.00	£3.53
AM170885 - Cabinet Top - CPC6128	£6.50	£2.35
AM170857 - Cabinet Bottom - CPC6128	£5.30	£2.35
AM170124 - Speaker - CPC6128	£10.48	£0.59
AMSDCPC6128ACP - 6128 CP/M Plus System Disk	£17.12	£1.18
AMSDCPC6128BDI - 6128 DR Logo & Help Disk	£13.22	£1.18
AMUKCPC6128/25 - CPC6128 User Manual	£16.43	£2.36
AM40025 - System Rom (Basic), Can be used to upgrade CPC464	£25.04	£1.18
CPC464 PLUS		
Service Manual - CPC464+/6128+	£5.63	£1.18
AM410891 - Cartridge, Basic & Burning Rubber CPC464+/6128+	£18.49	£1.18
AM270773 - Cabinet Top	£11.30	£3.53
AM270774 - Cabinet Bottom	£6.65	£3.53
AM270775 - Cassette Mechanisim	Phone	
AM270777 - Cassette Lid	Phone	
AM270779 - Keyboard Assembly (ESU44LN027AA)	£33.97	£3.53
AM271012 - Socket Audio (Stereo 3.5mm)	£1.18	£0.59
AM270792 - Paddle	£8.34	£1.18
AM271618 - Button, Power Switch (A) Outer Part	£1.06	£0.59
AM271618 - Button, Power Switch (B) Inner Part	£1.06	£0.59
AM270858 - Cassette Button Record	£0.63	£0.59
AM270778 - Cassette Button All others	£0.63	£0.59
AM170002 - Switch, On/Off (ESD-3975)	£2.75	£0.59
AMUARNS/UK - Manual 464 Plus / 6128 Plus	£15.28	£2.35
CPC6128 PLUS		
Service Manual - CPC464+/6128+	£5.63	£1.18
AM410891 - Cartridge, Basic & Burning Rubber CPC464+/6128+	£18.49	£1.18
AM170855 - Cabinet Top - CPC6128+	Phone	
AM170857 - Cabinet bottom - CPC6128+	Phone	
AM270779 - Keyboard Assembly (ESU44LN027AA)	£33.97	£3.53
AM271012 - Socket Audio (Stereo 3.5mm)	£1.18	£0.59
AM271610 - System Disk CP/M Plus, for 6128 Plus only	£6.61	£1.18
AM270792 - Paddle	£8.34	£1.18
AM271618 - Button, Power Switch (A) Outer part	£1.06	£0.59
AM271619 - Button, Power Switch (B) Inner part	£1.06	£0.59
AM271621 - Disk Drive Frame (Cage)	Phone	
AM271611 - Replacement Disk Drive (Internal)	£59.48	£3.53
AM271611 EXC - Replacement Disk Drive (Internal) Exchange	£47.59	£3.53
AM170002 - Switch On/Off (ESD-3975)	£2.75	£0.59
AMUARNS/UK - Manual 464 Plus / 6128 Plus	£15.28	£2.35

MODIFY YOUR CPC6128+ TO LOAD AND SAVE CASSETTE SOFTWARE AMAZING TECHNICAL BREAKTHROUGH.
All you have to do is send your CPC6128+ computer to us and we will modify it to allow loading and saving from external cassette recorders with jack lead. **ONLY £30.00 + £4.70 P&P.**

MODIFY YOUR DDI-1 INTERFACE TO WORK ON THE CPC464+
All you have to do is send your DDI1 interface to us and we will modify it to work with the CPC464+ without crashing. **ONLY £15.00 + £3.53 P&P**

PLEASE NOTE AS WELL AS MODIFYING THE DDI-1 INTERFACE YOU WILL ALSO REQUIRE THE WAVE WIDGET - £9.40 + £1.18 P&P.
PLEASE NOTE THE ABOVE WILL VOID THE WARRANTY OF THE ITEM IN QUESTION
PLEASE NOTE DUE TO THE NUMBER OF ORDERS CURRENTLY BEING PROCESSED SOME ORDER ARE TAKING UP TO 3 WEEKS!

OFFERS WHILE STOCKS LAST. *ENG. MAINLAND post & ins: (A) £5.88, (B) £4.70, (C) £3.53, (D) £2.35, (E) £1.18, (F) 58p (ANC) 3 day £10.58. Next day £14.10 COD + £2.35, maximum UK postage charge £10.58 per 20kg £500. ALL PRICES INCLUDE VAT. All sales subject to our trade terms of trading.*

WAVE (TRADE DEPT. AA 9204)
WALNEY AUDIO VISUAL & ELECTRICAL DISTRIBUTION, 1 BUCCLEUCH STREET, BARROW-IN-FURNESS, CUMBRIA LA14 1SR.
TELEPHONE: 0229 870000 (6 LINES) Hours: Mon-Fri 10.00am - 5.00pm.

AA SMALL ADS

For Sale

IDEAL STARTER PACKAGE, must sell. Amstrad CPC6128 with colour monitor, manual and joystick plus 70 top games (TMNT, F16 Combat Pilot, Terminator 2, Final Flight). Excellent condition £225 o.n.o. Phone Alex (0604) 859193.

CPC464, green screen, 80+ games, Multiface Two, joysticks, manuals, countless AA's and ACU's with covertapes, cheat mode book, other extras, all excellent condition. Bargain £200 o.n.o. Andrew, Glos (0452) 502095 anytime.

AMSTRAD 6128 COMPUTER STACK SYSTEM consisting of colour monitor TV modulator, radio alarm, 40 disk and cassette games plus Mini Office 2, tape recorder with leads, £300 o.n.o. Barry (0734) 690682.

AMSTRAD CPC6128 colour monitor, stereo sound, disk drive, tape deck, mouse, lightgun, lightpen, Slomo, Amdrum, Amstrad Action magazines. All manuals £500 of software. Bargain only £350 o.n.o. (0444) 450454.

CPC464 COLOUR MONITOR, disk drive + disks, joystick, AMX mouse, over £500 of games including Hobbit, Lord of the Rings, worth £1000 will accept £500 o.n.o. Telephone Joyce (0243) 785071 evenings.

CPC464 MONO, 6128 ROM internally fitted, DDI-1, DMP2000, Multiface II, Romboard, Eprom programmer, Protext, Qualitas, £150+ of games, AA 1, 2, 5, 7, 9, 18 to 76, all excellent condition, £350 o.n.o. Tel: Paul (0742) 424458.

CPC6128 COLOUR MONITOR and CPC664 green screen, Multiface II, datacorder, joysticks, manuals, most issues AA, ACU, CWTA serious utilities, £1000 games, excellent condition £500. Ring anytime Ipswich (0473) 713215.

AMSTRAD 6128K colour monitor, keyboard, disk drive + cassette player, 60+ games including WWF Wrestling, Turtles, Night Breed, etc. Bargain at £100. Tel: (0235) 831221.

GAMES FOR SALE 3D Construction Kit, Prince of Persia, F16, 3D Tennis, and more for under £10 each (tape and disk) phone (0494) 439425, ask for Nigel.

CPC 6128 and colour monitor, Multiface II, mouse, joystick, over £200 games (tapes/disks) in good condition and good working order, user manual included £350 o.v.n.o. Buyer collects. Phone Steve (0760) 338447.

CPC6128 TV MODULATOR colour monitor, matching clock radio, AMX mouse, Genus mouse, joystick, many games, tapes and disks, many £100's worth. Excellent value, bargain £300. Tel: (0207) 521071.

AMSTRAD CPC6128 COMPUTER with colour monitor, joystick, cassette player, many disk and tape games, Art Studio, music system, manuals, magazines, Pawn, all good condition, £250. Danny (0634) 389651, Rainham, Kent.

CPC464 MONO with disk drive and DMP2000 dot matrix printer, AMX Art and mouse plus Mini Office 2 Integrated Business Package, loads of games all for £400. Contact Daniel on (0404) 47136.

CPC6128 green screen 3.5" disk drive with ROMDOS ROMbox KDS printer port, MP2 modulator, data recorder, serious and games software, £400 the lot or split. Tel: Tony (0237) 475727.

AMSTRAD 464 plus colour monitor, joypad, cartridges include Pang and Switchblade, cassette software, full price and budget, plus Coverplan insurance up to 1994, £595. Tel: (0823) 278878 James after 6pm please

CPC464 green monitor + TV modulator, around 60 games, joystick, manual, a few AA magazines, worth over £500 will sell for only £189. Telephone Chris (0603) 700553 after 5pm weekdays.

CPC464 colour monitor, joystick, seventy games, magazines £150. Tel: Chris (0634) 252094.

CPC6128 colour monitor, DMP2000 printer, AMX mouse, Max (GUI), new QS joystick, 41 disks inlcuding Stop Press, Extra! Extra!, Advanced Art Studio, Speech, Diskology, many games, Pawn, Elite, etc. 17 tapes, 5 books, 70+ mags inc AA4-41, dust covers, etc, £350. Chris (0235) 535519.

AMSTRAD ACTION MAGAZINES 3, 5, 7, onwards to no. 78, all in binders. Including free AA tapes, £50 o.n.o. CPC464, 664, program, books worth £22 only £10. Tel: Anne on Peterborough (0733) 210184.

AMSTRAD CPC6128 colour monitor, 30+ games, dust covers, 50+ AA's, joystick, manuals, cassette recorder + leads, machine code manual, excellent beginners computer. Call Agnes £275 (0256) 862804 after 7pm.

CPC464, green monitor, modulator, £100 of software including Kick Off 2, Bart Simpson, North and South, joysticks, AA mags, cheats, worth £180. Sell for £125 o.n.o!!! Tel: Ben (0702) 547584 after 4.30pm.

CPC6128, colour monitor, hundreds of games, disks, cassettes, joystick, users manual, magazines, AA64-77, utilities disk, bargain £200 o.n.o. Phone Sue 859 6066, Eltham.

CPC6128 excellent condition, colour monitor, reverse modulator and over £200 of recent releases, also includes Multiface II and Cruiser joystick. Bargain at only £300 o.n.o. Telephone: Barry on 061-368 0930 after 5pm.

5.25" SECOND DISK DRIVE with RAMDOS and 2-in-1 software, CPM to MSDOS file transfer £100. Lots of software including educational for sale. Ring Jon after 7pm (0234) 854174.

CPC464 COMPUTER, colour monitor, plus brand new external disk drive!! Excellent condition, sell for £250. Contact Naveen (0924) 890978 after 5pm.

464 PLUS, colour monitor, games include Switchblade, Pang, Navy Seals, Smash TV, T2, F16 Combat, 1 year old, £250 o.n.o. Tel: Steven after 4pm on 081-684 7279.

AMSTRAD CPC6128 colour monitor with 25+ games including Gunship, all originals, spreadsheet, joystick, manual, three blank disks, user group information, very good condition, good deal at £225. Phone Tim (068481) 361.

AMSTRAD RS232C serial interface £40 o.n.o. Soft 968 Firmware £20 o.n.o. Toolkit Basic programmers aid £10, Iankey Crash Course Typing £12. Devpak80 version 2 £25. Tel: Michael (0293) 517369 after 6pm.

AMSTRAD 464 + green screen + modulator + disk drive + 3 joysticks + 29 games tapes + teak computer desk, 50 free disks with this setup. No splitting, no offers £300. Call Derek (0427) 613966. A complete set up manuals.

COC6128, excellent condition, colour monitor, tape recorder, games, manual, AA's since issue 67 except 74 plus covertapes, £250 for all; quick sale. Tel: Colin (0704) 840875 after 4pm anytime, weekends.

AMSTRAD COLOUR CPC464 X 2, MP1 TV modulator colour x 1, Joysticks x 2, manual x 1. Loads of games, green screen x 1. Immaculate condition, Wordprocessing Protext, Mini Office 2, box sets £190. Telephone: Frank (0666) 823648 anytime, Malmesbury.

AMSTRAD 464+, colour monitor, 64K memory expansion, joystick, paddle controller, £170 worth of software, lots of magazines, sell for £300 o.n.o. Phone David (0206) 323024 between 6pm and 9pm weekdays.

CPC464 WITH COLOUR MONITOR, Zipstik, joystick and over one hundred games. Also TV modulator and user book £195. Call Andy on (0634) 666638 (Medway).

CPC6128 COLOUR MONITOR, excellent condition, Pro competition joystick, mouse, interface, Advanced Art Studio, printer lead, dust covers, £200+ games, disk and cassette, users instructions, programming books £275 o.n.o. Tel: Richard (0283) 840419.

CPC464 KEYBOARD, DDI-1, firmware manuals, other machine code related books, many games and applications on tape and disk, sensible offers for anything. Dave 081-524 7655 after 6pm

CPC6128 COLOUR tape recorder, joystick, over £300 of software including SuperCalc 2, Mini Office, Emotion, 3D Chess, Demons and Drivers, Champions, Dragons of Flame, plus magazine tapes, £250 o.v.n.o. Phone Dave (0273) 733069.

CPC464 COLOUR MONITOR, joystick, £100+ of games including Robocop, Continental Circus, etc. All AA's from issue 42, excellent condition, hardly used, £150 o.n.o. Phone Keith (0628) 23789.

CPC464 PLUS, colour monitor, paddle, joystick, 50+ games, also MP2 modulator, 1991-92 full set AA magazines, as new, boxed, hardly used, £200 o.n.o. Tel: Ron Sudbury (0787) 75495.

464 PLUS COLOUR MONITOR, DDI disk drive, Olivetti printer, TV converter, joysticks, Protext disks, many original games, cassette & disk, ideal for fun, study or office £325. Telephone (0903) 244402 after 6pm.

COMPLETE CPC464 SYSTEM!! For only £300 includes computer, monitor, printer, desk!! + loads of extras. For more details call Andrew (0256) 470015 evenings.

Wanted

MEMORY EXPANSION 256K for use with CPC6128. Good price paid. Also wanted a couple of DISKETTE disk files. Tel: (0443) 225230.

GAMES COMPILATION "Soccer Mania" wanted on disk. Good price paid. Tel: Alan on (0282) 59672.

TV MPI MODULATOR for CPC464. Phone Barry (0582) 599571 days (0582) 502464 eves.

TV MODULATOR for CPC464. Tel: Colin after 6pm before 7.30pm on 081-859 4496 or Sunday before 11am.

WANTED: Dart Scanner, Microstuffer (Frontier Software), Eprom programmer, KDS 8 bit printer port, 256K memory & silicon disk, real time pack (DKtronics), 3-D Construction Kit. Write George, 56 Drew Street, Yarraville, Vic 3013, Australia.

Other

AOK FANZINE with PD pages, features, listings, advice, programming, adventure and more. 36 A4 sides, £1. Cheques made payable to: AOK please, 155 Haslucks Green Road, Shirley, Solihull, West Midlands, B90 2LG.

CPC/ST/AMIGA FANZINE called INPUT, covers everything from serious software to Public Domain, to get issue two send £1.25 + 75p for p&p to: Sean Stone, 1 Linsvale Drive, Frome, Somerset, BA11 2BP.

This section offers you a really cheap and effective opportunity to speak direct to 35,000 CPC owners – or would-be owners. Users report excellent results.

You can place an ad up of up to 30 words for just **£5**.

So you could use it to sell a printer, launch a user group or advertise a piece of software you've written.

One thing you can't advertise is the sale or swap of software. Such ads can be misused by pirates.

Fill in the application form and send it to us together with payment.

We'll place the ad in the next available issue.

ORDER FORM

SEND TO AA SMALL ADS, AD DESIGN, FUTURE PUBLISHING LTD, BEAUFORD COURT, 30 MONMOUTH STREET, BATH, AVON BA1 2BW

Please place the following advertisement in the next available issue of *Amstrad Action*

Name _____

Address _____

_____

_____

Telephone _____

I enclose payment of £5.00 by Cheque/ P.O/ Access/ Visa

Credit Card number

Credit Card expiry date

Classification. Tick box: ❑ For sale ❑ Wanted ❑ Services ❑ User Groups ❑ Other

Write your advertisement here, one word per box. Include your name and phone number if you want them

Welcome to ACTION TEST...

28 Potsworth & co
HI-TEC

30 Titus the Fox
TITUS/PALACE

32 Cartridge round-up
VARIOUS

● A cartoon series that's supposed to have 5.1 million viewers – and we've never heard of it! It's a darned good game, though...

● *Titus the Fox* er, from, Titus. He's their company mascot, apparently. He's also a hardened adventurer crossing the Sahara

● Whatever happened to cartridge games? Well we've tracked them all down, but we wouldn't say they were alive and well...

44 Stryker and the Crypts of Trogan – feature review

● Oh look, someone's dropped a mouldy fried egg.

● Here's a room full of postboxes and burning curtains.

● The most excitingest room of the lot.

JETSONS

HI-TEC • 0742 587555 • £6.99 CASSETTE, £7.99 DISK

Hurrah! It's everybody's favourite second rate *Flintstones* in Space, the Jetsons, in Hi-Tec's latest Hanna Barbera licence, *Jetsons – the computor game*. This game is born of a world inhabited by crap graphics, poo-poor playability and misspellings of 'computer' on disk labels

Yep, you guessed right, this is another of those hatchet jobs we go in for every now and then. Let's start by savaging the plot: George Jetson wants some time off work to go for a picnic with his family. Er, and that's the plot. Savage, savage, savage.

The first level is a boring walk-em-up in which George has to collect three items, at least one of which you will never find even if you play until you've got a big white beard growing down to the floor (women too). You fall through the floor a lot. Oh, and there's some chutes to shoot up.

The second level is a 2D shoot-em-up section, and there's three further levels. Unfortunately, no-one's ever seen them. The first level is so tiresome and tricky, you will be driven to despair. Let's ask some of Future Publishing's most experienced games players how they fared:

"It's so crap. No-one in the office got past the first level." Linda Barker, *Your Sinclair*

"Well, I think – zzzzzzzzzz..." Stuart Campbell, *Amiga Power*

"Half an hour with this game is enough to put you off the nauseating bunch of space age gets for life." Neil West, *Sega Power*.

Imagine walking through the same ten badly-drawn rooms over and over again for the rest of your life. Now you too can experience the pain and suffering of purgatory, without even leaving your bedroom.

There was a rumour buzzing round the office here last week (we think James Leach started it) that the Hi-Tec staff were being held hostage in their Sheffield office by a mad gunman. In the event, this rumour turned out to be false. The other rumour currently buzzing round the office, that Jetsons is a dreadful game on any machine, is a whole lot more believable. If this was a Eurovision Song Contest entry, it would get "nul points" (largely because it's not a song, but you know what we mean).

Adam Peters

SECOND OPINION

It looks OK when you load it, but it's not long before you're screaming with frustration. Has *anyone* got off Level One? I couldn't find anyone.

ROD LAWTON

■ And here's a chair and an upside-down bollard. Sigh.

FIRST DAY TARGET SCORE

Play it for a day? You must be joking...

graphics 39%
Is that George Jetson or a painted plank of wood?

grab factor 12%
Tedious walking around a small but tedious opening level...

sonics 26%
Game show music that will turn vicars into crazed killers>

staying power 05%
...which no-one has ever got off (difficult, boring, repetitive, etc).

10% VERDICT

POTSWORTH

HI-TEC • 0742 587555 • £6.99 CASSETTE, £7.99 DISK

We got an absolute mass of press blurb with this one, readers, Loads of sheets of paper detailing all the different TV channels around the world showing the series. (Quick news flash for our Icelandic readers – Potsworth starts its second run on Channel 2 on June 15th, in a new regular 10.30am spot on Saturdays. Good news, huh?) Amongst all this is the slightly dubious claim that the series has attracted 5.1 million viewers on BBC, making it the number one cartoon series in Britain. So how come neither your reviewer's ten year-old sister, nor any of her mates, have ever heard of it? Maybe we're being too suspicious-minded. After all, who could really gain from exaggerating the popularity of a cartoon dog?

(Erm, any chance of a game review sometime soon? – ed.)

Okay, *Potsworth* is a platform game of five levels. There is a basic game concept, with each level offering a slight variation on that theme.

■ Hmm. Nothing exciting happening here at the moment.

■ Amongst the foes Rosie must face are robot dudes like this.

SECOND OPINION

"Nope, I hadn't heard of *Potsworth* either. You get a lot of game for your money, but it's all a bit cute... and a bit tough for my liking."

ROD LAWTON

The game is very big, the graphics are pretty good, though not the sort of thing you'll want to look at after eating a smoked kipper (*what? – ed*), and the sound does the job.

It is a fairly difficult little venture, especially considering the tough time limits, but the cheat mode isn't that hard to find, and just check out that tape-disk price differential. *Why can't all the softies follow this example?*

With no password system, *Potsworth* might get repetitive after a while, and mapping is to be recommended. The scrolling is smooth, the action can get frantic, and the sheer size of the game for the price wins it a Mastergame award and loads of jelly tots.

■ Standing on a box staring at the wall isn't going to get you anywhere Rosie. Sort it out!

But we'll have to save one bag of jelly tots to give to Maryanne for drawing and colouring in all the characters on this page. We'll even forgive her for sticking flower petals all over our copy of *Machine Guns Illustrated* (probably).

Adam Peters

FIRST DAY TARGET SCORE

Finish the first level

Mastergame

Meet The Potty People

level one ROSIE

The first level features the "girl with an attitude" (i.e, stroppy) Rosie, who has been hurled into the Cave Zone. This is a *Blues Brothers* style explore-em-up, with lifts that need to be triggered by pushing boxes onto the big buttons alongside. Use a similar technique to start conveyor belts. As with most of the levels, there are six objects to collect (in this case, the parts of a ghetto blaster). Very big and very tricky. A baptism of fire, most definitely.

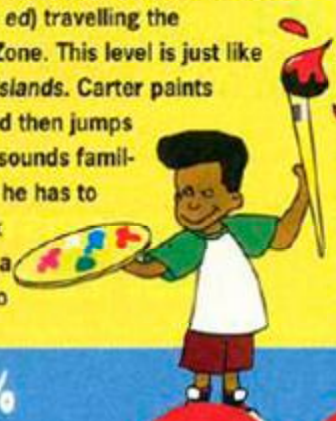
level two NICK

Nick considers himself a superhero of some sort, the nerd. Oh hang on, he is a superhero, and the second level of *Potsworth & Co* features Nick's attempt to get up a tall building, collecting a magic poppy (oo-er) on the way. There are swings to set in motion, pipes to zoom up, and lots of platform leaps that don't seem possible (but pressing Fire again and again in mid-air will enable Nick to fly higher). Tricky.

level three POTSWORTH

Woof, woof, cartoon fans, it's the star of the show himself. Unfortunately, the Candy Zone level is pretty crap, featuring as it does nightmaringly garish colour-clash graphics from hell. Potty has to collect six cocoa beans whilst travelling around a zone full of candy canes, sherbet fountains, dripping ice lollies and the like. The whole shabang starts to get a bit boring and repetitive around this point, but fortunately the game picks up again on the following level.

level four CARTER



The easiest level of all, with Jim Bob and Fruitbat (*er no, it's not that Carter actually – ed*) travelling the Rainbow Zone. This level is just like *Rainbow Islands*. Carter paints ledges and then jumps on them (sounds familiar?), and he has to collect six pieces of a painting to finish the level. There are trampolines to jump on and clouds to leap from, but what's the point when you can just paint ledges instead?

level five KEIKO

Yo Skateboard dudette Keiko, time to take to the fun and funky Carnival Zone. There are five mystical arrows and a dollar bill to collect. Stars give Keiko's skateboard the power of flight, and there are fairground rides that need to be turned off for safe passage. Hesitate on a couple of the star-aided sections and you could end up stuck at the bottom of a big pit with no stars in it and no way to get back up. Left there to rot till the time runs out. It's a hard life, eh, gamesters?

graphics **87%**
Very colourful with nice big sprites, but not much in the way of animation.

grab factor **88%**
Familiar opening level, and a challenge just waiting to be met.

sonics **73%**
Fairly spanky effects. Tune is more irritating that a Bruce Springsteen song.

staying power **92%**
Some variety in the levels and it's big, but perhaps a bit difficult.

90% VERDICT

3.5" DISK DRIVE

Our SONY 3.5" disk drives are fully compatible with the CPC range of computers and will format to 178K. With the addition of Ramdos or Romdos, they will format to 800K!

UNLIKE ALL OTHER DISK DRIVES ON THE MARKET, OUR SUPERIOR DISK DRIVES DO NOT NEED ANY MANUAL SIDE SELECT SWITCHES.

Disk Drive complete with free disk utility software £69.99 + £4.00 postage and packing.

Disk Drive complete with Romdos, 6 socket ROM box and utility software only £99.99 + £5.00 for postage and packing.

- 10 Blank 3.5" disks only £10.00
- Ramdos only £9.99
- Romdos only £19.99
- Rombox only £24.99

464 OWNERS DDI-1 disk drives for the 464/464 Plus now in stock. Available now £159.99. Only a few left, Order yours NOW.

Features:-

- Very quiet
- Slimline Design
- Sleek, high quality metal casing.
- Suits CPC6128 & 464 (464 owners must have a DDI1 3" disk drive first).
- External power supply
- On/Off switch
- Simple to connect, full instructions included.
- 12 month guarantee

TELEPHONE:-
061 724 7572

Siren Software, Wilton House, Bury Rd, Radcliffe, Manchester M26 9UR

Access VISA

The GREATEST EVER MULTIFACE SALE

Do you need to know what happens **ANY TIME INSIDE** a *RUNNING* CPC program?

Get INSIDE INFORMATION!

Install **INSIDER** into *MULTIFACE*. **RUN** a program, let *Multiface* **FREEZE** it and the **INSIDER** tell you everything: it will fully *disassemble*, *find* text or code, *show/alter* **RAM** and the **Z80** registers, *dump* to printer. All this & more for ~~£14.95~~ Now **HALF-PRICE for just £7.95 !**

Invaluable tool for machine code users!

Unique de-bugging/development aid

I order a **MULTIFACE 2** for **CPC 464/6128** ☐ ~~£47.85~~ **£34.95** or for **CPC+** ☐ ~~£49.95~~ **£34.95**

RODOS ☐ ~~£29.95~~ **£14.95** **RODOS XTRA** ☐ ~~£9.95~~ **£4.95** **INSIDER** ☐ ~~£14.95~~ **£7.95**

PLUS P&P per item: UK / Europe **£2** Overseas **£3**.

I enclose a **cheque/PO/cash** for £..... or debit my **Access/Visa** No. ☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐ Card Exp.....

Name/address.....

The above reduced prices apply to MAIL ORDERS received by 1.6.1992.

ROMANTIC ROBOT UK Ltd. 54 Deanscroft Ave, London NW9 8EN ☎ 24 hrs 081-200 8870 ☎ AA

test: in-depth game analysis test: in-depth game analysis test: in-depth game analysis

■ A garage roof. Titus certainly knows his platforms.

■ Yikes, there's lots of rough fat blokes around here.

sewer-exploring bits (to name but three). There are a lot of hidden sections, and plenty of pick-up objects that do weird and wonderful things.

Various enemies lurk enemy-like throughout the route. There are rotweilers, mad scientists, tramps, babies... all the usual sorts of people you'd expect to encounter when travelling from France to North Africa.

Some of the more exciting features of the 16-bit versions (including some different modes of transport and the facility to throw baddies) are absent from the Amstrad version. If that comes as a disappointment, there are two big factors to draw consolation from. Firstly, the CPC is the only 8-bit machine that *Titus* is available on (suck on that, Speccy and C64 owners). And secondly, the graphics are mind-blowingly brilliant, and give the 16-bit equivalents a very long run for their money. A marathon in fact, and for a fraction of the price.

There are a few annoying little niggles, such as the frustrating flip screen death that occurs when you let two moving foes get either side of you. The size, general playability and stunning graphics more than make up for this. There's also a password system, which means you don't need to return to a previous level once you've got halfway through the current one (you'll find a phone box with a code in it). Nice one. After all, the first level of a platform adventure does get a bit boring when you encounter it for the 50th time. The down side, of course, is that this makes the game that much easier to finish.

As for the number of roads, what exactly qualifies as a road? There's plenty of window sills, scaffolding, roofs and sewers to journey along as well, and the action is as spread out vertically as it is horizontally.

Taking each separate street level section as a road, for the sake of argument, and multiplying the figure several times over (these are, after all, only the highlights of the 4000 mile journey), we'd say about 250. "That's how many roads a fox must walk down, Bob."

"Hey man, wait a while, how many seals must one man eat before you can call him a slob? And how many times must the cuckoo clock chime before the meringues are done?"

"Look, what the heck are you on about? And what's that strange smell?"

"Hey man, mother's in the basement mixing up the omelets. What's through here?"

"That's the win..."

"Aaaaaargh."

"...dow. Tsch. Hippies, eh?"

Adam Peters

SECOND OPINION

"My only complaint is that the graphics slow down too much when there are loads of baddies on-screen. Apart from that, it's simply stunning."

ROD LAWTON

■ Where's Titus? Oh, there he is, bottom left. Co-ee.

■ Cor, what a big wall. Mind your step there, Titie mate.

style setters

We never say things lightly, readers. So when we say that *Titus* has the best graphics ever seen on the CPC, take that as being very heavy indeed. The game is the latest in a long line of products that have pushed the Amstrad to previous uncharted levels of graphical brilliance. Here are a few of the main performers:

CAPTAIN BLOOD (1988)

An absolute stunner, Captain Blood was our first glance of how brilliant French graphics could be. Swirling galaxies, exploding planets and brilliant animated aliens really got our juices flowing.

BARBARIAN 2 (1989)

Crikey! The most entertaining and sickly gruesome graphics of all time. Heads get bitten off, blood spews out, characters get eaten... and all in glorious technicolour. Not for those with a weak stomach.

PRINCE OF PERSIA (1991)

Another continental game, *Prince of Persia* offers probably the most fluid character animation ever. A massive platform adventure, spiced up no end by those incredible running and jumping moves. Wow!

TURRICAN 2 (1991)

Turry 2 set new standards of graphics on the CPC. Incredibly detailed sprites and an excellent use of colours, together with ultra-smooth eight-way scrolling. *Turrican 2* totally knocked our stockings off.

TITUS THE FOX (1992)

No sooner had we absorbed the brilliance of *Turry 2* and *Prince of Persia* than along comes something to blow them clean away. This looks better than the 16-bit versions!

meet the programmer

Charles Goodwin is 36 years old. *Titus the Fox* and *Prehistorik* (reviewed last month) are his first CPC games for quite a while. Past efforts include *Shogun*, *Palatron*, *Warlock* and *By Fair Means or Foul* (later released as *Pro Boxing Sim*). His hobbies include watching "crappy old movies" and re-runs of *Doctor Who*, and he's well into science fiction. Oh yes, and he also laughs quite a lot.

graphics	99%	grab factor	95%
We really, truly can't believe how good this looks – best CPC graphics ever!		Familiar platform game style to leap into head-first (without a bathing cap).	
sonics	93%	staying power	90%
Mega funky swing-a-long tune, with jingles instead of effects. Brill!		You'll finish the game eventually, but you'll have got your money's worth.	

94% VERDICT

cartridge ROUND-UP

It's been over 18 months since the Amstrad Plus and GX4000 were unleashed on an unsuspecting public. 12 games were supposed to be available as the machine hit the streets. Many more were promised for the months to come. But the machines flopped. Was it because the software was crap... or because you couldn't *get* it? ROD LAWTON checks out all those cartridge games and reaches a conclusion...

Burnin' Rubber
OCEAN • (SUPPLIED WITH MACHINE)

This is the game *every* Plus/GX4000 owner has got. It's a great-looking racing game that's nevertheless a bit sluggish and a bit thin on long-term interest. Brilliant crash sequence.

Batman – The Movie
OCEAN • £24.99

A console version of the hit tape/disk game released a few months before. We didn't think there was enough that was new to warrant the hiked cartridge price, though.

Barbarian II
PALACE • £24.99

We gave this a massive 92% on tape/disk back in *AA44*, but that was 1989. Graphics have come a long way since then, but *Barbarian II* hasn't. It looks just the same on cart.

Switchblade
GREMLIN • £24.99

Brilliant! A giant, 155-screen, platform exploration game, with lots of enemies, lots of objects to collect and some pretty hectic action. Terrific, detailed graphics, too.

Navy Seals
OCEAN • £24.99

One of Ocean's consistently good film licences. The film flopped, but the game was great. Several levels of platform shooting, collecting and jumping, and tough enough to last.

Klax
DOMARK • £24.99

Brilliant puzzle game where you have to form patterns from coloured blocks. The thing is, it was just as good on tape/disk – and about half the price!

Epyx World of Sports
US GOLD • £24.99

A collection of four sporting events – skiing, surfing, cliff-diving and bmx-ing. Not much depth, but superb graphics, thanks to clever console programming.

No Exit
NOT AVAILABLE IN UK

We just glimpsed this game running at the launch of the new machines. It looks like a pretty routine ninja-style kick-em-up. Not much sign of advanced console graphics.

Tintin on the Moon
INFOGRAMES • £24.99

It looks great, but the gameplay is thin and very tedious. Basically just a collection of nice-looking sequences bunged together into an extremely feeble game.

Pro Tennis Tour
UBI SOFT • £24.99

Not much difference between this and the rather good tape/disk version – except superbly detailed sprites, thanks to the extra hardware. Probably the best-looking tennis sim.

Crazy Cars II
TITUS • £29.99

A pretty good driving/racing game when it first came out in '89, but it's the same old story on the cart. Not enough of an improvement for the extra cost of the game.

Pang
OCEAN • £24.99

A brilliantly simple yet addictive arcade game for one or two players. For each bouncing bubble you burst, you create two smaller ones. One of the best cart games around.

Dick Tracy
TITUS • £29.99

Hopes were high for this film tie-in, but the reality was a good-looking but unutterably tedious plod that had us all reaching for the Off switch. One the worst cart games.

Robocop 2
OCEAN • £24.99

The game follows Ocean's standard formula of scenes from a film converted to levels in a game... but it's yet another superb release. Tough, but excellent platform fun.

Wild Streets
TITUS • £29.99

A pretty routine kick-em-up game, but it's well done with nice graphics and good gameplay. HOWEVER, it's yet another re-release of a game that first came out on tape/disk.

Fire & Forget II
TITUS • £29.99

We gave this game 94% back in *AA61*. We must have been mad. The graphics are nice, but the gameplay is dull as anything. You just drive along a road shooting things.

Gazza II
EMPIRE • £24.95

Not much by way of rules, but incredible two-player fun. Arguably the best footie game ever seen on the Amstrad, with ultra-fast end-to-end action all the way.

Op Thunderbolt
OCEAN £24.99

Grr... yet another cart game lifted from a tape/disk original. This is the (very good) sequel to the very good *Operation Wolf*. We expected something better on the cart, though.

Plotting
OCEAN • £24.99

Besides its movie licences, Ocean also does some excellent puzzle games. This one is merely OK. Chuck coloured blocks around within a time limit to stay awake (er, alive).

Chase HQ
OCEAN • £24.99

The cart version of the ever-so-good car driving game first out on tape/disk. We still haven't got a glimpse of it, though, but the original was great.

Panza Kick Boxing
LORICIEL • £24.99

It looks very pretty, but the gameplay is pretty standard kick-em-up fare. You fight another bloke in pyjama bottoms in a boxing (kicking?) ring while the spectators look on.

Pinball Magic
LORICIEL • £24.99

Yet another game first out on tape/disk! However, this is a corker on cart. Trouble is, it was a corker already. Never mind, it's still excellent Pinball fun.

Tennis Cup 2
LORICIEL • £24.99

We seemed to go through a glut of tennis games a couple of years ago. This one is good, but *Pro Tennis Tour* still has the edge. Still good one or two-player fun, though.

Copter 271
LORICIEL • (PRICE TO BE ANNOUNCED)

We've been promised this for ages, but we're still waiting. It's an airborne shoot-em-up that looks truly terrific – but we'll just have to wait and see (if it's ever released).

But where can you get them?

Dear oh dear, there was a great fanfare when the new machines were launched – at least a dozen titles available straight away, and loads more in progress from all the major software houses...

Some chance. Carts trickled out in handfuls, weeks late, and were hard to find in the shops. And the software houses were being canny. Few of them took the chance on developing new games for the cartridge format. Instead, they hedged their bets by converting existing titles.

It's not surprising nobody bought the machines – you couldn't get the games, and when you could they were just old stuff but £10-15 more expensive! Hardly stuff to stir the blood.

Now, eighteen months on, the cartridge format is dead as a dodo. So what do you do if you've got a cart machine and you want some of these games? You *won't* see them in the shops, but you *might* see them on offer from some of *Amstrad Action*'s mail order suppliers.

Your best bet, though, is to give the games' publishers a ring. If they can't tell you where to buy a game, they might be able to sell you one direct. We reckon there must be thousands of unsold cart games out there – *somewhere*.

Numbers to call

Loriciel	010 3314 752 1133 (France)
Ocean	061 832 6633
Palace/Titus	071 278 0751
Gremlin	0742 753423
Domark	081 780 2222
US Gold	021 356 3388
Infogrames	071 738 8199
Ubi Soft	0252 860299
Empire	0268 541126

Requests, please!

We want to know how many of you readers are keen to get hold of cartridge games, and which ones. If we get enough interest we might (no promises, mind) be able to do a deal with a software house not only to get the games, but get them cheaper. Send your requests to:

Cartridge Requests,
Amstrad Action,
Beauford Court,
30 Monmouth Street,
Bath,
Avon BA1 2BW

MJC COMPUTER SUPPLIES

Suppliers of Discount Software since 1984

HOW TO ORDER:

All prices include VAT & delivery

Send cheques or postal orders made payable to:

MJC SUPPLIES (AA)

Unit 2, The Arches, Icknield Way,
Letchworth, Herts, SG6 1UJ

Or telephone with Access or Visa debit and credit cards on:

0462 - 481166

Overseas Customers: write for quotation
Educational Bodies, Local Authorities, Govt. Departments: send written order
FAX US ON 0462 670301

CF2 DISKS

5 for £8.95
10 for £15.95
20 for £29.95

DESKTOP PUBLISHING

STOP PRESS SOFTWARE
A superb page layout program allowing text and graphics to be printed on the same page. Contains a number of text fonts & clip art. Create leaflets, posters etc. (CPC6128 or 6128+)
MJC PRICE £34.95

STOP PRESS & AMX MOUSE
As above but is supplied complete with the AMX mouse making the program easier and quicker to use.
MJC PRICE £64.95

EXTRA! EXTRA!
Two disks of extra fonts and clip art for use with Stop Press.
MJC PRICE £14.95

★ ★ SPECIAL OFFERS ★ ★
STOP PRESS SOFTWARE PLUS EXTRA! EXTRA!
ONLY £44.95
OR
STOP PRESS & EXTRA EXTRA *PLUS* AMX MOUSE AND INTERFACE
£74.95

CPC AMX MICE & INTERFACE

We now have CPC mice and interfaces back in stock.
CPC MOUSE & INTERFACE £34.95
(Plus owners please call)

RIBBONS

Printer	Quantity 1	2	5
DMP 2000/3000	3.00	5.50	12.00
Panasonic KXP1081/1180	3.95	7.00	15.00
Citizen 120-D	3.95	7.00	15.00
Star LC-10 Mono	3.95	7.00	15.00
Star LC24-10	4.95	9.00	20.00
Panasonic KXP-1124	3.95	7.00	15.00
Star LC-10 Colour	5.95	11.00	.... –
Star LC200 Mono	5.50	10.00	.... –
Star LC200 Colour	10.95	19.95	.... –
Star LC24-200 Mono	4.95	9.00	.... –

Heat Transfer Ribbons

	x1	x2
Citizen 120-D Mono	6.95	13.00
Panasonic 1081/1180 Mono	7.95	15.00
Star LC-10 Mono	6.95	13.00
Star LC-10 Colour	11.95	23.00

COURIER DELIVERY
Available on any order.
Prices start at £3.00
please ask for further details.

SERIOUS DISKS

PROTYPE
Arnor's excellent print enhancer - a must for all Protext users (not CPM)
MJC PRICE £21.95

Protext	18.95
Prospell	16.95
Promerge	16.95
Matrix Spreadsheet Plus	29.95
Qualitas Plus V2	14.95
Qualitas Font Library	11.95
Masterfile 3 *(database)*	29.95
Mastercalc 128 *(Spreadsheet)*	25.95

★★ LET'S GET SERIOUS ★★
A monthly look at serious software
This Month: COLOURDUMP 3
NEW RELEASE!!
After a lot of feedback on ColourDump 2, we are now pleased to announce the latest version of the best colour screen printing program for the CPC range. Requires Star LC-200 or compatible 9 pin colour printer.
Improved use with Advanced Art Studio. Will automatically read in palette file and set screen mode to ensure your page is the same as your screen. Uses compressed or uncompressed files.
Bigger printouts. In addition to the original 13 cm x 9 cm image, a large print out at approximately 22cm x 15cm is available at single or double density.
Use Multiface screens. A conversion routine is supplied to allow most Multiface screens to be used.
NO OTHER COLOUR SCREEN DUMP OFFERS SO MUCH.
COLOURDUMP 3 £15.95 DISK ONLY

24 pin printer screen dump	14.95
Stockmarket (share analysis)	29.95
Money Manager (home accounts)	21.95
Nirvana disk copier	14.95
X-press v2.0	18.95
Sprites Alive Compiler	22.95
Maxam Assembler	18.95
Mini Office 2	13.95
Advanced Art Studio (128K)	17.95
Advanced Art Studio & AMX mouse	49.95

3D CONSTRUCTION KIT (6128)
MJC PRICE £19.95

GAMES DISKS

COMPILATIONS

Capcom Collection	17.95
Grandstand	14.95
James Bond Collection	14.95
Hanna Barbera Collection	10.95
Hollywood Collection	14.95
Max Pack	17.95
Movie Premiere Collection	14.95
Soccer Stars	13.95
Super Heroes	14.95
Super Sega Collection	17.95
Super Sim Pack	17.95
System 3 Pack	14.95
Virtual Worlds	15.95

Alien Storm	12.95
Battle Command	11.95
Captain Planet	11.95
Colossus Chess 4	11.95
Double Dragon 3	11.95
F-16 Combat Pilot	7.95
Gauntlet 3	12.95
Hudson Hawk	11.95
The Jetsons	6.50
North & South	12.95
Outrun Europa	11.95
Paperboy 2	11.95
Pit Fighter	11.95
Potsworth & Co	6.50
Prince of Persia	11.95
Robozone	11.95
Rodland	11.95
Sim City	12.95
The Simpsons	11.95
Smash TV	11.95
Titus The Fox	11.95
WWF Wrestlemania	11.95

EDUCATIONAL DISKS

For more information on the educational programs ask for the MJC Educational Supplement

Learn to Read with Prof (age 4-9)	
Part 1: Prof Plays A New Game	14.95
Part 2: Prof Looks at Words	14.95
Sesame Street	
Letters for You (2-5)	11.95
LCL Primary Maths (3-12)	19.95
LCL Micro Maths (11-GCSE)	19.95
LCL Micro English (8-GCSE)	19.95
LCL Mega Maths (A-Level)	19.95

KEYS TO PLEASE

Young children don't understand CAPITAL letters - as on the keyboard. Keys To Please is a set of laminated keyboard stickers showing lower & upper case.
Keys To Please £3.95
or £2.95 if ordered with other goods.

French Mistress *12 to adult*	15.95
German Master *12 to adult*	15.95
Spanish Tutor *12 to adult*	15.95
Italian Tutor *12 to adult*	15.95
Answerback Junior Quiz (6-11yrs)	
500 general knowledge questions	10.95
Factfiles *(require Answerback Quiz)*	
Arithmetic (6 to 11 years)	7.95
Spelling (6 to 11 years)	7.95
NEW! TRIPLE R SOFTWARE	
Four programs per package	
Picture Book (2-5yrs)	14.95
Money Matters (2-11yrs)	14.95
Target Maths (6-13yrs)	14.95
Fun School 1 *10 programs per disk*	
For 2 to 5 years	6.95
For 5 to 7 years	6.95
For 8 to 12 years	6.95
Fun School 2 *8 programs per disk*	
For 2 to 6 years	8.95
For 6 to 8 years	8.95
For 8 to 12 years	8.95
Fun School 3 *6 programs per disk*	
For 2 to 5 years	11.95
For 5 to 7 years	11.95
For 7 to 12 years	11.95
NEW Fun School 4 *6 programs per disk*	
For under 5 years	11.95
For 5 to 7 years	11.95
For 7 to 11 years	11.95

ACCESSORIES

DKT 64K Memory Expansion 464	39.95
Multiface 2 Plus (for CPC)	39.95
Multiface 2 Plus (Plus models)	42.95
8 bit printer port (inc. lead)	24.95
CPC to parallel printer lead	9.95
CPC Plus to parallel lead	6.95
464 keyboard-monitor ext leads	7.95
6128 keyboard-monitor ext lead	8.95
NEW 6128+ key/monitor ext leads	7.95
FD1 Disk Drive Lead (664/6128)	7.95
464/6128 monitor/keyboard dust covers	7.95
464/6128 plus dust covers	8.95
(please state exact machine - col/mono)	
Quickshot 2 Turbo Joystick	9.95
Competition Pro 5000	13.95
Topstar Joystick	19.95

CPM BASED

Protext CPM	**39.95**
At Last Plus	24.95
Supercalc 2	42.95
Hisoft Pascal 80	36.95
Hisoft C Compiler	36.95
Iankey Crash course Typing	18.95
Iankey Two Fingers Typing	18.95

PRINTERS

All prices include cable, ribbon, VAT, postage & packing. Courier service available, add £5.
FEEL FREE TO CALL FOR ADVICE

9 PIN PRINTERS

CITIZEN 120-D PLUS
A cheap Epson FX compatible, with a range of text styles and sizes in draft mode, limited in Near Letter Quality.
£139.95

STAR LC-20
Star's new replacement for the popular LC-10 is sure to be a winner
£169.95

PANASONIC KXP-1170
Replacement for the very popular KXP-1180. Still Offers 4 NLQ fonts, and fast printing. Very good quality text for a 9 pin printer.
£159.95

STAR LC-200
The latest colour printer from Star. Not only very fast but offers new paper handling features. Best value for money. NB: Printing colour graphics requires extra software. Please call before ordering.
£219.95

24 PIN PRINTERS
When printing graphics from 24 pin printers results will be distorted without some extra software. Please call before ordering.

STAR LC24-10
Excellent value budget 24-pin printer, offering 5 letter quality fonts, and additional effects such as quad size, outline and shadow.
£209.95

PANASONIC KXP-1123
Panasonic's entry level 24-pin, giving a better print quality than the Star models, but with 4 LQ fonts and fewer effects
£219.95

STAR LC24-200
The replacement for the popular LC24-10, with the same 5 letter quality fonts, shadow and outline effects. Much quicker than the 24-10 and has improved paper handling.
£259.95

PANASONIC KXP-1124i
Replacement for the excellent 1124, offering excellent text quality, build quality, paper handling and control panel. Now offers shadow & outline effects, 7 LQ fonts and a new super LQ font.
£279.95

COLOURDUMP 2

This program prints Advanced Art Studio Files in up to 16 colours on the Star LC-200 Colour printer or compatible
COLOURDUMP 2 £12.95

CASSETTE SOFTWARE

Fun School 2 (2-6)	6.95
Fun School 2 (6-8)	6.95
Fun School 2 (over 8)	6.95
Fun School 3 (2-5)	8.95
Fun School 3 (5-7)	8.95
Fun School 3 (over 7)	8.95
Mini Office 2	9.95
Maxam 464	15.95
Protext 464	15.95
Tasword 464	15.95
Advanced Art Studio (128K)	15.95
Advanced Art Studio & AMX mouse	47.95

VISA **Access** **Card holders can order now on: 0462 481166** **EUROCARD** **MasterCard**

cheat mode

No game is safe from *Amstrad Action's Cheat Mode* section! Phil Howard sorts through another mailbag packed with game hints, tips and solutions. And, of course, there are full instructions on how to use the pokes on the covertape. Maybe you've got your own cheats? We pay £10 for the month's top tips, and £20 for pokes. Write to: Cheat Mode, Amstrad Action, Beauford Court, 30 Monmouth Street, Bath, Avon BA1 2BW

SEYMOUR GOES TO HOLLYWOOD

In hot pursuit of *Seymour Take 1* is the complete solution to the full-blown game, *Seymour goes to Hollywood*. And if you thought *Take 1* was tough get a load of this. All-time master adventurer David Hayes of Neilston in Glasgow takes the credit for this epic piece of detective work – fine stuff Dave, have an Oscar yourself.

Get the movie specs from the limo, then go right. Once past the security guard drop them again. **Go right until you reach the first studio then left twice. Get the dictionaryand give it to Pippa (the receptionist).** Keep going right until you reach the first tree hut. Enter and get the jacket. Go to the top right hut, enter and get the spanner. Make your way back to the first studio and leave the jacket outside. **Go to the lift and drop the spanner. Go to the first floor (press K) and get the pom-pom. Go up another floor and work around to the deflated balloon. Pick it up and return to the lift.** Go to the top floor then go right. Get the studio key. Go back to the first studio (M to make the lift go down). Drop the key at the door. Leave the balloon and get the jacket. **Enter the Grease set, give the jacket to the biker, and get the pump. Go right, enter the Malt Shop and give the pom-pom to Sindy. Take the key and the parrot food.** Leave the set, get the balloon, go right into the second hut, and drop the balloon and pump. Go to the top right hut, drop the parrot snack beside the door. When the parrot leaves collect it. Exit the hut, got to top left platform and repeat. Go left and repeat until the parrot enters the hut. Get the key and the dagger. **Go to the first studio, drop the dagger, get the key. Go left 5 times and open the door. Go to the Grease set, then left, right, and open the door.** Go to second tree hut, get the balloon and pump and drop on the platform. Ferry all 4 items across from the island. **Get the key, go up and left to the hut and get the key. Go to the Grease set. Go left, open the door and work through the set, collecting the key. Go left, open the door. Left twice again, open the door and return to the Grease set.** Get the gloves and go into "Sherlock Bones" set. Make sure the gloves are last on the inventory, go right, get one coin and the cards, then the arrest warrant from Rick Bracy. Go to the "Western" set, enter saloon, talk to Billy the Kid, then give the evidence to Rick Bracy. **Go to the Western set, climb the stairs in the saloon, go left, enter the green door. Talk to Sal and give the letter to Rick. Get the lollipop and coin from the Sherlock Bones set, go to the limo, then left and into Greasy Lils. Give her the coin, take a buttie and key and go to the Grease set, dropping the lollipop at the limo.** Go to the Western Set, and drop the buttie at the locked door to the left, open the door to the ▶

Multiface Mayhem

The battling buttoneers this month are (celebrated) Carl Surry of Barnet, (legendary) Lee Rouane of Wolley Moor and (marvellous) Martin Swift of Queensbury. They regularly plough through game code to bring you the latest and greatest for the miraculous Multiface. How may of you out there want to know more about the mighty beast and would like to find your own pokes just like these guys do? Write and let me know, and we might just be able to arrange a tutorial. (how about it Rod?)...

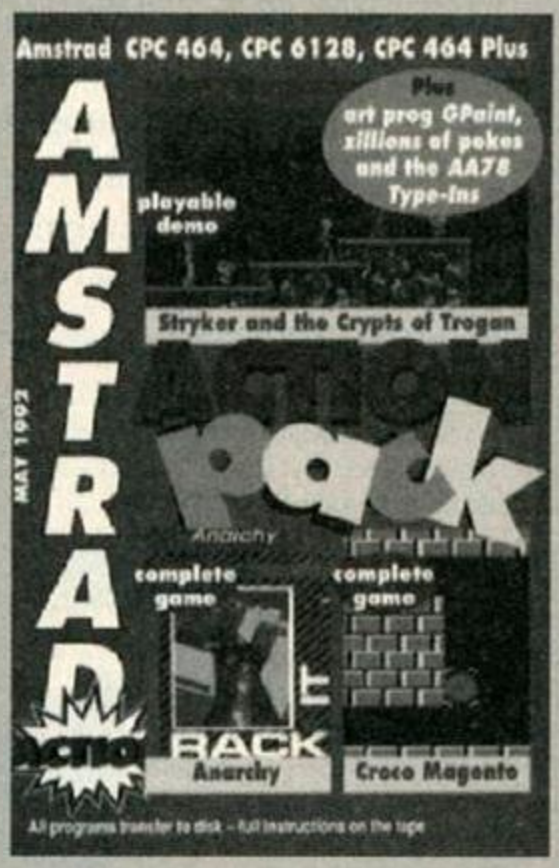
NAME		ADDRESS	POKE	EFFECT
Monty Python	(d)	8B91	FF	Lots of lives
		A388	00	Inf. lives
Shanghai Warriors	(t)	3331	00	Inf. lives
Last Duel	(d)	147F	00›	Inf. lives
		2BED	00›	
Crossfire	(t)	0D1F	00	Inf. lives
		0BE2	xx	No of lives
Q10 Tankbuster	(t)	C512	00	Inf. lives
Return of Jedi	(t)	0600	A6›	No obstacles
		0677	A6›	
Overlander	(t)	1815	00	Inf. lives
Live + let die	(t)	5B67	00	Invulnerability
		7402	01	Inf. fuel
		7495	00	Inf. missiles
Smash TV	(d)	1D5C	00	Inf. lives
Bart Simpson	(d)	15AC	FF	Inf. lives
		3B0E	00	Position
Wrestle mania	(d)	2A64	00	Inf. credits
Batty	(t)	4515	00	Inf. lives 1 play
		4523	00	inf. lives 2 play
Titanic		41F9	00	Inf. lives
		3008	00	Inf. bullets
Stardust		03E4	00	Inf. lives
Blackbeard		38DA	A3	Inf. lives
		4C3E	00	Inf. bullets
Spitting Image		36F3	C1	Always win.
Colloseum		68C4	00	Inf. lives
Midnight resistance		1557	00	Advance level when dead
Score 3020		68E9	00	Inf. lives
Back to the future 2		6954	00	Inf. time
		7A4C	00	Inf. lives
Time machine		733D	00	Inf. lives

covertape pokes

Every month we put a collection of game pokes on the covertape. These short programs 'modify' the game code when it loads to give you all sorts of extra goodies, like infinite lives, infinite time, extra weapons and more. You load the poke, then you load the game – simple (check out the detailed instructions at the bottom of this page). Pokes only work for specific versions of games – tape and disk versions may be different, and re-released versions on compilations or budget labels.

Whoa! What a lot of pokes we've got! There are just 9 pokes on the tape, but they cover a t least 4 compilations and amount to well over 20 pokes in all! These guys are just too much. Edinburgh's Ross Younger, Graham Smith of Street, and Dunstable's Andy Price are all doing a great job.

Graham Smith has sorted Codemasters' Christmas biggie compilations *Cartoon Collection* and *Dizzy's Excellent Adventures*, not to mention fixing the *AA77* covertape. Ross Younger shows his flair for the poke position with a poke for *Loopz* on the *Loopz Collection*, and last but certainly not least, Andolpho Price blasts the *TNT* and *Winners* disk compilations wide apart with some of his super-sneaky routines. The *TNT* pokes all need to be run separately (come on Andy, get a grip!).



CARTOON COLLECTION, AA77 COVERTAPE & DIZZY'S EXCELLENT ADVENTURES

● On the *Cartoon Collection* Seymour goes to Hollywood and gets a dose of (careful!) infinite lives. Use it along with the solution elsewhere. *Slightly Magic* also gets the infinite life treatment. *Spike in Transyvania* bites back with infinite lives, and lastly, *Dizzy* (if you haven't beaten this by now, here's your big chance) gets... wait for it... infinite lives.

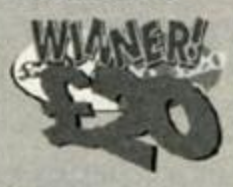
● The *AA77* covertape game *Seymour Take one* gets infinite lives. So does *Firelord*.

● On the *Excellent Adventures* compo, *Prince of the Yolk Folk* has infinite lives, *Spellbound Dizzy* gets infinite lives and *Kwik Snax* does too. *Dizzy down the Rapids* gets infinite lives and apples for both players. *Panic Dizzy* gets no punishment (change from lives).

LOOPZ

Ross's poke for Audiogenic's *Loopz* supplies infinite lives. Ross reckons the game is pretty impossible without a poke. He has supplied a few tips to help out. The object of games A and B is to make a loop that covers every part of the screen, take advantage of the poke and wait for the piece you want to come along. When you make a large enough loop (Game B recommended) you move up a game (from game A you go to game B), losing a life will put you back here. From game B you go to screen 31 of game C the passsword is POLL if you want to practise.

WINNERS



● On the *Winners* disk, *Thunderblade* gets infinite lives for parts 1 and 2, *Blasteroids* infinite credits, *Temple of Doom*, *LED Storm* and *Impossible Mission*, get infinite lives.

● *TNT's Dragon Spirit* gets infinite lives, *Toobin'* gets infinite credits as does *Xybots*. *Hard Drivin'* (and it is) gets extra time (and it needs some).

I've left the Multiface stuff off this time due to lack of space. Now that you can run the routines from the tape there should be no need, but let me know how you feel about it.

New Kids Block

1) Load the poke you want from the covertape into your computer.

2) Take out the covertape and put in your game tape or disk.

3) Type !DISC if you are using a disk poke.

4) Type RUN to run the routine (not RUN "" (CTRL+ENTER) as you normally would)

You should find that the game will load normally, or you will be given instructions on what needs to be done.

right. **Get the ball from the tree hut and go to the Frankenstein set. Give Towser the ball.** Go to Lils, collect the foot and then the hand from the limo. Go to the Frankenstein set and get the other foot. Work through to below the table and drop everything. **Get key and open the last door (where the buttie is). Go to Rick Bracy set, take the body and gloves, and get a coin from the Sherlock Bones set. Go to the Frankenstein set. Leave the gloves and coin on the first screen. put the body on the table.** Repeat for the hand (3rd floor lift), head (1st floor lift), arms (from island and Western), and legs (second hut and Western). **Get coin and gloves. Put the coin into the machine, then, wearing the gloves flick the bottom and top switches. Flick the top again, then the bottom. Go right, get the brain and drop outside the Grease set. Get the dagger, mallet and buttie, then enter the King Kong set.** Make your way to the top, give King Kong the buttie and use the dagger to cut the girl free. Drop the mallet, get the medal and collect the brain. Then get the clockwork heart from the Flash set. **Go to the Wizard of Oz set and give all 3 to Dorothy. Take the towel.** Get the lift to the third floor and collect the potion. Go to the Flash set. **Place the towel in the teleporter, operate the computer, then repeat to teleport yourself.** Go right and get the lift. Go left, past Ming and get the detonator. Make sure that you are still carrying the potion. Pass Ming, drop the potion then teleport back. **Get the flowers from the island and the explosives from the Rick Bracy set.** Give the flowers to Pippa, take the key get the lift to the top floor. **Go left and open the door. Drop the explosives in front of the safe, drop the detonator on the settee. Enter room and collect the script.**

● **You now have to take the script and an Oscar to all 16 characters. The Oscars are hidden in the following places.**

1) Props department, underneath a barrel.
2) At the lift underneath the Yukka plant.
3) The hut where you got the ball, underneath the window pane.
4) To the right of this hut, on the platform, under the leaves.
5) Top right tree hut, underneath a barrel.
6) In the Wizard of Oz set – go to castle top, fall instead of jumping up to the flying monkey and land on the platform. It's under the leaves.
7) On the Rick Bracy set in the lock up under a packing case.
8) First screen in the Sherlock Bones set halfway up a tree.
9) In Sal's Saloon – jump on to the piano, then across to the last chandalier, then try to pick it up.
10) Under the packing case in corridor (Sal's Saloon)
11) Under the bedknob in Sal's bedroom.
12) First room in the Frankenstein set under a railing.
13) In the Secret Lab, Frankenstein set.
14) In the Flash set – On transporting, jump up and right to Ming's armoury.
15) In the Space base under the first air vent.
16) Jump across the third chandalier in Sal's

saloon, hold down Enter it usually appears, if not keep trying.

SEYMOUR TAKE 1

If you happen to be the one person in the world (you're not, 'cos I can't do it) that is stuck on the *AA67* covertape game *Seymour Take 1*, then allow David Broughton, Philip Morris, David Francetti, Sean Wiesinger, Matthew Lee, William Huddleston, Ian Perry, Paul Whitsatble, Duncan Wallace, Alex Pluskowski, Richard Harris, Ross Younger, Francis Whitestone, Andrew Martyn, Peter Denyard, James Durrant, Steven Dale, Chris Russell, Steven Knox, David Horwell and Paul Forder (sorry to all I've missed) to help you out.

Go to the door on the left, press the switch and the room will turn red (unless you have a green screen!). **Go into the corner and pick up the "fresh reel of film".** Exit, jump over the couch on your right and go through the door. **Get the knife from the top of the filing cabinet. go back out of the room.** Go down in the lift and talk to Pippa, to get the movie script. **Go right and drop the script next to the rope.** Pick up the rope. **Go right and tie Fay to the track.** Go right again and put the film into the camera. **Go back to the room with the train.** Position yourself in front and press Fire. The train will start. **Go back to the camera and press Fire. It will start to move.** Go to Fay and cut her free from the track. **Go back to the camera. When the train stops take the film out.** Take the film to Room with no view. **Turn off the switch and develop the film.** Take the developed film to the Projection room. **Put the film into the camera and watch the movie.**

Keypresses, keypresses...

You have sent me an awful lot of keypresses this month (Keep it up!). I generally try the cheats out. My buddy Carl (Playmates) Surry usually helps, but I don't always have the games at hand so occasionally a cheat might possibly sneak past that dosen't work. Sorry if it happens, but nothing ventured and all that!. Anyway, here are the ones I am fairly confident about, you can have the rest next month..

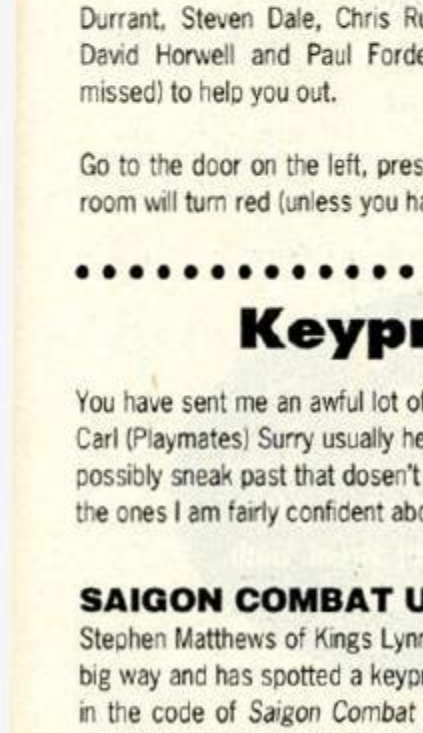
SAIGON COMBAT UNIT

Stephen Matthews of Kings Lynn is into cheating in a big way and has spotted a keypress one buried deep in the code of *Saigon Combat Unit* (Optimus generally builds them in!). At any time, press H to pause the game then type 48829 and H to restart – you will have infinite stuff.

TERMINATOR 2

Regular contributor Stephen Troup of Kings Lynn (what is it about Kings Lynn?) and the inimitable Carl Surry of Barnet have both spotted a keypress for *Terminator 2* (I watched the video last night!) – Enter GEP into the Hi-score table and the border will change colour, then you will have infinite energy for most of the time (watch out for T1000 though).

SHANGHAI WARRIORS, HOBGOBLIN & CAVE MANIA



Paul Harper of Folkestone has sent me a whole bunch of great keypresses, Here is the first batch (however did you get so many at once, Paul?):

Shanghai Warriors. On the Hi-score table enter OUTLANDS for infinite lives.

Hobgoblin. On the title screen hold down the keys RGB and a message OH OK will appear at the bottom. Press fire to start and a Cheat Mode menu will appear, you can alter lives by pressing L and weapons by pressing W.

Cave mania. On the Island title screen type CAPTAIN CAVEMAN (inc. spaces) for infinite lives.

FINAL FIGHT, DOUBLE DRAGON & DOUBLE DRAGON 2

Matthew Craven of Tottington has found another three keypresses all with pretty much the same system of operation (must have been written by the same chappies eh?) for three super games:

Final Fight. Press P to pause then type RUN LIKE HELL (inc. spaces) for infinite lives. Great stuff Mat. I suspect that you must have inside information to find these cracking cheats?

Double Dragon. Press DEL to pause then type RUN LIKE HELL (inc. spaces) for infinite lives. Do it again and you become Abobo (+inf lives). Do it yet again and you return to normal.

Double Dragon 2. Press DEL to pause then type RUN LIKE HELL (inc. spaces) for infinite lives. (Carl tells me that this one only works on the disc version)

PUZZNIC

In addition to a cheat we had back in *Cheat Mode 78* for *Puzznic*, Gareth Nicks of Bracebridge and Carl Dixon of Borehamwood have spotted an extra feature – Press R to enter the retry menu then type HELPME and you will get infinite retrys, also while you are playing you can press N to skip levels.

HELP

Here's a brand-new *Cheat Mode* section for all those gamesters well and truly stuck on their fave (or not so fave!) games.

We've broken up the *Helpline* page into queries about games, technical topics and adventures. From now on, if you're stuck on a game, or you simply can't get hold of an old classic, send a postcard (or write on the back of an envelope) to:

Games Helpline
Amstrad Action
Beauford Court
30 Monmouth Street
Bath
Avon BA1 2BW

The normal Helpline rules apply:

DO try to keep it quick and simple – name the game, name your problem, and make sure it's a reasonable request!

DO include your first name and your telephone number. Sorry, we can't print full names and addresses.

DON'T try to advertise 'games for sale' – that's what the *Small Ads* page is for. This section is for people who need help only.

And now, without further ado, lets hear from some helpliners...

Can someone please tell me where I can get *Garfield 2* on tape?
Andrew, Edinburgh 552 1607 5-9pm

Desperately wanted: *Fruity Frank*, will gladly pay.
Neil, 0626 779765

Where are the aqualung and flippers on *Spellbound Dizzy*? What is the weird talisman for?
Robert, 0333 312457

I can't get the bomb to work on the *Space Crusade* demo (*AA78*). Can anyone help?
Andrew, 0983 405995

Can anyone please tell me the code for part two of *Bubble Bobble*, as the game is driving me insane...
Val, 0744 53804

Help wanted in *Kentilla*. How do you cross the sea? In *Gremlins*, how do you operate the blowtorch?
John, 010 353 051 41525

Wanted: cheats, pokes and help for *Monty on the Run*.
Wayd Kennedy, 'Killara', Rifle Range Road, Sandford, Tasmania, Australia 7020

Would like to obtain *747 Flight Sim* for my 464 Plus. Can anyone help?
Norman, 0276 20476

Has anyone got *Sorcery* on tape for the 464?
Ron, 0582 873267 after 5pm

the Balrog

The Balrog, memory man extraordinaire, shows you this month how to get the most out of *GAC* as well as giving some hints and tips on writing a good adventure plus all the usual reviews, hints, amusing responses and the infamous Lords & Ladies of Adventure...

This month's scintillating collection of clues are from Jon Pengelly (Cheshire), Robert Melody (Surrey), Phil Johnson (Northenden), Alistair Crook (Leeds), Paul & Timothy Stitt (Belfast), Yasir Gilani (London), Benjamin Lomax (Bury), Amir Mansour (London), Dave Adams (St Helens), Laurence Boyce (Leeds), Katharyne Allen (Guernsey), Thomas Christie (Grangemouth) and John Critchley (Grange over Sands).

Special thanks to Thomas Christie for his map of The Trial of Arnold Blackwood.

Big Sleaze

• At the end, climb up the Empire State building, making sure you have the model plane and the battery from the torch. When you meet King Kong put the battery in the plane.

• Some of the places you can drive to: Joe's Diner, Brooklyn Heights, Home, Police Station, Astoria Boulevarde, Central Park, Battery Park, Central Manhattan...

Case of the Mixed-Up Shymer

• Baa-Baa White Sheep is a bit off colour. To help him you might want the tin of paint hidden in the hay in the barn.

Corruption

• Get the certificate from the cabinet and flush it down the loo (Now you won't get arrested at noon!)

• Go to the BMW and start the car – leave the engine running, even if you leave the car (so it doesn't get tampered with later on). Open the glove compartment and get the screwdriver.

• Break the window of the Volvo with the screwdriver and take and read the paper in folder.

• When you go to your dinner appointment with your wife at 2 o'clock, ask loads of questions, because you can get some good info from her.

Contacting the Balg

To get in contact with the Balg, write to him at: Amstrad Action, Future Publishing Ltd, Beauford Court, 30 Monmouth Street, Bath, AVON BA1 2AP or e-mail at cazsjw@uk.ac.leeds.dcs.

Jewels of Babylon

• Give the red herring to the lion.

Jinxter

• To get into the dumb waiter at the castle of Jannedor, you must tie the rope to the manacles, then light a candle with a match and put this candle in the hat which you then put under the

review The Chaos Maze

REVIEWED BY THE HOBBIT • £2.50 TAPE • £4.50 DISC.
61 Lowergate Road, Huncoat, Accrington, Lancashire BB5 6LN.

Well, after your heroics in *Tulgey Woods* (*reviewed way back in AA54 – Balg*), the light introduction to the eight-part saga of *Superstition – the Covenant*, you go boldly on to face the second challenge. This time you must seek out and destroy Gremold the stone wizard to free the land of Zar. Ahead lie many tough obstacles and puzzles, so don't expect *The Chaos Maze* to be easy!

Chaos Maze is a HUGE GACed game from Len Townsend (Author of *Tulgey Woods*, *Twelve Lost Souls* and *Labyrinth Hall*, all of which are now available from Adventure PD). It contains roughly 660 locations, with a picture for every room! The plot, although slightly unoriginal, is imaginative and easy to follow. The puzzles in the game are quite hard and some are a touch illogical.

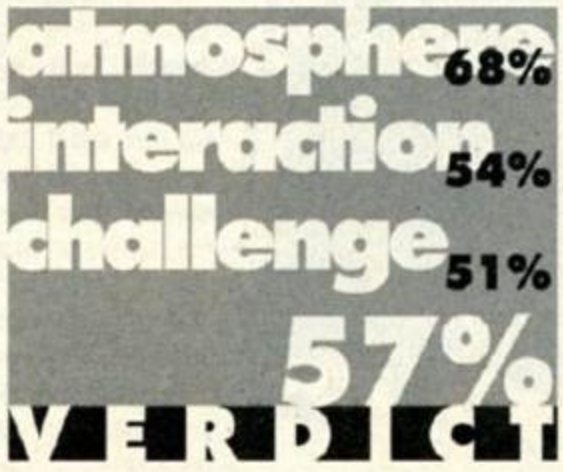
Although *Chaos Maze* is a very well-produced game, there are a few certain quirks lying around in there. If you are a die-hard text-only fan, then turning off the graphics will probably be your first command... Unfortunately, though, the graphics are very important in some places, as certain locations have special markings scattered around in the graphic. Switching them off would effectively mean that it's impossible to complete.

Once you have been playing the game for some time, it begins to get too repetitive and confusing to persevere with. Also, while I praise the clever method of cramming in the graphics, from what I have seen there are only around eight or nine different pictures used. Each one is used over again in separate rooms. Though I understand that it wouldn't have been possible to have a unique picture for each location it would have been nice to have more variety!

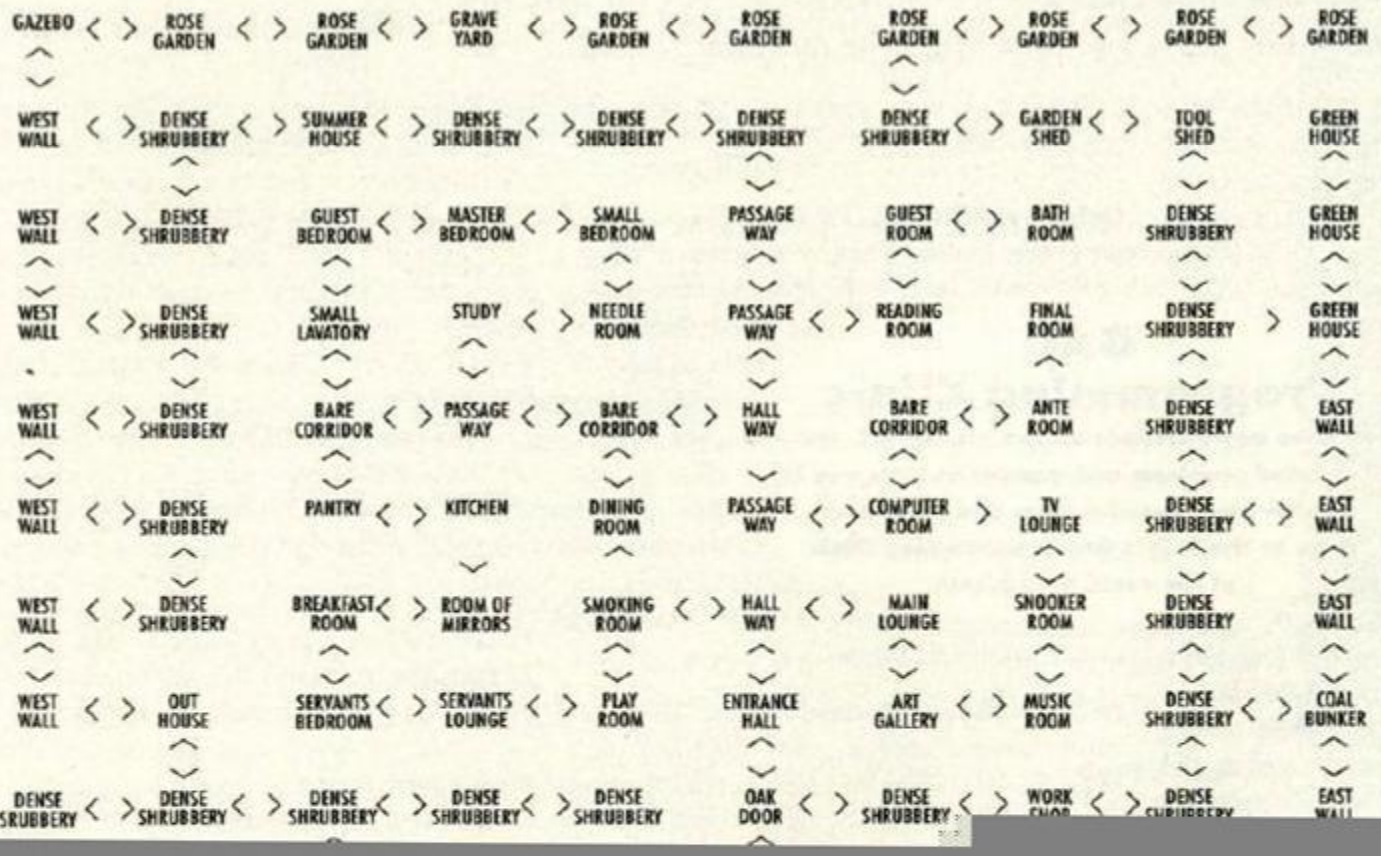
Even if you do begin to enjoy the game, there seems to be a bug later on which prevents you from proceeding any further! This is a shame as it has meant I have not been able to complete the game and may mean that the game is uncompletable.

Overall, potentially a very good game, especially with the extensive use of graphics. But the puzzles are slightly illogical and the programming is quite scrappy.

A commendable effort by Len, but *Chaos Mase* is let down by lack of real content.



Map of
Trial of Arnold Blackwood
by Thomas Christie



Crikey, get out your magnifying glasses! *Trial* is quite a big game with 100 locations arranged in a 10 x 10 grid. However, you can't move about willy-nilly. If there's no arrow in the direction you want to

GAC programming tutorial PART 4

This month is my final *GAC* tutorial – next month I'll start answering all your *GAC* problems in the Programming Clinic, this month I'll tie up some loose ends and try to give some clues on writing a good adventure game and how to get the most out of *GAC*...

Memory management One of the major problems with GAC is memory – you only have approximately 25K to write your adventure in and this free memory disappears very quickly (especially if you draw a lot of complex graphics). So how do you make the most of that limited memory

Graphics... Drawing pictures in GAC really eats up the old memory – each graphic command (rectangle, ellipse, fill etc) uses up bytes and often programmers waste extra memory by drawing graphics inefficiently – for example, drawing a chessboard with lines (which would seem the obvious method) and then filling in the squares uses up 199 bytes whereas drawing the chessboard using rectangles only uses up 154 bytes – this might not seem like a big difference but six chessboards drawn with lines would waste 1K of memory!

Programmers often fill their pictures in at the wrong time as well – if you wanted to have the chessboard black on white with a blue background you should draw just the outsides of the board, fill it in with black, draw the other lines (using rectangles) and then just fill in the white squares with white (this is 33 fill operations), rather than drawing the board and filling in the various squares (which is 64 fill operations!) – if all this seems a bit complicated don't worry – you don't need it to write a good adventure it just means you'll have more memory to play around with!

Using templates... Another way to save memory in your pictures is to use templates or merge pictures together. For more details see the box 'Editing pictures' on page 39 of AA78. Many GAC writers like to have their pictures surrounded by pretty borders or with a common graphic and using templates are the ideal way to do it.

Global object declarations... Instead of having individual code for each object (e.g. GET KEY, GET RAT, GET MONEY etc) you can use global object declarations by using the NO1 command:-

IF (NO1 = 0 AND VERB 7) MESS 19 WAIT END

If you typed 'GET' by itself or with an unrecognised word, print message 19 "I'm sorry, but I don't know what one of those is..."

IF (NO1 = 0 AND VERB 8) MESS 19 WAIT END

And similarly for "DROP"

IF (NO1 = 0 AND VERB 16) MESS 18 WAIT END

And again for "EXAMINE" except message 18 is "You find nothing much"

IF (NO1 < 5 AND VERB 7) GET NO1 OKAY END

If you typed "GET" and a noun with a number less than 5, then get the object with that noun's number. This only works because the object and nouns which refer to them have the same number.

IF (NO1 < 5 AND VERB 8) DROP NO1 OKAY END

If you typed "DROP" and a noun whose number is less than 5, then drop the object with that noun number.

IF (NO1 < 5 AND VERB 16 AND AVAI NO1) MESS NO1 WAIT END

If you typed "EXAMINE" and a noun whose number is less than 5, then print out the message with that noun number, it being the more detailed description of that object, then wait for a new command.

Thus, if you write your adventure with say, the first 20 messages, nouns and objects being allocated to objects then you can use this to save memory.

Multi part... Penultimately, if you find yourself running out of memory, you could make your game load in multiple parts with each part being separate from the previous one. For example you could have the end of Part 1 of your adventure as crash landing on the moon and then have Part 2 taking place on the moon itself. Of course you can't allow the player to return to a previous part when you do this, but if your adventure can be split up into sections than this is one of the best ways to get the most out of GAC.

Final tip... One last comment about saving memory in GAC – it's been shown that whilst writing an adventure, memory is allocated to messages (such as locations, objects, messages etc) as they are created, even if they are later deleted or changed – thus if you write twenty messages and then decide to scrap them at a later date, GAC will unfortunately not free the memory from the deleted messages. So, if you're really stuck for memory, you could always print out the whole adventure and then re-type it into a 'fresh', 'unused' GAC.

GAC Programming Clinic

If you have any questions on the use of GAC, specific GAC-related problems and queries or hints and tips of your own, then jot them down and send them to the Balg's GAC Programming Clinic at the usual AA address.

HOW TO WRITE A GOOD ADVENTURE

It's difficult to give any hard and fast rules as to what constitutes a good game and I'm not going to do that! Instead I'll just briefly mention a few hints and tips in making a good adventure:-

No instant death situations! It can be intensely frustrating to get killed without warning in a game. These 'instant death situations' can easily be avoided by giving a hint to the player that something could be dangerous (e.g. a sign saying "Quicksand to the east") or by asking a player if they're sure they really want to do something. (e.g. "Are you sure you want to light the dynamite?").

Try to make puzzles as logical as possible Some games have very illogical puzzles, which makes them near impossible to solve and very annoying to play. Having a door open by opening a can of coke is silly but opening a door by turning a key is not.

Spelling Try not to make any spelling mistakes as it can make your game look sloppy and unprofessional.

Bugs Bugs in a game can really be frustrating and can be largely destroyed by good playtesting. Get some people help you out by testing the game.

Graphics Make a conscious decision about whether to have graphics in your adventure. Graphics can use up a lot of memory and if you can't draw can look awful. But good pictures can add to a game. If you can't draw, try to find a friend who can do it for you.

Text Try to make your text as verbose and atmospheric as possible. If you think of an adventure as 'interactive fiction' then you'll understand how important the text in your adventure is. If your game has no atmosphere then it won't grab a player's attention and make them want to play more.

Parser Try to think of different words a player might use in different situations. For example in a good game, if you have a locked door, then there should be lots of different word combinations to open the door such as OPEN DOOR WITH KEY, TURN KEY IN DOOR, UNLOCK DOOR, UNLOCK DOOR WITH KEY

Competit

Yep! You guessed it – we're running a competition for the best GAC game written with this covertape. To stop people cheating and sending in games they wrote three years ago (not that we don't trust you or anything) we've decided to write a little storyline:

'You are intrepid editor Rod Lawton, saviour of the innocents and all round Mr. Nice Guy, who has been magically transported to the Balrog's lair – quite what will happen next is unknown but you must rescue a damsel in distress, Princess Cathy, who the Balg has captured for his dinner...'

Lords and Ladies of Adventure

More valiant and brave adventurers offer their services to readers in need of help.

Always remember to phone during sociable hours and to enclose a stamped SAE when writing for a reply.

Big Sleaze • Gremlins • Megabucks • Seabase Delta.
Darren Sharp, 10 Alfred Road, Greatstone, Kent TN28 8SH.

Questprobe 3.
Rich Thomas, 85A St. Johns Road, Cannock, Staffs, WS11 3AL. Tel: (0543) 503045, Mon-Fri, 5-10pm.

Colour of Magic • Forest at World's End • Gnome Ranger • Heroes of Karn • Rebel Planet • Questprobe • Seabase Delta • Subsunk.
The Dragon Master, 12 Gretton Crescent, Aldridge, Walsall, West Midlands, WS9 ODY.

Knightmare • Rebel Planet.
Ross Younger, 3 Cammo Parkway, Edinburgh.

Bard's Tale • Hitchhiker's Guide • Hobbit • Lord of the Rings • Pawn • Shadows of Mordor.
David Nicholas, 23 Houghton Lane, Sancton, East Yorkshire Y04 3QU.

Adult II • Can I Cheat Death? • Doomlords • Firestone • Jason and the Argonauts • Roog • Spacey • Tizpan.
Adam Maxwell, 9 Peth Green, Hetton-le-Hole, Tyne & Wear DH5 OEY.

Base • Hollywood Hijinx • Infidel • Island • Spiro Legacy • Test • Wishbringer • help for PAW programmers.
Ken Bond, 17 Adel Park Gardens, Adel, Leeds, West Yorkshire LS16 8BN. Tel: (0532) 672278.

Adventure Quest • Dungeon Adventure • Gnome Ranger • Imagination • Knight Orc • Kobyashi Naru • Jewels of Babylon • Lancelot • Lords of Time • Mystery of Indus Valley • Price of Magik • Redmoon • Return to Eden • Shadows of Mordor • Snowball • Souls of Darkon • Venom.
Wendy Watters, 82 Booth Road, Stacksteads, Bacup, Lancashire OL13 OSF. Tel: (0706) 877518

Classic Adventure • Fantasia Diamond • Hobbit • Hollywood Hijinx • Inca Curse • Mountains of Ket • Planet of Death • Sorceror.
Dave 'Flossie' Havard, 21 Belvoir Close, Fareham, Hants PO16 OPJ.

Forest at World's End • Jewels of Babylon • Seabase Delta.
James Mackle, 45 Kenure Park, Rush, Co Dublin, Ireland.

Bards Tale • Big Sleaze • Boggit • Caves '90 • Dragontorc • Forest at World's End • Hitchhiker's Guide • Hobbit • Jackle & Wide • Jewels of Babylon • Kobyashi Naru • Laser Squad • Lord of the Rings • Lords of Chaos • Lords of Time • Lost Phirious (parts 1 & 2) • Lurking Horror • Mindfighter • Mystery of the Indus Valley • Never Ending Story • Price of Magic • Quest for the Golden Egg-cup • Quill (+Illustrator) • Red Moon • Rigel's Revenge • Scapeghost • Seabase Delta • Shadows of Mordor • Souls of Darkon • Venom • Very Big Cave Adventure.
Simon "Aragorn" Netherwood, 36 Toothill Bank, Rastrick, Brighouse, West Yorkshire HD6 3EZ. Tel: (0484) 719326 5-9pm weekdays, 12-11pm weekends.

Andy Capp • Price of Magic.
The Kenderian, 475 Westhorne Ave, Eltham, London SE9 5LR.

Jewels of Babylon.
Chris "The Barbarian" Gore, 22 St. Anthony's Pk., Mallow, Co. Cork, Ireland.

Aftershock • Colossal Adventure • Escape from Khosima • Gnome Ranger • Gremlins • Guild of Thieves • Haunted House • Hitchhiker's Guide • Ingrid's Back • Kingdom of Hamil • Leather Goddesses • Mindshadow • Mordon's Quest • Pawn • Price of Magic • Return to Eden • Rigel's Revenge • Scapeghost • Seabase Delta • Snowball • Sorceror • Village of Lost Souls.
Robin Harley, 3 Shropshire Place, Eastgate, Peterborough, Cambs PE1 5BX.

on Time!

That's it – all you have to do is use your new-found GAC skills to write an adventure based around the above storyline. The prize? The winner's game will appear on a covertape, which will probably lead to more fame than Michael Jackson (well probably not, but you can dream!)

• The closing date is not until 1st November 1992 so you have lots of time to write in to the GAC clinic with questions as well as reading the programming tutorials. The only other stipulation is that games must be sent in with a full solution and map as well as any other items that you think might be helpful (£5 notes appreciated!) – if your game has a really clever routine, or a really hilarious response then tell me when you write in. Remember there is no rush, so wait a while to read the next few issues...

GAC manual offer

It's not too late to order your copy of the GAC booklet supplied with the program. Write to: **GAC Booklet, Amstrad Action, Beauford Court, 30 Monmouth Street, Bath, Avon BA1 2BW**, enclosing a cheque/postal order for £2.99 made payable to Future Publishing Ltd.

Just for laughs

This month's collection of humorous responses comes to you from Dave Adams (St Helens), Robert Melody (Surrey), Lee Hatton (Northern Ireland) and Katharyne Allen (Guernsey).

Labyrinthe
• Try swearing.

Ingrid's Back
• Go into the changing rooms while Jasper is in them.
• Swear.
• Look at Ingrid.

Simply Magic
• Try kissing everyone you come to.
• Try punching people but punch the witch before punching the elf!

Quest for the Golden Egg-cup
• Swear and then play around in the room (by trying to open door, digging etc). Swear again and you'll get a letter from God!

Jinxter
• Ask the guardian things.
• Play with dragon from wash basin.
• Dial phone numbers until they are not engaged.

Corruption
• Kiss anyone (male or female!)
• Snort the powder.
• Phone Margaret from Theresa's office.
Search people or throw things at them.

HELP

As you will have read elsewhere in the magazine (and if not, why not?!), the *Helpline* section is being broken up into its component bits and spread throughout the magazine. This means that pleas for technical help will go to the *Technical Forum* section, while requests for hints and tips on games will go to *Cheat Mode*. Each section in the magazine will have its own *Help* section – and *Balrog* is no exception.

The previous *Helpline* rules apply.
• Send your requests in on a postcard, or the back of an envelope
• Keep it short. The shorter the *Help* entries, the more we can squeeze in
• Don't try to sell anything! That's what the *Small Ads* page is for. *Help* is for people who are genuinely looking for help or who want to help others
• Make sure you include your first name and telephone number.
• The address for all your adventuring queries is: Adventure Help, Amstrad Action, Beauford Court, 30 Monmouth Street, Bath, Avon BA1 2BW

tips, news, reviews, technical help, tips, news, reviews, technical help, tips, AMSTRAD ACTION MAY 1992 help, tip

Loose Talk

Richard Fairhurst of Robot PD has just discovered something a bit worrying. The German BASIC compiler program, which most PD libraries have in their collection (it had previously appeared in lots of German libraries and bulletin boards, and featured in the AA PD round-up) isn't public domain after all, but a German commercial release. No-one knows how it got into the German public domain, but Robot has now withdrawn it from its library and other libraries should quickly follow suit.

There have been a few worried faces in PDland recently after a report in Shareware Shopper magazine concerning a Federation Against Software Theft (FAST) and Trading Standards Department raid on an ST library stocking disks containing copyrighted material (music and pictures).

There is still a lot of confusion surrounding the whole incident. The Trading Standards dudes were apparently mainly interested in pirated software, rather than pursuing any legally-untested notion of copyright infringement. The library itself, South West Software Library, hasn't got a clue what's going on.

The common view regarding CPC PD is that no-one in authority is all that bothered, since it's only a small 'hobby industry' unlike the 16-bit scene which is dominated by commercially-run libraries. However, Penguin Software (just to be on the safe side) has 'pulled' at least one of its digitized pictures disks as a result of the reports. Watch (as they say) this space...

Sad to report, the popular Data PD library is due to close its, er, letter box in a couple of months. Last orders will be called on Tuesday 30th June.

And hold on to those hankies, as the Print Out fanzine is also on course for that great Letraset box in the sky.

Its parting shot should raise a smile, though, as it plans to produce its own firmware guide. That's got to be good news for keen machine coders, since 'Soft 189', the official Amstrad firmware manual, has been out of print for yonks and is currently worth three donkeys and a melon on the black market – we still get loads of requests for the things ourselves.

public image

It's month two of *AA*'s new PD column, and ADAM PETERS is showing no signs of slowing down...

FULL-ON ROBOT CHUBBY

Once upon a time, in a land far, far away (near Leicester) there lived a young chap called Richard Fairhurst. He decided to start a PD library, and he called it Robot PD. A couple of years later someone phoned him up and asked him about all the French and German software in his library.

Richard Fairhurst of Robot PD – planning to introduce PD on a medium "other than disk..."

"It really all started after a mention in the AA Helpline. A French demo writer wrote to me and sent me a few demos. Since then most of the stuff has either come through demo writers or from foreign PD libraries whose address I've seen in continental CPC magazines."

Do you think demo writing is going to take off in Britain?

"Yes. Demo writing has never been as big in Britain as it has on the continent, but it should start to evolve as there's a few demo writing teams starting up over here now. The other boom area of late has been DTP packages."

Why do you think that is? Anything to do with the fanzine movement?

"It just started off with Alan Scully developing his DTP package. A whole load of other people followed on and tried to do better. And succeeded."

What do you regard as the most rewarding and the most hasslesome aspects of running a library?

"The most rewarding parts I find are getting nice letters from people who like want you're doing, and seeing lots of good new CPC progs. The bit that causes most hassle is people phoning you up and saying that your library hasn't delivered their software within five days and when are they going to get it, and saying they're going to take legal action."

How long does it normally take for you to send stuff out then?

"It can take up to a month, but my photocopier has broken so I haven't been able to send any catalogues out for quite a while."

Are than any particular areas of the PD scene that trouble you? *"There is a tendency for people to start up PD libraries because they've always wanted to run a software house. You get 27 million twelve year-olds writing to you, 'I've started up a PD library - please send me all your software.'"*

Have you got any particular plans for developing Robot PD?

"I plan to completely reorganise the library in a few months time. I'm also planning to introduce PD on another medium other than disk. I'm not talking about tapes, but I can't say any more than that at this stage. Oh, and I'm also working on a 128K version of PowerPage [DTP package]."

For more info or a catalogue (when the photocopier's fixed) write to: Robot PD, 2 Trent Road, Oakham, Rutland LE15 6HF. Remember to enclose an SAE.

User-friendly

Are you an Amstrad user? You must be, otherwise you probably wouldn't be reading this. Want to get down and share knowledge with other Amstrad users? Well join a user group then, matey. Here's a few (remember to enclose a stamped self-addressed envelope when requesting membership details)...

United Amstrad User Group, c/o Tony Baker, 26 Uplands Crescent, Fareham, Hants PO16 7JY. Four years old with over 300 members worldwide (including Russia and Zimbabwe). The UAUG has a regular magazine, and PD software is free to members.

Scottish Independent CPC-PCW-PC, c/o Michael Deary, 43 Loreny Drive, Shortlees, Kilmarnock, Ayrshire, Scotland KA1 4SX. A new group just starting out.

WACCI, c/o Clive Bellaby, 12 Trafalgar Terrace, Long Eaton, Nottingham NG10 1GP. The veteran user group. WACCI stands for Worldwide Amstrad Computer Club, er, something beginning with 'I'. Back from the dead with a monthly fanzine and new book and tape libraries.

Membership of a user group usually gets you a regular newsletter, access to a vast stock of PD disks, lots of special offers, technical help, etc.

TOTAL! The only magazine dedicated to Nintendo gamers, full of reviews and tips for the NES, Game Boy and Super NES!

Our dead smart logo – look out for it in the shops!

16 pages full of Game Boy reviews!

18 pages crammed full of NES reviews!

10 pages stuffed with tips!

Nintendo's stonky new super console – read all about it!

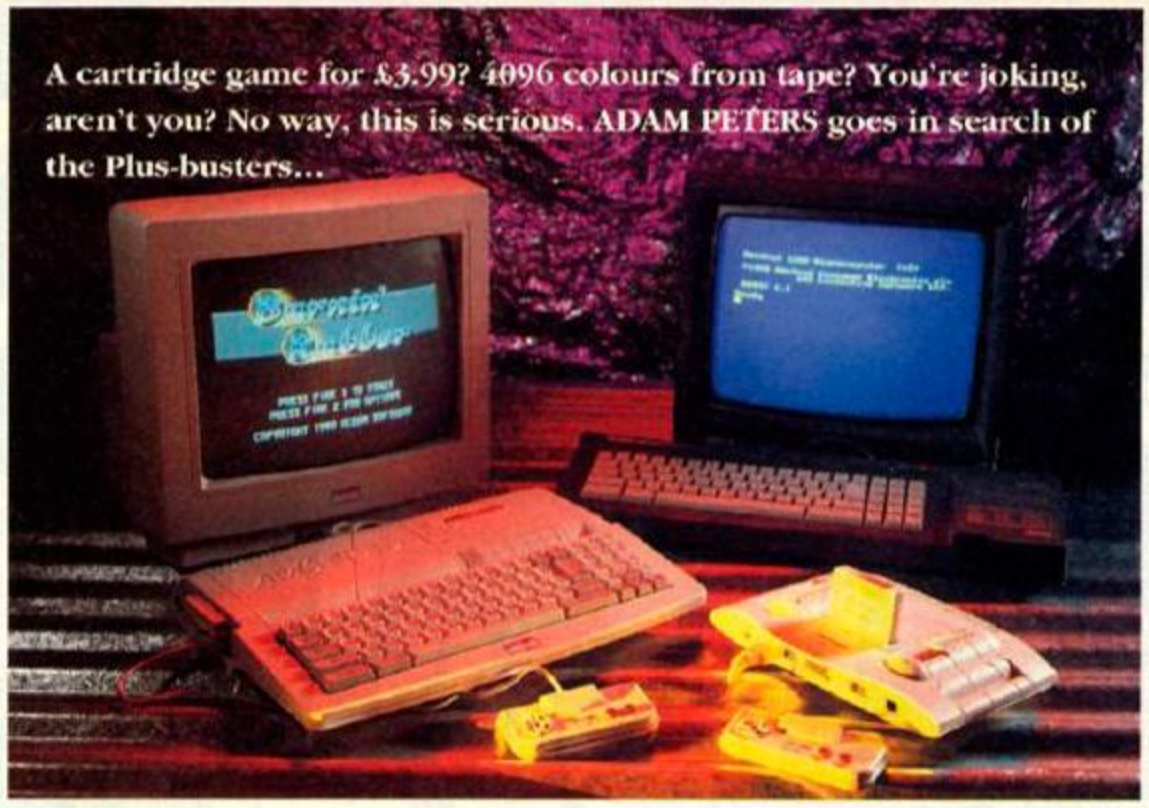
Like WOW! Heavy-duty compo or what?

Er... the bar code (ignore this bit)

Andy 'Thicky' Dyer. Writer and twonk

Steve 'Misery Guts' Jarratt. Editor and dweeb

Got a Nintendo? Then get TOTAL! Issue five is on sale right NOW!



the Plus-busters

Stryker and the Crypts of Trogan is a game and a half. Not only does it offer five action-packed levels of platform exploration for only £3.99, but it also offers Plus owners a whole lot more for the money.

The Plus machines contain extra hardware that gives 4096 colours instead of the normal 27, hardware sprites, ultra-smooth scrolling, etc. This extra hardware can only be accessed from cartridge, or so Amstrad said when the machines were first launched. Later events have shown that up to have been something of a porkie.

Most of the people approached to produce cartridge games, including the man who puts *AA*'s covertapes together, soon became aware that it was in fact possible to access the extra features from tape or disk. Cartridges contain two chips; one holds the game code, the other initialises the extra hardware inside the machine. But all the initialisition chip contained was some machine code commands (a special sequence that 'called up' the extra hardware).

If the same code was included on a tape or disk, it would enable the extra hardware to in turn be accessed straight from tape or disk. The first known version of the 'hardware access' code to appear on tape or disk was the *B-ASIC* program produced by French demo writers Logon Systems.

When *B-ASIC* is run, it installs a set of RSXs that let anybody incorporate the extra Plus features in their own BASIC or machine code programs. This sneaky little prog soon found its way into the UK public domain market, courtesy of Richard Fairhurst, the man behind Robot PD, who has contacts amongst the Logon crowd.

The cat was clearly out of the bag. But how long would it take before a commercial game appeared that used this sort of technique, and how would Amstrad react? Not long, and surprising well, as a matter of fact.

Up in bonny Sunderland lurks a freelance programming house called Simmer Software, and a bloke called Jeff Calder who programmed *Switchblade* on the console. Simmer were developing a platform exploration adventure called (originally) *Imperial Wizard*, and they decided to make it a bit special.

Having programmed a cartridge game, Jeff knew the escape code sequence (a very simple sequence of a dozen or so digits) that enabled access to the extra features. It was a fairly easy to job to incorporate the relevant code into the new program, and include 'intelligent loading' to enable the prog to sense what type of machine it was being loaded on, and either enact or ignore the extra commands as required.

A number of software houses were approached, and top budgies Codemasters were quick to see the appeal of the game. A deal was struck and the game, now called *Stryker & the Crypts of Trogan*, hits the shelves any day now.

■ **Extra hardware ahoy! Now you can access all the extra features of the Plus from tape or disk. Hurrah!**

Simmering Gently

Sunderland-based Simmer Software have certainly hit the jackpot with *Stryker*. We phoned programmer Jeff Calder, but he was out, so we rang graphics and sound man Andy Wynd instead, and he had this to say when we asked him how they knew how the Simmer posse knew how to bust the Plus:

"Jeff had programmed Switchblade on the console, and signed a non-disclosure agreement with Amstrad regarding accessing the extra hardware. We got in touch with Amstrad and asked whether, since they were not selling the console any more, the non-disclosure agreement still mattered. They said it was OK for us to go ahead, so Jeff used what he knew to access the extra features."

■ **We couldn't get a pic of Jeff and Andy, so here's Trevor and Simon instead.**

■ **It's... magic! *Stryker and the Crypts of Trogan* marks the dawn of a new era for Plus owners everywhere.**

Have you got any plans for other games featuring the enhanced hardware?

"We're in the middle of developing another game at the moment, and we'll probably be using the extra stuff in that. Now that we've got everything worked out, it's probably easier to include the 'hardware access' code than it is to leave it out."

Richard on the Ropes

We tied Codemasters' Richard Eddy to the other end of a phone line, and asked him about the name of the game.

"It was going to be called Imperial Wizard. Everyone liked that name. Then while I was in America, I was watching some dreadful US chat show and discovered that leaders of Klu Klux Klan tribes [scummy racist militia groups] were called 'Imperial Wizards'. We decided we needed to think of another title for the game. We thought maybe something with 'warlock' in it. Then we decided to think of a name for the main character.

"Me, Shân and Paul Ranson spent three hours screaming names at each other, writing them down, sticking them to the walls, and at the end of all that we picked the bit of paper that said 'Styker' on it. He was almost going to be called 'Strap Earthstick' but we thought that was a bit too silly. (A bit? - ed.)

"It was going to be the 'Crypts of Chaos', but we decided that we ought to give the enemy a bit of an identity, and come up with a name for him too. So after another screaming session, we settled on 'The Crypts of Trogan'. A lot of thought goes into this sort of thing you know."

Was the Plus-busting entirely the idea of the programmers?

"Yes, and all credit to them. When we saw Stryker we liked it instantly, but we didn't have a Plus machine, so we only saw it running on an old style CPC. The first time I saw it running with all the extra features was in your office when I called round last month.

"It's nice to do something different in a market which a lot of people are giving up on. It's also good for Plus owners to get something extra out of a game, without having to shell out £25 or so for a cartridge."

Amstrad's lawyers have given everything the OK, and perhaps its time now for other software houses to follow suit. With the supply of cartridge games seemingly drying up, all those Plus owners out there will be clamouring for any game that gives them all the features of a cart for a fraction of the price. Especially if future Plus-busting games are as good as this one.

STRYKER & THE CRYPTS OF TROGAN

CODEMASTERS • £3.99

■ **Oi Plus owners, dig that lush and groovy graduated background, huh?**

■ **Look, loads of skulls. Just like the one on our cover (only a bit smaller).**

■ **Cor. Red sky at night, shepherd's pie. Hang on, that's not right is it?**

Trogan is not a nice bloke. In fact he's a "vile monstrosity". In other words, not the sort of bloke you'd want to go out for a drink with. His nickname is 'The Diabolical' and he's got a whole bunch of evil minions (skeletons, skulls, monks, rock people, etc) all helping him to spread his malevolence across the land. Brrrr.

Stryker, on the other hand, is a nice bloke. He's a brave warlock dude, and he's opted to venture into Trogan's crypts to vanquish said nasty evil bloke for good. Of course, he's going to have to get physical with lots of the evil minions before he gets to face off with Troggie himself.

Our first reaction when loading Stryker up was to declare flamboyantly, "it's *Switchblade*!" The similarities are there for all to see, though it could easily be argued that detailed smallish graphics of this type is simply the programming team's normal style of doing things. The platform exploration gameplay is frighteningly similar to *Switchblade* though, with the industrial/warehouse setting replaced by a fantasy/horror one.

There's not much point explaining the gameplay here. You'll find all that info on the tape pages, and you can try it out for yourself with our exclusive covertape demo. Here we'll just focus on the game as an entity (whatever that means).

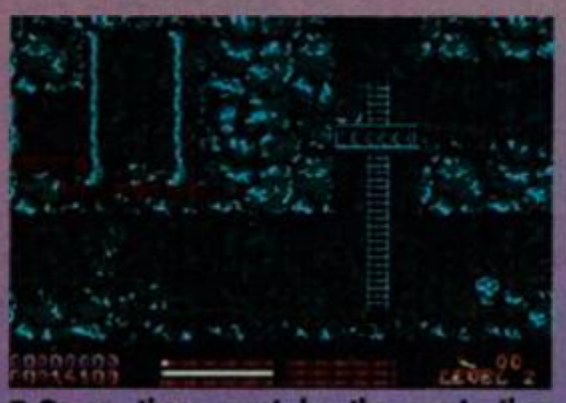
There are five levels (the whole of level one is on the covertape) and sixteen parchments of truth, which Stryker has to collect on his way, for some reason or other. Power ups are everwhere, mainly hidden in big jugs (oo-er).

These include rockets, firebolts, proton sticks, firecrackers, laser nails, and a couple of megakill unlimited range things (the razor disk and 'the lost spell'). There are also lots of bonuses around, which drop from the sky or (like the power ups) lurk inside jugs. Orbs and spheres are worth points, and gems are worth points and increased power on the combat power meter at the bottom of the screen. There are six meters at the bottom of the screen, each indicating the state of a different aspect of Stryker's powers and abilities (eg magic, combat).

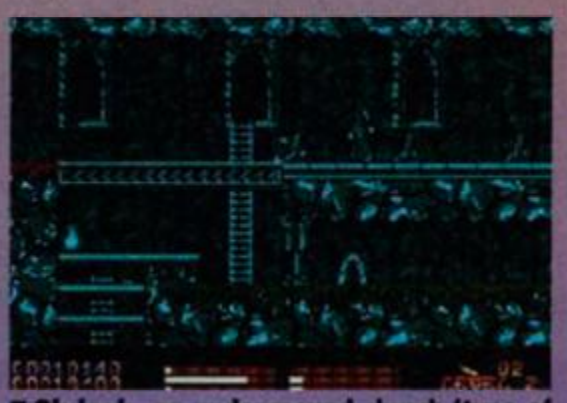
***Stryker* is an excellent game** which owes a lot of the ideas behind it to the fantasy role playing genre. The graphics are spectacular, even on the old CPC machines. On the Plus of course, the graphics are simply breathtaking; there's incredibly smooth scrolling and a wonderful graduated background. The game area is so large that it will keep you going for ages.

This game should be on the full-price shelves (maybe even the £24.99 cartridge shelves), but it's not. It's on the £3.99 shelves, and you'd be a fool to miss it.

A classic platform game in the *Switchblade* style, and absolutely unmissable (for Plus owners especially)



■ **Oo-er, these must be the crypts they were talking about. Dark here, isn't it?**



■ **Oh look, an underground church (type of thing). Oh look, an evil rock creature.**

AMSTRAD GAME CARTRIDGES
FOR 6128+/464+/GX4000

TITLE	BOXED WITH INSTRUCTIONS	UNBOXED NO INSTRUCTIONS
Klax	£24.99	£14.99
Pro Tennis Tour	£24.99	£14.99
Batman	£24.99	£14.99
Operation Thunderbolt	£24.99	£14.99
Barbarian II	£24.99	£14.99
Navy Seals	£24.99	£14.99
Robocop II	£24.99	£14.99
Pang	£24.99	£14.99
Switch Blade	£24.99	£14.99
No Exit	£24.99	£14.99

*** Special offers: 10 Unboxed games (all different) £100.00 ***
Amstrad GX4000 Games Consul 8 with free game £59.99
Amstrad Paddle Controller £9.99

Amstrad MP3 Modulator/TV Tuner, for use with CTM644 monitor £33.99
Amstrad CPC464 cassette mechanism with tape head and motor £29.99
Amstrad 464 head alignment tapes £9.95
FD1 disk drive for 6128 (c/w cable) £59.95

Prices include VAT, postage and packing

All orders by return: Cheque/Visa/Access
Trade-In-Post, Victoria Road,
Shifnal, Shropshire TF11 8AF
Tel/Fax (0952) 462135

3½" Mega Drive £79.95
(including FREE MS800 OR 10 FREE discs)
★ 800k per disc ★ Side Switch ★ Multi Compatible ★
★ Ext P S U ★ Compact Size ★ Dual Mode ★

3.5" Discs (Branded Bulk)(10)	£ 7.95
3" Discs (Amsoft) (10)	£19.95
3.5" Disc Box (holds 40)	£ 7.95
Printer Lead	£ 7.95
6128/464 Plus Adapter	£ 7.95
MP3 TV Tuner	£29.95
CT1 (Clock/Radio)	£14.95
MP1 & CT1 (TV Tuner/Clock/Radio)	£39.95

FILE TRANSFERS
CPC To/From PC's, PCW's, and Others
2in1 - £24.95 : MFU - £29.95
(Both programs run in CPM+ - NOT CPM 2.2)

SPECIAL OFFER
40 x 3.5" Discs & Disc Box (holds 40)
!!! £29.95 !!!

Maxidos (with FREE Prooopy)	£13.95
MS800	£ 9.95
64k DKtronics RAM PACK	£39.95
256k DKtronics RAM PACK	£89.95
6128 ROM	£24.95
FD1 Disc Drive (State Model)	£79.95
BONZO SUPER MEDLER	£13.95
BONZO BLITZ	£13.95
BONZO BIGBATCH	£ 9.95
BONZO FLASH PACK	£ 9.95
Olivetti DM109 Printer (240 cps)	£169.95

All prices include VAT, P&P, & Insurance

CREDIT CARD ORDERS (24hr Service) **Phone 0772-701248**

GVL Microform
191, Wealing Street Road, Fulwood, Preston PR2 4AE
Phone 0772-703248 Fax 0772-703151

MICROVALUE

ADVERTISERS INDEX

Brunning Software	18
C.A.V.E.	25
GVL Bagsform	46
Instamec	46
MJC Supplies	34
Ocean	IBC
Price Busters	25
Romantic Robot	29
Siren Software	29
Software City	24
Total!	43
Trade-in-Post	46
Virgin	OBC
WTS Electronics	46

If you are under 18 years of age please obtain permission of whoever pays the phone bill. Max cost of call £2.70 Cheap £3.60 All Other Times. INFODIAL PO Box 36 LS1 4TN Call charges 36p Per Min Cheap 48p Per Min All Other Times.

COMPUTER REPAIRS

★ AMSTRAD AUTHORISED ★

Quality Assured!

- ★ Fixed price repairs on many machines
- ★ Over 2500 square foot engineering complex
- ★ Top quality technicians at your disposal
- ★ All work warranted
- ★ Fast turnaround
- ★ Simply post or hand deliver your machine and we will do the rest

WTS Electronics Ltd reserve the right to refuse machines that in there opinion are beyond reasonable repair.

Amstrad 464	£37.00	
Amstrad 6128	£41.00	(extra if disk drive needs complete replacement)
Colour monitor	£15.00	Diagnostic charge plus quote
Others	P.O.A.	

Please supply evening and daytime telephone numbers

Tel: 0582 491949 (4 lines)
WTS Electronics Ltd, Chaul End Lane, Luton, Beds LU4 8EZ

Amstrad Action superstore

The latest and greatest products at the best possible price!

RODLAND

Storm

40 levels of yuckily-cute platform puzzling action. You have to defeat hordes of (equally cute) monsters with your rod – collect the flowers to enter a bonus stage. Very colourful, very sweet and great for younger games players.

save up to £3

Description	Price	Order No
Rodland Cassette	**£8.99**	**AA671C**
Rodland Disk	**£12.99**	**AA671D**

BLUES BROTHERS

Titus/Palace

Not, strictly, a conversion of the film but a platform explore and beat-em-up featuring the two lovable characters, Jake and Elwood. Five levels, and lots to keep you going

save up to £3

Description	Price	Order No
Blues Brothers Cassette	**£8.99**	**AA672C**
Blues Brothers Disk	**£12.99**	**AA672D**

MINI OFFICE II

Database Software

Word processor, database, spreadsheet, label printer, graphics and communications – a fabulous all-in-one pack at an amazing price!

Word processor Uses menus and/or embedded commands for most functions. Lets you import text from the database module.

save up to £4

Database Five different field types available. Handles arithmetical functions, record sorting and more

Spreadsheet You can copy formulae or absolute values from cell to cell, print out all or part of your spreadsheet and recalculate automatically or manually.

Label printer Lets you design labels and 'read' data from database files.

Graphics Produces pie, bar or line charts. Can accept data directly from spreadsheet. Dumps graphs directly to printer.

Comms Range of comms protocols supported, plus files saved directly to memory or disk.

Description	Price	Order No
Mini Office II Cass	**£13.99**	**AA670AC**
Mini Office II Disk	**£15.99**	**AA670AD**

SOCCER STARS

Empire

A collection of four brilliant soccer games. ***Includes Kick Off 2, Microprose Soccer, Emlyn Hughes International Soccer and Gazza 2.*** Four of the best soccer games ever published, in one compilation! An absolute must for footie fans everywhere.

save up to £4

Description	Price	Order No
Soccer Stars Cassette	**£9.99**	**AA673C**
Soccer Stars Disk	**£13.99**	**AA673D**

FUN SCHOOL 4

Database Software

There are six games in each package, and three packages: one for the under 5s, one for the 5-7s and one for the over 7s.

save up to £5

Under 5s (Teddy Bear) can learn addition, drawing, painting, picture-matching, karaoke (!) and reading.

5-7s (Frog) learn how to sort books, be a shopkeeper, do sums, arrange letters and numbers in sequence, match words and type.

Over 7s (Spy) can learn arithmetic, answer questions, convert currency, understand timetables and learn geography and dates

Description	Price	Order No
T. Bear Cass	**£9.99**	**AA650AC**
T. Bear5 Disk	**£11.99**	**AA650AD**
Frog Cass	**£9.99**	**AA651AC**
Frog Disk	**£11.99**	**AA651AD**
Spy Cass	**£9.99**	**AA652AC**
Spy Disk	**£11.99**	**AA652AD**

See our amazing subscription offer of free software on page 48

AA BINDER

Keep your valued Amstrad Action magazine collection together in this bright red binder.

Description	Price	Order No
One binder	**£5.99**	**AA417R**
Two binders	**£11.00**	**AA4172R**

VISA HOTLINE 0458 74011 Access

AMSTRAD ACTION MAIL ORDER

Name

Address

Postcode Phone number

Method of payment (please circle) Access • Visa • Cheque • PO

Credit Card No

Expiry date

Please make all cheques payable to Future Publishing Limited

Description	Price	Order No
TOTAL ORDER		

● For overseas orders call Claire Bates for prices on 0458 74011

SEND THIS FORM TO: Amstrad Action, Future Publishing Ltd, Freepost, Somerton, Somerset, TA11 7BR

No stamp required if posted in the UK, Channel Islands or the Isle of Man

Prices include POSTAGE, packing and VAT – NO HIDDEN EXTRAS

BACK ISSUES

ISSUE 70 • £2.20
Superb console game *Pang* reviewed. Also, new, action-packed budget section begins. Plus *Donald's Alphabet Chase*, *Tearaway* and *Shadow Dancer*.

ISSUE 71 • £2.20
Hero Quest and *3D Construction Kit* demos on the covertape – plus Devpac assembler! *Turrican 2* reviewed, *Hero Quest*, *Z80 Simulator* and *Fun School 3*.

ISSUE 72 • £2.20
Domark's *3D Construction Kit* gets a special feature review. Ocean's *Power Up* scores 89%. Full, working database on the covertape. All your regular tips, news letters.

ISSUE 73 • £2.50
Free covermounted tips booklet. *Turrican 2* and *Thunderjaws* demos on the covertape. Budget DTP program and *Robozone* reviewed plus Ocean's *Plotting* on cart.

ISSUE 74 • £2.50
Turtles 2 demo on the covertape plus two complete games. Brand new buyers' guide starts. Fujitsu DL900 24-pin printer reviewed. *Terminator 2* and *Final Fight*.

ISSUE 75 • £2.50
Two full games on the covertape, plus a playable demo of *'Cisco Heat*. *Equinoxe* music program reviewed, *Smash TV*, *Turtles 2* and bargain 3.5-inch disk drive pack reviewed.

ISSUE 76 • £2.50
Southern Belle on the covertape, plus *Graphic Adventure Creator*, DTP software, extended BASC & games pokes! *Dizzy's Excellent Adventures* & *The Simpsons* on test.

ISSUE 77 • £2.50
Seymour Take One and *Firelord* on the covertape, plus a football forecaster and fonts for DTP. *Paperboy 2* and *WWF* reviewed, plus special feature on the French CPC market.

ISSUE 78 • £2.50
Space Crusade demo on the covertape, plus *The Sphinx Jinx* and *Shockway Rider* (complete games). Public domain special, *Hudson Hawk* reviewed, readers' art.

ISSUE 79 • £2.50
New-look issue. Brand new *Technical Forum* section starts. *Ranarama* and *Maze Mania* on the covertape. *Blues Brothers* mastergame, plus compilations

SORRY, SOLD OUT! **ISSUES 1-54, 56-61**

ISSUES STILL AVAILABLE

ISSUE 62 • £1.60 Past, present and future of film tie-ins. *Rick Dangerous II* Mastergame. CES report.

ISSUE 63 • £1.60 *Shadow of the Beast* and *Learn to Read with Prof* reviewed. The *AA* end-of-year games retrospective.

ISSUE 65 • £1.60 Complete guide to word processing for beginners. *Ninja Turtles*, *Lotus Challenge* and *Gazza II*.

ISSUE 66 • £1.60 How to beat games. *North & South* reviewed plus *Robocop II* on the console! Plus *Fun School 3*.

ISSUE 67 • £2.20 Part one of our DTP special. Boxed covertape includes full versions of *Dizzy* and *Hydrofool*, plus a playable demo of *Total Recall*.

ISSUE 68 • £2.20 Four Mastergames! *Total Recall*, *F-15 Combat Pilot*, *Bat* and *Switchblade*. Includes packed covertape.

ISSUE 69 • £2.20 Amor's *Protype* reviewed, *Nightshift*, *Navy*, *Prince of Persia*, *Dick Tracy*, *Predator 2* and much more!

UK PRICE
Original cover price
OVERSEAS PRICES
Europe £5 Rest of World £7
Postage & Packing £1 per order*
regardless of size of order

BACK ISSUES ORDER FORM

Please send me the following back-issues ..... Total payment .....

METHOD OF PAYMENT (tick the appropriate box)

☐ Visa ☐ Access

Card no: ..... Expiry date .....

☐ Cheque (payable to Future Publishing Ltd.)

Name ..... Signature .....

Address .....

.....

Enclose this coupon (together with your cheque if applicable) in an envelope and send to: **AMSTRAD ACTION BACK ISSUES, FREEPOST, SOMERTON, TA11 7BR.**

Subs
Ams

FREE when
or

worth £29.99

Equinoxe

EXCLUSIVE! By special arrangement with the French publisher Ubi Soft, *AA* can now offer this excellent music package (reviewed in the December 1991 issue). Create, edit and save your own musical masterpieces

- **Disk only**
- **128k memory required.**
- **The menus in the program are in French, but the manual contains instructions in English**

Complete the coupon and return it today. Alternatively, call our Credit Card Hotline on 0458 74011

YOUR NO-QUIBBLE, NO-RISK GUARANTEE

You can cancel your subscription at any time in the future and we will refund you in full for all unmailed issues.

You just can't lose out!

What a brilliant birthday present!

scribe to trad Action!

only £29.95

you subscribe – choose any e of these three packages...

Blues Brothers

Can Jake and Elwood save the orphanage? They might with your help in this great, five-level platform game...

• Currently available on both tape and disk – please specify when ordering

Soccer Stars

A compilation of four superb football games: *Kick Off 2, Microprose Soccer, Emlyn Hughes International Soccer and Gazza 2*

• Currently available on both tape and disk – please specify when ordering

Free Software

when you subscribe (or resubscribe!)

Free Delivery

of your favourite magazine, every month

Free Club membership

All subscribers automatically get a monthly Subs Club newsletter

● **PLUS** you get complete **INFLATION PROTECTION** for a year **AND** you **GUARANTEE** never missing a copy of ***AMSTRAD ACTION!***

YES! PLEASE ENTER/RENEW MY SUBSCRIPTION TO AMSTRAD ACTION AT THE ALL INCLUSIVE PRICE OF *TICK AS APPROPRIATE*

12 ISSUES ☐ **UK £29.95.** ☐ **EUROPE £47.25** ☐ **REST OF WORLD £63.10**

To ensure you receive your magazine and tape quickly and undamaged, all overseas subscriptions are sent Air Mail

MY CHOICE OF GIFT IS *TICK YOUR CHOICE* **SOCCER STARS** ☐ **tape** ☐ **disk** **BLUES BROTHERS** ☐ **tape** ☐ **disk** ☐ **EQUINOXE**

If you are an existing subscriber please quote your subscription reference number here – you will find this on your address label _____

MY METHOD OF PAYMENT IS *TICK YOUR CHOICE* **TOTAL PAYMENT £** _____

☐ VISA ☐ ACCESS *CARD NO* ☐☐☐☐ ☐☐☐☐ ☐☐☐☐ ☐☐☐☐ *EXPS* ☐☐☐☐ ☐ CHEQUE *Make payable to Future Publishing Ltd*

NAME _____ SIGNATURE _____

ADDRESS _____

_____ POST CODE _____

Enclose this coupon (together with your cheque if applicable) in an envelope and send to: **AMSTRAD ACTION SUBSCRIPTIONS, FREEPOST, SOMERTON, TA11 7BR.**

NB: YOUR SUBSCRIPTION WILL BE PROCESSED IMMEDIATELY BUT PLEASE ALLOW 28 DAYS FOR THE DELIVERY OF YOUR GOODS. THIS COUPON IS VALID UNTIL 31ST MAY 1992 AA/MAG/0592

type-ins

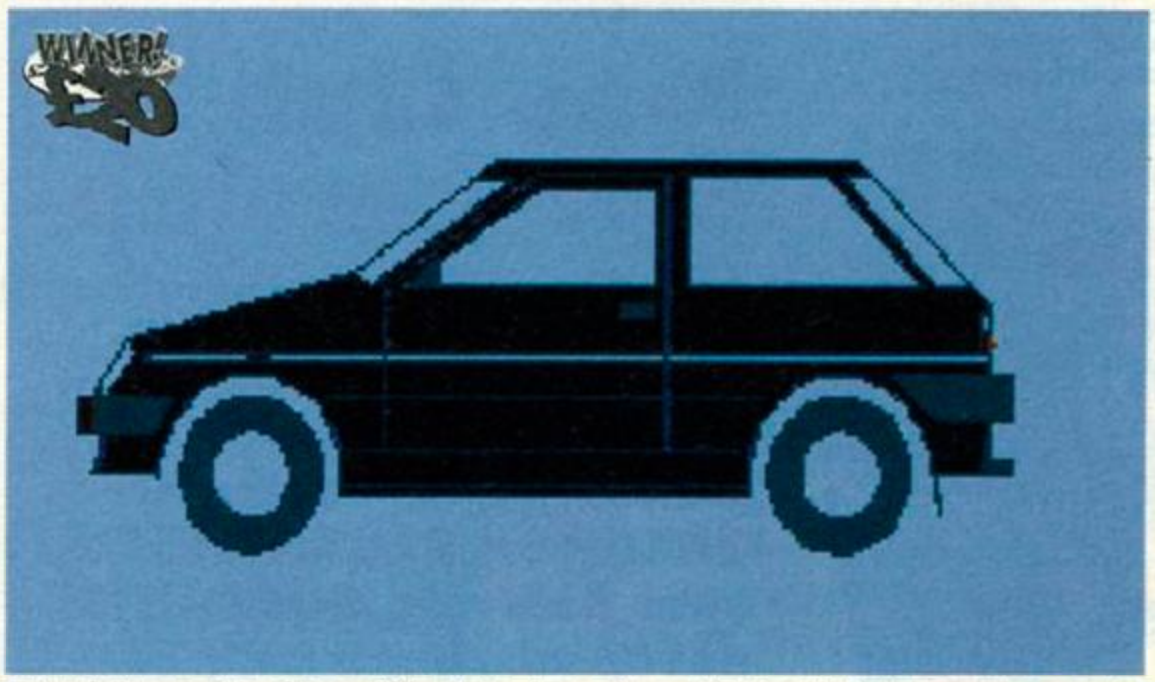
Welcome to JERRY GLENWRIGHT'S BASIC section, where you can both type in and run readers' programs AND learn how to program in BASIC. Send your type-ins to: Type-Ins, Amstrad Action, Beauford Court, 30 Monmouth Street – and don't forget, each type-in published earns its programmer £20!

METRO

Without rhyme or reason, this 'un! Even *Metro's* author, Ted English of Ashford in Hampshire, admits to his program being "...of no use to man or beast". What *Metro* does do, however, is to provide a massive amount of computerish fun for the under-fives.

Usually excluded from sessions at the keyboard, tots are grossly under-supported when it comes to simple fun software. Ted has attempted to reverse the trend by providing an amusing picture of a Metro motor car which has flashing indicators, a beeping horn – even an engine which be started and run (surely not an accurate portrayal then?). The program is stuffed with brilliant sound and screen effects too!

Simple, quality fun for pre-school CPC addicts.



■ Not just a pretty picture. This Metro has a horn, flashing indicators and an engine which runs... that's right, a *Type-In* with sound effects!

```
{HnBj} 5·'··WARNING!!·SAVE·BEFORE·RUNNING!!
{HoBi} 10·'··METRO····Ted·English·····Nov.91
{JpCi} 20·MODE·1:PAPER·0:INK·0,13:INK·1,0:BORDE
       R·13:CLS:SPEED·INK·20,30
{HxBo} 30·WINDOW·#4,1,29,1,3:INK·2,9:PAPER·#4,2
       :CLS·#4
{EvBk} 40·PRINT:INPUT·"WHAT·IS·YOUR·NAME·";2$
{CqAu} 50·IF·2$=""·THEN·40
{MxAp} 60·2$=UPPER$(2$)
{NpCs} 70·LOCATE·1,1:PRINT·SPACE$(30):LOCATE·1,
       2:PRINT·SPACE$(30):LOCATE·1,3:PRINT·SPAC
       E$(30)
{MkBr} 80·WINDOW·#4,10,25,11,13:INK·2,9:PAPER·#
       4,2:CLS·#4
{GoBj} 90·LOCATE·11,12:PRINT"HELLO·";2$;"!"
{LuAt} 95·'·····Draw·Wheels
{MiAo} 100·a=0:b=0.063
{DxBp} 110·ENT·8,35,-
       5,9,35,5,9:SOUND·1,200,570,10,,8
{DpAu} 120·x1=35*COS(a):y1=35*SIN(a)
{IoAo} 130·FOR·c=1·TO·100
{FtAr} 140·x=x1:y=y1:a=a+b
{OvAs} 150·x1=35*COS(a):y1=35*SIN(a)
{OiAx} 160·MOVE·x+130,y+100:DRAW·x1+130,y1+100
```

BASIC tutorial... BASIC TUTORIAL...

Last month's tutorial provided your first glimpse of a BASIC program – at least, your first glimpse accompanied by an explanation. BASIC programs can be seen everywhere, including the half dozen or so scattered across the *Type-Ins* pages!

Let's look a little more closely at what last month's fragment of program was doing. Oh, and it might be a good idea to sit by your CPC while reading so that you can follow the examples.

You remember that lines 10 and 20 are BASIC statements, and that the word RUN is a command? Well what do you think happens when you issue that command and run the program?

'CPCs are funky' is printed on the screen.

Even though the text (remember the name for it? The string) appears on the screen and not on any printer you might happen to have attached, the BASIC keyword is PRINT. This is because 30 years or so ago, when BASIC was beginning its slightly-longer-than five minutes of fame, most programmers didn't have access to a computer monitor, and entered their programs instead via a keyboard attached to a printer, receiving the output from those programs on the printer – hence the keyword.

So. Line 10 'prints' the string on the CPC's monitor, line 20 does as the name of its keyword implies and 'ENDs' (that is, ceases operation) of the program. Two simple statements, one to print something, one to cease processing, but statements which you'll find in almost every BASIC program ever written.

The number game PRINT can also act rather like the equals (=) key on a pocket calculator. Enter a line like...

```
10 PRINT 2+2
```

and what you're really saying is "perform the sum 2+2 and print the answer for me, will you?". Of course, simply typing in the line doesn't perform the action. What do you think is missing?

```
{JqAx} 170 MOVE x+420,y+100:DRAW x1+420,y1+100
{BwAl} 180 NEXT
{HvBn} 190 ENT 8,35,-
       5,9,35,5,9:SOUND 1,400,550,10,,8
{CnAu} 200 x1=20*COS(a):y1=20*SIN(a)
{CxAr} 210 FOR d=1 TO 100
{MsAr} 220 x=x1:y=y1:a=a+b
{GvAu} 230 x1=20*COS(a):y1=20*SIN(a)
{LjAx} 240 MOVE x+130,y+100:DRAW x1+130,y1+100
{JsAw} 250 MOVE x+420,y+100:DRAW x1+420,y1+100
{FjAl} 260 NEXT
{MnDr} 270 MOVE 130,125:FILL 1:ENT 8,10,-
       5,1:SOUND 1,25,5,,,8:MOVE 420,125:FILL 1
       :.....ENT 8,10,-5,1:SOUND 1,25,5,,,8
{KlBp} 280 ENT 8,35,-
       1,5,35,1,5:SOUND 1,150,300,10,,8
{HjAv} 290 x1=45*COS(a):y1=45*SIN(a)
{JuAo} 300 FOR e=1 TO 50
{GrAs} 310 x=x1:y=y1:a=a+b
{KxAv} 320 x1=45*COS(a):y1=45*SIN(a)
{LkAx} 330 MOVE x+130,y+100:DRAW x1+130,y1+100
{MuAw} 340 MOVE x+420,y+100:DRAW x1+420,y1+100
{LmAl} 350 NEXT
{AsCx} 360 LOCATE 10,11:PRINT SPACE$(16):LOCATE
       10,12:PRINT SPACE$(16):LOCATE 10,13:PRI
       NT SPACE$(16)
{JwAu} 365 '.....Draw Bodywo
       rk
{MvAo} 370 FOR f=1 TO 71
{CpBi} 380 x=x1:y=y1:READ x,y,x1,y1,note
{JvBs} 390 MOVE x,y:DRAW x1,y1:SOUND 1,note,5,8
       :GOSUB 840
{IjAk} 400 NEXT
{NqDs} 410 DATA 175,90,375,90,35,465,100,490,10
       0,120,85,100,50,100,43,175,90,175,100,..
       ...98,375,90,375,100,50,50,100,56,108,82
       ,56,108
{BpDq} 420 DATA 56,118,25,56,118,52,118,200,52,
       118,52,134,110,52,118,52,134,72,45,134,.
       ...91,134,35,45,118,82,118,83,45,118,45
{DjEo} 430 DATA 134,33,82,118,91,134,73,52,134,
       68,160,23,72,155,58,134,93,68,160,72,155
       ....,73,68,160,180,190,43,180,190,250,24
       0,83,250,240.....
{MxEj} 440 DATA 428,240,33,428,240,495,175,333,
       495,175,495,145,133,495,145,446,145,53,.
       ...446,145,466,125,143,466,125,504,125,6
       3,504,125.....
{NkEp} 450 DATA 504,145,300,504,145,495,145,93,
       495,173,488,173,63,488,173,488,155,123,.
       ...488,155,495,155,23,495,155,495,164,73
       ,495,164,488.....
       ....
{PwCk} 460 DATA 164,43,488,155,78,155,223,78,15
       5,78,150,63,78,150,495,150
{FpEl} 470 DATA 233,128,150,128,155,83,138,155,
       138,150,53,196,185,270,234,433,270,234,.
       ...335,234,53,335,234,335,110,123,335,11
       0,196,110
{HwDx} 480 DATA 53,196,110,196,185,133,188,185,
       258,232,63,258,232,238,232,90,258,232,..
       ...188,185,333,188,185,180,190,73,223,18
       5,223,194,23
{NsDu} 490 DATA 204,185,272,228,83,272,228,328,
       228,233,328,228,328,185,93,328,185,204,.
       ...185,33,312,171,326,171,113,326,171,32
       6,176,43,326
{HjDs} 500 DATA 176,312,176,330,312,176,312,171
       ,43,344,234,344,185,83,344,185,460,185,.
       ...123,460,185,413,234,83,413,234,344,23
       4,33,420,234
{MtDo} 510 DATA 467,185,73,467,185,482,185,233,
       420,234,433,234,93,495,125,490,100,43,..
       ...490,100,504,100,243,504,100,504,107,9
       3,504,107
{PsDk} 520 DATA 492,107,53,466,100,468,82,93,17
       5,95,375,95,333,179,110,371,110,83,168,.
       ...135,384,135,63,175,90,375,90,93
{LiDl} 530 DATA 492,107,53,466,100,468,82,93,17
       5,95,375,95,333,179,110,371,110,83,168,.
       ...135,384,135,63,175,90,375,90,93.
{IwAt} 535 '.....Fills and C
       hoices
{DoAr} 540 INK 1,0:INK 3,1
{FvEn} 550 MOVE 319,173:FILL 1:SOUND 1,60,10,12
       :MOVE 498,103:FILL 1:SOUND 1,33,10,12:..
       ...MOVE 219,190:FILL 1:SOUND 1,130,10,12
       :MOVE 67,126
{NoDo} 560 FILL 1:SOUND 1,30,5,12:MOVE 475,135:
       FILL 1:SOUND 1,73,5,12:MOVE 250,175:....
       ...FILL 3:SOUND 1,120,25,12:MOVE 250,145
       :FILL 3
{FnDu} 570 SOUND 1,53,35,12:MOVE 250,120:FILL 3
       :ENT -7,40,20,10,40,-
       20,10:SOUND 1,100,.....120,12,,7:MOVE 90
       ,160:FILL 3:MOVE 250,92:FILL 3
{IlBk} 580 LOCATE 13,4:PRINT"AUSTIN METRO"
{DvAr} 590 FOR c=1 TO 1200:NEXT
{BuAx} 600 LOCATE 13,4:PRINT SPACE$(12)
{IoCt} 610 INK 2,13,15:MOVE 48,126:FILL 2:INK 2
       ,13,15:MOVE 133,152:FILL 2:INK 2,13,15:.
       ...MOVE 491,160:FILL 2
{FoEn} 620 LOCATE 8,1:PRINT SPACE$(30):LOCATE 8
       ,2:PRINT SPACE$(30):LOCATE 8,3:PRINT SPA
       CE$(30):LOCATE 8,4:PRINT SPACE$(30):LOCA
       TE 8,5:PRINT SPACE$(30)
{BtAr} 630 FOR a=1 TO 6500:NEXT
{IoCm} 640 INK 2,13:MOVE 48,126:FILL 2:INK 2,13
       :MOVE 133,152:FILL 2:INK 2,13:MOVE 491,1
       60:FILL 2
{NwBp} 650 WINDOW #5,8,30,1,5:INK 2,16:PAPER #5
       ,2:CLS #5
{BlBs} 660 LOCATE 10,2:PEN 1:PRINT"B-C-G-K-M-P-
       R-T-W-Y-"
{OiBo} 670 LOCATE 9,4:PRINT"H-HORN S-START E-
       ENDS"
{CkAn} 680 a$=INKEY$
{IrAs} 690 IF a$="" THEN 680
{OpAw} 700 IF a$="W" OR a$="w" THEN 850
{CnAx} 710 IF a$="Y" OR a$="y" THEN 860
{KlBi} 720 IF a$="R" OR a$="r" THEN 870
{OsAw} 730 IF a$="G" OR a$="g" THEN 880
{PlAw} 740 IF a$="C" OR a$="c" THEN 900
{HtBi} 750 IF a$="T" OR a$="t" THEN 950
{MxBi} 760 IF a$="B" OR a$="b" THEN 910
{JtAx} 770 IF a$="M" OR a$="m" THEN 920
{PpAx} 780 IF a$="P" OR a$="p" THEN 930
{OlAx} 790 IF a$="K" OR a$="k" THEN 940
{JsBi} 800 IF a$="H" OR a$="h" THEN 980
{JpAx} 810 IF a$="S" OR a$="s" THEN 990
{FjBi} 820 IF a$="E" OR a$="e" THEN 1070
{GxAl} 830 GOTO 680
{MsAu} 840 FOR z=1 TO 200:NEXT:RETURN
{KoAs} 845 '.....Colour Chan
       ges
{PrBn} 850 INK 1,0:INK 3,26:GOSUB 970:GOTO 610:
       GOTO 680
{OiBl} 860 INK 1,0:INK 3,24:GOSUB 970:GOTO 610:
       GOTO 680
{BnBn} 870 INK 1,0:INK 3,6:GOSUB 970:GOTO 610:G
       OTO 680
```

BASIC tutorial... BASIC tutorial...

That's right, the command RUN. Type the line now, press RETURN, then type RUN <RETURN> (and from now on, whenever you see <RETURN>, don't actually type it in, just press the RETURN key).

You'll see 4 appear on the screen.

Now the point of all this is that PRINT can be used to provide textual information, 'perform' calculations, or combine both into formatted output.

See, it isn't much good simply printing 4 on the screen. If someone who doesn't know what the code does runs your program, all they'll see is the number 4 – what on Earth could that possibly mean?

To overcome the problem, BASIC positively encourages you to combine calculations and strings into formatted, hopefully intelligent output.

And to do that, PRINT is combined with the colon (:) and the semi-colon (;).

We'll look at how to use them in a moment but first, let's meet one more BASIC concept (sound of fanfare): the 'variable'!

Think again of the pocket calculator, and you'll remember that it can store numbers, remember and use them later. Well, the CPC can do that too. And not only that, but you can assign a meaningful name to those numbers.

JAM=58 or TEA=49 or CPCS=299.99 are all examples of variables. You're assigning the names JAM, TEA and CPCS to the numbers 58, 49 and 299.99 respectively. Variables are useful because by using them in a program, you don't have to 'hard-wire' values into code which may have to be changed at a later date.

Confused? Don't worry. Here's an example to help explain the concept.

Suppose that you wanted to write a program which calculated the price of butter in a country where the butter market fluctuated on a day-to-day basis.

You could use the following lines of code...

```
10 PRINT "Hello. I'm a program which tells you the price of
   butter."
20 PRINT "Butter is 90p per pound."
30 PRINT "Butter is 45p per half pound."
30 END
```

```
{FvBm} 880·INK·1,0:INK·3,18:GOSUB·970:GOTO·610:G
       OTO·680
{CuBn} 890·INK·1,0:INK·3,11:GOSUB·970:GOTO·610:G
       OTO·680
{JoBn} 900·INK·1,0:INK·3,10:GOSUB·970:GOTO·610:G
       OTO·680
{AqBm} 910·INK·1,0:INK·3,14:GOSUB·970:GOTO·610:G
       OTO·680
{PjBm} 920·INK·1,0:INK·3,8:GOSUB·970:GOTO·610:GO
       TO·680
{NiBm} 930·INK·1,0:INK·3,7:GOSUB·970:GOTO·610:GO
       TO·680
{ErBn} 940·INK·1,26:INK·3,0:GOSUB·970:GOTO·610:G
       OTO·680
{KwBn} 950·INK·1,0:INK·3,11:GOSUB·970:GOTO·610:G
       OTO·680
{FrBn} 960·INK·1,0:INK·3,8:GOSUB·970:GOTO·610:GO
       TO·680
{KoCk} 970·ENV·3,1,5,7,1,-2,1,5,-1,5,7,-
       1,8:SOUND·1,30,0,15,3:RETURN
{HnBw} 980·SOUND·1,284,20,12:SOUND·2,239,20,12:S
       OUND·4,190,20,12:GOTO·680
{AmEn} 990·LOCATE·8,1:PRINT·SPACE$(30):LOCATE·8,
       2:PRINT·SPACE$(30):LOCATE·8,3:PRINT·SPAC
       E$(30):LOCATE·8,4:PRINT·SPACE$(30):LOCAT
       E·8,5:PRINT·SPACE$(30)·
{AqBi} 995·'·····Start·and·Ru
       n·Engine
{GiCj} 1000·ENT·-7,7,10,1,7,-
       10,1:SOUND·1,25,80,9,,7,1:SOUND·2,4000,9
       60,12
{JxAu} 1010·FOR·d=1·TO·1200:NEXT
{DwAw} 1020·LOCATE·7,4:PRINT·SPACE$(24)
{OmBo} 1030·LOCATE·40,19:PRINT"·":count=0:WHILE·
       count<70
{KqAu} 1040·LOCATE·40,19:PRINT"·"
{FoBx} 1050·FOR·x=33·TO·39:LOCATE·x,19:PRINT"·";
       CHR$(41):NEXT:count=count+1
{MqCp} 1060·OUT·&BC00,8:OUT·&BD00,1:WEND:OUT·&BD
       00,0:LOCATE·33,19:PRINT·SPACE$(8):GOTO·6
       50
{IjAu} 1065·'·····End·Routine
{JiEn} 1070·GOSUB·970:KEY·0,"OUT·&BC00,1:OUT·&BD
       00,40:OUT·&BC00,2:OUT·&BD00,46:OUT·&BC00
       ,6:OUT·&BD00,25:OUT·&BC00,7:OUT·&BD00,30
       "+CHR$(13)
{OmAw} 1080·BORDER·11:FOR·f=40·TO·0·STEP·-1
{PjAr} 1090·FOR·g=0·TO·11:NEXT·
{AjAw} 1100·OUT·&BC00,1:OUT·&BD00,f
{EpBo} 1110·OUT·&BC00,2:OUT·&BD00,46-(20-
       INT(f/2))
{MwBq} 1120·OUT·&BC00,6:OUT·&BD00,25-INT((40-
       f)/1.6)
{MnBt} 1130·OUT·&BC00,7:CALL·&BD19:OUT·&BD00,30-
       ((40-f)/3.2)
{LsAm} 1140·NEXT:CLS
{JrAo} 1150·FOR·f=0·TO·40
{DuAr} 1160·FOR·g=0·TO·11:NEXT·
{PoAv} 1170·OUT·&BC00,1:OUT·&BD00,f
{DuBo} 1180·OUT·&BC00,2:OUT·&BD00,46-(20-
       INT(f/2))
{MlBq} 1190·OUT·&BC00,6:OUT·&BD00,25-INT((40-
       f)/1.6)
{OvBt} 1200·OUT·&BC00,7:CALL·&BD19:OUT·&BD00,30-
       ((40-f)/3.2)
{DsAt} 1210·NEXT:FOR·a=1·TO·200:NEXT
{ErBr} 1220·WINDOW·#1,8,33,8,16:INK·3,7:PAPER·#1
       ,3:CLS·#1
{LiBq} 1230·WINDOW·#2,9,32,9,15:INK·2,14:PAPER·#
       2,2:CLS·#2·····
{FkDl} 1240·LOCATE·13,12:PRINT·"GOOD-
       BYE·";2$;"!":SOUND·1,284,40,12:SOUND·2,2
       39,40,12:SOUND·4,190,40,12
{DrAs} 1250·FOR·a=1·TO·400:NEXT
{HxBw} 1260·SOUND·1,284,40,12:SOUND·2,239,40,12:
       SOUND·4,190,40,12
{FqAu} 1270·FOR·a=1·TO·4000:NEXT:CALL·0·
```

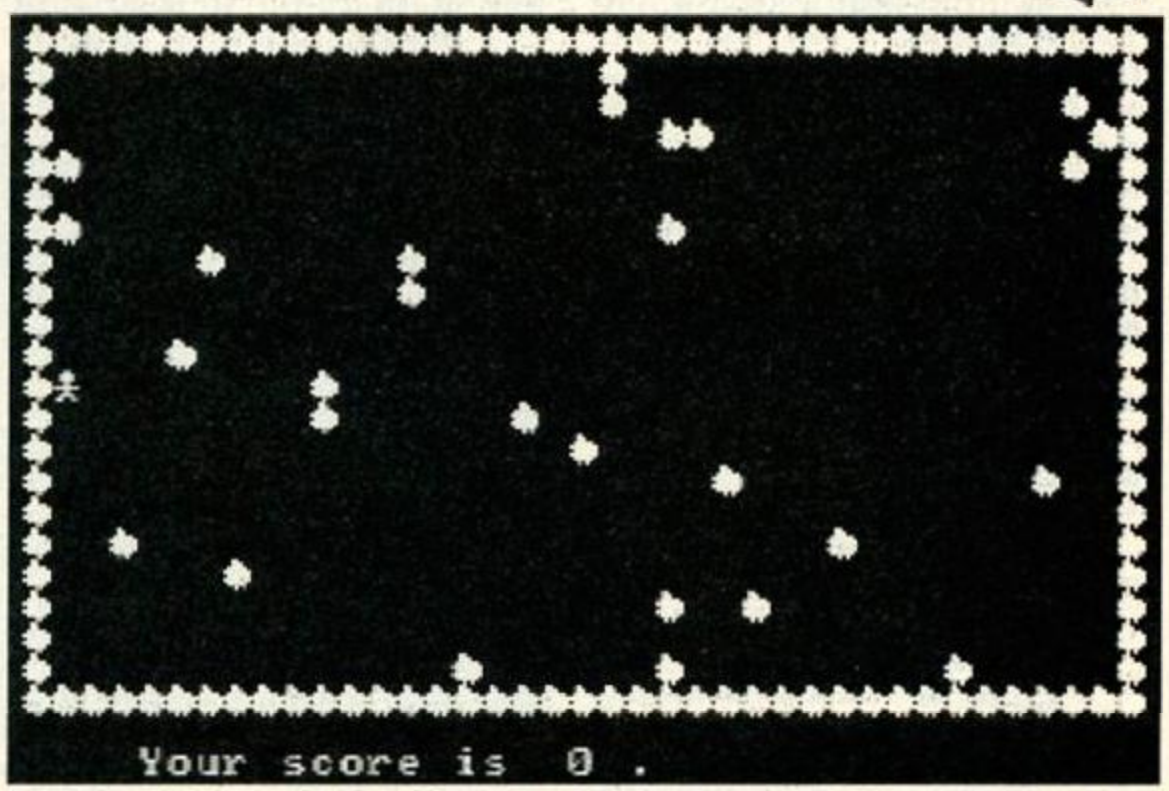
BOULDERS

A fiendishly addictive and difficult game is *Boulders*. You're inside a cavern which completely fills the screen and have to get from one side to the other in order to escape.

Simple? Not a bit of it. Raining down from the cavern's roof is an endless stream of falling boulders. Step under one, and you'll look like a hedgehog that's gone under a juggernaut! Full instructions are contained within the program.

Boulders is by Raymond Mulvihill of Fleet, Hampshire who wonders whether his game is "...up to the standard of being published" and signs himself 'a hopeful 13-year-old'.

Hope no more young Master Mulvihill...



■ ***Boulders* uses a simple idea, but it's great fun to play. You have to get from one side of the screen to the other without getting squashed by the falling rocks.**

BASIC tutorial... BASIC TUTORIAL...

And as it stands, running the program would produce the price of butter on screen, but what if the price of a pound of butter changed? Both lines 20 and 30 would have to changed because the 'per pound' price has changed and so, consequently, has the price per half pound.

A program which has to be re-written every other day in order to be useful isn't much good is it?

Now consider this...

```
10 PRINT "Hello. I can tell you the price of a half pound of
   butter."
20 INPUT "What is today's price for a pound of butter (type
   only the figure)"; BUTTER
30 POUND=BUTTER: HALFPOUND=BUTTER/2
40 PRINT "Butter is ";POUND "p per pound today, and ";
   HALFPOUND"p per half pound."
50 END
```

Wow! Is that a monster program or what? Variables, PRINT formatting, multiple statements on one line, and a new keyword. But what does it all do?

Well, line 10 simply tells the person sitting at the CPC what the currently running program can do. Line 20 is a keyword mentioned last month but which you haven't yet met. What it does is assign values to variables by asking you for the value. The string following the INPUT keyword is printed on screen as a prompt to elicit your cooperation. You see:

```
What is today's price for a pound of butter
(type only the figure)?
```

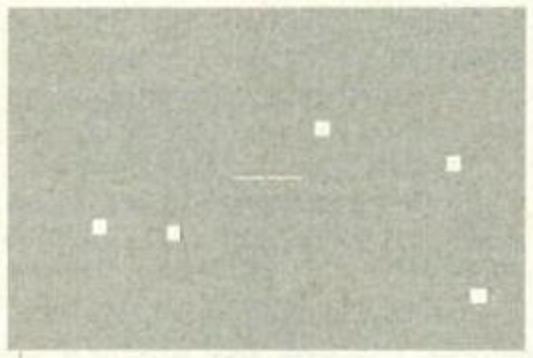
on screen (INPUT adds the question mark automatically), and respond with 90. Why the 'type only the figure' bit? Because INPUT can only accept numeric values. If you'd typed 90p (i.e. added the 'p' bit to the number), an error would have

```
{MiBv} 10·MODE·1:'Boulders·by·Ray's·Software(c)
       ·.....Raymond·Mulvihill
{HpEk} 20·BORDER·0:SPEED·INK·75,75:INK·1,24:INK
       ·2,15:INK·3,9,18:INK·0,0:LOCATE·14,1:PEN
       ·2:PRINT"Ray's·Software":LOCATE·17,2:PRI
       NT"Presents"
{ArDm} 30·PEN·3:LOCATE·13,5:PRINT"B·O·U·L·D·E·R
       ·S":PLOT·182,317:DRAW·182,340:DRAW·440,3
       40:DRAW·440,317:DRAW·182,317
{GlGv} 40·PEN·2:LOCATE·1,8:PRINT"Instructions·:
       -
       ":PEN·1:PRINT:PRINT"You're··this·funny··
       bloke·and·you've·gotto·get·from·left·-
       to·right·by·the·longestroute··possible··
       to·get·a·higher··score.Easy·Eh?·Well··wa
       tch·out·for·the·electicboulders."
{GjEs} 50·PEN·2:PRINT:PRINT"Controls·:-
       ":PRINT:PEN·1:PRINT"'Q'·.........Up":P
       RINT"'A'·.........Down":PRINT"'O'·....
       .....Left":PRINT"'P'·.........Right"
{GrCj} 60·PEN·3:LOCATE·18,24:INPUT"Play";a$:IF·
       a$="y"·OR·a$="Y"·THEN·70·ELSE·END
{OmHm} 70·CLS:SYMBOL·255,48,56,126,255,127,255,
       126,20:SYMBOL·254,24,60,60,24,255,24,60,
       102:eb$=CHR$(255):FOR·a=1·TO·39:PEN·3:LO
       CATE·a,1:PRINT·eb$:LOCATE·a,22:PRINT·eb$
       :NEXT·a:FOR·b=1·TO·22:LOCATE·1,b:PRINT·e
       b$:LOCATE·39,b:PRINT·eb$:NEXT·b
{DrBk} 80·x=38:y=22:DIM·eb(x,y):m=2:n=12:sc=0
{KrBi} 90·PEN·1:LOCATE·m,n:PRINT·CHR$(254)
{JpBp} 100·PEN·2:LOCATE·5,24:PRINT"Your·score·i
       s·";sc;"."
{BuCp} 110·xx=INT(RND(1)*x+1):yy=INT(RND(1)*y+1
       ):eb(xx,yy)=1:LOCATE·xx,yy:PEN·3:PRINT·e
       b$
{NlAo} 120·c$=INKEY$
{NkCn} 130·IF·c$="q"·THEN·LOCATE·m,n:PRINT"·":n
       =n-1:sc=sc+1:SOUND·1,100,10,15,,1
{OrCk} 140·IF·c$="a"·THEN·LOCATE·m,n:PRINT"·":n
       =n+1:sc=sc+1:SOUND·1,200,10,15,,1
{FtCn} 150·IF·c$="o"·THEN·LOCATE·m,n:PRINT"·":m
       =m-1:sc=sc+1:SOUND·1,150,10,15,,1
{PuCn} 160·IF·c$="p"·THEN·LOCATE·m,n:PRINT"·":m
       =m+1:sc=sc+1:SOUND·1,150,10,15,,1
{KqAv} 170·IF·x=m·THEN·GOTO·240
{FqAw} 180·IF·eb(m,n)=1·THEN·GOTO·230
{LlAu} 190·IF·n=1·THEN·GOTO·230
{LqAt} 200·IF·n=22·THEN·GOTO·230
{JsAu} 210·IF·m=1·THEN·GOTO·230
{LxAm} 220·GOTO·90
{MnBs} 230·MODE·1:LOCATE·17,5:PEN·3:PRINT"KABOO
       M":GOTO·250
{FpBr} 240·MODE·1:LOCATE·13,5:PEN·3:PRINT"CON-
       GRATULATIONS":GOTO·250
{PrCn} 250·LOCATE·12,10:PEN·2:PRINT"You·scored·
       ";sc;".":FOR·pause=1·TO·1000:NEXT:END
```

LC

LC, from Tom Pearce of Amersham, Buckinghamshire, is a version of old-favourite Light Cycles crammed into a mere 2K of code! *LC* also lets you specify the back and foreground colours of the playfield, as well as those for the players! You also decide the number of blocks. *LC* is fast, colourful and fun.

```
{MvDv} 10·MODE·1:SPEED·INK·1,1:PRINT"Light·cycl
       es·by·Thomas·Peace":PRINT:PRINT"Try·to·c
       ause·your·oponent·to·crash·into·y-
       ou·or·into·a·block"
{PiDr} 15·PRINT:INPUT"Flash·speed";x:INPUT"2·Co
       lours·of·player·one";i,j:INPUT"2·Colours
       ·of·player·two";k,l:INPUT"Border·colour"
       ;n
{BtAt} 20·INPUT"Paper·colour";n
{HoFk} 30·CLS:SPEED·INK·1,1:PRINT"Keys·are·Q,·A
       ,·Z·and·X·for·player·1":PRINT"Keys·are·/
       ,·\,·L·and·.·for·player·2":PRINT:PRINT"P
       ress·space":WHILE·INKEY(47)=-
       1:WEND:SPEED·INK·x,x
{OpBq} 40·ENV·1,10,-1,10:ENT·1,5,-1,4,5,1,4,5,-
       1,4,5,1,4
{OtGi} 50·MODE·1:BORDER·n:INK·0,n:INK·1,m:INK·2
       ,i,j:INK·3,k,1:PAPER·1:CLS:PAPER·0:WIN-
       DOW#1,2,39,2,24:CLS#1:CLEAR:FOR·I=1·TO·4
       :READ·X(I),Y(I):NEXT:DATA·0,2,2,0,0,-2,-
       2,0:Z(1)=4:Z(6)=1:PAPER·1:E=0:F=0
{BmEw} 60·A=318:C=322:B=200:D=200:X=4:Y=2:P=1:O
       P=1:Q=1:OQ=1:CLS#1:IF·E=10·THEN·I$="one"
       :I=2:GOTO·140·ELSE·IF·F=10·THEN·I$="two"
       :I=3:GOTO·140·ELSE·GOSUB·150
{JrDk} 70·XX=(INKEY(71)=0)-
       (INKEY(63)=0):X=X+XX:IF·XX=0X·THEN·X=X-
       XX·ELSE·IF·X=0·OR·X=5·THEN·X=Z(X+1):GOTO
       ·90·ELSE·90
{NiBu} 80·OP=P:P=P+(INKEY(69)=0)-
       (INKEY(67)=0):IF·P=0·OR·P=8·THEN·P=OP
{HqDv} 90·OX=XX:YY=(INKEY(30)=0)-
       (INKEY(22)=0):Y=Y+YY:IF·YY=0Y·THEN·Y=Y-Y
       Y·ELSE·IF·Y=0·OR·Y=5·THEN·Y=Z(Y+1):GOTO·
       110·ELSE·110
{NsBv} 100·OQ=Q:Q=Q+(INKEY(31)=0)-
       (INKEY(36)=0):IF·Q=0·OR·Q=8·THEN·Q=OQ·
{BpGr} 110·OY=YY:FOR·I=1·TO·P:ON·TEST(A+(X(X)*I
       ),B+(Y(X)*I))·GOTO·120,120,120:NEXT:I=A:
       J=B:A=XPOS:B=YPOS:DRAW·I,J,2:FOR·I=1·TO·
       Q:ON·TEST(C+(X(Y)*I),D+(Y(Y)*I))·GOTO·13
       0,130,130:NEXT:I=C:J=D:C=XPOS:D=YPOS:DRA
       W·I,J,3:GOTO·70
{LtBj} 120·F=F+1:SOUND·7,239,100,15,1,1:GOTO·60
{PnBk} 130·E=E+1:SOUND·7,119,100,15,1,1:GOTO·60
{PpEo} 140·CLS#1:INK·1,0:PEN·I:LOCATE·11,25:PRI
       NT"·Player·";I$;"·wins!·":E=0:F=0:WHILE·
       INKEY(47)<>0:WEND:LOCATE·1,25:PRINT·SPAC
       E$(40);:INK·1,24:RUN
{NuGs} 150·PAPER·0:LOCATE·2,2:CLEAR·INPUT:INPUT
       "Number·of·blocks";K:LOCATE·2,2:PRINT·SP
       ACE$(37):PAPER·1:CLS:PAPER·0:WIN-
       DOW#1,2,39,2,24:CLS#1:PAPER·1:LOCATE·2,2
       5:PEN·2:PRINT·USING"##";E:PEN·3:LOCATE·3
       8,25:PRINT·USING"##";F
{PrAv} 160·IF·K<0·OR·K>1000·THEN·K=10
{OiEk} 170·TAG:FOR·L=1·TO·K:PN=INT(RND*3)+1:I=R
       ND*552+16:J=RND*350+32:IF·(I<300·OR·I>34
       0)·AND·(J<198·OR·J>216)·THEN·MOVE·I,J,PN
       :PRINT·CHR$(143);
{PiAs} 180·NEXT:TAGOFF:RETURN
```



■ *LC* may not have particularly detailed graphics, but what do you expect for 2K?

BASIC tutorial... BASIC tutorial...

been generated and BASIC would respond with:

```
?Redo from start
```

telling you re-enter the value (yes, it is moderately friendly and offers a second chance!).

The semi-colon following the INPUT keyword and string is used as a formatting delimiter . It ensures that your response will appear on screen on the same line as INPUT's prompt. Leave out the semi-colon, and the value you type would appear on the next line (and probably look rather silly – try it...).

Line 30 uses the INPUT-assigned variable BUTTER to create values for the variables POUND and HALFPOUND. The former simply copies its value from BUTTER but the latter requires a bit of maths in the form of an expression (i.e. HALFPOUND equals (=) BUTTER divided by (/) 2).

Notice how line 30 contains what would normally be two separate statements fronted by the same line number. You can put as many statements as you want, separated by colons, on one line, up to the CPC's line length limit.

Line 40 combines formatting semi-colons, strings and variables to provide intelligent formatted output for the user (the semi-colon is used in the same way as it was in the INPUT statement). Here's what line 40 displays:

Butter is 90p per pound today, and 45p per half pound.

if you entered 90 as the value into the "what's the price of butter..." INPUT prompt. Finally, line 50 ENDs the program.

Now the clever part. If the price of butter drops to 80p, there's no need to re-write a single line of code. Just enter 80 when prompted for the price...

Butter is 80p per pound today, and 40p per half pound.

Study the code and then try leaving out and generally messing around with the semi-colons to see what happens – you can't damage anything, so have fun!

the buyers guide

word processors

All CPC owners know that their machines can do far more than run games. The Amstrad has many serious uses besides, and probably the most popular is word processing. ROD LAWTON looks at the word processing programs you can get for your machine...

Word processing has to be just about the most popular serious use for all computers, not just the Amstrad CPC/Plus range.

Computerised word processors just offer so many advantages over writing by hand, or even using a typewriter. With a word processor you can make things up as you go along, knowing that you can go back later and rearrange/rewrite what you've written. With a typewriter there's much more pressure to 'get it right first time'. No-one wants to keep re-typing successive drafts of a document they just can't get 'right'.

With a computer, of course, you don't have to print anything at all until it's perfect. You can also print as many copies as you like!

Of course, you also need a printer. We covered these back in the *AA74* Buyers' Guide. You also need to choose the word processing package that does everything you want it to, and at a price you can afford. That's where this month's Buyers' Guide comes in...

But what should you look for? Speed is a critical factor, especially if you intend working with very big documents (more than half a dozen pages long). It can take an age to scroll through a large document using a slow program.

User-friendliness is possibly more important, though, for beginners. Speed of operation will not be as important as a program that's easy and simple to pick up. Look out for programs that use menus (see 'Jargon-busting' below).

Spellcheckers are incorporated in the more expensive, more powerful programs. These go through your text matching up the words you've written against those in their 'dictionaries'. Spellcheckers will find obvious spelling mistakes, but can't correct grammar or simply using the wrong word. But they're extremely handy for people who, try though they might, simply can't spell properly. Programs may also include mail-merge facilities (invaluable for business use) and other powerful features.

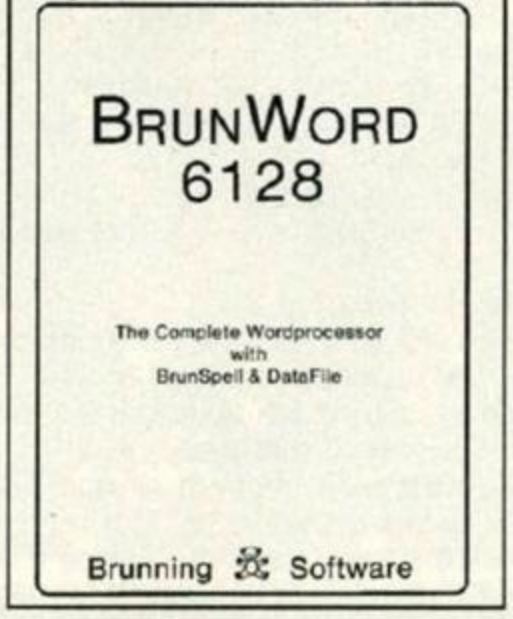
To find the best product for you, read on...

BRUNWORD 6128
BRUNNING SOFTWARE • £30

As the name suggests, this program will run only on 128K machines. Its principle claim to fame is its memory-resident spellchecker, which offers the fastest spellchecking of all the word processors here. There's also a word count feature (as with *Protext*), which is extremely useful for journalists and other professional writers. To cap it all, there's a card-index style database which can be used for mail-outs and label printing.

Brunning Software also produces a wide range of other word processing packages, all based around *Brunword*. These include *Brunword Elite* (£55, designed to get the very best from your printer), *Infoscript* (£50, includes simultaneously memory-resident spellchecker and database facility)

■ ***Brunword 6128*** **incorporates a very fast RAM-based spellchecker.**



Jargon-busting

ASCII format: Word processors usually produce files that only they can read. For example, *Protext* won't be able to make much sense of a *Tasword* file. However, most good word processors can also save in a special 'standard' format – ASCII. This file format won't let you store any fancy commands or characters, but the bare text it contains can be 'read' by just about any word processing program.

Blocks: When you delete large quantities of text, or want to move sections of text from one place in your document to another, you usually define the 'block' you want to move with markers.

Columns: All magazines and some books are printed with more than one column on a page. It looks more attractive and makes the text easier to read. Few CPC word processing packages can print out in columns, however, with the notable exception of the CP/M version of Protext.

Command line: Some programs feature menus – lists of options you can choose from – while others expect you to input commands in full, via a 'command line'. In *Protext*, the command line is below the text editing screen.

Control code: Word processors let you underline text or put it into italics or bold, as well as permitting a variety of formatting options (margins, insets etc.). These commands are stored as 'control codes' within the text. These control codes are only displayed, not printed out.

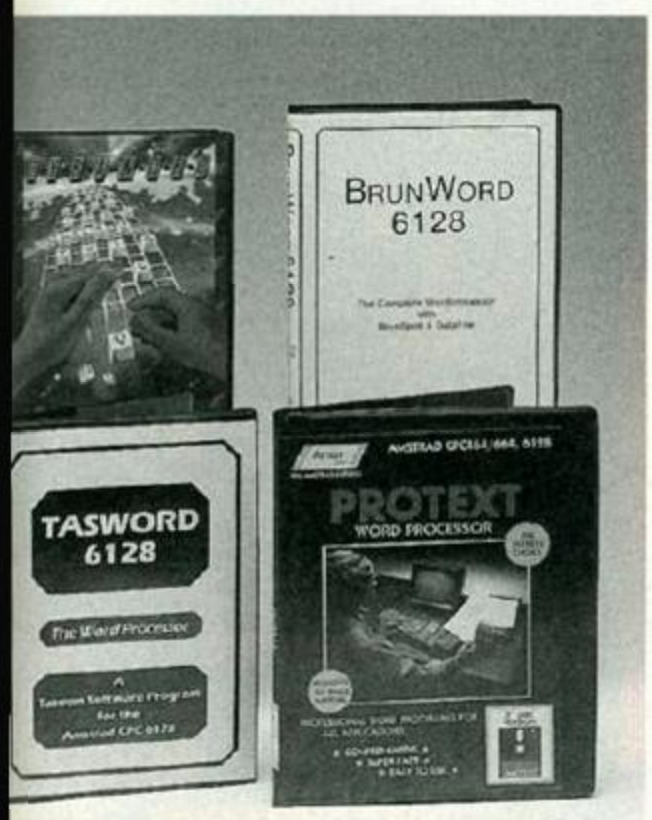
Cursor: CPC owners already know what a cursor is – switch the machine on and BASIC shows you a yellow block where the commands you type will appear on the screen. Word processors feature a cursor, too – it shows you where the text you type will be inserted on the page. You move the cursor around via the arrow (cursor) or other keys.

Cut & paste: Word processors let you 'cut' text out (see Blocks) and either delete it altogether or 'paste' it down somewhere else in the document. The phrase goes back to the days when sub-editors and artists did literally have to cut out chunks of text and paste them down somewhere else when designing pages.

Dictionary: The better word processing programs incorporate spellcheckers. These store a 'dictionary' of words, and they check what you've written against these 'correct' words.

Editing: When you go back to text you've already written to amend it or rearrange it, you 'edit' it.

Find/change: A decent word processor will let you change one word for another throughout a document. For example, you might find you've mis-spelt your boss's name throughout a 30-page report. Eek!



■ **The choice of top league Amstrad word processors is now limited to three. *Pyraword* (top left) is no longer available.**

and *ROM Module* (£125, consists of *Brunword Elite* and other add-ons in a single ROM module which plugs into the back of the machine – instant loading, and no disk accessing!) **90%**

MINI OFFICE II
DATABASE SOFTWARE • £13.99* CASSETTE, £15.99* DISK
(*see Special Offers this issue)

Mini Office II is an 'integrated' package consisting of word processor, database, graphics, communications and label-printer. The word processor is not the best in the world, but the whole package is extremely versatile and represents excellent value. *Mini Office* doesn't do anything that the various *Brunword* and *Protext* packages can't do, but it does them at a very much lower price!

An alternative worth considering for writers who need that little bit more... and it just so happens that *Mini Office II* is currently available from our very own Special Offers department on page 47. **88%**

■ ***Mini Office II* is excellent value for an integrated package.**

TASWORD
TASMAN SOFTWARE • £24.95 CASSETTE, £29.95 DISK

If you've noticed a similarity between this program and Amsoft's *Amsword*, that's because they're one and the same program! There are two version of the program – one for the 464 and one for the 6128. *Tasword* is very easy to learn, with good manuals an on-screen help. On the down side, it's extremely slow and can be fiddly to use. Great for beginners, but too sluggish for serious use. **65%**

PROTEXT
ARNOR • £29.38 (Amsdos version), £59.95 (CP/M version)

Protext comes in two forms: an Amsdos version and a CP/M version. The Amsdos version is a basic word processor which is cheaper and will run on a 464 or a 6128 (but only from disk). The CP/M version, however, is a complete word-processing environment, featuring a spellchecker (not as quick as *Brunword's*), disk/file handling within documents, macros, powerful mail-merge facilities and more. The basic word processing functions are the same, though. *Protext* is a blindingly fast text editor, easy to learn and very polished.

The Amsdos version has several optional add-ons which can be bought separately, including *Prospell*, the spellchecker, and *Promerge*. These are built into the CP/M version, which goes to explain the extra cost.

Also available is the excellent *Protype* print utility, which produces truly superb print quality from a 9-pin printer, albeit at the expense of speed.

90% (Amsdos), 94% (CP/M)

■ **The Amsdos version of *Protext* forms part of a suite.**

WHERE to go

Below are the names, addresses and telephone numbers of the producers of the programs described. You can order direct from them if you have any trouble getting these products either in the shops or from *Amstrad Action*'s various mail order suppliers.

Brunning Software 0255 862308
138 The Street, Little Clacton, Essex C016 9LS

Arnor Ltd 0733 68909
611 Lincoln Road, Peterborough PE1 3HA

Database Software 0625 859333
Adlington Park, Macclesfield FK10 4NP

Tasman Software Ltd 0532 438301
Springfield House, Hyde Terrace, Leeds LS2 9LN

A Find/Change function will let you correct all instances automatically.

Footer: If you're preparing a long report, an article or even a novel, you will probably want to put the page number and maybe even the title on each page. A good word processor will automatically print information like this at the bottom of the page – this is a 'footer'.

Formatting: If you change some of the words in a line, the line may end up a different length. Some word processors automatically 're-flow' the text, others (*Protext*) reformat only when you tell them to.

Header: Fixed text which can be printed at the top of every page. (See also 'Footer')

Insert/overwrite: Most programs let you choose between 'inserting' text as you write (the existing text shuffles along to accomodate it) or 'overwriting' the existing text (wiping it out as you do so).

Justifying: Many books and magazines feature 'justified' text – both the left-hand and right-hand edges of the text are straight. This is achieved by adding small spaces between the words on a line to get it to fit the full width of the column.

Line spacing: Although there is usually no difference to the way the text is displayed on-screen, most word processors will let you vary the vertical spacing between the lines when you do a print-out.

Mail-merge: Some word processors feature additional features like 'mail-merging'. You can set up a standard letter, for example, and print it out dozens of times, each time with a different name and address (loaded automatically from another file).

Margin: When you print out a document, the text doesn't go right to the edges of the paper. Instead, you specify margins. You may have to set up margins on the printer too, and allow for them when you set up your document.

Menu: While some programs expect you to type in commands, others will give you a list – a menu – of available commands to choose from.

Ruler: Many programs (*Protext*, for example) display a 'ruler' at the top of the screen which you use to set margins and tab stops.

Spellchecker: See Dictionary

Styles: Most word processors let you print text in bold or italics, or to underline it.

Tab stop: If you're creating tables, or you're in the habit of indenting the first lines of paragraphs, you need to set tab stops. Most programs will let you set several.

Word wrap: Word processors are much smarter than typewriters – they can sense when a word is too long to fit on a line and start a new line automatically. This is 'automatic' word-wrap.

the buyer's guide GAMES

Puzzle Games

Oh no, brainwork time! ADAM PETERS puts on his big pointed thinking hat (with the letter D on it) and tries to work everything out in his head *(there's enough room in there for even Arnie to work out – ed)*...

Puzzle games, hmmm... Where did they come from then? That, dear readers, is a puzzle in itself. One of the first puzzle games to hit the arcades was probably *Cliff Hanger*, a very strange affair reminiscent of the board game *Mousetrap* and the *Road Runner* cartoons. You had to set off an elaborate trap involving pulleys, bouncing balls, trampolines etc, hitting the Fire button at exactly the right moment to splat a cowboy, otherwise you got splatted yourself.

Another of the early puzzlies was *Marble Madness*, which appeared on home machines in various forms (*Gyroscope* and *Spindizzy*, for example), before surfacing as the *Marble Madness Construction Kit*. It's only in recent times that the genre has really taken off, though.

One of the main things to have contributed to this is a little gamelet from Russia by the name of *Tetris*. *Tetris* featured various different shapes (each constructed out of four square blocks) falling from the sky. The idea was to flip these shapes around before they reached ground level, aiming to slot everything in place and get complete horizontal lines of blocks, which then disappeared.

Tetris captured the hearts and minds of a generation (sort of) and it's success was soon capitalised on by any Thomasina, Diane or Harriet who could think of a slight variation of it. Virtually every puzzle game review appearing in *AA* during the past two years, had the line "loosely based on *Tetris*" in the opening paragraph. But maybe that's just us being lazy.

The most popular of the latest generation of puzzlers is the frantic colour-matching game *Klax*. The Codies' *Panic Dizzy – Klax* without the good bits – is amongst the nobbiest of recent puzzlers.

The appeal of puzzle games on home computers continues apace (the bundling of *Tetris* with all Gameboys would seem to confirm this) and we say hurrah to that. Even if mindless blasting is a lot of a fun, a bit of brainwork every now and then can't go amiss. Now let's see, I can put this bit here... oh no, a triangle... er...

best puzzle game

E-Motion
(US GOLD)

Nothing to do with jumpin' and pumpin' house dance styles, *E-Motion* is actually a corkin' puzzle game. You're piloting a little *Asteroids/Thrust* style spaceship, complete with tricky control method, and you've got to do strange things with molecules.

Occasionally there are individual balls (atoms) around, but often it's a whole bunch of balls linked together (molecules) – write this down somewhere, it'll help you with your physics homework.

The aim is to force balls of the same colour to collide, in which case they disappear. If different coloured balls collide, a third ball results. The ensuing chaos is compounded by the fact that if your ship strays off the screen, it reappears on the other side.

Throw in some stretchy rubber-like things (pardon? – *ed*) and a gnarly two-player mode and you have one heck of a tough puzzler. But don't play it for too long, folks, cos too much *E[-Motion]* makes your head throb.

■ **OK, here we go. Just got to bash the like-coloured balls together...**

■ **...Eek, this is a bit trickier than we think. They're bouncing all over the place**

■ **AAArrrggh! There's been a chain-reaction *and* we're run out of time!**

top 10

1) E-MOTION
(US GOLD)
It's a sci-fi puzzler with big balls and a *Thrust* style spaceship in it. **92%** (AA57)

2) KLAX
(DOMARK)

Catch the falling tiles and drop them to form piles of the same colour. Tripsville, Arizona. **89%** (AA58)

3) PIPEMANIA
(EMPIRE)
Plumbers ahoy! Here's 36 Levels of hyper-addictive pipe-placing action. **88%** (AA57)

4) CHIP'S CHALLENGE
(US GOLD)
This game is massive! 144 levels – some very large – of brain-blowing puzzlers. **86%** (AA67)

5) SPINDIZZY
(ELECTRIC DREAMS)
Manoeuvre your ball across a hazard-strewn course, trying not to let it plunge to a lemming-like doom. **96%** (AA6)

6) LOOPZ
(AUDIOGENIC)
Join blocks end to end to form loops. There are three distinct game types. **87%** (AA67)

7) DEFLEKTOR
(VORTEX/GREMLIN)
Using mirrors and prisms, deflect a laser beam from a generator to, er, somewhere else. **90%** (AA30)

8) PUZZNIC
(OCEAN)

Push blocks around the screen, trying to get blocks of a same type alongside each other. **84%** (AA62)

9) WELLTRIS
(INFOGRAMES)
Are we talking complicated or what? *Welltris* is *Tetris* in 3D. Mega yikes! **78%** (AA67)

10) KWIK SNAX
(CODEMASTERS)
An excellent block-pushing maze game. (Also on the *Dizzy's Excellent Adventures* compilation.) **76%** (AA76)

OI! YOU'D BETTER BUY SEGA POWER THIS MONTH...

BRITAIN'S BEST-SELLING SEGA MAGAZINE!

SEGA POWER

NOT AN OFFICIAL SEGA PUBLICATION

£1.95

ISSUE 30 MAY 1992

WIN! Tickets for the British Grand Prix

Plus loads of goodies - get to page 18!

SEGA POWER PRESENT

ROAD RASH™

A novel based on the best selling Sega game

BRILLIANT SEGA BOOK FREE WITH THE MAY ISSUE

DRIVE LIKE A LOONY!

Into overdrive with Ballistic's *TEST DRIVE 2: THE DUEL!*

Also inside this smart issue...

- Over 350 games reviewed and rated!
- Fun with those barmy Manic Street Preachers!
- All-new Sega heroes comic adventure!
- 5 packed pages of tips for *Sonic The Hedgehog* on the Master System!

Future Publishing

...'COS WE KNOW WHERE YOU LIVE!

Next month in AA

Cliff says: "Praise the Lord! Look what those AA people have got lined up for us in June..."

June issue on sale 21st May

Hold the front page!

How to produce your own magazine – we give you the info, the facts and all the tricks of the trade. Plus a look at all those wonderful CPC fanzines out there.

Let's get WACCI!

The popular Amstrad user group comes to town with the start of a regular series of pages of techie talk and info written by members of the BAFTA-winning (*you what? – ed)* WACCI team.

How a game is made part 2

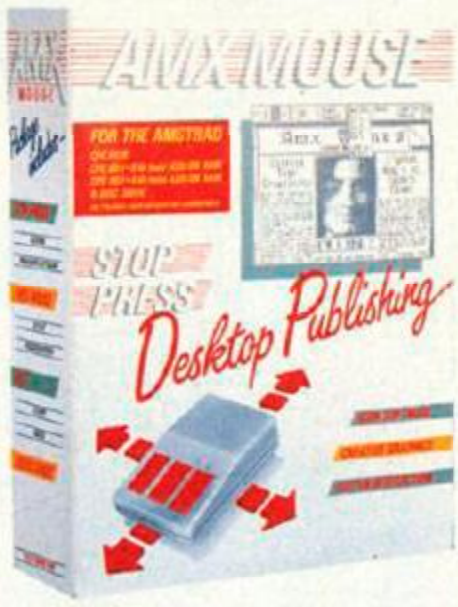
The second instalment of our spotlight on *Seymour in the Wild West*. What's going to be happening? You'll have to wait and see (so will we).

French games round-up

There are some brilliant games coming out across the channel, but very few of them reach these shores. We action test a dozen recent French games, and offer you exclusive mail order deals on some of the best ones.

The complete guide to desktop publishing

We run the *Buyers' Guide* rolling pin across a big pile of DTP packages, from the classic *Stop Press* to the recent spate of PD pretenders, and tell you which ones you should be spending your money on.



Plus MC Hammer, New kids and Danni Minogue (oh sorry, wrong magazine)

don't miss it!

Missing a single issue of **AMSTRAD ACTION** will result in you being hurled swiftly into the depths of hell, where lots of short red dudes will poke fun at you for eternity. Better fill in this form and hand it to your newsagent, eh, just to be on the safe side.

Dear kindly Newsagent person, I don't want to go to hell, so please reserve *Amstrad Action* for me every month, beginning with the June issue, out on Thursday 21st May (allegedly).

My name .....

My address .....

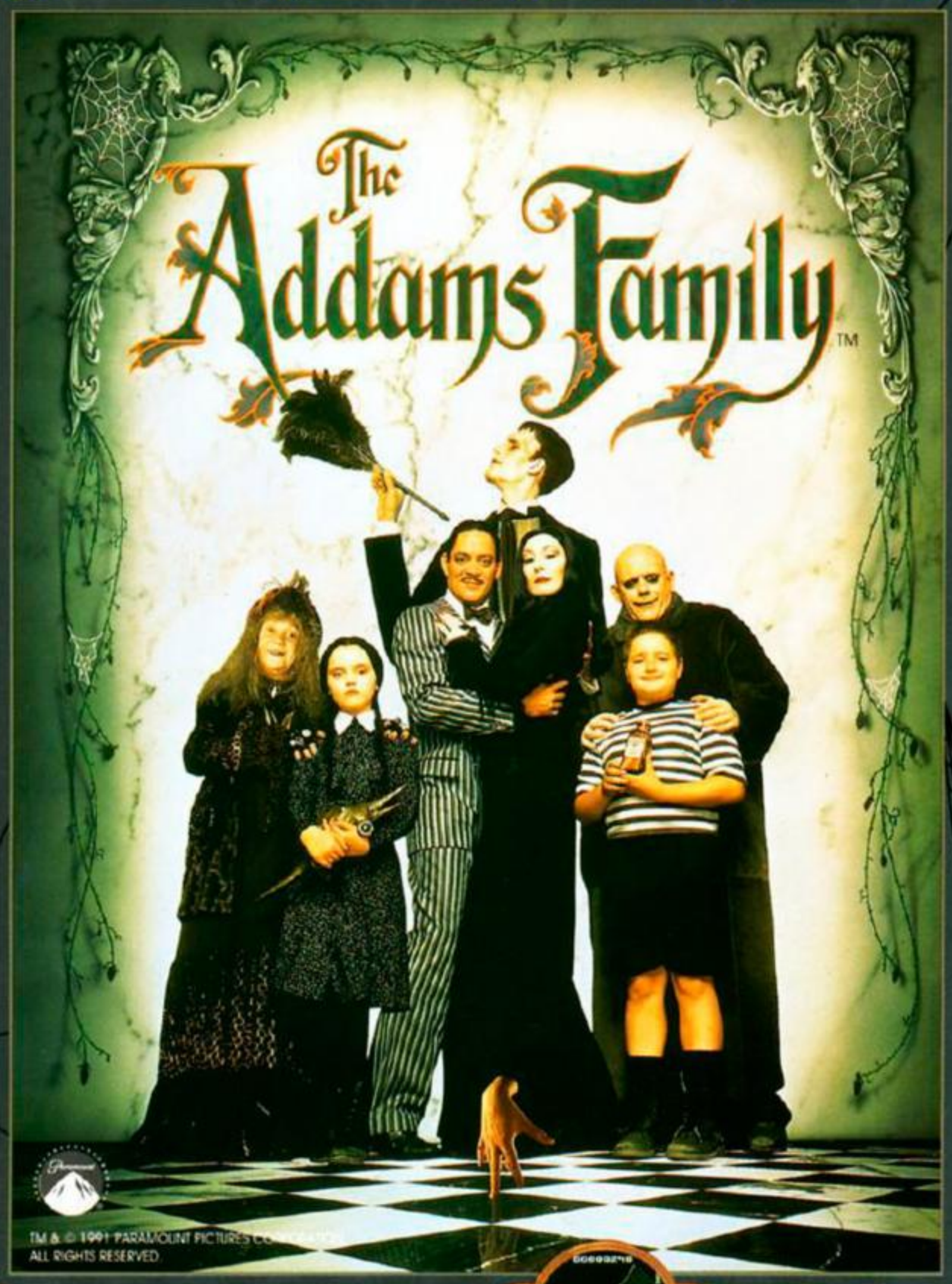
.....

.....

back-page competition

Aw, isn't it sweet (bleurgh)? This, dear readers, is Maryanne's teddy bear. But what's he called? (There, we've given you a clue - it's a 'he'.) Send your guesses to Back Page Compo (AA80), Amstrad Action, Future Publishing, 29 Monmouth Street, Bath, Avon BA1 2DL. The first person to guess right wins £10. If no-one gets it right by May 21st, Maryanne will choose her fave out of the names suggested, and we'll send that person the cash. OK?

CREEPY, KOOKY, OOKY, SPOOKY!



They do what they wanna do...

But not now that they've been evicted! Morticia, Lurch, Granny, Pugsley and Wednesday have gone back to their creepy abode to regain possession.

play how they wanna play...

But watch out for Tully - he plays mean. Tully is the trecherous lawyer intent on stealing the family fortune and who has many a dirty trick up his sleeve.

say what they wanna say...

But not now that they've disappeared! As Gomez you must find your loopy loved ones in their spooky mansion house.

dance how they wanna dance...

And you'll be shakin', rattlin' and rollin' when the spikes, monsters and ghosts save the last one for you! If you solve the puzzles and follow the clues you might just save the Addams Family so that they can...

Live like they wanna live!

ATARI ST . CBM AMIGA
IBM PC & COMPATIBLES
SPECTRUM . AMSTRAD
COMMODORE

ocean®

OCEAN SOFTWARE LIMITED . 6 CENTRAL STREET . MANCHESTER . M2 5NS . TEL: 061 832 6633 . FAX: 061 834 0650

wellard'n
wild!
monty python
golden axe
italia '90
super off road
100% PURE ENTERTAINMENT
Virgin GAMES
now unleashed by
TRONiX
all on
amiga (£9.99)
atari st (£9.99)
PC (£9.99)
commy cass (£3.99)
speccy cass (£3.99)
ammy cass (£3.99)
well?
how do
they do it?