


## Serious

## 8 <br> Bigger 8 Better

Phil Craven begins a new series on addons. Get the most out of your machine, without spending loads of money.


Technical Forum
Richard Fairhurst answers sackloads of your technical problems, including a whole bundle of Mulitface problems.

## 52 Public Image

Tim Blackbond sorts through the latest PD releases. If it's any good, you can be sure he'll tell you!

## 5: Type-ins

Jerry Glenwright checks out more of your handywork, and carries on with the BASIC tutorial.

## cames

## 12) Poking fun

Phil Howard provides us with probably the largest number of multiface POREs this side of, well, anywhere really! You need never despair again.

## Balrog

Leaving all those smelly orcs behind for the day, The Balrog takes his monthly pilgrimage to Bath for the chance to swap tales of distant lands.


Postman Pat, a cat and a hat on page 48.


Main feature


## Nigel Mansell's World Championship

Have you got what it takes to be the best? If so, then this is the game for you. It's one of the best we've seen.

## 31 Shervood Forest?

Win a weekend in Nottingham for a family of four, visit the castle, the Tales of Robin Hood, Sherwood Forest and meet the Sheriff (if he's in town).


Ves! It's your chance to find out just what it is that makes the AA team tick. Plus! Take in all this issue's games at a single glance. Marvellous!

## Kids Pack 2

It's finally here. More horrific violence coming your way... No sorry, wrong game. This one's cute ' $\mathbf{n}$ ' cartoony!

## The Popeye Collection

Time to crack open the spinach! it's all three Popeye games in one compact box.


Act like Arnie! Terminator $\mathbf{2}$ is on page 56.


Tread in Robin's footsteps! Turn to page 31.


## Postman Pat Hit Collection

He's back. He's mean. He's got three games to his name, and Atternative have just released them on a compilation!

## Classic Arcadia

There were only meant to be three, but Alternative have gone wild and given us six remastered classics!

## 51 <br> Cheat Mode

Phil Howard jumps on a few pages to regale us with yet more cheats. This month, he shows you how to beat all those Quattro compilations and a smattering of Dizzy games too.

## E5 <br> Air Attack

Put your head in the clouds and test your flying skills at 50,000 feet! You'll find a lifejacket under your seat and a sickbag to your right. Thank you!


## Action Replay

There's only two entries in this month's Action Replay. We've got Terminator 2 and RBI2, and they've both got a whole page to themselves.

## Regulars

## (4) The Tape Pages

You'll definitely need those instructions this month. LARA certainly takes a fair old bit of explaining.

## (7) Amscene

News from the Amstrad front. Some serious bargains in the way of hardware, software, and slightly-squidgy-ware!

More of your views, questions and wondrous warblings.

## $2:$ subs

Save time, effort, money, shoe leather, frustration, space, the oxone,
"filename,ext", water, the whale and the dolphin... with a subscription!

## (30) Back Issues

So you missed the eightieth issue of AA, did you? Well, wipe those tears away, turn to this page and cheer up!

## 42 Small Ads

Are you missing a vital piece of hardware? Got something to sell? Want to swap some software? Got something to tell? Reach 35,000 readers in one go. It's as easy as one, two. three!

## 58 <br> Next Month

Let us wet your appetite! Isn't it nice to know that the next issue of AA is going to be just as good as this one? Read the last page and smile!


A slight change of pace this month, as we settle clownm to the more relaced, intellectanal feel of a game of smoolker and a very serious machine code utility. Why don't you just go and get your slippers?


Vou'we shot the bad garys, sawnesl the plaaset, wow the race annel flownm the Isellicopter. Move it's time to play a milce melaximg game of smoolcer. Failimg that, hit tem as hard as you can!


## LARAA

Bowed wulth BEASIC? Mot msuch good at cobrol? it could be tirne for manchine code, ancl tiane to choerclc out LARA: Even If you havee coding, talke a looic anyyuay. Mot only is it freee, lit's anlso amsaxivagly good. Eveen if you dow't flowow wulhat's soling on, you can skill sit ansel gavee in avve. Alternatively, yow could actually use it?


(2)

## Type-lins

Sonve moore of the hottest reader progirams to ever reach AA Towwers, and you dom't even have to type them int For the innherently laxy amsong yous, wre've pert thems on the tappe. There's a beiglse predicter (incredilibly stramgo, lout nemavilcaloly trene!) a flagss sutility, anel focals move fear you tes loole at amel learn fromn.


园

## 

For as mutalile this monely inre theoughe vore'cl have encusgh room for the poicils om the cowertape - thant's vulry we unrote all abbost theevn on the tappe Inflay. Unfortwnataly. Seeve Devís Snoolker and LAREA wwere lsoth sso boly the t ttiere was so tape spasce left For our poor forlarn Hitie powets. Aasahis! Dow't wnowry. they'll bee bacic mext monels. tn the meeawtime, sit basclc in anel enjery thils Issute of A.A.

## （4） covertape

Suede ロコルゴ reck s．acerer

## Complete Game CDS Software

Hareat AA Towers，welve had enough of guns for a while．It＇s time to be nice to animals，bad guys，and airens．We want io piay someling a iftie more passive，something which calls for a quiet kind of skith，for a careful aim and gentle endurance．Something，in fact，like Steve Davis Snooker．

Snooker doesn＇t excite evergbody，but we think well make lots of converts out of you lot with the help of this game．But before you go and play it．were going to have to quickly show you how its done．

Use the keyboard keys Q，A，O，P and ENTER （or a joystick）for moving your target around the table，and press fire．Then use left and right to set the power of the shot．and press fre again． Next，move the arrow bround the white ball at the bottom of the screen lo select spin．After that，


Spin the ball by using a combination of keys，and ge for the red．

It＇s time to put away those guns，space helmets and other worldly toys．Istead，settle down at your monitor with a nice cup of orangina and enjoy a game of snooker．


And you＇re off：Take your time and loolt at all the angles．
press fire，and watch all the balls whizz aroundl．
When you pocket a red（stop，thiell．，you can select a colour by pressing the corresponding number key on the keyboard．The numbers are easy－They start at two，and run in order of points（yellow，green，brown，blue，pink，and black）．Oh yeah，at the start of the game，you have to position the cue ball somewhere in the D the semicicte at one end of the table）by using normal directions and fre／enter

If you are so abysmal at aiming a white ball that you foul you will be asked Play Again？This is simply f you want the player who cominited the foul to play the next shot or not．It＇s not at all complicated：
As for the more advanced rules of snooker． you could go out and find a book or something

## SNOOKER DOS AND DON＇TS

You don＇t want to offend any snooker players by not adhering to all those special little points that they care so much about．Not only would you seem like an outsider，but it＇s not polite． －Unlike real snooker，you are allowed to eat and drink whilst playing Steve Davis Snooker． －No spitting．


Oooh，you＇re so close．Just nudge it and you could have your ball！
－Using the thin end of the stick，hit the white ball with the stick，and hope it hits the red ones．
－If the red balls fall into one of the holes at the side of the table，you have to cheer．
－Follow this move by hitting one of the lovely coloured ones into a hole as well．
－If you manage to hit the white ball into a red one and nothing goes into a hole，it＇s the other player＇s turn．
－If you lose the black ball in a hole before one of the reds，or any ball hits the pint mug on the table，you＇re out．
－Don＇t eat the blue chalk．
－Don＇t distract other players by blowing in their ears．
－Don＇t wear tight，shiny brown trousers． －Don＇t even think about cracking one of the thousands of possible smutty jokes to be made about snooker．（And that also includes you， Simon．Ed）

## Snooker－is it a game of carefully－taken angles and razor－sharp wits，or is it just two blokes hitting little balls with big sticks？

Well，Steve Davis thinks it＇s the former and Mrs Gladys Frunge from Kidderminster said she would stand up，in public，in support of the latter view．

but you probably won＇t need it．If you don＇t manage to pick up the general idea of this game then you＇re obvously a babe in arms and shouldn＇t be touching anything electrical．If＇s kinda surprising that we should have to go through the rules，but there may have been sone utite bit you werent clear on，so its better to sort everything oui

## CONTROLS

Joystick or the keys Q，A，O， $P$ and ENTER


And when you＇ve perfected the moves， why not start another game？

## лype-inas

For all those of you who are too worried about their fingernails to tap in long lists of numbers, here are the pick of the recent crop of fruity AA TypeOins.

## Flaces <br> Ross Rilley

Wow It's a flagt And another Theres Germany! Americal Fabl Groovesome etc. Sit back and watch this nice nttie display of the major fiags of the world.
Okay so youre probably wondering what use this program could possibly have. Well, have you ever considered the fact that there are some people ont there wiog get loads of enoyment out of looking at flags? Well, there are: So spare thema thought

## Height <br> James Rross

Have you ever noticed ust how easy it is to insult short people? (Watch it you're on very dodgy ground. Ed) Some people on the AA team are a
 Heres a ince progiam with which you can tell stumpy people that they arent going to get any nearer the clouds. Just enter your height in cenimetres, or milimetres if it's easier, your age and this program tetts you what helght youl eventually reach

## Number Scoffer

 Dean Jacksonits time to bip round a screen scoffing numbers, and avoiding the nasties! What funt it's also very, shall we say, uncomplicated. Use the joystick. (1s thar ail there is lo say? Ed) Erm, yesin it's easy and Its tun. Bascealy: There must be more than that? Let me have a go.. I see what you mean. It certainy is good fon, and it's ever so easy to pick up. But what you didn't mention is the fact that ifs a bit on the addictive side. And that's quite an mportant point $E$ al

## Surap

## Paul THiner

Have you ever played one of those pumze games Where you have to slide ail the bits around? (I) love those, theyre my fave. Is this game like that? Can I Thave a go? Ed Yes, this game's ust the one of those and it's tab. The point of the game is to finsh with an exact mirror mage of the starting position of the grid. Smply move the bits using the cursor keys, and press copy when you want to swap a piece. Actually, it's a similar concept to the puzzeley bits in Terminator 2, Okay, you can have a go now, Ed.


Look at thatt Isn't It lovely? A real work of art, that is!


Did you know that most males groew up to be taller than their mothers?


I'm a little number, short and stout, I haven't done any harm. Don't eat me!


Gorh, it eren fells you what to do. How aurfully considerate!

## How to load your covertape

Just pop the tape into your machine, making sure it's rewound to the start of Side 1, and then press CTRL + ENTER (or type RUN"'), then press any key and the tape will start loading.

Within a few moments you get a menu screen. Choose the program you want using the Spacebar, then hit the Return key.

- Note that none of the programs need be loaded directly from the main menu. They can all be run from BASIC. The menu lists them, but you must quit back to BASIC to run them. (Use the RUN"(filename)" command.)
- If you have a disk drive either built into your machine or plugged in, you will first have to type Itape to switch the computer to tape loading. You get the I character by pressing SHIFT+Q. Then just proceed as normal.


## Dunffif tappe?

We go to great lengths to make sure that our covertapes work properly. However, if you still have difficulty, try this:

- Loading at several different volume levels (if you're using an external tape recorder) e Cleaning the tape heads. This can be done with any commercially available cleaning kit o Adjusting 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. Turn it a fraction at a time with a jeweller's screwdriver. When the crispest sound is heard, the alignmnent is spot on. - Tapping the cassette gently against a table edge - the spools may be sticking or jammed.

If you still can't get the tape to load then send the tape, along with a brief description of the problem and a sae to:
A.A90 Cowertape Returns,

Ablex Aurlio Video Ltel,
Haurcourt, Mallesforel 14,
Telforel, Shropshire
TFY 4 QD

## Want a clislk

 version?The covertape contains its own tape-disk copying program. To transfer the programs to tape, simply follow the instructions on the tape.
e 464 owners with external 3 -inch drives will have no problems, but 6128 owners will need a cassette player with a REM socket. Stopping and starting the tape manually is difficult.
e 6128 Plus owners who've had their machines modified to load from tape can transter the programs to disk, but must rewind to the start of the tape again before the transfor starts.

You can also order a disk version of the covertape from our duplicators, Ablex. Snip off the coupon on the corner of this page and send it with a cheque/PO for $£ 2.00$ to:
A.A90 Disk Offer, Ablex

Ausilo Vileo, Harcourt,
Hallesford 14, Telford,
Shoropsthire
TFF 4QD

If somebody walked up to you in the street, and whispered in your ear, "Ere, squire, fancy a topquality machine code utility for only 25?" you'd probably be quite templed. But buy it, and yourd have wasted your money, because this montit's covertape contains just such a utility and it's completely free.
We couldnt put the instructions for LARA on the tope, bevause they're 45 K long. There also written in German. This is a pity, because it can be tricky to use. However, this short tutorial should get you acquanted with what is possibly the best 280 montior avalibble for the CPC

LARA positions itself in extra memory if you have a 128 K computer, so as not to corrupt the main program. You can toad LARA, ext (press E followed by ENTER), load the program you want to have a look at, and then reenter LARA (with SHIIT and function key 9). 64 K users are restricted to the memory below 84000 , which is okay for programs of less than 16 k .
LARA commands mosty consist of a single letter, sometimes followed by one or more parameters. The first command you should know is H (or ?) which brings up a help-screen of al the avallable commands. When it pauses, press any key to progress to the second screen.
Let's have a look at a few of these commands. To dump memory to the screen, type $D$ followed immediately by the address from where you want to start lfor example, DBEOO to start from $88 B 00$ ). After a while, the memory dump will stop: Just press D and ENTER to carry on from where you left off. You can also disassemble coder instead of typing D. use L instead.
This is all well and good, but it's possible that


## LARA is a toolbox utility for machine coders and it's a teensy bit on the clever side. No hang on, it's more than that - it is in fact remarkably clever!

you don't have anything in memory to look at right now. No problem: load in a file using the $R$ command. If you want to load it to a specific address, add a comma followed by the address (in hex) at the end of this. CP/M. COM files can be read by using the CR command.
You can also use LARA to look kat ROM : To do this, type $K$ followed by the ROM number for example, K 07 will select the disk ROM), and then disassemble or dump as usual - remember that ROMS sit between \&COOO and \&FFFF: KFF returns to RAM.

To alter the contents of memory, use the S command followed by an address ( S 4000 alters 84000 onvards). The address will be shown. foilowed by its present contents, and a cursor for you to type in a rew value - or simply press ENIER to move to the next one. ESC quits this mode. To make it easy to enter text into memory, the P command is availatie, which is followed by the relevant address and text le.: P170,Another great program with AAJ

Perhaps you need to search for some bytes. LARA's Q command comes in here: for example, to search between 24000 and 27 FFF for the sequence \&CD, \&18,\&BB, type Q4000,7FFF,CD, 18, BB . You can also look for

```
LaRA by Jürgen Heber
-2
3<byse)
<<arive? (art> ena)
```



```
<<tart(ty, brkt?(,brka)
fint1,int?
Fintl,in
fidez
<<confbyte>
i<start%<,end}
c<{10%,<start 
```

ScRemy

GRITE COHFILE
CMI WMORY


Ho coDE
Cohpute


The question mark at the command line gives you a list of all the commands available.
And what a truly huge amount of commands there are. This is just the first section of the list.
$\qquad$
strings: if you wanted to search the whole of memory for the string thazelnuts", you would type QT0000.FFFF hazehuts - Easy'
At some time youll probably want to execute a machine code routine in memory to do this, type $G$ followed by the address. Two breakpoints ii.e. places where the computer pauses and reports what's going on) can be set, the address of Which siould be added to the G command with a preceding comma ffor example, G3000,3012 would execute code from 83000 , and stop when $\$ 3012$ is reached).
If youre not exactly sure what effect the routine will have on memory, 128K owners can use the commands YG and YP: YP puts the contents of memory into your extra memory (as a backup), and YG gets it back again. 64 K owners, obviously, can't use this facility. You can move small areas of memory to a safe place somewhere else using the M command M2800.29Ff, 8000 coples the bytes between 22800 and $229 F F$ to $\$ 8000$ ).
We could go on for hours, but now that you know the basics, you can just as easily find out by experimentation (Besides, there's no space left.) The program is great for debugsing code and examining other peoples: 128 K owners should even be able to use it in conjunction with the Multiface's (Iump "function to hack into games. Now no program is safe (evil cacke).

## Coming Soon:

## Don't forget that mext month AA will

unclergo a vaclicat change. Not, we hasten to add, the the content of the magazine, but the covertape will be one of the best we've eur given you. Amstrad Action, In confunction with Tasman Software, brings you the truly exceltent and renowned word processing package Tasword 464.
As usual, the tape will also contain a superior complete game. To fit all this on to the tape, we've had to ralse the cover price slighely - the new AA will cost £2.95. But you are getting a full word processor (that will
work on disle machines as wrell) for a mere $45_{p}$ :

All this, plus the usuat blend of news, reviews, serious software,
programming, and AA fun! Please kurn to page 21 for an explanation from
Amstrad Action's
publisher.


## Annstrad newus, vieuvs and goodies!

This month we've found loads of bargains for you and a fair bit of news. If you've got any info that you think should be passed on to other Amstrad owners, then write to Amscene, Amstrad Action, Beauford Court, 30 Monmouth Street, Bath, Avon BA1 2BW.

## Fly Fishing...

We don't quite know whether anyone's noticed this before, or whether it was some kind of naff joke (and we'd know all about them) on the part of the author, but if you look at last month's review of Vigilante, you can't but help notice that the author of the game is one Mr J R Hartley.

## Cheap ROMs

Too cheap to buy a full ROM box? Dartsma PD is knocking out Arnor's AD1 boxes (only one socket folks) with Maxam or maybe Protext stuffed in. They cost around $£ 10$, but stocks are limited (he's go about twenty left). As usual, you can find Dartsma on 0813171170.

## WAVE Update

Long standing hardware suppliers WAVE have announced some new products soon coming to the CPC. Amongst these will be a range of leads to connect your oid CPC monitors to completely different computers - solving a lot of reader's queries! They can supply leads to connect both old monitors (CTM 640/644) and new monitors (CM14) to Amigas (£14.99), STs (£15.99), MegaDrives ( $£ 12.99$ ), and Spectrum +2 s and $+3 \mathrm{~s}(£ 12.99)$. Unfortunately, the old monitors don't have speakers, so you'll need an extra pair, or headphones.

On top of this, they're reproducing the MP3 which allows you to use your old monitor as a colour TV (if you've got a colour monitor) for $£ 34.99$, plus $£ 5.88$ handling fee.
You can contact WAVE on 022987000.

## HackIt's Back!

Just when you thought it was safe to turn your CPC back on, Siren Software release their new Hackit black box (well it's white, actually). The new model is said to be even better as it's stuffed with an assembler as well as all the usual stuff. We'll have more for you at a later date.

## CampurSoft Goes Ape!

Campursoft' have got wads of new stuff coming out, including a scanner, a genlock llimited version), a memory expansion, and a stunning hard disk drive (possibly with an autoboot feature) with software written by our very own ChaRieyTronic!

## The Aussie's Need Help!

No, that's not cultural prejudice, it's a fact. They've got no CPC support down there! A certain Peter Campbell is a tad concerned at this, and has supplied two contacts for them.
The first is Q3Soft, based in Tasmania on 002 535318 , and the second is the PCW Australia User Group who support CPCs as well, on 027 571105 . Give them a call today!

## Dartsma Moves House

Dartsma PD has now changed address, and can now be found residing at 5 c Robert Street, Plumstead, London, SE18 7NE.


That's Tanya on the left and John Barnes is the one with the silly grin. No, hang on...

## A Final Photocall

I know our "GetA-Photo-Of-Yourself-With-A-Star-And-A.Copy-OfAmstrad-Action" competition finished a while ago now, but we just had to print this one of Tanya Winston and her brother, Ben, next to Liverpool's John Barnes. And was she thrilled? "Not really, I actually support Arsenal."

## Creative Dealings

Creative are offering the 464 Plus with a mono monitor for just $£ 115$. They've also got a few modulators for the knockdown price of $£ 19$. Hurry while stocks last Call 0353663030 now!

## Computer Shopping Spectacular

If you're anywhere in the Telford area on March the sixth and seventh, then pop into the Telford Exhibition Centre. Why? Well, it's hosting a massive computer fair and we've heard that there are going to be lots of bargains, competitions and a local radio roadshow. Coo!

## The Mammoth AA Compo Results Bit



The scenario: Wading into the office through thousands of Dizzy pictures to find the $A A$ editor curled up in the foetal position under a desk. "I've done itt Ive finished judging the Dizzy competitionl" Oh dear. Seems the strain was too much for Rod. That's the real reason he left, you see. He simply couldn't handle all the hideous egg gags.
Whilst being strapped up and carried off, he gave the name of the competition winner in a demented scream, "Graham Pilling of Huddersfield for his Duffy": Now... Because we're all sadists here at AA, we're going to torment a few of those who didn't win, but came damned close. Theyre Aidan McKenna, Malcolm Cleland and Tom Ash, but they don't get a single egg gimick

Rod, however, totally neglected to judge the Alternative compo that night, so we did it for him. The winner here is David Southgate of Staffordshire, so he can expect a bag of games pretty soon!


#### Abstract

Of all the great add-ons for the 464 Plus the most popular are the 64K RAM pack and the disk drive. They're also the most expensive... or are they? In the first part of a new series, PHIL CRAVEN tells you how to cut the cost of add-ons.


A RAM pack costs between forty and fifty pounds, and a disk drive about $£ 160$. There's no doubting their usefuiness but there's no doubting their cost either.

So what if I were to tell you that you could have the extra 64 K for only a tenner? You like that? And how about knocking, say, fifty to sixty quid off the cost of a drive? You like that too? Aaw, shucks. Sad to say, it can't be done. Im sorry to be the one to tell you but, although we can get you the drive
for a tweak over $£ 100$, the best we can manage the extra 64 K for is $£ 10.72$, including VAT and postage, which is a massive 72 p up on what I led you to think. You still want it? Oh, all right. If you've got money to burn, read on.

Until you actually buy one, you wouldn't know that the existing 64 K RAM pack was designed to perch neatly on the back of the older 464 and, although it works fine on the 464 Plus, it doesn't exactly perch neatly anywhere. In fact it fits rather like a square peg in a fits rather like a square peg in a
round hole, and I don't just mean that they have different connectors. The RAM pack is too tall for the 464 Plus. The answer to this is to either raise the computer on a board or use an extension cable and let the RAM pack sort of flop all over the desk. The best solution is not to use the RAM pack at all but to put the extra 64 K inside the computer where it couldn't be neater. Using a soldering iron, a solder sucker and this article you can upgrade your 464 Plus to 128 K , the same as the 6128

Plus, and, because the parts cost a mere
$£ 10.72$, you can save yourself at least $£ 30$ in the process!
It isn't widely known, but the main circuit boards of the 464 Plus and the 6128 Plus are identical, having identical circuit tracks and identical holes for the various components. The difference between the two models is that the 6128 Plus has the disk interface and extra 64 K components fitted where the 464 Plus has holes and the 464 Plus has tape components fitted where the 6128 Plus has holes. So it doesn't take an Einstein to wonder if putting the extra 64 k components into the correct holes in the 464 Plus' circuit board would produce a 128 K computer - and it does! The same applies with the disk interface components (464 Plus) and the tape interface components ( 6128 Plus). But first - the extra 64 K .

Assembling the upgrade kit is simple. There are ten components to buy and fit (see the parts list) but, before you rush to get them, take a little time to examine the task ahead and make sure that you are confident enough to perform it or that you know a man who is.
With all power turned off, remove all peripherals including the cartridge and tape from the computer and disconnect it from the monitor. Turn the computer upside down and remove all the screws from the underside. While you've got the underside up, notice the three catches - one in the centre of the front and one on each side. Turn the keyboard the right way up again and, with your fingers, undo the three catches. The front one pulls towards you and the side ones pull outwards. That done, press EJECT on the tape player to raise its lid and lift the top of the casing away from the keyboard. It will fold back but it is still connected to the circuit board by several wires so don't yank at it.
Whilst you're doing the job, the circuit board will be completely removed from the computer but, at this point, leave it where it is and leave


Fig. 1464 Plus main circuit board showing the positions of the 64 k upgrade components
the top connected to it. Don't touch anything on the circuit board but compare it with Fig. 1 and Fig. 2 and take a little time to consider how the 64 K upgrade will be done. Fig. 1 shows where the components are fitted to the circuit board, Fig. 2 shows the detail of fitting the electrolytic capacitor and wire link and the parts list indicates each component that you will have to fit. Use the diagrams to identify the location where each component fits. You will notice that the holes for the components have been filled with solder during the manufacturing process and it needs to be removed before fitting the components. For that, you'll need a solder sucker. Tandy sell a cheap bulb-type one that looks like abit like a small vinegar bottle and Maplin sell a better one called a Desolder Tool - its order code is FR26D and it costs $£ 3.95$.

If it looks easy enough to you then go ahead and buy the parts. If not, then close up the computer in the reverse order to opening it and consider the service offered by Avatar.

## DOING IT

Open the computer as described earlier. Now, before going any further, hold your cold water tap for a second to discharge any static electricity from your body. That done that, touch the circuit board and chips as little as possible. Zapping a chip with the body's static electricity is rare these days but it's always better to err on the side of caution.

Remove the case top from the circuit board by disconnecting the wires that join them. Notice that the the two pairs of wires have colour-coded sockets - the blue socket goes on to the blue plug and the black one on to the black plug. Those plugs and sockets clip together and a small screwdriver is needed to prise their vertical tongues slightly open. Remove the tape deck connector by pulling it upwards. Remove the
keyboard by pulling the two film connectors from their sockets and take out the three screws that hold the circuit board to the case bottom (see Fig.1). The circuit board can now be lifted out but handle it by its edges. The component's pins on the underside of the board are sharp and will scratch a polished surface. You have been warned, you've no excuse.

Suck the solder from the holes that are needed for the ten components. You'll probably find it easier to suck from the underside of the board. Don't worry about the weight of the board bending the copper leaf springs. They will bend back again later. With the solder sucker poised very near a hole melt the solder inside the hole with your soldering iron, quickly move the sucker nozzle onto the hole and suck. Some of the holes will only be partly filled and sucking is more successful when a hole is full so, if at first you don't succeed, fill it up with solder and try again. It's easy when you get the hang of it. When all the holes have been cleared look closely at them, preferably with a magnifying glass, and get rid of any solder bits. Now you're almost finished!

There is no particular order in which the components should be fitted but, to help you get used to it, you might like to do resistors R28 and R55 first. The only fiddly bits are the wire link and the electrolytic capacitor, C99, which are best fitted before the IC sockets. Otherwise the sockets can get in the way.

## FIITING EACH COMPONENT

Resistors R28 and R55 To make buying the parts easier, I have specified them all from a single source, Maplin. But Maplin don't stock the precise resistors that Amstrad used in the 6128 Plus machines ( $1 / 6$ th watt, 4.1 mm long). To avoid any possibility of overheating the resistors, the ones specified are 6.8 mm long and are bigger than those already in the circuit board.

This is not a problem. Bend the wires to fit the holes and solder into place.

They are coded by coloured bands as shown in the parts list followed by a brown and a red band. Be sure to put the correct resistor into the correct place. It doesn't matter which way round they are fitted. Push the wires of one resistor through its holes so that the resistor's body is quite close to the circuit board and bend the wires outwards on the underside of the board. That prevents the resistor from slipping out when you turn the board over to solder it into place. Turn the board over and solder the wires into place. Trim off the excess wire. Now do the same with the other resistor.

Capacitors C12 and C13 These are brown discs. Like the resistors, they can be fitted any way round - either wire in either hole.

Electrolytic capacitor C99 There are no holes for this one and when you've fitted it, you'll think it looks a bit odd but, surprisingly, this is exactly how it is done in the 6128 Plus.

C99 is a small metal can with two wires at one end and a dark stripe down one side, next to one of the wires. The stripe indicates that that wire is negative. It is important to connect this capacitor the correct way round. Fig. 2 shows it as a circle with a positive $\operatorname{sign}(+)$ at one side and a negative $\operatorname{sign}(f)$ at the other. The negative sign indicates the dark stripe side. Melt a small blob of solder onto pin 18 of the existing memory chip, IC11, and solder C99's positive wire (not the dark stripe side) to that pin. Solder the negative wire to the side of the existing resistor, R88, as shown in Fig.2. You'll need to bend the wires to fit and the result will leave the capacitor sticking up but it can be bent over a bit before you close up the computer.

When soldering to an IC pin, as in this case,


| PARTS LIST |  |  | MAPLINS PART No. | $\cos t$each |
| :---: | :---: | :---: | :---: | :---: |
| QTY | DESCRIPTION | PART |  |  |
| 2 | 41464 or equivalent | IC12, IC13 | UH938 | 4.45 |
| 1 | 10K (brown black orange) |  | M10K | 0.03 |
| 1 | 33R (orange orange black) | R55 | M33R | 0.03 |
| 2 | 0.14 F 12v ceramle | C12, C 13 | YR758 | 0.12 |
| 1 | 47 uF 16 v electrolytic | C99 | YY37s | 0.12 |
| 2 | $2 \times 18$ pin ic sockets | IC12, IC13 | HQ 76 H | 0.10 |
| 2 | short plece of wire | wire link | Hors | - |
| MAPLIN ELECTRONICS, |  |  | total par |  |
|  |  |  | handiling | 1.20 |
|  |  |  | TOTAL | 510.72 |

## Telephone orders: 0702554161

Mapilins make one $\$ 1.20$ handiling charge so, it you also need the soider sucker (desolder tool), add it to your order but don't add any extra handling charge.

Fig. 2 Detail of C99 and the wire link connections
you have about six seconds with the iron on the pin before the heat starts to become dangerous for the chip. Six seconds is a very long time in soldering terms but, even so, it is best to do it as stated by melting a blob of solder onto the pin first. That way the capacitor's wire will solder to the IC's pin in a fraction of a second.

Wire link Again, this is exactly how it is done in the 6128 Plus. Any short piece of wire will do. Strip about $1 / 8^{\prime}$ of insulation from each end of the wire and tin the exposed metal conductors. Tinning is covering the conductor with solder and it is done by holding the soldering iron onto the conductor and allowing solder to melt over it.

Melt a blob of solder onto pin 1 of the existing memory chip, IC11, and solder one end of the wire onto it. Solder the other end of the wire to the hole as shown in Fig. 2. It isn't necessary to clear that hole of solder as melting it will allow the wire to push through.

Sockets for IC12 and IC13 These aren't really necessary but many people are afraid to solder the pins of chips. The sockets avoid that and they are cheap enough.

Look at the existing IC10 and IC11 and notice that they each have a notch at the end nearest to the back of the computer. The notches are to indicate which end is which. Most sockets have notches too. If yours do, then place them into the
circuit board with their notches towards the back - exactly like ICs 10 and 11. Do the sockets one at a time and solder every pin into place.

Memory chips, IC12 and IC13 These simply plug into the sockets. They are both the same so each can go in either socket but they must have their notches towards the back of the computer.

Most new chips are supplied with 'splayed' pins which must be bent inwards. It's quick and easy to hold a chip at each end with one row of pins on a hard surface and push down so that the whole row of pins bends inwards. You want each row to be more or less at right angles to the chip's body. Push each chip into one of the sockets making sure that all the pins go in and none become bent.

## CLOSING UP

The upgrade is now finished and the extra memory can be used but, before closing up the computer, check that you have C99 the right way round and that the memory chips have their notches at the back. Now you can close it up, remembering to screw the circuit board to the case bottom and reconnect the keyboard's two film connectors, the tape connector and the blue and black wire pairs. The copper leaf springs should rest on the underside of the keyboard. If they have been bent down and can't touch the keyboard, bend them up again so that they do.


## USING THE EXTRA 64K

With the computer put back together and connected to the monitor you can turn it on et voila! Nothing! Nowt! Zilch! There'll be nothing different on your screen and nothing to indicate that the extra memory is there at all. It's a common mistake to think that some software is needed for the extra 64 K to be used. The DKTronics RAM pack is supplied with software which people imagine is necessary, but it isn't. What it does is test the extra memory and provide some RSX's so that it can be used from within Basic programs. But the main use of the extra 64 K is with commercial programs that are written to use it and those programs will find it straight away. You don't have to do anything. You don't have to tell the computer that it's there and you don't have to tell a program that it's there. Programs that want it will find it. CPM + is one such program.
Using the extra memory in your own BASIC and machine code programs needs some knowledge of the CPC's memory organisation facilities which, unfortunately, is beyond the scope of this article.

## FINALLY

DIY projects that tell you how to alter the insides of your computer are unusual and we don't want to leave you in the lurch so we have taken the unusual step of providing technical help for this project on a special phoneline - the number is 0274602180 . It must be said. If these instructions are followed accurately, and the parts are good, the upgrade will work. But we cannot control what a person does inside his/her computer and neither Amstrad Action nor Future Publishing, nor the author of this article can accept any responsibility or liability for any damage to parts or equipment that might occur by doing this project. I can say is that many others have already done the project as sold in kit form by Avatar.

Hopefully, you've read this far before closing your computer so wet your appetite a bit by spotting another group of unused holes on the circuit board, including a set behind the tape deck that is obviously for a connector. A disk drive connector? You'll just have to wait and see, won't you? Seeya next month.

## 3.5" Neya Drive 679.95

(Including FREE MS800)

* 800 K per Disk
* Side Switch
* Multi Compatible
* Dual Mode
* Compact Size
* TEAC Mechanisms
* External PSU
* Free Delivery

|  |
| :---: |
|  |  |
|  |  |
|  |  |


| $\begin{gathered} \text { DKtronics } \\ \mathbf{£ 3 9 . 9 5} \end{gathered}$ |
| :---: |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |

## 2 in 1 Write or Phone File Transfer CPC - PC <br> £24.95 <br> 

$40 \times 3.5^{\prime \prime}$ Disks
229.95
and Disk Box

BRAND NEW
CPC6128
£299.95
$3.5^{\circ}$ Disks (10)
$3^{\text {" }}$ Disks (Amsoft)(10) $£ 19.95$
$3^{\prime \prime}$ Plastic Cases (10) $\quad \$ 5.95$ Disk Box (Holds 40) $\$ 7.95$
Head Cleaner

6128 ROM
624.95

Includes Full Fitting
Instructions

Exchange your
464 for 6128 from
only
$\& 129.95$

191 Watling Street Road, Fulwood, Preston PR2 4AE
For Or72703131

DISK DRIVES
First disk drives for the 464/464+. Only $£ 159.99$. Includes DD-1 interface, $3.5^{\prime \prime}$ disk drive, all connecting leads, formatting/copying software, instructions and 12 months guarantee.

## FREE MULTIFACE II (RRP $£ 35$ ) for copying cassettes onto disk with every first disk drive order for the 464/464+

Second $3.5^{\prime \prime}$ disk drives. Slimline Panasonic drive mechanism. Comes complete with RAMDOS to allow you to format to 800 K WITHOUT the need for any side select switches. Full 16 page manual, connecting cables etc. Only $£ 74.99$ or with ROMDOS XL cartridge $£ 99.99$ ! Amazing value!

## FREEE 10 BLANK DISKS WITH EVERY SECOND DRIVE!!

RS232 Serial Interface $£ 59.99$ (Includes full soffware)
Mouse and Interface $£ 39.99$. Single socket Rombox $£ 14.99$
Please add $£ 5.00$ postage and packing for disk drives. All major credit cards accepted. Immediate despatch for credit card orders. Siren Software, Wilton House, Bury Rd, Radcliffe, Manchester M26 9UR Tel 0617247572 Fax 0617244893

## exatifere.

## ACTION!

Once in action, it freezes everything and it displays its own menu. Being fully menu-driven and error-trapped, youill probably never need the full manual that comes with the Multiface. Most operations are also entirely AuTomanic so to SAVE a game once you stopped it, you just name it, insert disktape, and press a key. You can then return and continue the program. If you get beaten later on, just reload from where you saved last and play just from there again! No need to go back to the start all the time. Or even better, the Multiface allows you to POKE

## INFINITE LIVES

listed in this magazine and you'll never loose. The MULTIFACE comes with a builr-in TOOLKIT that lets you inspect/alter/dump the OPC RAM. It also has its own 8K RAM and 8K ROM. Many top programs were written with the ald of the TOOLKIT and the extra 8K RAM. And do you like the screen shots in this magazine? They are all produced using the MULTIFACE!

When we announced earlier that we were to pull out of the 8 -bit market, the surge of interest in the MULTIFACE was such, that we had to make many more. And not just the MULTIFACE - we also have the one and only disassembler,

## THE INSIDER

that lets you soe and after what happens any time anywhere inside a RUNNING CPC program. This is a unique de-bugging/development aid. It comes on a disk and loads inside a MULTIFACE. Press the magic button and the INSIDER will disassemble, find text/code, dump the CPC RAM to printer, etc. Get it at HALF-PRICE for £7.95 As this goes to press, we still have plenty of stock of both the MULTIFACE and INSIDER. However we can't go on manufacturing for ever. The MULTIFACE is terrific value, in fact more for the customer than for the manufacturer... So

## HURRY!

In any case we will only accept orders when we can supply the goods and we give a full guarantee. Plus we still offer up to £15 OFF! mail orders!

You MUST NOT Use our products to copy, reproduce or infringe in any way whaswoever any copyright material without the permiselon of the
All prices are already discounted and
copyright owner. We do neither condone nor suthorise the use of our products for the reproduction of copyight material - to do ao is liLE $G A L I$
spply to Mail Orders to3L3.1993 only.
I order a MULTIFACE 2 for CPC 464/6128 $\square$ e47.35 £34.95 or for CPC $+\square$ ens.96 £34.95


PLUS P\&P per item: UK / Europe £2 Overseas £3. l enclose a cheque/PO/cash for $£$...
or debit my Access/Misa No.
Card Exp.
Name/address

# AA presents the longest list of Multiface POKEs ever. Phil Howard is the man responsible for giving you everlasting life. 

## The Multiface way

The ( t$) \mathrm{s}$ and (d)s before the address indicate whether the POKE was written for a tape or disk game they might work on both, it's worth a try). Just in case you don't already how to put in these BLACK BOX POKES, here are the steps to success.
a) Load the game as normal.
b) Press the RED button on the MULTIFACE.
c) Press "T" for tool.
d) Press "*" to make sure you select the game code.
e) Press "H" for HEXADECIMAL input. f) Press "SPACE" for input.
g) Type in the ADDRESS ( 4 characters ie. 3A7C)
h) Type in the POKE (2 characters ie. A7) i) Press "RETURN"
j) If there is more than one poke (indicated by a " 1 ") goto (f)
k) Press "ESC" back to the menu. I) Press "R" return to the game.

| 2 | (t) 2974 C3 Manual rapid fire |
| :---: | :---: |
| 1942 | (t) 2982 00-Aute rapid fire |
| 1942 | (t) $24 \mathrm{CO} \mathrm{C9}$ ) inf lives |
| 1942 | (t) 2400 COF |
| 1943 | (t) 7A21 A7 inf energy |
| 30 Starfighter | (t) 7F3A 000 Invulnerability |
| 3D Starflehter | (t) 7F1500) |
| 720 Degrees | (t) 802700 Inf lives |
| 720 Degrees | (t) 952800 inf credits |
| 720 Degrees | (t) 808800 lint tickets |
| ATF | 2C5A FF 255 Lives |
| ATF | (d) BE4C FELots of fuel |
| ATF | (d) BE61 FF Lots of cannon |
| ATF | (d) BE62 FF Asraam missiles |
| ATF | (d) BE63 FF Maverick missiles |
| ATy Simulator | (t) 4C1E 00 Stops the clock |
| Acadeny | 8 CF3 00 Inf missiles |
| Acadeny | 801700 Inf ammo |
| Academy | BDD6 00 inf delay bomt |
| Acadeny | 8CC8 00 Inf flares |
| Acadeny | A049 00) Inf fuel |
| Academy | 8日EC 00) |
| Academy | $83 \mathrm{C2} 00$ Int shield |
| Addams Family demo | (t) 120000 inf lives |
| Adranced Pinball | TE 042500 fit balls |
| Atter the War | (i) 804800 -nflives (part 1) |
| After the War | (t) 804900 lnf ives (part 2) |
| Atterbumer | (t) 1 D58 00 lnf missiles |
| Afterburner | (t) 20A7-3A inf lives |
| Agent X2 | (t) 5 CDA A 7 Inf energy |
| Airborne Ranger | (t) 945A 5 C Inf aid - press DE |
| Airborne Ranger | (d) 9539 3Binf aid - press DE |
| Airwoif 2 | (-) 8228 No. 7 lives |
| Airwolf | (t) 786500 linf lives |
| Alien 8 | (t) 41BE 00 Int lives |



Batman the Movie Batman the Movie Batman the Movie Batman the Movie Batman 30
Batman the Movie Batman the Movie Batman the Movie
Batte of Brtain Batty

Batty
Bedlam (Go Crazy) Beyond ice Palace Beyond Ice Palace Beyond Ice Patace Beyond Ice Palace Beyond lce Palace Bigfoot Bigfoot Billy the Kid
Billy the Kid Bionic Commandos Black Tiger Blackbeard Blackbeard Blade Warrior Blade Warrior Blade Warrior Blasteroids Bloodwych Bloodinych Bobby Bearing Bombfusion Bombfusion Bömblusión Bombfuslon Bombjack Bombjack tt Bombjack II Booty
Boulderdash N Boulderdash IV Boy Racer
Boy Racer Brainache Breakthru Brian Bloodaxe Brian Jacks s/star Brian Jacks s/star Bronx Street Cop Brons Street Cop Bubbile Bobble Bubble Bobble Bubble Bobble Bubble Bobble Bubble BabbleBubble Bobble Bubble Dizzy Bubble Ghost Bubbler Bugzy Boy Butcher Hill Butcher Kill

1D62 FF Removes grenades (t) EE06 C9 Inf energy (i) 674300 inf lives (t) $76 E E 00$ inf time (t) IC90 00 inf lives (d) EE06 C9int energy (d) 674300 inf lives (d) $76 E E 00 \inf$ time (t) 403000 lat fuel 4328 FF 255 lives (t) 451500 inf lives 1 play (t) 452300 Inf lives 2 play (d) F18E 099 Liver (t) 0038 A7) tht spirits ti1 OED3 C9) and (t) CF32 00)Invulnerability (i) ET7FOO/use all 5 (t) FF34 C9)pokes (x) 1016 A7 Inf hives (t) 060100 Cots of lives (1) 81 Cg .00 Inf amme (t) 92CA 10 One shot OEFB FF Lots of lives (d) 5612 A 7 inf lives 38DA A3 Inf lives 4C3E 00 Int butlets (t) 031800 linf lives (t) 625 C 18) inf time (ti 77A1 C9) 215500 Int lives. (ti) 0523 A7] inf energy (t) 9873 A7yint spell (t) 824300 Disables baddies (t) 493A 00 Slows Timer $4 A 7200$ Int lives 493500 Int time ( 1 ) 4 A71 00 lrat lives 009000 Loads of lives 02E8 00 Loads of lives 064900 Stops all enemies (t) 545400 inf fives (0) 05E9 FF Extra lives (1) 6 C 3 C 00 inf time $83 E 4 \mathrm{AF}$ Indestructable (p1) 83 CA AF Indestructable (p2) 731200 Int lives BE38 00255 lives (t) 6848 C 3 int lives (t) 1980 A7 Full strength part 1 (t) 1999 A7 Full strength part 2 (t) 057932 Extra time (7) 4FFA A7 Inf bullets (t) 6026 A7 Inf lives part 1 (i) 6087 AT
(d) 6024 A7inf lives part 1 (d) 6 D85 A7 (d) 6 COF A7Inf lives part 2 (d) $6 \mathrm{C7O} \mathrm{A7}$
(v) $6 E 7200$ int lives. (t) $82 A 400$ int bubbles A74E B7 Inf lives 1E7F C9 Inf time (t) 115D A7)int lives (t) LIFD $A 7$
(t) 197200 inf lives
(d) OB1A COint lives






## ALL PRICES INCLUDE VAT - DELIVERY IS FREE OF CHARGE IN THE UK MAINLAND

## SILICA SYSTEMS OFFER YOU

- FREE OVERNIGHT DELIVERY: On all hardware orders stipped in the UK mainland
- TECHNICAL SUPPORT HELPLNE: Team of technical experts at your senice.
- PRICE MATCH: We nomaly match competiors on a "Sarte product - Same price" basis - ESTABLISHED 14 YEARS: Proven track rocord in protessional computer sales.
© 12 MLLION TUANOVER (with 80 statf: Sold, relatle and pmotatle - C12 MLLION TURNOVER (with 60 staff): Sold, relable and proftable.
- BUSINESS - EDUCATON - GOVERNMENT, Voume - BUSINESS + EDUCATION + GOVEANMENT: VOUMe discounts avalable $081-3080838$. - SHOWFOOMS: Demonstration and training taolibes at Cur London \& Siccup branches. - THE FILL STOCK RANGE: AS of your requirements from one supplier.
- FREE CATALOGUES: WI be maled to you with ofters + sotware and peripheral details.
- PAYMENT: Major credi cards. cash, cheque or monthy terms.

Belore you docide when to buy your new Amiga computer, we suggost you tiink very caretilly about

 will have noilting to worry about. Wo have been established for almost 14 years and. with our undivaled experience and expertise. wo can now claim to meot out customers requirements with an uncorstanding which is second to none. But dont just take our word forit Complete and retim the coupon now for our tatest FREE Herature and begin to experienco the 'Silica Systems Semice".

## MAIL ORDER:

## LONDON SHOP


 SIDCUP SHOP: ESSEX SHOP: Keddes (hid Auot) Hiph Street, Southend-on Sea, Essex, SSI ILA Tet: 0702468039

[^0]McMesmissMs. Intials Sumame

[^1]Address:

## - COMPUTER SUPPLIES

Suppliers of Discount Sofivare since 1984

HOW TO ORDER:
All prices include VAT \& delivery Please allow 5 days for cheque clearance. Send cheques or postal orders made payable to

## MJC SUPPLIES (AA)

Unit 2, The Arches, Icknield Way, Letchworth,
Herts, SG6 IUJ

## and credit cards on:

0462-481166
Overseas Customers: write for quotation Educational Bodies, Local Authorities, Govt. Departments: send written order FAX US ON 0462670301
**NEW - MICRODESIGN PLUS **
This superb Desktop Publishing program is now available from MJC Supplies. MD + offers superb page layout features along with probably the best printouts you will see on a CPC. $\mathrm{MD}+$ can import Stop Press pages \& cut-outs along with the cut-outs on Extra Extra. MD + files are also compatible with MD2 on the PCW and PC. The pro gram is also compatible with the AMX mouse. Contains too many features to list here!
REQUIRES 128 K AND A DISK DRIVE
MJC PRICE ONLY £28.95
MICRODESIGN PLUS \& AMX MOUSE
Buy the Microdesign+ program
together with the AMX Mouse
MJC PRICE ONLY £59.95

## GOLDMARK PAGE PRINTER

Contains printer drivers to enable you to print out your Microdesign Plus pages on your 24 pin or Bubble Jet printer
MJC PRICE ONLY 89.95
ADVANCED ART STUDIO
Probably the best graphics package for the CPC. Contains lots of features such as: Cut and Paste, Zoom In \& Out, 16 Pens, 8 Sprays, 16 Brushes, Rotate, Copy and many more, It is also compatible with the AMX Mouse. (Requires 128 K )
ADVANCED ART STUDIO CASSETTE . $\mathbf{1 5 . 9 5}$
ADVANCED ART STUDIO DISK. ....... 17.9

ADVANCED ART STUDiO \& MOUSE
49.95

## AMX MICE \& INTERFACE

We now have CPC mice and Interfaces back in stock
CPC MOUSE \& INTERFACE $£ 34.95$ ('Plus' owners please call before ordering)

## PRINTER RIBBONS

## $\mathrm{X} 1 \quad \mathrm{X} 2 \quad \mathrm{X} 5$

DMP 2000/3000 $\ldots . . .3 .00 \ldots 5.50 \ldots 12.00$ Paraspic $1001081 / / 1803.95 \_7.00 .15 .00$ Citisen 120D........... $3.95 \ldots 7.00 .15 .00$ Star LC10 Mono........ 3.95 ...7.00 ..15.00 Star LC.10 Mono...... $3.95 \ldots 7.00 \ldots 15.00$
Star LC24.10 Monio ... $4.95 \ldots 9.00 \ldots 20,00$ Star LC24 10 Mono _..4.95 _.9.00 . 20.00
Panasonic KXP. $1124 . .3 .95, \ldots 7.00 \ldots 15.00$ Star LC. 10 Colour $\quad$.... 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.

## CF2 DISKS



## SERIOUS DISKS

## NIRVANA

Various disk utilities including Copy Format and UnErase. Also includes Sector Editor \& File Archiver MJC PRICE £14.95

## Protext.

Protype
.. 19.95
Prospell.
21.95

Promerge
17.95

Matrix Spreadsheet Plus
17.95

Masterfile 3
Mastercalc 128
Stardump
29.95

Stockmarket
Extra Extra (Fonts \& Clp Art).
.. 25.95
.14 .95 Money Manager Maxam Assembler
14.95

Mini Office 2
11.95
19.95
19.95
.14 .95

## COLOURDUMP 3

Atter a ist 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. Reqires Star LC200 or compatble 9 pin colour printer. Improved use with Advanced Art Studio. Will automatically read in palette fle and set screen mode to ensure your page is the same as your screen. Uses compressed or uncompressed fles
Bigger printouts, In addition to the origina $13 \mathrm{~cm} \times 9 \mathrm{~cm}$ inage, a lage print out at $22 \mathrm{~cm} \times 15 \mathrm{~cm}$ is avalable at single or double density
Use Multiface screens. A conversion routine is supplied to allow most Matiface screens to be used.
NO OTHER COLOUR SCREEN DUMP OFFERS SO MANY FEATURES.
COLOURDUMP 3 £ 15.95 DISK ONLY

## GAMES DISKS

## THIS MONTH'S SPECIAL STREET FIGHTER 2

MJC PRICE ONLY £11.95
(Price valid until 31st March 1993)

Football Manager 3 Hero Quest Double Pack Lemmings. Manchester United Europe North \& South Outrun Europa
Sim City.
Smash TV.
Space Crusade
Street Fighter 2
Titus The Fox
Hus The Fox........................11. 95

## COMPILATIONS

Classic Games 4. Capcom Collection The Dream Team. Gary Lineker Collection Max Pack
Super Fighter
Super Sega Collection
Super Sim Pack
12.95
15.95
10.95
12.95
11.95
.CALL
11.95
11.95
11.95
1195

## 12

1591
15.95

CALL
.17 .95
.15 .95
...CALL

Card holders can order now on: 0462



Welcome to
Reaction! As well as your letters, wre've also got an open letter from the publisher of Amstrad Action to you, the readers.

## Don't try this at home, kids!

As a newcomer to the world of computers, and very ancient into the bargain, I find much of what I read in your magazine a complete mystery. However, I have made a discovery which I wonder if many of your readers know about.
When a tape fails to load properly and the screen goes either blank or comes up with the message 'read error', it may be possible to cure the problem. I have encountered this on two occasions and each time I stopped the tape at the place where the fault occurred, removed it from the tape player, carefully pulled out a couple of feet of the tape, placed the tape between a couple of layers of smooth material (a couple of pillow cases are ideal), and then carefully ironed over the tape with a warm iron. After winding the tape back in and then rewinding in the computer tape player the tape then loaded perfectly: Am I an old genius, or what?

## Mrs V Crossley

Polegate, Sussex
Erm, I'm not entirely sure how good an idea it is to pull out bits of your covertape and iron them. I mean, it is a good idea in itself as you're straightening out the tape. But, and I would stress this, please don't try this if you're one of our younger readers. Not only will you be unable to reach the ironing board, but irons are very dangerous things. Ask your mum or dad to iron your tape for you. Alternatively, for that real professional touch, take it to the launderette and
get it done there! Ed.

## The awful truth

I have been playing Tir Na Nog for at least three years and I seem to be unable to complete the game. This is despite playing it in several different ways.

I am now worried that this is a game which is perhaps impossible to complete. Several clues seem to point towards this conclusion...
$\star$ None of the Lords and Ladies seem to have completed this game, although it's been around for ages.
$\star$ No one has answered my previous pleas for help in $A A$.
$\star$ You gave the game away a year ago, so someone must have tried it.
Can you confirm the truth about this garne? Can you force the writer to come clean? This is a last desperate plea, I must know if there is hope.

## Dave Gahan

Tupsley, Hereford
There are two schools of thought as regards this little poser. Some people say that the reason nobody's ever finished the game is simply because it's so dull. The other school, of which Im a member, tend to think that the rest of the world is conspiring against you-including the programmer! No, seriously, I'm sure there's nothing wrong with the program itself otherwise we would have had other letters about it and, erm, we haven't.

By the way, are you that Dave Gahan out of Depeche Mode? Is that the reason you haven't


## Life after Protext

Why is it always Protext which is put forward as the last thing in word precessing for the CPC? thave to admit that I was an avid user of the program, that is until Brutword.
I have been using BW now for about two and a half years for page layout including illustrations.

Logos are designed using the Easydraw
released many records recently - because you've been too preoccupied with Tir Na Nog? Ed.

## Naughty, naughty, very naughty!

In issue 88 of AA, I glanced at a program by Simon Clark called Blocks. Very recently I had borrowed some copies of ACU from someone, and I noticed a striking resemblance to a ten-liner called Tower of Brahma by Chris Wooton. Simon Clark has taken Tower of Brahma, added bits and bobs to it, called it Blocks, and put it under his own name. I have supplied a photocopy of the original program, which was in the April 1990 issue of ACU. Whether this deserves $£ 20$ is beyond me, but I don't think it does. Maybe Simon thought we wouldn't notice, eh? So don't do it again, mate.
Nicholas Campbell
Newtonmards, Northern Ireland
I suppose it is a bit on the naughty side, but it's not the naughtiest thing I've ever seen. After all, it's not as if it's exactly the same program, Simon did make some changes. Maybe those bits aren't worth $£ 20$, but all we can do is try and be more vigilant in the future.

By the way, did you know that Brahma is a Brazilian beer with a really smart advertising campaign? Y see, if you buy a bottle of Brahma then ten pence, or something, goes towards saving the rainforest. The best bit is the posters, there's all these bright parrots sitting in the forest and underneath it says something like 'Drink Brahma and be popular with the birds.' It's very smart. Ed.
program which was published in the now defunct Attack magazine, any cleaning up being done in the Dariscan program. Hustrations are scanned using Dartscan. M F Gurney
Billericay, Essex

## I must admit that Mr Gumey's letter and

 enclosed example looked very good indeed. We'vereproduced his pictures, so you carr see the quaity. So, if you're thinking of getting a word processor, this is certality one to a think about. Altematively, you could wat untifi next month and get Tasword free: Ed

## Soccer simulation shock

A few months ago I came into a little money, only a little. So I saw your rave reviews on the football compilation Soccer Stars and I ordered it from MJC Supplies. I received the game and, as you said, it was great. Gazza 2 was good fun, as was Kick Off 2, and Emlyn Hughes was excellent. The problem came when I loaded Microprose Soccer. It loaded fine, and I saw in the instructions to go for Microprose International Challenge for a quick start, this was not in my options menu. Your review said that you used the 11 -aside facility and it said nowhere in the instructions that you couldn't get 11-a-side on the Amstrad. I was quite put off as the six-aside American facility isn't that good. Please could you give me an address where I could find out whether I could get this facility or a new disk.
Jon Joasbury
Ivybridge, Devon
Well, either our reviewer was lying, or you can get 11 -aside and you just haven't found it yet. You could either contact M.C supplies and see if they forgot to include part of the instructions. You could just find the address of the original publisher on the game box itself, and try contacting them. Ed.

## Console conundrum

I am the proud owner of the Amstrad games console, the Amstrad GX4000. I have not yet bought any games, but I have been out looking for some. After a day of no success, I decided to go to the shop where I bought the console itself. They told me that I wouldn't find any in the shops, but that if I became a member of the Amstrad User Group then that had games for my particular console. Unfortunately, they had no idea where I should write off to, so I thought, Who better than Amstrad Action?

Could you please send me information about this club if it does exist, and where I can find games if it doesn't? I would very much appreciate it as I'm getting tired of Burnin' Rubber.
Giancario Cassano
London
Okay, first the bad news - the Amstrad User Group disbanded quite a while ago. But, and here's the good news, you can probably get console games from a mail order company called Trade-In Post. They advertise in AA on a fairly regular basis, look in a few of your back issues. Ed.

## Some questions

I am writing to congratulate you on producing a good magazine which is a good read for gamesplayers and serious users alike. I have several questions to ask you, they are...

1. What is the value of the components in a GX4000 console? Why did it have little commercial success?
2. What games do you have lined up as covertape games in the near future?
3. How much of the cost of an $£ 11.99$ computer game goes to the software house and how much to the retailer?
4. Why don't you include slightly more adverts (ie - you charge less for adverts) and then you could produce a proper magazine with more than your measly 58 pages.
Peter Barnes
Stroud, Gloucester
5. The value of the components is probably around $£ 30$, but you've got to remember that they're buying in bulk. The reason it had no commercial success was because it was aimed at CPC users - people who preferred to have the CPC + which was effectively a console and a CPC in one box.
6. Oooh, let's see... we've got Wizard's Lair, Syntax and European Superleague amongst others. And they're all pretty smart. 3. It depends on the retailer. Big retailers like Smiths and Menzies earn more from their games than Fred Bloggs, independent retailer.
7. A lot of people don't like to admit this, but adverts make money. Our ads aren't actually that expensive (as ads go). If we charge less for ads then we need more ads to get the same amount of money as we were getting before. (If you see what I mean.) We'd have to sell loads more ads before we could afford an increase in pages. Ed.

## All together now

Firstly I would like to point out that if anyone was thinking of following up the article about the huge amount of CPC software available in France, don't bother. When I went, the full price shelves in Auchen were all but empty and, although the range of budget games was large, there were no outstanding tities. This was just before Christmas, when you'd expect the shelves to be quite full. I would also like to point out that in the latest issue of Check It Out, a young people's buying guide, not only was the great AA given a very poor $32 \%$, but CPC Attack got $40 \%$.

Also, snide comments were made about the amount of life left in the CPC. I urge all faithful AA readers to boycott this pathetic mag that's obviously written by Gameboy-playing idiots. Together we stand united. Fraser Hewitt

## Sandwich, Kent

United we stand, divided we fall! Workers of the world unite, we have nothing to lose but our minds, and they aren't our own anyway! Remember kids, the state is your enemy! Storm the barricades! Lock yourself in your bedroom! Refuse to eat anything but crisps and... Oi, Adam! What are you doing here? Get out, shoo! Ed.

## I know a man who does!

I have grave news - the rare oasis in London, Virgin Gamestore, has stopped stocking Amstrad software. This means that the only way Amstrad owners in the south can get hold of software is by ordering through mail order or taking a daytrip to France.

I have found a shop that does sell Amstrad software and isn't thinking about quitting the Amstrad market, but unfortunately for me it's way up in Coventry. It's called K-Soft, it's in Cathedral Lanes and has over four shelves of CPC stuff, but no cartridges.

## Chris Edwards

Surbiton, Surrey

There is actually a very good mail order company called EDOS (which stands for Electronic Distribution of Software). They have masters of absolutely tonnes of games, you tell them what game you want and they duplicate it for you and send it off. It's all perfectly above board and legal, and the software houses know all about it. So don't worry! For a free catalogue simply send a large sae to EDOS, Computer Visions, 30a School Road, Tlehurst, Reading, Berkshire RG3 5AN. Ed.

## A face in the crownd

Has anyone watching Gamemaster noticed a certain Scottish chap commenting on the challenges called Frank $O^{\prime}$ Connor? The challenges he commented on were for the SNES. Is this the same chappie that used to work for $A A$ and left just before Adam came along? Traitor! Matthew Long
Calcot, Berkshire

You're spot on, Matthew. That cheery chappie was none other than the same Frank O'Connor who once graced these pages with his wicked wit

> Help us to help you
> Now, we know that it's essential that readers are able to contact the world's greatest CPC mag, but we seem to be having a few problems. Firstly, there's the problem of unmarked mail. We receive far too many letters addressed simply to Amstrad Action. It would be much nicer if you would mark on the letters which particular feature you are writing to, as it makes our mail sorting system much easier, and means your letter is much more likely to reach its proper destination.

> Secondly, it must be stressed that we cannot replace games that you have bought in the shops. Any damaged goods you have bought should be exchanged at the shop you
bought them from. If, however, you have problems dealing with software companies, then please write and tell us, but mark your letters to Reaction, and don't include your tape! We really cannot do anything with them. Of course, if you have problems with your covertape, then send the tapes to Ablex and theyill send you a new one back. Their address is on the covertape pages. Thank you, thank you and thank you. (Again')

The address to send you Reaction letters to is...
Reaction, Amstrad Action, 30 Monmouth Street, Bath, Avon BAI 2BW. We regret that letters cannot be answered personally, so please don't enclose saes


Beauford Court, 30 Monmouth Street, Bath, Avon, BA1 2BW Telephone: 0225442244 Fax 0225446019

## 23rd February, 1993

Dear Amstrad Action Reader,
Next month you will witness a radical change in Amstrad Action. Not so much in the magazine, but in the already acclaimed covertape. For a start, it's now going to be called The AA CLASSIC COLLECTION. This means it'll feature better programs than ever before, and more of them.

Every month you will receive a full commercial program, worth at least $£ 20$. Guaranteed.

This does mean that the price of the magazine will increase by forty-five pence (to $£ 2.95$ ), but it also means that we're sticking to our commitment of value for money. After all, you're getting a magazine, a full program (worth at least $£ 20$ ) and a game (worth at least $£ 2.95$ ) for less than three pounds. I consider this to be an exceptional offer.

We've spent the last couple of months trawling the CPC world for full commercial versions of the best programs. This means word processors, databases, spreadsheets, printing utilities, DTP packages... the list goes on. These will help to increase the size and breadth of your software collection. This means that you really will be getting the most from your CPC, and it'll help you make considered buying decisions when choosing the really advanced programs.

The first offer will be a fully working version of top word processing package TasWord, with spelling checker. This is Amstrad Action's most ambitious offer to date. If you were to buy this version of TasWord in the shops, it would cost you £25. This doesn't mean that we'll be neglecting games. The new Classic Collection pack will feature an action-packed full commercial game every month.

And what of the magazine itself? Well, I can assure you that it will continue to be the essential read it always has been. It'll be packed with information on the serious and the not-so-serious side of CPC computing.

## AMSTRAD ACTION IS 100 PER CENT COMMITTED TO THE CPC. IT IS THE ULTIMATE CPC PERIPHERAL.

I look forward to hearing your comments on the Classic Collection. I feel certain that you will be as enthusiastic about this as I, and the rest of the Amstrad Action team are.


Publisher

Registered Office
Future Publishing Limited
Beauford Court, 30 Monmouth Street,
Bath, Avon, BA1 2BW
Tel: 0225442244 Fax:0225446019
Registered Number
2008885 England


Adventuring mewns, wiews and avvards.

Welcome to yet another missive from the mighty Bairog spreading the word of adventure to all his followers. There's no hanging about this month, we go straight into the most awaited event in the adventurers' calender...

## The Balrog awvards results:-

The response to the Balrog awards was very impressive - letters appeared from all over the World, and the results were as follows:The Top Five Adventures Of All Time:

## 5 Magnetic Moon FSF Software

4 Price of Magick Level 9
3 Hobbit Melbourne House
2 Bard's Tale Electronic Arts
According to AA readers, Helvera Mistress of the Park is the best adventure of all time. Well done to Bob Adams, the author, for writing such a popular game!

The award for the best text adventure of the year was a close-run thing but the winner was... (sound of an excitedly-ripped open envelope)


## Helvera Mistress of the Park:

The best graphic adventure of the year was also very close, but eventually Rob Buckley's Eve of Shadows came out on top. Eve of Shadows also scooped the award for best PD adventure.
Wow Software deservedly (I think)) won the title of best software house (well done Joan!) and Adventure PD won the title of best public domain library.

Adventure personality of the year was another close run award (at one point it looked like yours truly would win but unfortunately I didn'tt) which was eventually given to Debby Howard of Adventure PD.
And the award for the most promising author went to Simon Avery. And why not' (Briliant Barry Norman impression by the Balg... NOT!!
The results of the Balrog questionnaire were also very interesting - the average age of a Balrog reader is 17 and $5 \%$ of Balgers are female (Balgettes?). There's an even split between 464 and 6128 owners with quite a few adventurers without disk drives. The Balg was surprised by this - 1 thought many more adventurers would have disk drives so that they could play the various Infocom, Magnetic Scrolls and PAW games).
Nearly all of you gave the Balrog column a good mark out of ten (it averaged out to about 8.5 ) and most peoples favourite section was the cluepot, with the GAC Clinic and Lords \& Ladies being the least popular (although this was often a

## Lords \& Ladies of Advemture

I always have to tell any possible newcomers out there how this bit works, so if you've heard it before, skip to the start of the list! For you newies, this is how this section can help you...There are a number of CPC adventurers who are willing to share their knowledge with you. If you have a problem with any of the following
games, simply
drop a line to the Lord or Lady who's got the solution. Enclose a sae, and remember to keep your needs as simple as
possible. Complete solutions are out - these
kind volunteers have their lives to be getting on with!

## Adventure Quest Dungeon

 Adventure - Gnome Ranger $\bullet$ Imagination $\bullet$ Knight Orc $\bullet$ Kobyashi Naru $\bullet$ Jewels of Babylon Lancelot Lords of Time Mystery of Indus Valley $\bullet$ 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 P016 OPJ

Forest at World's End Jewels of Babylon - Seabase Delta. James Mackle, 45 Kenure Park, Rush, Co Dublin, Ireland

Bard's Tale Hitchhiker's Guide Laser Squad Lord of the Rings - Lords of Chaos Lurking Horror • Price of Magic Q Quill ( + lllustrator) © Scapeghost. Simon Netherwood, 36 Toothill Bank, Rastrick, Brighouse, West Yorkshire HD6 3EZ. Tel: (0484) 719326 5-9pm weekdays, $12-11 \mathrm{pm}$ 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

## Melp:

Stuck in an adventure? Or desperately trying to find one - the helpline it the place for youl Just send a postcard to Batrog's Helpine at the usual Bairog address.

- Patrick Dyson from Shipley wants to know how do you glue the map and open the safe in Subsunk - can anyone help?
- Wanted: Genesis instruction booklet and hints and tips for Moonmist, Lancelot and Slaine. Dominic Corby, 62 Roxwell Road, Chelmsford, Essex CM1 2ND. Tel: (0245) 353718 - Mark Hudd is stuck on Level 6 of Bloodwych - does anyone know how to get past the green pads? He also wants to know what the various wands and rings do. 2 Bankside, Staple Hill, Bristol, BS16 5LQ
- Philip Carver is stuck in no less than three games. He wants to know how to stay in the kitchen in the Famous five. How to move the lift in The Pawn and, frally, how to persuade the sessiones to retreat at Tintagel in Lancelot.
20 Pirie Road, West Bergholt, Essex, C06 3TA. Tel: (0206) 241181
matter of taste - some people gave marks of 10 for Lords \& Ladies and others gave it 0 ). Suggestions ranged from the silly ('Why don't you become a vegetarian and stop eating all those hobbits?? to more constructive comments which have all been eaten (but in a very intellectual kind of way).
Finally, as promised, two lucky readers won a game for their troubles of sending in the questionnaire. Well done to Marc Curtis of Liverpool and Graham Booth of Tadcaster.
If you have anything to say about an adventure game or the adventure scene in general then write to the Balrog at the usual address. Sorry but the Balrog cannot reply personally - I have enough on my plate trying to control all the orcs that live with me!


## GAC Programming Clinic

This month readers have sent hints on how to get the most out of GAC..
Dear Balg,
I overcame one little difficulty in a way other users may find helpful. Unless you are extremely well organised, it can be a pain remembering the next number to use for your verbs, nouns and adverbs. I always have one of each called ' $A A^{\prime}$ carrying the highest number.

So, when I need a new verb, the screen displays all my verbs in alphabetical order with $A A$ sitting at the top (naturally) showing the next number. If it were, say, 47 and I needed a new verb, Twist, I can immediately delete 47, enter 47 Twist and 48 AA .

## Ray Bryan

Dear Balrog,
Does anyone else know about the ADVINMAN.ADV file that follows QS.ADV on the covertape? It is an amusing little adventure, and it is very helpful to be able to examine the GAC conditions used in it and see how they work. C Hetterington

## Multipart adventures

Although it is not possible to link various parts of a game together so you can carry through objects, there is another way to make multi part adventures - simply at the end of the first part give the player a password for the second part and then at the start of Part Two, make the start location have the description 'from Part One...' (making sure you have no exits from this location. Then just create a condition so that when the password is typed the player is transported to Part Two proper. However you won't be able to take objects across from Part One - you have to try and make Part One end with the player carrying either no objects or a few objects which you can predict (so at the end of Part One you could attack the player muggers who steal all his objects etc).

## Contacting the Balrog

To communicate the Balg, write to him at Amstrad Action, Future Publishing, Beauiord Court, 30 Monmouth Street, Bath, Avor BA1

## Letters

Dear Balrog,
lam conducting market research into the demand for Adventure Software on the Amstrad (tape/disk) as I am thinking of starting up an adventure software house to try and revive some of the old flare for the games.
Is it possible to print this plea for help and ask everyone that's interested to write to me. lain Quigley, 14 Bute Court, Greenock, Inverclyde, Strathclyde, Scotland PA16 7AG

Good luck lain and keep me up to date if anything comes of your idea! The Balg.

## Dear Balrog

What is your favourite Level 9 game? Robert Melody, Purley

Probably Worm in Paradise - the game is massive and has some very tricky puzzles. Thanks for the letter and GAC hints, Robert. Unfortunately I can't print them as they came from another magazine. The Balg.

Dear Balrog,
I was thinking of buying Bloodwych as I have greatly enioyed playing Bard's Tale. I was wondering if it was worth getting, how difficult it was and where on Earth to get it Im also: looking for the old RPG Rings of Darkness.
Tom Ford, 5 Sheperds Way, Harpenden, Herts AL5 3HF

Bloodwych is well worth getting - however you may have difficulty finding it now. If anyone wants to sell their copy then get in contact with Tom. Rings of Darkness is now pretty ancient and could be very difficult to get hold of. Even if you do manage to you'l probably only get it on the Fourmost Adventures compilation. Again If any readers can help then they should get in touch. The Balg.


## Balirog's Cluepot

## Cluepot

This month's honeypot of clues comes to you courtesy of the following do-gooders... Thomas Christie of Grangemouth, Richard Jamieson of Aberlour, Katharyne Allen of Guernsey, Dominic Corby of Cheimsford and Robert Smith of Gwynedd.

## Case of the Mixed-up Shymer

- Examine garden display for pack of seeds.
- Give them to Mary, Mary, quite contrary to complete the first puzzle and get gloves.
- Put all in briefcase, find tramp in park and attack him, you will now be taken to hospital. - Wait until the nurse goes, don't get watch.
- Get up. Get cases and papers. Get up.
- Put briefcase on empty bed, south, south, open locker, get stethescope and clothes, north, east, put all but papers in pillowcase, wait for second footsteps outside, wait, west, west, wear bandage, lie on bed, wait, wait. You are now in the ambulance.
- Wear stethoscope and wait until you are dropped off.


## Erik the Viking

- Blow the horn to summon your friends.
- Type pull boat in the boathouse.
- Don't drink wine offered by enchantress.
- When you meet Dragon of the north sea, send Erik up mast and up on to dragon's nose. Dragon will sneeze and blow you and the boat away. To avoid this, block his nostrils with the bedding from the great hall.


## Microman

- Get lighter, examine car, climb seat belt, wind hande and jump to escape the car.


## Mordon's Quest

This one's especially for Rix.

- Make a blowpipe to despatch the pygmy and then use the pygmy to get passed the plant. - Lay down the blanket over the quick sand to walk over it safely.


## Rigel's Revenge - Part 2

- To get passed the checkpoint: From start: Ex2, wait until you hear marching to east, E, N, E, get rifle, examine seat, get documents, W, $\mathrm{S}, \mathrm{W}$, wait again until you hear marching to the east, $\mathrm{E}, \mathrm{S} \times 2, \mathrm{E} \times 4, \mathrm{~S}, \mathrm{E}$, dig and get light guide.


## Seabase Delta

Another one for Rix!

- Enter car, fasten seatbelt and insert card in slot to get car in station to move the card is obtained from the dead body).


## Smashed

Robert Smith! This one's just what you need.

- Inject Clingon with anaesthetic.
- Get cat and then enter chopper, switch on then pull joystick to get the key.
- Inject Crank with sodium pentathol.
- Get Clingon's dress.
- Hypnotise crank with Padre's book and give him the dress.
- Drill pills and string them with catgut to make fake pearls.


#### Abstract

This month RICHARD FAIRHURST answers loads of your letters. If you have a pressing technical query then just write it down and send it off to Technical Forum, Amstrad Action, Beauford Court, 30 Monmouth Street, Bath, Avon BA1 2BW. We'll try and help. Now let's make a start on those letters...


## SCROLL OF WISDOM

I am trying to make a game, but have a major problem. Is there any way, in BASIC, that you can make the screen scroll from right to left (as in $R$. Type, Robocop etc) instead of bottom to top? Bruce Dunbar
Tyne and Wear
No problem at all. Type in this listing...
10 MENORY A9FFF: FOR $n=\mathbb{A} A 000$ to \&A02.
20 READ af: POKE $n$,VAL(" 8 " +a$\})$
30 NEXI n: CALL \&A日BO
40 DATA $21,09, A 8,01,0 D, A B, C 3, D 1, B C, 00,00,80$ 50 DATA 00,15, A0, C3, 18, A0, C3, 27, A0, $52,43,47$

60 DATA $48, D 4,4 C, 45,46, D 4,00, C D, 0 B, B C, 2 B, 2 B$ 78 DATA $\mathrm{C}, 05, \mathrm{BC}, \mathrm{CD}, 0 \mathrm{BB}, \mathrm{BC}, 23,23, \mathrm{C}, 05, \mathrm{BC}$

This sets up two new commands: IRIGHT scrolls the screen right, and ILEFT scrolls it left. Like all RSX programs, you should only RUN this program once after every reset. AA

## DOWM UNDER

1. In Australia, there is hardly anything for the CPC, except Amstrad Action! How is it possible to purchase the latest CPC software? 2. I use Stop Press on my 6128 and the printing is incredibly slow, because it uses only two pins. Could I get a program which increases the

## Multiface Questions

This month $A A$ is going overboard with tips for Romantic Robot's little black box. Here are some of the questions you've sent us about it...

## ANCIENT AND MODERN

I have recently purchased a secondhand Multiface 2. When I first attempted to use it, the game I tried to load (Rainbow Islands on disk) did not load. I read in AA that it is possible to hide the Multiface by pressing the Stop button then R. However, this did not work. In fact, only a small selection of my tape games loaded succestully. Is there a way of hiding it? Matthew Boulton Kent


Rainhow Islands - if it doesn't load, what's wrong?


#### Abstract

Oider Multifaces, unfortunately, don't have the facility to be hidden - this was introduced after software houses got wise to the device and started making games crast if a Multiface was detected. As you bought yours second-hand, it seems that you have one of thesel The best suggestion is to phone the manufacturers, Romantic Robot (081 200 8870) and ask them If they could upgrade your Multiface to the latest version. AA


## PLUS PROBLEMS

I have recently attached a Multiface 2 to my 464 Plus. Everything works well until I try and switch the Multiface off by selecting Return from the Multiface's menu: anything I type in, I get the message "Press PLAY then any key" and if | try and press ESCape, the disc drive I have attached starts. The only way I can stop this is by resetting my computer. Please help me, or I can't transfer many of my tape games to disk. Thanks.

## Bruce West

March
Are you using the special CPC Plus version of the Multiface? A slightly different model is needed for correct operation on 464 Plus and 6128 Plus machines. If you bought the Multiface secondhand, without realising that it was a CPC version, this might explain why it's not working. Again, a phone call to Romantic Robot (081 200 8870) should sort things out. If you are using the Pius version in


#### Abstract

conjunction with a WAVE widget, it may be a case of a dirty expansion port somewhere along the line. Find an ink rubber (or even better, a Peco track rubber from a model railways shop), and clean ali the expansion port connections with it. If you still have no luck, return it to Romantic Robot. AA


## ROBBING THE BANK

I find the Multiface's toolkit brilliant for altering the contents of memory, hacking games, etc. But how do I get to fiddle about with the extra memory of my 6128? The manual says. something about pressing 'S', but I don't understand what it means: all that happens when I press it is that a question mark appears and I can't type anything. Please help me! Robert Ham
Edinburgh
When you press S, the Multiface wants to know the bank-switching code (from 0 to 7 ) to use. This number determines whereabouts in memory the extra 64 K is switched in.
The easiest way to access extra memory is to do the following: if you press $S$ followed by 2, then whatever you do will alter the extra memory instead of the first 64 K . This is very useful for altering the second program if you're using Flik, from last month's covertape!) Pressing S followed by 0 brings back the first 64 K . Unfortunately, the Multiface can't actually alter memory in 256 K RAM packs above the first $64 \mathrm{~K}!$ AA
number of pins and the speed?
3. I can format and read sectors with a length of six, but is it possible to write to this format?
Matthew Brown
Australia

1. Most of the mail-order companies which advertise in AA will be happy to send software overseas, for an additional postage charge. Write to them with an International Reply Coupon for details.
2. X-Press, by Medway/King, is one of the best programs that will deal with your specific problem. Unfortunately, it's not being advertised any more, but placing a Wanted advert in the Small Ads section in AA might help.

Alternatively, a Polish PD program prints Stop Press pictures quickly - try your friendly local PD library. (That's if you've got one. If not, try a British one.)
3. Not really. It is possible to write a small portion of data to this format, but not the full 8 K : this means that a CPC cannot copy such sectors, a fact used by many disk protection systems. However, an Australian boffin has reputedly come up with a hardware modification for your CPC which lets you do this. More details when we get them. AA

## CANON LAW

I am writing to enquire about the Canon bubblejet printer. I have heard that it can emulate an Epson nine-pin dot-matrix printer. Would this printer be compatible with my CPC 464 (upgraded to a 6128)?

## A. Baker <br> Northampton

The Canon bubble-jets are increasingly popular these days, and no wonder: the output quality is excellent. Make sure that you buy a B-10ex, rather than a BJ-10e. The 'ex' model is the one which emulates an Epson 9-pin, which most CPC programs support. You'll need a CPC printer cable, too: 0 J Software can sell you one for $£ 8.95(0257421915)$. AA

## SIzing things up

Please help: is it possible for the length of a file to be recorded in a variable?

## Tom Ford

Harpenden
Enter this listing and RUN it:

10 KENORY A9FFF: FOR $n=8$ ABee TO $A$ ABe2
28 RERD af: POKE $n, V A L(" a *+a s)$
30 NEXT H: CALL 8 AOOg
40 DATA $D D, 62,60, D D, 66,81,46,23,52,23,56, E B$ 50 DAIA $11,00, C 0, D D, E 5, C D, 77, B C, D D, E 1, D D, 6 E$ 60 DATA $82, \mathrm{DD}, 66,03,71,23,70, \mathrm{C}, 7 \mathrm{D}, \mathrm{BC}$

Once RUN, you can get the length of a file (in bytes) into a variable as follows:
variable\%=0: af="filenane*: CALL
88e日e, evariable\%, eias
That should do the trick! AA

## TOP TIPS

## MACCPC

In Reaction (AA89) you printed a letter from a reader offering to send people details of how to transfer files from a CPC to an Apple Mac. Unfortunately you forgot his address, but it's easy anyway. Simply copy your files to a PC format $3.5^{\circ}$ disk (using $2-\mathrm{in}-1$ ), and read this disk on the Mac using Apple File Exchange (which should come free with your Mac). If you have an old Mac without an Apple SuperDrive installed, you need to buy a SuperDrive for it.

I use this regularly for copying files between Protext on my 6128 and my school's Mac Classic II - as long as they are saved in ASCII format, MacWrite II can load them with absolutely no problem.

## Matthew Khan

Powys

## USER-FRIENDLY

I have read a lot of tips that say that you can change the user area to anything from 0 to 255 (with 229 being the erased files area) by simply poking this number info \&A701.
Well, this worked on my 6128 , until bought a second.ROMBO and fitted some ROMs llike Protext) in slots from 8 up: from then on it did nothing. However, I have come up with a POKE that works on all CPC setups. Type this line:

## POKE PEEK(ABETD) +256*PEEK(ABE7ET+1, u5er

 nunherOr, if you remove the ' $+1^{\prime}$ ' and place 0 or 1 after the commo, you can select a disk drive without the usual whirring!
Chris Jones
Aldershot


Stars and stripes - easy huh?

## MOVIN' ON UP

1. Will the 256 K upgrade work on the CPC 464? 2. I am thinking of getting an EPROM programmer: do you think it is the best for writing a program?
2. I am hoping to upgrade my CPC 464 to 6128 configuration: how could my 464 match the 6128 ?
3. What does the MP1F do for the 464 ? James Henry
Colchester
4. Yes, although remember that not many programs can use the extra memory. To use it in your own programs, you'll need to use the supplied software (if you don't have a disk drive, make sure that it comes on tapel).


This is what Apple File Exchange looks like. it is extremely useful.

## STARS AND STRIPES

Ive discovered a great tip to produce stripey writing on the CPC's screen (1 use a 664). Simply POKE $8 B 72$ F with a number between 0 and 255: change the number for different effects (I find 60 gives a good stripe effect in MODE 1). Or, to change the background, POKE 88730 instead. Smart eh?

## Don Tucker

Llangollen
The same addresses should work on the 6128. On the 464, try \&B28F (for PEN) and \&8290 (for PAPER).AA

## PARLEZ-VOUS PROTEXT?

In Technical Forum (AA85), Alex Willamson described how to get accents for European languages for those sending letters as BASIC programs. I think I have an even better solution: just use Protext. It gives you a number of commands which set up the character set for foreign languages, such as French, German and Italian.

Even better, when you quit out of Protext, the letters stay the same: This means that, if you have Promerge Plus, you could hiave $\mathbb{P}$,"FRENCH" as a line ui your BASIC program, which would redefine the characters and let you use them in your program. Of course, this is of absolutely no use if your pen-pal doesn't have Promerge Plus and Protext too. Still, itmight come in handy!
John Waite
Woolwich
2. Only if you want to write machine code programs on ROM, and even then, you'll need a RAM-ROM (Avatar, 0442251705 ) to test them. If you don't already have a disk drive, this is the most useful addition. For the budding machine code programmer, a ROMboard, Protext and Maxam 1.5 on ROM are recommended.
3. You'll need a disk drive (either an Amstrad DDF 1, or Siren's $3.5^{\circ}$ equivalent - 061724 7572) and a RAM expansion ( 64 K or 256 K ). If you really want to go the whole hog, you can buy a 6128 ROM, to give you the new 6128 commands such as FILL (WAVE, 0229 870000). However, this isn't usually necessary for running 128 K commercial programs, and fitting can be very difficult on some 464 s .
4. The MP1-F lets you display the output from
your CPC on any TV equipped with a SCART socket (in generat, only present on more expensive models). The quality isn't too amazing: Campursoft's Videomaster (041 5544735 ) gives better quality results. AA

## PRINTS CHARMING

I have recently obtained a Citizen 120D printer for use with my son's 464 Plus. Unfortunately, being somewhere in the stone age as far as computers are concerned, I am unable to make it print any text from the screen. A friend tells me I need a print driver. Could you point me in the right direction?

Secondly, could you please recommend an effective but relatively simple graphics package for my son's use?
T.E. Sumner

Plymouth
Oh dear, your friend is leading you astray! All you need to do to print a line of text is use the command PRINTH8. For example, to print "The ultimate CPC peripheral", just type:

PRINTIB,"The ultinate CPC peripheral"
You don't need a print driver at all. As to your second question, the best art package that works on a 64 K machine is the PD program GPaint. A copy was given away on the covertape with $A A$ - our back issues department can send you a copy for $£ 2.50$. AA

## AAS EYE-STRAIN

I find that most of the menus on Advanced OCP Art Studio are unreadable. Black and dark red bars can be seen, but no letters!
Recently my seven-year-old grand-daughter came across the disk and tried it out - with no

## OH CRIKEY, HE'S BACK

Just when you thought it was safe to turn on your CPC again, our intrepid techie expert Mr Fairhurst decides to increase the suffering of us all. Fade to a beach. Someone who bears a remarkable resemblance to an ageing television personality ambles along picking up tennis balls and bottle tops. The cold, salty wind breezes through his hair.
"Doctor?" questioned Richard.
"Is that you, student?"
-Yes, doctor. We need your guidance once more. Evil lords have taken over the CPC as we know it. There's a software cartel started, and Simon Forrester has
been linked with the Brinks-Matt robbery and is due for the chair at seven!
"And you think you can get me back by just asking?" asks the wizened seer of the EEC $3^{\prime \prime}$ disk mountain.
"AA are offering a fairly healthy wodge of cash if you'll do it," answers the ever quick Richie.
"How much?"
"A lot"
"Right. Stand aside all you fascist
programmers and money-minded sales people. I'm coming back. You can't get away with this any longer!... Wheeze... You won't get away with abysmal conversions and game concepts any longer. I can see the real situation. If you want to stick around, you'd better stand up to the almighty power of THE FEGG!"

Oh brollies... We're sorry...


Advanced OCP Art Studio - it helps if you can see what's happening on screen.
success. However, leaving her persevering with it, suddenly the 'Misc' menu appeared in black-and-white - as did all the others. Unfortunately, after a few shape trials the menus reverted to
their original condition. Have I by any chance got a copy with a bug in it?

## John Brownlee

Hertfordshire
The reason that the menus suddenly became readable is because your grand-daughter selected the 'Screen mode 2' option: this selects the two-colour mode, and so only the first two standard colours are used.
Advanced OCP Art Studio can be very difficult to see on a green screen (let alone understand), but on a colour monitor it should be no trouble. Have you tried adjusting the brightness control? Failing that, select the 'Palette' option, and you will be able to change the colours llook in the manual for details) to something just a little bit more readable! AA

## DOS UPDATE

Last month, AA featured the ultimate guide to disk operating systems. Well, almost: since then, we've heard of major improvements to the two top-rated DOSses, so we thought a brief second look was in order.

ROMDOS XL. The soupedup version of ROMDOS from Siren Software, has been completely debugged since the version we


The soffware may be extremely smart, thut I's's useless without a $3.5^{\prime \prime}$ disk drive.
reviewed. What's more, it can now automatically detect between formats in drive B. There is no longer any need to type IDOSOFF if you want to read data or CP/M format disks. This is great, because we reckoned this was the major minus point against the program. One smart new feature added to ROMDOS XL is a sector editor, like the DMON utility which we gave away on the covertape. If you play around with disks a lot, this is a great addition and unique amongst DOSses.
S-DOS This too, can now automatically sense what format the disk you have placed in the drive is. Unlike ROMDOS XL, though, it does this in both disk drives - great for ABBA switch owners or people with a $3.5^{\prime \prime}$ first disk drive (e.g. 464 Plus owners). It can also do this under both versions of CP/M (2.2 and Plus), a boon for all you 'A>' prompt junkies.

In addition, two more formats are supported by S.DOS: the first is a $3^{\prime}$ disk format which gives you an extra 27 K per disk - the same format as printed in an AA type-in (Ultraform) a while ago, except that S.DOS detects it automatically, For $3.5^{\circ}$ disks, format 5 from MS800 (the most popular MS800 format is included: if you have a collection of MS800
disks, this makes SDOS an ideal upgrade.
After last month's roundup, ROMDOS XL and SDOS were way in front of the competition: these improvements have pushed them further ahead. For devotees of the original ROMDOS, the improvements make the new version a very tempting proposition: if you have a large stack of ROMDOS disks, and want the convenience of built-in utilities, such as the rather spanky new sector editor, it's definitely recommended. To access 800 K per disk without using a side switch, there is no other choice.

SDOS narrowly retains the gold, though: it lets you use large formats in drive $A$, it's as happy under CP/M Plus as AMSDOS, the utilities are generally more powerful, and it's compatible with more programs. It's a closenun contest, but S.DOS is still the front-runner amongst DOSses.

## ROMDOS XL 87\%

$£ 19.99$ (ROM), $£ 29.99$ (cartridge)
Siren Software, (061) 7247572
S-DOS 89\%
$£ 12.95$ (ROM)
STS Software, (081) 3173536


ALL PRICES INCLUDE VAT - FREE OVERNIGHT COURIER DELIVERY IN THE UK MAINLAND

## SILICA SYSTEMS OFFER YOU

$\qquad$
$\qquad$
$\qquad$ wi nave cofing to wory about We have boen establahed for almost 14 years and with our inivaled
expenence and expertise, we can now ciam to meet cut cuitomors' requimments with an inderstanding ©... MAIL ORDER HOTLINE $081-30911111$

## MAIL ORDEA

## LONDON SHOF

LONDON SHOP
SIDCUP SHOP
ESSEX SHOP

PIEASE SEND A BROCHURE ON THE ST RANGE

## MeMrs/Miss/Ms: Initials:

## Company Name (if applicablo)

[^2]
## For this month <br> onlyl Cet a subscription and save 251

 Get a year's subscription to AA for the old price of $£ 29.95$. From next month it will cost $£ 34,95$
## 푸부․․․


vulhen you subscribe (or resubscribel)

Free

of your favouriite magazilne, every month

## 

## All subscrilbers

 automatically get a monthly Sulbs Club mewrsletter
## PLUUS you get

 complete INFFLATION PPROTECTION for a year AND youGUARARNTEE mever missing a copy of Amstirad Action!

Yes! Please enter/renew my subscription to Amstrad Action at the all inclusive price of wamma 12 ISSUES

$\square$ UK e29.95.<br>$\square$ EUROPE $£ 47.25 \square$ REST OF WORLD $\quad \mathbf{6 3 . 1 0}$<br>To ensure you recelve your magazine and tape quickly and undamaged, all overseas subscriptions are sent Air Mall

If you are an existing subscriber please quote your subscription reference number here - you will find this on your address label $\qquad$ MY NETMOD OF PAYMENT IS HOY TOKOHICE TOTAL PAYMENT E

| $\square$ access anno $\square$$\square$$\square$$\square$ as $\square$Offolf Make parabe to future Prosting to |
| :---: |
|  |  |

NAME SIGMATURE

ADDRESS


## FREE

when you subscribe, the Cheat Mode II book!

- POKKE games for extra lives, energy, tirme etc
- CNEAT your way through dozens of classic Amstrad games

E EXPPLORE uncharted gaming territory with specially drawn game maps

First released three years ago, this book contains countless hints, chearts, tips, polkes and solurtions for huncireds of CPC games.

Originally costing e9.99, this book is now availlable FRREE to sulbscribers:

Complete the coupon and return it today. Alternatively, call our Credit Card Hotiline on 045874011

## YOUR

 NO-QUIBBBLE, MO-RRISEKGUARANTEE
You can cancel your subscription at any time in the furture and wue wwill refund you in full for all unmailed issues.
You just can't lose out!

- the magazine that brings you


## ALE THIHS!

- A superb covertape

Packeel with soffinare incluclings complete games, demos of newn releases, serious urtilities, readers programs and game cheats

## - Top game revieuvs

We don't just give you an opinion, wre give you FACTS - plus maps, annotated diagrams, tips and more info than you'll get anywhere else

## - Budget games latest

Many top games are nowy being re-released at bouciget prices. We maike sure you don't miss any

## - Game cheats

Stuck in a game? Every month wee primt pages of tips, hints, help, cheats, passwordis, maps and solurtions sent in by our readers

## - The latest news

New products, game previewns, inchustry
interviews, reader opinions and showr news

## - Technnicall help

Pages and pages of help, tips and info for those who want to do more than just play games... plus reviewrs of all the latest serious products

## - Top features

On musific, clesktop publishing. games, art and more - all the bacikground you need to getting the very best from your CPC

## - BASIC programmmining

Learn hown to use your machine's built-in pro gramming system to wrrite your owun programs AMD see what our readers can clo in our Type-ins section
..-and there's much, much more!
HF YOUVE GOT A CPC OR A PLUS, GET AMMSTRAD ACTION!


## Sold out! Issues 1-54, 56-65 © Still available! Issues 55, 66, 68, 71-81



Issue 82; On the tapel PowerPage and playable Lemmings demo. Inside: reviews of Lemmings and The Addams Family. Plus' Buyers' Guide to art packages.


Issue 86; Feature on Aternative's kid's TV licences plus review of the Picasso art package. On the tape - Glider Rider (full game), MDI demo and three utitites.


Issue 83; A packed tape with Tetris game, music composer and a full game Defenders Of The Earth. Inside: CPC bargains in France!


Issue 87; Inside - the complete history od Dizzy and review of the Amstrad NC100 notepad. Andl Football Manager 3 reviewed. Full game of Nexor on the tape.


Issue 84; On the tape: Famous Five, the complete game. Inside! Review of Hideous, Virtual Reality special, the best 3D CPC games and colour printing special.


Issue 88: Two complete games on the tape - Tankbusters and Penguins. Inside, Videomaster, Robin Hood: Legend Quest and Crystal Kingdom Dzzy reviewed.


Issue 85; A look at music-making on the Amstrad, a WMP interface and a PowerPage tutorial. On t'tape, two full games - On The Run and Link.


Issue 89; Inside - Buyers' Guide to disk drives, a look at CPC-stretching demos and Crazy Cars 3 reviewed. Plus! Wriggler and three great utilities on the covertape.


[^3]

0kay, hands up who's seen Robin Hood: Prince of Thieves? It's good, isn't it? Especially the bit where our Kevin swings through the buming trees and jumps on the baddies. That's all supposed to take place in Sherwood forest, the very same forest that you could be wandering around if you win this rather ace competition.
Simply by filling in that coupon at the bottom of the page, a family of four are in with a winning chance to be taken on a guided tour of Nottingham, taking in the castle, the museums, the rather nice shops and the Tales of Robin Hood. The latter is a sort of interactive exhibition with all the smells, sights and sounds of mediaeval England. But that's not all! You'll also spend the weekend in one of Nottingham's many fine hotels, with breakfast and dinner thrown in. (Well, maybe more 'served' than thrown', actually! And! You'll be taken around Sherwood forest itself. As an extra special treat you may get to meet the Sherrif of Nottingham. We can't promise anything cos he goes away a lot, but it he's in town we're sure hell be dying to meet you! You don't go away empty handed either, the City of Nottingham also mentioned some free gifts. Yum!
As runners-up prizes, we've got five copies of the Codies' Robin Hood: Legend Quest. A very smart prize indeed

## The Rivalles

* Employees of Future Publishing, CodeMasters and The City of Nottingham Council are barred from entering this compo.
$\star$ All entries must be received by the first of April, 1993. Any entries that reach us after that date will, I'm afraid, be chucked in the bin. (That's after we take the stamps off for charidee.)
* Multiple entries are very naughty and not allowed.
$\star$ The Editor's word is absolutely final.

Sherwood Forest - home of outlaws and also the place where Robin and Marian were married.

To be in with a chance of winning this fabulous family weekend away, all you have to do is answer the following question...
$\star$ Which of the following is one of Nottingham's main roads?
a) Friar Tuck Avenue
b) Maid Marian Way
c) Robin Hood Place

Write the answer on the coupon, stick it on to the back of a postcard or envelope and send it off to 7 m With The Bloke In The Green Jerkin", Compo Amstrad Action, 29 Monmouth Street, Bath, Avon BAI 2DL. All entries must be on the Ed's desk by the first of April, 1993.


Everywhere in
Nottingham, you'll find
reminders of Robin Mood.

## Rolbin Hood Compo

To: I'm With The Bloke In The Green Jerkin, Competitions, Amstrad Action, 29 Monmouth Street, Bath, Avon BA1 2DL
The answer is



# TIM BLACKBOND wants it to 

 be known that he lives in Barnsley and eats coal. We don't believe him, but here's his PD news anyway...
## Adder

## By Simon Walker

## Available from PD Fun

This is a simple game based on the concept of an ever-growing snake. Hands up those who have heard of it before! The object of this game is to


## Loose Talk

## Amsof PD address presumed missing...

It's all very well to give a new library a huge plugging, but it all becomes so very, very pointless when the address is left out. (Hear. hear! Ed) This wasexactly what happened in the case of Amsof PD last month. Just to set the record straight, here is that elusive address: * Derek Hyland, Lyssanly, Cloyne, Middleton, Ireland

## Amstrad Users Unite

Apparently, the United Amstrad User Group has been running for several years, yet has been constantly ignored by that get who runs the $A A$ Public Domain column. Im sorry. Anyway, past offences aside, for a paltry $\$ 8$ per year you get full membership including a bimonthly fanzine, free Public Domain and a smashing postalbook
guide your snake around a screen (avoiding the walls), eating the snakey staplediet - numbers! Each number appears on the screen one at a time and slowly counts down until it reaches zero when... it disappears. If you get to it fast enough, the appropriate number of segments will be added to your body. It starts off easy enough for a two year old to play it, but as you get better the game gets harder as it's difficult to move around with your back legs three miles away. (But snakes haven't got legs. Ed)
The graphics are simple, but then aren't all really lasting games simple in the visual department? Doubtless, this will keep you going for many moons to come.
78\%

## Spring On A Thing By Frederick Nordakke

Not to be confused with the Gremlin game of almost the same name (Thing On A Spring), Spring is another one of those simple concept games to while away Sunday afternoons.
Spring has to get to the top of various mult-platform screens by leaping through the gaps that randomly appear on each row. The gaps wait for a few seconds before being replaced by

another hole somewhere else along the line. Sometimes it's possible to accidentally fall down a hole, in which case you'll have to climb back up again and waste valuable and limited time. Death awaits all those springs that are unfortunate enough to drop to the bottom row, so you'll have to be quick if you're to succeed.

Once you've passed the first level, you're treated to more of the same - except that arrows shoot across random rows, giving you something else to worry about. And that's about it. Spring will bring an hour or so of pleasure for the aformentioned Sunday afternoon, but it gets too repetitive for long-term enjoyment. 57\%

## lending service. White for more information to: * UAUG, c/o Tony Baker, 26 Uplands Cresent, Fareham, Hampshire P016 7JY

## Alive and kicking updates

After the exclusive AA revew of Lee Rouane's fanzine, improvements have been made on the presentation front. Now, a font is used that actually has a lower case! The latest issue has no less than thirty six pages filled with cheats, reviews and even tape-to-disk information. All this for a mere £1.20. Write to:

* Lee Rouane, 3 Causeway House, Kelstedge, Chesterfield S45 ODW


## Zap T' Balls: the untold story

There are a hell of a lot of angry people on the continent, particularly EGS after the game Zap T' Balls has been freely distributed around Britain. Well, apparently it isn't public domain.

Far from it, in fact. The only public domain version of Zap T Balls is the one that only has five levels and comes with a preview of the Advanced Edition. This only leaves the problem of what is to be done with the many libranes that have it within their catalogues. The best advice would be to remove it, quickly...

## A short public announcement...

Artificial Intelligence issue eight was released iust before Christmas 1992 and as a consequence of the usual poor postal service around this time of year, 1 have received a few letters from people saying that they have not received a copy. II you have ordered, yet still not seen issue eight of AI, please write and tell me at:
$\star 19$ Lee Street, Liversedge, West Yorkshire WF15 6DZ
You'l get a replacement copy andril know who's just trying to get a free one.

## PUBLIC DOMAIN

## The mailbag

As the number of letters has dramatically picked up, I can't guarantee a personal answer, so don't waste a stamp by putting a sae in the envelope. Sorry an' all, but what can you do? Letters than cannot be answered in AA will almost certainly be in Artificial Intelligence!

## NOWHERE TO ROAM

After reading a few issues of $A A$, various PD items have appealed to me. My problem is that I don't have the distributors' addresses. I would be grateful if you could send me some addresses, in particularly that of Robot PD as Power Tetris looked really radical, Could you possibly tell me how much Power Tetris is?

## Gregory Birchall

Coventry
No addresses printed last month! See what lack of space does to a man (lobby your MP for more PD pages nowl!, If you'll care to look elsewhere about this page, you'll find a number of addresses that will come in useful. Robot PD is temporanly closed for reorganisation, so orders will be ignored untilhe can clear the backrog. The price of Power Tetris varies from fibrany to librany. The cheapest library in Britian is Sheepsoft at a AA

## CUE VIOLINS, CUE SIMON BATES AND GET THE HANKIES!

I have been a subscriber to AA since issue one and was very pleased when a PD spot started. However, since then I have encountered nothing but problems. I do realise that these things are not out to make a profit, but I do not mind paying more for a better service.

I spied the Print Enhancer review and sent two disks to Presto at thier new Neath address (which, I believe, has moved again). I got no answer. Also, I sent a letter to Dartsma asking for some of their clip art. I enclosed a sae and got no reply.
I think that all the PD libraries that are plugged in AA should carry some kind of guarrantee that they will return orders, instead of just leaving readers without their disks.

## Dave Wilkins

Northampton
Actually, I'm the one who has to take the blame for the Presto delay. I was meant to send Matt Gullam a copy of Print Enhancer, but due to a sudden barrage of other things, his copy was delayed. You were not the only one to be kept waiting - 1 am sorry.

I must say that in principle, I agree with you - PD librarians should send disks back as soon as possible. But remember that it is simply no more than a hobby to most, seeing as no
money is made. AA

## WATER, WATER EVERYWHERE!

I am a boating enthusiast (when I can get away from my 6128!) and would like to get hold of a navigation program similar to PC Wayplanner. Does such a package exist for my machine? John Haas
Essex

I have no knowledge of a boating navigation program on the CPC whatsoever, especially public domain' If anybody else does, feel free to tell me about it. AA

## Postbox

For those of you who are interested in getting hold of more PD, here a few addresses to write off to. Pli have more for you next month, but I seem to have run out of room already!

ADVENTURE PD Debby Howard, 10 Overton Road, Abbey Wood, London SE2 9SD DARTSMA PD Adam Shade, 47 Kidd Place, Chariton, London SE7 8 HF<br>DEMON PD David Long, 47 Hillton Avenue, Birmingham B28 OPE<br>DOMAIN PD Graeme Chesser, 44 Echline Grove, S Queensferry EH30 9RU G.D. PD Dave \& Ged Lawson, 49 Woodvilie, Barnstaple, N Devon EX 312 HL . WORLD PD E Willims, 111 Riverside Road Orewa, New Zealand

## Fanzine review extra!

If you run a fanzine, no doubt it could do with a good plugging, especially if it wasn't mentioned in the last fanzine round-up in Amstrad Action. Send me a copy and I'll return a sparkly copy of AI for your troubles and a review. You can't say fairer than that!

## Eurostrad

Editor: La Redaction $\boldsymbol{m}$ Issue Two: $£ 1$ ■ UK:
Malcolm Smith, 2 Baily Place, Moray,
Scotland IV31 6RW $\quad$ - France: Thomas
Fournerie, La Hemeliniere, 50450 Hambye

- Espana: Manuel Laorden Mas, Valldemosa


## 64, Entlo 2, 08016 Barcelona

Eurostrad claims to be the first European fanzine for the Amstrad CPC. Well, that's what it says on the cover so it must be true. It's a twelve-page A4 fanzine, bound together with one staple in the top-lefthand corner of the page and is written in no less than three languages, these being English, French and Spanish. There should be no disappointments here as Ill bet every reader has a firm grasp on at least one of these dialects.

So what's actually in the mag, then? Firstly, there's a British fanzine round-up of which some rag with the name Artificial Intelligence comes out on top of three others with a spanking nine point five out of ten! I think PIII be buying a copy of that fanzine very soon indeed! (That's enough Al. Ed) Quite a lot of it is actually in English, and there's a round up of several British PD libraries, as well as a brief look at French fanzines and a short article on piracy in the United Kingdom.

Unfortunately, no matter how interested you are on the subject, you'll be none the wiser if you can't speak French.

The presentation is good, although in some areas a font is used that is both small and completely upper case. True, if you want a fullEnglish read, this may not be the one for you but is still a very interesting read. It even has a Smurf on the cover!
78\%

## Amstrad Express

Editor: Salman Sandhu Im Issue One: 50 p + disk $\#$ Salman A Sandhu, 17 Cromer Road, London SW17 9JN
Take a look at any French or German disk-fanzine and you'll be astounded at the amazing mix of both graphics and music. Now, stop that and move to Britian. Firstly we have CPC Domain which, and let's be fair, is an example of what not to do with a disk fanzine. Amstrad Express, I'm sorry to say, takes this concept one step further.

The entire magazine spans two sides of a disk. The contents are little more than uncompressed screen files (some of which are ripped straight from computer games) and ASCII text files, bound together with a simple menu system. Oh well, the presentation would have anybody vomiting in loathing and disgust, but it's the content that counts. Isn't it?
Unfortunately, this bit's pretty much the same. There's also some POKEs and keypress cheats (the TMH Turtles POKE Pm sure used to be in AA) and an adverts section which is a collection of
badly drawn screens for WAVE.
There is a good point to the magazine, and you'll be glad to know it's a great one: The Special Offers section. This includes a wide range of software and hardware going at low prices. For example, a GX4000 can be snapped up for $£ 25$.
I suppose for 50 p and a disk, it isn't too much to ask but when the ASCll reader system does little more than list a file, you might as well import the text into PowerPage 128 or a lesseffective DTP.
25\%





## TROJAN PHAZER GUN FOR GX4000/464+/6128+ (RRP £34.99) OUR PRICE £29.99



Phazer Gun plugs straight into analogue port (next to joystick port). Comes complete with SKEET SHOOT CARTRIDGE.


ENFORCER CARTRIDGE. Your job is to gun down the bad guys as they pop
up, but not civilians. gun down the bad guys as they pop
up, but not civilians. PRICE £14.99

SKEET SHOOT consists of 6 levels, each broken up into two normal rounds and one bonus round. See games review in Amstrad Action - Feb '93

## AMSTRAD GAME CARTRIDGES FOR 6128+/464+/GX4000

TITLE
Klax
Pro Tennis Tour
Batman
Operation Thunderbolt
Barbarian II
Navy Seals Robocop II.
Pang
Switch Blade No Exit

## BOXED WITH INSTRUCTIONS

824.99
£24.99
$\$ 24.99$
. 24.99
$£ 24.99$
$£ 24.99$
. 24.99
\&24.99
£24.99
.24 .99

UNBOXED NO
instructions
.814 .99
. .14 .99
.814 .99
$£ 14.99$
814.99
814.99
814.99
\&14.99
$£ 14.99$
.814 .99

* Special offers: 10 Unboxed games (all different) 8100.00 *

Amstrad GX4000 Games Consoles
with free game 859.99
Amstrad Paddle Controller 88.99
Burnin' Rubber + Locomotive Basic Cartridge 819.99

## AMSTRAD 464 AND 6128 - GENERAL

Amstrad MP3 Modulator/TV Tuner, for use with
Amstrad 464 Light Gun \& Games Cassette
329.99 819.99

Amstrad 6128 Light Gun \& Games Disk $£ 19.99$
Amstrad CT1 Clock Radio. 814.99

Amstrad CPC464 Cassette Mechanism with
tape head and motor.
829.99

Amstrad 464 Head Alignment Tapes
Tape Head Demagnetizer

## Prices include VAT, postage and packing

|  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |
|  |  |  |  | All printers listed below ore suitoblo for use with AMSTRAD CPC, ATARI ST, COMMODORE AMIGA, IBM PC \& COMPATBLES <br> When ordering please stoto computor |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  | STRATEGY/SIMULATION | ACCESSORIES |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
| ARCADE |  |  |  | 5 |
|  |  |  |  |  |  |
|  |  | - Above require RGB inpat <br> Conste lead (with REM Conn) | RINTER RIBBONS |  |
|  |  | $\text { Dak Drive Cleaner } 3^{*}$$559$ |  | Torget Moths 6.13 $\qquad$ \$12.95 |
|  | War Games |  | Beter Matas 12.10 $\qquad$ $18.95 \quad 12.95$ | Quantiy: 180205 |
|  |  | Disk Drive Cleaner 3" © 595 <br> Genivi Mowte \& Adr At $\qquad$ $\$ 49.95$ | Biober 112160 crer |  |
| Mony fytion- $\quad$ - 811.95 | Avolonhe tay WW21 510.95 E11.95 |  |  |  |
|  |  R.T.Smith Compendium Ancient Botios + Amhem + Wicarl | MP3 + P/S Ior CIM 040 Monitor..... 839.95 MP3 TV Toner for 404./6128. $\quad$ C39.95MP3 TV Tuner for CTMO44 Mono .... $\$ 32.95$ <br>  Printer Coble 404+/612+2Mrr \&V:95 | French Mitues 11. cis95 |  |
| Rodlond - 12.95 |  |  | German Mover 11* .... 815.95 |  |
|  |  |  |  | STAR IC200 Mono $\$ 4.95$ - 59.50 Stor IC200 Colout. $£ 9.95$ £18.95 |
|  | BUSINESS/UTILITIES |  | $\text { Five on Treaviere lilond } 69.50 \text {. } 51195$ |  |
|  |  |  |  | Other printer ribbons please phone |
|  |  | Joysticks |  | RIBBON REINK.BUDGET CASSETTES ¢ 3.75 EACH |
| Thus fefox r950 $\quad 812.95$ |  |  |  |  |
| Wwfwereme 510.95 ¢1295 |  |  |  | Chockie fog <br> Conlinatal Cirous <br> Chuclop Egg II Dizay Yolk Folk |
| SPE |  |  | FACTFIL SERIES FOR ANS BACK JNR QUIZ |  |
| Myitcol - | Mini Oifice 1.... 812.95 ¢10.95 |  |  | Dovible Dropon il Enlyn Highes Socce |
| 56 | Money Manoger (+FCW) -- |  |  | H15 Smina Eogle |
| - |  | POWERPLAY Terminose - $\quad$ C14.95 |  | Flimbo'r Quest Gradtip |
| Oifshoe Worior $\quad 10.90$ | Protent $816.95-81.95$ | quickstor fyton 1, 810.8 |  | fizanic <br> Sient Service Terainotor II Torto Jotolie |
| Wid Streenh - - - | Mroype Print Enhoncer)-- | Quickstor Pribon Micoswith ¢11,95 |  |  |
| PMU Comidor |  |  |  |  |



This month, live from Bath, we have four type-ins. If yours are half as good then send them to Type-ins, Amstrad Action, Beauford Court, $\mathbf{3 0}$ Monmouth Street, Bath, Avon BA1 2BW. If your routine is up their with the best, you could earn yourself twenty pounds!

## ESTI-DIY

EST-DIY by A J Bishop of Daventry, Northants, enables committed DIYers to work out, accurately, the amount of materials they'll need to complete a job. The program is menu-driven and, by prompting for the areas involved, computes the number of bricks or what have you necessary for a project with dazzling speed and accuracy. Interesting, and very useful.

FAPG 5-REK - . BY T. . BISHOP....
BAKP $10 \cdot$ HODE -1
FALC 20-REK-esti-d.i.y.
BAFG 30 .CLS
IADA 48-LOCATE 15,3 :PRINT - "ESTI •D.I. Y" IANM 50-LOCAIE-15,9:PRINT, "A . . BRICKHORK" IAGA 60-LOCATE-15, 12:PRINT *B . . CDRENT" IACK 70 -LOCATE-15,15:PRINT. *C. . .CONCRETE* IAKP Be-LOCATE-15, 18:PRINT, "D . . HALLPAPER"

GAGJ 90-As=INKEYS:IF •as=n" THEN 90
IAKA $100 \cdot$ IF $\cdot A 5=" A^{*} \cdot O R \cdot A \xi=" a^{\circ} \cdot T H E N \cdot G 010 \cdot 140$



BARS 148 .CLS
GADO 150 -PRINT-TAB (15) "BRICKHORK*
 METRES"; br
 NETRES";bri
EAKH $180 \cdot \mathrm{bric}=(\mathrm{br} * 4.5$ )
GANK 190 -brick=CINT(bri*13.3)
IACK 200 -bricks=bric*brick/100*105
NAJP 210-LOCAIE-4, 12:PRINT *BRICKS $225 \times 113 \times 75$ -ALL-SIZES-IN-HM"
PABO 228-LOCATE-4,15:PRINI **BRICKS-REQuIRED. . .CINT(bricks)
MABG 230-LOCAIE-4, 24:PRINT - *RETURN- T0-MAIN- NE $\mathrm{NO} \cdot \mathrm{P} \cdot(\mathrm{Y} / \mathrm{N}){ }^{*}$

GAAN 240-AS=TNKEYS:IF-AS=*", THEN-240
 E.END.

BAKJ 258.CLS
GANN 27e-PRINT-TAB(15) *CERENT-1:4*
LADC 275-LOCAIE-4,6:INPUT **No.OF,BRICKS"; bric ks
GAIL 238 -cenent=bricks/258
FAKM 300 -sand $=$ cenent***. 2
OREA 318 -LOCAIE-4,12:PRINI. *SAND-REE-IN-CUBIC -NETRES." ; : sand
PAGE 32B-LOCATE-4,15:PRINT * "CERENT-REQ-BAGS. . ......."CINT(cenent)
CAEK $330 \cdot 6010 \cdot 230$
BANJ 348 .CLS
HALC 350-PRINT-TAB(15) *CONCREIE-1:6"
KALM 360.LOCAIE-4,6:INPUT "LDNGTH-IN-KETRES"; co
KALP 378-LOCATE-4,9:INPUT, "UIDTH-IN-METRES"; 0 on

## Telephone Directory

E2O
WINTERAlasdair Gillies's program Telephone Directory is a basic (2K) but very usable repository for the telephone numbers of all your friends and relations. The program prompts for a name and, when you've entered it, fires the telephone number associated with that person right back at you. Phone numbers must be entered as data statements while you're typing in the program - although an input routine could easily be added to smooth the whole operation. All instructions necessary are contained within the program. Alasdair hails from Ardrossan, Ayshire and has just made twenty quid!

## CAKB 5. INK-1,24

CARG 6.DORDER. 6
KACK 10.DIM-NAKEt(20),Nt(20),T8(20), wis (3),N2 t(20), 12t(20)
BANP $20 \cdot \mathrm{HODE}$. z
ABAN $30 \cdot$ LOCATE-25,1:PRINT"**-TELEPHONE•DIRECT ORY-BY-ALASDAIR-GILLIES*"
 PROGRAKく"
NABD 50 -LOCATE-25, 3:PRINT"PLEASE-ENTER-NANE"; :INPUT-NAKEI
EAMK 60-IF-NAME\&:" "THEN-20
FAND 70•IF-NAKEt="?", THEN $\cdot 300$

GAND 80-IF-NANES="LIST",THEN. 500
IaML se-pRINT:PRINT:PRINT;"SEARCHING"
CAFN 100 RESTORE
DALE $110 \cdot \mathrm{FOR} \cdot \mathrm{N}=1 \cdot \mathrm{TO} \cdot 30$
DAFA 120 -READ-NS, If
GACL $130 \cdot$ IF - NS $=$ NAME $\cdot$ • THEN - $6070 \cdot 250$

CADC 150 -NEXT $\cdot \mathrm{N}$
 MEER•IS-NOT"
LAKX 170.PRINT:PRINT-INCLUDED.IN-THIS.DIRECTO RY."
ABKI 200-LOCATE-25,15:PRINT-"D0-YOU-REQUIRE-A NOTHER -NUMBER":INPUT• WWs.
 5W.6070-20
 -THEN. $6070 \cdot 300$
KAPD 250•PRINT-NANE\$;"'S•NUNBER•IS•";15:G0TO. 200
BAFJ $300 \cdot \mathrm{CLS}$
CANM 310-INK. $1,26,6$

 -IN•A•PRESSURE COOKER -WNTIL•IT•EXPLODES!

EABF 321-FOR•Q $\mathbf{1 0 0} \cdot \mathbf{1 0} \cdot 200$
DALG 322-SOUND.1, 0,1

CAIG 323-NEXT-Q
DAIM 324-FOR $0=1 \cdot 10 \cdot 60$
Gant 325-SOIND-1,RND (100), $1,15,0,0,31$
CALG 326 -NEXT-0
CAFX 330 -6070-321
FADG 500 -CLEAR:RESTORE-S000
LAAK SIO.CLS:PRINT.TAB - (4) ***-TELEPMONE.DIREC TORY.***
DAAM $520 \cdot \mathrm{FOR} \cdot \mathrm{N}=1 \cdot 10 \cdot 30$
FMOP $530 \cdot$ IF $\cdot \mathrm{N}=15 \cdot \mathrm{THEN} \cdot \mathrm{COSUB} \cdot 700$
DAFG S40-READ -N2t, T2S


CANG 570 -NEXT. N
IBCD 603-PRINT:PRINT:PRINT:PRIMT-MO-WORE-NUYB

CADK 610.6070-210
ABNI TOQ-PRINT:PRINT:PRINT:PRINT:HMNT•T0.CONT INUE.LIST;:INPUT-WI
 N-RETUBW
CAEM 720.6070-20



Anyone who's been an Amstrad owner for some time will know that it's often difficult to keep track of the thousands of programs tucked away on disk and tape. Commercial titles, games and utilities typed in from Amstrad Action and other sources, public domain downloads - they all have to be stored somewhere and catalogued. And it's for the latter operation that ProgLib was created. Written by Chris Godrrey of Basingstoke, Hants, ProgLib is a menu-driven database which stores detals and whereabouts of all your programs so that, to find one, all you have to do is enter its name and the computer coughs up the relevant info. A print routine means you can get a hard copy listing of your software at any time.

JAPK 10-DIM-nanel (1000) :DIH-authors (1000) . .
IAKA 20-MODE-2:BORDER-8:TNK - $1,26:$ INK $\cdot 0,8$
JABH 30.PRINT" ...............................PROGRA
M. Library"

IALA 40 -PRINT".
-........."
FAAK 50 -PRINI:PRINI:PRINT
GAIO 60-PRINT" $1 . .$. . ERTER -LIST" . . . .
FAMC $70 \cdot$ PRTNT"2.....LIST" $\ldots$.
LAMI 80 .PRINT"3 . . . .BYE."
FAPP 90 .PRINT*4 . . . . SAUE-LIST*
GASB 100-PRINT"5 . . . .LDAD-LIST"
GACG 110 -PRINT" 6 . . . . CLEAR-LIST"
GAIG 122 -PRINT" $\ldots$. . . PRDHI-LISI
KAII 130 -INPUI"Mhat-do- you choose" ins

LAKN 380 -LOCATE $\cdot 4,12$ :PRINT "ONE $\cdot$ INCH $=0,8,825$. OF - $A$ - METRE"
HAJL 39日-LOCAIE-4,15:INPUT. *THICKNESS.IN-NEIE RS"; conc
HANP 400-concr:co*con*conc*0. 15
GAEE 410-concre=concr $* 5.6$
HAOB 420 .concret $=$ concre*5. 6
 "; concret
PALB 448 -LOCATE $\cdot 4$, 21 :PRINT. *BALLAST - IN. CUBIC METRES...."; concre
CAHK $458 \cdot 6010 \cdot 230$
BAKN 460 CLS
GACO $470 \cdot$ PRINI •TAB (15) "KALLPAPER"
LAKJ 480-LOCATE-4,6:INPUT " "HALL-DROP -IN-METRE $\mathrm{S}^{\mathrm{n}}$; wd
 N-METRES"; dr
EAOA 500 -pap $=u d * d r$
EAOD 510 -pape=pap/5
MARJ 528-LOCATE-4,12:PRINT"ROLLS•HALLPAPER•RE $Q^{*}$;pape
CAGK 538 -6010. 238

## Proglib - which disk?

JALE $140 \cdot$ ON $\cdot$ AS $\cdot \operatorname{COSUB} \cdot 180,280,370,450,539,610$, 668 KABE 150-LOCATE-7,25:PRINI"Press-any key" GAKO 160-IF TNKEY $=$ " " , THEN-GOTO-160
CADH 178-6010-20
LONI 180-MODE-2:PRINI",
. ........... ENTER-NAMES"

## IANK 190.PRINT" ....

FANM 200-PRINT:PRINT:PRINT
EAEH $210 \cdot F O R \cdot x=1 \cdot 10 \cdot 10000$
MAII 220-INPUI" Nane of Game/Progran" ${ }^{\text {/ NAKE }}$ (X ).....
MAIK 230.INPUI" Nane of Publisher ${ }^{\text { }}$;author ( $(x)$ HAED 240-IF-NANE $(X)==1$-THEN $\cdot 6010 \cdot 260$
BAGP 258-NEXI
HARL 260 -PRINT" Ho-nore• input."
CANJ 279-RETURN
LAME 289 -HODE $\cdot 2$ :PRINT". $\qquad$
. . . . . . . . . . LIST-NAMES*
IABI 290-PRIMT" $\qquad$
FAOM 380-PRINT:PRINT:PRINT
EAFC $318 \cdot$ FOR $\cdot X=1 \cdot T 0 \cdot 1600$
HADD $328 \cdot$ IF -NAKEt $(X)=$ "* $\cdot$ THEN $\cdot$ GOT0- 350
 UTHORS $(x) \ldots$.
BACP 348 -NEXI
IAEE 350 -PRIMT:PRINT" LIST-FIMISHED, "
CAJJ 360 RETURN
LAAB 370-PRINI:INPUI -"Are-gou-sure•(Y/W) " ";at
IAPB 368-IF UPPERs $(a 5)={ }^{*} \mathrm{~N}^{*}$ - THEN $\cdot$ G070-440
 380
JAKA 400 -PRIMT:PRINT"Bye then. ":CLEAR
GANS 410 -PRINT"press-a-key"
FAPI 420 , IF, INKEY $=* *$, THEN 420
BABK 430 - NEH
CAIJ 440 -RETUR
C3PE 450-PRINT:PRIMT:PRINT $r$-Insert-tape/disc.

## Alpha Scroll

You've all seen those funky scroling messages on computer screens in shop windows, estate and travel agents, railway stations and the like which display on an endless sideways scrolling loop information and advertising, right? Well now you too can create scrolling messages.
Manchester boy David Hall's Alpha Scroll reads a previously saved text file (or enables you to enter one and save it) which it then scrolls smoothly right to left across the CPC's screen. Fun for all the family!

JAJM 10, '***•RLPHA SCROLL *** •••By David - Hall JAAD 20.' (C) - Mar - 1998 . . . . . . . . and - Andy - Hall AAKK 30 .'
XAPA 40,1, ........Anstrad-CPC-version.-.....

AANK 60.1
FAHM 70.IF HIMEN $=9999 \cdot$ IHEN $\cdot 100$
EAEH 80 -SYMBOL-AFIER-31
DAGG 30-MEMORY-9999
CAPD 100-INK.0,0
then press a akey"
FACG 460.OPENOUI"data". ....
EANE $470 \cdot F O R \cdot x=1 \cdot 70 \cdot 1808$
JAJA 480 RRIIEAS, nane $(x)$, author $\$(x)$
BAMP 498 -NEXI
DADC 500 -CLOSEOUI
GAEF 510 -PRINT"data-saved"
CAHS 520-RETURN
CBOK 530-PRINT:PRINT:PRINT*-Insert-tape/disc.
then -press-a key" . .
EAAM 548-OPENIN"data"...
FALA $550 \cdot F O R \cdot x=1 \cdot 70 \cdot 1008 \cdot \ldots .$.
JANA 560-INPUTA9, nane $\$(x)$, author $\$(x)$
CALH 578 -NEXT...
CAKM 580-CLOSEIN
GACL $580 \cdot$ PRINI"data-loaded"
CAGJ 6Be-RETURN
JAGK 610-PRINT:TNPUT"-Are-you-sure ${ }^{*}$;at
IAJC 628-IF•UPPERS (as) $=$ " $\Psi^{n} \cdot$ IHEN-GOT0. 648

20
CABC 640.CLEAR
BAAL 650 -RUW
EANC $850 \cdot F O R \cdot X=1 \cdot 10 \cdot 1000$
HAKO $678 \cdot$ IF $\cdot$ AUTHORS $(X)=$ "n - THEN $\cdot$ COTO-780
JAJO 680-PRINTH, NAKES $(X)$ : 1 PRINTE8, AUTHORE $(X)$
BAOP 690 -NEXI
CAMS 700-RETURN


CAGH 118-INK-1,14
CAKH 120.INX-2,16
CAHE 130 -INK-3,2
CAIE 148-INK 4,1
CAME 150-INK-5,3
CAAF 160 -INK 5,6
CACI 178.INK-6, 15
CAFI 180-INK-7,16
CAII 190-INK-8,26
CAAM $2 B 0$-BORDER-B
EAOA 210 -store $=18000$
FABG $220 \cdot$ FOR-100p $1=1 \cdot 10 \cdot 46$
CAH月 230 - sum $=8$
GABA $240 \cdot$ READ-codes, total
HAPA 250-FOR-100p2=1-10-24-STEP-2
KAPF 260-value=UAL( ${ }^{2} \mathrm{~d}^{*}+$ MIDs (codef, loop 2,2 ) )
GAOH 270 -POKE-store, value
FAJO 280 -sun=suntvalue
FAOK 290-store=store+1
DAOP 300 -NEXI - loop?
HAPB 310 - IF'sun=total $\cdot$ THEN -348
LAPC 320-PRINT-*Error-in-line-*;1120+100p1*10 BANI 330 -DKD
EABA 348-NEXI•loop1

CAOC 356 ．MODE 1
BAPO 360 －PEN -3
HAGG 379 PPRINT＂ $\mathrm{B} \cdot \mathrm{L} \cdot \mathrm{P} \cdot \mathrm{H} \cdot \mathrm{A} \cdot \mathrm{C}$ S．C．R．R．O－L．L＂
CAIE 380 －PRINT
BABP 390 －PEN－2
MABI $400 \cdot$－PRINT，＂Type nane of file－to lload－or＂
NAOI 410－PRINT，＂press－ENIER－to create－a－nessa ge＂
CADE 420．PRINT
BALO 430 PPEN－ 1
HAHE 440－LINE• INPUI＊＂）．．．，＂，Inanes
GAFC 450－IF－Inane $\$=\boldsymbol{*}=$ ．THEN $\cdot 480$
FAKE 460 －LDAD－Inane 5,12800
CACL $478 \cdot$ COTO． 950
BACX $488 \cdot x=1$
BAEK $490 \cdot y=1$
EACB 580 －store $=12000$
CAMC 510 ．MODE－2
BALO 520 －PEN－1
NAEO 530 －PRINT＊＊ALPHA－SCROLL by－David－Hall－－ Please，＂；
 FI $=\cdot 20000$ ．）＂
IABL 550．PRINT， $0,=z=:=:=z=z=\cdot(\mathrm{c}) \cdot \mathrm{Kar} \cdot 1990^{*}$
FAGL 560 ．PRINT．STRING（ 80, ＂＊＂$^{\text {（ }}$ ）
DAIF 570 ．LOCATE 1 ， 25
FADP 580 －PRINT－STRING $5\left(80,{ }^{*} *^{n}\right)$ ；
EANO 590－HINDOW－ $11,1,80,4,24$
EALC 680 LOCATE $/ 11, x, y$
EAOH 610 ．PRINT• 11 ，CHRE（143）
DACC 620－18＝INKEYs
EALH 630 －IF－ $\mathrm{itz}=$＂ C ．THEN． 600
GAKG $640 \cdot \mathrm{IF} \cdot \mathrm{is}$（ $)$ CHRE（127）－THEN． 690
EAAD 650－LOCAIE－ $11, x, y$
DANE 660．PRINT． H ，＂，＂
DAFO 670－SOUND．4，1000，2
CAHL 680. COTO． 888
FAGP $690 \cdot$ If $\cdot 15=$ CHRs $(16) \cdot$ THEN $\cdot 600$
 N－760
BaKJ 710．CLS
LARP 720．PRINI，＂Type－in filenane－to－SAUE or＂

LAAK $730 \cdot$ PRINI－＂press－ENIER to continue：：－＂；
GALF 740－LINE－INPUT，＂＊，snanes
CADL 750 －6070．950
GAEA 760－IF－ASC（is）） 188 －THEN－ 858
DAGL 770 －SOUND $-4,100,2$
GaNK $788 \cdot$ POKE－store，ASC（is）－31
FADL 798 －storesstore +1
EANC BOD－LOCATE $11, x, y$
DADH 810．PRINT． 11 ，is
CADE B20．$x=x+1$
GACK $830 \cdot \mathrm{IF} \cdot x=81 \cdot \mathrm{THEN} \cdot x=1 ; y=y+1$
HALL $840 \cdot$ IF $\cdot y=21 \cdot$ THEN $\cdot$ PRINT $\cdot 1: y=y-1$
DAKF 850－LOCAIE－71，1
FAKL 860 ．PRINT． 32800 －store
CAOK $870.6010 \cdot 680$
GAEF $880 \cdot$ IF $\cdot x=1 \cdot$ AND $\cdot y=1 \cdot \mathrm{THEN} \cdot 600$
CARE $890 \cdot x=x-1$
GAAK 980－IF $x=0 \cdot T H E N \cdot x=80: y=y-1$
FAFM 910－IF $\cdot y=0 \cdot$ THEN $\cdot y=1: x=1$
EAEJ 920 －POKE －store， 1
FABL 930 －storestore－1
CADL 940 －G010． 850
CADD 950 －KODE－ 8
JAJI 968－FOR－loop＝store－70－store＋22
EACC 970 －POKE－100p， 1
DAKN 980 －NEXI－ 100 P
EADJ 990－POKE－loop， 255
GaLH 1000．IF，snane $\$=$＂$"$ ，THEF 1020
JANJ 1010 －SAUE＇slane $\$, h, 12080$ ，store－ 11960
BAFM 1020．CLS
CAFH $1030 \cdot$ INK $-2,1$
BADP $1040 \cdot p=10$
FAMP 1050－FOR $\cdot t=1 \cdot 10 \cdot 640 \cdot 5$ TEP $\cdot 4$
NAIB 1068－PLOT t ， $398, \mathrm{p}$ ：DRANR $\cdot 0,-150$ ：MOUER $\cdot 0$ ，－ 188：DRAKR $\cdot 6,-180$
GALN $1070 \cdot p=p+1: I F \cdot p=16 \cdot$ THEN $\cdot p=10$
CAIC 1080 －NEXI
EAPF $1030 \cdot \mathrm{p}=10$ ：CALL 18000
HAKK $1100 \cdot$ INK $\cdot \mathrm{p}, 1$ ：CALL $-48 D 19 ;$ CALL－ 10096
IAON $1110 \cdot$ INK $\cdot p, 0 ; p=p+1: I F \cdot p=16 \cdot$ THEN $\cdot p=10$
CAPP $1128 \cdot 6010 \cdot 1180$
IAKL H39－DATA CD2827CD3B27CDBE27CD8D27，1398

## Fammous Five！

That＇s what we＇re offering：five minutes of glorious fame，and masses of cash（well，your name in print and twenty quid，anyway．．．）．So if youre a brill BASIC programmer writing code which knocks spots off anything published here－send it in！Your name in lights and big prize money is awaiting．Here＇s a few dos and don＇ts to help you on your way．．．
－DO include your name and address with your tape or disk．
O DO include a sae if you want material returned．
© DO write your application on the back of a fiver if you want to jump to the head of the queue．（O！Behave，Ed）
－DO include a written description of your program and details of its operation－on－disk doc files won＇t dol
－DONT include instructions saying＊．．here＇s my program Hot－Dots，the name speaks for


Get in Type－ins and win an island！
itself．．．．because it doesn＇t if you can＇t be bothered to describe what it does，I can＇t be bothered to load it up，okay？

IADI 1140 －DATA $\cdot$ CD6D27C921F47E368011F578， 1393

IACH 1160 －DATA－2E226D9DC30C28DD21De8486，1193
IAAB $1170 \cdot$ DATA－8BC5DDE52135281158880E20，927
IAFH $1180 \cdot$ DATA－66887EDD7780DD232310F7DD， 1255
IAKF $1198 \cdot$ DATA－190D20FODDE $1188800 D 19 C 1,1228$
HAFP 1200 －DATA－10DB21010022409CC91120C3，968
IANC $1210 \cdot$ DATA－2188980 28 C5D50150beEDBo， 1255
IAND L220．DATA－DIEB7CC688673804015CC609，1211
IAPJ $1230 \cdot$ DATA－EBCHLOESC9CLDE84EDSB4e9C， 1799
HAJO 1240 ．DATA－191188903E20015000EDBe日1，911
IAFA 1258 －DATA－8888033D28F411F47E218893，929
HAGO 1268 －DATA－OE1806501AFD802801772313，610
IAOG 1279 －DATA－10F60D20F1C93A499C3DE602， 1325
IAKD 1288－DATA－32489C2IF57E11547ED10005， 1067
IADJ $1230 \cdot$ DATA－EDBeal437FDD212D28eE88ED， 1238
IAOI $1300 \cdot$ DATA－5B6B9D1A473A6F9DheFE80ezB， 1232
HANO $1310 \cdot$ DAIA－03DD7EQeD511500806027719，812
IAHI 1320．DATA－10FCD113DD230DZOE23A6F9D， 1349
IAFI $1330 \cdot$ DATA－1F326F9DFEBCC03E80326F9D， 1303
IAAR $1340 \cdot$ DATA－2A6D9D23228D9D7EFEFF2097， 1317
IABE 1350－DATA－21E02EE26D9D7E11080021F4，1031
IALK 1368 －DATA－9F471910FD226B9DC9FO3CFC， 1575
IANF $1378 \cdot$ DATA－ －3FC3CFOFOCC883ез9303064， 1427

HAHL 1390 DATA 3 Зезезев


 HANJ 1438－DATA－800888日0040408888日004400，348 HAKI 1440 －DATA－ 080944008000080409008880,216







 HAEE 1530 －DATA－ －



 HAOS $1580 \cdot$ DATA－8C302939303030643009000e，432

## Imagination

Each month，we get a lot of Type－Ins．We get a lot of really good software．However，we also get a lot of stuff that really isn＇t worth printing．Why？ It＇s not because it＇s too long，too short，or badly programmed．The reason a lot of programs fail to get on these pages is a lack of imagination．

If you want to guarantee your program a place on the most coveted listings pages this side of Venus，theres one simple rule to stick to －make it original！We＇ve had thousands of file copiers，maths programs，graph drawers，etc． Why not try adding a twist？Why not take an old idea and give it a bit of life？Also，try sending in modifications to old Type－Ins．If we get enough we might try starting a regular feature of updates for popular programs．

Finally，don＇t worry about listings being to short．If your program does the job and is still incredibly short，so much the better．

## MWYY BASIC TUTORIAL PART 11

Last month we examined the password routine in detail and saw that, by combining BASIC constructs such as ON BREAK with simple string checking code we could work up an abeit minimal and rudimentary - form of password protection. Here it is for those who missed it:

5 REM This is a program to count the characters in a string 10 VALIDS = "valid" 15 ON BREAK GOSUB 500 20 FOR CNT $=1$ to 5
30 etc
500 REM This code checks for a valid code examination
510 CLS: LOCATE 15, 7
520 PRINT "ACCESS ATTEMPT - ENTER PASSWORD
530 LOCATE 20,10
540 INPUT "Enter password:": PASSS
550 IF PASSS $=$ "" THEN 540
560 IF ASC(PASSS) < $>$ ASCNALIDS) THEN CLS:LOCATE 15,15:PRINT "INVALID PASSWORD": NEW 570 RETURN

Of course, the password routine in this program doesn't actually stop anyone from running the code - ie by checking that they're valid users, all it does is stop unscrupulous persons from examining what took you hours, days or even weeks of hard work to produce. In other words, it helps to keep out unwanted program crackers, by deleting the code if the 'cracker' doesn't know the password.
BASIC isn't terribly good at providing suitable tools for protection. The password routine given here would probably insult the intelligence of anyone even half familiar with breaking into programs, but it does, at least, serve to illustrate a point. And when you become more


Oh wow! t's a CPC464+1 We've got one of these in the office, you know!
conversant with BASIC and the machine in general, you can write more effective protection routines in both BASIC and machine code (the latter offering the only real solution to effective copy and cracking control).
But what if you want to check user validity before allowing them to even use the program let alone examine its workings? Easy. Simply insert something like this new line 15:

5 REM This is a program to count the characters in a string
10 VALIDS $=$ "valid"
15 GOSUB 500
20 FOR CNT= 1 to 5
30 AS ="'
40 INPUT "Please type a string"; AS
50 etc
Now every time the program is run it will expect the user to hack in a valid password before allowing them to continue operation (and thereby do anything useful). This kind of checking is common on mult-user installations in offices and the like where even operating the computer is limited to the privileged few. If you want to check for valid operation and examination rights, use the ON BREAK GOSUB and the new line GOSUB 500, with slightly ammended (separate) routines and two different passwords.

5 REM This is a program to count the characters in a string

10 VALLDS = "valid": EXAMS="AUTHOR'
15 ON BREAK GOSUB 500
20 GOSUB 600
25 FOR CNT $=1$ to 5
30 AS ="
40 INPUT "Please type a string"; AS
50 etc
Here, two levels of password are in effect allowing operation of the program and containing unauthorised examination. You'll come across thrs kind of userinterrogation, known collectively as testing and branching, throughout your excursions into BASIC programming. It's a useful and does more than simply provide an answer to a computed equation. Look at the following

10 INPUI Would you tike to play a game":AS
20 IF $A S$ = "yes" THEN 100
30 PRINT "OK, bye for now"
40 END
100 inpur thich level, (H)ard or (E)asy",AS
etc

When the program is run it interrogates the user as to whether they'd like to play a game or not. If the answer is in the negative, then operation simply falls through to line $30-$ a simple goodbye type message, and the program ends. If however, the user wants to play, then operation is restarted from line 100 - the start of the program proper. Line 10 gets a user response, line 20 makes a decision based on that response.
You can also make use of ON GOTO and ON GOSUB when testing and branching by using it to enable the user to select from a range of options, and well look at that next month.
So, include plenty of interrogation in your programs - that way, youtl ensure the user is getting exactly what he or she wants from it, and always encode pieces of the program which will be used more than once as subroutines. Unique code can be included in the main part of your program, oft-used stuff as subroutines placed in order at the beginning or end. Try mult-iayer protection with one of your programs, and have fun until next month.

Speaking of next month, there'll be some slight changes to Typelns. The main difference is that itlil be hosted by Simon Forrester, the newie here at AA. Also, the tutorial section will be very different. Instead of the usual topics, he'll be dissecting a reader program each month, and taking you through the workings and uses of BASIC that way. There comes a point where you can learn nothing more by reading tutorials, and you've just got to dive straight in, and so that's what we're going to help you to do. Also, from now on, we'd like to see more assembly (machine code) listings in the mag. We ve had plenty of tutorials on the subject, so we won't be covering them in that sense, but there's no reason why you shouldn't send your assembly listings in.


And here's a cpC6128. Very useful Hy you want to use this prograntming column.



## For Sale

LISTINGS - lots of them on $3^{\prime \prime}$ disk. Mostly games or graphics, some from 1985, for $£ 3.00$ only. From Angela Allum, 22 Point Royal, Bracknell RG12 7 HH .
AMSTRAD CPC464+ with colour monitor. One year old, Mini Office 2, some games and manual. Offers around £260. Phone ( 060548 ) 5485 after 6 pm. AMSTRAD 6128 colour monitor, joystick, printer, tape deck, 85 games, £275 o.n.o. Tel: 081-460 7079 after 6 pm. AMSTRAD CPC6128 colour monitor, cassette player with lead. Also printer lead, lots of disks, tapes and books including Mini Office II, Pyradev and many games, £275 o.n.o. Phone Roger (0646) 684423 after 6 pm. SPECTOR 5: (STRATEGY) Buy weapons and armour to win all five sectors of an Alien Planet, and dominate the world. $1-2$ players. Homebrew. $\mathrm{E} 2.00+$ tape/disk. A Swinboume, 11 Vicarage View, Redditch, Worcs B97 4RF.
DDI DISK DRIVE plus interface and manual £50. ROM Board with RODOS, Protext, Pascal and 6128 ROM £40. Tel: Brian (0425) 477229 (Hampshire). DISK GAMES for sale, including Lemmings, Turrican, Hollywood and many more, Originals in boxes. Tel (0582) 606888.

AMSTRAD 6128 colour monitor, manual, magazines, Datacorder and all leads. Lightgun plus loads of games on disk and tape including some covertapes. £150, no offers. Call Paul 051-928 3207.

FOR SALE: Loads of games, tapes only. Titles include Continental Circus, Lotus Esprit, Target Reneage, Wonder Boy, Out Run, Stunt Car Racer. All games for CPC464 only. For a list send an SAE to: Paul Garratt, 28 Howe Dell. Hatfield, Herts AL10 8BD.

AMSTRAD 464 MPI modulator. 10 games, joystick, instruction book, £85 o.n.o. Tel (0642) 467413.

SOFT 968 Firmware book for
464/664/6128. ROM routines and explanations. Any reasonable offer. Dave 061-427 7222.
ROMBOARD XTRA ( 7 sockets) for
CPC464, complete with 40025 (CPC6128 system) ROM. Switchable between $464 / 6128$ operating systems. Upgrade your CPC464 for just 240 including P+P. Phone Tim (0291) 627732 Chepstow.
AMSTRAD 464 plus with green screen monitor, 1 joystick, many games plus two cartridges, AA mags and manual, £150. Tel (0482) 795170. CPC464 with colour monitor, joystick, manual, 30 games, 25 magazines. £150 o.n.o. or will swap keyboard and cash for 6128 keyboard and manual. Phone Jimmy on 7998266 anytime. AMSTRAD CPC6128 PLUS, colour monitor and paddle controller! Some software, including Mini Office II, £185 o.n.o. Tel: Chester (0928) 725904. ONE THOUSAND games, 84-92, tape and disk from E1. Speech Synth, mono monitor, Light Pen, every Amstrad mag. Multiface, upgrading so all must go. For details phone Wayne (0532) 572154. $464+$ COLOUR MONITOR, Multiface, DK Tronics Lightpen, 64 K expansion, 2 joypads, 4 cartridges, $£ 120$ worth of software, 19 copies of AA. Worth £600, accept £320. Tel; Dean (0253) 770391. Buyer collects (Fleetwood), COMPLETE PACKAGE, 464 colour monitor, DDI drive, printer, Light Pen. Multiface 2, 6128 expansion memory, all manuals, $£ 400$ worth software, including Mini Olice 2, Devpack 80, Tassign, Lemmings, Rick Dangerous 2, Hero Quest, Back to the Future 2 and many more. £200. Tel: Geoff (0305) 854012. ROMBO ROMBOX with Protext and Maxam 1 1/2 ROMS 245. 3.5* second drive with RAM DOS and ROM DOS, £40, RS232. Pace Interface with Commstar software, E35. Multiface 2, £40. Phone (0271) 24843.

## Wanted

DOOMDARKS REVENGE by Mike Singleton wanted desperately for the Amstrad CPC464 on cassette. Will pay £10 for working boxed tape. Write to: Paul Suttle, 11 Bath Place, Margate, Kent CT9 2BN.
OLD 464 GAME Who Dares Wins Two, desperately wanted, will pay reasonable price. Contact Craig on (0670)
855013. Please helpl

AMSTRAD ACTION magazines, issues 1-19 and 22-45. Also wanted the follow. ing games, on disk. Grand Prix Circuit. The Cycles, Lotus Exprit Turbo The Cycles, Lotus Exprit Turbo Challenge, Super Monaco GP and
Dominator. Nigel Soal, 12 St Margarets Dominator. Nigel Soal, 12 St Marga
Avenue, Sidcup, Kent DA15 7NP.
WANTED: SSA1 Speech Synthesisor or Modulator for CPC464. Will swap Multiface 2 Lightgun Phaser and games, or Quckshot Aviator joystick. Swap 1 for 1. Interested? Write to: Fichard Latham, 31 Oriel House, Black Cat Close, Birmingham B37 5DG. DDI-1 DISK DRIVE wanted with Interface. Reasonable price for unit in Interface. Reasonable price for unit in good condition. Chris Rivers, 1 The Butts, Steeple Ashton, Near Trowbridge, Wiltshire. Tol (0380) 870782. AMSTRAD 6128 with colour monitor. I must buy one - mine is bust. Good price paid. Tel (0536) 518780 (Kettering). JACK NICKLAUS Golf disk wanted. Tel (0734) 596884.
DESPERATELY NEEDED! Devpac Assembler from AA71 also magazine issue if possible - pay cover price + postage. Also AA72 magazine only. Call Paul 051-928 3207 anytime. PENPALS WANTED - male or female especially 6128 owners for swaps, info etc. Also games for sale: Wrestlemania, Moonwalker, Starwars. Write to: Teresa or Mark, 28 The Rally, Arlesey, Beds SG15 6UJ.
DOES ANYONE out there have a copy of Poolsmaster on tape? Phone Bill 061-436 1812
ELITE on disk. Will pay the original price. Wanted desperately. Stuart Henshall, Flat 49, University Hall, Parry's Lane, Bristol BS9 1AR. WANTED DESPERATELY. North and South, Nightbreed Adventure for the CPC464, tape only. Will pay up to $£ 9$ each. Phone (0376) 516352 (Ian) (Witham).

## Services

AMSTRAD HOME programmed computer games for sale. Including Adventure and Arcade games. Word processors and other programs. Fo list, send SAE to: Derek Payne, 89 Wolverhampton Road, Codsall, Wolverhampton WV8 1 PL

FREE BASIC Programming help. Send specific enquiry (I don't have time to run a correspondence coursel) with SAE to Sean McManus, 226 Chertsey Rise, Stevenage, Herts SG2 9JO.
FREEI BASIC and assembly language programming advice for everyonel Don't forget to send an SAE to: Robin Gilbert, 9 Brynglas Terrace, Pyle, Mid Glamorgan CF33 6AG.
BROKEN JOYSTICK? For cheap repair call Wrexham (0978) 362808 after 6pm and ask for Martin. Send to 19A, Kenyon Avenue, Wrexham, North Wales LL11 2SP.
DEMON PD LIBRARY the largest CPC Library in the UK with over 300 selections at only 50 p eachl Write to: 47 Hilton Avenue, Hall Green, Birmingham B28 OPE.
TUCK PD - for a stock list and more details send an SAE to: Matthew Tuck, 15 Ravencar Road, Eckington, Sheffield S31 9GJ.
PD FUNIII For a free catalogue send an SAE to: 41 Mitchelgate, Kirkby.
Lonsdale Via Carnforth, Lancs LA6 2BE We offer $100 \%$ funl Games, demos, adventures and more (nothing boring).

## Other

WILL SWAP MY Amdrum Digitial drum system for use on 4646646128 for any game on the $464+$ machine. Call Dave (0222) 860581 (Caerphilly).

NUMEROUS CASSETTE Complations (History in The Making, Go Crazy, Five Star) swap for console, disk games (Rainbow Islands, Pang. Tokd, Protext, RoboCop 2, Space Gun, Addams Family, X-Out). Tel (0935) 25974. I WANT TO SWAP my Tamiya Radio controlled car for a CPC6128 with a cas sette datacorder, Can't be bad! Tel: Gareth (0691) 778493.
MAN UTD FANZINE coming out. It'l grow with support, £1. 'Football Premier' Fanzine on all your results, letters, predictions and more, $£ 1.50$. To order: ring 061-799 4533 and ask for Matt.
HARD CORE PD is open for orders. For details send SAE to: Hard Core PD. Bradda" Crowborough Road. Georgeham, North Devon EX33 1JZ. You choose the programs you want!


## ORDER FORM

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


Classification. Tick box: For sale
Wanted
$\square$
Services
User Groups
Other

|  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |

## games segtion


action test pages 44-49 - action replay pages 56-57 - Cheat MOde pages 51-54
Hurraln! It's fimally arrived and it's absolutely beautiful. What are we tallings about? Why, Migel Mamsell's Morld Championship, of course!


## Sinmon Forrester

We all get the distinct feeling that Simon struck some kind of publicity deal with Nigel Mansell this month, what with his rave review. Why should we think such a strange thing? Well, maybe the new Porsche parked outside AA Towers has got something to do with it. (I wish! Si) Simon spook fact number 528: He's related to Lady Godiva! Yep, the one who rode through Coventry with no clothes on!


## Linncla Barlker

Linda didn't review any games this month, instead she just subbed everybody elses stuff. Ilt's not true, I did The Popeye Collection! Ed). She's also recently become the proud owner of an orange WW beetle. Stand aside Nigel Mansell, Barker's on the road. Linda spook fact number 834: She can actually stomach (and find) salmon and black pepper flavoured crisps! (I just thought I'd point out that I can't actually drive. Ed) Oh dear!


## Somatham Nash

John, as usual, didn't actually appear in print this month either, but he did a lot of behind-the-scenes work and other such vital what-would-we-do-without-you type stuff. We can't actually tell you what Jonathan's been doing, because a lot of it counts as delicate information! Jonathan spook fact number 395: He's world famous for his collection of Pinky and Perky memorabilia!
The hit parade

1
NEW ZEALAND STORY
Hit Squad

2 DIZZY DOWN THE RAPIDS CodeMasters
3 DIZzY PRINCE OF YOLKFOLK.....-C/MAsters
4 STREET FIGHIER. $\qquad$ - Kixx

5 BubsLe diza $\qquad$ - Nax

6 FUN SCHOOL 2 OVER 8 $\qquad$ tasters

7 FUN SCHOOL 2 6-8 $\qquad$ - Hit Squad

8 LOTUS TURBO CHALLENGE

- Hit Squad

9 Minn OFFICE - GBH
$\qquad$ - Attemative IOMAGICLAND DIZZY - C/Masters


## Reviewred this month



NIGEL MANSELL'S WORLD CHAMPIONSHIP


KIDS PACK 2..............................................................
THE POPEYE COLLECTION..............................60\%
THE POSTMAN PAT HIT COLLECTION..... $89 \%$
CLASSIC ARCADIA .................................................. $89 \%$


## School holidays? Off work? Ready to strangle the kids? Don't. Apart from being highly illegal, it's not very nice. SIMON FORRESTER thinks that buying them Kids Pack 2 from Alternative is a much better option!

This little bundle contains six games - Count Duckula 2, Fireman Sam, Popeye, Postman Pat 2. Huxley Pig and Bangers \& Mash. In case you hadn't noticed, some of these are reviewed elsewhere in this issue, so turn a few pages for those reviews, but as for the rest..
count n metanta 2
No, don't laugh, it's really on here, and it's abysmal. It's a simple platform game with bland monochrome sprites, hideousty stow and jerky movement, an ice-skating main figure (it kinda helps if the legs move roughly in time with Duckula's movement and pathetic moving platforms that don't so much move as vanish and re-appear elsewhere. Count Duckula 2 isn't a game, a game is fun. This is like siting your $A$. levels again.


Count Duckula 2 is as bad as it looks.


Tea, eh? Just what the postman ordered.



## Alternative Software : $\mathbf{£ 9 . 9 9}$ cassette $\mathbf{0 9 7 7} \mathbf{7 9 7 7 7}$

Heaven knows why it was released the firsttime round, let alone put out again. In fact, it doesn't even deserve a ratings box. You can't do that, it's got to have a score. Edt Oh okay, how about zero? (Come on. Ed) Arright, it can have a crap 2\%

## FICditit Salit

That's Postman Pat No it's not: It's Fireman Sam. It may look pretty similar, but there are major differences. The fire engine is faster that Pat's van and there's lots of little subgames to have fun with too. These can vary from platiorm games to putting out fires, finding skateboards and getting kites off roots.
Fireman Sam is a slightly more frantic version of Postman Pat, with loads more arm work and less time to dore.
The only drawback is the loading system. The main game loads all at once, but the bits which involve putting out fires, climbing up the sides of houses and the like, load separately. Still, the newangled kids of today sitould be able to fiegre it out. That said, don't ever make the mistake of thinking this is just for kids. If a twenty year old reviewer can sit and get addicted to this stuff, it really doesdeserve to be taken seriously!
got to stun, and escape from, the baddies. The graphics are reminiscent of an enlarged Rick Dangerous and the sound is limited to appropriate spot effects and a nice meandering little tune whenever a ghost or witch is near. Death, though inevitable, is especially irritating in $B \& M$, as it comes in the most unexpected forms. A witch may fly up directly underneath you, and youll die. Or maybe youll jump and the screen will scroll upwards, youll hit a previously unseen ghost, and youri die. falling that, youll be standing on a plattorm, a poisonous plant will grow where youre standing, and youll die. Persevere and youil survive!
Bangers \& Mash is deffintely one of the better games on this compilation. It's fun to play, challenging, and teasing. Each time you play you do progress a little further, though expect to find toothmarks in your joystick it can get very frustrating.


By the way, Postman Pat 2 is reviewed on page 48 and Popeye on page 45. Both games have been taken into consideration when awarding an overall mark.

The obvious reaction to this game would be Wowf considering the excellent TV series, and the loading sequence does nothing to quench your enthustasm. It loads. You press fire. You see the graphics. You move around the house. Scream. It's Craaaap' Don't despair, things could be warse. They get worse.
The game is based more around a bloke avoiding spiders than Huxley, looking slighty overdone and moving the he's broken both his legs, interacting with his friends. Yet another opportunity for a fun licence has been wasted.

Oh nol it's the one with the theme ture by Chas 'n' Dave! Bangers \& Mash, Bangers \& Mash. Rabbit Rabbit Rabbit Wotcha Rabbit Rabbit Rabbit Wotcha Bangers \& Mash. Classic musicians. (ft took him two hours to work that out. Ed)
Bangers (or is it Mashi) is a rather acrobatic, chimp who has to jump along the jungly plattorms and collect frut (for his mum's pies) and diamonds (for points). At the same time he's

## JERDIGT <br> Gmenpmaics <br> You'd have to play it to realize just how nice some of these graphics really are. <br> Sonically restricted, but the whine doesn't grate and a nice tune sets the whole thing off. <br> <br> GRAB Bnctar <br> <br> GRAB Bnctar <br> This game will leap out of your CPC, grab you by the ears and scream in your face - it grabs you. <br>  <br> STravienec maverat go back again and again.

This is probably the most beautiful game you'll see for quite a while.

Plgs love toast. IXs a fact.


Alternative $0977 \mathbf{7 9 7 7 7}$ £6.99 cassette


#### Abstract

Blistering barnacles and shiver me timbers if it ain't Popeye! LINDA BARKER checks her sea legs and wades in...

Popeye is a perennial favourite, these Killer Tomatoes may come and go but the world's most famous sailorman lives on in these three games from Atematve. What a shame then, that theyre not that good. Actually, that's a bit unfair cos Popeye is a bit of a laugh and Popeye 2 does have its good bits. Ahyway, tets take a took at them one by one, shall we?


## Popeye

This is undoubtedly the best of the bunch - it's big, it's blocky and it's a bit beaut The sprites are massive and dead colourful yet, despite their bulk, they manage to move with ease. You play the part of our Pops and you have to collect enough hearts to corvince the fickle Olive that you really love her. If you don't... well, she might fust run off with that brute Bluto.
Popeye is kind of 3D, its difficult to explain but you can take retuge in doorways and window alcoves. Ysee, even though they look exactly like the rest of the scenery, they are actually set back from the rest. As well as being very clever, this is also very useful and is therefore a very good thing. So whenever Bluto comes blundering towards you, or a vicious vuture vrooms straight for your jugular - find a doorway: Ah, talking of doorways, you need to collect keys too as these give you access to other areas of the game.
As for the baddies, they seem to have absolutely no connection with the game, or with each other - apart from the fact that they all knock you out. I mean, one minute you're fighting off a witch and the next a floating shark knocks you out It's mad. It's also quite a laugh.


You've been a swell crowd - I love you all!


What a smart Tonka toy!

## Popeye 2

Oh no, that silly sausage Olve has gone and fallen foul of Bluto's burly biceps! He's grabbed her and made a run for it and you've got to save your babe. Lucky of Olve, eh? Popeye 2 is a platform game and it looks lovely. The characters, the platforms, the ladders and the various bits and bobs are all beautifuly drawn. It really does look like it's going to be a complete treat to play.

But wouldn't you just know it - appearances are playing that old deceiving trick again. Popeye 2 plays like a particularly spoilt child losing at Frustration - badly! The little Popeye sprite is wonderful until you actually try moving him. It's at this point that you begin to realise that this isn't going to be the pleasant experience that you were anticipating.

Popeye insists on falling down gaps rather than jumping over them and sometimes refuses to get off the ladders when you want him to. What's more, he has a marked fondness for death. Death comes in many guises but, whatever the means. Popeye always falls flat on his back with a rather large potbelly stuck in the air. This confuses me. Popeye, standing upright, looks like rather a thin little chap - where does this belly come from? Oh well, potbelly or no potbelly - it's still not a very good game.


He'll never fit in that little box:


I thought carrots made you yellow?

## Popeye 3

Popeye 3 isn't very good at all because the basic concept behind Popeye 3 is crap. It really does seem as if Atrernative thought they should get in on the wresting thang, and quickly. So they came up with the idea of some alien fiends called KRAGGS kidnapping Popeye and forcing him to save the earth by, erm, wresting. The gameplay was tied to this conceptual plot and it really shows. The main sprites are murky and undefined and the gameplay is simply dull. Popeye 3 doesn't work as a wresting game. You could have fun with it, but not for very long.


## VEFRDIST

Gramplancs
Popeye 1 and 2 look pretty darn good. Both are pretty darn good, Popeye 3 has smart aliens.

## Bomures

We've got the Popeye theme tune and various blips and blops. Good, but not great.

CRNAB PAGUOR
These games are easy to grasp and quite easy to settle down with - but for how long?


Syrmyunacs popanari You'll play Popeye for ages, Popeye 2 for a while and Popeye 3 is only for serious wrestling fans.


Popeye is the only game of the three that you should own. The other two are okay, but nothing special at all.


## Gremin 툴 0742753423 [ $\mathbf{1 5} .99$ disk

The true British classics, eh? Monty Python, Carry On
films, Gazza and nown, says SIMON FORRESTER, Migel Mansell (and his fairly natty set of wheels)...
Okay, so Gazza is a bit of an idiot, and Carry On films aren't exactly tasteful, but Monty Python and Nige make us all stand proud. We at AA towers awaited the CPC version of Mansell with baited breath, hoping that it would measure up to what we'd seen on other formats.
When you first run Mansell, youll see a Gremlin logo, and think 'Hmm... that's pretty'. If this is the case, the odd's are you'll probably spit your teeth out once the main game gets going. You're


## What a logo! What a world! Have you ever

 seen anything so absolutely gorgeous?greeted with some of the most beautiful graphics ever to grace the CPC. Forget demos - they're all the same anyway. Just spend a while playing Mansell to find out what your machine can really do with some decent software.


It's a very blue kind if game is Nigel Mansell's World Championship.

We've all heard this kind of slobbering rant several times before, and we all know that beautiful sounds and graphics do not a stunning game make. So it's time to prise open the box and check under the hood, so to speak1
Nigel Mansell's World Championship is a, erm. racing game. Basically. (We gathered that. Ed). Okay, right - you, as Nigel Mansell, burn round as many courses as you can and get to be the world champion a lot. If this sounds a bit limiting, don't worry - it's not. You work your way round the world, with plenty of different tracks, varying weather conditions (which you must accommodate by modifying your car), and


Some lovely huge graphics on the joystick . controlled main menu screen.

it's like a busy shopping day in Bath city centre minus the gawping grannies.

## ? <br> RENAULT

I wonder who sponsered this Ilcense then? Was if Ford? How about Flat? Ferrari? Lotus? Honda? Or maybe Renault...
various opponents. In each race, you must first qualify to decide your position on the grid. The qualifying race usually consists of two to three laps. After that, you'll be entered in the 'real' race, where twelve of the best drivers in your field are waiting to destroy and humiliate you. After the race comes the award ceremony. complete with a podium (no champagne though), and a chance to view the leaderboard to see just where you are in the big scheme of things.
If youre not exactly God's gilt to drivers, you have the option to go to driving school, which involves whizzing round the track a few times in order to get the hang of the game la nice idea), and check out the competition.

It's weird. The only way to describe it is that it's as if someone really loved this game and spent all their time working on it until there was absolutely nothing more they could possibly add. When you want to modify your car to handle varying weather conditions, etc, there's this lovely sideways view of the car, and any alteration you select is played out via an animated sequence. At the beginning of the whole game, you are presented with a spinning globe, stopping at your current location. The options menu has some of the most scrumptious


A gorgeous animated sequence accompanles any changes you make to your car.


## 



A nice open stretch and a chance to get some speed up, ready to fly off a corner!
icons you're ever likely to see, and all the menus throughout the game are joystick controlled and beautifully presented. (By Jove, I think he rather likes it. Ed)

Another thing you'll notice about Mansell is that it runs at incredible speeds. Granted, the screen update is slow, but this doesn't seem to impair the game play, as it seems to create the impression that your car's going really fast. I suppose that what l'm trying to say is that it isn't at all flickery in the conventional sense.

There are varying difficulty levels and the easier ones are quite unbelievably, erm, easy. Once you've been on one practise run, you'll be able to handle the car with no problems, and you'll probably find yourself well ahead of the other drivers whether you started in pole position or not. But don't for a minute you go thinking that this detracts from the gameplay, because it doesn't We all know just how irritating it is to play a racing game, make a slight slip, and know that no matter what you do in the next few laps, you've lost and won't qualify for the main event. It makes a nice change to actually play a game where you stand at least a fighting chance of progressing. Still, even on the easier levels there are a few challenges, Overtaking, for example, is very difficult, as Mansell didn't seem to be at the front of the queue when they handed out track width. And of course, once you've got the hang of things, you can try out the harder levels. So what separates this game from the average driving game, such as Crazy Cars III last month? Well, the emphasis in CC3 is on money. That's all very well, but Mansell allows you to explore all the lovely things you can do to your car without worrying about cash. It also lets you advance around the world freely, as your progress depends on your skill rather than your


You can select various courses around the world with this spinning globe.


That filag at the top means you're on your last lap of the circuit.


I was wondering how I'd survive without my daily dose of Nige... Thank heavens for Gremlin Graphics!
luck at betting. Also, you're racing against a more logical opposition, as opposed to cars that just appear out of nowhere. When you overtake the pack, you don't have to dodge cars, just stay in the lead (unless you lap them - ahem).
Flashy bits aside, Mansell is a very enjoyable game. Of course, if you don't like racing games, then don't bother, but if you do then this is most definitely one of the best there is.

If, however, you're not into this kind of thing. don't worry, because neither was a certain staff writer before seeing probably the best racing game released to date.


## CRAMpaynes

You have to play it to realize just how wonderful these graphics really are. Buy it

scymars
Sonically restricted, but the whine doesn't grate and a nice tune starts the whole thing off.


GTRAM PMETDIT
This game will leap out of your GPC, grab you by the ears and scream in your face - it grabs you.


8trayanac ppoyerevi
It maybe easy, but it's fun, and you'll go back again and again.

This is probably the most beautiful game you'll see for quite a while.



You've seen the film. You've read the book and heard the hit rave theme. Now play the games. That's what SImon FORRESTER'S done!
First there was Pat. In Pat 2, the battle continues. Pat 3 sees the final battle against rising postal costs with Pat sporting an Uzi and bandana. (He tives in his own world, yknow. Ed)

## Postman Pat

PP sees you on a basic defivery run on a standard sunny day. No aliens, no bad guys, no ramps, jeeps or rocket launchers - just Pat, the cat, and the van. This game is blissfully puerile. The most you will ever have to worry about is getting Miss Hubbard's prescription to the chemist's, and drinking tea with the postmistress. When you're not leading this frantic social Ife, you're lazily driving around in this funky roadster of a Pat van. If you can't find your way to the doctor's house, don't worry - just keep driving round until you find it. Backwards if you want - nobody cares.

This game is absolutely perfect for its target age group. It doesn't have power-ups, continues, guns, or anything that anyone could possibly object to. It's just plain nice. The one mistake to


Not so much Paperboy as Paperpat!


Burning up the village in Pat 1.
March 1993 AmISTRAD ACTIOM


There's lots of nice locations in PP1.
make would be to restrict this masterpiece to children. Everybody should try to live like this. (Like, wow mant)

If you don't fall in love with this game, something is quite obviously hideously wrong with you.


## Postman Pat 2

He's back, he's mean, and he's broken his van. That's why he's on foot, and that's why they haven't bothered with the colour red.
Pat 2 is a lot like Pat 1 , but with a little less reliance on the cute factor. In fact, the emphasis seems to be on more lifelike characters, that aren't in the least bit cuddly.
Graphically, it's a Speccy port (or a very close conversion), and is distinctly unappealing. The addition of a radar to help you seems a little tacky, as do the moving counters representing other characters. Stylewise, it's a fast version of Tir Na Nog, with the added bonus of being able to tell which way you're facing.
Pat 2 turns a lazy drive round town into a boring trudge round the streets, and the colours give the impression that it's going to rain any minute.


## Postman Pat 3

Oh no! Delivery man Dan has broken his leg! Who will deliver all those phone directories? If you


Eek! It's the rozzers! We've heen rumbled!


More Speccy port action in PP2.
have a problem, if no-one else can help, and if you can find him, maybe you could hire Pat.

Paperboy fans will love this one. It runs in overhead view, a view that sees Pat screaming down a road chucking phone books at houses. That's not all. There are roadworks and other cars to avoid, as well as the police who, however cuddly, probably have a distinctly unsavoury cell waiting for Pat.

You must deliver a set number of directories to specified houses within a certain time limit. It seems logical that the roads get progressively harder through the game, but this is not all that evident. All in all, it's a nice way to round off the collection.


## VERDIST

## cirmppounes

The emphasis here is definitely on cute, but what's wrong with that, eh?


Sopancs
There's only so much you can do with van noises, and these games don't exactly stretch the limits!


## CRME PRGUDR

Quite frankly, if this stuff doesn't appeal to you, there has to be something wrong!


They will be played quite a bit, if not just to complete the various tasks throughout the game.


Never before has the CPC seen such hideously cute releases. We love this stuffi

## RTINA <br> $89 \%$



## ADVERTISERS INDEX

$\begin{array}{lr}\text { AVATAR } & 17 \\ \text { BOXFORM } & 49 \\ \text { C.A.V.E, ELECTRONICS } & \text { OBC } \\ \text { DATEL ELECTRONICS } & \text { IBC } \\ \text { G.V.L. MICROFORM } & 11 \\ \text { M.J.C. SUPPLIES } & 18 \\ \text { O.J. SOFTWARE } & 36 \\ \text { P.R. FREEDMAN } & 17 \\ \text { ROMANTIC ROBOT } & 11 \\ \text { SILICA SYSTEMS } & 27,35 \\ \text { SIREN SOFTWARE } & 11 \\ \text { SOFTWARE CITY } & 41 \\ \text { TRADING POST } & 36 \\ \text { WIZARD GAMES } & 49 \\ \text { W.T.S. ELECTRONICS } & 49\end{array}$

## ONLY POOLS AND HORSES

FOOTBALL BOXFORM The onty pools peogram willen by a Geviline DPPLRT who has deen employed os such by Uliewoods he KNOWs how to help you win
 program consistentily forecosts $50 \%$ more draws than would be expected by chance
APC W. moo A RICORO UNMATCHE OY ANY OTWIR PROGRAM OR POOIS EXPIET A. C. W. Mog. A RECORD UNMATCHED EY ANY OTHER PROGRAM ORPOOIS EXPERT
Homes. Homes, away, diowi shown in order of meit. True odds for
non leogue. Autiolion Poois program inoluded in the pice
 RACING BOXFORM thike rote of 44 St overoging $3 / 1$ per winner. 05 UG mog price incwdes OFFER期 PRICES $\$ 21.95$ tor ons, 532.95 any tro, 542.85 al tree.
FOOTBALL TOOL KIT $\qquad$ BOTH

Elock Ferms Panner, program to work out bets, Dindend Fortcaster, E399.93

» AMSTRAD AUTHORISED $\star$

Quality Assured!
$\star$ Fixed price repairs on many machines
$\star$ Over 2500 square foot engineering complex

* Top quality technicians at your disposal
* All work warranted
$\star$ Fast turnaround
$\star$ Simply post or hand deliver your machine and we will do the rest
Please supply evening and daytime telephone numbers

Amstrad 464
Amstrad 6128

All monitors
Others
P.O.A

WTS Electronics Ltd reserve the right to refuse machines that in their opinion are beyond reasonoble repalr. Full chorge opplies.

## $(50)$ COMPILATION



Alternative Software $\mathbf{£ 4 . 9 9}$ cassette (0977) 79777

Well, the answer to that very question depends both on the games and whether you were around when these games were the 'in thing'.
Classic Arcadia Collection consists of six of the earliest (and some believe the best) games ever seen: Invaders, Axiens, Muncher, Missile, Crazy Er*ert II never did understand why the star was there. Is Er" bert a swear word, or something?), and Grebit. For all those who quietly snigger at games like this whilst loading up Blasterzombiephaze, just remember that these games were the predecessors to all the techojunk floating around.
So... The games. Graphically and sonically, these games won't astound you. On the plus side though is the fact that, that from a programmer's point of view, the whole selection is very tightly designed. For anyone who's never played any of these oldies, here they are one by one.

This is the standard shoot'em-up (I can't believe Im explaining Invaders). Take away all the


Classic Invaders action - we love It


What exactly, if anything, is a Pac?


Oh not The invaders are fighting back!
phazers, smart bombs, thrusters, etc and you're left with something like the screenshot. The block of ships at the top move left and right, gradually getting lower, and your mission is to kill them. Basically.

As a faithful representation of an alltime classic, this has to be worth a second look. कyripans
In the history of shoot'em-ups, this came next. It involves the same old Space Invaders stuff (no doubt something to do with it being a straight conversion of Galaxians!), but with the invaders bombing down the screen with the intention of severely hurting you. There's enough extras here to make this a darn playable game.

You've seen it on the covertape, you've played it to death. Now buy an official version and play that to death as well.

Muncher is nice as a PacMan cione but it doesn't really gel. Come to think of it, maybe the original didn't either.

This one involves an alien race attempting to blow you to smithereens. And, errn, that's it If you're looking for fast fun and excitement then this game is definitely one to be avoided.
of 0

This was known as The Game That No-One Could Control' and it's ust as blimmin' difficult today. The easiest way to describe this game is as an isometric beat'em-ip on a mountain. (You have to change the colour of the blocks by jumping up and down on them. E(d)

It's too confusing, and it really isn't


Could you run those keys by me again?
cyralhift
If you've ever played Frogger, then you'll understand Grebit. The idea is to guide your frogs across a busy road, and to the safety of a lily pad on the other side.

Frogger is as Frogger does, it wasn't all that thriling then and, well, you can work out the rest yourself.

So, we've seen a bundle of old classics, some good, some bad. But whether a collection such as this is worthy of a rerelease is debatable. In the end, it's got to be subjective. Remember though that this stuff started tit all.

VERDDIS
capmpanice
They're faithful to the originals but, still, they're not exactly impressive.

somapes
Don't expect miracles here either the odd beep or rasp is all you'll get out of these.


CRANB RMGTOR
As with all the early stuff, their simplicity will definitely grab you. These were here first, remember!

By Maypune popyymi
The fascination will wear off, but not before you've played some of them to death.

A nice package giving faithful covers of the old classics. Worthwhile for posterity, and fun
$30 \%$


## Cheat Mode

That Phil Howard, eh? What a chap and no mistake. Once you've worked your way through his cheats special (back on page 12) get going with this little lot. Does this man never rest? Save Phil a bit of work by sending in YOUR maps, cheats, tips and pokes to Cheat Mode, Amstrad Action, Beauford Court, 30 Monmouth Street, Bath, Avon BA1 2BW.

POKEs for CodeMasters compilations are this month's flavour to be savoured. Dug up from past issues and requested by lots (and lots) of people are the following tape cheats. Most of the Quattro cheats will work on the individual games if you have them.

## The Quattro compilations...

Adventure, Arcade, Cartoon, Combat, Firepower, Power, Racer, and Superhits. Dunstable's Andy Price has, in his time, cheated on games almost too numerous to mention, here are some.

## Quattro

Adventure:
Dizzy - Lives
Vampire - Lives Super Robin Hood Invulnerability
Ghost Hunters - Start room/energy

Withstand the arrows of outrageous fortune with a few well-placed numbers!


HAGF 1.', Quattro. Rdventure EADF 2.'.by-RNDY-PRICE AARH $5{ }^{\prime}{ }^{\prime}$
FANC 18 -DATA- $2 \mathrm{a}, 38, \mathrm{bd}, 22,2 \mathrm{dd}$ FANI 28.DATA. be, ac,ad, 21,37 FAED 30 . DATA - bd , $3 \mathrm{e}, \mathrm{c3}, 77,23$ EAEN $40 \cdot$ DATA $3 \mathrm{e}, 21,77,23,3 \mathrm{e}$ IALM $50 \cdot$ DATA $\cdot$ be $, 77,21,40,60$ EAOO $50 \cdot$ DATA $\cdot$ e $3,11,00, \mathrm{bb}, 60$ EAKP 78.DATA $\cdot \mathbf{C 3}, 4 \mathrm{a}, 3 \mathrm{a}, 41,50$ FAID $89 \cdot$ DATA $\cdot \mathrm{af}, 32,3 \mathrm{a}, 95,3 \mathrm{e}$ EAEH $98 \cdot$ DATA $\cdot 84,32,25,89,80$ FAKF $100 \cdot$ DATA- $21,3 \mathrm{~d}, \mathrm{be}, 22,4 \mathrm{f}$ FAIL $118 \cdot$ DATA $\cdot \mathrm{bf}, \mathrm{c} 3,00, \mathrm{bf}, \mathrm{c} 3$ FAAA $128 \cdot$ DATA $\cdot 88,13,21,23, \mathrm{be}$ FAED $130 \cdot$ DATA- 22, e $3,33,3 \mathrm{e}, \mathrm{c} 3$ EAOK 149-DATA-32, e2, $39,21,48$ FAAC $150 \cdot$ DATA $\cdot 80,11,00, \mathrm{bb}$, e5 FANS $160 \cdot$ DATA $\cdot$ eb, e 5, c $3, \mathrm{b7}, 39$ FAJJ $179 \cdot \mathrm{DATA} \cdot \mathrm{dd}, \mathrm{e} 5, \mathrm{dd}, 21,91$

FAGG 188-DATA-01, 3e, de, dd, 77 FAOG 190 - DATA - $80,3 \mathrm{e}, 6 \mathrm{f}, \mathrm{dd}, 77$ FACJ $208 \cdot$ DATA $\cdot 81,3 e$, cd,dd, 77 FANI $218 \cdot$ DATA $\cdot 02$, dd, el, $\mathrm{f1}, \mathrm{f3}$ FAFD $228 \cdot$ DATA $\cdot \mathrm{C9}, 3 \mathrm{e}, 34,32,5 \mathrm{~b}$ EAGP 23e-DATA-2d, 18, c5, 80,68 EABP 240-DATA•86,85,11,00,ac FAKG 250-DATA-21, 28, be, ed, 77 GAFC $268 \cdot$ DATA -bc, eb, ed, $83, \mathrm{bc}$ FACM 279 - DATA- 23 , e5, cd, 7 a , bc FAAD 288-DATA $21, \mathrm{lb}, \mathrm{be}, 22,92$ FAMM 298-DATA-ac, cs, 3e, ee, 32 FABA $380 \cdot$ DATA- $22,61,3 e, c 9,32$ FAOD 310-DATA $97,6 \mathrm{c}, \mathrm{C} 3, \mathrm{de}, 76$ ТАМА З20. DATA $\cdot 52,4 f, 42,49,4 e$ EAPO $338 \cdot$ DATA $\cdot 06,8 d, 11,00$, cも FAKG 346 -DATA- 21,28 , be, cd, $7 ?$ GAFC $350 \cdot$ DATA $\cdot \mathrm{bc}, \mathrm{eb}, \mathrm{cd}, 83, \mathrm{bc}$ FAGM 360 - DATA - 23, e 5 , $\mathrm{cd}, 7 \mathrm{a}, \mathrm{bc}$ FAAJ $370 \cdot$ DATA- $21,1 \mathrm{lb}$, be, 22 , fe FAPG 380 -DATA- 24,09 , $3 \mathrm{e}, \mathrm{c9}$, 32 FAFD $390 \cdot$ DATA $\cdot \mathrm{cf}, 61,3 \mathrm{e}, 82,32$ FAAD $408 \cdot$ DATA $\cdot \mathrm{ca}, 61, \mathrm{c} 3,73,61$ EABO $410 \cdot$ DATA $\cdot 47,48,4 f, 53,54$ FAOA $420 \cdot$ DATA $\cdot 2 d, 48,55,4 e, 54$ DABI $430 \cdot$ DATA $\cdot 45,52,53$
HAPA 440 -RESTORE $10: s t a r t=8 B E 00$ GAOP $450 \cdot f$ ini $\operatorname{sh}=8$ BE20: GOSUB. 770 FAKP 460-MODE-1:INK. 1,15 :INK $\cdot 8,0$ FAFC 470.PRINT"1. Dizzy" FABO $488 \cdot$ PRIMT" 2 . . Vanpire" IANB 498 -PRINT" 3 . Chost-Hunters" IALN 500 -PRINT" 4 , Super -Robin - Hood ${ }^{*}$ IABC 510 -PRINT:INPUI"Nunber) **, ne GAFP $520 \cdot$ ON $\cdot$ no $\cdot$ GOSUB $\cdot 538,680,650,790$ HANB 530-RESTORE-80:start=ABEL1 НАНА $540 \cdot f$ inish $=8$ BE29:COSUB. 778 JADK 550 -CLS:PRINT"Inf $\cdot$ lives active" JAKK 560 -INPUT"Speed-of-Dizzy-(1..18)",s HADE 579-POKE-8BE26, s:POKE• 8 BE $2 A, 8 C F$
 GAPN 590-LOAD"dizzy":CALL-dBE80 HAND $680 \cdot$ RESTORE-100:start $=$ \&BE80 HABA $618 \cdot f$ inish=dBE $43:$ COSUB 778 JAOB 620.CLS:PRINT"Inf inite-lives" IAOG $630 \cdot$ MEHORY- A2FFF:LOAD"vanpire" DACB 648 -CALL-ABEBC HAHE 650 -RESTORE- $338:$ start $=$ dBEOB HACA 660 - $f$ inish $=$ ABE 34 :COSUB. 778

JALO $670 \cdot$ CLS:PRINT"Invulnerability* LAPC 688-PRINT:INPUI"Enter-start-roon"; ${ }^{\text {r }}$ GAPD 690 -POKE-4BEL1, r :CALL- ABEDO HADE 790 -RESTORE- 240 :start=8B580 HAAB $710 \cdot f$ inish=\&BECC:COSUB-778 MADI 728.CLS:PRINT"Invulnerability•active" JAKK 730-PRINT:INPUT"Faster Robin"; y\$ GAPP $740 \cdot$ IF $\cdot L E E T S(y s, 1)={ }^{n} n=$-THEN $\cdot 760$ DAII 750 -POKE-ABEIC, 8 DAGA 760 -CALL- ABE Be HAFP $770 \cdot$ FOR-azstart-70-finish
 GARJ 790-POKE - $\mathrm{a}, \mathrm{b}$ :NEXI:RETURN

## Quattro

Arcade:
Advanced Pinball Balls
Fruit Machine Credits
3D Starfighter Invulnerability Grand Prix Sim Track

Endless cost-effective arcade fun!


KACS 1.' Quattro Arcade Cheat - Systen
EADF 2,',by-AKDY.PRICE
AAKH 3.'
FAAE $18 \cdot$ FOR $\cdot x=A B E P 0 \cdot 10 \cdot d B E 24$
GALJ $20 \cdot$ READ $\cdot \mathrm{cdf}$ :cd $=\mathrm{VAL}\left({ }^{48} \mathrm{~d}^{*}+\mathrm{cd} f\right)$ EACL 38 .POKE • $x$, cd:NEXI JAJK 40-MODE-1:PEN-2:PRIMT"Choose-Gane:" IAOE 50-PDN-1:PRINT" 1 , Pinball 1 Sin" HABP 60 -PRINT" $2 .-3 \mathrm{D}$-Starfighter" GARN 70-PRINT" 3 . Grand-Prix-2" JADA 80 -PRINT" 4 , Friut-Machine-Sin" HABI $98 \cdot$ PRINI:INPUI"Nunber: $\cdot ", n$ GABH $180 \cdot$ ON-n $n \cdot \operatorname{COSUB} \cdot 128,148,160,200$ CAKK 118-COTO-398
FALP 120-RESTORE-330:COSUB-220 CAES 130 -RETURN
CABA 140 -RESTORE-370:COSUB - 220
CAGS 158 -RETURN
KANF 160.PRINT:PRINT"Grand-Prix-cheat:" KAPI 179-PRINT:PRINT"Re-def ine nane -as"; HACJ 180 -PEN-3:PRINT" ${ }^{\text {- }}$ INIEGRA ${ }^{6}$ :PEN-1

BADP 190 -RUN" ${ }^{\prime \prime}$
FAMP 200-RESTORE, 350 :GOSUB-228
CADJ 210 -RETURN
FAII $228 \cdot \mathrm{FOR} \cdot x=\mathrm{ABE} 25 \cdot \mathrm{TO} \cdot \mathrm{ABE2B}$
GABP $230 \cdot$ READ -at: POXE $\cdot x$, VAL (" $d$ " $+a t$ )
EAPB 240-NEXI:RETURK
FAKA 258 -DATA-ED,58,38,BD,L5
FADA $260 \cdot D A T A \cdot A C, E 1, E D, 53,2 D$
FABA $278 \cdot D A T A \cdot B E, A D, 11,37, B D$
EABN 280-DATA-3E, C3, $12,13,3 E$
EACN 290-DATA-25, 12, 3E, BE, 13
EAPJ 300 - DATA $\cdot 12,21,40,00$, E 3
EAKL $318 \cdot$ DATA $\cdot 11,80, B B, 00, C 3$
EACL $328 \cdot$ DATA $\cdot 4 A, 3 A, 41,50,80$
EAAO 330 -DATA -AE , $32,15,04$, EE
EAGI 340 -DATA $\cdot 41,00,00,80,80$
EALP 350 -DATA -AF , 32, 3F, 73, EE
EAII 360 - DATA $\cdot 50,80,80,80,80$
EAGO $378 \cdot$ DATA-AF, $32,3 A, 7 \mathrm{~F}, 32$
EAIK $388 \cdot$ DATA $\cdot 15,7 \%, 00,00,00$
EAIA 390 - POKE-ABE2C, ACF
FAFH 400-MEHORY- ALFFF:LOAD" "
CAOP 410 .CALL - ABEOO

## Quattro Cartoon:

Frankenstein Jnr - No ghosts Wizard Willy - Lives
Olli and Lissa 3 - No ghosts
Little Puff - Invulnerability

GAOH 1.' -Quattro Cartoon
EADF 2,' 'by-ANDY-PRICE
AQXH 3 .'
HAGI 4,', Frank -Jnr: •No Chosts
NABB 5,'-Hizard-Hilly:-Inf-lives-d-Firepower
LaRE 6.'-Little-Puff:-Invulnerability
IABM 7,................and -nove-location
IAFX 8.',011ie-\&-Lissa: No Ghosts ARAI 9.1
FANI 18-DATA- $2 \mathrm{a}, 38$, hd, eS, ac
FAEI 2B.DATA $-\mathrm{el}^{2}, 22,2 c$, be, ad
FRLI 30-DATA $-2 \mathrm{~b}, 21,37, \mathrm{bd}, 3 \mathrm{e}$
EAEN 40-DATA- $33,77,23,3 e, 23$
FAPA 50.DAIA-77,3e, be, 23, 77
ERBJ 60-DATA $21,40,80, e 3,11$
FAEF 78-DATA-60, $\mathrm{bb}, \mathrm{c3}, 4 \mathrm{a}, 3 \mathrm{a}$
FAGC 80-DATA-af,32, $85,5 \mathrm{~d}$,ee
FAAD SO-DATA-41, ee, 50, cf ,88
FAEF 100-DATA-af, 32, 1c, 1c 32
FABF $110 \cdot \mathrm{DATA}-4 \mathrm{c}, 1 \mathrm{~d}, 00, \mathrm{cf}, 00$ EAPN $120 \cdot D A T A \cdot 60,80,0 \mathrm{a}, 08,8 \mathrm{a}$
FABG 138-DATA-21, de,7f,22,4b EAEN 140-DATA $80,21,18,8 \mathrm{e}, 22$ EAPJ 150 -DATA $70,80,18,22,21$ FABJ 160 -DATA $\cdot \mathrm{ec}, 7 \mathrm{f}, 11,90, \mathrm{fc}$ FAPE 170-DATA-81,0a, 80, ed,b0 FAOH 180 -DATA- $\mathrm{C} 3,4 \mathrm{~d}, \mathrm{fc}, 3 \mathrm{e}, \mathrm{cs}$ EAFN 190-DATA-32,68,63,81,8d EABN 280-DATA-7f,18,69,08,88
 FALJ $228 \cdot$ READ $\left.\cdot 2\}: a=V A L\left(" a{ }^{2}+a\right\}\right)$ GACD 230 -POKE - $x$, a $:$ MEXI:MODE -1 FAHE 240-KENORY- 2 CFFF:PEN-1 HAPA 250.PRINT"1.thittle.Puff" HAEJ 260.PRINT"2. Wizard-Hilly* JAGC 270.PRINT" 3 . \#Frankenstein-Jnr" IAII 280.PRINT" $4, * 011$ ie. $\frac{2}{4}$-Lissa-III" HAIH 290-PRINT:INPUT"Option"; $n$ GALD $380 \cdot O \mathrm{~N} \cdot \mathrm{H} \cdot \mathrm{GOTO} \cdot 328,390,430,448$

FAIK 310-RESTORE:CLEAR:RUN
JARD 320-CLS:PRIMT"Kegpress-Cheat:" KABA 330 -PRINT:PRINI"Press-Keys." ";:PEN-2 NACH 340 -PRINT"D•R•A• $6 \cdot 0 \cdot \mathrm{~N}^{\prime \prime} ;$ PEN-1:PRINT* $\cdot$ all -together*
MAGF 350-PEN-1:PRINT"Gives-Invulnerability" LAPP 368 -PRINT"Also, Press-SHIFT-Plus-Arrow* KAKB 370-PRINT"Keys To -Hove-Location" BAEP 389 -RUN ${ }^{\text {" }}$
DABJ 390 -RESTORE 100

 HAAH 428 - NEXI:LOAD" $W I z^{\prime \prime}$ : CALL - \&BEDO IAKB 430-LOAD"frank• jnr": CALL - \&BEEO DAAJ 440 -RESTORE• 130 FANI $450 \cdot$ FOR $\cdot x=\$ 7$ PDD $-10 \cdot \$ 7$ FF5 GAGP 460-READ - at:POKE $\cdot x$, VAL(" $\left.\left.\mathrm{a}^{\prime \prime}+\mathrm{a}\right\}\right)$ IAHB 470 -NEXI:LOAD" candlelight" DARA $489 \cdot$ CALL- $47 F D A$

## Quattro Combat:

Arcade Flight - Lives
Death Stalker - No ghosts
SAS Combat Sim - Lives

XAIK 1.'-Quattro•Combat-Cheat -System EADF 2.'.by-ANDY-PRICE
JAIA 3,'**-use'Iypewriter'codes•* AALH 4,'
FAND $10 \cdot \mathrm{FOR} \cdot \mathrm{x}=\mathrm{ABE} 80 \cdot 70 \cdot \mathrm{ABE} 21$
FAGJ 20-READ•pt:p=UAL(" $\mathrm{d}^{\text {" }}+\mathrm{p} \$$ )
EAPF 30-POKE- $x, P$ :NEXI
IAKD 40-MODE-1:PRINT"Choose Game:"
HABL 50 -PRINI" 1 . Death-Stalker"
HANH 68 -PRINT"2. SAS.Conbat-Sin ${ }^{*}$ IAAO 70-PRINT*3. Arcade-Flight-Sin" HAAI 88 -PRINI:INPUI"Nunber: $\cdot "$, n FAII $98 \cdot O N \cdot n \cdot \operatorname{COSUB} \cdot 180,180,288$ FAOI 91-RESTORE-448:COT0-580 FAOP 180-RESTORE-480:COSUB-230 IAPH 118.INPUI"Ground -ghouls";y\$ GAMP 128-IF LEETS $(y \$, 1)=" y$ " THEN-168 JAHC 130.INPUT"Fireball-denons" $y \$$ GAPP $140 \cdot$ IF $\cdot$ LEET $(y) \$, 1)=" y^{*} \cdot$ THEN -170 CAGJ 158 -RETURN
GAIR 160 -POKE - 8 BE $24,83 C: 0070 \cdot 130$
GABA 178-POKE-\&BE $29,43 C:$ RETURN
GANA 180-RESTORE-380:GOSUB-290
CAKJ 190 -RETURN
GABA 200 -RESTORE 420 :COSUB- 230
JADF 218-CLS:PRINT"Infinite•lives:*
GAAC 248-INPUT"Player-1";y\$
HAFA 245 - IF -LEFTs $(y 5,1)=" y^{*}$-THEN-268
DACO 258-POKE-\&BE24, 43 D
GADC 260-INPUT"Player $2^{n} ; y \$$
HASA 265 - IF CLEFT $\$(y \$, 1)=" y^{*} \cdot$ THEN- 288
DANO $278 \cdot$ POKE- $8 B E 29$, $43 D$
CAKJ $288 \cdot$ RETURN

HANA $300 \cdot$ READ $\cdot \mathrm{p} \$:$ POKE $\cdot x$, UAL (" ${ }^{\prime 2}$ " $+\mathrm{p} \$$ )
EANA 310 -NEXT:RETURN
FAHB 320-DATA-ED,5B, 38,BD,EB
FAAK 330 -DATA- 22,34, BE, 11,37,BD
FANI $340 \cdot \mathrm{DATA}$-EB, $3 \mathrm{E}, \mathrm{C} 3,77,23,3 \mathrm{E}$
FADH 358-DATA-23,77,3E,BE, 23,77
FAAD 360 -DATA $21,40,00, E 3,11,00$
FANH $379 \cdot D A T A \cdot B B, 69, C 3,4 A, 3 A, 91$
FAAL $388 \cdot$ DATA - AF , $32, A A, 49,3 E$, FF
FAOE 398-DATA-32, 86, 32, 32, 8B, 32

FALF 400-DATA-3E, $30,32,1 \mathrm{C}, 17,3 \mathrm{E}$ FAPD 410 -DATA $00,32, B D, 18,00,00$ FALG 420.DATA-3E, $08,32,8 A, 89,3 E$ FAKD 430-DATA -80, 32,4E, 89, 00,88 FABE $440 \cdot$-DATA- $80,41,58,80, \mathrm{CF}, 80$ FANI SEO-FOR $\cdot x=\mathrm{ABE} 2 \mathrm{~F} \cdot 10 \cdot \mathrm{ABE} 34$ HAAB $518 \cdot$ READ $\cdot \mathrm{P} \$:$ POKE $\cdot x$, VAL ( $\left.{ }^{8} \mathrm{~g}^{*}+\mathrm{p} \$\right)$ GAAL 520-NEXT:MENORY-a3e日e:LOAD*" DABA 530 -CALL- ABEO


## Quattro Firepower:

Mig 29 Fighter -
Lives
Operation Gunship

- Invulnerability

3D Starfighter -
Invulnerability

Zap 'em out of the skies and remain invincible!

HALF 1,' Quattro-Firepower EADF 2.'.by,AKDY.PRICE
AAKH 3 ,'
KAFM 10-MODE• 1:PRINT"Quattro-Firepower" HANL 28-PRINI-TAB(13)"by-ANDY-PRICE"

JAEI 40 -PRINT" 2 , 'Operation-Gunship"
HABP 58-PRINT" ${ }^{*}$.3D-Starfighter"
HAPJ 68 -PRINI:INPUI"Nunher*; jp
FACL $78 \cdot \mathrm{ON} \cdot \mathrm{JP} \cdot \mathrm{GOTO} \cdot 340,188,568$
CACE 80-6010-10
ARAL SB.'
HAHK 180.'.Operation Gunship
HAKL 118.' Quattro Firepower
GAME 128. ,
EAFL 138.'.by-AMDY-PRICE
AARN $140 .{ }^{\prime}$
DABJ 150 -RESTORE 160
GAFI 168-DATA-2a $38, \mathrm{bd}, \mathrm{e} 5, \mathrm{ac}, \mathrm{el}$
FADP 178-DATA-22,35, be, ad, 21,37
GAOC 188-DATA-bd, 3e, c3, $77,23,3 \mathrm{e}$
FAFN 198-DATA - $23,77,3 e$, be, 23,77
FAJE 2B0-DATA-21,40,60,e3,11,60
GADH 218-DATA-bb, $00, \mathrm{c} 3,4 \mathrm{a}, 3 \mathrm{a}, \mathrm{af}$
GADA 228-DATA-32, $3 \mathrm{~b}, 8 \mathrm{e}, 32,5 \mathrm{f}, 8 \mathrm{~d}$
FAJJ 23B-DATA-32,53,8d,32,h1,85
FAPO 240-DATA-3e, 41, $3 \mathrm{e}, 58$, cf, 80
FANA 258 -DATA - $80,60,60,80,60,60$
FAKH $268 \cdot$ FOR $\cdot x=8 B E 80 \cdot 10 \cdot$ - $8 B E 36$
FAAK $278 \cdot$ READ $\cdot a \$: a=V A L\left(" a^{\circ}+a s\right)$
HAGP 288 -POKE $\cdot x$, a:chk $=c h k+a:$ NEXI
GAED 298 - IF - chk () 81546 - THEN-328.
FAEH 308 -KDNORY- $\$ 2 F F F: L O A D * * ~$
CANP 318 -CALL- ABE 88
IACN $320 \cdot$ PRINT"Error-in•poke ${ }^{\text {a }}$ :STOP
AANN 338 .'
IANC $3480^{\prime}$-Nig•29-Soviet-Fighter
HACK 358.' Quattro-Firepower
AAAO 368.'
EALL 378.'•by-AKDY-PRICE
AACO 388.,
DAES 398 -RESTORE- 480
GACI 400-DATA-2a,38,bd,e5, ac,e1
GAMB 418-DATA-22, 2 b , be, ad, 21,37
GALC $42 B \cdot D A I A \cdot b d, 3 e, c 3,77,23,3 e$
FACN 438 -DAIA $23,77,3 e$, be, 23,77

FAPE $440 \cdot$ DATA $\cdot 21,40,00, e 3,11,00$ GAJH $450 \cdot$ DATA $\cdot \mathrm{bb}, 00, \mathrm{c} 3,4 \mathrm{a}, 3 \mathrm{a}, \mathrm{af}$ FAHM 460.DATA $32, \mathrm{c}, 08,32, \mathrm{f1}, 8 \mathrm{c}$ FAKH 470.DATA - Cf , 00, 00, 00, 00, 80
 FAEK $490 \cdot$ READ $\cdot a f: a=$ UAL (" 2 " +a 5 ) HABP $500 \cdot$ POKE $\cdot x$, a:chk $=$ chk + a:NEXI GAPD 510 - IF chk () \& 116 D . THEN 540 . FAIH 520 - KEHORY- A 2 FFF :LOAD" ${ }^{\prime \prime}$ DABA 530 -CALL-ABEBe IAKN 548 -PRINT"Error-in-poke": STOP AABO 558.1
GAKB $560 \cdot{ }^{\prime} \cdot 3 \mathrm{D}$ - 5 tar- Fighter
HAGK 570.'Quattro. Firepover AAEO $580 .{ }^{\prime}$
EAPL 590 '' 'by ANDY-PRICE
AAN 600 ,'
DAGN $610 \cdot$ RESTORE• 650

GACN $630 \cdot$ READ - od $f=C d=V A L(* 8 "+c d s)$
EANO 640 . POKE • $x$, cd :NEXI
FAAB 650 -DATA-ED, $5 B, 38, B D, E 5$
FAHR $668 \cdot D A T A \cdot A C, E 1, E D, 53,2 D$
FAFA $678 \cdot$ DATA $\cdot B E, A D, 11,37, B D$
EAFN $688 \cdot$ DATA-3E, $\mathrm{C} 3,12,13,3 \mathrm{E}$
EACN 690 -DATA-25, $12,3 E, B E, 13$
EADK 7e0.DATA $\cdot 12,21,40,00$, E3
EAOL 710.DATA-11, 00, BB, 00,C3
EACL 720.DATA-4A, $30,41,50,00$
EACO $730 \cdot \mathrm{DATA} \cdot \mathrm{AF}, 32,3 \mathrm{~A}, 7 \mathrm{~F}, 32$
EAIK $740 \cdot D A T A \cdot 15,75,80,80,80$
EAIA 758 - POKE-ABE2C, $A C F$

DAHA $770 \cdot$ CALL-ABEOO

## Quattro Power:

Motorcross SimBikes
Twin Turbo V8 -
Time/lives
Pro Powerboat -
Lives
ATV Sim - Time
Stay ahead simply by tapping in this list.


Fafl 1."Quattro Pover EADF 2. $\because$-by -RNDY PRICE AAKH $5{ }^{\prime}$
FAOL $10 \cdot$ MODE $-1:$ INK $1,15:$ INK $\cdot 8,0$ HAEO 20.PRTNT" 1 . Hoto Cross $\cdot \operatorname{Sin}^{"}$ HAAF 30 -PRINT" 2 . Tuin - Turbo - U8" JADC 40 -PRENT" 3 . Pro P-Powerboat . Sin" HADK 50 -PRINT" 4 , ATV. Sinulator" HABP 60 -PRINT:INPUT"Nunber) -", no GAIF $70 \cdot \mathrm{ON} \cdot \mathrm{no} \cdot \mathrm{GOTO} \cdot 880,660,320,30$ CACE $80 \cdot$ COTO. 10
HAAM $90 \cdot$ '- ATV Sinulator cheat EACL 108.'.by'ANDY.PRICE
XAPF 118 ', Function: 'stops the clock DALI 120 -RESTORE- 130
EADJ $130 \cdot$ DATA- $21,70,01,11,35$ EALN 140. DATA- $04,3 E, 16, C D$, A1 EAGP 150.DATA $\cdot B C, 2 A, 8 E, B C, 22$ EACP 160 -DATA-B5, BE ,3E,C3,32 FAFA $179 \cdot$ DATA $\cdot 0 \mathrm{E}, \mathrm{BC}, \mathrm{aL}, 9 \mathrm{~F}, \mathrm{BE}$ EABP 180-DATA-22,8F, BC,CD, 80

EAHO $190 \cdot$ DATA. $01,85,21, \mathrm{AB}, \mathrm{BE}$ EALO $200 \cdot$ DATA- $22,82,98, E 1, \mathrm{CD}$ FAIB $210 \cdot$ DATA $\cdot \mathrm{B4}, \mathrm{BE}, \mathrm{C9}, \mathrm{F5}$, AF EANN 220-DATA-32, 1E, 4C, F1,C3 EAKK 230. DATA $\cdot 00,04, C \mathrm{CF}, 00,00$ FAKN $240 \cdot \mathrm{FOR} \cdot \mathrm{ad}=\mathrm{ABE} 80 \cdot 70 \cdot 2 \mathrm{aBEB6}$
 GAHP 260.POKE• $\mathrm{ad}, x: z=x+x:$ NEXI FANE 270-IF - z ( ) A1800- THEN-300 HANJ $289 \cdot$ MODE. 0 PPRINT"Press. PLAY" DAKA 290-CALL-ABE8E HAIG 300 -PRINT"DATA, error": STOP AALN 310 ,'
НААН З28.'. Pro.Powerboat. Sin' $^{\prime}$ EAKL 330 ', 'by -ANDY-PRICE FAKJ 340 .' , tape ne thod 1 AAPN $35 e^{\prime}$
DARJ 360 -RESTORE- 370 FAOB $378 \cdot$ DATA-ED $, 5 B, 38, B D, E D$ FAIA 380 . DATA . $53,3 D, B E, A D, 3 E$ FADA 390 -DATA. $59, A 4, \mathrm{CB}, 77$,AF EAPN $400 \cdot$ DATA-21,37,BD,3E,C3 EACH 410 -DATA- $77,23,3 \mathrm{E}, 28,77$ EAFN 420-DATA-3E,BE,23,77,21 EAPS $430 \cdot$ DATA $-40,80$, E3, 11,80 EAFO 440 -DATA-BB, $00, C 3,4 \mathrm{~A}, 3 \mathrm{~B}$ EAOK 450 -DATA-3E, $09,32,2 C, 88$ EAIL 460.DATA $3 \mathrm{EL}, 12,32,31,88$ EAAN $470 \cdot$ DATA-3E,08, 32, 3C, 88 EAAM $488 \cdot$ DATA $-3 E, 17,32,41,88$ DAIJ $490 \cdot$ DATA-CF, 00,00
 FANS $518 \cdot$ READ $\cdot a\}$ : $a=V A L(" a$ " + at $)$ GAGK $528 \cdot y=y+a: P O X E \cdot a d, a$ NEXT FANG $530 \cdot$ IF $\cdot \mathrm{y}()$ ) 168 E E- THEN. 640 FASD 540-KDHORY-43800:LDAD"* HAEI $558 \cdot$ INPUT"lives $\cdot$ for $\cdot \mathrm{P1}$ "; P DAJL 560-POKE - ABE $33, p$
 DAAK 580.POKE - ABE 29, P HACI 598-INPUI"nines-for •P2"; DAFM 608-POKE ABE $2 E, P$ HAKH 610-INPUT"nines •for-p1"; DALL 620-POKE-8BE38,P DACA 630.CALL-ABE80 IAGE $640 \cdot$ PRINT"Error-in•DATA":STOP AACO $6580^{\prime}$
FAPH 660 ', Twin - Turbo -U8 EAOL 678''by-AKDY-PRICE AAFO 688.1
DAKJ $690 \cdot$ RESTORE 700
FADA 790-DATA- $2 A, 38$, BD, ES , AC EAMO 710.DATA-E1,22,31,BE,AD EAEO 720.DATA-21,37,BD,3E,C3 EACM 730.DATA-77,23,3E,23,77 EAKN $740 \cdot$ DATA-3E,BE,23,77,21 EAEK 750-DATA-40,00,E3,11,00 EAKO 768 . DATA-BB, $00, C 3,4 \mathrm{~B}, 3 \mathrm{~A}$ EANN 770.DATA-AF,32,50,65,3E FAHA 780-DATA 99,32, EE, 1B, EE EALF 790-DATA-41,EE,50,CF FAID 800. KEHORY -43000:LDAD"

 GAKJ $838 \cdot x=x+p: P O K E \cdot y, p:$ NEXT FAOG $840 \cdot \mathrm{IF} \cdot \mathrm{x}()$ \& 14 A8-THEN 860 DAGA $850 \cdot$ CALL- $8 B E D 0$ HADH $860 \cdot$ PRINT"DATA -error ${ }^{*}$ :STOP AACO 878.

Ihal $880 \cdot$ '- Moto Cross. Sinulator
EACM 890,' by -ANDY.PRICE
AABO 900.'
DASJ 910 -RESTORE, 920
FAHA 920.DATA- $2 A, 38$, BD,$E 5$,AC FAEA 930 - DATA.E1, 22, $25, \mathrm{BE}, \mathrm{AD}$ EAIO 940 -DATA-21,37,BD, 3E,C3 EACH 950.DATA. $77,23,3 \mathrm{E}, 23,77$ EAON 960-DATA-3E,BE, 23, 77,21 EAIK 970 DATA $40,00, E 3,11,00$ EA00 $980 \cdot$ DATA -BB, $00, \mathrm{C}, 4 \mathrm{~A}, 3 \mathrm{BA}$ EANN 990.DATA-AF, 32, C7, 85,32 EADN $1080 \cdot$ DATA - $2 B, 0 \mathrm{D}, 00,00,00$ DABD 1010 - DATA $\cdot 80, \mathrm{CF}$ FADG 1020.NEMORY-43000:LOAD" FAFL $1030 \cdot$ FOR $y=A B E E 0 \cdot T 0 \cdot d B E L E$
 HALC $1050 \cdot \mathrm{ch}=$ ch +p :POKE $\cdot \mathrm{y}, \mathrm{p}:$ :NEXI
 DABD 1079 -CALL- $8 B E 00$ HRFB 1880.PRINT"error in DATA"

## Quattro Racer:

BMX Freestyle Qualify
BMX Sim 2 - Time ATV Sim - Time Championship Jet Ski-Course

Race to the front and stay there whilst others look on in awe!


GAIA 1.' Quattro Racers
EADF 2.'.by.ANDY-PRICE
AAKH 3.'
HAOC 4. - ATV Sin - - stop $\cdot$ clock
GAPL $5 \cdot 1$ BHX $\cdot 2 \ldots$-.lock-speed
NAGC $6, \cdots$ 'BHX -Freestyle $\cdots$ nefarious oddities!
KAAL 7 ,' Chanp -Jet-Ski - - choose' course AAPH 8 .'
EAPI $18 \cdot$ DATA- $21,30,6 c, 11,30$ FAFC $20 \cdot$ DATA $\cdot 30,01,91,01$, ed EAKP $30 \cdot$ DATA $\cdot \mathrm{be}, 21,94, \mathrm{be}, 22$ FALI 40 -DATA. $6 \mathrm{f}, \mathrm{ac}, \mathrm{c} 3,30, \mathrm{ac}$ EALM $58 \cdot$ DATA- $3 \mathrm{e}, 01,32,43,5 \mathrm{~b}$ FAAB $60 \cdot$ DATA $\cdot 03,40,80,4 f, 6 f$ FANG 70.DATA-4f,4f,b8,a8,a8 FAES $80 \cdot$ DATA $\cdot 2 \mathrm{a}, 38, \mathrm{bd}, \mathrm{eS}, \mathrm{ac}$ FABJ $90 \cdot$ DATA $-\mathrm{el}, 22,2 f$, be, ad FAKF $100 \cdot$ DATA $-21,37$, bd, $3 \mathrm{e}, 03$ EAKN $110 \cdot$ DATA - $77,23,3 \mathrm{e}, 23,77$ FACD $120 \cdot$ DATA -3 e, be, $23,77,21$ EAKL 130 .DATA $40,60, \mathrm{e}, 11,00$ FACI $140 \cdot$ DATA $\cdot \mathrm{bb}, 80,03,4 \mathrm{a}, 3 \mathrm{a}$ FAAA 150 -DATA $-3 \mathrm{e}, \mathrm{C} 3,32,10,66$ EAFP 160 -DATA-21,31,be, 22,11 FAPC 170 -DATA-66, ef, $80,00,3 \mathrm{e}$ FAKA $180 \cdot$ DATA $\cdot 02,32, f 9,65, c 3$ FAIN $190 \cdot$ DATA $\cdot 13,66$, $\mathrm{ff}, \mathrm{ff}, \mathrm{ff}$ EABJ 280.DATA-21,70,01,11,35 EANN $210 \cdot$ DATA $\cdot 04,3 \mathrm{BE}, 16, \mathrm{CD}, \mathrm{A1}$ EAEP $220 \cdot \mathrm{DATA} \cdot \mathrm{BC}, 2 \mathrm{ZA}, 0 \mathrm{AL}, \mathrm{BC}, 22$ EAAP $230 \cdot$ DATA-B5,BE,3E,C3,32 FADA $240 \cdot$ DATA $\cdot 6 E, B C, 21,9 F, B E$ EAPO $250 \cdot$ DATA $22,85, B C, C D, 88$ EAKO 260-DATA-01, E5, $21, \mathrm{AB}, \mathrm{BE}$

EACP $270 \cdot D A T A \cdot 22,8 \mathrm{E}, 98, \mathrm{E1}, \mathrm{CD}$ FAPB 289-DATA-B4,BE,CS,F5,AF EAEO 290-DATA-32,12,4C,F1,C3 EAKK $390 \cdot$ DATA $-80,64$, CF , 00,00 DALN 305 -KEMORY-82FFF JAFK 310-MODE 1:PRINI"Quattro-Racers" HRKO $320 \cdot$ PRINT-TAB (13)"by-ANDY-PRICE* HABN $330 \cdot$ PRINT" $^{*}$. ATV. Sinulator ${ }^{*}$ IABC $340 \cdot$ PRINT" 2 , BMX - Sinulator $\cdot 2^{\prime \prime}$ HAEK 350.PRINT" 3 . BKX Freesytle ${ }^{*}$ KANH 350-PRINT"4, Chanpionship-Jet-Ski" HADN 379 -PRINT:INPUI"Nunber*; ip GAFL $380 \cdot$ ON $\cdot \mathbf{j p} \cdot \mathbf{6 0 1 0} \cdot \mathbf{4 9 0 , 4 0 0 , 5 3 0 , 5 8 0}$ CAJK $398 \cdot$ G010-310
DAFF 490-RESTORE - 18 FABN $410 \cdot \mathrm{FOR} \cdot x=1 \mathrm{BE} 88 \cdot \mathrm{TO} \cdot \mathrm{ABE} 9 \mathrm{~B}$ GACP $420 \cdot$ READ $\left.-{ }^{2} 5: P O K E \cdot x, V A L\left("{ }^{2}{ }^{*}+\mathrm{a}\right\}\right)$ FALM $430 \cdot$ NEXI:LOAD"BMX2", \&6C38 JACP 440 -PRINT"Clock - Speed-(1-is fast)" IABG $450 \cdot$ PRINT-TAB(13)" $(5 \cdot$ is -normal)" IAFA 460 -PRINT $\cdot$ TAB(13)* $(255 \cdot \text { is } \cdot 51 \text { ow })^{*}$ JAhJ 470.INPUI"Enter-5peed•Value:", v
 DADJ 490 -RESTORE 290
FAOI $500 \cdot$ FOR $\cdot x=\mathrm{dBE} 80 \cdot 10 \cdot \mathrm{ABEB6}$
GACP $518 \cdot$ READ $\cdot a \$: P O K E \cdot x, V A L(" z "+a\})$ EABI 520-NDXI:CALL-ABE80
LAFJ $530 \cdot$ MODE $1:$ PRINT"Keypress-Cheat:" $:$ PRINT
KAIL 540-PRINI"Redefine-each-players";
HABE 558-PRINT*, nane-as!";PRINT
LAEC 560-PEN-2:PRINT"TAEHC ('CHEAT' ' 'reversed J"
BAFP $570 \cdot$ RUN"
DAJG 588 -RESTORE 80
FACI 590.FOR $\times x=8$ BE80 $\cdot 70 \cdot$ ABE 38
GACP $\left.600 \cdot R E A D \cdot a 5 ; P O K E \cdot x, V A L\left({ }^{n} a^{*}+a\right\}\right)$
GAOB 618-NEXI:LOAD"jetski"
JACF 620.INPUT"Start.Course•(8-8)"; tr
GAPK 630-POKE-ABE32,tr:CALL ABEPO


## Quattro

 Superhits:Super Tank Sim Lives
Super Hero - Lives Italian Supercar Time

Gain superhuman qualities with this simply super routine!

HAPG 1.' Quattro-Super-Hits
EADF 2,',hy-ANDY-PRICE
AAKH $3{ }^{\prime}{ }^{\prime}$
FANE $10 \cdot \mathrm{FOR} \cdot \mathrm{x}=\mathrm{ABED日} \cdot 10 \cdot \mathrm{z}$ BEEA
GALJ $20 \cdot$ READ $\cdot \mathrm{cd} 5: c d=V A L\left(" a^{*}+c d \xi\right)$
EAGL 30 -POKE•x, ed:NEXI
JQJK 40-MODE-1:PEN-2:PRINT"Choose-Gane:"
JOMM 50-PEN-1:PRINT"1.-Super.Stuntnan"
GAES 60.PRINT"2.,Super •Tank*
GAGJ 78,PRINT*3. Super-Hero ${ }^{*}$
JACA 80-PRINT"4, Italian-Super.Car*
HABI 90-PRINT:INPUT"Nunber: "*,n
GABH 100.ON.n.GOSUB-160,120,140, 280
CAKK 118.6010 .398
FAOP 128-RESTORE-360:GOSUB-220
CAES 130-RETURN
GACA 140-RESTORE-380:GOSUB-220

CAGJ $150 \cdot$ RETURN
KACB 160-PRINT:PRINT"Super.Stuntnan:"
KAOI 170-PRINT:PRINT"Tgpe-LIUEHIRE- into";
IAOK 180.PRINT",high.score'table" BADP $190 \cdot$ RUN" ${ }^{\prime \prime}$
FALP 200-RESTORE 340 :GOSUB - 220 CADJ $210 \cdot$ RETURN
FAFI 228-FOR $x=8 B E 2 B \cdot 10 \cdot 8 B E 31$
GABP $230 \cdot R E A D \cdot a t: P O K E \cdot x$, VAL (" ${ }^{2}$ " $+\mathrm{a} \$$ )
EAPA 240 -NEXT:RETURN
FAMA 250-DATA-ED,5B,38,BD, 55
EAGP 260-DATA•A5,ED,53,33,BE
EACP $270 \cdot D A T A \cdot E 1, A C, D D, 21,37$
FAOA 280-DATA-BD, $3 \mathrm{E}, \mathrm{C3}, \mathrm{DD}, 77$
EAHO 290-DATA-60,3E, 2B,DD,77
EADP 300-DATA-01,3E,BE,DD,77
EAPJ $310 \cdot D A T A \cdot 82,21,40,00$, E3
EAIM $320 \cdot$ DATA $11,00, B 3,37,3 F$
EAPL $330 \cdot$ DATA-C3, 4 A $, 3 A, 00,00$
EAFN 340 -DATA-AF, $32, C 8,17,32$
EAGK 350 -DATA $91,4 \mathrm{~F}, 00,00,00$
EAKN 360-DATA -AF, $32,56,37,32$
EAKK $370 \cdot D A T A \cdot 2 B, 99,00,00,00$
EANM 380-DATA-AF, 32,63,37,32
EALK 385-DATA-6A,37,00,00,80
DAIP 390-POKE- ABE 32, ACF
FAED 400-MENORY- $\frac{23}{3} 300$ :LOAD ${ }^{*}$
CAOP $410 \cdot$ CALL - EBEOD
Graham Smith of Street has bashed together cheats for The Dizzy Compilation and The Cartoon Collection, get stuck into them too.

## Cartoon Collection:

Seymour goes to Hollywood - Lives Spike in
Transylvania - Lives Slightly Magic -
Lives
Dizzy (again) - Lives
Little Puff Invulnerability


NAKI 1.'.Cartoon $\cdot$ collection'by Grahan $\cdot$ Snith HDKK 10-DATA $-86,00,11,11,11$, cd, 77, be, d5, eb, cd $, 83, \mathrm{bc}, \mathrm{e} 5, \mathrm{~cd}, 7 \mathrm{a}, \mathrm{ho}, 01,10,08,11,00, \mathrm{be}, 21$, e2, $90, \mathrm{ed}, \mathrm{be}, \mathrm{e} 1, \mathrm{~d} 1,7 \mathrm{a}, \mathrm{fe}, 3 \mathrm{a}, 20,28,7 \mathrm{~d}, \mathrm{fe}, 4$ $3, c 0,2 a, 38, b d, 22,0 \mathrm{a}, \mathrm{be}, 21,37, \mathrm{bd}, 36, \mathrm{c}, 23$ $, 36,00,23,36, \mathrm{be}, 11,00, \mathrm{bh}, 21,40,00, \mathrm{e} 3, \mathrm{c} 3$, $4 \mathrm{a}, 3 \mathrm{a}, 21,38,30,22,22,3 \mathrm{~b}, \mathrm{c} 3, \mathrm{e} 9,3 \mathrm{a}, \mathrm{d} 5,01$
GDLE 28-DATA $71,00,11,1 \mathrm{e}, 02,21,5 \mathrm{~h}, 90, \mathrm{ed}, \mathrm{be}, \mathrm{d1}$ $, c 3,1 e, 02,7 a, b 7,20,10,21,2 a, 02,22,7 f, 00$, eb,e9, cd, $9 \mathrm{f}, 80, \mathrm{af}, 32,91,16, \mathrm{c9}, \mathrm{fe}, 03,20,1$ $0,21,3 e, 02,22,3 e, 03, e h, e 9, e d, 98,03, a f, 32$ $, f 1,40, \mathrm{c9}, \mathrm{fe}, 8 \mathrm{a}, \mathrm{c2}, 00,00,21,59,02,22,56$, $8 \mathrm{~b}, 21,00,00,22,60,8 \mathrm{~b}, \mathrm{eh}, \mathrm{e} 9, \mathrm{~cd}, 52, \mathrm{fe}, 01$
CCKN 30-DATA-1d,00, $11,00,00,21,68,02$, ed, be, c9 ,cd, $52, f e, a f, 32, b 8,61,21, c 8,61,36,7 e, 23$, $36,67,23,36, c 2,23,36,82,23,36,61,23,77,2$ $3,77,09, \mathrm{af}, 32,3 \mathrm{a}, 95,3 \mathrm{e}, 03,32,18,95$, cf
CCKL 40-DEFSTR-a-e:FOR - j= $=9000 \cdot 10 \cdot 490 C B ; R E A D$. a:POKE. $\mathrm{j}, \mathrm{UAL}(" \mathrm{~g}$ " $+\mathrm{a} \ddagger$ ) :NEXI: $a=$ STRINGs $(22,4$ 2): $b={ }^{*} *^{\prime \prime}+\operatorname{SIRING}(20,32)+{ }^{*} *^{\prime \prime}: c=S \operatorname{TRING}(15$ ,42):d $=^{*} *^{0}+$ SIRINGs $(13,32)+^{*} *^{n}$
FBNC 50.ez"-Infinite lives ":GOSUB•60:PRINT" $\uparrow$ Seynour goes to Hollyuood
IAPA Spike'in-Transylvania

FABF Slightly. Kagic
CAKB Dizzy
EAPB Little.Puff
JAIL 〈 $\downarrow$ ";e;e;e;e;"Invulnerability
JANE $\boldsymbol{\gamma}^{(" j a ; b ; b ; b ; a ; " C A R T O O N . C O L L E C T I ~}$ ON
GAOG < Insert-gane tape
BADP f
GANP 60.CALL-49000:G0SUB-80:PRINT"
KENC . During-the-gane-press keys-D-R-A.G.O-N at-the'same'tine'for-invulnerability.... fron-nost-things....This-also-lets-yeu-. change-location by holding-down-shift... and • pressing-an -arrow 'key, …If 'you'do-get-killed-then,";
DBLB 70-PRINT"re-enter'the cheat-after";"rest arting-the,gane.
HAEE • "jojd;d;d;c;"LITILE.PUFF
MAGI $\uparrow\langle\langle$-Press -any ,key- $\rangle$....
*:CALL- $\mathrm{ZBB18:CALL}$-49842
HAFC 80.PRINT"tAKS
IRAD - ACTION-CHEAI HODE" :RETURN

## The Dizzy Collection:

Dizzy (yet again) - Lives
Treasure Island Dizzy - Immunity
Fantasy World Dizzy - Lives
Magicland Dizzy - Lives
Fast Food - Lives

HAKK 1.' Dizzy-Collection, By-Grahan-Smith.
MAGA 2.',Also-for original -ganes, except
GAKJ 3, '(perhaps) -Dizzy.4.
JQLH 4,',Dizzy, Dizzy 3, -Dizzy-4 and
KAGA 5,'नTast-Food--, infinite-lives.
MAKH 6.'.Dizzy.2...innumity from-drowning,
LAPP 7,'flanes, 'cages-and-sea-creatures
IAJI $8 \cdot$ ', Save'to-tape, not-diso.
AABI $9 .{ }^{\prime}$
IACP $18 \cdot$ DATA $-11,00,01,43, \mathrm{od}, 77, \mathrm{be}, \mathrm{d} 5, \mathrm{eb}, \mathrm{cd}$ JAFS 20-DATA-83,be,cd,7a,be, e1,7c,fe, 3a, 28 IAND 38 -DATA $-4 e, f e, a f, 28,25,01,17,00,11,85$ IANM 48 -DATA-8a, 21, 27 , be, ed , be , c3, $91,8 \mathrm{a}, 21$ HAHP $58 \cdot$ DATA. $60,03,22,4 \mathrm{~b}, 3 \mathrm{e}, 11,00,48,03,71$ IAJB $68 \cdot$ DATA - be $, 21,13,8 \mathrm{~b}, 36,03,23,36,85,23$ IAAK 70.DATA- $36,8 \mathrm{a}, 21,47$, be, $22, \mathrm{cc}, \mathrm{af}, \mathrm{c} 3,80$ IAPH 80-DATA-af, $21,8 \mathrm{a}, 8 \mathrm{~b}, 7 \mathrm{e}, \mathrm{fe}, 20,3 \mathrm{e}, 18,28$ HAOO 90 .DATA $\cdot 86,77,32,92,8 a, 18,86,32,1 \mathrm{c}, 8 \mathrm{~b}$ IAEF 100.DATA $32, a 4,8 a, 32,2 e, 01,03,40,68,2 a$ JAEA $110 \cdot$ DATA $\cdot 38$, hd, $22,9 \mathrm{e}, \mathrm{be}, 21,37, \mathrm{bd}, 36, \mathrm{c} 3$ IABG $120 \cdot$ DATA $\cdot 23,36,7 \mathrm{e}, 23,36, \mathrm{be}, 11,00, \mathrm{bh}, 21$ IADJ $130 \cdot$ DATA $-40,00, e 3, c 3,4 a, 3 a, 21,8 c, 57,7 e$ IAKD 148-DATA-ee, $3 \mathrm{~d}, 20,03,77,18,14,21,63,38$ IAKK 150-DATA-7e, ee, $3 \mathrm{~d}, 20,03,77,18,09, a f, 32$ HAAG 160 .DATA $\cdot 3 \mathrm{a}, 95,3 \mathrm{e}, \mathrm{c9}, 32,18,95$, cf HANF $178 \cdot \mathrm{FOR} \cdot \mathrm{j}=48648 \cdot \mathrm{TO} \cdot 48797$ :READ a ! JAIN $180 \cdot x=$ VAL (" $\left.{ }^{2}{ }^{\prime \prime}+a \$\right): y=y+x: P O K E \cdot j, x: N E X T$ GACN $190 \cdot$ IF $y=15354$-THEN - CALL $\cdot 48640$ GAFE 200-PRINI"data-error




Upethere, flying through the cloud's, soaring with the birds, siwooping fike anieagle, diving-like a heron (getting blown to Gits like:a clay pigeon), playing in the fluffy pink clouds, and baick in time for,tea -life in, the Air Force is good, handsome, brave, dashing.es or is it:-SIMOA FORRESTER thinks not.

That's dross. Your lifespan was ten minutes in a Spitfire, and probably not much longer in a Harrier, You were cold, scared, and exhausted and filled with the cold dread of sudden, unheroic death. So especially for you, Altemative have allowed us all to reive the experience with their flight sim compilation pack containing Spitfire 40 and Strike Force Harrier - two of the biggest selling sims on the CPC. But are these games any good? In reality, it all depends what lights your candle. Personally, my candle positively melts when I think of hanging upside down 30,000 feet up in the air!

## Spitfire 40

This game must have been a nightmare to program, seeing as not only have you got to write a flight sim, but a faithful conversion from reality. Whether theyve achieved this is, quite frankly, anybody's guess (when was the last time you went up in a Spitfire then?).

The game is simple; fly over England blasting as many bells as possible out of your opponents. That's it. Your opponents, like everything else in this game, are essentially vector graphics, but the speed at which this game runs excuses that - if those straight lines were all filled in with colour and stuff like that, the game would be too slow to be playable.
On loading, you have the choice of practice


Chocks away, and I supose I'd better start the plane up (it usually helps).


Oooh, It's a bit of Blighty! Some of It's a bit brown, but It's what we call home.
mode (no evil villainous bad guys), combat mode (the real thing, chocks away etc), and finally combat practice this sees you already in the air being attacked by a stream of Red Baron style blokies). This makes Spitfire 40 more than just a mediocre flyand-shoot'em-up.

The graphics in Spitfire 40 aren't exactly beautiful, with not much on the ground, the horizon, or indeed, the air. Life isn't all dull though, as getting used to the controls and learning to fly a plane that has great difficulty maintaining height will keep you too occupied to worry about the lack of ground detail. Sonically, this game is just a tad annoying. The problem with any simulator is that programmers always seem to feel compelled to simulate a whining engine with a really heavy fiange.
When yourre flying, certain things are bound to confuse you at first. The scariest problem you'll have is suddenly tipping forwards and flying towards the ground. Aaazaaueargh!

Spitfire 40 isn't the smoothest or flashiest game in the world, but it's fun.


## Strike Force Harrier

Time to dispense with all the 'Tally Hols' and such like, and move to more modern quotes such as, "Tll see you in hell, Jack" as we move almost bang up to date with Strike Force Harrier, and if you though reviewing Spitfire 40 was difficult enough, you ought to try taking an authoritative stance this one! However, I suppose ld better do my job (When? Ed) and appear the allseeing, allknowing reviewer.
The quality of the simulation is still open to question, but what about the quality of the game? The first problem you'll encounter is the fact that there don't seem to be any instructions. You're not even told how to speed up, let alone climb! Always assuming you don't want to use them, there are a lot of features on the Harrier. There's loads of weapons (what is a chaff anyway?) and


Oh I see, these are the controls are they? So how do I fly this thing?


Life on the ocean waves, la da da ... Oh sorry, wrong game.


Die, you planey-type flying thing that's probably British. Oh dear.
some nice fun to be had shooting the hell out of people.

Graphically, Harrier is a little better than Spitfire 40 , with stuff on the ground, mountains, etc. Sonically, it's pretty much the same.
Once you get the knack of playing this game, you'li enjoy it. However, if you don't like flight sims as a rule, what are you doing with this game anyway?


## YERDIG

## Girenpmapes

They're both good looking and nice to play, but Harrier seems ever so slightly better.


## somanes

There's not much you can do with a flight sim. As far as flanging motor effects go, they're okay.

## GIRNES FFACTMR

How grabby can a flight sim be? There's little room for originality in the format.
STRMVITAG poonners If you like flying around a lot, this pack has certainly got the goodies to keep you happy.
Flight sims are a funny bunch. You either love them or hate them. If you love them, these are for you!


## There may only be two games in this month's Action Replay, but they're two jolly good ones. So good in fact, that we've put one on each page! <br> 

## 

## The Hit Squad 0618326633 国 $\mathbf{1} 3.99$

## That incredibly sporty jock (ahem) SIMON FORRESTER picks up his bat and steps on to the diamond...

Oh scriddly dee. La tum te tum. What? A baseball game? What's baseball? Oh, you mean rounders? So what's the difference? A diamond? Where does that come into it?
Ooh Lordy Simon, you are so thick. Baseball differs from rounders in that baseball is played on a diamond shaped pitch, and only has four


This is what the whole screen looks like. it's pretty spiffy, isn't it?
bases (including the batting base). All the standard rules of rounders are still applicable as, basically, baseball is just an American variation of rounders, or rounders is just an English version of baseball.
In RBI2 most of the game involves shots of the diamond, the feld, and the bowlers mound. The animated sequences are absolutely beautiful, with the ball arcing right up to almost obscure your view of the diamond.
The game is quite a good simulation. You have the option to select the starting players in your team and, with none of the messing around involved with positioning people, you can dive headfirst into the main game. Fielding can be a tad slow, with the blokies crawling through the grass, but the batters don't move all that fast either anyway.
Gra... (Graphically, there's very little you can do with a game like this, Ed) Ot (If you've ever played a cricket game, you'll know it's just like an isometric version of Lemmings. Ed) Help! I Im being obscured by Ed comments! (The fielders are slightly easier to control in RB12, though you might have some trouble getting to grips with it first time around: Ed)



As the fielder ran towards the ball, the audience held their collective breath.


Daylight turned to dusk and the players' thoughts turned to their tea.
Can I do the sound, Linda? The sound is all right and quite unobtrusive, it won't detract from the game though it won't add much either.
All in all, RBI 2 gels together quite well, it's nice to be able to select your team, and it doesn't get too tedious as there isn't much tactical talk. It's always a plus point to have some animated sequences to look at instead of lots of boring boxes with numbers in. Ed)
Erm, Linda, (What? Ed) I was quite looking forward to reviewing this game. (But it's quite clear to everyone that you know very little, if anything, about the intricacies of the game of baseball. Ed) But I could learn.

## RBI - What does it mean?

Righteous Baseball interaction

- Rather Blimmin' Important
- Really Blue Ink
- Rancid Banana Incense
- Render Badgers Insensible
- Respect Bad Instructions
- Romantic Bohemian Inventor


# Terminator 2 

The Hit Squad 00618326633 톱 $\mathbf{E 3 . 9 9}$
"I'm a cold heart breaker, fit to burn, and I'll rip your heart in two... " SIMON FORRESTER straps on his metal arm and grabs a piece of the action.

So it's the game of the film of the book, eh? Quite frankly, the thought of meeting that AxI Rose (Who? Not terribly with it AA reader)... out of Guns ' $n$ ' Roses (Oh yes, Guns and Roses. Jolly nice chaps, lovely ear for melody. Even less with it $A A$ reader) in a dark alley is slightly more horrific than meeting Arnie (especially if AxI started singing Ed). Still that's by the by and, after a pointless effort to let you know how scared I am of Axl Rose, we'd better take a look at the game.

Level One - The shopping mall - Enter Arnie stage right, and the strange liquid bloke stage left. If you play this game anything like I do, itll run as follows: Arnie kicks the other bloke. Bloke turns his hand into a spike and stabs Arnie. Arnie tries to punch him. Arnie misses. Bloke headbutts (or rather blob-butts) Arnie. Amie kicks. Arnie kicks. Arnie kicks. Arnie kicks. Bloke melts. Bloke reforms himself. Arnie keeps kicking, Bloke eventually dies after doing various liquidy things. Why do I get the feeling that everyone's going to write in, having followed this paragraph to the letter and then lost? Ed)
Level Two - The flood channel - Enter Arnie on a cool Harley, with John Connor draped over the back (Makes a change from a scantily clad, erm, lady. Ed), being pursued by the same rather scary liquid bloke in a pretty hefty truck. The idea


Allo! Ich bin das Terminator und I vould like to know vas mein hed ist doing over there?


Ich bin das Terminator und du ist ein blob von metal. Du cannst nicht me beat.
 There are also puddles to skid about in and drink cans that, for some reason, seem to cause immense hassle. (I think they're meant to be petrol cans actually. Ed)

Later on, you get some smart puzzle bits to work out. In Level Three you have to operate on the Terminator's arm. It's one of those rearrange-the-blocks puzzles and it's fiendishly difficult. Still, everything's made a bit easier by the friendly controls. If you're kicking yourself with frustration it won't be because of the joystick. A couple of levels later, you have to do the same thing with old Termy's head. The levels kind of repeat themselves, so you get a couple of other racey levels and a couple of fighty ones. They may be quite similar ideas, but they get progressively more difficult. One thing's for sure, this is a blimmin' hard game.

Like Arnie (okay, I admit it, I can't spell his last


Ha! das Terminator (das ist me, ja?) ist vonce again die best. Oh, Ich bin so gut!

Your Ameikanische roads are sehr dirty. In Deurtschland, alles ist clean und, how you say, neece. Ja, ist all neece.
name), this game is immensely and well 'ard. You've seen those games where you complete them in a matter of seconds? Well, this is definitely not one of them. You will progress further every time you play, but you won't complete this on your second go. You'll definitely keep on trying and there are certain skills that you'il slowly get the gist of, and some that'll take a little longer to master. Indeed, there are a wide range of skills needed, not least puzzling out just how to fit all those blocks into Arnie's unfished fizzog. This isn't just a fighting game, a racing game nor a puzzie game. It is in fact a combination of all the elements that have created classic games in the past. Whether this was a deliberate strategy on the part of the programmers, or whether the plot of the film simply ient itself rather easily to this format isn't clear. Whichever way round though, you'll have a lot to do.

So how does it measure up? Well, as an action game, it's got it all, or most of it at least. And it's even got those lovely puzzley bits. It's nicely presented, with some good graphics, and incidental loading screens. It's definitely worth a review, which is a good job really!

## VERDICT $90 \%$

Futarre Pablalishnimg Limmited, Beanford Court, 30 Monnmouth strect, Bath, Avorn BAn zBy Tolf ornes 4422act Fius: oz2s a46019

## Editor Linda Barker

staff Writer Simon Forrester Contrilautors Stuart Whyte, Phil Howard, Jerry Glenwright, Richard Fairhurst, Tim Blackbond, Colin Wren, Stuart Baynes Art Editor Nick Aspell Senior Ad Sales Executive Jackie Garford Publisher Colin Campbell Promotions Assistant Tamara Ward Group Publishing Director Greg Ingham

Production Craig Broadbridge
Subscriptions Christine Stacey, tel: 045874011
Circulation Director Sue Hartley, tel: 0225442244

- Reader calls: We regret we have to restrict reader calls to Tuesday afternoons.
© Future Publishing Ltd 1993 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.


## Printed in the UK



## 'Vour gumaratee of valme"

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

Better adyice. Our titles are packed with tips, suggestons and explanatery features, writuen by the best in the bumness.
Stranger reviewe. Wo have a castron policy of editorist independence, and our roviows give claar buying recommendations:
Clearer dealen. You neod solid intormation tast. So our detigners hithlitht key eloments by uing charts, diagrams. summary bores, annotated photoseraphs otc.
Creater rolevance. At Future, editors operate under two golden rules:
Solden rutes Understand your renders' needs:
-sotisy bem
Mors 'ruader Imteraction. Wo draw stronely on readers' contributions, resulting in the livoliett tettirn pases and the bost reader tps. Buying one of our magazines is like joinhg a nationwide user croup.
Befter walue for money. More pmes, better quality: magazines you can truat.

Home of Britan's foest computer mapazines. Anstad Actim - Your Shathr - Comneder Format • PCW PAr •PC Pus - PC Awwen PC Fomat • Anina Fomit • ST Fomme Sena

 Crout-Sith Colloction - Crman Plur and otbers

## ABC <br> 35,298

## 1) MEt M/ODTH

## Coming to a newsagent near youl



Rod used to live in a bus Hike that!

## Wore Itids...

The Fun School collection, The Shoe People and Playdays crocodile march on to the CPC (and in to your child's mind).
Get some education!

## More Upgrades

The next instalment of Phil Craven's series on boosting your CPC Plus to the skies. Next month 6218 Plus owners can find out how to operate that remote!


Erm, we ran out of pictures of upgrades!

## Street Fighither 2

We live in eternal hope, and promise we'll review it next issue. It was delayed this month. We all cried bitterly, but that's the way it is. However, abandon not ye faith! We shall cometh in the future, with fist and foot, to bring you this long-awaited beat'em-up.


## Wiachume Covle (aymina)

Simon Forrester takes you on a ramble around the innards of your CPC.

|  |  |
| :---: | :---: |

## April issue on sale Mardh 254

MAG*SAVE



## LC 200 COLOUR PRINTER PACKACE

## NOW YOU CAN PRINT OUT YOUR PICTURES IN FULL COLOUR!

- The Star LC200 Colour Printer not only prints in Near Letter Guality for youvregular jobs but also prints out your pictures from Art Studio, etc., in genuine colour!
- LC200 is a full Centronics printer so it works with other comppiters (Amiga. ST, etc.).
- Made possible by Datel's unique colour printer derver - now you can have a hardcopy in up to 16 colours!! - No more to buy - Just plagm and printt!

PACKAGE INCLUDES... STAR LC200 COLOUR PRINTER RRP $£ 299.00$ CENTRONICS PRINTER LEAD RRP C9.99 DATEL COLOUR PRINTER DRIVER SOFTWARE RRP E19.99 NORMALLY ع327.98
COMPLETE PACKAGE NOW ONLY £239.00 COLOUR PRINTER DRIVER AVAILABLE SEPARATELY ONLY £19.99

- If you already have an LC10 or LC 200 Colour Printer we can supply the Driver separately.


## ätivincs



- Simple piug in memory expansion gives instant extra memory. - Features bank switching software for casy use by the programmer or for use as a data storage area.
- Ideal for use with the CPM 2.2 etc.
- The software also features some extra BASIC commands. - 64 K unit expands 464 to 128 K .
- 64 K unit brings 464 up to CPC 6128 memory configuration making a much larger software base available. Will work straight off with many programs designed for this unit (including OCP Art Studio, see Ad.).
- Bank switching done automatically by software (cassette 464).

ONLY £49.99 $\mathbf{6 4 K}$ FOR 464

5:18]
L. M1TE:

HOW TO GET YOUR ORDER FAST! TELEPHONE [24Hrs] 0782744707 CREDIT CARD ORDERS
 $\square$ Lin ELECTHONICS Fin

GOVAN ROAD, FENTON INDUSTRIAL ESTATE, FENTON, STOKE-ON-TRENT, ST4 2RS, ENGLAND. FAX 0782744292 TECHNICAL CUSTOMER SERVICE 0782744324

DATEL LONDON SHOP

222. TOTTENHAM COURT RD, LONDON, W1. TEL:071 5806460

64k RAM Expansion, CPC464 only
$39.84 \quad 1.18$
$3.5^{*}$ DS/DD Bulk inc Labels PKT 10 CPC Centronics Printer Lead 1.5 m CPC Centronics Printer Lead 2.0 m CPC to Video Lead, state BNC or PHONO plug Expansion Port Adaptor for CPC464+/6128+ plus machines (WIDGIT) Advanced Art Studio, CPC disk (Requires 128 k Memory) Genius Mouse + Advanced Art Studio
Amstrad, MicroScript Word Processor, CPC464/664/6128 disk 40025, 464 Upgrade ROM
The Amstrad 12 pack, 12 Games on cassette for the CPC464+
Amstrad Soft 158A-DDI-1 Firmware Manual
MultiFace 2, for CPC464/664/6128
MultiFace 2, for CPC464+/6128+
Amscase $3^{*}$ Disk Filing Cabinet, holds $103^{*}$ disks
MicroFile/MicroWord, Database \& Word Processor
Burning Rubber Cartridge, GX4000
Paddle Controller, for CPC464+/6128+ \& GX4000
System Disk, CP/M plus CPC6128
System Disk, Dr Logo \& Help CPC6128
System Disk, CP/M plus CPC6128+
CPC6128 Manual
CPC464+/6128+Manual
Service Manual CPC464
Service Manual CPC6128
Service Manual CPC464+/6128+ \& GX4000
Service Manual DDI-1 \& ED-1
Service Manual Amendment \& CT-1/MP-3
Ribbon DMP2000, PKT 2
Ribbon DMP2000, PKT 10
Ribbon LC10 Mono, PKT 2 Ribbon LC10 Colour
Ribbon LC2410/LC24200/LC24100, PKT 2 Ribbon PCW8256/8512 Fabric Nylon, PKT 2 Ribbon Cítizen 120D, PKT 2
Ribbon PCW9512 Multistrike, PKT 2
Ribbon PCW9512 Fabric Nylon, PKT 2
LEAD Amiga 500/600/1200 to CM14 Colour Monitor LEAD Amiga 500/600/1200 to CTM640/644 Colour Monitor, no sound LEAD Sega MegaDrive to CM14 Colour Monitor LEAD Sega Megadrive to CTM640/644 Colour Monitor, no sound LEAD Spectrum $+2 /+2 a /+3$ to CM14 Colour Monitor LEAD Spectrum $+2 /+2 a /+3$ to CTM640/644 Colour Monitor, no sound CPC Joystick Splitter, allows two joysticks on a CPC464/664/6128 Joystick Extension Lead 1.5M MP-1F for CPC464 to allow use of the computer on SCART TV MP-2F for CPC664/6128 to allow use of computer on SCART TV MP-3 for CPC464/664/6128 with CTM644 Colour Monitor, to make monitor into a full colour TV
$4.99 \quad 1.18$
$\begin{array}{ll}7.64 & 0.59\end{array}$
$\begin{array}{ll}8.40 & 0.59\end{array}$
$\begin{array}{ll}7.14 & 0.59\end{array}$
$9.40 \quad 1.18$
$\begin{array}{rr}16.41 & 1.18\end{array}$
$40.86 \quad 3.53$
$\begin{array}{ll}4.99 & 2.35\end{array}$
$25.03 \quad 1.18$
$\begin{array}{ll}3.99 & 3.53\end{array}$
$\begin{array}{ll}4.99 & 3.53\end{array}$
$34.42 \quad 3.53$
$41.42 \quad 3.53$
$\begin{array}{ll}2.99 & 1.18\end{array}$
$10.95 \quad 3.53$
$18.49 \quad 1.18$
$\begin{array}{ll}8.34 & 1.18\end{array}$
$\begin{array}{ll}17.12 & 1.18\end{array}$
$13.22 \quad 1.18$
$\begin{array}{ll}6.61 & 1.18\end{array}$
$16.43 \quad 2.35$
$\begin{array}{ll}15.28 & 2.35\end{array}$
$11.00 \quad 1.18$
$11.00-1.18$
$\begin{array}{ll}5.63 & 1.18\end{array}$

| 7.50 | 1.18 |
| :--- | :--- |

$\begin{array}{ll}11.00 & 1.18\end{array}$
$\begin{array}{ll}3.88 & 1.18\end{array}$
$18.00 \quad 2.35$
$\begin{array}{ll}4.70 & 1.18\end{array}$
$4.23 \quad 1.18$
$\begin{array}{ll}6.32 & 1.18\end{array}$
$\begin{array}{ll}5.10 & 1.18\end{array}$
5.50
$\begin{array}{ll}4.72 & 1.18\end{array}$
$\begin{array}{ll}5.52 & 1.18\end{array}$
$\begin{array}{ll}14.99 & 1.18\end{array}$
$\begin{array}{ll}14.99 & 1.18\end{array}$
$12.99 \quad 1.18$
$\begin{array}{ll}12.99 & 1.18\end{array}$
$12.99 \quad 1.18$
$12.99 \quad 1.18$

| 7.99 | 1.18 |
| :--- | :--- |

$\begin{array}{ll}5.99 & 1.18\end{array}$
$\begin{array}{ll}19.99 & 4.70\end{array}$
$25.99 \quad 4.70$
$\begin{array}{ll}22.95 & 4.70\end{array}$
MP-3/PSU for CPC464 with CTM640 Colour Monitor see above MP-3+ for CPC464+/6128+ Colour Monitor see above
Amsoft CF2 Disks Box of 10
Amsoft CF2 Disks Box of 10 in Hard Plastic Cases
CF2 Disks Ex-software House PKT10
TASWORD 6128, Word Processor
GX4000 Games Console, including burning rubber cartridge GX4000 SCART to SCART TV Cable WAVE CPC Price List disk
Money Marager, CPC Home/Small Accounts Program Disk

## CLEARANCE OFFERS

PAPERBOY 2 DISK $£ 5.99+£ 1.18$ P\&P PP8 - 17 GAME PACK DISK $£ 14.99+£ 2.35$ P\&P TEN OF THE BEST VOLUME $1 £ 8.99+£ 1.18$ P\&P TEN OF THE BEST VOLUME $2 £ 8.99+£ 1.18$ P\&P CHARTBUSTERS $£ 8.99+£ 1.18$ P\&P
11 GREAT GAMES + WORD PROCESSOR $£ 12.99+£ 1,18$ P\&P FUN SCHOOL 1 UNDER 5 s $£ 9.99+£ 1.18$ P\&P FUN SCHOOL $15-7 \mathrm{~s} \quad £ 9.99+£ 1.18$ P\&P
FUN SCHOOL $18-12 \mathrm{~s} \quad £ 9.99+£ 1.18$ P\&P DISK 50, 50 CPC GAMES $£ 12.99+£ 1.18$ P\&P

ALL CLEARANCE ITEMS ARE DISK BASED

MODIF Y YOUR CPC6 128 PLUS TO LOAD E SAVE CASSETTE SOFTWARE



MODIFY YOUR DDU 4 INTEREACE TO WORK ON THE CPC464. All you have to do a wend wiy your DDI 1 Interface and we wil modiry it te work on the do4t only $\mathrm{C15} .00+53.53 \mathrm{PAP}$

## MINI OFFICE 2

Complete Word Processor Database, Spreadsheet Communications
All in one package!!!!!! Cassette Ver. $£ 14.99+$ E1.18 P\&P Disk Ver. $£ 19.99+\varepsilon 1.18$ P\&P

GX 4000 GAMES AVAILABLE MYSTICAL - WORLD OF SPORTS TINTIN ON THE MOON
Games $£ 12.95+£ 3.53$ P\&P each

## THIS MONTH ONLY

AMSTRAD CPC + \& GX4000 PADDLES ONLY £3.99 + £1.18 PEP


[^0]:    

[^1]:    Company Name (if applicable)

[^2]:    Address:

[^3]:    March 1993 AmSTRAD ACTION

