

FRONT
COVER



REGULAR SCENE

Index & General Information 2
 ED Talk 3
 Data Blast 4 & 5
 Classified 6
 Readers Letters 7, 8, 9 & 10
 Readers Quickies 10
 Importing Service 30
 So, What's New ? 31
 Bargain Basement 31

FEATURES SCENE

CS-SuperPSU 6
 CS CD-ROM 11
 1541/AMIGA PSU 11
 The New 24-BIT Horizon 12 & 13

GAME SCENE

Budget Brilliance 14
 Cunning Stunts ! 14
 Role Playing Games 26

GEOS SCENE Yellow Pages

geoTELEGRAPH 15
 ED Talk 15
 geoNUT Disk Depository ... 15 & 16
 GEOS from ZERO 17 & 18
 GEOS On The Disk 18

FEATURES SCENE (continued)

Hard Drivin' 19 & 20
 Lights, Camera, ACTION ! 20
 LCD64 21, 22 & 23
 Thumb Candy 23, 24 & 25
 What Kind Of Member ? 28

SERIOUS SCENE

Learning Machine Code 27

SUPERCPU SCENE

Postponed 0

PUBLIC DOMAIN and DEMO SCENE

Postponed 0

REVIEW SCENE

Fanzine Roundup 28

MUSIC SCENE

Postponed 0

C64 EMULATOR & WWW SCENE

Postponed 0

CONTAX SCENE

Contax UK 29
 Contax WORLD 29

ADVERTISEMENT SCENE

Back In Time 3 Back Cover
 CS CD-ROM Back Cover

INCLUSIONS

STOP PRESS update sheet, 5.25"
 Coverdisk*, Coverdisk Sleeve(s)*,
 Coverdisk Information Sheet*
**optional*

ARTWORK

General : Chris Bohanna (new artwork)

CONTRIBUTORS TO CS

Allan Bairstow (editor), Ken Ross,
 Robert Bernardo, Andrew Fisher,
 Dave Elliot, Richard Bayliss,
 Nicholas Coplin, Wayne Womersley,
 Jane Templeton, Jeri Ellsworth,
 David Walker, Mike Vainola,
 Dale Sidebottom, Jakob Voos
 Nathan Butcher, William Kennedy
 BBC2, Channel4, Lord Ronin
 Shaun Bebbington, Go64, CMD
 Centsible Software, Kenz
 Mihai (Michael) Barbat
and anybody else that I have missed !

EDITORIAL ADDRESS

14 Glamis Close , Garforth , Leeds ,
 West Yorkshire, LS25 2NQ , UK

Telephone/FAX
 (0113) 2861573 before 9pm

COMMODORE SCENE COPYRIGHTS

All the material within Commodore Scene is freely available for duplication within the Commodore community and it is okay to reprint any pages in your own newsletters / fanzines / diskzine - PROVIDING - all credit is given to its original author and you give the details out of Commodore Scene.

Duplicating Commodore Scene in its entirety for profit (or to 'pass on' to another C64 user) is strictly prohibited. Please order an original copy. If the copy is for promotional purposes, then please contact me and discuss favorable terms.



General Advertising Rates

	Black & White	Colour
Back cover	N/A	£50.00
Full page	£25.00	£30.00
Half page	£20.00	£25.00
Quarter page	£15.00	£20.00
Boxed (Contax) ad	£5.00	per year
Classified	5p	per word
Classified	FREE	readers/subscribers

General Information

Polo Shirts	£15.00
T Shirts	£13.00
Sweatshirts	£15.50
Baseball Caps	£7.00

The following clothing items are available from the editorial address, please note that these items are quality products with fully embroidered logos on them - these are not cheap rubbish. Sizes : small (34"/36"), medium (38"/40"), large (42"/44"), X-large (46"-48"). Colours : white, black, sunflower, navy, bottle green and burgundy Please allow up to three weeks for delivery.

General Conditions

All material recieved by Commodore Scene will be regarded as 'printable' unless specifically stated otherwise. Swearing and foul language will NOT be printed.

Writers Pack

If you would like a CS writers pack to help you compile your submissions for CS then just drop me a SAE and I will post one out to you.

Advertisers Pack

All advertisement rates are negotiable. There is a 'CS Advertisers Information Pack' if anybody requires one, just drop my a line. All 'paying' advertisers will receive one complimentary copy of that particular issue (no coverdisk).

Distributors Pack

If you would like to distribute (or are thinking about distributing) Commodore Scene within your country then please drop me a line and I will send

out this pack to you describing some of the terms and benefits.



allan.bairstow@btinternet.com

E-MAIL

Hi there everybody. I hope you are all doing well ?

This issue of CS is again filled with some very interesting viewpoints, articles and letters ! I hope you all enjoy it.

Postal Service : The UK postal service never ceases to amaze me. CS33 was a fairly trouble free as regards lost issues (only one this time), but the time it takes to arrive is quite astounding indeed. Most of you got your copy of CS a day or two after I posted them (all on the same day), however, one or two took an amazing ten days to arrive ! To top it all off, people in Europe got theirs in about three to four days - that is six days earlier than people in the same country of postage ! Ah well, I suppose it is a cross we have to bear.

On a more serious note, some of you will already be aware that my post delivery is now under investigation by the Post Office because I have not been receiving some of the money that people have been sending to me. This is very worrying indeed. In the mean time, would everybody make sure that all envelopes are as secure as possible and please 'cross' all cheques and postal orders - that way only I can cash them into my account. I hope this is no more than a 'glitch'. I will let you know more when things have calmed down a bit.

CS Library CD-ROM : At long last, it appears that this CD is now available and fully functional. The problems with this CD in the past was that when it was created the Commodore CD reading program would not recognise the disk, hence you could not then transfer the files back to a 1541 disk. These problems are now a thing of the past and the CD is available to buy and use with your Commodore. See page 11 for details.

Holidays : Some of you have expressed concern over the fact that in the last issue I printed the dates that I would be on holiday. What I actually did not print was that my house would not be empty (even though we are on holiday), what I meant was that I would not be here to answer any questions, etc because my mum knows absolutely nothing about computers !

CS35 : It's official - CS35 will be the 'Arcade Special', filled to the gills with arcade articles and features. Most of the normal features will be suspended and most of the magazine will be dedicated to arcade stuff*. The coverdisk (possibly two) will have arcade conversions that made it to the c64.

As well as all this, there 'may' well be a few extra colour pages and the page content will rise from the current 32 pages up to 36 pages. This is partly because CS35 will be held back for one month due to time restraints on myself over my busy summer period. CS35 will be due out on 1st August 2001.

* There will be a couple of features on 'other items as well.

Naughty Bitz : This special supplement will be coming with CS37 (1st December 2001). This special supplement will only be supplied with CS37 and will not be available separately. The cost is only £1 and this will get you the supplement and an additional coverdisk. Please order early as I will only be printing the number required/ordered. Please remember that

this special supplement is for over 18's only and please don not order it if you are easily offended as it will contain pictures and bad language !

CS Subscriptions : Due to the obvious cost restrictions placed upon me by the printing company, I urge everybody to reorder their subscriptions (or single issue) as soon as possible. The number of copies of CS has now reached a state were all those being printed are sold very quickly indeed. In fact, the last issue sold out within four days, I even sold my 'spare' copy. Two regular readers who did not order in time were left without a copy until a reprint was done, however, I will NOT be reprinting any further issues due to the high cost of printing small numbers of issues and I can't print the 'odd' copy for people - as much as I would like to - sorry.

I am now supplying a note with your last subscription issue when it expires. However, I ask you all to check the

details on your envelope label (that CS came in) and check your details.

Taking out a subscription guarantees you a copy.

Centsible/CMD : Centsible have bought out CMD's entire range of Commodore items, with the exception of CMD's unique hardware and the GEOS range of software. I will therefore still carry all the items on the importing service and I am currently sifting through **Centsible Software's** vast array of Commodore related items. I think the best thing to do is run a feature/listing on Centsible Software in a future issue. Watch out for it !

24-BIT Video Card : Last issue, Jeri Ellsworth brought us a very early prototype of her 24-BIT video card - but it wasn't working ! On page 12 you can see the newer working version AND some screen shots as well !

The End Of An Era : Most of you who know me, will also know that my favourite piece of hardware for the Commodore - EVER - is the **RAMLink** from CMD. Well it was a sad day when I had to tell you in CS33's stop press sheet that CMD are now scaling down their Commodore operations to maintain a viable business. The most disturbing shock of all was to find out that they only have enough components for about 50 RAMLink's and they will not be ordering any more new parts. Once these units have sold then there will NOT be any more. I urge you all to place any orders now to avoid disappointment. I can not stress enough how versatile and powerful this device is. RIP the RAMLink !

Catalogue : The **CS Importing Service Catalogue** which is nearly complete, has now been put on hold until I can determine exactly 'who' is selling 'what' and 'where'. To say that things are a bit of a mess is an understatement ! - I really don't know whether I am coming or going at the moment, but I am sure it will sort itself out eventually.

More news in the next issue, see you all again soon.



<http://www.commodorescene.org.uk/>

The estimated release date for CS35 is 1st August 2001

DATA : The 'TND - Official C64 Web Site' seems to be expanding and getting even more interactive than ever. There's some hot new stuff waiting to be checked out. There's a new C64 forum, The Plonker Awards 2001 and many other cool features. There is also a guest book, cool downloads and even c64 stuff from paradise. There will be more hot updates and new stuff coming nearly soon to the web site. Oh for crying out loud, just go to:
http://website.lineone.net/~r_bayliss/index.html

DATA : **Enhanced Newcomer** is about finished.

DATA : **It's Magic 2** is about finished

DATA : New games coming from **Protovision** : **Bouncy Balls** (remember it!? - we got a permission to distribute it! But we will fix it first for the 4 player-adaptor!!) **Blocks**, a simple puzzler low-price game with nice gfx/msx is finished and we will probably be distributing it! **Reel Fishing**, a fishing simulation :) is in production from a new member of ours.

DATA : **Bil Herd** announced that he will be attending the **Louisville Commodore Expo** on May 26 in Louisville, Kentucky. Bil was the lead **Commodore Business Machines** engineer who was responsible for the development of the C128, among other projects. He is also advising **Jeri Ellsworth** in her development of the **16/24-bit video board** for the C64.

DATA : Fri, 06 Apr 2001 19:44:41 comp.sys.cbm - **Centsible** purchases some **CMD** stock. It seems to just be

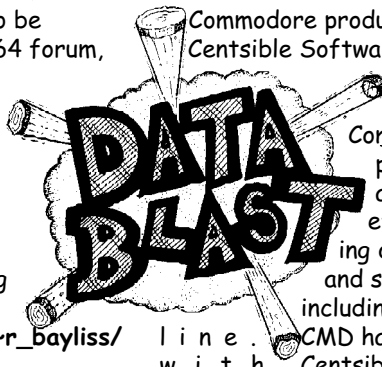


their 'extra' products..like books and older software..the 'staples' of CMD are still listed on the site.....

excerpt taken from CMD index page below

'Centsible Software Purchases CMD Software Inventory'. On April 5, 2001 an agreement was reached between Creative Micro Designs and Centsible Software for the purchase of a major portion of CMD's remaining inventory of Commodore software, books and other

third-party products. The decision was made as part of CMD's overall plan to reduce overheads relating to the Commodore product line. By allowing Centsible Software to service the remaining software market for Commodore compatible products, we will be able to focus our efforts on maintaining our own hardware and software products, including the GEOS product line.



CMD has had a long history with Centsible Software and has every confidence that Scott Parker and his staff will continue to offer a high level of support to Commodore users. Please look closely at our list of available products as it has changed substantially. Please refer all software inquiries to support@centsible.com or visit their website at www.centsible.com.

DATA : CS is currently having a prototype **4 Player adaptor** constructed. It is hoped that the unit will be very simple in design and will look something like a 'small box with two joystick ports in the top'. The unit will connect to the user port and it is hoped that it will be fully compatible with all the new software being written for the 4 player adaptors. More news soon.

DATA : **Back In Time 3** is being officially launched at **Club DNA** on 16th



May 2001. Get this ! - The following people have confirmed that they will be attending : - **Jeff Minter** - **Rob Hubbard** - **Tony Crowther** - **Ben Daglish** - **Fred Grey** - **Mark Cooksey** and **Richard Joseph**. Our own roving reporter (Wayne Womersley will be their clutching free copies of CS for all these people in the hope that they will divulge their e-mails addresses and then we can interview them). *More news just in from the man himself (Ken)* - I've just returned from **Chris Abbotts** house after 4 days in his studio working on the Bit3 tracks - and a 10 hour mastering session in a REAL recording studio!!! The finished CD is sounding INCREDIBLE!!! People are going to be blown away when they hear what we did with the C64 tunes. The orchestral tracks are unbelievable!! Things are really hectic

and bizarre here. There's loads of stuff happening thanks to my appearances in **Bits** - did you see my name in the end credits of the last series 5 show? Yep, I actually worked on the show for this series!!! Plus **Channel 4** have expressed an interest in me ... ! Who knows where this may lead?! And another bit of nooz - **Binary Zone Interactive** and **c64audio.com** have officially combined forces and merged. I'm still running the Zone etc. but I'm also now working pretty much full time for Chris Abbott. So expect some nice C64 related goodies from us in the future - starting with **Back In Time 3** and the **CD-ROM companion** for it!

DATA : Do you want to upgrade **JiffyDOS** beyond **v6.01** ? Then go to - <http://home.t-online.de/home/dadler/ajhome.htm> - and check out the new upgrades.

DATA : The web address of the **COPS** web site has changed. Point your browser to - <http://copslist.homepage.com>

DATA : I must warn you that a group of idiots are trashing forums about us C64 people, especially me. A load of their comments are untrue and are really hurtful and very abusive. If any of you own a forum on your web site and you end up with a load of abuse about myself, then please delete it. Anyway, I've updated my C64 web site, which consist of some cool stuff including the ultimate and new 'Vioris Challenge'. Try to beat the top scores (shunt, shunt). Other new stuff is the 'Cool Demos' page. and loads more. I hope you have fun with my web site, and also the C64 forum. Any comments of free submissions are welcome to my site. C'mon everyone. Let's help liven up the C64 scene and keep it forever. Coming soon to my web site: The Full version of **Defuzion 3** + more. Join in the fun at: <http://tnd64.cjb.net> or http://website.lineone.net/~r_bayliss

DATA : More web site news from **Dave Elliot** - You can see my new site here: <http://dgelliott.tripod.com/csgeos/> Let me know what you think!

DATA : We just wanted to inform everyone of some special **SCSI Hard Drives**, we have picked up at an unbelievable price! We have a limited quantity of **Seagate Barracuda 4GB** and **18GB SCSI II/III Hard Drives** at half the standard market price. This is the perfect time to upgrade your system or enhance the Video Storage of your **Toaster/Flyer System**. To take advantage of the special pricing, please visit the **SCSI HD** section at - <http://www.softhut.com/scsi.html> - We have updated our used

Products page, with some very interesting equipment at - <http://www.softhut.com/used.html> - And we have recently received the new Aminet 42 located at - <http://www.softhut.com/newprod.html> - We will have a more thorough news letter in the next week. We hope this message finds everyone well. Have a great weekend! Sincerely, Software Hut, Inc. - www.softhut.com

DATA : Jeri Ellsworth has given me (Robert Bernardo) permission to release a few details on her upcoming release of her 24-bit video board/accelerator for the C64 (o.k., we had a discussion of what it should be called... the Jeri board, the Ellsworth board, the E-board, the JE-board... well, I'll call it the J-Board). If you read the above statement carefully, yes, that's right... not only will the J-Board be a video board having the capability of displaying thousands or millions of colors, but it will also be an accelerator. Here are the details: 24-bit video with VGA display (no NTSC/PAL composite video to worry about) 6502 core running at 25 mhz. (25 times the CPU speed of a C64). Currently for the C64 (not C128 mode). Estimated selling price of \$100. Production models (v.1?) to be sold at the Louisville Commodore Expo, May 26. The Louisville C= Expo will be the venue where Jeri will debut the board. She calls it a "replacement" for the SuperCPU. She also thanks Bill Herd, former CBM lead engineer in the development of the C128, for his invaluable assistance in solving sprite detection problems in the J-Board. And she thanks Sierra Circuit Designs of Portland, Oregon, for their help, too. Her work continues on the J-Board, and the board is constantly evolving. Now that her computer stores have been sold, she intends to spend up to 8 hours a day working on the board to get it ready for its debut.

DATA : If anyone's interested in the latest beta release of The Wave, you can get it from my new "beta test" page. This version is B2.8 and is one step up from the release version which is V1.0. Just go to my web site (listed below) and you'll find a link to the correct page. If any programmers are listening in, I've also got Concept+ online for downloading now. This is the enhanced version of Concept and it requires a SuperCPU with SuperRAM. Concept is an assembler/linker programming package for the Wheels environment. Maurice Randall - Click Here Software Co., High-Performance software for your Commodore, email: maurice@ia4u.net, web: www.ia4u.net/

DATA : 'People Of Liberty' who were going to finish off 'Legend Of Kyrill' by Taurus Software are no longer going to

do so. "The truth is, we have obtained all the code and graphics, but, we are NOT going to start work on it soon. Our first project will be a PAL/NTSC demo, followed by some graphics".

DATA : **geoPUBLISH** can now print in full colour! YIPPEE! Providing that you have the PP3 program and a compatible colour laser printer that is! I have the information here and if there is room I will try to squeeze it into this issue somewhere, if not, it will appear later.

DATA : Lots of news from **PROTOVISION** - here goes! - **BLOCKS**, a low priced puzzler game is finished and will be distributed soon. **Reel Fishing**, a fishing simulation (!) is now finished and will be distributed soon. **Metal Dust**, the SCPU only game now has sound effects installed. **PAC-IT** is now 99% completed and has many new features, some features not yet completed are the Intro screen, Bonus game and Titlescreen. **Virtual Assembler** for the

SCPU is in the pipeline. The **SuperPower Power Supply** is now available, (now pay attention people as this bit gets a bit hard to follow - ED), Basic unit is £18 (shipping included), then you have to add these prices for your special needs : c64 or c128 - £10, c64 AND c128 - £15, each 1541/71/81 is £2, each FD drive is £15, each CMD HD is £2, RAMLink - £23 (a special circuit board is needed), CD-ROM/non CMD HD - £2. If you need to connect more than one computer then a further £27 is required to boost the units power output. **DoubleSID board** - £20, compatible with Rayden's DoubleDMC. Special instruction are required for this board (see page 31 for full details). Other items available from Protovision are : Soundcable64 (stereo cable), Soundcable64 with monitor connection, Joystick cable extender lead, Read/Write for any floppy drive, monitor cables, serial leads, printer cables (geoCable compatible), parallel cable 1541 (old), transfer cables for Star Commander / CBM4Linux, X1541, XE1541, XM1541.

FLOPPY 2001 COMPETITION RESULTS

DEMO COMPETITION

1. TRIAD/FEEDBACK
2. A QUOI CA SERT?/WRATH DESIGNS
3. DISCOJIVE/CIVITAS
4. RETURN OF.../HUJOWA
5. THE ESLOV DEMO
6. C64 LOVE!/MACX
7. FLOPPY 2001 DEMO/PUTERMAN+YODEL KING+ULTOMTEN
8. EXKREMENT/SEALSEX
9. MAKEDONIAN SOLIDARITY/SPIDER BOYS

MUSIC COMPETITION

1. AJVARRELISH - GOTO80/HT
2. KENZABURO - ZZAP69/NOICE
3. RISEPHIN - ED/WRATH DESIGNS
4. OLD-FASHION - PUTERMAN/CIVITAS
5. MUSIC - JOHEY/RUNTIME

GRAPHICS COMPETITION

1. ZOOTOPE - CLONE/WRATH DESIGNS
2. PARAPHRASE - JOE/WRATH DESIGNS
3. SKRIKET - POISON/ONEWAY
4. TUTTFIA - VODKA/FAIRLIGHT
5. BUFFY - HOLLOWMAN/TRIAD
6. LAXITY - SKYHAWK/LAXITY
7. EATME - TWOSHEDS
8. ANDROMEDA - ANDROMEDA/RAYZOR1911

GAME COMPETITIONS

"EXPLODING FIST" COMPETITION
WON BY: JUCKE/G*P

"HAT TRICK" COMPETITION
WON BY: JUCKE/G*P

The organizers wish to thank all competition attenders for their efforts, and all the party people for making FLOPPY 2001 a very successful event! Also a special thanks to UPROUGH for their amiga demo contribution!



FREE : I have 2 cypys (#1 definitely , #2 if 2nd chap don't bother) commodore 64 programmers ref guide going free to anyone who can either pick a copy up from london SW15 or send me an SAE 10*8" with £2.45 of stamps on it.

Ken Ross
petlibrary@bigfoot.com
or phone/fax 07092 -022719

(Names will be drawn out of hat after a few enquiries to ensure fairness due to time lag in this advert)

FOR SALE : Commodore items, VIC-20, C64, C16, Plus4 and Amiga. Send SAE for list stating computer.

T.Moore, 3 Highfield Avenue, Benfleet
Essex, SS7 1RY

FOR SALE : 8-BIT clearout (Nottingham). Cheap prices offered, contact for details. c128, c128 (64k VDC), 1571, 1541-II, c64c, VIC-20 (plus memory and cartridges), Plus/4, C2N, c64 software (tape) and IEEE488. @£100 for the lot.

Nick B
nickbeee@bigfoot.com

WANTED : For Amiga - 'Vortex at once' emulator system disks. Also instructions for Flashback.

T.Moore, 3 Highfield Avenue, Benfleet
Essex, SS7 1RY

WANTED : Any type of MIDI interface for the c64. Very good money is being offered!

Paul Kubisyn
paulk@xlcus.freereserve.co.uk

WANTED : 1750 or 1750XL REU urgently required. Or any REU expanded will do.

Editorial address


WANTED : (1) I'm searching for the following products to my C64 computer : CMD's 1750/1750XL REU's or 1750 Clone by SSI. I am paying up to the full price for 100% working units containing all software and manuals. (2) I'm searching for a Handy Scanner and a Video Digitizer for the Commodore. If you have (or know of someone) who might

have some of the products listed above for sale, please do not hesitate to contact contact me.

Yngve Dagslott,
Utsikten 123, 9018 Tromsø, Norway

HELP : 100% reply - 100% freindship ! Swapping all kinds of c64 wares, old and new ! Searching for other GEOS users to share information and to swap GEOS shareware and PD programs !


Yngve Dagslott,
Utsikten 123, 9018 Tromsø, Norway



CS SuperPSU
Commodore Scene 2000

150cm (60") in length, an extra charge is made for this.

Feedback & Update



Q : Personally my main concern is the fan noise, compared to CMD's heavy duty unit (which is physically larger) but which has a much quieter fan.

A : CMD's psu is only doing one job - powering a computer but the CS-SuperPSU is doing NINE jobs, also, in side the CMD psu there are hardly any components but in the CS-SuperPSU the unit is absolutely packed full of heat generating components - hence the need for a better fan (which generates a little bit more noise). We, as Commodore users, have become accustomed to 'silent running' as our computers don't have fans (apart from the c128d). But more units now come with noise as a common feature - wait until you have heard the CMD hard drive spinning all day !

Q : I think the longer length of 150cm should be the standard for the cables with an option to make them longer still.

A : I discussed this at great length (no joke intended ;-)) with the engineer and we decided that if 75cm was good enough for 20 years then it would be good enough now ! Extending the cable length brings in an unknown quantity and possible failure of the unit, which I didn't want. I think 150cm is long enough for most people if they need it that long and I could not guarantee the correct function of the unit above that length.

Q : Longer leads would enable the unit to be place further away and thus avoiding 'magnetic field' problems with tape decks,etc.

A : The unit has the industry standard suppression built in and should not cause a problem. My unit sits next to my monitor - that is something that I could not do even with the standard c64 psu ! As for siting the psu away from the computer, well, the leads are the same length as the standard c64 psu so you can put it where your old one used to sit !

After now having built several of these units, the specification has now calmed down a bit after some good feedback from the people who have bought these units. Currently, no two units have been built to the same specification due to the unique requirements that each person had requested - not bad really, a PSU that you can have built to order is a great boom to the Commodore community !

The final specification now looks something like this :

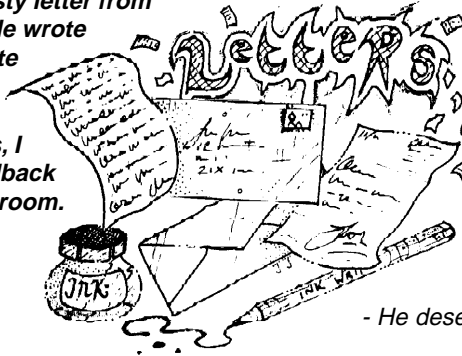
- 1x supply outlet for c64 or c128**
- you supply the lead from your old c128 PSU for me to install directly into your new CS-SuperPSU for the c128 version OR see below for an adaptor.
- 4x DIN supply outputs** for 1541-II, 1581, CMD Hard Drive and RAMLink (version 1).
- 4x power jack** for FD2000, FD4000, RAMLink (version 2).

All leads are @75cm (30") long but double length leads are available if required.

Optional Extras : - c64>c128 adaptor an adaptor from c64 connection to c128 connection can be ordered separately if required, an additional charge will be made for this. **1x Euro input lead** - You will have to supply your own mains input lead (as per the 1541, 1571, etc). Or, one can be supplied for an additional cost - UK only. Double length supply leads, if you required a bit more length on your leads then you can opt for the extended leads that reach out to @

Hi there,

It will come as no surprise to most of you that there was quite a big response to last issues nasty letter from Robbie Wakeham. Indeed, many people wrote quite alot about the topic and I estimate that over 80% of you wrote something on the subject. Below are some edited highlights from your responses, I couldn't possibly have put all the feedback in here as there would not be enough room. I have left off the writers names and addresses. This was done to stop any reprisals being vented.



- Cs arrived safely, who is that idiot Wakeham, Shakem, Killen. IDIOT. Nice issue, as one who appreciates your efforts (and many others to), well done. A vote of thanks must also go to the BOSS (wife) for putting up with all the hassle producing CS.

- We'll teach Robbie a lesson won't we? ;O)

- Weakest link quote - I have also used that on someone as well ;->

- I think this issue is very good, much better than the previous one and it's noticeable that you really put lots of effort into it! And great how you handled that too-angry letter from that strange "Rascal" guy who obviously wants everything great for free but is not ready to produce something by himself... Keep up the good work!

- Yes, it's another ANGRY letter responding to 'Robbie the Rascal'. He has mentioned -very- nasty comments about Commodore Scene the magazine. I understand that CS is thin at the edges, but this is due to the lack of time you get. I thought it was uncalled for when he sent a threat about photocopying his complaint. I understand that CS is over priced, but people like him should keep their mouth shut for what they mentioned.

- How dare he insult us contributors about working for CS. (Quote "The people working with you are so 'see through' and it never gets any better, does it?" The reason why we support CS is because we love the C64 and want to keep the magazine going. Oh, and it is a hobby of course. He just does not have any respect for us hard working contributors.

- Why would anyone want to change CS into 'Allan Bairstows' Book Of Excuses/Gaphes'? Us readers understand your apologies and we also understand some of the awkward situations you been through.

- On to the subject regarding the CS cover disk. I'd like to mention that his 'Questions About Life' was lamely produced. This is because he used a note writer to do the article. (Voodoo Noter methinx). If anyone was producing their own diskmag - THEY SHOULD CODE IT THEMSELVES - HA, HA! A note writer is not really meant for disk mags, it's supposed to be used for greetings messages, instructions and that.

- Who is this guy anyway ?

- He has been complaining about the spelling in CS. Well now and then we all make mistakes, his remarks were VERY uncalled for.

- He thinks you are making profit out of CS and the cover disk products. Us readers know that no profit is being made within CS and the C64 community.

- I agree with your comments about his handle 'Robbie the Rascal' - BIG BABY more like (*joke*) :o)

- I think Robbie should leave Andrew Fisher alone and get on with his own life. I understand he had no response from Andrew Fisher about IRQ loaders, but my friendly advice to him is to download 'Plush Dos' from the Internet or find a copy of the CS22 cover disk.

- He's a swine.

- He deserves the 'Smack in the mouth' award.

- I like your reply to Robbie Wakeham. Is issue #33. I thought the way you handled it was fine. Never heard of him or his alleged group prior to that though !

**Robbie actually sent another short letter but it was no better than the first so I threw it straight into the bin !
I thank you all for your support but I think it is now time that we drew a line under Robbie and get on with some more deserving letters and the continuing production of Commodore Scene.**

Hi Allan,

I would like to say thanks to one of the readers who enjoyed my 'Music Scene' feature. As long as there is still CS, there should still be music scene.

Thanks also goes to Andrew Fisher for putting the tune 'Phantazia' on to the CS menu, and also for making a Richard Bayliss extravaganza cover disk. (Despite I put my games on to my web site - sorry!).

Now on to the subject of the CS33 cover disk. I loved 'Flummies' World' the full game. It was highly addictive. I also enjoyed the demos which Andrew produced (When will we see some of your MSCK stuff :o)?

CS33 was a great read and it was nicely set out. Just an idea Allan, I think the 'Comic Sans MS' font is unprofessional, please could you use 'Arial' size 10? Sorry if I'm criticizing the CS font. I enjoyed reading various articles about the 8-bit computer events. I even found it a laugh, when Kenz appeared in CS as Geek of the Week :o)

Overall, the magazine was good.

When Andrew reviewed some game previews. I must point out that 'LORD OF OBLIVION Preview' is actually a Note Writer called 'Action Noter'. I downloaded a note writer from an ftp: site and unzipped it. Got some proof.

If you would like me to send it then please let me know.

Sorry for such a long letter, but I did want to point out my honest opinion.

Yours sincerely

Richard Bayliss

Hi Richard,

Thanks for your contributions to CS, lots of people enjoy reading your articles (more in this issue), me included, although I don't understand everything !

I also liked Flummi's World and I even managed to find time to play it for a few hours recently, still, I was not very good at it, but it was very addictive.

Comic Sans/Arial : Hmmm, not sure about this, I personally feel that the Comic Sans font is better looking and easier on the eye to read. Arial tends to be a bit 'angular' and 'stiff'. However, for this issues letter pages I have indulged you and used Arial 9pt to see what all the other readers think. As for the point sizing, well, I use 9pt because I can then get a great deal more information/articles on a page and it is still very legible.

So, what does everybody else think ? Do you want Comic

Sans or Arial and would you prefer 9pt or 10pt ?

I am open to suggestions, after all, you are the people who have to read it ;-)

ED

Dear Allan,

I'm sorry I have not written for some time, but even though I am now 'retired' I don't find a lot of time to do the things I want to do with the computer. Running a Bowling Club takes a heck of a lot of time just writing letters to various people, and keeping the Club running smoothly.

How you find any time to run the magazine and look after a family and keep a full time job, and more importantly balance all these things and keep your Wife happy, is beyond my comprehension.

Each time I write a letter, I thank you many times for your introduction to me to GEOS. Geowrite is my main word processor these days, together with GeoCalc for the Club Register of scores during the season, and GeoDex to keep abreast of the ever increasing membership records.

I have included on this disk some of my favourite and well used programs for GEOS which other GEOS users may find useful, and on the reverse side are some programs which I have collated over the years and may find a way to fill the future cover disks.

Just to make sure your records relating to me are correct, I recently managed to find a 1581 drive, using the 3.5 floppy disks. In the event that the supply of 5.25 disks dry up, you can always send me the cover disk on the 3.5 format.

Over the years I have collected about 200 disks filled with various GEOS programs, although some disks seem to repeat themselves with duplicated items on. I got some from Ian SWAIN who got them from Frank CASSIDY of GEO CLUB fame. I am trying to index all the fonts supplied on these disks, and there are hundreds. This will keep me out of mischief. Eventually I want to duplicate them to 1581 disks in alphabetical order. When I've done, it won't be this year, I'll send you a copy for the 'Archive', when you manage to start this venture.

I hope you can make use of the disk for the future.

Many best wishes to Elizabeth and your brood.

David Walker

Hello David,

Thanks for the letter, it is always good to hear from people who still use their Commodore's for everyday use.

As for 'time', well, I have mentioned it enough before but needless to say that it is very precious and in very short supply !

GEOS is a wonderful set of programs, I have to agree. I only wish more people would use it. Thanks for the disk with your favourites on, I have included a few for this issues coverdisk for everybody to use (see page 18 for brief details).

So you managed to track down a 1581 drive ? You lucky so and so. Those drives are rare, I hope you didn't pay too much for it. I will amend your subs to show the 3.5" disk - this makes it easier for me in many ways.

I keep meaning to archive some stuff but with my disk collection growing faster than I can even file it, is doubtful that I will ever get round to sorting them out. I look forward to your help when the time comes to actually start the archive.

Thanks for your wishes, likewise to your family.

- ED

Hi Allan

Many thanks for the CS33 edition which I received last week. I was pleased to hear that my request for some help on the XE1541 cable has lead to you being able to sell them on. I am writing as I have managed to buy a C128 from a shop in Scarborough whilst on holiday for £10. The reason I bought it was to test out some software I gained from a recent purchase of some C64 equipment - the C128 software was thrown in.

I am quite disappointed at the moment with what I can do with the C128 and wonder what your thoughts are on the machine and do you use one?.

I probably got the machine cheap and it will be worth keeping even if I don't use it but I imagine it must be better than the C64 or else it would have never of been made.

Keep up the good work with the CS magazine and let me know when the next one is out.

Regards, Kevin Howell

Hi Kevin,

£10 for a C128, you jammy sod ! Some people would have ripped your right arm off for that !

Yes I do use a C128(D) and it is superb. I mainly use it for GEOS which can utilise the 80 column display. I also use it to access the www. I am not sure about exactly how much software was specifically written for the C128 other than a few application software uses. Maybe somebody could enlighten us ?

As for the next issue - you are reading it !

ED

Hi Allan,

The copy of CS arrived yesterday - so of course I was pretty keen to have a look through. I must say for a "one man" show its very good, with a friendly chatty style to it. Will have more of a read through over the coming weeks to see what else is in there.

I've recently got back to working on one of my older projects, the LCD64. The project connects a 40char by 4line screen to the C64 and I've just finished patching the Kernal so that it's half useful as a stand-alone machine (ie without a monitor).

Let us know whether this sort of thing is worthy of my writing an article and please give some guidelines as to how much (1/2 page, full page, etc).

Regards, Nick (Coplin)

Hi Nick,

Thanks for your comments, I 'knew' I was doing something right !

Please write what you can as I am sure the readers would love to hear about what is still happening in the Commodore world - after all, that is what CS is here for.

Thankyou for all your help so far (more of Nick's articles feature in this issue).

ED

Hello Allan,

Sorry that I have not been in touch for a while. I, like you, have been very busy.

I have a contact that says he knows how to interface a 6581 SID chip via the user port from Vic 20 and C64/128. He is a qualified engineer and use to fix Commodore's for a living.

Doing this will effectively add 3 voices to Commodore 8 bits. It might take a while, as I don't get much time, but if it works then I will send you the information. Unfortunately, you will have to basically remove the sid chip from dead C64's, and so it could be expensive.

Obviously, I am assuming that you will consider printing this in Commodore Scene. This could, to a small extent, replace the Sid Symphony. You also might be able to calibrate the communication from C64 /128 <> 6581 to SCPU timing. If you like, I will send all the information he gives me to you as I receive it. Please let me know!

I have also asked him if he could do some articles for you directly. I have not got a reply yet as he is currently looking for a job, and like everybody else, he is quite busy. His web site is; <http://members.aol.com/mas459/index.htm>

Speak to you soon,

Shaun Bebbington

Hello Shaun,

3 voices on the c64 ? What will they think of next ? I honestly believe that whatever happens to the SID will HAVE to be compatible and standard with what is currently happening in the demo scene. Already we have got stereo SID demo programs that are not compatible with the Stereo SID from CMD and that is a crying shame.

I will contact him soon to discuss his projects.

Thanks for the information.

Dear Allan,

The CS-SuperPSU arrived in good condition today. I was thinking for a while that I needed to write to you for directions on how to get in the cardboard packing ! But I finally managed. Whew !

I used an extension cord such as fits the 1571 input (three-prong with centre offset) to connect it up. Many people would not know this over here, so it might be wise to indicate that the cord from a 1541 or 1571 will do to make the PSU operational from 110v AC.

I like your workmanship. It is pretty and functional, and the idea of no on/off switch is not so 'far out'. After all, the PSU's for the 128's and old 64's have no on/off switch.

I used two of the small plugs for the FD-2000 and the RAM-Link. Then I used three of the large plugs for the two 1581's and the CMD Hard Drive. I have hooked the CS-SuperPSU to the main supply permanently. It runs quietly. I am going to take your word that it will run 'forever' ! Does operating with no load on the open cables hurt anything ?

Thankyou for your rapid response in filling my order.

Sincerely yours, Bill
(W.R. Kennedy - USA)

Hi Bill,

Ah, thats good to hear a satisfied fellow Commodore user. I am glad you eventually got into the packing, but it is better to be safe than sorry.

It appears that the lead needed to supply it needs to be made a bit clearer for some users. In the UK the lead is called a 'Euro Mains Supply Lead', obviously that is not a term used in the USA. I will make amends and make it clearer in the future.

As for the workmanship, well, I can't take any credit for that as I did not build it personally. I have passed on your letter to the engineer and he was very pleased to hear that you liked his work - he thanked you for that. As for the on/off switching, well, as you said, people will get used to it - I know that I have.

I obviously used a bit of artistic licence when I said it would run 'forever', it should run forever but that is a long time indeed - I hope it does though. My PSU (the first to be built) has been running constantly now for 6 months and more !

In answer to your question about the leads - No, it will not hurt them at all - just don't short them out ! In theory, it should perlong the life of your PSU, if it is not fully loaded.

I hope you have a long and happy life with your CS-SuperPSU.

Hi Allan,

I saw a post on comp.sys.cbm announcing the new issue of Commodore Scene. Is this an e-zine? If so, how would one go about downloading a copy?

Hi Jim,

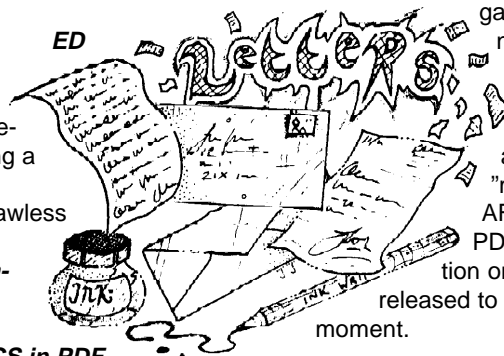
Sorry, Commodore Scene is a 'true' magazine, printed on real paper ;-)

If anybody would prefer a copy of CS as a PDF format then please say so. I can create CS in PDF format in full colour for you to read on ADOBE ACROBAT READER (v3.0 and above). If you have an A3 colour printer then you could even print it out in full colour !

Be aware though - a full download of a complete copy of CS is absolutely huge !

This offer is only open to people who purchase a paper copy though, I may, in the future, make past issues available on the new web site which is currently being redone.

Thanks, Jim Lawless



ED

Hoi Allan,

Do us a favour in the future. If you are going to present an article on C= items. That some one <l'll volunteer> give it a check to see if it can be seen by c= users. I'm on Wave64. I can't go there to www.64hdd.com. it wants me to DL and install the newest version of Nutscape or internet Exploiter. Mys sone with his A4000 power Tower and the Amiga fake out for the above can't get there, not great for me and my users group. I wanted to grab the info and pass it along to my group and to the CML for the upcoming May issue. But that is a no go. The site is non friendly to those not bending to the Bill Gates will. Seems rather strange to put up a C= site and not allow C= users to go there??

In issue #33 Mr. Andrew Fisher writes about the Handy Import file for the Handy Scanner and GEOS. A bit over a year ago I had the pleasure of buying not only a handy scanner. but several files including handy import from Dick Estel. Who once did a GFX business for the C= called FRD. In that time to my shame, I haven't done all that could be done with the Handy Scanner and the Handy Import. I have worked on a few projects. Such as preserving certain images from out of print games that I play. Which have graced the pages of my users group's newsletter and the Commodore MailLink. In an attempt to continue C= related items for my people. Who I admit are mostly pen and paper FRPG players.

At first I used GoDot to convert the images from the handy scanner to GEOS. This wasn't near as satisfying as the handy Import file. As the convention required many hours of work to clean it up in the GEOS geoPaint environment. When I started to use the Handy Import tool. Things became much easier. What I saw in the handy scanner screen, was exactly what I got in a geoPaint document. No clean up save what needed to be done from the original scan.

Since then I have scanned things from the cover of the C=64 game judge Dredd. Which graced the pages of my users group's newsletter. AD&D monster Manual 1,2 and Fiend Folio. The FRPG Sci-Fi game High Colonies. Issues of 2000 A.D. Both semi current and the U.S. reprints from 15 years ago. Images from a tattoo catalogue. In all that work. There has been no problems with this tool. The created image is the same as what I saw in the Handy Scanner prg on screen. The image though is a little smaller than what GoDot gave me. But much more exact. Since my work is making it into photoscrap for my newsletters. I have to be careful on the size.

Now for those of us using GEOS on the Hard Drive. Handy Import, at least for this novice, does not seem to "see" subpartitions. As I have on mine things set up for the Village Green <my users group newsletter> and the Commodore MailLink <internation newsletter which I am managing Editor>

For me then, there is a bit of moving files around. You will still gain the "+" symbol at the end of the file name and the image is supposed to look like a scanner in the icon. Doesn't look like the model I have. <G> All in all for those that have GEOs and the Handy Scanner. This is a "must" tool to add to your collection. AFAIK at this time it is either freeware or PD. As of this writing I can't get confirmation on it's status. Save reports that it was released to the public. All unconfirmed at the moment.

Lord Ronin from Q-Link

Sensei David O.E. Mohr {go-dan}

Chancellor & Editor for Amiga-Commodore Users Group 447

SysOp Vacuum Tube BBS <Omni-1128>

503-325-2905 300-14.4k C/G-ascii-ansi

Hoi Lord Ronin,

Phew ! That was a long letter !

Okay, here goes - Having web sites that are not Commodore friendly is something that we are going to have to live with I am afraid, as much as I would like to test every web

ED

site it is just not possible. Having somebody else do it is good in theory but again, time is the key factor here, sorry.

Scanning into the c64/128 is now quite easy and a couple of features are coming in the near future for all you scanning fans.

ED

Hello Allan,

I have a good news. Finally the magazines made it. For a while I thought that somebody from the post office got them.

They are very interesting as usual. I read the mags and I saw some mistakes that I made. I was asking about the patch for Geowrite 2.2.

I have found Test drive2 and Redstorm.

I've just seen Jeri's site. There are very promising things there.

I wish you a nice trip to Cyprus.

Regards, Michael
(Romania)

Hello Michael,

At last your magazines have arrived (it has taken a month !), I was beginning to lose hope on them all together. I am glad you have found the games you were looking for and as for Jeri, well there is an update in this issue for you to read.

I am looking forward to Cyprus very much, ah, the pool and the cool drinks.

ED

Dear Allan,

Well done on another interesting issue of Commodore Scene. Despite some people's criticism of spelling mistakes (joke!) The magazine looks as good as it ever did, and the content (particularly the articles from LUCKI) were a good read.

You can quote me on that !

Andrew Fisher

Hi Andrew,

Well we (there are lots of us) try our best to bring a Commodore magazine to the readers that is worthy of the community that it serves. But you know that because you are one of the regular contributors ! Thanks for your help and support.

ED

Dear Allan,

So I've not been in touch recently. I've been so busy at work. I did start to write an article on the VIC-20 but did not finish it !

I suppose that I am very much a silent supporter, but I really do wish you all the best concerning the C64, not forgetting the old VIC-20.

John Hill

Hi John,

Good to hear from you again. Don't worry about not getting your article finished, I too have been busy at work and I know only too well how hard it is to find time to write stuff - just imagine having to do a whole magazine !

ED

Well, thats it for now everybody. See you in the next issue which is the Arcade Special Edition.

See you then - ED

- READER QUICKIES ! -

RQ - I have GEOS v2 with no patches, is this enough to install and run Wheels 64?

Reply : Yes it is, but you WILL need an REU.

RQ - Is Wheels compatible with all Hardware available?

Reply : Yes - but I am not sure about the IDE64.

RQ - Can Wheels load Games and other Application like, Bombmaina and GoDot (like Windows)?

Reply : No it can't. You will have to use normal BASIC for that.

RQ - Do I need Wheels64 to run Wave64?

Reply : Yes, you do.

RQ - I am registered to Freeserve. Can I transfer my details to Wave and Logon?

Reply : Hmmm, not sure about that. In theory you can use any ISP with TheWAVE providing you know all the correct connection specification details (usually supplied by the ISP). Many users do use many different ISP's with TheWAVE but I have not personally tried Freeserve yet. The best thing to do is try it and see.

RQ - I hear that CMD are not supporting the Commodore anymore, does that mean that I can no longer get a Turbo232 interface ?

Reply : CMD say they will continue to support the Commodore with their own products (such as the Hard Drive, SuperCPU, etc). But they are not selling third party products. Centsible Software have bought ALL CMD's stock and they are quite happy for me to continue listing all the items I currently have. However, I have never bought anything from Centsible so the time delay is an unknown quantity as is the pricing structure. Having said that, I am currently still waiting for the last order from CMD to arrive - 3 months now !

RQ - Is CLiPS out yet ?

Reply : Not that I am aware of.

RQ - Will Commodore Scene ever go back to being monthly ?

Reply : Ha, ha ! - Oh, you were serious ? Well, the answer is most definately NO !

RQ - Is the Commodore Scene web site ever going to be updated as it still has the latest issue as CS31 !

Reply : I know, I know ! I have actually done the replacement site and a few of the pages are up and running but until it is completed I will not be moving the address over. It should before the next issue though. By the way, the address will not change, just the pages.

RQ - How do I write an article for CS ?

Reply : The easiest way is to write your text and send it to me via a disk or via e-mail (I see you have an e-mail account). I can then insert your text and get some pictures for you. All I need from you is the text !



At last, the Commodore Scene CD-ROM is *GO!*

Well, it has been a long wait, but it is now fully working at last!

As most of you will already know, I wanted this CD-ROM to be fully compatible with the Commodore CD reader software before it was released. This has now happened and I am pleased to say that I am now ready to offer this CD-ROM for the very low sum of £20 including p&p in the UK.

For details of pricing for other countries please see page 30 / Importing Service.

Whats' On the CD-ROM ?

Are you ready for this lot ?
Okay, lets roll !

The current listing is as follows but please note that this is being constantly updated and when a CD-ROM is ordered then the current version will be sent.

Archive - The beginnings of the Renaissance Archive, this section is sub divided into A to Z folders. Currently, there is little or nothing in here.

Coverdisks - Every single coverdisk that ever came with Commodore Scene or any of the specials are here !

Demos - Some of the demos that have caught my eye over the recent years are here. The CD-ROM was never meant to be a serious 'demo' archive but here are a few to keep you going.

Gameadult - Naughty but nice selection of games for those more broad minded people among you.

Gamecartridges - Most of the files on this CD-ROM are in .d64 format so you can easily create a standard 1541 disk to run on your C64/128. However, here we have a collection of cartridge software to run via your favourite emulator on the PC.

Gamedemos - Previews and demos of games that were under development.

Gamedisks - d64 images of some great games.

Gameprograms - Not all the images on the CD-ROM are d64 format. Here we have a collection of programs that are still in their original Commodore form, just copy them back to a disk and run them.

Gametapes - Another small collection of 'tape' images for use on an emulator.

GEOS - Here we have the entire geoNUT Disk Depository (formerly the geoCLUB UK disk library) from Dave Elliot. A lot of work has gone into this area of the CD-ROM and all of it has been done by Dave. The contents of this section are subdivided into the following areas :

- 128 Disks
- Albums (photo and text albums)
- Allan (a collection of my own original disks from the old geoCLUB library)
- Applic (application software)
- Art
- Compil (compilation)
- FONTS 1-44
- GEOS 1
- GEOS 2
- GEOS 3
- GEOS 4
- GEOS 5
- GEOS 6
- Geos128
- Geoworld
- Ps-pm
- TXT D64
- TXT WORD
- Wavebeta
- Wavepublic

GoDot - I have included this on here to encourage sales of GoDot.

This section may be removed in any commercial sales of the CD-ROM to avoid copyright infringement.

Remember - The complete games archive from Remember.

Scpudemo - Demos for your SCPU

Scpugame - Games for your SCPU

Scpuserious - Some utilities for your SCPU.

Serious - Utilities and serious software for the Commodore.

Sidmusic - A vast collection of music for the SID player from over 20+ musicians. Hundreds of tunes !

Special - Do you remember those extra disks that you used to get with early Computer Scene issues ? Well, they are all here.

Temporary - This folder is only here to store anything that has not been tested or allocated a designation.

Wraptorfiles - For those of you who like to play around with Wraptor, here are some files for you to use.

THERE WILL BE MORE SOON !

1541 PSU from an AMIGA PSU

1. On AMIGA psu, cut back the cable to remove the square plug.

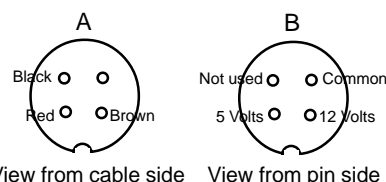
2. Remove 15mm of outer sheath to expose colour coded wires.

3. The WHITE wire and the BARE EARTH wire are not required. They should be trimmed back to the length of the outer sheath.

4. Trim the insulation on BROWN, BLACK and RED wires back by 3 to 4mm. Solder wire to 4 pin DIN plug as per diagram 'A'.

5. Assemble DIN plug. Connect power pack to mains and switch on. Test output as in diagram 'B'.

6. Switch off psu at mains, connect psu to disk drive and test with a c64.



The New 24-BIT Horizon !

An update on Jeri Ellsworth's video card project

All this information has been taken from Jeri's site at http://www.geocities.com/cm_easy/

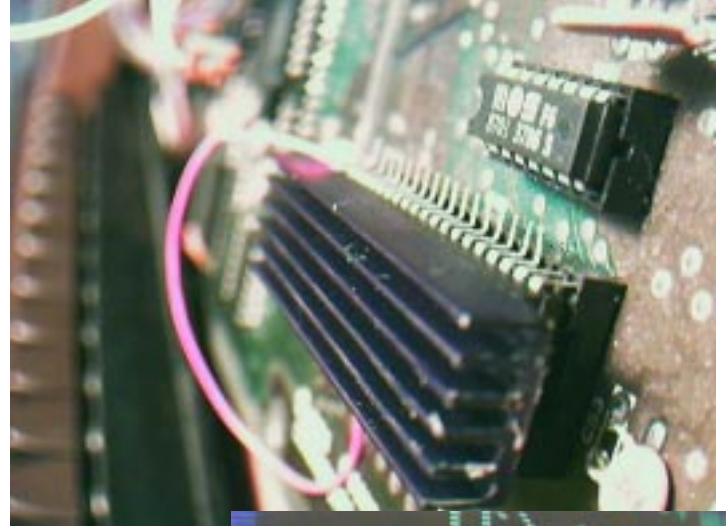


The VIC-II Modes

I just about fell out of my chair when I saw the ready for the first time. This is a good example of the "regular scan mode" no scandoubling. I have also added a register to flip cells H/V, or the entire screen H/V. This could be usefull for projection or VR goggles.

"Here is to all the sceptics who felt they needed to write those nasty emails! Hah!" - I can't believe anybody would doubt her word - ED.

The original VIC-II with only a few pins attached for CAS/ RAS/ controller. (Look Maw, no pins - picture below) I have a sram attached to the c64 bus and have run it without the VIC , but I don't have a master clock that will divide down correctly for the cpu and I get glitches in programs.



Scan doubled modes (picture to right) can be one of four intensities on every other line. I can't wait to see what the hackers will do with this.

The timing is very close to the



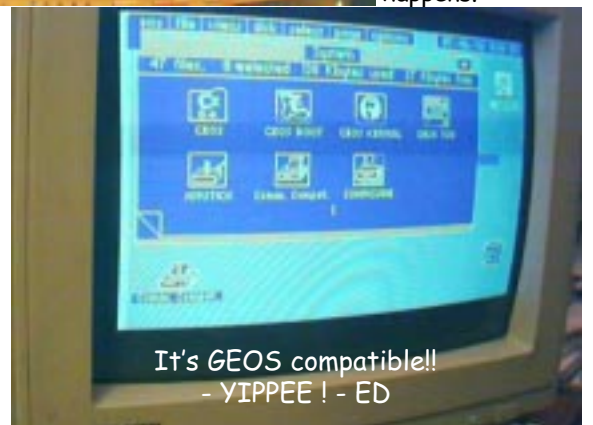
I've loaded up the sprite x/y size register to demonstrate (picture above) the scalable sprites upto 256x256 pixels. If you look close you can see that they don't need to be rectangular anymore. The sprite controller has no data fetch circuitry yet, because I want to take advantage of the burst modes in the SDRAM. All sprites show up as their respective colored solid blocks. They do have the priority set working and maybe changable in the future. I've had some success with translucent sprites and may show up in the final product.



Original VIC II (picture to left) and can even play demo's with raster scrolls / bars (can also be toggled 60/50hz mode). It's fun to turn off bad lines emulation and watch what happens.



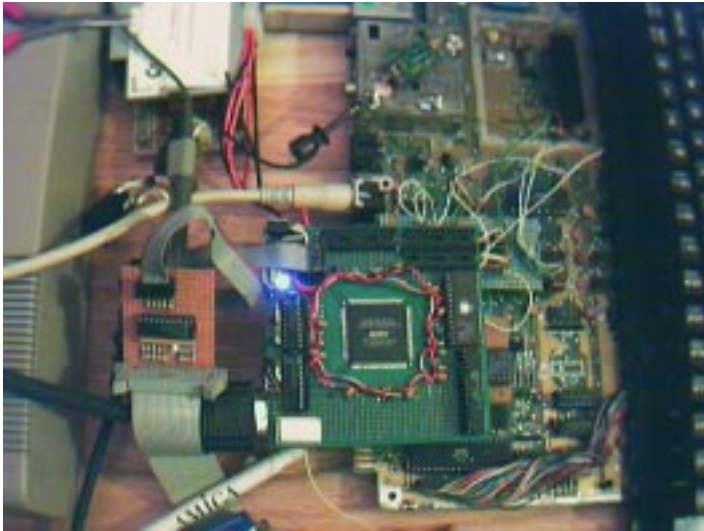
The front view (left picture) of the interface between the c64 and the video card. The video is now totally asynchronous and the C64 can free run at any speed with the old VIC removed, but can be set to emulate synchronous timing.



It's GEOS compatible!!
- YIPPEE ! - ED

I've greatly reduced the part count since the beginning of the project which should keep the cost down (pic below).

That big chip in the center has been slowly assimilating the C64 step by step and now includes the VIC, PLA and most of the one CIA.. I have the cpu mounted on the underside of the motherboard waiting to be removed and replace with the internal one. *Do I here C64 PDA?*



Hacking away (right).

" Where do I go from here ? "

VIC-III Modes

I have been studying the C65 a lot the last few months and think that what I have for the extended video registers and modes are so close to the VIC III that I would be making a big mistake by not including the modes that use planar, blink, inverse... etc into my design. Plus it has the really cool Dat register and blitter (which I have nearly completed).

VDC Modes

I think this is do-able without a lot of effort, but I have nothing started on this. This would be especially helpfull for the C64 people that would like to port 128 programs.

CPU

My entire goal when I started this was to have a c64 on a chip and I'm not giving up until that happens. I think the way this will be configured as a free standing unit which has all the custom chips on board or you can attach it to a c64/128 and use the extended modes... Plus have a free 6502 running in your video ram as a Coprocessor. Maybe some smart hacker could use it to JPG decompress as your scpu runs the browser.

Lan

OK.. Go ahead and flame me!! Everyone is so touchy about this topic, but I have the Cirrus Logic 8900a Ethernet chip which looks like it will bank straight into memory.. I'll put it there, but the software guys will have to make it work. I have not checked the volume pricing on this, but I'm sure it will have to be for more \$\$\$.

IDE

I'm thinking really hard about it, but I'm running out of time quick before it's release at the Loiusville Expo. May have a header, but no funtion until later.

PS-2 MOUSE / Keyboard

I have most of the mouse interface done including a hardware position counter and selectable auto sprite positioning. This will elliminate the need for the CPU to poll the register only under a mouse click interupt or sprite collision..

OK guys don't beat me up too baddly if for some reason something here doesn't end up working. This is going to be my page for throwing out ideas and dreams.

Thanks, Jeri Ellsworth

cm_easy@yahoo.com

NOTE : I DO NOT PROMISE OR GUARANTEE TO DELIVER ANYTHING POSTED IN THIS ARTICLE !!!
- I'll just try to do my best :)



Well then, what about that lot for some stonking great ideas eh ? It would be nice for people to give Jeri their own words of support. Jeri's e-mail address is there for you to use and I urge you all to drop her at least a few words of encouragement. Don't forget to mention where you read about it ! - ED

I have been in contact with Jeri recently via e-mail, offering my support for her project. I am certain that we will be hearing more about this project but for now, we will let Jeri have the last word for this issue.

Hi Allan,

I'm very happy to have a chance to write with you and it sound like you are a true C= fanatic (very good thing in my opinion) :)

It is truly amazing the wide spectrum of people in the C= community/family: you have Teenagers playing SID music in bands, race car driving GEOS programmers, senior citizens browsing the web, postscript junkies, 3D programmers.....etc and (I even hear there is a 26 year old hacker chick who is building a video card!) if you can believe that. The most amazing part is that this is being done on equipment that is nearly 20 years old. —Really cool—

As far as the board goes I'm in a huge push to get it ready to sell at the Louisville Expo. I just have a hard time deciding on what to add and what to leave out.

I'm not sure if the article (see CS33) explained what I had originally planned to do was not a video or CPU upgrade, but a 'c64 on a chip' and to tell you the truth as every day goes by I have been pulling more and more of the c64 functioning into my design.

Jeri Ellsworth

BUDGET BRILLIANCE

reviewed by Andrew Fisher

The Firebird and Silverbird range in the Eighties was home to some original budget games, and none more so than a trio of titles from French coders JAWX. The un-mistakable shark-shaped logo meant you were in for a game that was very different to the usual clone or second-rate release.

RAGING BEAST (also known as **RAGING BULL**, but re-titled due to copyright problems with the film of the same name) is a matador simulator. If a modern game like this was released, the tabloid press would have a field day. Fortunately there is no gore in this clever release. You see the bull run into the arena, your little matador stands there and waves his red cape at the bull and the bull charges.. After a few successful passes (complete with applause from the crowd) a rosette is thrown into the arena. Put down your cape, pick up the rosette and try to put it on the bull's horn as it goes past.

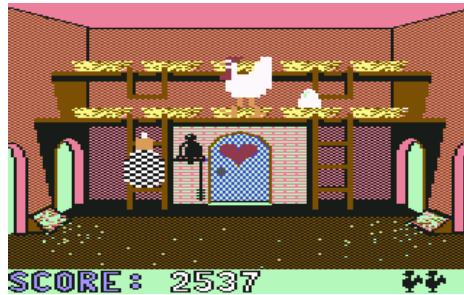
If you get hit, you are thrown into the air to land on the sand. Rapidly push up to stand up again, before the bull can trample you again. You might even try some rodeo-riding.

With it's clever high-score poster, jolly music and some good animation, this unusual game is not everyone's cup of tea but is worth a look.

From the struggle of man against bull to.. the chicken coop? **CHICKIN CHASE** features some great (but blocky) expanded sprites in an original scenario. As the rooster, your job is to protect the nests as the hen lays the eggs (and every so often, pop in through the heart-shaped door to perform your rooster duties..) Rats and hedgehogs scurry about, snakes slither, and worms can be pecked to gain extra energy. Let all the eggs die and the hen bashes you over the head..

Again, this is not the most polished game ever released but the colourful graphics do an effective job. Sound is average but cute, and control is good. Yet another unusual hit.

Finally, a game I have never managed to figure out - **SERENADE**. You are a Romeo-type person, hoping to use your musical skills to capture the heart of the woman on the balcony. You have four different instruments and lots of tunes, but most of the time the woman seems to ignore me. Clever silhouettes on a nice background move well, and tunes are twee. But does anyone know how to PLAY it?



CUNNING STUNTS

reviewed by Andrew Fisher

After the success of **BMX SIMULATOR**, Codemasters released **BMX FREESTYLE** by Summer Camp programmer John Ferrari. With some clever parallax backdrops, you have to perform various stunts on your BMX - wheelie for the longest distance, jump over people and so on. Sadly the controls are very difficult to understand and having to start at the first event each time is a real drag.

BMX KIDZ has stunts and wheelies in it's racing format, while **PRO SKATEBOARD SIMULATOR** is basically a clone of arcade game 720. The latter has very simple stunts - waggle the joystick to spin in the air - while Codemaster's event (by Gavin Raeburn) is more of a race against time.

THE REAL STUNT EXPERTS is an unusual game which featured music by Benn Daglish, and "takes" rather than lives. You also needed insurance to take part in the films (levels) - you earn money by performing stunts, but the premiums go up steadily. It also had two different types of level; horizontally scrolling stunts in a car, vertically scrolling shoot em up in a helicopter.

Of course, skateboarding and roller-skating are better suited to stunts. **CALIFORNIA GAMES** by Epyx has both, although the half-pipe event is limited (watch out for the brilliant earthquake effect) and the roller-skating is more about avoiding/jumping obstacles. The ultimate multi-event for skateboarders has to be **SKATE OR DIE**.

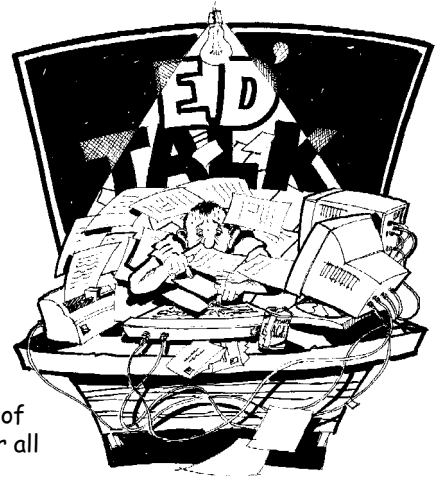
After the amazing Rod Hubbard title tune, your jaw will drop at the astounding animation of the characters. Fall off in the half-pipe and your skater's equipment (pads, helmet etc.) fall off and bounce away. Watch the flags flutter in the breeze as you go downhill through the park. Controls are simple yet unleash a fantastic combination of moves, and the computer opponents (in the pool joust and back-alley downhill jam) are tough enough. Repeated play brings rewards in higher scores.

SKATE CRAZY from Gremlin is also a two-part game. First up is the multi-directionally scrolling of the car park as you pick up litter and perform stunts. Then, the horizontally scrolling levels full of obstacles make you work up a sweat as you try to avoid them.

For winter sports, load up **WINTER GAMES** from Epyx and jump over a small ramp in the Hot Dog Ariels. The perfect score of 10 is tricky to achieve. Or you could try the disappointing sequel to EA's masterpiece - **SKI OR DIE**. With mediocre music (Rob Hubbard wrote the original PC tunes, but someone else did the C64 conversion) and bland graphics, this is nowhere near as much fun as the original.



geoTELEGRAPH



THE geoNUT DISK DEPOSITORY

(Formally the geoCLUB UK GEOS Disk Library)

Disks cost £1.30 for one 'double-sided' disk (that's TWO cs library disks). Make all cheques payable to Dave Elliot, at: 32 Wood Lane, Cippenham, Slough, SL1 9EA, UK.



Greetings GeoPhilles,

Only one alteration to the library this month and that is entirely down to yours truly. Andrew Fishers new disks are now numbered 592, 593, 594 and 595. Disk 314 turned out to be good. I have enclosed the contents of 314 below. I am also having problems accessing my Web site, no alterations possible, so I have commenced building a new one with Tripod. Will keep you informed.

Dave Elliott

CS DISK 314

A complete disk full of PCX converted pictures with geoView to view the following— ROSEBUD, LEAF 02, LEAVES 12, LENTIL, LEEKS, LEMON, LEMON 2, LETTUCE, LILY 1,2 and 3, RADISH, THYME, MACE, MINT 1 and 2, PALM 1,2 and 3, MOW, OPENFLOWER 1 and 2.

Continuing from the last issue.

CS DISK 321

This collection is called Garden, the pics are called - FLOWER 1, 21, 21C, 43, 43C, 44, FARMER 3, OWLS, PONY 1 & 2, SWICH, MOW LAWN & MOW LAWN 1, MULBERRY, NUTMEG.

CS DISK 322

Doreen's called this collection Garden/Odds. The pics are - MUSH-ROOM, MUSTARD, NASTURTIUM, OLIVE, ONION, ORANGE BLOSSOM, SUNDIAL, WEEKENDER, SUGAR CANE, SWIM POOL, SWING, SWING 2, TRAIN, TRAIN 6, TENTS 106, WATER PISTOL, WELL, BONKED, WELL/1.

CS DISK 323

This disk contains some more cars, which are - JALOPY, BMW, CONVERTIBLE, CLASSIC & CLASSIC 2, ANTIQUE, ANTIQUE 1, 4WD/C, ASTROVAN & ASTROVAN/C, CAR 13. Also on this Disk is a GEOFAX DEMO + Docs.

CS DISK 324

Even more cars on this one - CAMRO & CAMRO/C, CAR 22, JEEP, PORSCHE6, CAR300ZX, CAR 65 & 66, CARR, CAR 40, CARMALIB, CARS, CRUISING, CARSALEO, CARSIGN, CAR40/4, CARS/1.

CS DISK 325

Doreen's called this one PCX ART, which include - SCHOOL 2, SEASON 2, SPEC DAY 7, SPORT 15 & 16, SPRING 2, TRAVEL 3, WEATHER 2, WOMEN 6, XMAS 2 & 5, FIRST PRIZE, A-FEB, A-MARCH, ALPHABET, DBLBURST/C, ARROWS 1, FANTASTE.

CS DISK 326

For a change, this time it's boats - 3 MASTER, ANCHOR 5, BOAT, CANOE 33, BARGE, ESSEX 1, FISHR, BOAT RIDE, FREIGHTER/1, FREIGHTER/C, GALLEON/1, LINER.

Welcome back for another run through the world of GEOS.

As usual, we have another delve into the GEOS library, curtesy of Dave Elliot - thanks for all the hard work Dave.

Also, as promised, there is an article from Ken Ross who is new to GEOS and he has penned some of his preliminary findings.

GEOS never stands still for long and as such there is much happening all the time. The amount of stuff available for GEOS articles is now reaching critical mass, so a future issue should see a bumper '8-page' geoTELEGRAPH section - bet you can't wait - ED

CS DISK 327

This one's called BOOK1/Lady - CARDS, CARRIAGE, DINNER 42, DORKINGS, DRESS-EDW, DRESS-VIC, ESCHER 2, 5 & 67, FLORAL CAT, JOMON, STALL, SHOP.

CS DISK 328

At Last!, this one's called Food - NANNA, APPLE, BEER & BEER 3, BEVERAGE, BREADBOARD, BURGER & BURGER 3, BEVERAGE 2 & 3, EGGS and EGGS 3, DINER 1, DINING2, BEVERAGES 3/1.

CS DISK 329

Even more food - DINING 2, BREAD, SNACKS 3/C, CAKE 44, CHERRIES, COKE BOTTLE, FOOD 3, SWICH, COFFEE, DINING 1 & 5, DINNER /1, DESSERTS/1, FRENCH FRY, FOOD 4, SNACKS3/1.

CS DISK 330

This one's called PCX ART - CLOWN 2, COVER 11, EQUIP3/1, DAYS 3/1, DECO 1, DESIGNS 2, DROPINS 1, EM-21, ETHNIC 4, EXNEWS 1, FAIR 3, ROR 20'S 1, FAIRY3, FILMREEL/C, HARVEST 1, HISTORY 3, HOTLIP, LH10, INSECTS 2/C, MEDICAL 4, MEN 1, MUSIC 2/1, MONEY 1, OLDFASHIONED1.

CS DISK 331

A geoPaint disk full of pic's about Boat's. KEYWEST, MERCHANT-MAN, PIC-RIM, SAILBOAT, SAILING, SAILSHIP, SCHOONER, SPEEDBOAT, SPRUANCE, STEAMSHIP, UNDERSEA and YACHT.

CS DISK 332

For a complete change, this one's Fish - FISH 47, 51, 54, 43, 46, 41/3, 44,49,52, 50, 53, 56, 61, 65, 70, 88, FISHES, FISSSH, GOLDFISH, FLOUNDER.

CS DISKS 333 & 334

To review these 2 disks, I'll quote from Peter's letter - "It's very important that Doreen's Updated Converter goes into the Library. Not only does it work with 2 drives, but it now works with 1541 - 1571 and 1581 drives, you can also preview the converted files. Doreen has also modified the code to ix some of the earlier bugs" - an Info file is also included. This programme has been 'Beta' tested by several OZ members.

CS DISK 335

geoView (of course), plus a mixture of cats and dogs, 18 in all. From Kittens to Cats in various 'poses', plus a couple with Dogs on. The files are - CATS, CAT5, 6, 7, 9, and 26. KITTEN, KITTEN 3, 4, 5, 6, 7. SIAMESE, SIAMESE2, ABMTEROO, BKDOG, BEAGLE2.

CS DISK 336

GeoView plus on this disk a mixture of BIRDS & DOGS. From a BLOODHOUND to a BULLDOG, from STORKS to a WREN. 11 geoPaint

files in all. The names are - BLOODHOUND and BLOODHOUND2, BOXER, BORZOI, BULLDOG, BORDCOLLIE, STORKS, BSTHND00, BULLDOG5, SWALLOW, WREN.

CS DISK 337

GeoView plus a mixture of BIRDS & PEOPLE. From a PARTRIDGE to COUPLES. 9 geoPaint files in total. The files are - PARTRIDGE, SEAGULL & SEAGULL2, CANTEEN, CEVENTS2, COUPLE 3 & 5, CUPELKIL, TERNS.

CS DISK 338

GeoView plus a collection of different birds. From EAGLES to OWLS, (in amongst them is a file called SKUNK, don't ask me why, I didn't know that they could fly!). 11 picture files in all, (including the skunk.). They are - EAGLE1 & 1/C, 10, 11, 12, SKUNK, OWL1, 10, 13, 19, ROBIN1.

CS DISK 339

GeoView plus People & General. Everything from DINNER to DRINKS (naturally!). 12 picture files in all. They are - DAD-KIDS, DINE, FAMILY1, 6 & 7, DAD-SON, DINNER, DRGHTS00, DRINKS, FSON2, GROUP1, HORRAY.

CS DISK 340

GeoView plus some more People/General theme. From FRUSTRATION to PICNIC, 8 pictures in all. The files are - FAMILY7, FRUSTRATION, GROUP2, HUSWIFE, LAUGHS, PILGRIM, PICNIC, and TABLESCN.

CS DISKS 341 & 342

GeoView's on both disks plus a collection named PANELS. I think that 'ClipArt' would be a better choice, there are 5 files per disk, each containing some very well, and some very usable Clip Art. The files are - (341) - PAGE 3 & 4, PAGE01FS & 05FS, RELI25 and on (342) - PANEL77, PAGE5, PANEL, PANEL50, OLDWEST.

CS DISK 343

There's a variety of subjects on this disk, the geoPaint files are - SAMPLES, SAMPLE 1, 2, and; SCIENCE; THINGS 2 & 3. The pics run from Flowers, Fish, Ships to a Microscope & Fantasy.

CS DISK 344

The titles of this selection are - THINGS 4 & 5; ARROWS 2/8; DBLSTARS 5/8 & 5/C; GOLDFISH 2/3 & 2/6; CARD 91; FANTASTE/1. A good selection from Xmas to Fantasy.

CS DISK 345

Yet another great mixture of geoPaint pics - DISPLAYS; FARM 78; RELIGIOUS 29; LEISURE; LEISURE 1 & 2/C; MISC 11; LI 13/1, 12, 14, 15, 17, 18. The 'LI' pics are all of the Print Shop kind. There's everything from Labels to People.

CS DISK 346

6 - Video Shop Fonts; Plus a large selection of Printmaster/PrintShop graphics, which include - Maps1 - 12, Office1, Spaces 1 and 2, Commodore Amiga and C128, Artist etc.

CS DISK 347

Another batch of various pics - MISC 11, 12, 14, 17, 18, 298, 11/C. A host of pics for almost any occasion.

CS DISK 348

On this disk are the following - MISC 19, 3, 4, 93, 5, 6. As on the previous disk, there's something here for everyone.

CS DISK 349

The various files continue - PANELS 2; PUBLICA 1; WINTER; MISC 7; SIGNS; PUBLIC /2. Some of these files are ideal for use in geoPublish, but all are very good.

CS DISK 350

Some more pics of various sizes - PARTS/C; PEOPLE 2 & PEOPLE 20; PERSONAL; RELPANEL; MISCELL 2. The pics on this disk also range from Print Shop sizes to almost full screen.

CS DISK 351

Again there's a good choice of subjects on this disk - DESKITEM; AMERICANA; CLIP 1 & 1/1; ANIMALS 3; COMPU8; BIRDS 6 & 7; CAMPING; CLIP 2, 3, 3/C and 3/CV. There's no occasion that's left untouched.

CS DISK 352

Once more a mixture of picture sizes and contents - COOP 3/1; COOPER 2 & 5; COOPHO 1; COOPER 6/C, 7, 5/TR & 7/TR. If you buy this lot I promise you that you won't be disappointed, because I think that they're good.

CS DISK 353

On this disk there's a good selection of Animals - ANIMALS, ANIMALS 9, 10, 12 & 13; ALLIGATOR; ARMADILLO 2 & 3; DRAGON 4; FROG 11; CROC 2; DRAGON 6; FROG.

CS DISK 354

To end this months review is yet another disk of Animals and Insects - APE 2; FLY FROG; FROG 12, 14, 6, 7, 9, 10; FROGS; FROG LIFE; INSECT 4; APE 3; LIZARD 3, 4 & 5; RATTLE 1; CROC 4.

CS DISK 355

A geoPaint disk full of pic's about Animals. BANDKOOT, EMU, KANGAROO, KOALA, KOOKABURRA, PLANTYPUS, POSSUM2/1 and RINGTAIL.

CS DISK 356

7-geoPaint file called Animals 1-8.

CS DISK 357

A geoPaint disk full of pic's about Animals. AARDVARK, ANTEATER, APE, BEAR and BEAVER.

CSL DISK 358

A geoPaint disk full of pic's about Religion. ELDERS, ABRAHAM 1, ACT ADAM, ALIVE, ANDREW, ARK, ASCENSION, BARRABAS and BISNES.

CS DISK 359

Doreen's latest PCX Converter V3, programmes. A small bug was found with the double image, when used.

CS DISK 360

A disk full of mixed applications: NOTEPRINT - printout you note pages; geoSIDPLAYER - play music with this app; SID_PRINTER - print sheet music from any Sid player file; MISICAL NOTES - musical character set for Sid player program; CHROMOPHOBE - modify geoPaint color data; geoVERSION 128 & 64 - a list of all the Berkeley software for Geos 128 & 64; QUICKVIEW - dump write files to screen; MAGAZINE LIST - geoWrite Doc, when printed makes a nice record to take to flea markets etc.. GENIE FILE TEXT - ?; TURBOBOOT, HEADEDIT.SFX, AUTOMAGIC.SFX, GEORAMWEDGE.ARC, MAVBOOTFIX.ARC - Basic files; SETPOINTER - lets you put the pointer where you want it on the desktop; ROADWAY, WHILE, OLDFLAG - geoSid Player music files; FINDFILE - use to find files on big disks.

CS DISK 361

A disk full of mixed applications: HULMEVIEW - view CBM SEQ files from the Geos desktop; FORTUNE - ancient book of inspirational computer proverbs; CHEQUEBOOK - Keep your cheque book up to date with this geoCalc file; RAWAUTO - loads Raw Auto-Exec files; HAL 2001.RAW - Geos 128/80 column screen intro Boot package; COMIC.ARC - basic file; ENVERLOPE - address your envelopes.

CS DISK 362

A disk full of mixed applications: GEOS - basic fast boot; TURBOBOOT - for use with GEOS file; CONVERT.BAT - allows you to select multiple files; HEADER EDITOR - edit Geos file headers; WRITERS CRAMP - down grades geoWrite files 2.0 to 1.0; AUTO RAW - loads Raw Auto-Exec files; MAKE MAY DAY.RAW - data; GEO POINTER - allows easier changing of the pointer; BLACKJACK - card game; NOTE PRINTER - printout your notes; PHOTOALBUMLISTER - list V2.1 albums; CROSSWORD - a Geos crossword.

GEOS FROM ZERO

(part1)
By Ken Ross

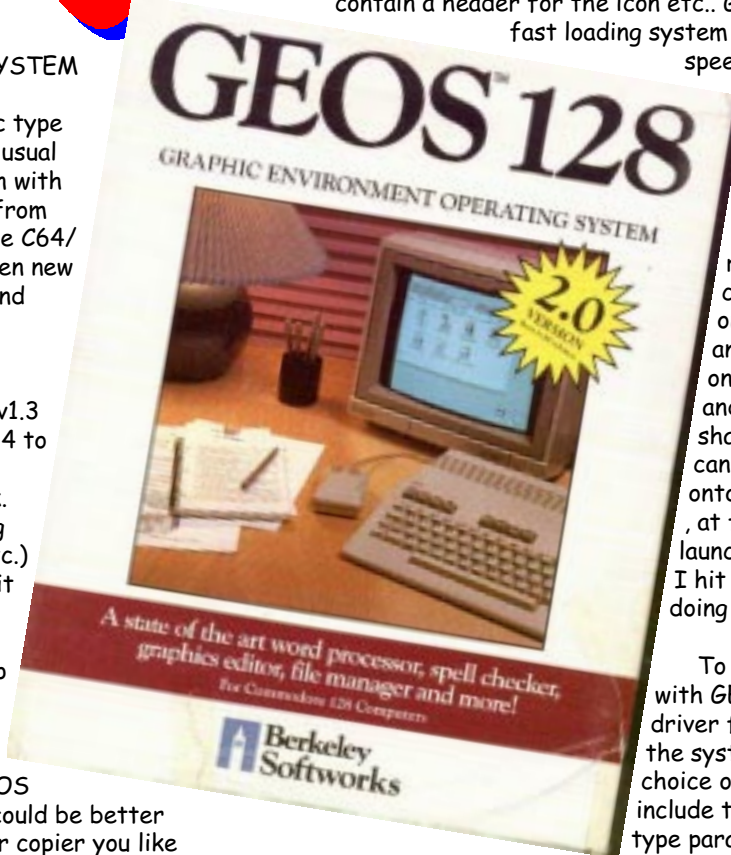
G.E.O.S.
GRAPHIC ENVIRONMENT OPERATING SYSTEM

If you've not encountered GEOS it is a Mac type OS for the C64 which after it's loaded by the usual 'load"*",8,1' biz takes over things from then on with things dealt with by clicking on them, GEOS, from Berkeley Softworks, breathed new life into the C64/C128. A graphical operating system like the then new Apple Mac. In 1986 icons, windows, desktops and menus were new in personal computing.

Until recently I'd not had much to do with GEOS for various reasons beyond using GEOSv1.3 to look at Macpaint pictures at times on my C64 to see how they looked when I was putting PROJECT64's service manuals onto floppy disk. Then, 'inheriting' a GEOS capable printer along with some other GEOS software (geoWrite etc.) gave me reason to explore things to see what it was all about.

First sensible thing to do is to make backup copies of your GEOS system disk, I used my 8096 along with a 4040 drive to create clone(s) before starting (safety in numbers), Sometimes there is a copy program on the GEOS disk itself, but it can be temperamental so it could be better to make alternate arrangements with whatever copier you like most. When GEOS starts up you're confronted with a Mac 'classic' like desktop, with various icons to double click on, GEOS uses port #1 for control of the pointer unlike most other C64 items that use port #2. The pointer can be used with either a joystick or if you're fortunate enough a Commodore 1351 mouse (if you can't find one - get a CMD smartmouse from Allan Bairstow via CS's importing service). GEOS will recognize two drives (what as depends on which version of GEOS) as A & B (device 8 & 9), and also RAM drives (depending etc.) and up to 4 drives in later incarnations (Wheels64 /MP3.). GEOS formatted disks have some extra information on them which can only be dealt with in GEOS so don't mess with them in BASIC as they'll end up corrupted and GEOS will throw a wobbly - when a BASIC formatted disk is being used in GEOS it'll offer to change it a GEOS format disk and write the extra information on to it. I

found that I had a copy of GEOSv1.2 that'd work with geoWrite v2.1, and a GEOSv1.3 that'd work with geoWrite v1.3 but not vice versa. A reference book revealed that when first run geoWrite will make note of the GEOS kernal number it's first used with and refuse to work with any other, another book gave me the location on disk of the GEOS kernal number which was altered to suit using a block write utility. The 'desktop' folder displays 8 icons at a time and the various pages can be clicked through (the file pull down menu gives you options to view by name etc. but only by icon for double clicking). Pull down menus stay in position while the pointer stays on them - nice touch. On the 'desktop folder' are a number of system files that have to be there and a 1541 disk is limited in space so two drives are really best to work with (Without two drives life with GEOS is a disk juggling affair to be honest) and it behaves much better (at least I've found in the copies I've got) if the desktop file is copied to work disks that contain the GEOS applications in use - GEOS files are in USR format as opposed to the usual BASIC PRG/SEQ/ REL formats and contain a header for the icon etc.. GEOS uses a fast loading system which greatly



speeds up loading times from the disk drive so things happen sooner than BASICv2.0's routines. To copy files from one disk drive to another just click on the icon wanted and it'll appear as a shadowed icon that can be dragged onto the other drive, at first I kept launching things then I hit the knack of doing it.

To use a printer with GEOS a suitable driver file has to be on the system disk and the choice of printers can include types with PC type parallel connections by using a geoCABLE



from the user port, at first I thought it was some special variety of adaptor until I found out from the CSTech2000 special issue that it was just a variation of the cable I used to connect my 8096 to a Panasonic daisywheel printer many years ago which was still lurking in my odds box. One end is an edge connector for the user port and the other is a standard centronics plug. To get hold of one if parts are unavailable to

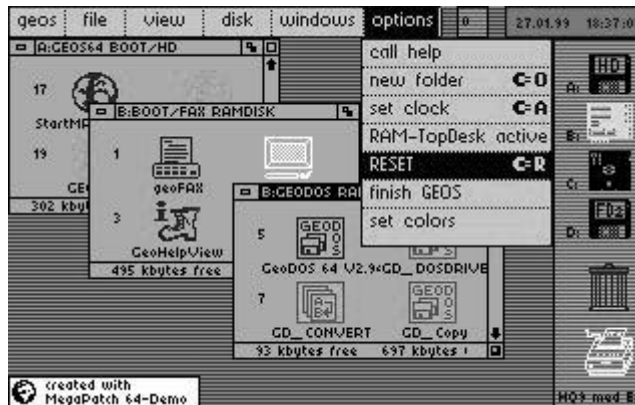
you contact either CMD in the states or the excellent Mr. Bairstow in the U.K.

Software for GEOS can be found on the internet (at this point fill in your own method of getting stuff onto a disk your C64 likes!) but due to the way things are it'll most likely be a file in SEQ format with a .CVT extension on it which requires

a conversion utility (called CONVERT funnily enough) run over it to turn it into a GEOS USR file with an icon. Further sorting of the box turned up some copies of GEOS 2.0 which was faster than the GEOS 1.3 I'd been using until that point which got retired straight away and pointed in the right direction geoWrite v2.1 was double clicked on ...

A FEW WORDS FROM MR. BAIRSTOW HIMSELF ON THE SUBJECT:-

"It is important to remember that GEOS v2.0 will only recognise two physical drives (3 at a push using an REU as the third drive), so if you have a disk drive attached set to device 10 it will not recognise it and also if you had a drive attached set as device 11 then GEOS will not work at all because GEOS uses device 11 as storage for devices 8, 9 & 10 - it all gets very confusing. The best bet is to have a minimal set up of 1541 (or 1571) as device 8 and in this case have the FD2000 as device 9, an REU would be nice but it is not essential. If GEOS does not recognise the FD2000 as a 1581 on boot up (it should do) then just go to the 'configure' file and set the second drive to 1581 (you will first have to select 'no drive' to bring up the options menu). - BUT - copying GEOS disks with anything other than CMD's geoMakeBoot & Original GEOS disks will result in compatibility and application problems. It will also mean that you will not be able to upgrade to either MP3 or Wheels as these programs require the original GEOS disks to install themselves - pirate copies will not work."



got to try experimenting with importing pictures into a geoWrite document (due to my other hats taking up free time). Also on the disk are the system utilities : PHOTO MANAGER - stores graphics for using in geoWrite & geoPaint (and other applications), TEXT MANAGER -stores text items for geoWrite (and other applications), PREFERENCE MANAGER - sets screen background colours , pointer speed/shape and so forth , and in v2.0 there are options on the colour of individual files (system , application, data ,BASIC etc.)

THE SMARTMOUSE Whilst in the early stages of things I obtained a CMD Smartmouse from Mr. Bairstow (again) and makes life a lot easier/smoothen than using the joystick , and things feel a lot faster than before. Along with the FD2000 it's an item that enables

the C64 achieve a lot more than when it was first created. GEOSv2.0 uses a date/time clock and this can be set to be updated with the smartmouse's driver software. (Mac has one button on mouse , my Amiga has 2 , now I've got one with 3 !)

A BIT OF HISTORY ? In the June 1986 issue of Compute!'s Gazette (from the USA) is the first real review of GEOS I've been able to find with screen shots , ICPUG members got their first glimpse of GEOS back in the Sept./ Oct. 1986 issue of their journal - reviewed by Brian Grainger (who now edits the ICPUG on-line journal) probably version 1.1 , version 2.0 is a great deal swifter !.

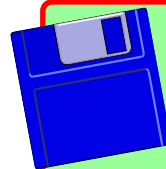
(Mr. Bairstow hasn't paid me to plug him after I've read this through!)

More 'GEOS from zero' soon!



(Back to me!)

FIRST STEPS After formatting a floppy disk as a 1581 in my FD2000 (device9) things were a lot easier as I'd been trying to get GEOS 2.0 to recognise a 1.6MB formatted disk which it wouldn't. With the disk now GEOS formatted I started to put various applications on it. (macattack for converting Mac paint files into geoPaint was one important item for me !). geoWrite can use seven fonts that are stored on the disk that it's on , and a bit of experimenting worked out which ones I liked the look of as they're the only ones that can be displayed in the font selection menu along with the selection of sizes that it comes in. On the other hand each font is available in the full range of styles , underline, italic and so forth. If a document uses fonts that aren't available the default one of BSW is used it seems .There is a downgrade utility to modify doc's to earlier versions as geoWrite v1.3 can't read geoWrite v2.1 doc's which results in an error message. (A few of my problems were caused at first by my paper system - as I've got a few very large rolls of fax paper I wanted to use it instead of single sheet feed or buying tractor paper but a bit of fiddling sorted that out .) As yet I've still



GEOS ON THE DISK

The GEOS files that are on the coverdisk this issue, courtesy of David Walker, are as follows :

MarReOrg & documentation - A powerfull application for altering and moving files on your disks. Read the instructions for full details.

GEOLabel - A nice simple and easy to use label making program from John White.

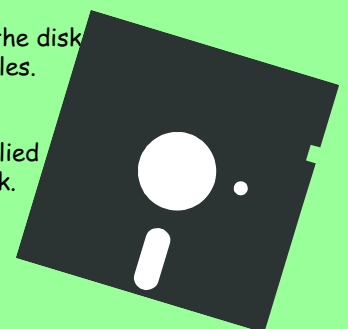
Mult-Print & documentation - Another utility for printing multiple copies of 1" labels.

PLUS - lots more !

The entire side two of the disk is dedicated to GEOS files.

geoDOS v2.95 - This superb software is supplied to you on a seperate disk.

- ED



Hard Drivin'

In the beginning there was the 1541...

But we all very quickly amassed so many 5 $\frac{1}{4}$ " floppy disks that the practicality of finding what you needed became near impossible. The situation was made all the more difficult for those using multi-disk programs. Commodore eventually came to the rescue with the capacity-doubling 1571 and later the 3 $\frac{1}{2}$ " 1581, which is just large enough to hold the full suite of GEOS applications. To appease the search for more space, third-party vendors brought out hard drives for the 8-bit CBMs; 10 and 20Mb device spawned from a number of vendors including Xetec's Lt. Kernal, the ST10C, JCT's 1010, ICT's HFD-20; and finally came drives from CMD, and very recently the IDE64 card.

By Nicholas Coplin

Have times changed?

The search for more space and functionality has not ceased. Thanks to the internet many Commodore enthusiast's now collect and exchange disks using email and image formats such as D64, etc. For storage, the mass-media of choice today has become the CD-ROM.

Whilst owning a CMD HardDrive is the pinnacle of a Commodore collection the cost is a beyond the reach of many people. What has long been needed is a user-supported mass-media system that is easily expandable and can be configured by anyone on a small budget.

Introducing: 64HDD - The CBM Drive Emulator...

64HDD is software which allows an MSDOS based PC to act as a drive emulator for a Commodore computer. As the software emulates the IEC serial protocol directly it not only works with the C64, but also with its cousins the C128, C16, Plus/4 and Vic20. The only extra hardware needed is a X1541 adaptor, which most of us have if we use transfer utilities such as Star Commander or Trans64.

The 64HDD software allows the resources of the PC to be used by the Commodore. This includes the drives such as floppy and CD-ROM, the Real-Time Clock (RTC) and mouse. Most load and save operations are transparent to the user. New functions such as setting or reading the RTC are handled by command channel sequences. Where greater compatibility such as direct disk access is required, disk images can be attached. No need to load special drivers or use patched Kernals... everything's there from the moment you switch-on.

And by the way, there is no need to imagine having a huge PC case sharing your C64 desk, many baby-AT 386/486 PC boards will fit in a 1571 case as can be seen in Figures 1 and 2.



Figure 1 - 64HDD in-a-1571 case



Figure 2 - It is a very tight installation but with the correct PCB you can fit the FDD, HDD and PSU.

But Hey, haven't we seen this sort of thing before...

You are probably thinking of older PC based server tools such as VC1541 and

Want to build a HardDrive for your C64? ...how about a CD-ROM?

If you can get hold of a 386/486 PC and a X1541 cable, download the 64HDD software to get:

- * Unlimited storage space
- * Disk image support
- * Tape and Lynx image support
- * Plus more....

SERVER64. These noble programs also attempted to emulate the IEC serial protocol but fell short on compatibility. Their fatal flaw was that they streamed data to the computer, taking little or no notice of the ATN signal. Whilst PRG files usually transferred well enough, sequential file and command channel support was simply not possible.

Strict adherence to the IEC timing specification is key to attaining good compatibility. Working with Jochen Adler (developer of SJD64), 64HDD has been developed to be compatible with all CBM Kernals and is JiffyDOS friendly (JD currently thinks it is just an ordinary CBM drive...).

A file system for every occasion...

64HDD supports several file systems and this gives it its flexibility. Currently it can also support up to eight drive numbers; all at the same time.

Firstly it supports files in the MSDOS file system, with filenames up to the CBM 16 character limit. Directories and drive letters are also supported. Files can be loaded with the path specified or from the current directory. Reading and writing of files, the creation of sub-directories can all be done using BASIC open, close, load and save commands. It is not efficient to support block reads/writes in the MSDOS file system, as a PC disks easily extends beyond the Commodore limitation of 256x256 blocks. Programs that do not use direct disk access work well, allowing many games and utilities to be loaded. Imagine using the new JPZ viewer to load JPG files without transferring them to 1541 disk!

Disk, Tape and Lynx images are some of

the other files systems being supported. The latter two are read-only types, provided mainly for compatibility with images downloaded from internet archives. Disk images provide the next level of CBM compatibility where track and sector access will be possible. Support is being provided for D64, D71, D81 and D2M disk images, as well as a new 16MB disk image - try emailing that to your friends!

With seamless interfacing to Wolfgang Moser's 1581COPY utility, 31/2" formats can also be transferred to and from a real disk.

But how do you get 16 character names in plain DOS?

Easy! - well, not really. As most know MSDOS does not support LongFileNames (LFNs), not even in MSDOS7+ (Win95+). To get around this in the past emulators have used header files to record the "CBM name" and assigned an often meaningless name to the real file.

64HDD uses a suite of DOS based LFN tools that ensure it can create Win95 compatible filenames. Included also are the tools to copy and move these files around.

Pssst!!!

Want to know a Short-Cut?

With all this data available to you on the one system how do you remember where to find it again... well, the practise of using unit numbers has long been used by Commodore hard disk systems to define partitions.

64HDD takes this concept one step further. Instead of a maximum of 254 partitions, 990 are now available. But, these "partitions" are not hard-coded disk structures, rather they are pointers to sub-directories or disk images allowing the short-cut to be changed without moving any files around.

Speed and Compatibility

The graphs in Figures 3 and 4 compare the 64HDD system to a number of other disk drives. Significant improvements in load and save times are possible even with the standard CBM Kernal. These improvements are possible because once the disk hardware delays are eliminated, only the time to transfer the data is needed.

In the future, it is hoped to support faster data-transfer protocols such as burst-mode for use with the C128 (or modified C64). Whilst your enhancer cartridge may work with 64HDD to view directories and send disk commands, generally speaking, the disk acceleration functions will not work (and should be disabled). This is because 64HDD has not been written to support drive-executed code, as this would increase the minimum

requirements for the PC hardware. Not a big problem, as most disk accelerators will not work with any drive other than a 1541.

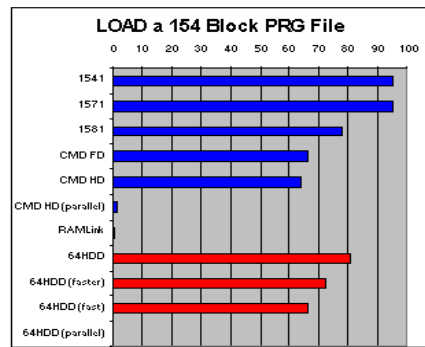


Figure 3

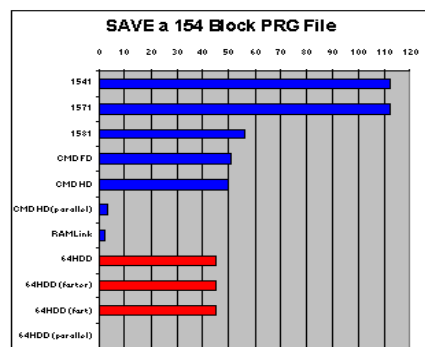


Figure 4

Does GEOS work with 64HDD?

GEOS and 64HDD can co-exist, and a GEOS clock driver to synchronise the time and date is included with the 64HDD package. The source code for the driver is available by request. However, for file access a disk driver or desk accessory still needs to be written, a task I have little experience with.

Calling all users....

In the introduction to this article I mentioned the desire for a user-supported system. A lot of support has already been provided by many Commodore users who have posted documentation and schematics to the internet and in publications such as Go64! Many thanks to all.

GEOS programmers are being sought to help write drivers for 64HDD; whilst others can help in beta testing.

For the future...

A parallel transfer system is already in the design phase and will support all of the current Commodore 8-bit platforms. Further down the track, support for access to even more affordable PC hardware is planned such as direct printer connection and networking; but that's another project....

Contact

coplin@hotbot.com

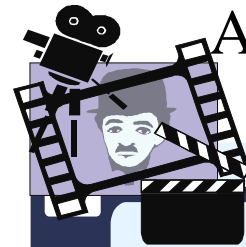
Free 64HDD Download

<http://pages.hotbot.com/family/coplin/c64-proj.html>

Apologies...

I would like leave a thought with those that may wonder How-and-Why a story about a piece of PC based hardware and software made it into a C64 publication... In a world of PC and MS domination, isn't there some victory in making a PC a slave to the timeless Commodore!

Lights, Camera, ACTION!



English Express

BBC2,
29th March 2001 onwards,
@12:15pm

The one thing that you have to endure with children is 'childrens TV'.

This is not a bad thing in itself, but it soon become tiring. However, I was recently watching a learning program teaching english grammar to young children when low and behold, what computer was he using ?.

A C64 (old breadbox version) was being used as a keyboard. Unfortunately, the keyboard was not actually plugged into anything though ! Ahwell, you can't have everything !

LCD64 – a new take on Commodore portability

By Nicholas Coplin

This article is both a look at what could have been, but wasn't, and a look at a project to build on from where Commodore left off.

A walk down memory lane...

The year was 1985, the place Las Vegas. This was the location Commodore had chosen to unveil a new computer, the Commodore LCD.

As a fan of portable, small sized gadgets I'd always dreamt of having a portable Commodore. The SX64 had captivated my attention in a shopping centre where a mobile insurance salesman used it to compute premiums, etc... but the SX was not *really* portable.



The LCD promised so much more... battery operation, inbuilt display, built-in applications. It was like a Tandy M100, but better... it was a Commodore!

Unfortunately production of the Commodore LCD was never realised. As I later learned and will explain below, the LCD was not C64 compatible and this perhaps was one of the reasons for its non-production. Today it remains one of the rarest of Commodores. Soon after Commodore's demise one was advertised "for sale" at DM2400; apparently only 5 were ever built.

Inside the CBM-LCD

The internet has several good sites detailing the specification and workings of the LCD, so I'll only briefly cover the basics. The LCD did not have the famous features of the C64; it lacked the VIC-II video chip, the memory map was very different and even the processor was not 100% 6510 compatible. In many ways it had more in common with the short lived C116/C16/Plus4 models. It was however compatible with many Commodore peripherals, though there were also a number of battery operated devices designed exclusively for it including the C1561 - a 3.5" floppy drive unit.

Processor	Rockwell 65C102
Speed	2 MHz
ROM	96kb (BASIC3.6, applications)
RAM	32kb (upgradable to 64kb internally, total 128 KB)
TEXT Modes	80 x 16 (25 virtual lines)
GRAPHIC Modes	480 x 128
Colours	Monochrome LCD
Sound	Unknown
I/O Ports	User Port, Centronics, Barcode, Serial IEC Port, telephone

Portability revisited...

My main Commodore project is 64HDD, the CBM drive emulation software. However, whilst the software can be transported from PC to PC on a 3.5" floppy disk, transporting a C64 between test PCs proves to be a little more difficult. Enter... the concept for a portable C64. Project: LCD64.

The C64c makes an ideal choice. Firstly, this model readily available. Secondly the "c" casing is attractive even by today's standards and a laptop version is easily conceivable. Thirdly, the short "e" board fitted to many of the "c" models uses less power and has sufficient room inside for mounting a power pack. Fourthly... there are too many reasons... so I'll stop.

Too good to be true!

Unfortunately, a 100% C64 compatible machine is not possible because of the complexity of the VIC-II video chip. Sure, an LCD television could be attached to the A/V outputs (as with the PSone) and the resulting unit called a "portable". But somehow this doesn't seem right...

The approach taken with LCD64 is to attach a text-only display controlled by a modified Kernal ROM. The result is a machine that works well in text mode, with many off-the-shelf programs working as if nothing has changed. The only visible limitation comes when applications use more than the displayable screen or use hi-res graphic modes.

Getting down to the Nuts-n-Bolts...

This electronics project begins with the selection and mounting of the LCD screen. In the world of text based LCDs there are basically two major types:

- 1) those powered by a Hitachi HD44780 chip; and
- 2) those powered by an Epson controllers.

The Epson devices have a better character set, but are generally more expensive and harder to find at surplus stores.

As a result, I've chosen to use the more generic Hitachi powered devices in LCD64. Screens are available from various optics manufacturers including Sharp, and through various retail /surplus electronics stores. Three online sources for components and information are: www.bgmicro.com, www.eio.com and www.densitron.co.uk. The purchase of a "new" LCD can be rather expensive, and I would recommend the purchase of a component from a salvage /surplus store. Mine cost £1.50.

The LCD screen is 4lines, 40char. The 40 character line is identical to the C64's simplified things for the software.

The screen height is a first glance a potential limitation, but with Kernal modifications and virtual paging most limitations can be overcome.

Also, a 40x4 screen has a rather appealing feature though when it comes to mounting. As shown in the photo, this small screen fits neatly into the C64c's casing

The rear deck is cut from the keyboard surround, and a pivot mechanism is made by aligning the mounting screws at





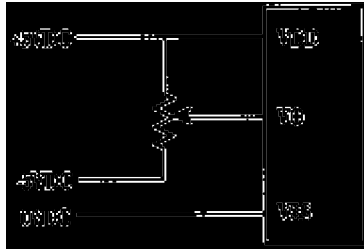
either end. A tilting deck is a feature more so than a necessity, and so is completely optional. It does however improve screen view-ability.

A hole for the screen is made by cutting through the ventilation slats on the rear deck of the case. Care is

needed when mounting the screen. Fixing the screen rigidly can cause distortion of the thin glass sheets, potentially leading to damage. Gentle mountings are recommended; personally having chosen to use cable ties rather than screws.

...moving on to the Sparks-n-Volts.

The LCD screen has its own power requirements and these depend on the exact screen selected. Some work perfectly from 5Volts, and conveniently, +5V and GND can be taken from the UserPort (or from any TTL chip).



However, some LCDs including the one I used require an additional -5V supply for the screen. This is needed for the screen to have enough contrast to be visible. Normally, generating this negative supply voltage would be a real hassle, but fortunately the amount of power consumed is so minimal that it can be simply provided by 3V battery source (I used two AA batteries and an isolation relay to turn "off" the battery). The details of this are shown in the power supply schematic.

Backlighting is an optional extra with many LCD screens. I did not implement this feature, but would recommend LED backlighting as no specialized power supply is needed.

And finally the Bits, Nibbles and Bytes!

The last step is setting up the communication to the LCD screen. Before going into the steps of how I chose to do it, lets consider the options once again:

a) Interface it to the I/O area via an internal or cartridge port: - This was my first thought also. The 4 control registers (two for each group of 80 characters) could be programmed directly, but this implementation identified several quirks about timing of the 6510. Its "write" timing is not 100% compatible with the LCD controller, and as a result an interfacing circuit would be required making the project a bit more complex than a "bunch of wires". Additionally, using the spare I/O locations could prohibit cartridge and REU compatibility - after all, I was aiming for a machine that worked just as well as a desktop as it did as laptop!

b) Connect it to the UserPort: - at first this sounds like a step backwards. Surely there can't be enough pins on the UserPort to control an LCD? Fortunately the HD44780 LCD controller has another attractive feature in that it is programmable as a 4bit device!

With the connection of 8 wires from the UserPort to the LCD our circuit is complete (see table below). Power "On"... and nothing happens... Hmm... Software is needed!

A download on my website includes a BASIC program for demonstrating how to talk to LCD64. However, this is hardly practical. A replacement Kernel must be burned to EPROM for the LCD to work at power "on".

UserPort Pin	LCD Function /Name	Pin ID (check for your LCD)
C - PB0	DB0/DB4	4
D - PB1	DB1/DB5	3
E - PB2	DB2/DB6	2
F - PB3	DB3/DB7	1
H - PB4	E1	9
J - PB5	E2	15
K - PB6	RS	11
L - PB7	R/W	10



The New Kernel...

Removing the old Kernel from a C64 short "e" board is not easy given it is soldered in place. The safest approach is to clip the chip's pins then unsolder each pin individually. With a 27256 EPROM two switchable Kernals are available (standard and LCD64).

The LCD64 Kernal performs several functions under IRQ control. Currently the following functions are performed, and

Lower 4-bit	Upper 4-bit	0	2	3	4	5	6	7	A	B	C	D	E	F
		0000	0010	0011	0100	0101	0110	0111	1010	1011	1100	1101	1110	1111
0	xxxx0000	CG RAM (1)			0	a	P	\	P					
1	xxxx0001	(2)	!	1	A	Q	a	q	.	7	7	4	ä	q
2	xxxx0010	(3)	"	2	B	R	b	r	'	/	u	x	p	ø
3	xxxx0011	(4)	#	3	O	S	c	s	.	o	t	e	e	*
4	xxxx0100	(5)	\$	4	D	T	d	t	.	I	t	t	µ	ø
5	xxxx0101	(6)	%	5	E	U	e	u	=	7	7	1	ö	ü
6	xxxx0110	(7)	&	6	F	V	f	v	?	o	c	a	p	Σ
7	xxxx0111	(8)	'	7	G	W	w	w	7	†	7	7	g	π
8	xxxx1000	(1)	(	8	H	X	h	x	,	o	z	u	r	π
9	xxxx1001	(2)	)	9	I	Y	i	y	?	7	u	u	'	ü
A	xxxx1010	(3)	*	:	J	Z	j	z	z	o	n	v	j	7
B	xxxx1011	(4)	+	:	K	C	k	c	(	7	o	o	'	π
C	xxxx1100	(5)	,	<	L	†	l	†	7	7	7	7	7	π
D	xxxx1101	(6)	-	=	M	I	m	i	>	u	z	^	z	÷
E	xxxx1110	(7)	.	>	N	^	n	^	z	a	e	t	'	π
F	xxxx1111	(8)	/	?	O	_	o	_	7	7	7	7	7	ö

the list of features is being optimized and improved as time goes on.

- Translation from CBM codes to ASCII (see font chart on previous page)
- Mapping of the VIC video screen to LCD, including memory bank and screen pointers, upper/lower case fonts
- Keyboard toggle for the display mode (selecting either 40x4 or 40x25)

Many more features are planned in future revisions of the EPROM including use of programmable character modes. The specification table below outlines some of the features that may be adopted as time goes on.

LCD64 project and downloads:

www.64hdd.com (latest info and download zip)

ncoplin@lycos.com (author's email address)

For information about Commodore's LCD:

1) www.student.informatik.tu-darmstadt.de/~mepk/

2) <http://mjk.c64.org/>

© COPLIN 1999-2001

LCD64 Specifications and Features		
Feature	Currently supported	Future enhancements
LCD Display 40char x 4lines	4/25 line keyboard toggle	25line virtual screen
Fonts and colours	Re-mapping	Tone Simulation by duty-cycle
Graphics detection	N/a	Text message to user
Power supply /management	Standard PSU	NiCads with low-power mode (switches off unnecessary chips), 12V option (for car operation)
Processing Optimisation	N/a	IRQ disable, clock step-up
Sound Output	N/a	In-built speaker for SID

Ah, the 1980's, those heady days of absolutely wonderful electronic music, silly fads and most importantly of all, the birth of something truly amazing - original and ground breaking computer games. These were truly times to behold!

If all that strikes a cord with you then you will be kicking yourself if you missed 'Thumb Candy' which was aired by Channel 4 on Saturday 31st March 2001 at 11:35pm until 12:35am. After all this time, here we had a program dedicated to those wonderful days when computing was still the domain of computer nerds and history was still in the making. This program has to be considered a 'bible' of the video age! I liked it very much - just in case you hadn't already got the idea. Why did I enjoy this program so much? Simple really - because I was there, in the 80's, shoving 10p's into the slots of Space Invaders, Pac-Man, Defender and the like, the sound effects were great, the graphics were adequate but the gameplay was superb. Enough! Let's talk about the program.

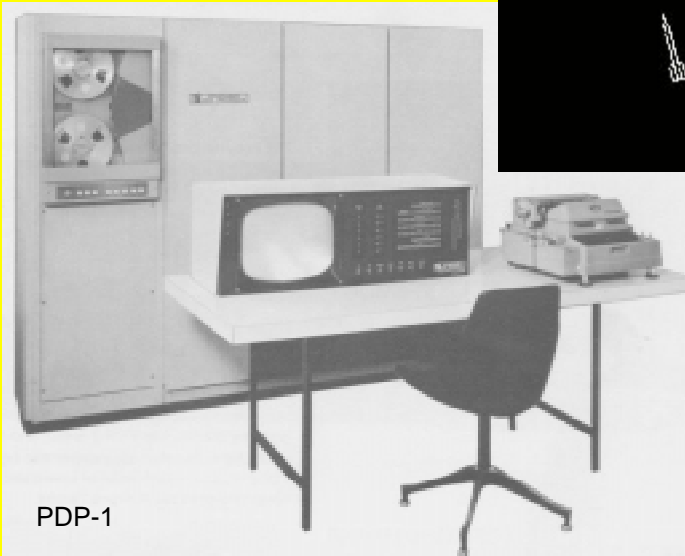
Iain Lee was our host for the night and he stands before us in a modern arcade with 'whizz's' & 'bangs' going off all over the place. But where did all these technological marvels stem from? We enter the unbelievable year of 1957!!!

1957 was the year of **Bouncing Ball** (Author Unknown), this was nothing more than an oscilloscope but the usual 'blip' on the screen had been made to 'bounce' - whoever created this had no idea what he/she had started!

Staying with the oscilloscope, the next leap forward was in **1958** when **W. Higinbotham** brought us the first ever game called **Tennis Programming** - a very catchy title! This was the forerunner to the eventual tennis games that would try to rule the world in the 70's.

The oscilloscope has a very limited capacity for programming and it was not until **1961** when mainframe computers became common place (?) that **Steve Russell** wrote **Space War** for

Thumb Candy



the PDP-1 (now there's a name for a computer straight out of a 50's b-movie!), see the picture to the left.

The game (pictured above) might not look much, but to see it move around will immediately tell you that is silky smooth and operates very much like Asteroids, but don't forget that this is some 18

years earlier! This has to be the granddaddy of all computer games, I don't

care who you are, but this is history in the making. The sad fact is that only a select group of people ever played it. Space War was designed to be given away with the PDP-1 as an incentive to buy this particular mainframe computer, but, at over a half of a million dollars (today's equivalent), not many people could afford such a luxury. The game itself was extremely ahead of its time, it had smooth flowing vector graphics, it was a two player game and you could also have the option of separate game controls (paddles) - but you had to build them yourself and 'hardwire' them into the PDP-1. The game was stored on 'punch cards', anybody remember them? I do!

Now we take a leap forward to 1971 and we talk to Atari man, **Nolan Bushnell**. Nolan had created what he hoped would be the first true arcade cabinet complete with a game to play. The outcome was **Computer Space**

(pictured above) and, although it looked great, it had one flaw. When it was sent out for test trials in local bars (pubs to you and me), it was just too damned difficult to play, especially if you had been partaking of the 'falling down water'!. It was ahead of its time, it was too hard to play - it was shelved!

So, in 1972, **Pong** was born! This was widely accepted as the first commercial arcade success and to this day, everybody has heard of Pong! The creator, **Al Alcorn** was challenged to a duel by Iain Lee, but Iain lost by 15-6!

This is to be a common feature of this program where by Iain challenges each of the creators to a duel with the game that they created - bad move! He was doomed to failure, lets face it, you don't play Space Invaders with the guy that wrote it, do you?

To the tune of 'Heart of glass' by **Blondie** we enter the year 1978 - **Space Invaders** (original name **Invader**) by **Tomohiro Nishikado** from the Taito Corporation (picture to right). What can I say, a true classic and probably the all time most played game in the world. Nolan Bushnell paid the following compliment to it as being <<

The ultimate game to offer the best balance between 'risk and reward' >>. Tomohiro's original idea actually came from **Breakout** (1976, Steve Jobs, Atari), but he wanted to make the blocks fire back and to have the gameplay more interactive. Space Invaders was the first game to offer a hi-score system, game progress and true animation.

The original design for the actual 'invaders' came from British author, **HG Wells** - **Man from Mars** book. Even the early graphics on those pioneering machines did the original sketches justice, they really do look like the drawings!

Tomohiro then played Iain at Space Invaders and to Iain's great surprise, he won by 10 points! Tomohiro then



described how to win at Space Invaders by using the '**Nagoyo Method**' - more of that in the CS35 Arcade Special Edition.

Up pops 1979 to the tune of 'Cars' by **Gary Numan** (ah, that's more like it, real music).

Ed Logg (Atari) shows us how and why **Asteroids** took \$10 million in a week in quarters. This game was very difficult to play - I remember it very well, I was useless at it! - but it brought in a new breed of very cool and dexterous players who seemed to be far too good with their hands. Utilising five control buttons was too alien for most people to master - but the game was a hit, outstripping Space Invaders for a short while. A cheat called 'lurking' was developed for use in Asteroids which enabled you to 'hide' in a corner and pick off the space ships one by one, and rewarding you with a massive score and marathon games (30+ hours!). This cheat was later written out of the programming.

1980 brought us, in quick succession, **Defender** by **Eugene Jarvis** of **Williams**, **Missile Command** by **Dave**

Theurer of Atari and **Battlezone** by **Ed Rotberg** of Atari -

Ah, Battlezone, what a masterpiece of programming, I have always been a big fan of Vector graphics but when this came out in the arcade you had to look through a simulated tank eye piece to see the action (see picture to right), very engrossing stuff, very tense, very atmospheric, very - ahhh, there goes my bladder!



Now we briefly slip off to something a bit nearer to home - the **Home Console**.

1972 saw the world's first true home console games machine, the **Odyssey** by **Magnavox**. Closely (!?) followed in 1980 by the **Atari VCS** which made over \$250 million for Atari in its first year of production. These were brave times which brought great reward for innovation and forward thinking people who knew how to take risks!

Back to the arcade! The year is 1981, **Tohru Watani** from **Namco** is launching an entire new genre of arcade game which is about to change the way we perceive gameplay - forever. His game? Come on, it's

got to be **Pac-Man** (pictured left). The original name of **Puck-Man** was dropped when it was distributed all over the world for obvious reasons (if it is not that obvious then it will be revealed in the next issue!). This game brought in many new innovations, there was only one joystick (no buttons), game 'characters' were born (Pac-Man went on to do sequels) and to top it all



off, Pac-Man brought in a whole new audience to the arcades - GIRLS - was nothing sacred ;-) Apparently, the girls played Pac-Man because of their love of 'eating', obviously a sexist statement from a man ! Namco had to produce up to 1,200 machines a day just to keep up with demand and Pac-Man brought home the bacon to the tune of \$16 million in one year alone.

By the way, the official sound that Pac makes is 'wocca, wocca' and you have that from the programmer, and he must be right !

After a commercial break we are treated to the birth of the home computer with a demonstration being carried out on the **Commodore VIC-20** set up. The program was something like Tomorrows World and the set up was complete with disk drive, printer, etc.

Sir Clive Sinclair proudly holds the only white **Spectrum** ever made - the 1 millionth production model. You may remember that the normal version was black with those funny little rubber keys :-)

A pan shot (moving right to left) gives a quick view of some other rare breeds from the early 80's, a **Newbrain**, **Commodore PET** (small screen), **Commodore VIC-20**, **Apple** and a **BBC**. You have to be quick to catch 'em all, but they are all there !

Where to next ? You may well ask. Did we just put down on some strange planet or is that really **Mathew Smith** complete with 'extra wide staring eyes' ! In 1983, **Manic Miner** was unleashed on a computer buying public and the world shook ! Mathew was 'inspired' by the original game **Miner2049** by **Bill Hoad**, a cynic might even say he 'borrowed' the idea. But who cares ? It was a success and paved the way for programmers all over the UK in their bedrooms to put down their copies of Mayfair and do something more constructive with their time - write some games software.

More on Mathew will be in CS35.

In 1889, **Nintendo** was formed but it was not until 1981 that they released **Donkey Kong** by **Shigeru Miyamoto** (who has been described as being more popular than Jesus !). There was a storeman at Nintendo called **Mario Sigali** at the time and the character based on him was to make his first appearance in Donkey Kong - **Mario** had arrived. Donkey Kong only came about after a failed game called **Radar Scope** (1981) left Nintendo with a load of unused arcade machine cabinets to fill.

The **Gameboy** then makes an appearance with what has become the 'killer application' of all time - **TETRIS**. So, in 1989, **Alexey Pajitnov** (who now works at **Microsoft**) wrote

this masterpiece behind what was then, the 'iron curtain', and, because of this, he did not even receive one rubble in royalties when the USSR sold the game to Nintendo for a cool \$5 million ! Rotten gits ! Alexey says that Tetris works because when you fail to clear the screen, what you are looking at, in essence, are your own mistakes and because of that you 'have' to go back and do better next time. A winner everytime !

Up comes the **Playstaion** from **Sony**. What can you say ?

Whatever you think about games consoles, they have brought us some stunning games and some of the games have even been 'retro-programmed' into our beloved old machines. The Playstation has brought us some wonderful games and the even lovelier **Lara Croft** - who has to have the best pixels in the business ! In 1996 Lara was shot to fame in **Tomb Raider** by **Toby Gard** of **Core Design** and even now, in 2001, she is still the number one artificial superstar. This game brought us the next generation of game designs which meant that the days of the sole programmer develop-

ing and writing his entire project himself in his bedroom was a thing of the past. What we now have are huge teams of artists, programmers, game designers, musicians, etc, all working together (for the most part) to create a new level of enjoyment for us all.

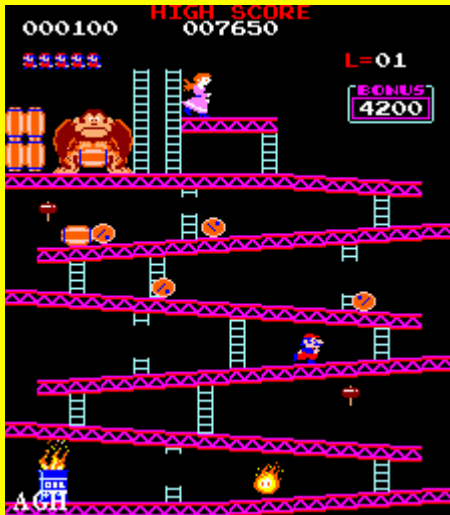
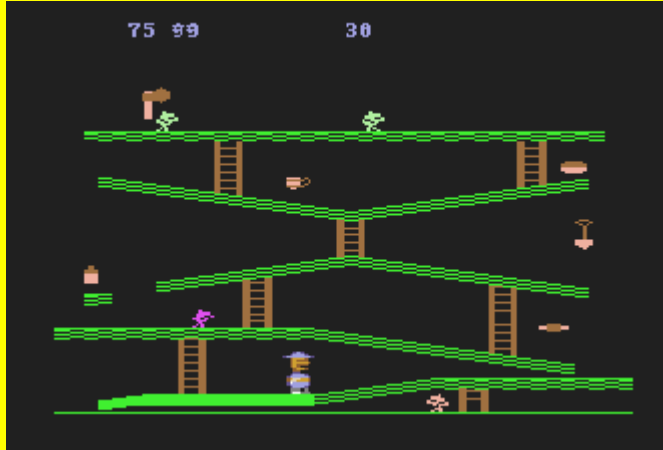
With the demise of those innocent days of the 80's, will the games become faceless and corporate led ? I think they will. Sure, the graphics will get better and the sound will eventually blow your head off - but the gameplay will hide behind 'gloss', is that what we really need ?

The end of the programme left me with a chilling thought when we were told that <<we are near the 'total immersion' video game >> where the user becomes part of a virtual world that is so close to the real world that he/she won't be able to tell the difference ! WHAT ? Are we going mad ? If the make believe world is becoming so real what is the point ? Surely in those early days, shooting aliens was fun because it was different from real life and it looked different too. If we are to now immerse ourselves in electronics and surrender our bodies to processors while we 'make believe' an existence in cyber space don't you think it has gone too far ?

Give me Space Invaders anyday !

Written by Allan Bairstow but thanks are also given to Channel 4, Iain Lee and Jane Templeton for their help and guidance.

This article was written to give you a snippet of things to come in CS35 which is the arcade special edition. Order it now !



RPG

ames
laying

1983, my room is darkened. The pipe smoke hangs in the air. Coffee cup is half drained. The sound of dice as they strike the table and the result of "Orc is hit but fires his bow doing 7 points to Tarna the Elf maid". Thus was life with AD&D and other RPGames. 15 years later it is 1998. My room is darkened. The pipe smoke still hangs heavy in the air. The coffee cup, same one, is full. The sound of me cursing the Commodore as the zombie kills Tarna the Elf Maid is heard in the house.

Welcome readers, the above is a story to show you that I am a Role Playing Game fiend. Dice or C= it doesn't matter. In fact, I have two great addictions. Role Playing Games and the Commodore Computer.

But of course you want to know who I am, and what is the purpose of this area. At conventions and on the Inet and my BBS. I am Lord Ronin from Q-Link. Mundanely known as Sensei David Mohr. Semi retired veteran. I teach Martial arts, sell Role Playing Games and Commodore hardware and software. Chancellor and Editor of my local users group. Proof Reader for Go64 magazine. Managing Editor for the Commodore Mailink. Also I admit to being late into the computer world. having a C=64 given to me as a gift just seven years ago. So I am really a dumb ork on programming and a lot of the words.

I've also been a "Gamer" since my first Basic D&D game in 1978. Though now I play more than just Basic and 1st ed AD&D. My game group meets almost every night for the last 21 years. Hmm funny a lot of the members of my game group are also in the users group !

There are a lot of Role Playing Games floating about the world. Good news is that unless they deal with the C= system. We won't be talking about them in this area.

As to the question of what is this area to contain? Commodore Role Playing Games. But what is a Role Playing Game for the Commodore? In actual truth no computer can equal the environment of a group of people all around the table rolling dice and acting out the characters. Not even the Commodore can handle all those programming variations <BG>

As a dice gamer for over 22 years. My standard for a R.P.G. on the computer is, to some, perhaps a bit strict. But these are the guidelines for this section. To be considered a R.P.G. the following must be met.

Character Generation : By some manner the character in the game has to be created. Random rolls or point buying. But the stats and or skills/abilities have to be created. At least 50% by the player. Some games allow a set of stats to be re-rolled. Others allow the entire character to be re-rolled.

Character Advancement : Be it levels of XP or new and better skills. The character must be able to improve through the course of the game.

Character Role : Hard one to pin down on the games. To be simple and therefore vague. The generated character needs to have some sort of role in the game world. This is really more in the story line of the game than the actual game.

In the dice version of games. The way it is defined is you generate a character to enter into a high risk situation for what ever rewards the game and the DM assign. The Commodore is the DM in this encounter.

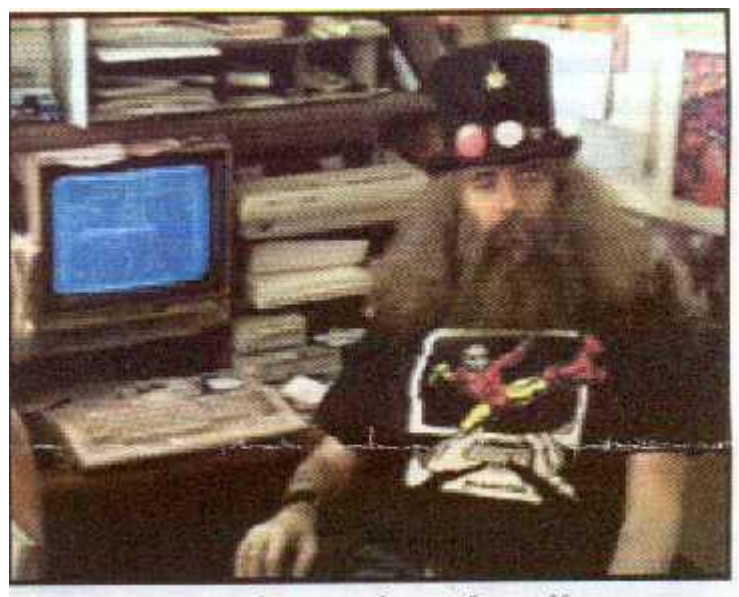
One other topic that I wish to cover in this area is tools for gamers. Many were released by C= users. Put up on BBS's and Q-Link. Simple Dice Rollers to complex monster makers and treasure creators. I have several of these in my own collection. But we must not forget some commercial made ones. I only have the SSI ones for AD&D. I understand that there were ones made for other games. Like original Traveller.

Right, now that you know a bit on me and what is a Computer R.P.G. for this area. This is what I would like to do for us. Discuss, review, tips & hints etc. On the games themselves and the tools for the games. There is a large collection in my computer room. But I'm the first to say I don't have it all <yet> or that I know it all. Also I don't use anything but the Commodore. So I can't help on emulation problems.

So there you have it. I have many games to talk about. But then you probably have quite a few as well. Don't forget that new games are also quite acceptable as well. Feel Free to contact me at my e-mail addy. lordronin@videocam.net.au.

Till the next issue, may all your games end friendly.

Lord Ronin from Q-Link
Sensei David O.E. Mohr {go-dan}
Chancellor & Editor for
Amiga-Commodore Users Group 447
SysOp Vacuum Tube BBS <Omni-128>



503-325-2905 300-14.4k C/G-ascii-ansi

Note : My apologies for the poor quality of the picture of Lord Ronin, but the only pictured I had (at the time) was a poor quality image and when I scanned it, this was the result. A better picture will be published as soon as I have one - ED

Learning Machine Language

By Shaun Bebbington.

(c) 2001 Soma Sound and Vision.

Published by Commodore Scene (c) 2001 Allan Bairstow.

Reading Machine Language tutorials in the past, I have often found them confusing, not because they necessarily were, but because they seemed to assume that you at least knew something of programming in machine language in the first place.

As a programmer of Basic for many years, learning to think in machine language was a bit beyond me - you have a new numeric system to learn, as well as various addressing modes, and more than one way to do simple tasks.

When I promised to do some articles for Allan on the basics of Machine Language, I thought back to my days of knowing nothing of Low Level programming and asked myself: "If I had a case of amnesia and tried to learn Machine Language again, what would be most useful?" I suppose the first thing I would want it to get my head around the numeric system used by computers, which is in steps of sixteen's, rather than tens.

Introducing Hexadecimal

In one way or another, most of the people reading this article will have been taught to think in steps of sixteen rather than ten at some time in their lives. Inches are often broken down into sixteenths, and sixteen ounces make one pound in weight. In the same way, $\#\$10$ in Hex (think of this as 1 whole and 0 units for now) is 16 in decimal. If it makes it any easier, think of $\#\$10$ (Hex) as 1lb 0oz (16 ounces). (And they tried to ban pounds and ounces!)

With the above in mind, we can say that $\#\$100$ equals $\#\$10 \times \#\10 , or in other words, 16×16 . This means that $\#\$100$ Hex is 256 Decimal. So, if $\#\$100$ hex is equal to 256 decimal, how do we count to $\#\$100$?

Again, we use pounds and ounces to help here, i.e., 1lb 1oz = 17 units, 1lb 2oz = 18 units 1 lb. 10 oz = 26 units etc.. Computers do the same, but instead of saying 1 whole and 10 units, they use the first six letters of the alphabet to replace decimal numbers ten to fifteen. So $\#\$1a$ (1 whole and 10 units) = 26.

{Example 1 - Starting from zero, we would count to sixteen as follows:

$\#\$00, \#\$01, \#\$02, \#\$03, \#\$04, \#\$05, \#\$06, \#\$07, \#\$08, \#\$09, \#\$0a, \#\$0b, \#\$0c, \#\$0d, \#\$0e, \#\$0f, \#\$10$ }

The next step in thinking in Decimal is to use four digit numbers. We know then $100 \times 10 = 1000$, so, for the same reason, $\#\$100$ (256) $\times \#\$10$ (16) must equal $\#\$1000$. This is 4096 in decimal. We can now set up our number base for calculations. An Hex and Decimal example is

shown below.

{Example 2 - We know to think in steps of 1, 10, 100's, 1000's in Decimal. In Hex, we think in steps of units, 16, 256 and 4096}

	4	2	1	1
	0	5	6	
	9	6		
	6			
$\#\$$	1	0	0	0

	Th	H	T	U
	1	1	1	1
	0	0	0	
	0	0		
	0			
	4	0	9	6

Look at the above numbers and think of them as either $(1 \times 4096) + (0 \times 256) + (0 \times 16) + 0$ (first example, in Hex), or $(4 \times 1000) + (0 \times 100) + (9 \times 10) + 6$ (Decimal). Both calculations will have the same answers, but it is the example in Hex that we are most interested in. This tells us how to convert Hex into Decimal easily, and this will help us to think in Hex.

Look at the following numbers:

- (a) $\#\$c000$
- (b) $\#\$d021$
- (c) $\#\$1abc$.

These, translated into decimal, are:

- (a) 49152 , (b) 53281 , (c) 6844.

One by one, these are broken down as follows:

$$(a) \#\$c000 = (12 \times 4096) + (0 \times 256) + (0 \times 16) + 0 = \mathbf{49152}$$

$$(b) \#\$d021 = (13 \times 4096) + (0 \times 256) + (2 \times 16) + 1 = \mathbf{53281}$$

$$(c) \#\$1abc = (1 \times 4096) + (10 \times 256) + (11 \times 16) + 12 = \mathbf{6844}$$

Using the above calculations, convert the following Hex into Decimal:

- (a) $\#\$abcd$ (b) $\#\$ffff$ (c) $\#\$e001$ (d) $\#\$002d$.

Answers will be in the next installment.

Shaun Bebbington

What Kind Of Member

Are you an active member ?,
the type who would be missed.
Or are you just content to be
a name upon a list.

Do you come to all the meetings ?,
and mingle with the crowd,
or would you rather stay away
and complain long and loud.

Do you give a little time to us ?,
and help to make things tick,
or leave the work to others,
then moan about the clique.

There's quite a programme scheduled,
that means success if done,
and what can be accomplished,
with help from everyone.

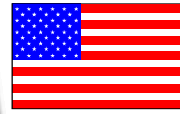
So join in events,
and help with hand and heart.
Don't just be a member,
take an active part.

Think it over, member,
are you right or are you wrong ?,
are you an active member ?,
or do you just belong ?

Anon.

*My thanks go to David Walker for
sending in this item. I know that CS
is not strictly a club as such, but, I
think that the sentiment works just
as well for us as well.*

FANZINE ROUND-UP



Ah yes, the December (2000) issue of the **LUCKY REPORT** at last reaches me here at CS.

Dale has given nearly all of this issue's news over to the forthcoming EXPO (I really wish I could have gone - ED). This EXPO promises to be a real humdinger, with lots of guest speakers including Bil Herd (from CBM) and Jeri Ellsworth (24 BIT card). The tale of 'Christmas In Romania' graces the front cover and continues inside with a couple of pages dedicated to Michael and his family. The story of how his 80 column monitor got all the way across Europe to him is heartwarming and again makes you realise the power of a community coming together to help out people who would have otherwise been left in the wilderness. Fantastic production as always and Dale is now a master with PP3 and his postscript printer. The colour shots throughout the newsletter are a credit to his expertise.

Great stuff Dale, keep it up. Now then , where's the next issue ? :-)



GO64 / Commodore World (issues 5 & 6/ 2000).

New for CS this issue we have two copies of **GO64 / Commodore World** to look through.

First impressions count (as anybody doing an interview will testify, etc) and we are not disappointed with these lovely full colour glossy covers.

Issue 5 sees an interview with Nate Dannenberg gracing the pages along with some quite technical articles about various projects such as digitizing data and assembly language tutorial. And some people think that CS carries articles that are too serious ! Along side all this we have some interesting features and one such feature is 'Developing a Character' which delves into the mind of programmers who have developed memorable characters and some

stunning graphics as well - I was very pleased to see one of my favourite puzzle games get a mention for its beautifully crafted female robots (Blue Angles 69).

Issue 6 has a great feel to it with some interesting features and even a peek into an aladdins cave treasure trove with a visit to a Commodore shop !

Hard Hat Mack (SID DJ) has an interview but this was a bit sad really as he no longer does his superb show anymore. Want more serious articles ? How about 'chip cloning' ? Well, if you can understand it then this is for you. A superb article which even I understood.

One feature of **GO64/Commodore World** is that it carries a regular column by Arndt Dekkte on the subject of GoDot. If you need help with GoDot then this is the place to find it.

Great mags, keep up the good work.





Allan Bairstow -
Importing Service, Commodore Scene Magazine,
New & used hardware & software
14 Glamis Close, Garforth, Leeds, West Yorkshire,
LS25 2NQ
Tel : (0113) 2861573 - 9.30am and 9pm
Fax : (0113) 2861573
E-mail :
allanbairstow@commodorescene.freemove.co.uk

Victoria Road, Shifnal, Shropshire, TF11 8AF
Tel : (01952) 462135

MAGAZINES & FANZINES

Commodore Scene
See 'Commodore Scene' box



Commodore Zone
Binary Zone, 34 Portland Road,
Droitwich, Worcs., WR9 7QW
Tel : (01905) 779274



ADVICE ON ?

Allan Bairstow
- General, GEOS, See 'Commodore Scene' box
Mike Berry
- Programming
6 West Bank Street, Hindsford, Atherton, Manches-
ter, M46 9AQ
Andrew Fisher
- Technical, GEOS, Music
30 Rawlyn Road, Cambridge, CB5 8NL

PUBLIC DOMAIN LIBRARIES

Binary Zone PD
See Commodore Zone box.

CLUBS & ASSOCIATIONS

British Association Of Computer Clubs
J. Hughes, 39 Eccleston Gardens, St. Helens,
Lancashire, WA10 3BJ
Independant 8 Bit Association
Brian Watson, Harrowden, 39 High Street, Sutton In
The Isle, Ely, Cambridgeshire, CA6 2RA
Tel : (01353) 777006

REPAIRERS/SUNDRIES/MAIL-ORDER
& HARDWARE

High Street Micros
- Repairs, software - 20/24 High Street, Crewe,
Cheshire, Fax (01270) 580964
Importing Service
See 'Commodore Scene' box
Needmore Limited
- Repairs, Tel : (0151) 5212202
Ribbons & Things
- Printer ribbons and consumables
8c Treefields, Buckingham, MK18 1BE
Tel/Fax/Answer machine : (01280) 817217
Ribbons Unlimited
- Printer ribbons and consumables - PO Box 7,
Belper, Derbyshire, DE56 1AD, Tel : (01283)
734050, Fax & answer machine : (01283) 734051
Trading Post
- 2nd hand hardware & software

Retro Classix
- All formats fanzine
- Monthly, £2
- Make all monies payable to 'G. Howden'
4 Chatterton Avenue, Lincoln, LN1 3TB



DISKZINES

The Big Mouth
See 'Commodore Scene' box

SOFTWARE

Importing Service
See 'Commodore Scene' box
John Thomson
Software & hardware for c64 & other 8-bit's
78 Holtdale Avenue, Leeds, LS16 7SG
Tel : (0113) 2671393
Roy Cross
76 Castle Drive, Neath, West Glamorgan, SA11 3YE
High Street Micros
20/24 High Street, Crewe, Cheshire
Tel : (01270) 580964



Allan Bairstow & Commodore Scene
allanbairstow@commodorescene.freemove.co.uk
Frank Gasking
m00xbs00@mcmill.com
Richard Bayliss
RChrisBayliss@yahoo.com

C64 WEB SITES

Up to date site links are on the Commodore Scene
web site at <http://www.commodorescene.org.uk/>

COMMUNICATIONS & BULLETIN BOARD
SYSTEMS

Chic BBS (Weekends ONLY) Dial : (01753) 890111
Lentil BBS Dial : (01483) 834626
Sysop : (01483) 834606 - voice
Midnight Express BBS Dial : (01384) 865626
Tiger BBS Dial : (01753) 672520



CLUBS & ASSOCIATIONS

Woombug
Scott Roseboom, PO Box 213, Woombye,
Queensland 4559, Australia

REPAIRERS/SUPPLIES/MAIL-ORDER
& HARDWARE

Creative Micro Desigins
- New hardware & software, Commodore World
magazine, help & advice
PO Box 646, East Longmeadow, MA 01028, USA
CMD Direct Sales
- Mail order service
Postfach 58, A 6410 Telfs, Austria

MAGAZINES & FANZINES

GO64!
CSW Verlag, Gohestr. 22, D-71364 Winnenden,
Germany
Commodore Mailink
Tom Adams, 4427 39th St., Brentwood, MD 20722-
1022, USA
C= Voyages
Fresno Commodore User Group, 3487 E. Terrace
Ave., Fresno, CA 93703-1939, USA.
GEOS Publication
7969 Woodcrest Drive, Louisville, KY 40219-3859,
USA
LUCKY Report
K.Dale Sidebottom, PO Box 303, New Albany, IN
47151-0303, USA
The Village Green
C.C.U.G. #447, 623 29th St., Astoria Ore. 97103

DISKZINES

The Big Mouth Magazine
Now available from Commodore Scene
Loadstar
443 Gladstone, Shreveport, LA 71104, USA

IMPORTING SERVICE



C64c (Jumper Clip fitted) **CS** £15.00
SUPERCPU
 SCPU64 (no SuperCard) £155.00
 SCPU128 (no SuperCard) £199.00
 CPU MMU adapter (C128/C128D) .. £30.00
 SuperCard (0Mb) 64 or 128 £61.00
 16Mb Simm for SuperCard **CS** £30.00



IDE64 HARD DRIVE INTERFACE
 IDE64 fully assembled version **CS** £90.00

IDE64 SOFTWARE
 CD Player **CS** £2.00
 Atapi CD-ROM Driver **CS** £2.00



51/4" Floppy Drives
 1541 **CS** £30.00
 1541-II **CS** EN/A

Replacement Power Supplies

CMD HD PSU for CMD Hard Drive, 1541-II, 1581 & RAMLink Mk1 £46.00
 FD & RAMLink Mk2 **CS** £20.00
 CMD C64 / C64c & C128 heavy duty / repairable (requires USA>UK converter) .. £120.00
 USA>UK power converter **CS** £23.00
*****CS-SuperPSU*****



JiffyDOS

128 Kernal £33.00
 128D Kernal (metal case) £33.00
 128D System (metal case) £47.00
 C64 Kernal (24 pin) £39.00
 C64 v4 Kernal (28 pin) £39.00
 SX 64 System £47.00
 ROM's for disk drives each £24.00
 (Ordering JiffyDOS, state make / model / type & serial number of your equipment)



RAMLink

RAMLink - base (no RAM-Card II) (J) £130.00
 RAMLink jumper clip £2.00
 RAMCard II, 0Mb, no RTC £39.00
 RAMCard II, 0Mb, w/RTC £45.00
 RTC add-on for RAMCard II £15.00
 4Mb simm (for RAMCard II) **CS** £20.00
 Back up battery with cable £20.00
 Parallel cable (RAMLink to HD) £16.00



Fan cooled, outlets for 1x computer (c64/c64c/c128 but NOT c128d), 8x devices (1541-II, 1581, RAMLink1&2, CMD hard drive, FD2000, FD4000 and SuperCPU). UK, European and USA versions available **CS** £160.00

CS-SuperPSU optional extras

IDE64 power connector **CS** £FREE
 C64>C128 power gender changer . **CS** £8.00

Input Devices

Smartmouse (1531 compatible) £39.00
 Gamepad (megadrive style) £23.00

Printers & Consumables

Brand new Commodore compatible CANON printers are now available from Commodore Scene. Please ring for current range details and up to date pricing. Most ink and laser cartridges are now available for CANON, EPSON HEWLETT PACKARD & LEXMARK.
 Examples :-

BC-01 **CS** £20.00
 BC-02 (black) **CS** £20.00
 BC-05 (colour) **CS** £20.00
 BCI-21 (black) **CS** £7.00
 BCI-21 (colour) **CS** £9.00

Port Devices and Cables

3 way USER PORT expander £24.00
 USER PORT extension cable £16.00
 EX3 cartridge port expander £24.00
 EX2+1 cartridge port expander £27.00
 Expert Mk1 cartridge v3.2r **CS** £15.00
 Expert Mk2 with ESM v4.1 **CS** £18.00
 Expert system disks*each **CS** £4.00
 * state disk required - 2.1 / 3.2 / 3.2r / 4.1
 geoCable II (with pass thru port) .. £24.00
 X1541 (with Star Commander) ... **CS** £9.00
 Serial cable (1m) **CS** £5.00

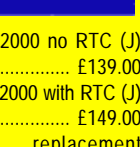
HD Series

HD-1000 (1Gb) £415.00
 HD-2000 (2Gb) £499.00
 HD-X (no internal hard drive - you fit your own) £190.00



FD Series

FD-2000 no RTC (J) £139.00
 FD-2000 with RTC (J) £149.00
 FD replacement mechanism £40.00
 FD instruction manual £12.00
 RTC add-on kit (existing owners) .. £30.00



CD-ROM DRIVE
 CD drive. **CS** £80.00

CD-ROM DRIVE SOFTWARE
 CD-ROM commander 128 **CS** £20.00
 CD-128 (music player) **CS** £20.00
 CD-ROM 64/128 (Gateway) **CS** £10.00



Serial cable (2m) **CS** £8.00

Telecommunications

Diamond Supra Express 56e V90 Pro modem (geoFAX & TheWAVE compatible) ... **CS** £65
 ScanLynx2000 (geoFAX) **CS** £25.00
 Turbo 232 modem interface £31.00
 Modem cable (DB9 to DB25) £8.00
 Novaterm v9.6 (5.25" or 3.5") £24.00
 TheWAVE 64 / 128 **CS** £3.00

Magazines / books / etc

CMD product catalogue **CS** £1.00
 Anatomy of the 1541 £7.00
 C64 science & engineering £7.00
 C64 tricks & tips £7.00
 C128 computer aided design £7.00
 C128 BASIC training guide £7.00
 Commodore World Magazine - 9,11,12,17,18,19,20,22 & 24 ... **CS** £3.00
 Compiler design & implementation . £7.00
 GEOS prog.s reference guide £22.00
 Graphics book for the C64 £7.00
 Hitchhikers guide to GEOS £22.00
 Ideas for use on your C64 £7.00
 Printers book for the C64 £7.00
 Mapping the C64 £7.00

GAMES software

Bombmania **CS** £10.00
 Ice Guys **CS** £10.00
 Sword of honour (3.5" & 5.25") .. **CS** £5.00



GEOS software

GEOS 64 v2.0 £34.00
 GEOS 128 v2.0 £38.00
 Wheels64 v4.2 (5.25" or 3.5") £28.00



Wheels128 v4.2 (5.25" or 3.5") £31.00
 MegaPatch64 / Topdesk **CS** £28.00
 MegaPatch128 / Topdesk **CS** £30.00
 (State 5.25" or 3.5" disk for MP/TD64 & 128)
 Gateway64 v2.5 £24.00
 Gateway128 v2.5 £24.00
 Gateway 64 & 128 combined ... £35.00
 geoFile 64 £31.00
 geoFile 128 £35.00
 geoCalc 64 £31.00
 geoCalc 128 £35.00
 geoProgrammer £35.00
 geoPublish £31.00
 geoChart £24.00
 geoBasic £16.00
 geoShell £16.00
 geoMakeboot £10.00
 geoFax v2.1 £31.00

Desk pack plus £24.00
 Font pack plus £20.00
 Font pack international £20.00
 Collette utilities £16.00
 GEOS companion £16.00
 GEOS power pak 1 £16.00
 GEOS power pak 2 £16.00
 PPLQ master system & fonts 1 & 2 . £39.00
 PPLQ font collection 3 £16.00
 PPLQ border font collection £16.00
 Dweezil's greatest hits £24.00
 SuperFonts **CS** £7.00
 MergeFonts **CS** £7.00
 SpecialFont collection **CS** £7.00
 InstallGW_Drives **CS** £2.00
 HD-ZIP(al) **CS** £2.00

Serious Software

Bank street writer £10.00
 Big blue reader £30.00
 CMD utilities £20.00
 FlexiDRAW £15.00
 FlexiFONT £15.00
 GoDot **CS** £25.00
 I-Paint (80 col's & 64k VDC) £30.00
 I-Port (80 col's & 64k VDC) £30.00
 JiffyMON - monitor £16.00
 Master type £10.00
 MECC educational series :
 - spelling bee £10.00
 - adventures with fractions £10.00
 - expeditions £10.00
 - pre reading £10.00
 - the glass computer £10.00
 - the market place £10.00
 Multi Screen Construction Kit **CS** £5.95
 PASCAL 64 £6.00
 ReRUN disks £8.00
 Superbase 64 v3.01 £27.00
 Superbase 128 v3.01 £27.00
 Where in the world is Carmen SanDiego ? £23.00
 Where in time is Carmen SanDiego ? £23.00

Miscellaneous Items

5.25" 10 branded disks **CS** £6.00
 5.25" disk drive cleaner **CS** £4.00
 3.5" disk drive cleaner **CS** £5.00
 64k VDC Upgrade Kit (C128&D) . **CS** £25.00
 geoPublish master disk **CS** £20.00
 Printer/plotter pens (3x black) **CS** £3.50
 Printer/plotter pens (3x colour) **CS** £3.50
 USA to UK power converter . **CS** £23.00

INCOMING!

4 Player Adapter **CS** £TBA
 Abracadabra ! **CS** £TBA
 Bombmania PLUS **CS** £TBA
 CLIPS **CS** £TBA
 Doubledesk 128 **CS** £TBA
 Metal Dust (SCPU only) **CS** £TBA
 Newcomer **CS** £TBA
 PacIT **CS** £TBA
 PrintText 64 **CS** £TBA
 PrintText 128 (64k VDC in 80 col) **CS** £TBA
 ProfiLabel 64 **CS** £TBA
 ProfiLabel 128 (64k VDC / 80 col) **CS** £TBA

Key to codes
 RTC = real time clock
 CS = Postage included
 (J) = JiffyDOS installed
 TBA = To Be Advised

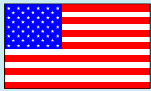
ORDERING INFORMATION



Please add the following postage costs to your completed order :

CS Items	NIL
£0.01 to £10.00	£4.00
£10.01 to £20.00	£8.00
£20.01 to £30.00	£18.00
£30.01 to £50.00	£22.00
£50.01 to £60.00	£25.00
£60.01 to £150.00	£35.00
£150.01 to £300.00	£50.00
£300.01 to £800.00	£60.00
£800.01 plus	£70.00

Add a further £15 for insured postage



CS Items	£6.00
£0.01 to £10.00	£9.00
£10.01 to £20.00	£16.00
£20.01 to £30.00	£25.00
£30.01 to £50.00	£29.00
£50.01 to £60.00	£33.00
£60.01 to £150.00	£41.00
£150.01 to £300.00	£60.00
£300.01 to £800.00	£72.00
£800.01 plus	£85.00

Please note that all items are supplied with UK compatible PSU's were applicable and an adapter (not supplied) may be required in some countries.

Payment Details

Make payments payable to : **A J Bairstow**
 Accepted Payment Types

CASH - If you are sending cash then please use secure postage - CS will not be held responsible for any lost money. UK Sterling only please.

Cheque or Postal Order - A great way to pay, cheques take up to one week to clear but a postal order will ensure a fast turnaround of your order.

International Money Order - Guaranteed payment between different countries. Secure and very safe.

Direct Bank Transfer - This new method is very popular and assures immediate action on your order. Usually FREE to use and is very quick.

Contact address

CS Importing Service
 14 Glamis Close
 Garforth, Leeds
 West Yorkshire
 LS25 2NQ
 United Kingdom

Telephone (before 9pm) / Fax
 (0113) 2861573

E-mail
 allan.bairstow@btinternet.com

All details were correct at time of going to press. Delivery can be up to four weeks after the 1st of the month. Please - ring before 9pm in the evening, thank you. All prices are subject to change - you will be notified prior to orders being accepted.

1st May 2001

So, what's new ?

Commodore Scene CD-ROM : At last it is here ! For a full breakdown of the contents please see page 11. The asking price is £20 - not bad considering the amount of stuff on it !

Creative Micro Designs : As the bad news about the lack of continuing hardware development starts to sink in, we now have to concentrate on what is left. CMD have said that will continue to support the Commodore, but, they will not be making anymore RAMLink units. This leads me to the conclusion that they will not be making 'any' more units of any kind. They have not said this but I believe that is the way things are going. As well as all this, CMD have now had to restructure their operations by not selling any software (apart from GEOS) and have cut down on staff as well, this has meant a very long delay in the last order that I sent. It has taken over six weeks to receive a relatively small order - I hope this is not a sign of things to come. The only advice I can give you is that if you were 'thinking' of buying any CMD hardware then you will have to do it now as there is no guarantee of how long it will still be available.



Centsible Software : The good people at Centsible have bought all the remaining Commodore stock from CMD. I hope buy the time you read this that I will have had to go ahead from them to continue to list the items here. It may be that there will be a price change on some items and we may even see some more items appearing. Watch this space.



Protovision : DoubleSID board ! This board is fully compatible with Rayden's DoubleDMC (?). The board is built to your own specific Commodore requirements, hence, there is some information from you that Protovision require before they can make it. <<Unscrew your c64 and look at your SID chip. What is the name and revision number ?>>. <<Do you have a SuperCPU ? If so, we will include a disk with 'Popel Premiere/Cyberpunx' featuring brilliant DoubleSID music and the greatest SuperCPU demoparts currently available.

Prices ?

DoubleSID board - @£20 to £30

2nd SID chip (needed for the board) - @£17

- if you know of a cheaper source for these, now very rare SID chips, then please let either Commodore Scene or Protovision know about it.

It is of VITAL importance that you have exactly the same SID chip twice !!!



IMPORTING SERVICE BARGAIN BASEMENT

All the following items are reduce in price to clear and all include P&P in the UK. Items that have more than one unit for sale are indicated in brackets. No serial or power leads are included unless stated otherwise.

- (3)-c64c, all leads, psu, jumper clip .. £13
 - (3)-FD2000/RAMLink2, USA psu ... £10*
 - (1)-CMD, heavy duty C128 PSU ... £100*
 - (1)-CMD, heavy duty C64 PSU £100*
 - (2)-1mb simm module £3
 - (2)-USA>UK power adaptor £20
 - (6)-Jumper clips £1.50
 - (3)-Plus4 PSU £3
 - (1)-geoPublish, boxed, uninstalled, no manual £5
 - (1)-Deskpack1 (GEOS), boxed (tatty), manual £4
 - (3)-Expert cartridges, manual, system disks £10
 - (1)- X1541 £5
 - (1)-CMD HD manual (new) £5
 - (3)-Sword Of Honour (new) £3
 - (1)-c64c keypad (new) £10
 - (1)-c64c-nightmoves pack £60
 - (2)-CDreader+software £70
 - (15)-Datasette £3
 - (1)-MPS801 £10
 - (1)-Okimate-colour thermal printer, seven spare ribbons, paper included ... £15
- * Requires a USA>UK power convertor

S P A R E S - O R - R E P A I R S

- (1)-C128 case . £3
- (2)-C64 case . £3
- (1)-C64 keypad . £3
- (1)-C128D front panel . £3

MORE BARGAINS COMING SOON !

BACK
COVER