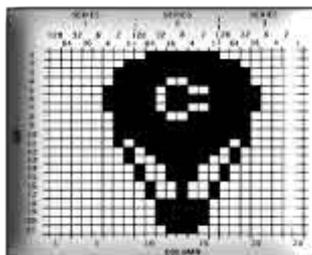


Commodore Free

Issue 25 November 2008

Free to download Commodore magazine
Dedicated to Commodore Computers
Available as PDF Text SEQ HTML and D64 image
www.commodorefree.com



Contents

Editor	Page 2
News	Page 3
Super Cpu Information	Page 11
Interview with Jeff Daniels	Page 12
Programming Environment	Page 14
In the beginning 10	Page 18
The Sceptre of Baghdad	Page 22
Questions about CCC U.k.	Page 23

HOW CAN I HELP COMMODORE FREE..

Ok the best way to help would be write something about Commodore

articles are always welcome,..

WHAT ARTICLES DO YOU NEED..

Well they vary, contact me if you have an idea but I am looking for..

Tutorials..
(beginners and Expert)..

Experiences..
with Commodore,..

Why I love Commodore machines..

Interviews..
maybe you have access to a power user.

News
Club meeting
General Commodore news
New Products

Editor

Last Issue was numbered 24, so that marked Commodore Free's 2nd birthday. I never celebrated a one year birthday for the magazine, basically because I didn't think that I, or Commodore Free would last out. I wasn't going to celebrate 2 years but as it's a milestone and after 2 years the magazine is still in production I think, even though it's an issue late, I should celebrate 2 years of Commodore Free.

I won't say its been an easy 2 years. There were more downs than ups, and the first hurdle was how to create a website and copy issues to it so others could download the magazine. Issue 1 for some time was emailed to friends, then as I had a hosting company the website took shape. I kept the site simple because I am aware not everyone uses Evil machines to access the content and some users prefer text only browsers or use their Commodore 64 with the wave for example. Being aware that there could be issues I kept a very simple site design and that's how it remains. I had a few issues with various browsers but it was a learning curve and although I won't be taking up HTML coding in any form commercially I do have a website.

The Domain name was supposed to be a .co.uk but some mix up in the communication between my none U.k. based hosting company ended in me paying for a .com. I still think it was a marketing trick making me buy a .com rather than a .co.uk so the hosting company could obtain more cash from me. Still .com is easy to remember but means I have to re-register and stump up the cash each year, the hosting or web space isn't free but this gives me flexibility and no popups which are limitations of the many free hosts out there.

The problem with my magazine creation is that it doesn't leave me much spare time to actually utilise my machine. I have purchased new hardware for my own pleasure but haven't had any time to utilise the hardware to its fullest extent. I hope this will change and have promised user point view reviews of various devices, I also Owe Robert Bernado a review of a music hardware / software combo so I need to get that done soon. Sorry Robert.

What Happens Next

Well as far as I can see its basically more of the same, Commodore Free will continue running and I have settled on around 20 pages for each issue. This makes editing and creating the various formats easier for me. Sometimes I have loads of information and the magazine fills up quickly, sometimes I wonder if I will get 5 pages never mind 20.

Commodore Free magazine is trying to cater for the needs of everyone, and I know that is impossible, I haven't had any Readers Letters for a while bar the odd one here and there, (I hope that means I am doing a good job!) I do know Some of the articles in the magazine are aimed at the beginner, so advanced users will look and sigh. Then again, some of the articles are aimed at advanced users, some articles are just of general use or general news. I hope the mix is equal and no one reads the issue and thinks "there was only 1 page relevant to the level I am on. Pushing yourself to learn new things is always a positive in life or something like that, I am very good at miss-quotations.

The Commodore Computer club is taking shape and I have some articles for the shop kindly donated by members. These will be sold to fund the purchase of hardware/software so we can have regular sales or a stock/ inventory. Club Members receive discounts and information from like minded individuals. I am a founding member so that's why I push the Club every issue, I know you are fed up with this but I will ramp down the Commodore club force feed in the next issues, if you have a club you would like to plug feel free to send me details. The Commodore Computer club forum is being used and no one has killed anyone yet, (to my knowledge) so that must be good, I am aware forums can become messy fighting grounds. In this issue I have had permission to reprint an article from the Commodore Computer Club Forum about running the SCPU CMD's Super CPU accelerator for the Commodore 64 and Commodore 128; many people will learn something about the device from this text, especially about its stability in heavy use.

Sadly I haven't had any good news about Maurice Randal from Click Here Software <http://www.cmdrkey.com> but I notice the website looks like its accepting orders. Obviously I didn't follow it all the way through as I am still waiting for an SCPU from Maurice, I think it's been on order for over 4 years. I can't see there being a delivery of my order and while that leaves me out of pocket it serves as a warning to others NOT TO USE the website, nothing will be delivered and Maurice is, for want of a better word, in hiding from angry shoppers.

So where does that leave us? Well I hear some company is working on an SCPU clone, and lets face it, the SCPU needs a revamp. The SCPU is too big, too power hungry and prone to crashing, but the Commodore 64 wasn't designed to run any faster than 1Mhz so maybe that could be the main issue. Should designers be working on a Commodore 64B an upgraded Commodore 64 with built in acceleration, better graphics and better sound? Probably not.

The SCPU clone would be most welcome. Lets hope its a neat design, power friendly and works well on both the 128 and 64, and lets also hope it works equally well on both PAL and NTSC machines. If I could find the funds I would be looking to purchase such a device, although we do really need some software to utilise the device fully as Metal dust and Geos/Wheels are not really enough to tempt everyone to mass purchase.

Back to the issue and it's more of the same interviews, news and other tidbits to excite and amaze your Commodore needs. Hope you like it and hey, someone send me a readers letter it makes me feel better.

THANKS Go to

Richard Bayliss for the The Sceptre of Baghdad review
Paul 'Trooper'Green for the Coding environment write up
AL Jackson for creating the D64 Image

Regards

Nigel

Website www.commodorefree.com

Email commodorefree@commodorefree.com

News

Mille Bornes - Orion70

has released a brand new game for the Commodore VIC-20. Mille Bornes is a French card game and is played with a special deck of cards. There are hazard, remedy, safety, and distance cards. Each hazard is corrected by a corresponding remedy, and is actually prevented from happening in the first place by a corresponding safety card. The target distance is reached by playing distance cards. You can play the game on a VIC-20 with a 8kbyte RAM expansion <http://sleepingelephant.com/ipweb/bulletin/bb/viewtopic.php?t=2880> The game is based on the Commodore 64 version published on the August issue of Compute!'s Gazette in 1993.



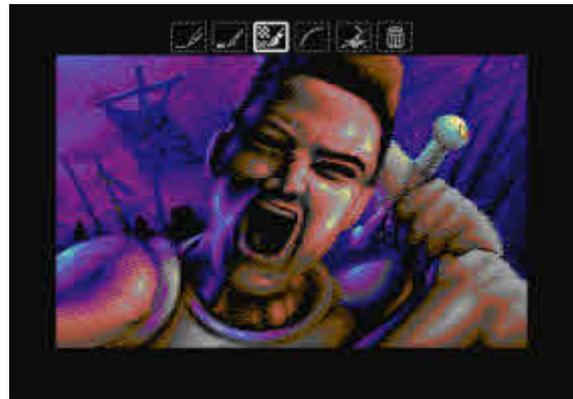
SOAMC

The Stone Oakvalley's Amiga Music Collection is almost complete. After the amazing project of recording all HVSC music from a real C64, the next step was taken. Take an Amiga and record all available music to MP3. There are now more than 30,000 tracks available for download. It took over 200 days 24/7 to make this possible.
<http://www.paula8364.com/>



FunkPaint 0.39

Soci from the group Singular released a grafix program for the Commodore 64 called FunkPaint. It can be used to edit Hires, Multicolor and DTV pictures. The program supports a REU for undo and has mouse support.
http://noname.c64.org/csdb/getinternalfile.php/63922/FunkPaint_0.39d.zip



Cannon Fodder New Campaign (Amiga News)

Cannon Fodder New Campaign consists of 72 completely new maps grouped in 24 missions. Phase's system is the same as the original Cannon Fodder. CNFC has new mission titles and soldiers, there are also modified graphics and games sprites. The original game engine is unchanged though, and every map can be completed. Maps were tested by a group of testers and author. Additional information can be found in Amiga guide file inside CFNC archive.

Requirements:

AmigaOS 2.0 up to 3.9
Cannon Fodder (english, disk version)
WHDLoad package
Installer, XFDMaster, gpatch

In addition we recommend:

Some Fast RAM (required by PRELOAD option)
Colour monitor
Audio amplifier
Good mouse (important!)

<http://www.ppa.pl/cannonfodder/about.html>



FastATA 4000 MK-V controller

http://www.elbox.com/products/fast_ata_4000.html



With the FastATA 4000 MK-V controller you can take advantage of the latest low-cost, high-capacity ATA/EIDE devices like hard drives, CD-ROM drives, CD-RW drives, ZIP drives, LS-120 drives, etc. The minimum hardware configuration is: Amiga 3000 or Amiga 4000. The recommended configuration is: Amiga 3/4000 with 68060 (or PPC with 68060) processor card with 64MB RAM.

The FastATA 4000 controller features represent the ultimate technology in its category:

- Fast transfer rate of up to 16.6MB/s

The FastATA controller with its maximum transfer rate of 16.6MB/s in the PIO 4 mode offers a huge capacity reserve for fast mass storage devices, especially for fast hard drives. Therefore, applications may run much faster if they can count on fast access to large data files.

-Support for ATAPI standard devices

The FastATA 4000 controller implements the ATAPI standard as well, for use with devices like CD-ROM, CD-R, CD-RW, ZIP, LS-120, DVD drives. This enables connection of ATAPI-standard devices to the Amiga with no need to install any additional software.

- Two buffered and terminated EIDE ports

The controller operates with two EIDE ports, which enable installation of up to 4 IDE/EIDE/ATAPI devices. Both controller ports are fully buffered and terminated in accordance with the recommendations set forth in the ATA-3 specification. Compatible with PIO-0, PIO-3, PIO-4, ATA/33, ATA/66, ATA/100 ATA/133 devices.

- Fully compatible with HDDs > 128GB

Limitations on support for > 128GB HDDs have been eliminated in the FastATA 4000 controller. The LBA 48 addressing support is included in the onboard BootROM.

- Automatically configured devices

The controller automatically recognises any device attached to it, negotiates the highest possible data transfer rate, switches the device into its appropriate mode and transfers data at the maximum transfer rate.

- Automatic processor type recognition

The FastATA 4000 controller automatically detects the type of processor, optimising and modifying software routines in order to achieve the highest possible data transfer rate between the controller and the computer memory.

- 32-bit access

The computer recognises the controller as a 32-bit device configured in the Zorro III address space. Full 32-bit operation of the controller combined with very efficient software guarantee significant increase in the speed of your computer.

The FastATA 4000 controller is compatible with all A3/4000 processor card models. The FastATA 4000 controller fits any selected Zorro III slot. The FastATA 4000 controller is available with a standard software pack including FastATA4000 software.

FastATA4000 software bundled with FastATA 4000 controllers provides support for:

- HDD drives,
- CD-ROM drives,
- CD-R drives,
- CD-RW drives,
- ZIP drives,
- LS-120 drives.

The FastATA 4000 is also available with an extended software pack with Allegro CDFS included.

PC gamers Demand Gamers bill of rights

Although this isn't really Commodore related I thought it was amusing

- Gamers shall have the right to return games that don't work with their computers for a full refund.

- Gamers shall have the right to demand that games be released in a finished state.

- Gamers shall have the right to expect meaningful updates after a game's release.

- Gamers shall have the right to demand that download managers and updaters not force themselves to run or be forced to load in order to play a game.

- Gamers shall have the right to expect that the minimum requirements for a game will mean that the game will adequately play on that computer.

- Gamers shall have the right to expect that games won't install hidden drivers or other potentially harmful software without their express consent.

- Gamers shall have the right to re-download the latest versions of the games they own at any time.

- Gamers shall have the right to not be treated as potential criminals by developers or publishers.

- Gamers shall have the right to demand that a single-player game not force them to be connected to the internet every time they wish to play.

- Gamers shall have the right that games which are installed to the hard drive shall not require a CD/DVD to remain in the drive to play.

Read more here

http://www.reghardware.co.uk/2008/09/01/gamers_bill_of_rights/

SUBHUNTER Released

Richard Bayliss and Frank Gasking have released the long awaited Psytronik game, Sub Hunter C64. From their description -- "Sub Hunter features 25 levels of sub-aquatic action, amazing multi-layered parallax scrolling, fantastic intro sequence, superb detailed graphics, varied missions including shoot 'em up levels, rescue missions and terrifying boss encounters."Go to<http://www.binaryzone.org/retrostore/index.php?main_page=product_info&products_id=430> in order to purchase the game. Note: Frank writes, "The game will only be available from Psytronik for the first month, but afterwards the full game will be put up for free download and will include a bonus disk of used and unused materials from the game."

English SCACOM issue 4 and German issue 8

You can download the new English edition of SCACOM (issue 4) with 34 jam packed Commodore related articles. There are also background pictures and two exclusive SCACOM disks with the Gold Quest 4 C64 Game as bonus. Download the magazine now at www.scacom.de.vu or www.english-scacom.de.vu. Have fun reading it. Unfortunately this will be the last regular English SCACOM release. Thanks to all fans and people who supported the project.

Commodor NEWS

COMMODORE FREE Readers note the spelling of Commodor is correct in this context this is thought to be an historic thing when the list was hosted on a server that conformed to the 8 character filenames more about this later

Sent: 08 September 2008 07:00
To: COMMODOR@LISTSERV.BUFFALO.EDU
Subject: Commodor list to be moved to vcsweb.com

Hello, Commodor mail list members,

Since the 1990's the Commodor mail list has been hosted by the University of Buffalo in New York State. The administrator of all UB mail lists has sent this message:

"The list hosting policies at the University at Buffalo have changed and we will no longer host lists that are not affiliated with UB. This includes the COMMODOR list."

[snip]

"...the list will be deleted on Sept. 15th."

However, there is no cause for worry. Gaelyne and Rod Gasson of Vcsweb.com will now host the list. All current Commodor members will be automatically subscribed to the newly-moved list. Postings will be made at COMMODOR@vcsweb.com Here is Gaelyne's description of the new Commodor list:

"This list is the OLDEST Commodore 8-bit computer mailing list on the Internet. It was started in 1990's and was intended for the discussion and dissemination of information related to the use of Commodore 8-bit computers."

"The old COMMODOR list will be closed down in Sept 2008, and so this 'new' list is a continuation of the original, with the exception that it will now be used specifically to send Commodore NEWS about events and new products, websites, etc."

"Please note that the older archives aren't yet available but will be in the future."

If you were an original Commodor list member and don't want to be a member of the new Commodor list, please let me know, and your name will be unsubscribed before the host transfer on Sept. 15. If you wish to subscribe to a more general list which discusses all aspects of Commodore 8-bit computers, you are encouraged to subscribe to the Homestead mail list, also hosted by Gaelyne and Rod Gasson.

Truly,
Robert Bernardo
owner, Commodor mail list

Subject: Re: [Homestead] Commodor list to be moved to vcsweb.com
From: Gaelyne Gasson
Reply-To: Homestead Organization: VCSWEBTo: Homestead G'day Andrew,

I can only respond to the Homestead list as I'm not on the soon to be closed COMMODOR list. Hopefully, someone will forward this to the COMMODOR list for me. Yes, I think the missing 'E' on the end of the name is due to old DOS limitations.

The COMMODOR list is the oldest Commodore 8-bit mailing list, but it has been waning in recent times and is down to about only a quarter of the number of members of the Homestead list -- less when names and Email addresses of deceased members are removed (sadly, there are several of these). The list was a general discussion list, with (in years past) more technical information than the Homestead list has.

The COMMODOR list was hosted at Buffalo.edu as the founding person (C.S. Bruce, if I'm not mistaken) was a Uni student there at the time. This would have been in the early 1990's. Recently Buffalo.edu has changed their policies and will no longer host mailing lists that aren't directly involved with the university itself. As the most frequent recent poster, Robert Bernardo was asked to become the list's moderator (the list had been running on auto-pilot for several years) and decide whether to continue it or not, and find a new host for the list.

After discussions about what to do with the list and how to go about things, (one of the main things we didn't want to do was duplicate what was already available through VCSWEB, which is the Homestead list). Also as the membership for COMMODOR is pretty light compared to the Homestead list, we also didn't want to just end the oldest Commodore mailing list in existence. It seemed important to keep the continuity, but perhaps rather than have the list be for general discussion it could possibly serve a different purpose.

One of the things that's been mentioned a few times over the last few years is the possibility of having a mailing list specifically for Announcements and News. So this is what the new focus of the COMMODOR list will be. Discussions about Commodore News and any announcements on the COMMODOR list is encouraged so it won't be just a 'one way' News only type list.

The Homestead list will remain as always, a general Commodore topics list where as long as it's about our favourite computers, it's on topic. I have no plans to rename the Homestead list. The name means a great deal to me, and as the

two lists serve different purposes, there's no reason to merge the two lists together.

Hopefully this brings everyone up to date on the situation. Buffalo.edu will be pulling the plug on Sept 15th, and the migration to COMMODOR@vcsweb.com will take place on the 14th. The folks at Buffalo.edu have been extremely helpful in providing Robert with lists of members - one for digest Emails and the other for regular delivery. I'll be able to re-subscribe members with their same preference in this regard, and also set any members 'no mail' that have this setting.

The university has also supplied the archives for the Commodor list, and I'll be trying to make this available as soon as I figure out the best way to go about it. The archives start in 1996, but I'm fairly certain the actual list started around 1994.

Hopefully this helps let everyone know what's up, and gives a bit of a history to the list and explains the plans for the list. I also feel it's vital to understand that the two lists won't have the same content, so there's no reason to merge them. Many people have asked for a News type list, and this seemed the appropriate thing to do. We do our best to support Commodore computing, so I really hope there's not a lot of angst about this change. That certainly isn't the intention.

Cheers, Gaelyne

-----Original Message-----

From: COMMODORE COMPUTERS DISCUSSION
[mailto:COMMODOR@LISTSERV.BUFFALO.EDU] On
Behalf Of Robert Bernardo
To: COMMODOR
Subject: A final message at Commodor at Buffalo.edu

Hello, all Commodor members, Today, Sunday, is the last time to post final messages here on the Commodor mailing list at Buffalo.edu As mentioned before, post any new messages to commodor@vcsweb.com

I am hoping the transition will be smooth and that the new Commodor list will meet your needs. If you have any news, events, and discussion of those items, feel free to post to our new home. Long live the Commodor mailing list!

Truly, Robert Bernardo owner, Commodor mailing list

Commodore 1520 plotter printer Gears

Jon "Acadiel" from the Commodore 128 Alive! forums is getting together a pre-buy for a production of stainless steel gears for the venerable Commodore 1520 plotter printer. Other than the ink pens which dry out in the printer, the next most



common cause of printer failure is when the original plastic drive gears break. This is part of what he had to say:

I'm willing to coordinate a group buy, if we get enough interest. You might also want to advertise to the other folks (the Atari folks and the TRS-80 folks) to drum up interest (I'm going to advertise to the TI-99/4A folks, because the HX1010 uses the same gear.) Here's the cost for just the gears (not including shipping), rounded up to the nearest dollar, based upon quantities:

Qty	Cost
1	\$335 (eek!)
5	\$74 (\$370 total for group buy)
25	\$23 (\$575 total for group buy)
50	\$16 (\$800 total for group buy)
100	\$13 (\$1300 total for group buy)

Now, I'm thinking that enough people probably read this board and the TI online user group to order 25 units (\$23/ea). However, I want to get pre-orders from everyone (no payments yet!) to see if we have enough interest. Example: If we get people to order two (one for each side) and get 25 people, we can then get into the \$16/ea bracket. Once we have enough interest, I can initiate a group buy and get these gears and ship them out (probably small packages with delivery confirmation), so there will be a S/H cost (envelope, postage, and handling to make up for any PayPal fees). If anyone needs confirmation that I'm a good guy, here's my e-bay feedback (the picture is probably 10 years old...):

<http://members.ebay.com/ws/eBayISAPI.dll?ViewUserPage&usrid=jdguidry>

So....If you want to express interest in pre-ordering gear(s), send an e-mail to [acadiel\(at\)guidry.org](mailto:acadiel(at)guidry.org) with the Subject "Gears". I'll collect these, and by October 15th I will see how many people want gears.

1541 Ultimate V1.2 beta Firmware Download

Beta versions

The following beta releases are available for download. These are versions that have not been fully tested, and might need some polishing.

1541 Ultimate V1.2 beta Firmware Download (PAL & NTSC in one package)

What has been done?

- Logic changes:
- B flag in the processor corrected, and the V flag for ADC in decimal mode.
- Split cart base and mode, such that more rom locations are possible for NTSC.
- Slot server corrected: disable serve while in menu
- Memory controller corrected: removed default flash chip enable. This solved flashing from menu!
- Added logic to map Ethernet chip in memory space
- Slightly modified timing to allow Ethernet chip to meet timing requirements.
- Software changes:
- Added PAL/NTSC switch in menu
- Made scroller optional
- Made 1541 rom selectable
- Boot in menu option (which gave me a headache in combination with Super Snapshot V5)

- Increased write protect sensor times for better disk switch
- Improved SD-card change mechanism
- Added feature to exit menu upon pull of SD-card, while booted in menu (just in case it locks up)
- Stand alone mode: mounting a disk through IEC sets button navigation to that entry.
- Updated the updater! ;-)

1541 Ultimate V1.3 beta Firmware Download (PAL/NTSC)
What has been done?

- Logic changes:
- IEC controller improved so that address handling is now done in hardware
- This should fix the false reporting of the non-existent drives
- RAMBoard support added.
- Software changes:
- Corrected the SS5 boot problem
- Configuration screen updated
- Various hardware types defined
- RAMBoard support added
- TAsm / Codenet cartrom added
- Updated the updater! ;-)

1541 Ultimate V1.5 beta Firmware Download
What has been done?

- Logic changes:
- Floppy emulation revised, can now support variable track lengths
- IEC controller improved to make it more robust
- Some changes in AR/RR emulation
- Software changes:
- Added SDHC support
- Added GCR support (read only)
- Added auto disk-remount on power-up
- Partly rewritten the software IEC controller to support multiple open files/channels
- SEQ, USR and REL files
- Updated the bootloader to support SDHC as well
- Updated the updater to flash the bootloader
- Some minor fixes

The updater will now wait about 4 seconds before it starts.

Please, do NOT turn of the power when flashing. However, if the updater hangs on flashing the bootloader, for more than let's say 2 minutes, just turn off the C64 and please contact me. (The bootloader should only be updated once, even if you run the updater multiple times. The software should automatically enforce this, but if it goes wrong, contact me.) Updating the bootloader is risky and might brick your 1541U. Unfortunately it is necessary for the SDHC support.

Last Updated (Saturday, 20 September 2008 13:04)

8-Bit designs

Charles has updated his website and the address is now



<http://www.8bitdesigns.ath.cx/> Charles asked me to reprint some details to remind people of his services

Welcome to 8 Bit Designs

Welcome to 8 Bit Designs! Thank you for stopping by; I'm eager to serve your Commodore-related needs. I'm Charles Gutman, and I can provide a number of products and services to users of Commodore 64 and 128 computers. If you're looking for cables, adapters, parts, service, or upgrades for your Commodore Business Machines equipment, I can provide what you need.

This site is my new home on the Web; it supersedes the previous 8 Bit Designs page on Windows Live Spaces. Here, you'll find the complete 8 Bit Designs catalogue of products and services, all of which are available to the worldwide Commodore user community.

If you have any suggestions for products or services that are not currently listed here, please feel free to inform me and I'll consider each and every suggestion; and if feasible, I'll post them here on the site. Also, if you have any unwanted Commodore hardware that you would like to trash or donate, please consider us; we would like to pass them along to others in the community that desire to have them.

Please feel free to contact me with any questions, problems, concerns, or feedback that you may have about anything that you see here, be it about the site itself, or one or more of my products. Once again, thank you for stopping by!

PRODUCTS available

1541-II/1581 Power Supply
Power supply for 1581 and 1541-II floppy drives.\$12

BNC Splitter Cables
BNC splitter cables for those running BNC hardware.\$20

C2N16 Cassette Adapter
This allows owners of the +4/Commodore 16 tape drive to use it on VIC-20 and C64/128 systems.\$8

Commodore 64/VIC-20 Power Supplies
Power supplies for C64 and VIC-20 computers.\$10

Commodore 64C
Tested, working Commodore 64C.\$18

Commodore 128 Computers
Stock and upgraded C128 systems. See the product page for details.\$25/\$50

Commodore 128 RGB Cables
C128 RGB cables that have become hard to find in recent years. They give the 128 user full 80 column display on a compatible monitor.\$20

Floppy Disks (Boxed, 5 inch, 10-pack)
Unused boxed floppy disks.\$4

Floppy Disks (Boxed, 3 inch, 10-pack)
Unused boxed floppy disks.\$7.50

HD81 Extension Cable

The HD81 extension cable is useful when you need an extension to the power supply for the CMD hard drive, or the Commodore 1581 floppy drive.\$20

Joysticks

Assorted joysticks that are all tested and guaranteed functional.\$5 and up (contact)

Koala Pad

Touch-pad/drawing tablet for Commodores.\$20

Memory Chips

Set of 8 memory chips for Commodore 64 and 128 computers.\$5

Plus/4 Edge Connector

The Plus/4 edge connector is used to connect either a VIC-20 or C64 datasette to a Plus/4 (the Plus/4 datasettes are rare!).\$20

Plus/4 Joystick Adapter

The Plus/4 joystick adapter allows an Atari or C64 joystick to be connected to a Plus/4.\$20

Quad Port Plus

The Quad Port Plus is a new product in the 8-Bit Designs line. It is a box that plugs into the serial port on the computer and gives out 4 serial ports sharing a single reset switch.\$25

Serial Bus Reset Switch

The Serial Bus Reset Switch is a simple but handy device that allows a user to reset the I/O ports on the computer whenever "lockup" occurs.\$15

Serial Cables

Commodore serial drive/printer cables. Custom lengths available upon request.

\$10 (3 foot)

\$15 (6 foot)

\$20 (10 foot)

Serial Extension Cable

The serial extension cable is used to extend the length of Commodore serial cables. Custom lengths available upon request.

\$6 (3 foot)

\$12 (6 foot)

\$20 (10 foot)

\$25 (15 foot)

Serial "Y" Adapter Cable

The serial "Y" adapter cable is useful when a user uses up all the serial ports and needs to connect a new device. Just a splitter cable for the serial port.\$20

Star NX-10C Printer

Comes with manual and interface.\$35

SuperCPU-compatible RAM

Sticks of RAM tested on a SuperCPU with Wheels.

1MB: Free (One available)

2MB: \$3.50

4MB: \$5

8MB: \$10

16MB: \$20

S-Video Cable

S-Video cable for use on devices that support or require S-Video.\$5

Tandy Communicator Plus Cable

Cable for connecting your Tandy's internal modem directly to the wall jack for internet access.\$10

Tandy Printer Cable

Ribbon cable for the Tandy brand of printers. \$10

Universal Video Module

The Universal Video Module allows the Commodore user to make use of the stock A/V cables that are flooding the market these days. It also has S-Video capabilities and an audio input for use by someone with the software know-how.\$30

User Port Commander

The User Port Commander is a user port interface that is backward-compatible with the GeoCable. It has many extra features that make it a one of a kind device!\$40

Various Commodore Chips

I have a number of CBM chips available, for sale or trade. See the product page for details.

See product page

WICO Joysticks

A pair of WICO Joysticks. Both are in great working order with a fair amount of use.\$15/pair

SERVICES

1541 Device Switch Installation

Have a set of device number switches installed in your 1541 floppy drive.\$20 plus S&H

1541/1571/C64/C128 Diagnostics

Have any problems with your Commodore drives and/or systems diagnosed.\$0 plus S&H

1541/1571/C64/C128 Repairs

Have your Commodore drives and/or systems repaired.
\$20 plus cost of parts and S&H

Commodore 128 Video RAM Upgrade

Have your C128 upgraded with 64KB of video RAM usable with utilities such as Maverick.\$30 plus S&H

Commodore REU Upgrade

Have your 1700/1764 RAM Expansion Unit upgraded to a full 512K of RAM, as in the 1750.\$25 plus S&H

ROM Chip Installation

Have any compatible ROM chip you supply installed in the device of your choice.\$20 plus S&H

Orders are accepted via telephone, postal mail, and email. I accept US & international postal money orders as payment. Send all postal correspondence to:

8 Bit Designs

Attn: Charles Gutman

9590 Acacia Ave. #3

Fontana, CA. 92335

United States of America

I can be reached by telephone at (909) 350-9987, and by email at shifty_butch at hotmail dot com.

HyperSID V1.1 is released :

<http://www.hypersynth.com/hypersid.html>
<http://www.hypersynth.com/gallery/Hi/HyperSIDv1.1.png>

HyperSID is a subtractive synthesizer with all the C64 SID chip hardware capabilities besides many new software based features, so you can take advantage of various controlling



features of a VSTi and also real analogue sound with SID character. Real time integration between software and hardware makes HyperSID act like the other VST instruments in your host application.

Note :

HyperSID VSTi does not generate any sound itself without the HW Unit.

v1.1 Additions & Fixes:

- Added Pitch-bend wheel with adjustable range
- New Oscillator Sync option
- New Oscillator Phase Sync
- Added logarithmic and linear curve mode for filter Cut off
- Added Key and velocity tracking for Cut off
- Added FPB control module
- Added HW unit reset option
- Fixed transpose and cent issue when resetting to default
- Little GUI redesign
- HyperSID now sends more descriptive messages to host when tweaking parameters

Main Features:

- 3 OSC per key (Monophonic)
- 1 OSC per key (3 Voice polyphonic)
- 4 Waveforms per OSC Tri , Saw ,Noise, Pulse (combinatorial)
- OSC transpose range +36 to -36 Semitone
- OSC cent range -50 to +50 Cent
- OSC ring modulation
- 3 Amp Envelope ADSR
- Multimode analog filter 12dB/Octave HP , LP , BP and (combinatorial)
- 1 LFO Part with sync , retrigger and invert capability
- 1 Step LFO Part with sync , retrigger and invert capability
- 2 General purpose envelope generator with invert capability
- Individual routing for each modulation source
- 88 Parameter for controlling overall synthesizer (automation recordable)
- Flexible preset manager with save and load function
- Built in 64 categorized Factory preset .

- Clean sound without any Self oscillating in most of the Presets
- Automatic real time synchronization between software and hardware
- Independent MIDI out path from host
- Very low CPU usage

HW Unit (Enhanced Series):

HyperSID HW unit is a custom build synthesizer with internal processor and a real SID Chip! There is no emulation here, All the sounds are generated with a real SID chip. HyperSID VSTi functions as a software MIDI controller for this hardware sound engine.

New features :

- Support for all SID chip revisions (8580-6582-6581) .
- Balanced audio output .
- Front panel backlight brightness can be controlled by user-assignable MIDI events (MIDI-driven Visualization)
- Half-rack-space form factor fits in Universal Rack Tray.
- Compatible with discontinued series of HW unit .

HW unit is also available in standard 19" rack mount version.

Gideon announces Ultimate SuperCPU

As club members will already know, Gideon, creator of the 1541 Ultimate + (<http://www.1541ultimate.net/content/index.php>) has announced: "There are indeed plans to create a SCPU image for the 1541U Hardware. That means: no hardware change, but a completely different behaviour of the cartridge. The FPGA content would be different of course, offering you SCPU functionality. So *NO* built-in 1541, but just SCPU. [Of course the idea is that two 1541U's should work in a cart-expander, one as SCPU, one as 1541U.]"

I'm not sure how a cartridge extender board would work, but then at least he's giving it a go, and it means that we don't need



to hope for a SCPU to come along at less than \$1000USD!!!

Also, from the club's point of view, as follows:

"I've been speaking to Gideon about implementing a SuperCPU-compatible device; how he does this is up to him, and he is choosing to implement in within the U1541+, which is fairly

sensible from his point of view. The suggestion was made back in the summer, and Gideon said that he wanted to wait until the Autumn, but would like to work with us as we had experienced SCPU users in our ranks.

Anyway, the Commodore Computer Club (UK) is working with Gideon and providing him with a SuperCPU initially, and will further provide him with a C128 + MMU so that he may observe how the MMU works, and how it allows the SCPU 128 to access the 128's modes. The first thing though is to get his implementation working in 64 mode. After he is satisfied, and we have something that basically does the same job, he can then look at further improvements to the hardware.

He seemed reluctant at the idea of our offer of funding, as our club is not for profit. So, on that basis, we will simply pre-order these devices for our club shop. Some of these will be offered to programmers on the agreement that they actually create something useful, be it a game or application.

Furthermore, we will be seeking agreement with the Ultimate New Comer team and Protovision to bundle authorised copies of UNC, Metal Dust and Virtual Assembler 16 with this device, which will make a nice bundle. UNC is being developed to take advantage of the SuperCPU by putting all of the game data into RAM, meaning no more disk swapping - It should also be just a little bit faster.

As this device will be available through our shop, member prices will be 10% less than non-member prices, in accordance with our club rules.

Yes, we are aware that a SCPU implementation will not suit everyone out there.

Yes, we are aware that many people are happy with the 1541U+ in its current state, and will not want to upgrade that.

Yes, we know that many programmers prefer 6502 over 65816.

And finally, we know that most C64 fans/users don't want a SuperCPU.

But we are still backing this device because we know that many people would like to get hold of a SuperCPU without taking a chance on an auction.

More details will soon be available at www.superCPU.co.uk. For now, that domain points to the CCC (UK) homepage."

A few updates to add: I have agreed in principle that if this device is sold through the club shop, we can bundle UNC, Metal Dust and Virtual Ass 16 with the device. I hope also to speak to Stephen Judd to include his apps in any such bundle. Indeed, it might be handy to have Jammon built into the USCPU+ firmware especially if Gideon finds a way of implementing an Action Replay style 'freeze' function which would allow access to the ML Monitor for debugging purposes. Let's not get ahead of ourselves though - first thing is to get it working and compatible.

Regards,
Shaun.

www.commodorecomputerclub.co.uk

Mark Fellows takes back CMD?

I found this over at the excellent 128 alive forum
<http://landover.no-ip.com/forums/index.php?topic=2358.0>



From: Terry Raymond
Date: Sun, August 24, 2008 8:07 pm

[snip]

Hey good news on the home front, I cant say too much but I have been in contact with Mark Fellows and there is a person that is interested in taking over the CMD C= distribution, Mark is aware of Maurice's bad Behaviour and is doing something about this.

COMMODORE FREE: Well its all fingers crossed at the moment, I may receive my SCPU or a refund but I don't want to hold by breath because I will quite probably die from lack of oxygen.

Commodore LCD prototype Firmware update

Date: Sat, 04 Oct 2008 01:44:37 -0700
From: Mike Naberezny

Hi All,

I don't think the list allows attachments so I've posted the firmware from Bil Herd's Commodore LCD prototype here for you to download:

<http://mikenaberezny.com/2008/10/04/commodore-lcd-firmware/>

I just received these images and wanted to share them with you. Even without disassembling, the contents are very interesting. You can see the built-in applications and BASIC 3.6 (U103). BASIC 3.6 looks like it has the same Easter egg text as 3.5. Many thanks to Bil Herd for making these available to us!



SCPU information

Commodore Computer club

The following Information has been taken from one of the Commodore Computer club U.k. many Forum topics and has been used with permission, for more information please visit the Commodore Computer club

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

Here is some information about the SuperCPU. I wrote this to give an idea of the hurdles that one might come across for those who were considering spending half of their life savings on one, as follows:

*You will need a heavy-duty power supply unit. The standard C64 PSU generally doesn't provide enough juice to keep things stable, and tends to burn out especially if you have a SuperRAM card + RAM. The PSUs for the flat C128 is okay for your 128, and can be converted to the C64 - this will provide ample power for your computer + any other devices that you are using. For C128D (Plastic casing) users, the raised cartridge port will cause problems, so you'll have to make yourself some sort of support for the cartridge, which might mean cutting off the "wing" on the back of the case that is below the cart port. C128D-Cr (metal casing) users won't need to worry about this, however, make sure that everything is level (as in, make sure that the computer has it's rubber feet still, and your computer is on a nice, flat and stable surface).

*Look for a SuperCPU 128 even if you own a Commodore 64. These units are better able to cope with the differences between the UK made PAL C64s, and German made machines and the NTSC computers. And, if you do upgrade to a 128 at some point in the future, you already have a 128 SCPU to use on it, should you want to. Though the MMU adapter needs to be installed to use the 128's native modes @ 20Mhz.

*You will need at least one disk drive on your system.

*The unit runs hot especially if you have a SuperRAM card + RAM on your system. Take the top off it to keep things cool and everything running stable. Some people have added air vents and such like to the casing. There are also heat sinks available, and recommended.

*If the red LED on the top of the unit is in any way 'dull', or not shining as brightly when in 20Mhz mode as usual, there is probably a power problem on your system.

*Every so often, open up the unit and push down all of the socketed chips. You can clean the contacts with pure alcohol and a cotton bud.

*Commodore 128D (plastic casing especially) users might have problems with the internal 1571 disk drive. This is probably due to the internal PSU not providing enough ampage to power everything. Unless you specifically need a 1571, unhook the power to the drive, or even remove the drive completely. Normal, stable operations should resume. I removed the internal drive from my 128D-Cr and cut the ATTN line as I figured that I don't really use 5.25" disks anyway. Cutting the ATTN line on the Cr will make the internal drive invisible - not entirely sure how it works inside a 128D.

*I have found the best way to switch on my computer (my set-up consists of C128D-Cr, 1581 Drive 8, RAMLink Drive 9, FD2000 Drive 10 and CMD-HD Drive 11 hooked up to the RL Parallel port) is to switch the drives on after things have fired up, in order from Drive 8 through to 11, the RAMLink is on anyway, unless I've deliberately disabled it. Doing this seems to cause the fewest amount of problems.

*Metal Dust is a very good shoot-em-up... in my opinion.

*Not all games benefit from running in 20Mhz mode - and some games will either crash or not work at all. However, you can switch the SuperCPU out of your system by holding down the reset lightly for a couple of seconds whilst switching the unit off - once the first switch on the left is set to off, let go of the reset button. If you can, hold down the CTRL key on your Commodore whilst doing this.

*I've found that it's often best setting the SuperCPU's optimisation mode to "NONE" for most games that benefit from the extra processing speed, such as the Freescape games, for instance.

*If the SuperCPU is not reading the RAM from your SuperRAM card, try removing the SIMM and SuperRAM card and testing the SuperCPU by itself. Reseat everything firmly. If there are still problems, the best solution is to find someone who owns a SuperCPU and try a chip-for-chip replacement with their units (providing that they agree to it, of course), from each removable chip.

*German made PAL machines tend to run less erratically with a SuperCPU attached than their UK-made cousins. Not that UK-made C64/128 machines don't work, of course, it's just that German-made computers seem better - with the exception to the "Aldi-64", apparently.

*The performance of GEOS is greatly improved - which can now be downloaded for free (www.cmdrkey.com).

*Jos/WINGS demonstrate the potential of a Commodore + SuperCPU and a bit of extra RAM. As reported in Commodore Free previously, the source code has been released for people to play with.

*The Retro Replay/RR-Net adapter works (or, at least the revision of the cart that I have does), but you must switch the computer on in 1Mhz mode (or reset it in 1Mhz mode), load the software that uses the RR-Net and then switch to 20Mhz mode. The difference is quite noticeable.

*New SuperCPU-specific software is very unlikely to be developed - though power in numbers. If you want new SuperCPU software, vote at www.xeo3.com.

*The world needs a cheap replacement for the SuperCPU. The CPU64 project by those IDE-64 people looked very interesting, but alas nothing has been heard for ages... hmm, maybe some news on this soon!

*It's probably not worth buying a SCPU just to play Metal Dust, though it is a very good game. GEOS gets the most out of the device.

*Even the best behaved units can occasionally freeze and crash. Might be something to do with the fact that no one ever intended the Commodore 64 to run at 20Mhz, who knows? Things can usually be reset, but otherwise, switch off your system, reseat the unit in the cartridge port, wait a minute or so and then turn the computer back on.

*If you own a RAMLink, keep the timer jump clip installed and connected to your RL (The SuperCPU users guide says that you can remove it). This should help to keep strange behaviour to a minimum.

If anyone else has noticed anything more, no matter how small or insignificant, please report it on the Commodore Computer Club (UK) forums -

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

Interview with Jeff Daniels VIC 20

<http://www.sleepingelephant.com/denial/>

COMMODORE FREE

Can you introduce yourself to our readers?

JEFF DANIELS

Hello I'm Jeff Daniels. I started Denial, a VIC 20 enthusiast community. The Denial newsletter began in the mid 90s and evolved into the current Denial website.

CF. Can you tell our readers about your website and give it a plug.

JD. Denial is arguably the best place for any information on the Commodore VIC 20. We have members world-wide creating new hardware and software for the platform. The website is a friendly and lively community. The URL is <http://www.sleepingelephant.com/denial/>

CF. Can you tell our readers what you consider to be unique about the VIC

JD. The Commodore VIC 20 is truly a unique and marvellous machine. Not only does it represent many firsts in the computing world, it also manages to make a great impact on the world of gaming consoles. I think it is one of the few machines to bridge the gap between gaming enthusiast and computer collectors. The history of the machine is long and compelling, one of the greatest background stories of the classic console era. I won't get into it here.

CF. Do you think that Commodore "killed off" the VIC-20 too soon?

JD. It is difficult to answer this question honestly. As a kid, I felt it died much too soon, I will always wonder what game programmers would have achieved if the platform continued for one or two more years. As the gaming market crashed, the newer generation Commodore computers went for a different market. We all know how well the 64 did. That doesn't make it a better machine, but it was obviously the right machine for the time.



CF. What would you like to add to the VIC to improve it further?

JD. Personally, I am very happy with the unexpanded machine. The VIC is very flexible as it is. Users can easily expand to 32k memory or 80 columns. There's even a rare VIC with a built-in screen. I'm ok with the system as it came out of the box. If I

have to say something, I guess a second joystick port would open up new possibilities (please note, the VIC can use two joysticks with the help of additional hardware). The VIC is also missing the colour gray. I recall wanting to use gray in a recent program. Not a big deal.

CF. Can you explain to our readers how Denial started?

JD. Magazines or Zines" were the rage in the early 90s. I started Denial as a fun project in self-publishing. The name Denial is just the letters of my name rearranged. I thought it was a funny name for a newsletter dedicated to the VIC 20.

CF. Is there still a large VIC user base, also why in your opinion do people still use the machine?

JD. We have just over 1000 members, but this is only VIC users who are comfortable communicating in English. The VIC 20 community itself may be much larger. The popularity of the VIC on auction sites suggests many collectors have yet to discover Denial. Members of our forum are very passionate about the machine.

CF. Do you prefer to use a real machine or to emulate?

JD. Of course, the real machine. Emulators have come a long way. They are quite good now, but still not entirely accurate. The screen ratio is still very off. I would hate for someone to get an impression of the machine through emulators. The real machine is much more charming.

CF. Can you update our readers with what you consider the best recent software and hardware developments for the VIC?

JD. This has been a great year for VIC development. In software, we have had over seven new game releases. The hardware side is equally impressive. We had a impressive multicart release in both PAL and NTSC models, and another all-in-one mega cart coming soon. There's plenty of information on both in our forums.

CF. What are your thoughts on the amazing demos that stretch the VIC hardware so much, giving us sampled speech and full screen graphic effects?

JD. The European scene has really produced some amazing demos! The sampled speech and memory tricks are really inspiring. I hope many of these programmers become more active in our community.

CF. From the main website is a link to a Wiki. What is a wiki, and what would our readers find there?

JD. The Wiki is still in its infancy. It's an open information base with many important technical and historical details. There's so much more to be added, but for now it is a very good start for info.



CF. Are there any plans to resurrect the Denial news letter?

JD. Not yet. Last year, I produced a disk collection of games. This is something I wanted to do when the newsletter was active. I mailed around thirty disks to members around the world. If I ever send something through the mail again, it will likely be software.

CF. Was the newsletter free, and is there a fee to join denial?

JD. It was free. I put \$1.50 price on the cover of the first issue, and I mailed them out for free. Later, I accepted donations to cover the cost of postage. As a website, Denial continues to accept donations. Our members are very generous! Denial should be around for a long time. The aforementioned disk collection was also free.

CF. Do you think your members were original VIC users or are some seeing the VIC for the 1st time?

JD. Some of our members were born long after the VIC was discontinued. Many are first time users, but most are original users. We also have a few classic gamers just now discovering the VIC. In the 80s, most of use were aware of other consoles but couldn't afford to have more than one or two.

CF. What is your personal favourite of all the games you have created for the VIC?

JD. I was really proud of Game Theory; it was featured in a UK magazine. The game also received a great deal of attention at the last Commodore convention I attended. That would probably be the first game I would show someone interested in my work. Personally, I am very interested in Ghost. The game started off with a simple draft called Zombie Yard. I think "Ghost" attempted to add arcade elements and got away from the creepy

theme I wanted. I really want to revisit this. I think the idea has unrealised potential.

CF. What are your favourite games in general for the VIC?

JD. Gridrunner was my first game, and I probably played it the most. So that's my favourite game. Most VIC users would agree Omega Race is an impressive cartridge game. New games like Frogger 07 or Return to Fort Knox are also quite enjoyable.

CF. How did the Denial Wiki come about? Also have you found out anything unusual or interesting through it?

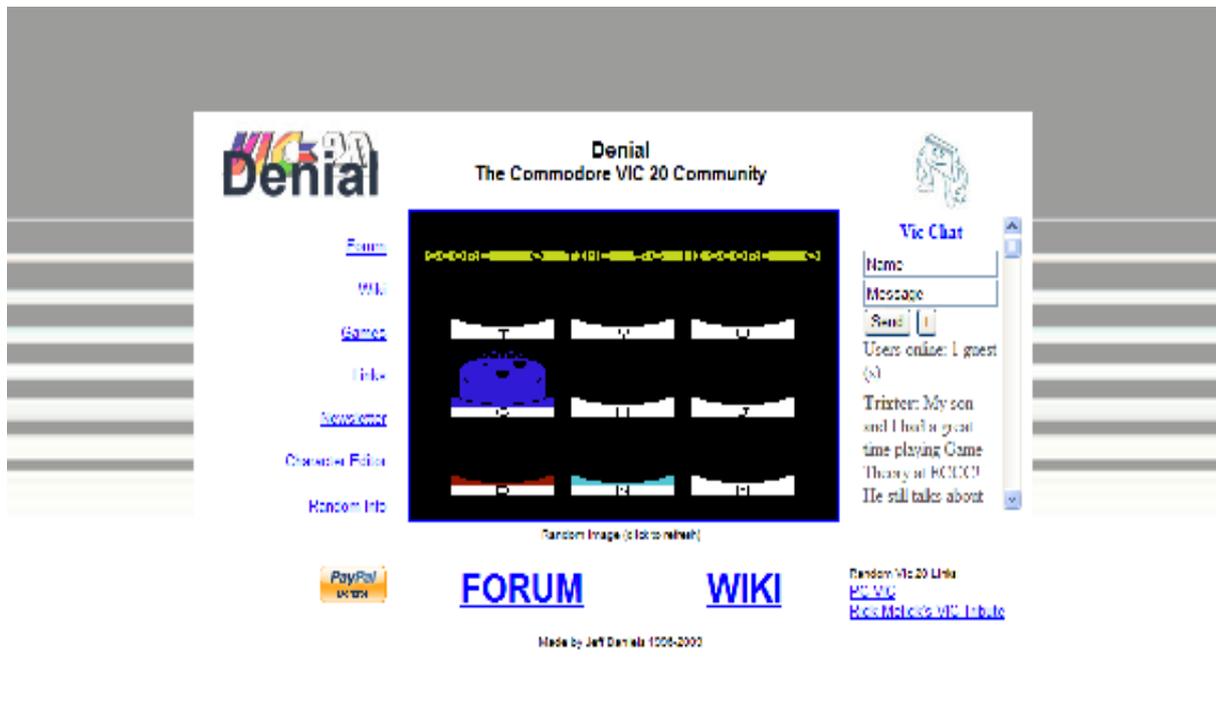
JD. We always wanted a wiki, and the wiki came out of necessity. On collaborative hardware projects we needed a single place for information. I've learned a lot about international variations of the VIC. We also even filled in some product number gaps.

CF. Have you ever had the chance to meet any of the Commodore engineers and designers who worked on the VIC?

JD. No, not yet. I would however love to meet them!

CF. What do you see the VIC's future being like? A small cult following or disappearing entirely?

JD. I see a bright future for the VIC community. It is an admittedly small, tight group, but everyone is really friendly and passionate about the machine. The VIC computer has the feel of a game console (something between the Astrocade and the 2600); yet, it invites gamers to develop their own ideas. Some of our members have even modified popular games to add more levels or variation in game play. In 2008 alone, we have had a new original game released every month! This is even more than the previous year. The forum and our members have received a lot of attention in magazines and the net. With the great members we have now, I can only see Denial growing in the future.



Creating a Commodore 8-bit Machine Code programming environment for Windows

By Paul 'Trooper'Green

Windows

This document is for a Windows programming environment, as I know nothing about Linux or Mac environments I would urge readers to send in setups for these machines to address the balance.

DOWNLOAD

First you will need to download all these files, and save them on your machine. When you choose to save them save them to your C:\ Drive, the root of your hard disk (you can always move the downloads later) mainly because they are easier to find, work with and we will all have the files in the same place so we both know where to find them.

C64asmv

First you will need c64asmv1.la this is a windows dos program, the program converts the .txt files (or .src or .asm) files into a .prg (or .p00) or the actual executable files so; download the application from <http://tothb.ehc.hu/software/index.html#c64asm> and save it your machine.

Emulator

You'll also need an emulator (as getting things on a real-c64 is a bit hard, although it can be done but for this example we will use emulation) I use WinVice (but there are other emulators such as CCS and HOX) for this document we will assume you are going to use Winvice. First download the application from <http://www.viceteam.org/#download> and choose the link that says.. Binary for MS-Windows 32bit (Pentium-optimized): WinVICE-2.0.zip.

EDITOR

The you need an editor, you could use notepad.exe from windows, but there is a free text editor (as you don't want the files being saved with any unnecessary characters, notepad has been known to add strange characters' to plain text files) called Crimson Editor. You can download the latest version from their website <http://www.crimsoneditor.com/> (look under the contents bar, there is a download (2nd down), from there, you want to be getting the Crimson Editor 3.70 Release (Sep. 22, 2004, 1224KB) from either of the links then save the executable to your hard disk.

Ok, as was previously stated, we'll assume you have saved the files to "C:\\" for everything as it makes life easier to follow.

The c64asmv1a.zip file you've downloaded I want you to unpack/unarchive this file so you end up with a folder in your C:\ Drive that is called c64asmv1a and contains all the files from the within the .zip file.

Then double click and install the Crimson Editor, you will receive an 'error message' on the first running the application, but it explains that when you do run it...when that has run, just close it for now...

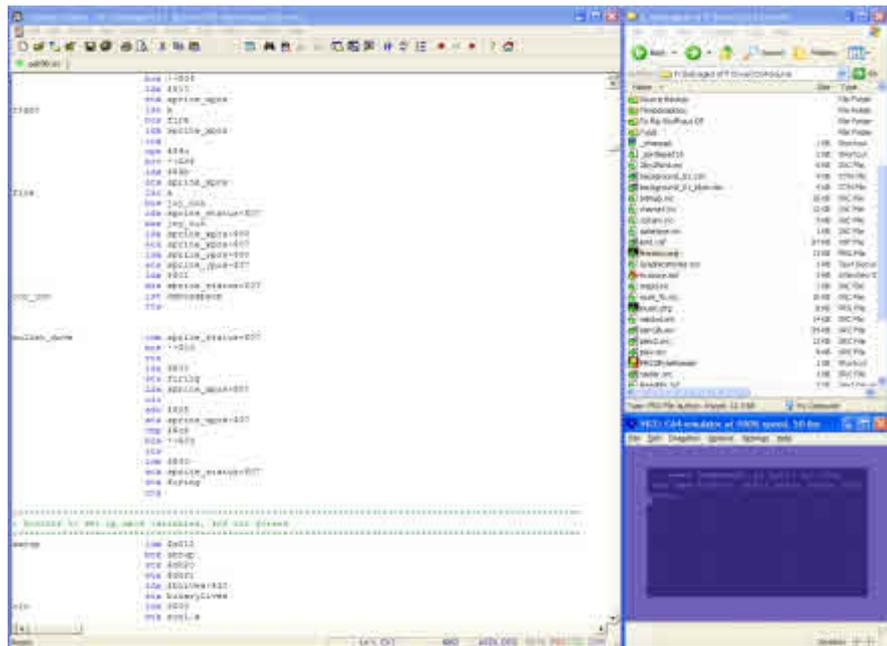
The WinVICE-2.0.zip you've downloaded you need to unpack/unarchive so you end up with a folder in your C:\ Drive which is called WinVICE-2.0 and contains all the files from the .zip file (you will notice within that folder, depending on how you choose to unpack It, you might have a WinVICE-2.0 folder in there too, now this is your call, I go into that folder, and move everything inside that to the one above, just seems to be a bit tidier)

Right, when you have got Winvice installed/unpacked you can then run the application. It doesn't create a shortcut as there is no install, but you will find a file called x64.exe, located within the Winvice folder, that is the application to double click to get the emulator running. Once the Emulator is running standard prg and d64 files, will work with using windows drag and drop, but you won't be able to play them as you haven't got a joystick plugged in (technically). Go to it's settings and change anything you need to do, the main one is Settings\Joystick Settings, and you can setup a key map or choose a preset (or if you have one, use your own joystick in the machine)...

Also for your ease, is to create a folder in the root of C:\ called "Source"... then if you look at the picture you will see my setup and how I have my area laid out for ease.

New we need to get Crismon editor to Communicate with C64ASM, the thing to remember is C64asm is a DOS program, so any files need to be 8 chars and an extension, for example you could call something source1.src, then any changes could become source2.src, etc, etc.

Ok, first we need the Crimson Spec Files.zip download this file from here <http://www.slur.net/a8/6502spec.zip> and save it to you desktop (if you wish to keep hold of this file in-case you do a re-install then save it elsewhere like on the root of your c:\ drive) and when you have saved the file you need to unzip it and you'll end up with two files called.



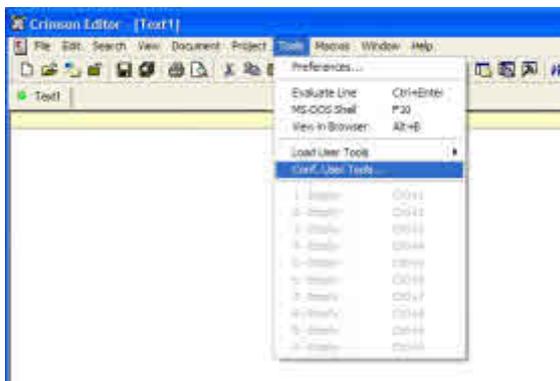
6502.key
6502.spc

these are just pure text files, but with the extension so crimson will understand them as configuration or syntax files.

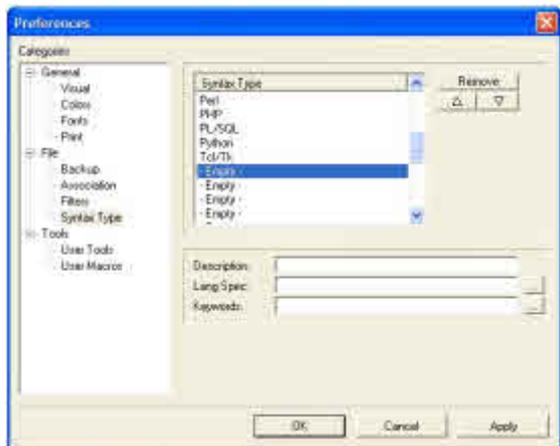
OK, so where do these files go? If you've installed Crimson into it's default location then you will find a folder called "C:\Program Files\Crimson Editor" within that folder there is a folder called 'spec' copy and paste (or cut and paste, it's your call) the two files into that folder....Then you can close that folder and open up Crimson Editor. Then it is time to set up Crimson.

In the menus, go to 'Tools' and the Conf. User Tools

this will open up the preferences

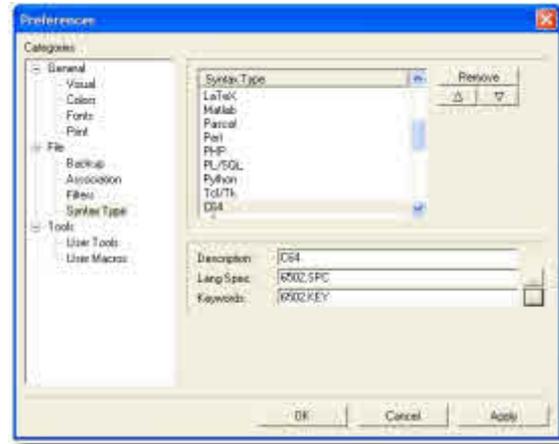


Click on Syntax Type (as shown in the example), then scroll down to the first 'Empty' location and click on it.

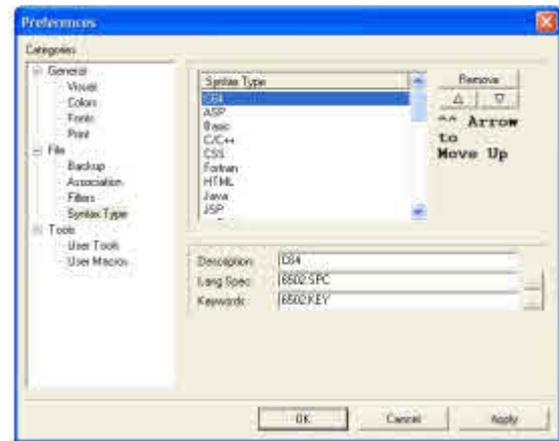


Now within the Description type C64 (or whatever you want, but what you type there, displays on the menu so something descriptive would be more of an advantage) then click on the Browse (the 3 dots) to the right of Lang Spec, this will open a file browser. Now we need to look for the 6502.spc file, click on it and press the open button, then below is the keywords, do the same again, but this time you are looking for the 6502.key and press on the open button you should end up like this

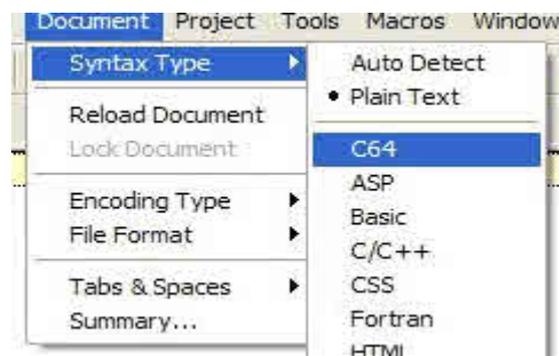
Description C64
Lang Spec 6502.spc
Keywords 6502.key



Now, if you click on the C64 in the Syntax Type box, which is now there because you typed it into the 'Description', it will highlight, and you can now click the up arrow and move the 'c64' to the top, as it will be quicker in the menu selection because it will appear as the first item in the menu list.



Then you can click Ok, now when you go back to the menus, you'll see a C64 choice under, Document - Syntax Type, you then click on C64 (the only thing I don't personally like about



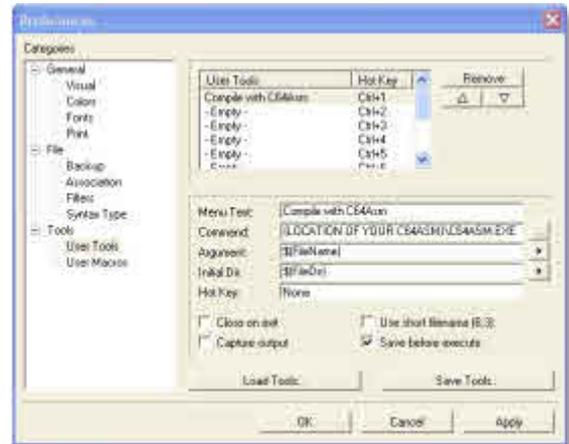
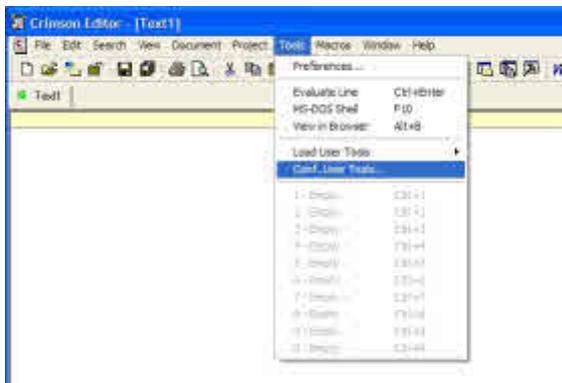
Crimson, it that the application doesn't remember what you've clicked on, if you close it down)

Now if you type any text or syntax that pertains to the C64, it will change colour. If for some reason the text doesn't change colour you've probably just opened Crimson, and the editor has forgotten you like the C64 syntax, reslect the c64 from the syntax list.

So that bit sorts out the Syntax Text.

The next part we will get crimson editor to communicate with C64asm.

Open up Crimson Editor, and in the menus go to 'Tools' and the Conf. User Tools. This will open up the preferences. The default when the box opens is 'User Tools' this is ok, as this is what we want to change..



Then click ok.....

Ok, in theory that has now set up Crimson to talk to C64ASM. One point I'll tell you now, with C64ASM being DOS it doesn't like being stored in a folder that has spaces in the name or in the folder before, etc. So it is best staying in the ROOT of a Hard Drive normally drive c:\.

So, we should try to do a test compile ensuring everything is working ok.

Right then you should have a blank Crimson Editor (if not choose File/New, so you end up with a Text1. Then type at the top (or copy and paste from this document)

* = \$2000 <--- copy or type into Crimson

```
;^^^ help on this command i.e. * = is in the C64ASM help file, basically it means your telling the compiler where you want the following code to compile too, $2000 is 8192, so on the C64 you'd type SYS8192 {You don't have to type this into Crimson though this would be used to RUN the program from BASIC}
Next type the following lines
```

```
lda #$00
sta $d020
rts
```

Right at the moment the source is called 'Text1' and should have a red dot by it to say it isn't saved, so right click on the 'Text1' and choose 'Save As' and save it in the folder for your source that you created previously. Call the filename test.src for now. (again you can call it what you want, but 8 chars and an extension is all you can go up to.)

Now the Dot will go green, to say it has saved. Now either hit the menu options (under tools), or if you set up a shortcut key command press it, but you want to be trying to compile the program you've just done. You should get a Command Box pop up, with something that looks like...

```
C64ASM v1.1a - C64 (6510) Assembler Copyright (c) 1993-2001 by Balint Toth
```

```
Assembling TEST.SRC
TEST.PRG created from $2000 to $2005
Press any key to exit
```

Click on the first "-Empty-" so it is highlighted. And then in "Menu Text" you can type 'Compile with C64Asm'. Then in the 'Command' box you will click the three dots and you will be pointing it to the C64ASM.EXE file, (where ever you chose to save it and unzip it.)

Just to the right of 'Argument' there is an arrow, click this, and choose 'File Name' and then below that, there is an 'Initial Dir.' You want to click the arrow to the right of that and choose 'File Directory'

Below all that, you will have some tick boxes, Untick the 'Close on exit' other wise if there is an error during the compile you won't be able to see it as the CMD window will close too quickly.

The 'Save before execute' is your choice, I have it turned on, as I want the program to save the file before it sends it to C64asm, or you'll have to manually save and then compile your file.

Also, Hot Key is your Choice! I've got mine setup up, so I just press CTRL + ALT + Z, this saves me going into the menus.

So to set this up, first click on the box to the right of the word 'Hot Key' and actually press the keys you want for the shortcut.

So, apart from the {Location of your C64ASM} which will display a real directory path in yours, it should look pretty much like you see in picture

you can now press any key, or hit the x to close that command prompt, if you look in your source folder a file called TEST.PRG will have been created. (Now technically without setting up crimson to auto execute into WinVice, you can just open up Winvice and drag and drop the .prg into Winvice using windows drag and drop, but and there is always a but, why? I hear you cry, well try it and see what happens....

All you will get is...

**** commodore 64 basic v2 ****

64k ram system 38911 basic bytes free

ready.
load"TEST.PRG",8,1:

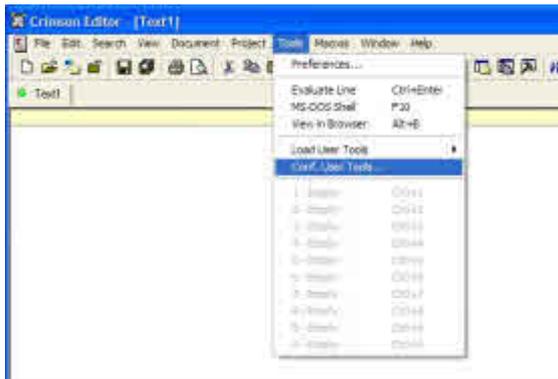
searching for TEST.PRG
loading
ready.
run

ready.

Technically it HAS worked, but the machine as you will remember uses the RUN to tell it what to do, and we didn't tell it in the source. Just type (in WinVice) SYS8192 and press return, and if you have done everything right, you should see the border turn black. If you do see that, then congratulations you have successfully typed up and compiled a C64 program in Machine Code and got it to run on the C64.

This is the bit where we will get Crimson to Communicate with WinVice

Ok then, Open up Crimson Editor. And In the menu, go to 'Tools' and then Conf.User Tools. This will open up the preferences. The default when the box opens is 'User Tools' this is ok, as this is what we want to change....



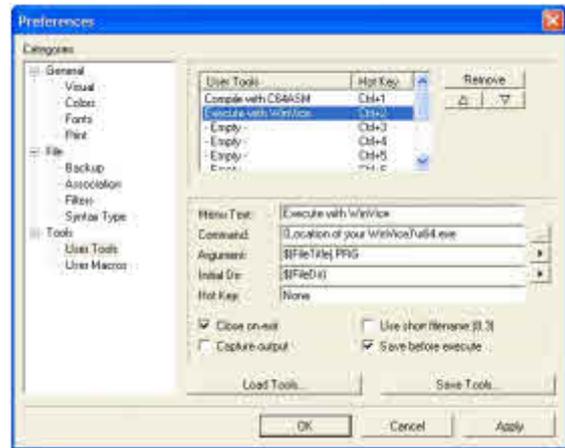
Click on the next "-Empty-" so that it is highlighted, and in "Menu Text" you can type 'Execute with WinVice' Then in the 'Command' box you will click the three dots and you will be pointing it to the X64.exe file, where-ever you chose to save it and unzip it.

Now to the right of 'Argument' there is an arrow, click it, and choose 'File Title' and then move back into the box, and add ".PRG" at the end. Then below that item, there is an 'Initial Dir.' you want to click the arrow to the right of that and choose 'File Directory'. Below all that, you will have some tick boxes, tick the 'Close on exit'

The 'Save before execute' is your choice, I have it turned on, as I want the program to save the file before it sends the file to C64asm, or you'll have to manually save and then compile your file.

Also, Hot Key again is your Choice, I've got mine setup up, so I press CTRL + ALT + X, saves me going into the menus. To set up the hotkey, click on the box to the right of the wording 'Hot Key' and actually press the keys you want to use for the short-cut.

So, apart from the {Location of your WinVice} which will display a real directory path in yours, it should look pretty much like you see here



Then click ok

Then you need to try to the compile and then run, so load the source code we used back up, try compiling again, and if you get no errors, then choose "Execute in WinVice" and see what happens..

Don't forget you'll need to type SYS8192 again, you now have a Windows Compiling environment for your Assemble applications.

In the Beginning 10

(Lord Ronin from Q-Link)

Already we have used the print statement to make animated graphics. We used the poke command in the last instalment to make a more complicated animation. Both of those were technically animation, but nothing like the games you have seen or I talked about earlier, we used only one little character from the 256 that exist in the computer. OK clarify that, from the stock ones that exist. Remember that you can create your own characters.

Well you saw that moving those little graphics symbols around took some typing work. Also it took a bit of knowledge that at present we just don't have in our memory. By that I mean knowing things like the value to variables and how to structure the lines. OK a big action game would be pretty much impossible to create in the way we have done. Simply put, we won't always be limited to just a character from the character set. You would like a larger thing on the screen for the game right?

That is where the idea of a sprite comes into play <sorry for that pun>. What then is a sprite? A small somewhat evil creature in an AD&D game. No wait, sorry mind was in the wrong place. <LOL>

"A Sprite is a high-resolution programmable object that can be made into just about any shape – through BASIC commands. The object can be easily moved around the screen by simply telling the computer the position the sprite should be moved to. The computer takes care of the rest." 4th paragraph page 68 in the user's manual.

Strange words huh man? The book goes on to say that the sprite has "more power than just that". Colours can be changed. Collision detection, move in front or behind each other, change in size and more.

Right that takes care of the two paragraphs quoted and information and you are more confused than I was the first time I read the passages. Now then before you need to take a nitro tab, I'll try to explain all this weird talk.

To the best of my knowledge all the 8 bit games played with sprites. Asteroids, defender, pacman and the like. OK maybe that isn't the correct word to use. I'm a lamer as you remember. Still the point is that these games I mentioned above, at least on the C= use sprites. That can give you an idea of what a sprite can become in your future work.

Yes you can change the colour of a sprite, you can also change the size of a sprite. Three things that I quoted above come into my explanation of a sprite. Moving in front or behind and collisions. Sprite collisions are a strange concept and term, the guy that got me to understand it, to some degree was watching me try to play a flying game. Sorry don't really remember the game, may have been Zennon, anyway as I kept shooting the other space ships. He would just whisper out "Collision". When I crashed the space ship, he would shout out "Collision". Wanted to deck him at times., but he did show me the connection of what I was doing to the sprite collision thing. I'll admit that he also showed me a cartridge that plugged into the C=64 and then pointed out an option called something like, collision killer. Yeah that is what it did, I could smash up and not be killed off in the game. I tell you that I then bought that cart for my collection.

Basically what I am saying is that you can make a shoot 'em up game, blast at the bad guy, your shot is a sprite, the bad guy is a

sprite and your shot hits, and because it hits in the right place, you make a collision with the bad guy. Simple idea and it took me months to understand what was being said.

On screen it was easier to see the idea of moving in front of something or behind it. There is a book that I want to get that has a demo disk of the things that are covered in the book. Sprites are one of them, I remember that the book showed a car that drove by a garage, the car came back again and entered into the garage. Now this garage had a simple window in it, and you could see the car, or part of it through the window. That is what clicked in my mind for putting a sprite in front of another one, or even behind it, and making it look good.

Some bad examples are some games that I have played. One that comes to my mind is an aeroplane game. Simple sprites, with a couple of planes that are controlled by the joystick, you basically Blast unlimited bullets at each other. Its a rather fun simple, little thinking, game. Sprite collisions here are the bullets hitting the planes. Now it would have been real nice if the clouds where something you could go behind, but no they are as hard as granite. Hit a cloud and you don't go behind or in front of it, you crash and burn.

Examples out of the way, here we are only going to make some simple sprites. There are books and programs to create sprites. Some of the little programs I have used make the process simpler than what we will be doing next. For those that have a 128. There is a sprite maker in the 40c mode.

The book tells us that making a sprite isn't as difficult as they or I make it out to be. Well it is something that you will need to do more than once to get the full feel of making a sprite by scratch.

We have a separate picture maker in the C=64 for sprites. "This picture maker handles the video display." So says the book. Gee man that sounds so friendly! We are told that the computer handles the tasks of keeping track of the characters and graphics and the colour and of moving the object around. Wait for it, gets confusing real soon.

Time for that real soon part then. There are 46 different "ON/OFF" locations "which act like internal memory locations, each of these locations breaks down into a series of 8 blocks. And each block can be either 'on' or 'off'."

A lot of members just tossed the book to the side at that point. The book stopped being friendly and got complicated. Before you blank out . Take that stuff and put it off to the side for a good amount of time. What we are going to do is poke things into these areas to make stuff happen. On screen again I repeat that there are programs that take a lot of this work out of the task of making sprites.

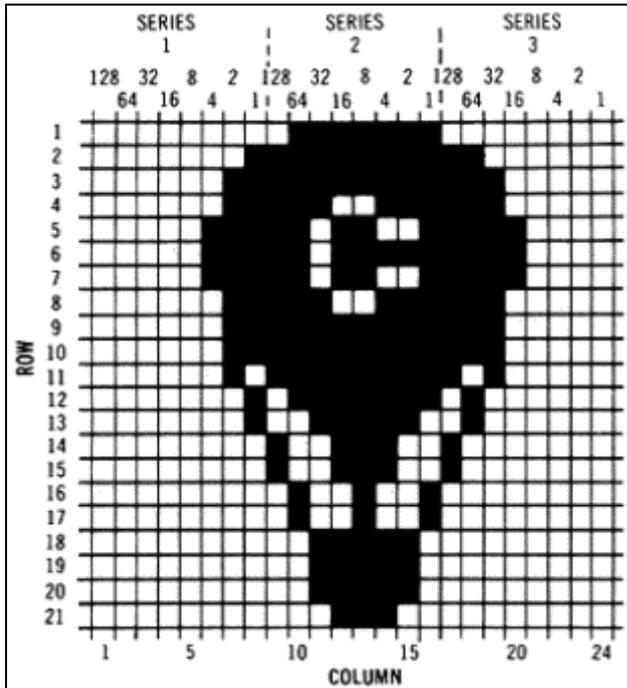
Eight memory locations are used. Tell you now that you have only 8 sprites at a time "ACTIVE" on the screen. You can have more waiting to be used though.

You may want to make a grid chart here to help you draw out your sprites. A sprite is 24 dots wide and 21 dots (or pixels) tall. "Sprites are displayed in a special independent 320 dot wide by 200 dot high area. However you can use your sprite with any mode high-resolution, low resolution, text, etc." And I know that makes very little, or no sense at this moment.

What is going to happen is that we are going to make a balloon character, and have it float across the screen. We will also be

adjusting that in a few steps. The book now wants you to grab some paper, and they say graph paper as one of the options, we are going to do a little bit of work.

Below is a very crudely made example of the graph they would like you to make. 24 columns wide by 21 rows tall. Sorry can't do the grid stuff as precise as I would like. Hoping that you can see what I am trying to create.



This is what we will use to create the basic sprite drawing. Make a bit more sense in a moment. If it will help, add the word "data" at the end of each row. This is a suggestion from the book. What I can't give you here is the actual illustration of the balloon that's created on that grid. But I do have the numbers to plug into the actual programme, or I think that I do <VBG>.

What is happening here is that you create the drawing in the grids under the numbers. Just fill in the grid as it fits under the number. I'll suspect that you will try your own design after this bit. OK we are going to look at this drawing, I have to use the balloon one. You can see that there are squares that are filled and those that are blank. What this can be translated to in your mind, and of course the C=64 is that the filled areas are "ON" and the empty or blank areas are "OFF". Not to scare you away, but this is the start of binary. Filled areas are a 1 and empty areas are a 0.

Next you have to convert the image into something that the computer can use. All computers work with numbers. Meaning we now must convert this image into numbers. Since there are three series from 128 to 1 in the grid. There must be three sets of some sort of number system. But how to create them and what do they look like?

For this I must use the illustration from the book. Going over that one we have nothing in the first set of numbers. Therefore

the total of that is 0. Second set or series of numbers has something in the boxes. Book has the little thing I am recreating below, as a way for you to work out the numbers. This is for the

128	64	32	16	8	4	2	1	
0	1	1	1	1	1	1	1	
0	64	32	16	8	4	2	1	
=								127

second section of the book illustration

Wow that looks crazy, what is happening in that thing?

Remember that it is the second set or series in the grid. Three of them need to be done for each row. But what you are doing is simply marking on this little work chart if there is anything in the 128 column on row one and the second set. Here there isn't. So a 0 is what you put underneath. Ah but in the 64 one we do have a something in the illustration. So in series 2 row one under the heading of 64. You place a 1. Once you have completed that method of marking down, if there is or isn't a something in the grid square. You next go down to the area under the up arrows I placed there in the example.

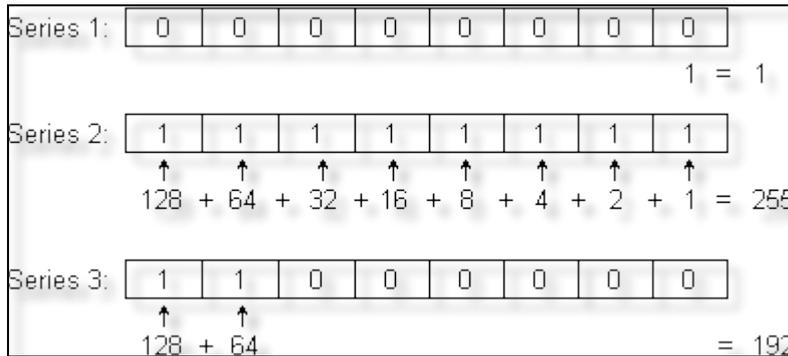
Here is where problems happen, I have seen it and done it myself. As you take another look at that thing I made above. You can see that where there is a 0 in the boxes under the numbers. Then on the bottom row you put a 0. If there is a 1 in the box, then you put down the value of that box. Repeat for the entire series. That is why under the 64 there is a 1 in the box, and on the bottom line there is a 64. Some of us have wondered why the extra step. Well when doing this off of paper. One can make mistakes by skipping that last step, like I said, seen it and done it.

OK as that bottom line shows you add up the numbers. This becomes just one number. In this example it becomes the number of 127. Trying not to confuse you here, if there was a 1 in each of the boxes, the total would be 255. Hey have we seen that number before? Yuppers and we will see it over again many more times. Just keeps popping up a lot. <G>

So then in the example from the book, the first series had nothing in the first row. The second series had the stuff we saw above. The third series has nothing on that row. How is this written for the program? Remember I said a while back about writing the word Data at the end of the row? This is why it works nice that way, you see the way to write it down for this part is

DATA 0, 127, 0

Based on the example above. Nothing in the first series, 127 is the total for the second series and 0 is the amount for the third series, as there was nothing on the row in that part. In order to further this example and idea. Book goes into the entire second line of the balloon illustration. Below is sort of what it looks like in the book.



you typed it in and we have more places that things could go wrong, did a piece on the pitfalls of type in programs. DATA statements are one of them that can frell you, I already mentioned fonts elsewhere.

Taking that into consideration. If I typed it in here right, and I did test and run it before writing the lines down, rare thing for me to do <BG> If you typed it correctly from what I did, then there is a small green hot air balloon that goes from the upper left of the screen towards the lower right. Doesn't make it all the way though so if that is what you see. You typed it in right, at this time that balloon won't go

across the screen, to the other side.

For row 2, the data would be:

DATA 1, 255, 192

Yeah I know that it looks complicated. But by the time you have done a couple of these lines. You get the message that is being applied, granted that there are 21 lines to do of three series each. I cheat and use a calculator. Mind isn't what it used to be decades ago.

You should be able to see how to count the series, how to present the chart where you see what is in each of the slots from 128 to 1. Also how to do the math for adding and then how to write that data line. I've seen <and done> the math to the point where all the separate three part series were added up, making it the total for the line. This doesn't work worth a smeg. Frells your programme, like you can't believe. Next thing is to type in the balloon program and we will go over the parts.

So type new Press return then enter

```

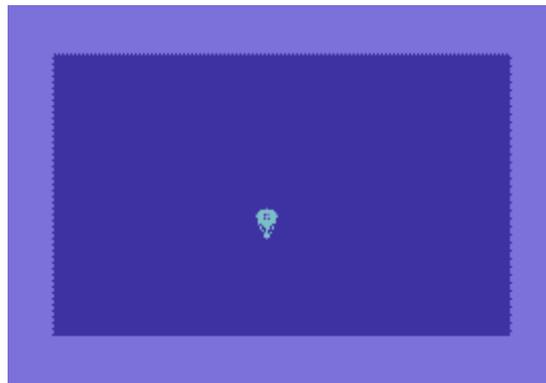
1 rem up, up, and away
5 print "(clr/home)"
10 v = 53248 : rem start of display chip
11 poke v + 21,4 : rem enable sprite 2
12 poke 2042,13 : rem sprite 2 data from block 13
20 for n = 0 to 62 : read q : poke 832+n,q : next
30 for x = 0 to 200
40 poke v + 4,x : rem update x coordinates
50 poke v + 5,x : rem update y coordinates
60 next x
70 goto 30
200 data 0,127,0,1,255,192,3,255,224,3,231,224
210 data 7,217,240,7,223,240,7,217,240,3,231,224
220 data 3,255,224,3,255,224,2,255,160,1,127,64
230 data 1,62,64,0,156,128,0,156,128,0,73,0,0,73,0
240 data 0,62,0,0,62,0,0,62,0,0,28,0
    
```

Book says "if you typed everything in correctly" That is an understatement, I had to type it in a few times and even now I am not certain I did it right for you (EDITOR yep its fine). Then

I'm not great enough to tell you how all of the things and this program work. In fact those that are clever enough to know all of these parts, can't seem to explain it to me easily, so I guess that makes us both in the same boat. What I can tell you is only a few things. Some of that is a constant refresher on stuff we have done before.

Line 1 and line 5 we have done before. A REMARK and then clear the screen

Line 10, now this is a new thing for us, The book doesn't go into a lot of information. Not supposed to, just a primer to wet your appetite about sprites. Or for many of us, confuse the smeg out of us. <G> Well v=53248 is obviously a variable. The Rem statement says it is the start of the display chip. I have heard that also called the VIC chip. 53248 is the starting memory location of the "v"ideo chip hence the V for the variable name. Notice how close that number is to the 53280 and 53281 the locations that we used for border and screen colour changes?



The book takes us to the following chart thing. In an attempt to explain the "picture making locations control the functions..." Called registers, these locations in their chart look like...

Register(s)	Description
0	X coordinate of sprite 0
1	Y coordinate of sprite 0
2 - 15	Paired like 0 and 1 for sprites 1-7
16	Most Significant Bit -- X coordinate
21	Sprite appear: 1 = appear, 0 = disappear
29	Expand sprite in "X" Direction
23	Expand sprite in "Y" Direction
39-46	Sprite 0-7 color

If you see that 23 comes after the 29, you are right, that is the way it is listed in the book. I don't know if it is a book typo or not. Some of the above may make a little sense to you. Most of it may not and it also may seem so alien that you feel you will never understand it. Many - many of my members have felt the same thing. A few have gone past that and made sprites on their

The Sceptre of Baghdad

Reviewed by Richard Bayliss

The Sceptre of Baghdad
(C)2008 Psytronik Software

Programming: Jon Wells
Graphics: Jon Wells
Music: Paul (Feekzoid) Hannay

The tales of the 1001 knights and Ali Baba meets Dizzy in this arcade action adventure by Jon Wells. You are the Caliph who wakes up one morning to find everything around him is so big. Is he dreaming or is it for real? Unfortunately for the Caliph he was cast under the spell by an evil sorcerer who was very jealous and wants to be the new Caliph himself. Not only is the Caliph small and cast under an evil spell, but he needs to find a way to bring him back to normal size and try to stop the evil sorcerer, which of course will not be an easy job. Thankfully the Caliph has a friend to try and help him find a way around and to try and bring things back to normal. Who is that? It's the genie in the magic lamp. So the Caliph rubs the lamp but sadly the genie speaks "I'm not at home". After several rubs, the genie gives up and gets the Caliph started and booms out that to break the evil sorcerer's spell; he needs to find the sacred sceptre of Baghdad.

In the game you start in the lounge, where lies the Genie in the lamp, and the game idea is generally to find the sacred sceptre. This sounds straight forward, but to be honest it is not all that straight forward. You cannot find the sceptre straight away, you need to enter all the rooms inside and outside the magic palace gathering items to try and solve various puzzles. For example how can you rub the lamp, how can you enter the water, how can you avoid turning into stone when you come so close to the Medusa. What things do I need to do to get on to the next stage, if you solve any puzzles you will gain access to new rooms, which may or may not have some more puzzles for you to solve.



As well as the various puzzles to you need to solve, you can rub the magic lamp, where the genie lives and he will give you some very useful clues. Or then again he could be a bit stubborn and say that he is not available. Several rubs of the lamp usually will give out clues, no wishes. There are also various hazards which you have to watch out for in the game. The main hazards are the demons, but you can attack the demons while they are moving around the rooms by using the fire button. If you touch a demon, a bit of energy will be lost. Once all your energy has gone, the game is over.

Not only are there deadly demons lurking around the palace (probably sent in by the evil sorcerer) but you also have various obstacles to avoid by collecting the right item to help you prog-

ress further. For example, if you walk in water, on a very hot sandy ground or walk across fire without the correct item in your possession, you will lose energy quicker than the demons sapping you. Also there are some obstacles that are dangerous if you walk into those, like as mentioned before, the Medusa. And funnily enough, you can get killed by a harmless looking goldfish. (Well, it does look harmless, unless it packs a bite.)

This game is kind of like Dizzy, especially when you have various puzzles to solve to try and progress further, but this game has no egg characters involved - thankfully because I have run out of egg gags :). Anyway, the concept of the game is very simple. There are plenty of rooms for you to explore which makes things wonderfully enjoyable, and some puzzles are tricky others easy (Unless you keep playing the game to progress further that is). If the player finds the sceptre, then they will be awarded a password for the final part of the game (The ending), which I won't give away because that's wrong. The game is fun for all the family. The game plays smoothly well.

On the graphics front this game looks very stylish. Practically every screen must have been painted in a art program because the graphics are probably all C64 hires/multicoloured bitmap graphics. The detail for the graphics is magnificent and very colourful. The sprites are very nice looking as well. There has been a lot of attention to graphical detail with this game which was worth the effort. The loading picture is artistic as well.

As for sounds in the game. The sound effects are pretty original, because I never heard nice filtered sound effects like this in a game. This game does not only have sound effects, but it has an excellent sound track to the title. Feekzoid's music stands out really well with this game, the intro and end sequence. The music is very atmospheric all the way through the game. The in game tune is over 9 minutes long and you are sure to really enjoy it as I did.

The tape version of this game is split into 3 different parts. The first part used is the intro part. You are first presented with a nice picture, and then the intro comes on. The intro is just a 2x2 char up-scroll, with a longish story line. There is also music playing in the background, which makes things more atmospheric. Then the picture comes on again and loads in the game (While the loading music is playing in the background). Then the last part has to be loaded in separately, where loading music will play again, which is good. Overall the production is worth its price of 3.99 on a real Commodore C64. Not only do you get hours of excitement and many puzzles to solve, you also get a proper C64 tape with professional artwork on the tape inlay in full colour and a very professional tape loader. I was very impressed with the production and would love to see a sequel to the original game.

The Sceptre of Baghdad is available from:
<http://www.binaryzone.org/psytronik>



Questions about Commodore Computer club

Robert Bernardo: What is the mailing address?

Commodore Computer Club (UK): As in email? You may contact either contact@CommodoreComputerClub.co.uk <Shaun Bebbington>, or shop@CommodoreComputerClub.co.uk <Nigel Parker> - Nigel Parker (the club treasurer) has a snail-mail address, which may be obtained by contacting him first.

RB: What is the website?

CCC (UK): The website is still under construction, and can be accessed by pointing your web-browsing software to either <http://www.CommodoreComputerClub.co.uk> or <http://www.SuperCPU.co.uk>.

RB: Who is your official contact person?

CCC (UK): I'm [Shaun Bebbington] listed as the club secretary, Nigel is the treasurer and Allan Bairstow is listed as the club chair person, however real life means that things are taking a little longer than we had hoped.

RB: Who are your officers?

CCC (UK): As above.

RB: How often do you meet?

CCC (UK): Club rules state that we must meet at least once a year. We will also be attending events, such as <http://www.byte-back.info>, which will be held in March 2009.

RB: Is there a newsletter?

CCC (UK): At the moment, all news is delivered via private members areas of the club forums, and through our own (again private) Google group. Commodore Free is being phased in as the club newsletter, and will soon be released to members first and everyone else second.

RB: What are the membership fees?

CCC (UK): Membership fees start from £3 for six months, and up to £30 for life membership. Most people prefer the latter option, as they want to be involved long term.

RB: What support do you have for the members?

CCC (UK): We can provide spares [when 'in stock'] such as chip or keyboard replacements and so forth, as well as easy fixes and maintenance - these will usually be free to members, but always charged for non-members. We would like to organise workshops, such as using GEOS or Wheels, or using Slang, or even just general 6502 coding. Club members will get first refusal on anything that is in our club shop (still to be set up), and any items listed will be cheaper to members than non-members. For instance, the shop will soon be acquiring some 1541 disk drives; these will be 10% cheaper to members.

RB: What are the other advantages of your club?

CCC (UK): One practical example is when Conrad had a dodgy 1541 MK-II drive, so he brought it along with him. It was a simple head alignment problem, so we fixed it, there and then. It would have been pointless to send him a D64 image or the alignment software on disk because how would he have loaded it in the first place? So, we're pooling resources, not just in terms of money, but also knowledge. The main point is that we want to keep our Commodore computers useful for as long as possible, but we recognise that for the typical nostalgia hunter, who would typically emulate a Commodore, joining a forum like Lemon64 [for gaming], or subscribing to comp.sys.cbm would probably ideal for them. The latter is a better example as we don't just support the C64, nor are we just interested in gaming, but we aim to support all Commodore 8-bits, as well as the DTV.

Regards,

Shaun Bebbington,
Club secretary,
Commodore Computer Club (UK).

