

Commodore Free

Issue 16 February 2008
www.commodorefree.com

Free to download magazine
Dedicated to Commodore Computers

Available as Text, Html, PDF, SEQ and Commodore 64 D64 disk image



Editor

I re-did the logo and while I am no artist I think it almost looks quite good (ish) I would love the whole thing designed using a real Commodore 64 and maybe if I get the time I will give it a go maybe as a low resolution blocky image. You will see the change as the reflected Commodore Free is graded and moved up slightly. Looks more natural looking as my old art teacher would have said, I expect if he saw this he would be on the floor dying in fits of laughter, I didn't last long in art and dropped the subject as quickly as possible when I was at school.

Maurice Randel continues to upset people and he remains quiet about what is happening and so manages to upset everyone by his lack of communication. Can the rights to produce CMD products be removed from him?

Remember the Poster competition ends at the end of this month and so I cant accept any more entries after the last day in February, I presume by the time you read this text the competition has already ended, thanks to all who entered, I had a hard job deciding a winner and it may not be to everyone's liking, but I think its interesting reading; so unless a flood of other entries come in before the end of February, I have already picked a winner and you can read the comments next issue.

Again I am suffering from exams and struggling to fit all the time in, but I managed another issue. Hope its to your liking, keep the readers comments coming in they seem to have dried up, I don't mind just a simple Hi great issue keep up the work or even hi I read every issue I think you should give it up as a bad job because the issues are rubbish.

Ok you can stop reading this rubbish and get onto the main magazine speak to you next month.

Regards
Nigel
Commodore Free

HOW CAN I HELP COMMODORE FREE

Ok the best way to help would be "write something about Commodore" (yes for the observant I spelled the company correctly this time) _grin seriously though 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

Thanks Nigel
www.commodorefree.com
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News

Cottonwood BBS

In an effort to consolidate my various websites onto my own server, the C64/128 BBS List is now located at <http://cottonwood.servebbs.com/cbm-bbs-list.txt> ... I'll still keep it posted at the old address for a while, but eventually it'll only be available at the new address.

Additionally, the Cottonwood BBS Informational Website is now at <http://cottonwood.servebbs.com>, and my personal website is at <http://cottonwood.servebbs.com/wiskow>. Simple HTML pages with a note providing the new addresses have been posted at the old addresses.

Amiga Forever runs on Eee pc and Onlaptop per Child Hardware

I thought you might be interested in seeing the Amiga OS running on the OLPC and the Eee. As we are putting the finishing touches to Amiga Forever 2008, we just previewed the Amiga emulation and OS running unmodified from Amiga Forever on both the OLPC XO and an Asus Eee PC:

Amiga Forever 2008 Running on One Laptop per Child Hardware
<http://www.amigaforever.com/news-events/20080105oapc/>

Amiga Forever 2008 Running on Asus Eee PC
<http://www.amigaforever.com/news-events/20080115eee/>

I'd be happy to provide more details and answer any questions you may have. You are free to use the texts and photographs from the above two pages.

Thank you.
Regards,
Takeo
<http://www.amigaforever.com>

Computerworld

Computerworld has posted an interview with Amiga v.p. of technology, Adam Chowanec. He talks a bit about the Commodore and a lot about Amiga. Go to

<http://www.computerworld.com/action/article.do?command=viewArticleBasic&articleId=9052598>

Artillery Duel Network 1.0 Released

Here it is! The first non-beta release of the first multiplayer game for RR-Net, ETH64, and FB-Net.

<http://home.ica.net/~leifb/commodore/duel/>

Download it here:
<http://noname.c64.org/csdb/release/?id=45526>

Major update to the C64 PAL/NTSC core

FPGA64 for the C-One is now available in V0.23 - Peter has re-written large parts of the VIC-II code with the result that DMA-delay now works perfectly! Also, VIC-tricks like displaying 9 sprites in the same row are working correctly, and Mark McDougall has contributed a joystick emulation to the keyboard interface, so the numeric keypad can be used as joystick. As always, the new version of the core can be found on the download page of this website. Thanks, Peter and Mark! Final core bounty: We really want the board to leave beta state now. The final thing to test is the 65816 processor, therefore we have a bounty of 500,- EUR for the first person who is making a VIC-20 or C64 core using the 65816 processor on the CPU/RAM card. The bounty is good until march 20th of this year! All necessary technical information has been published in may 2007 in the cone_cores Yahoo group. Read message number 89 for all the details. That Yahoo group is a very good place for finding technical answers. If you want to claim that bounty, joining this group will increase your chances!

SCACOM Aktuell issue 4

The new (German) issue 4 is available via www.scacom.de.vu. It's a special issue about the C264 Series of computers that Commodore made (C16, C116 and plus4). To download: www.scacom.de.vu in the menu on the Left click on SCACOM Click on SCACAOM Aktuell (PDF Magazin) and download the latest issue 4. Hope you enjoy reading

SCACOM Team

MossyCon 4

MossyCon 4 is on track as the first North American C=/Amiga event of 2008. Here are the details -- Date: Sunday, March 16 Set-up time: 10 am Official show time: 11 am to 3 pm Unofficial show time: 3 pm to ? Location: Fultano's Pizza 620 Olney Ave. (just off of Highway 101/5th St.) Astoria, Oregon 97103 Phone: 503 325-2855 <<http://216.151.27.205:8080/apache2-default/index.php>>

Admission: Chip in for pizza, sodas, beer, coffee, etc.

Raffle prizes: new-in-box GEOS 64 2.0, DTV stamps, and more Presentations (tentative): JiffyDOSsed VIC-20 with CMD FD drives and hard drive, Lt. Kernal hard drive for the C64, Behr-Bonz VIC-20 Multicart, Beginner's walkthrough of the C64 User's Manual, Commodore/Amiga videos, Prophet 64 in a modded SX-64 On exhibit: Dave Haynie-autographed Amiga 4000, CommodoreOne, modded SX-64s

For nearby accomodations, go to <http://www.hotels.com> and input Astoria, OR

For more MossyCon 4 information, contact the chancellor of the Anything Commodore User Group (ACUG), David Mohr, at [lordonin\(at\)vcsweb.com](mailto:lordonin(at)vcsweb.com) Fab!
Robert Bernardo

NEWS Continued.....

Prophet Cartridge discontinued!

Yes the cartridge is discontinued but read more about why this is good news later in the magazine also online at

www.prophet64.com

SCACOM Aktuell English

A version 1 of the English edition of SCACOM magazine is available to download

www.scacom.de/vu

Guinness book of records Gamers edition

<http://gamers.guinnessworldrecords.com/default.aspx>

Read more about whats included

http://www.reghardware.co.uk/2008/02/14/guinness_world_records_video_game_edition/

CCCC Expo

CCCC is pleased to announce beginning on June 28, 2008, and continuing thru the 29th, we are hosting an expo for all Commodore enthusiasts. The event is taking place within greater Cincinnati, Ohio, at the Drawbridge Inn of Ft Mitchell KY.

A huge room will be available for demos and dealers. More details will be coming soon.

David Witmer Cincinnati Commodore Computer Club President Webpage

<http://www.geocities.com/c64-128-amig>

Commodore Videos

Thanks to Robert Bernardo's video work and 1.5 solid days of editing and converting by www.commodore.ca, we now have a substantial amount of video content posted from the Computer History Museum's: Impact of the Commodore 64.

Note that many of these files are large and we only have a limited amount of bandwidth. As such I recommend that you RIGHT CLICK ON THE APPROPRIATE LINK AND SELECT "SAVE TARGET AS" to download the files to your computer rather than having them run through your browser

<http://www.commodore.ca/gallery/video/video.htm>

Bil Herd - Commodore C128, Plus/4, Early Days
Bil Herd - Everyone Worked for Jack Tramiel
Bill Lowe - Father of the IBM PC
Jack Tramiel - Atari Deal, Amiga Chips, Irving Gould
Jack Tramiel - MOS Technology was Critical
Jack Tramiel - Commodore History His Own Words

Jack Tramiel - Commodore History – Interview Steve Wozniak - Tries to Sell Apple to Commodore

LOADSTAR 248

It has been a long time in coming, but LOADSTAR Issue 248 shipped on Valentines Day, with emails shipping on Sunday, Feb 17. We do apologize about the long hiatus, but we are finally back in the swing. During the year, disks -- both 5.25 and 3.5 DD/DS have become hard to come by and expensive. Fortunately, we now have enough 5.25 disks to finish our run of 256 issues! And the cost of 3.5 disks is not too much. So, if you want to get in on the last 8 issues (249-256), email is the way to go. We email D81 and D64 versions. The subscription price on these last 8 issues is \$24 for all eight.

Thanks to all LOADSTARites for your Loyal Support Dave www.eloadstar.com

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LOADSTAR by the Dozen.

Get your back issues in a convenient Windows-ready format.

The Commodore 64 Book. by Andrew Fisher A new published perspective on our favorite computer.

F U N W A R E

Shamrocks Solitaire. by Maurice Jones A completely different and addicting way to play cards.

Shisen-Sho. by Ron & Kate Slaminko It's tile matching with a twist, and a little help from the C64.

Alfredo's Pitfall by Ricky Derocher The little guy is back, with music and more.

Elevator Music by Fender Tucker A puzzling piece of cyber-enigma, wrapped in a fog of binary pasta.

Misfortune by Bad Bytes A classy game from Down Under that will certainly silence those who call LOADSTAR "lame!"

M U S I C W A R E

Corky's Classy Classics by Henry "Corky" Cochran Three songs you will love to hear.

Graphics and Music by Dave Moorman A step by step tutorial for putting bitmap graphics and SID Songs in your programs – with DotBASIC Plus!

M O R E F U N W A R E

Knight's Journey by Ricky Derocher As a Knight Errant, you must carefully pick your way through this adventure.

Corsair by Jon Mattson Make your fortune trading on the frontiers of civilization.

MOOD by Perff of No Name DOOM on the C64 never looked or played better.

C O D E R W A R E

DotBASIC Plus by Dave Moorman An Object Oriented BASIC Extension that can keep on extending for years to come!

Interview with Al Anger

Hardware modder
<http://alanger.net/>

Hello Nigel. Thanks for the interview. To use this, I require it be included as is, with no changes of any kind to your questions or my answers. If you can not abide by this requirement, do not use it.
Thanks for your understanding.

Q - Please introduce yourself to our reader

A - Hi, I'm Al.

Q - Can you tell us about your computing history what was your first machine etc

A - IBM Card Punch. Followed by the IBM Card Sorter. And then the IBM403 Accounting Machine. This was in 1967. In my Jr. & Sr. years of high school, I took the regular classes, math, history, etc. in the morning. In the afternoons I road a school bus, by myself (plus the driver, of course), fifty some miles to Buffalo NY. There I took the local community collage classes in Data Processing, as it was called then.

<http://www.columbia.edu/acis/history/026.html>
<http://www.columbia.edu/acis/history/sorter.html>

I've included pictures of a panel similar to one that plugged into the 403. The banana tip jumpers were how the machine was programmed. They told the machine where to print the various bits of information. More here:

<http://www.columbia.edu/acis/history/407.html>

These machines were from the fifties to early sixties, but were still used for teaching in the late sixties.

I was not the type to ware the thin black tie, so after high school I moved to Miami FL. and worked at restoring old wooden boats. I played with computers on the side during the seventies. Mostly building computer kits.

In the eighties, I took classes at Miami Dade Community Collage. Mostly programming classes, just for fun, not for credit. In eighty two, I bought a Vic 20. That began a life long love affaire with Commodore Which runs through today.

In the mid eighties, I was asked by a friend to manage a computer store; Computer Warehouse. We sold everything from the Adam to Zenith laptops.

In the nineties, I managed one hundred and fifty desktops for an import/export broker. They had eight offices from Tennessee to Florida.

Q - Can you tell our reader what you do for a living?

A - As little as possible. Right now it's running a small PC repair shop.

Q - Can you tell our reader about your website?

A - It has a blue background, and lots of pictures.

Q - Can you tell our reader about your collection of machines (commodore and none commodore)

A - I don't collect any more. I've given away or sold most of what I don't use. I don't need to have stuff, just to have stuff.

Q - What is the term "modding" and how does this relate to Commodore machines

A - Mod is short for modifying. It relates to C= as to modifying anything else.

Q - Why did you decide to Modify Commodore Machines?

A - Because I had lots of them, and they are relatively cheap. If you brake it, no big loss, financially.

Q - Are any of the modded machines available for



sale

A - No. I tested the waters with a sale on eBay, and didn't receive near what it was worth.

Q - Can you tell our reader about Ray Allen's 128DCR, how was the project started and why.

A - I had taken a few years off from modding. I wanted to do something again and made some remark on IRC or mailing list, I forget now. He had the courage to follow up on it.

Q - Ray Allen's 128DCR project looks brilliant do you have plans for any more maybe to sell off or was this purely a 1 off?

A - Thanks for the kind words. It is a one off. No one wants to pay what it's worth. even at say, \$20/hour; it took hundreds of hours.

Q - Did you think about repaying the drives in Ray Allen's 128DCR blue so they matched the case?

A - No I didn't.

Q - Ray Allen's 128DCR did you come to a point where you thought you had "bitten of more than you could chew" and think about giving up?

A- No, not at all. I enjoyed every minute of it.

Q - How long did the project take and what would be the costs involved in time and materials

A - I didn't keep track of the time. Hundreds of hours. The materials were minimal. IIRC less that \$200.

Q - Did you have any problems obtaining materials for the conversion

A - No. With the exception of the power supply. Danny crapped out on us. He's an idiot.

Q - The Commodore 128 in a tower case of course still looks great can you give our reader information on what you managed to fit into this Modification

A - <http://alanger.net/comm/tower/index.html>

A Commodore 128 installed in a PC tower case.



Installed in the tower are a Ramlink;
a CMD FD 4000; a CMD Hard Drive;
and a 14.4 modem attached to a SwiftLink.

Every connector on the motherboard was modified.

What you see is what you get, as the expression goes.

Q - How long would a tower conversion of a commodore system take, I presume this is a question like how long is a piece of string

A - Hundreds of hours.

Q - The problem most users have is with power supplies, have you ever thought about going into production modifying power supplies for these tower conversions

A - Nope. No thanks. :)

Q- I asked Commodore gaming if they would do a "tower case and psu" to convert a commodore 64 or a commodore 128 they said they may think about it depending on the Sales of there pc's have you any thoughts, do you think there is any Commercial value in such a product

A - I really don't know. I have no experience in large (relatively) scale production. Generally, I don't think there is enough market for C= to make any real money.

Q - Have you seen Commodore Gamings cases and do you have any comments

A - Yes, I've seen them. De gustibus non est disputandum.(google is your friend :)

Q- Do you think its still good to see the Commodore name on products even if they are just Pc systems

A - rose by any other name would still have thorns.

Q - What Commodore mod are you most proud of

A - That's like asking which child I like the most. (if I had children)Very hard to answer. How 'bout; whichever one I'm looking at?

Q - Do you still actively use Commodore machines?

A - Less all the time. Haven't turned one on in several months. A case of been there done that; made the T shirt.

Q - Do you think If Commodore was still in business they would be creating just PC systems or Do you think they would carry on building on the Amiga system

A - Commodore missed the boat years ago. The Amiga, or some derivative, should/could have been the PC in widespread use today.

Best Regards,
al

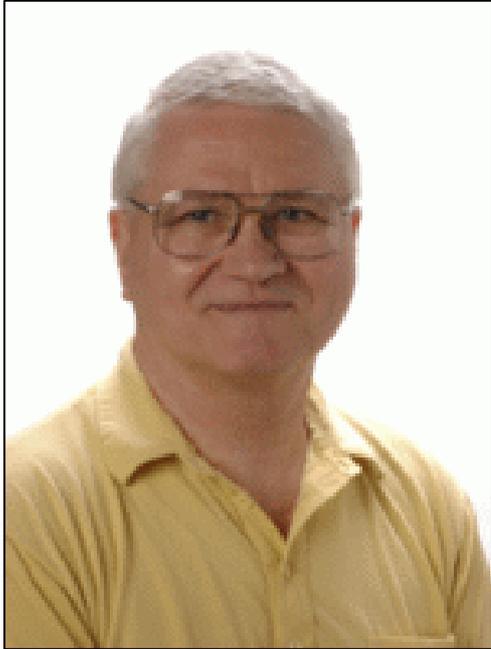
Interview with Ray Carlson

Repair engineer still supporting Commodore Machines

<http://personalpages.tds.net/~rcarlson/>

Nigel,

This interview was tougher than it seemed at the start. I wrote and rewrote it many times, and I'm still not sure it's what you wanted. But, here goes...



Add one more name to the endangered species list: the Electronic Service Technician. Due to the way electronic devices are built nowadays, lack of support from the manufacturers with regards parts and service information, and the initial low cost of complex devices such as DVD Players and Computers, the independent service facility has become a thing of the past. I've worked in and out of repair shops all my adult life.

Presently, I'm in the A/V department of the University of Washington in Seattle, Northwest Washington State, USA. As of this writing, I expect to retire in about three years. I install, maintain and repair all the equipment in their electronic classrooms, from control systems to data projectors. Most of that stuff is not considered Repairable, but I tackle it anyway. Working without schematics or a parts stock, I can still manage to salvage some that would otherwise go to State Surplus or the garbage can.

Repair technicians were the buffers between the consumer and the manufacturer. The tech had to know how the device worked, what mistakes were likely to be made in its' use and, of course, how to fix it when it failed. The ever-increasing knowledge necessary to do the job took a tremendous investment. In the tube days, a technician could make a living repairing TV sets alone. Later, just to survive, servicers had to learn to repair (dare I say it... at a profit) just about anything the designers dreamed up. Repair techs must have a working knowledge of electricity, electronics, optics,

physics, chemistry and mechanics. Their tasks are as mundane as wiping the dust off a repaired TV or as important as servicing that electronic defibrillator so the doctor can work his "magic".

The first consumer VCRs sold for more than \$1500. Repairs amounting to several hundred dollars were acceptable. Now the customer can and does buy new product for less than the cost of repairs! Even new technology is obsolete in just a few years and it is cheaper for the manufacturers, now mostly based in China, to produce products that are not repairable. Glass picture tubes in TV sets and computer monitors are being replaced by LCD and other displays. The world is shifting from analog to digital. Fewer after-market parts vendors, and more specialized and proprietary parts add to the "repair not possible" problem for older equipment. Generic parts are virtually unknown for new electronic devices.

Many times, I didn't see that electronic gizmo until a broken one showed up on my repair bench. Repair technicians are detectives searching for clues and we actually enjoy zeroing in on the bad part(s). It's rarely a matter of just seeing "where the smoke came from". A good tech will not only find the bad part but will find out what caused the problem in the first place. If a resistor is overheating, there is a reason. When a transistor fails, it often times points to another fault.

Just to replace that part is not enough. To do our job right, we don't just treat the symptoms; we must "cure the disease". Re-work on a repair angers the customer and costs us time and money. Although the work is often frustrating, there is a pleasure in seeing that gadget work again, no matter what it is or who owns it. We enjoy sharing our knowledge, too. It's part of the fun.

We hate waste. It hurts to have to give up on a job because it's uneconomical to repair or we can't get the parts, and then see the equipment go in the trash. Therefore, many of us end up as "packrats". We salvage and store anything which we think may be useful later because we see a time when repair parts will be impossible to obtain. Even though the manufacturers do not support our efforts, we still try to repair down to the component level, rather than replacing a whole PC board, or the whole unit.

We take pride in a job well done. It is often times our only "thanks". Our motivation comes from within. No one but another tech knows what we do and why. You might say we have an image problem. We are Misunderstood and, for the most part, invisible. In all my life, I have seen exactly ONE Television Commercial featuring a TV repair tech. When we do our jobs right, no one knows or cares. We are "video janitors". It is only when we goof that it shows. As with all professions, there are those who shouldn't be in the business. Some are sloppy... they may be Competent but are careless and/or don't follow up on details. That drives me crazy... especially if I have to do their re-work. A few can't

solder. No excuse! Dishonest shop owners reflect badly on all of us but are, fortunately, in the minority. The "last gasp" of independent service turned some saints into sinners. Most techs I've met are middle-aged men. This profession didn't draw many young people. I have only known two female techs. They were professional, intelligent, fearless in attacking problems, and a joy to work with. I miss them.

A repair shop was usually a Management afterthought... support for a Sales facility. It was the grubby little room in the back, cluttered with equipment waiting to be looked at and repaired sets as well as mountains of debris of every description... and an overworked tech. It was rare indeed to find a clean, quiet, well lit area free of clutter. I worked in two of them, so I know they existed. The need has always been there but the overhead costs are enormous. Management (and the general public) sees us as a necessary evil and we look the part. Most of the shops I worked in were similar: the uninsulated back corner of the warehouse, someone's garage, basement, back room, etc.

I have always fought for more space, more schooling (new product update classes, at least) and better test equipment. Since the "bean counters" never really understood what it was we did, how could we hope to get them to spend more money on service. With those handicaps, we technicians laboured along the best we could. We knew the customer would come out on the short end and we would take the blame! The only worse thing would be no techs at all. With a fixed salary, we got only a fraction of the labour charged to the customer and nothing for the parts. We knew we would never be rich no matter how hard we worked. It was not the kind of club that attracted new members.

I didn't choose this profession. At the beginning it was a hobby. Like most kids I was curious about how things worked. I took apart toys and watches and radios. I fixed bicycles and roller skates. If anyone deserves credit for getting me started in electronics, it was my father. He provided the fertile ground for my education and he bought the first tools and test instruments I owned. I remember working on a table radio salvaged from the neighbours trash back in the early 1950s. I spent months trying to make it work again. That one never did.

No one around could answer my questions, so I learned to read technical manuals. I progressed to black and white TV sets and would spend most of my spare time trying to figure out how the various circuits worked to produce that magical picture. Try discussing stuff like that with your grade-school and high-school classmates. I was literally an outcast. I spent months building and rebuilding sections of a TV set to see if I could make it better. All of this was play to me. I loved it! My first job (early 1960s) was fixing tube and (then new) transistor radios and reel-to-reel tape recorders at a "wage" of a few dollars per item repaired. I always liked "piecework" (getting paid by the job rather than a fixed salary) with personal initiative as the motive for better pay.

I'll never forget the first time I saw a color TV in a department store. I was 18 years old in 1962. I sat on the floor in front of the set for half an hour in total amazement. "How do they do that?" A year later, I paid \$50 for a color TV no one could fix and spent several months learning about color circuits.

The first program I watched in color on my set was "Bonanza". By then, the Disney TV shows were in color too. Real Magic! I later talked the guy who sold me the set into hiring me part time for \$50 a week. My "career" was flying!

The Army "borrowed" me for two years (1965-67) and, with my electronics background, of course made me a Military Policeman. Army logic. With a rifle over my shoulder, I guarded a missile base in Germany for 14 months. About three months before my tour of duty was to end, someone learned of my "talents" and sent me to "Radio School" in the Bavarian mountains. I almost slept through it and still made Honor Graduate. They figured I would re-enlist but I hungered for freedom and electronics (in that order). I remember angering a re-enlistment Officer by answering: "Do I look crazy to you?" A month later, I was "back in the world". Imagine being anxious to get back to work.

Since that time, my education and on-the-job training has been an accelerating spiral... VCRs, videodisc players, microwave ovens, audio cassette and CD players, test equipment, and on and on. Just to keep up, it was necessary to regularly update my schooling on various pieces of equipment, new VCRs, TV Studio gear, microprocessors everywhere... and computers. Like most of my education in electronics, what I learned about computers has been self-taught. I'm a "hardware" kind of guy. Early on, I spent more time inside the box than I did pounding the keys. Commodore, IBM, DEC, Kaypro... all have been my teachers. I bought my first computer system, a C64 with 1541 and printer in 1986... relatively late in the game. The learning curve was rather steep. I "consumed" utility programs, learning how the devices worked. I never liked games.

The majority of people outside the circle of technicians who fix all these magical boxes must assume it's done with mirrors and smoke, assuming they think about it at all. They don't know what happens inside that box and most of them don't want to know... until it breaks! How amazed (or bored) they must be to stare into a Computer or VCR. Most of it makes logical sense to the tech. Sometimes WE stare in awe! We see the wonders around us contributing to our enrichment... and our demise as technicians. High-priced items like a Camcorder that is un-economical to repair or a two year old "obsolete" computer are good examples.

Before the internet went mainstream, I was repairing Commodore equipment and writing repair articles for the local computer clubs. Being an electronics tech, it was a natural progression to get into computer repair. The main problem at that time was that there was virtually no service information out there. I've been acquiring and sharing everything I can since then. In the early 1990s, I started answering hardware repair questions on the Internet newsgroup comp.sys.cbm, and I still frequent that group when I have time. I later put up my own websites after I saw my repair information, mistakes and all, appear on other sites all over the world. The only way I could easily make corrections and add updates to existing material was to control my own websites, so that's how they got started. It appears to be the only comprehensive source of repair information and schematics for Commodore gear in the world.

It's amazing to me, now that I think about it. One of a kind. My two sites include not only repair

articles but hardware "hacks" such as how to install a reset switch in an SX without drilling holes in the case, and a "protector" circuit to prevent power supply damage to the C64. Schematic diagrams for Commodore computers, monitors, disk drives, etc. are available on another site.

Commodore computer hardware has proved itself to be quality equipment. They used fiber glass epoxy silk screened boards and quality components throughout. How else could such equipment survive over two decades. The downside of proprietary parts such as their custom ICs is that they are scarce now and only available from salvaged boards. When the last SID (sound) chip has failed, that's the end of it although there are emulators out there designed to run on a PC. For the diehard original hardware enthusiast, there is a limit, but it will be at least a decade or more if I have anything to say (and do) about it. I have quite a bit of experience with the C64 and 128 but have not done much with PETs or the Amiga so I limit my repair efforts to the former 8 bit stuff.

Along with full time employment, I've always had a home-based repair business to supplement my income, up until about two years ago. Although I have stopped repairing consumer electronics for a living, I still keep my hand in for friends and family, at least for the stuff that can still be repaired. Included in that is Commodore equipment which I'll continue to repair for anyone who asks until I run out of repair parts. Being a packrat by nature, I have many computers and drives stashed away for salvage. The "black brick" power supply is a common failure item but is not repairable because it's "potted" in epoxy inside. I recently managed to develop a replacement for the PLA chip in the C64. It's the IC that fails so often because it runs very hot normally. I now install heat sinks on the PLA, SID and the MPU whenever I repair a board. If too many chips have been damaged by over voltage from a failed "black brick" power supply, I simply swap that board out to keep the repair cost down, then keep the dead board for salvage. Not all chips are bad even if the board has been so damaged.

I've never advertised, so all of my Commodore repair jobs have come by word-of-mouth. I don't know how much I could handle if lots of people suddenly started sending me work because I still have a full time job. That said, I'm available if anyone wants to have their equipment serviced. A few years back, a Commodore user in the UK was amazed to find anyone anywhere who could repair his 128DCR boards. He sent me two of them and some spare chips. Everything in the USA uses the NTSC television format and both his boards were European PAL format, something I've never worked with.

Those were the most interesting repairs I ever did. Some chips were installed backwards, some in the wrong sockets, bent pins, etc. In addition, the surface-mounted disk drive head amplifier chip in both boards was bad. I hate working on surface mount stuff, but through the kindness of a friend, I got two 1541-II spare boards that each contained that same IC and was able to do the SMD chip swaps and repair the DCR motherboards. It cost more to ship them back and forth than I charged to repair them, but the UK owner didn't care. He was thrilled to get them working again at any price.

I usually charge a flat rate rather than by the hour. The charges depend on what I have to do, but I prefer to put a "cap" on the costs that I will not go over without customer approval, or if they need custom work done. I try to make an initial diagnosis and estimate cost of repairs based on symptoms before the customer ships the equipment. In some cases, a user can repair his/her own stuff with my help, via email. That said, I don't like to sell parts only. Diagnosis by swapping parts around is hardly the best way to troubleshoot for the inexperienced. Unless they have spare boards on hand. It usually ends up being a waste of money if I have to supply chips that may not even be used. Further, ICs have become even more precious (read more expensive) as the supply continues to shrink and I can't afford to waste any. When I'm doing a repair, I don't discard anything unless I KNOW it's bad.

I've done very little with CMD products mainly due to lack of support. Without schematics and a stock of parts, I would have little chance of fixing their equipment. After-market disk drives are another matter as they are much like Commodore drives with regards design and parts equivalents.

I once heard of a car made in France that had no hood opening. You put gas in one end and oil in the other... no maintenance. When it stops, you haul it in, it's ground up and you buy a new one. Electronics is headed in that direction. In the mean time, the electronics service technician, like the auto mechanic, is hated and feared and needed. Until we are needed, we are invisible. Soon we will be gone. It's happening... it's history.

Ray Carlsen

COMMODORE FREE

I would like to thank Ray for taking the time to do this interview, I appreciate you spent a lot of time forming the replies and I was transfixed reading the information you sent back.

I feel many people work hard and no one appreciates them, I work in IT support and never receive any thanks for the work I do people just expect everything to work. Most times people only notice you when the network and computers stop working, then they wonder what you actually do all day and when it will be fixed.

Ray is a rare breed of technician rather than fix a broken part he is looking at why the part failed and addressing the root cause so it won't fail again.

Commodore machines never get any younger and parts do fail eventually we will have no spares left what will we do then, just use emulation.

Intro "THE END"

Lord Ronin from Q-Link

Funny that I am writing this after all the parts and the outro have been written. Guess it is best as now I can explain things, after they are done, in a better light. I call this the end, because after you have gone through this poorly written drivel. You will have ended your lack of knowledge on the worlds greatest PC. But know now that I am exceptionally biased towards the C=PC platform. <VBG>

Sort of explain this in part #1. What this is all about, a personal look at the Commodore 64. Using besides personal experiences and my ueber bias for the C=64. The Commodore 64 Users Manual. A book that was included in the box, when the PC was sold new.

I wrote this for many reasons. My own users group of beginners. But also for those that are the 2nd generation of C= users. Like I am and face the same problems of finding some form of assistance on how to use the C=. I mean by that statement, just what it says. In fact I have taught people locally and on line how to load a programme from a disk. Because they didn't have any information on that subject.

No way am I an expert. At best I am a lamer. A very dedicated, use the C=everyday, it is my primary computer platform, lamer. What follows in the 12 parts is a personal look and interpretation of the information of the users manual. Full of bad grammar, spellings and typos. Each section was worked upon with the local users group in a programming class. Before it was written up in this series. Which in no way proves any accuracy <G>.

One thing that I have heard about is people attempting to learn how to use the C=. But coming from other platforms. These people have trouble with the terms used in the C= PC world, as compared to their current platform. I understand that problem well, except in the reverse. I had not a lick of home computer experience before I was given a C=64 system in the early 90s. Through out this monograph, I attempt to deal with the terms and give meanings to them for the user. A task that is hard, when I have no reference to the other platforms.

What I hope you will see in this series is not only the method to hook up your C= 64 PC. As yes I do cover that part. But the fact that you are in control of the computer. Even with the little that is here on programming. You will be making some music, some different forms of animation and a couple simple little games. A taste of what you can learn to do with the C=. And you don't have to be a geeky nerd to programme this machine.

Along with that part. There is also the understanding that you do not need to programme to enjoy this machine. Though there is a lot on the programming in Basic in this series. Because the manual deals with the topic in some depth. I did make a couple sections on just the parts of the 64 for the user. Where I talk a bit on different games, Word Processors, Desk Top Publishing, Scanning, Voice recognition and other topics, that we have had since the mid 80s. Plus some of the more recent developments.

How to use this series is a big question. I write it on a Commodore 128Dcr. Put in 64 mode and used the EdStar II writing tool from LoadStar disk Mag. What I don't know is if you are using a 64 breadbox, 64c, 128 in 64 mode, or trying this in emulation, such as vice. Nor if you are reading this on a screen or have printed it out. Or reading it on a now C= screen while trying it out on a C=.

Trying to take all of that into consideration. Best way to do this series is to have a copy at someplace. Screen or print out. Then go over the material, as there are typed in things and proceed to work step by step. My intention is to have it personal and friendly in style. I can tell you that you won't understand everything, after the first run through. Truth be told, took me 5 times through the book. Before this old brain started to make any sense of the material. While others in the group did the same in 2-3 times through the book.

So now you have the intro. Lets start on the world of the greatest PC ever made, loved by millions for over 20 years.

Lord Ronin from Q-Link

Chancellor A.C.U.G. #447
Editor The Village Green
Managing Editor Commodore Mailink
Contributor to C= publications
SysOp of a C= BBS

Fanatical, devoted C= user.

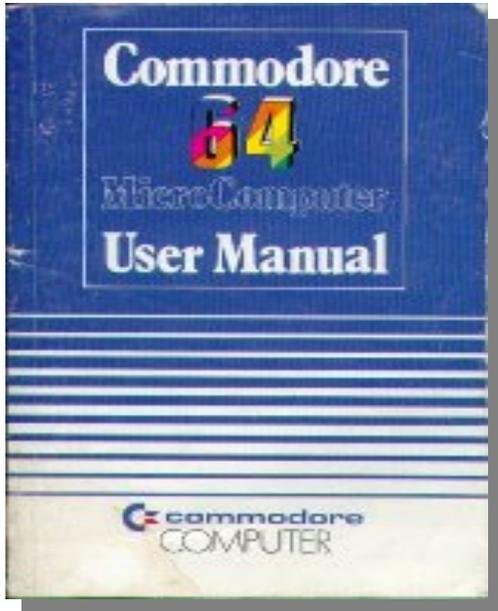
In the Beginning

Lord Ronin from Q-Link

"How do I use this thing?". To quote The Cat from Red Dwarf "What is it?", a line he would say often about most techy things. "Where is the computer?".

OK that is enough of the things that I hear about the Commodore 64/128 system from people that know nothing about it or how it functions. Save for one thing that I hear a lot, 'cause other people say it and so do I, "How do I use it?". Yuppers same pretty much as the opening line. That in a small way is what this set of writings is all about.

First lets clear a few things up. There were around 30 million of these buggers sold. According to some people. I don't have all of them, at least not yet <BG>. This was the most popular PC of the 80s and into the early 90s. Why is the next question that I am



usually asked. Well despite my over talkative nature. That reason can't really be pinned down in a few words. Perhaps this set of informational things will help, perhaps you will find the magic as you play with the PC. Other computer companies in that time frame said they were the best or the #1. Well they did just like a Mr. Hitler did in the 1930s. They lied about things. But for the truth on this part. I suggest you check out "On the Edge" by Mr. Brian Bagnall. Found through amazon and other online sources. Web search for the commodore book and you may find it that way as well <VBG>

But back to clearing things up about this set of writings. Since I digress with the amount of stuff about this great PC. I am not an expert on the subject. I am a fanatical user that thinks this is the worlds greatest PC. I am not a hardware hacker <guy that messes with the actual workings and such>. Nor am I a software hacker or cracker <guy that tears into

and changes programmes>/ In fact I am not yet even a lamer level of a Basic programmer. I am a user, and that is the end to it. So tech and gear heads are gonna get sleepy reading this stuff.

Next to clear up is the who that I am writing this for, besides my own egotistical needs. 'cause man with the way I ramble about, you know that I am not a writer. Well I am writing these for those that I call 2nd generation users. That being anyone that scored up a Commodore PC, lets shorten that to C=, after the big heyday of the C=. Reason is the lack of easy to gain assistance in any form. A subject that I have harped on for years, that I have read about in lists and publications, and hear in my own users group.

Not to say that the information isn't around. Just hard to get these days. The books and magazines are not on the racks at the stores anymore. You have to find them in yard sales and the like. Check online and let the word get out that you are interested. Then you get what ever is there at the time. Oh yeah and now you may have to pay collectors prices for them as well.

There is another source of information on the C=. This is other people that have or still in some way use the C=. Here though is the big problem. The "been there, done that, got the doll and bumper sticker" attitude. You are at the page one and they are on volume 27. Many of them don't want to help you from your level. They want you to be near their level. Which they gained from long hours and many years. Add to that part, the fact that they know the stuff. Well it doesn't mean that they can teach it to someone else.

OK now there is one other problem in learning about the C=. Not the history revisionists from other companies, who just seem to forget the existance of the C=. No this problem may be in you. By that I mean what you already know about computers. That information may need to be trashed. As the C= is a completely different breed of computer. You may find that the colour and meaning of words are not the same as you currently understand. Since the older and to some the original meaning of the words are used in the C= books.

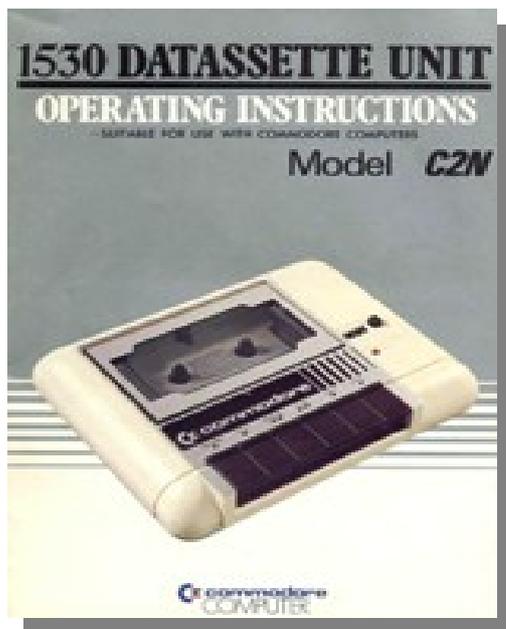
Right, now that I have pretty much offended most of the readers. Lets get to you the beginner. Who has gone through the above explanations of this series and some of reasons for it and wonder why you read this far. <VBG>

There are going to be a lot of self anecdotal bits here to illustrate my presentation. Which is simply, using the C= for the rank, abject first timer. I'll digress as is my habit, when there are side points to mention. For that I must give a reason. Like there is over 25 years of C= computing stuff out there, including post manufactured items. Stuff that came out after the company croaked. Give you a hint there that this is a loved PC.

Now then to the meat. In some way you have gotten a Commodore PC. Since more of the 64s were made than the 128 units. Plus the 128 ones also had the 64 in them. <That will be explained later> I am going with the 64 as the main line theme.

You have one! Got it as a 2nd hand hand me down. Scored it in a yard sale, rummage sale, jumble sale, thrift store, out of the closet, attic and all of that sort of thing. You have it because it is of interest to you. Or you are too ashamed to tell the giver to smeg off. Maybe you got it to do an electronics project. Rip out the music chip for an electronic instrument. Or you are into retro computers and want to see what they were like 20 some odd years ago. Yeah we did have electricity before computers <VBG>.

In any case. You have odds on that you didn't get it in the same way as original. So lets over that now, and you compare to what you have. There is a pretty coloured, friendly looking box. Inside in Styrofoam holders is your C=64. There is also a couple of cords <not all the time>. A black or tannish brick with two cords out of it and a "C=" symbol on it someplace. There is also a manual. That manual is what we will talk about in depth a little later on in this series.



One by one, that brick thing, and yeah it is called a power brick, is the thing that makes the C= work. For now, don't do anything with it. As all things that plug in and out of the C= should be done with the power OFF. This has two ends. One for the wall socket and the other for the hole near the switch on the right hand side of the 64. Early word of warning for you. That power brick is under powered for add-ons. You can literally fry an egg on it, if you add many things to the system. Yeah I did it as a joke. There will be some heat. But if it is hotter than you want to put your finger on it for over a couple of seconds. Well according to my old college electronics teacher. Then it is over 140 degrees. [Note of explanation, I'm in NTSC land and know very little about PAL things. All measurements are in standard US style] Remember also that that power supply is probably old enough to vote and in many cases old enough to drink.

I said that there are two cords, and this is also not always the truth. There would be one cord that will plug into a socket on the rear of the computer, and the other end through a matching transformer. Oh that is a little black thing that may have a switch and is to be plugged into your antenna input on the T.V. Right your newer T.V. doesn't have an aerial input. Rather it is cable ready. Not to worry, electronics stores have the adapter thing needed. Before you ask, yeah man, this was made to connect to your T.V. set. Much as in the same ways as the old game consoles did, in fact the same converter for the game console works for the C=. That is because more people had T.V sets than monitors at that time. But the C= will work on a composite monitor as well. Reverse is true, the monitor works great for a T.V. set. I know as that is what I am using at the kibbutz.

Hey if you are really lucky and have the box. See if the serial number on the box matches the one on the bottom of the C=64. If it does, and you don't want the system. Matching numbers makes it more valuable on re-sale.

So where are we? Oh yeah confused with my ramblings. Well to be honest, I don't know the what and how you gained your C=. Nor what you have in it. To that end, here is some of what I have picked up in collections, and it may fit what you have at hand. You see, I started in the 2nd generation. All of my Commodore created stuff is also used. Well my first system was a late Channukha present. To long of a story to bring up here. Suffice to say that I was computer phobic. I scored up a 64, monitor, pair of joysticks, pair of paddles <another form of joystick>, and a printer. None of which I knew how to use. Now then I also gained a couple of disk boxes <plastic things that hold 50 or 100 disks, depending on the size> of C= disks. Theses came in two major types. Factory disks, which are disks of programmes, commercialy made. Got pretty lables and at times you can even get the box for them. The other type is what we term "arkhive". Apolite term for copies and pirateware, of factory disks. OK according to what I have read, be it true or not. One can legally make a backup of the software. If they sell the software, that is the original factory. All back ups must go along with the sale. Anyway there was a lot of different viewpoints of the copyright laws in those days. Along with different laws in different countries. Well I also got the manual. That is how the gang hooked it up and we started playing some of the games. I thought at that time that I would never have to spend a quarter on games in the bars again. <VBG>

Over the following years. I have bought C= collections from just a few items to a car with trailer load. Monitors, printers, a few thousand disks, cables, drives, tape machines and several special things. Which can be discussed later. So you can see that there are many ways, and amounts to collecting C= things. Therefore I can't really say what you have in your collection. Just have to deal with the generic stuff.

Having rambled on about all of that drenn. My general idea is that you have a few disks and some hardware. Right now I want to get you set up. Starting not with the C=. But with the video display unit. OK that is a fancy word phrase for the T.V. or Monitor. Since most systems that I have had the great pleasure of grabbing, have a monitor. I will start with that assumption. Those that will be connecting to the T.V., skip ahead a bit.

So then, keeping the techy talk down. Lets plug that puppy into the monitor. You need a cord/cable for that. Hope that it came with the system. You can order them online from auction places. Even have one custom built for you. But lets say you have one. There are different styles. They all have something in common. One end has a round <called DIN> plug. This bugger plugs into the back of the C=. OK I know that there are two holes there that look like the same thing. Facing the back of the C=, it is the one to your left. Don't worry, the pin configuration will only allow it to fit in the proper socket. Now the other end. Take a breather and look at that other end. You can have as little as two and as many as five connectors. Depending on the year your system was released. Your socket on the C= may have more or less pin holes. I know that without others to compare, this makes little sense. My point is that later modes did a thing to the video output. That for lack of a better explanation is Split Video. Bit more on that in a moment, in regards to the cable.

Looking at the end that will go into the monitor. Those are called RCA jacks. Sort of a crown looking thing with a short shaft in the center. They are probably different colours. Love to tell you which colour goes where, but not all manufacturers used the same colour scheme. On a two plug one, you just try to fit it at first to the respective colours of the socket. Yellow, most of the time is video. Naturally dealing with old monitors, that colour in the socket may be cloudy or just plain not visible. OK plug it in, turn on the Monitor, but not the C=. If there is a bad hum when you mess with the volume control. Which is known as a 60 cycle line hum. You have it backwards. Reverse the plugs and the hum should go away.

Now then for those that have a monitor cord that is more than two. Well only three of them are needed. I am hoping that your monitor has three input sockets. There are many monitors that will work with the C=. Not all of them made by Commodore. If you have a 1701 or a 1702 monitor. You have in many peoples opinion, the best one. But past that point. Some monitors have the inputs on the front. Some have them on the back, and some, like the 1702 have them on both the front and the back. Side note here, I have a 1702 set up for my 64c model. Using a three wire connector. That goes in the back. I have my DreamCast connected to the two front sockets. All I need to do is flip the switch in the back, to move from the C= to the DreamCast. But that aside, the hard part is putting the correct plugs in the correct sockets. Try to match the colours of the plug to the sockets. Give thanks to the C= headed goddess if it works right the first time <G>. For me on the 4 and 5 plug ones. I have never found the black one to do a thing for me. But don't take that as etched in stone.

Now some of the problems that you can encounter. Story time, the C= monitor model 1802. Nice one, has a built in antiglare screen. Also has the connections for two and three wire plug ins on the back. Not really labeled well for many people. I paid \$5 USD for one just for parts. Because the guy that got it, couldn't make it work. Bought his C=64 as well for the same price. Reason it didn't work, was that he didn't connect the cable right on the back. Since the cable and the switch that moves between the two and three wire connection, well it has to be on the right one for the input. He had it set for two wire and then had a three wire input, half set for two wire and the rest for three wire. When dealing with something

like that, try all the combinations that you can think of, and if that fails. There may be a manual for your monitor on line. There are sites that preserve the text of manuals for the C=.

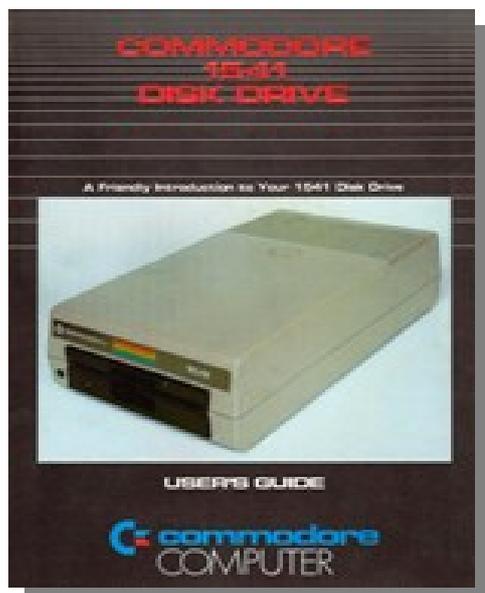
Right then, why is there three plugs on some and others just have two? Well Commodore after some time, split the video output signal to "Luma" and "Chroma". I was told that this was the start of the S-Video thing. Not that I know what S-Video is in any form. But here is a kicker. You see when they did that, they had to change the video output socket. Adding a couple more pins and changing the pin layout in the socket. The older video cable would fit the newer configuration. But naturally the newer one wouldn't fit the older one. Funny thing is I have a collection of video cables, that have three plugs. But they are pinned out for the older socket. Makes one wonder why.

Now you guys that don't have a monitor. I could say go out and score one up. But till you know if you like the C=, why spend the money? The monitors are fairly priced on line. But the shipping can be over \$100 USD for one. Depending on how it is shipped of course. That was the price quoted to me from a users group that was going to take it to one of those places that pack and ship for you. What you will see on the T.V. is not as good as what you will get with a monitor. Your picture may be a tad bit fuzzy and it will certainly in comparison not be as sharp or colours as vibrant. Yeah I have used a T.V. for a monitor. Connecting your C= to the T.V. is easier than those guys doing it to a monitor. The cable with the two RCA ends is the first thing to find. Second is that little box thing. One end of the cable goes into the C=. There is only one hole it will fit. The other end plugs into that little box. Well that is what it says in the book. On the Other Hand <OTOH> I have close to 100 of these buggers. You may not have gotten an original one in your collection. Some of these have the cable built into the box. If you have a T.V. that takes an aerial. You just take the two small flat leads with the "U" shaped connectors on them. Screw that into the antenna screws on your set. What you are doing is converting the signal from the C= to the 300 ohm <standard of measurement> antenna signal input on your T.V. Now then, there are newer forms of TV units. That do not have an antenna input. These "cable ready" units have a connector that looks a bit like a screw. I mean the connector is threaded. Your C= to T.V. adaptor doesn't fit. What you need is a 300 ohm to 75 ohm connector. Best I can tell you is take the box to you favourite electronics store, show them and tell them that you need to convert that to 300 ohms. They generally have the device. Most of them will just pressure fit onto your cable input. OK now there are many variations of these. I have some that are both 300 and 75 ohm in the box. Many of them are not original. But ones from off the shelf electronic store converter systems. As they have a little switch on them that says T.V. on one end, computer or Game on the other. A few have game on one end, T.V. on the other and computer in the middle. Using a three position switch. Whew that was a lot. OK we are finished with the Monitor and T.V. connection. Save for one little thing. Take a look at the back of the C=64. There is a switch that has 3-4 on it. This is used to select channel 3 or channel 4 for the C= input to your T.V. I never had T.V. connected at the same time as the computer. Never used that switch.

Thanks man, you have waded through a lot of drenn to reach this part. And we haven't gone on about what the C= will do! I have a reason for that, and that is, get the smegger hooked up right before you tackle anything. To that end, there are a few more connections to make, or possibly make. Then I will expound on things about the C= that you may not know. Since in the next installment, we are hitting the user book for more information.

There are three ways of having something show up on the screen form "canned" software. Cartridges or "carts". Cassettes, a.k.a. DataSet and there are several spellings for that one. Disks, and here there are a few different ones. Carts are the easiest and what most of the early users started with in the first place. I mean after blowing \$199 in 1980s money. There isn't a lot left to buy the other stuff right off the bat. Now you may have a few carts in your collection. I have never seen one that wasn't already opened and used. So I don't know what the packaging was originally. They are a device that plugs into the right rear, as you face the keys, on the C=. Entire programme is stored in that cart. To use it, turn off the C=. Plug the cart in snugly. Turn on the C=. You should have the start of the programme on the screen. If you are lucky and I am rarely that lucky. You will also have a small instruction booklet for the programme. If you don't see anything at all. Time to clean the cart and the port. Personally I use a cotton swab, best are the ones sold in electronic stores for cleaning tape machines. The cotton fibers on the swab don't catch on things and make matters worse. I also go to the local drug store and buy Isopropyl Alcohol <nice to have the bottle at hand for spellings> at the strength of 91%, or greater. Make certain it is plain. No scents or additives like that. As that will coat your connectors and cause problems. Now just lightly wipe the wet swab over the copper looking things in both the cart and on the C=. Bet you find a lot of crud. Now then after that is completed. Wait at least 5 minutes. Let it dry out before reconnecting. If all is as it should be, you will see the programme when you plug it in and turn on the C=. If not, then there is a problem in the C= or the cart. Working on that isn't in the scope of this part of the series.

Next in line we come to the DataSet. That is my preferred spelling. If you have one of these in your collection. Then it looks like a mono



cassette machine. The older ones by Commodore where rectangular in shape. Later models where square with rounded corners. In either case, it is a cassette machine for the C=. When I worked for Radio Shack as a repairman and tech. They were selling the TSR-80 units. These would only load from an off the shelf cassette machine. There wasn't at that time any other form of software. In some countries the DataSet is still heavily used. As the price of it and tapes was much cheaper than a disk drive.

Here I can go on a bit for you. I have a couple in my collection that are still in the box. Besides the tight packing. There is also a manual for the use of the DataSet. Small and most of the information is in other books. Like the user guide that came with the C=. Where the difference between a cassette drive and a DataSet end is the connector. This plugs into the port on the C=. On the back of the C=, this is next to the round socket that isn't for the video output. Really it only fits in one place. Ah, but you ask, where does it plug in for power? Well the same place. I remember that it pulls about 5 volts to operate. Could be wrong on that. But remember what I said about the brick power supply and it being under powered when things are added? Well this is about all it was designed to handle. And there is debate on that part. Right you want to see if there is anything on that tape in that box of stuff you have. Well repeating myself here again. Don't plug it in with the system turned on. Taking that as read. You need to open the lid of the DataSet and put in the tape. Type in the word LOAD and then press the return key. For those coming from the non C= world. That RETURN key would be the same as the enter key on other keyboards. Anyway the computer will say PRESS PLAY ON TAPE. Do that and then the C= will go blank as it hunts for the prg. When that is finished. You get the message FOUND (the name of the programme). Press the C= logo key. Ah that is bottom row far left. The C= will now load the programme. A note at this point. OK a few notes. If the prg is a long one. Well go make something to eat, watch a T.V. show. Grab a smoke and a drink. Then see if the thing has loaded. Tape loads are S L O W. They are also on old tapes and machines not that accurate. Mainly because the cassette machine is dirty and needs to be cleaned. I'll cover that in another part. Now you can load the first programme on the tape as written above. You can tell it to load a specific programme on the tape. This means that you have more than one programme on the tape. If it isn't the first one then the DataSet will play through looking for the prg name. At the incredible rate of 1 7/8 inches per second. Think about that if you use 90 minute tapes for your saves. Now you see why many users went to the floppy disks. A thing to mention here about the tapes. Regular ones will work on the DataSet. Not going to bore you more with the different tapes of tapes. Only this one section. There was/is a tape that was manufactured, that didn't have the clear leader tape at the start and end of the cassette. Once this was said to be for cassette letters, then for the blind in their tapes. Then it was called a computer cassette. Only difference was the price.

Right I've babbled on long enough or this session. Mainly as this is done originally on a Commodore and I have reached the limit of lines for the programme. Next part will be on Disks and the manual and anything else that feels right at the time.

Interview with Simon Ulliyatt Cronosoft

<http://www.cronos.toucansurf.com/>



Q. Please introduce yourself to our reader!

A. My names Simon, I'm 36 years old, married with 2 children, 2 cats and 6 chickens, and have an addiction to 8-bit machines. ;)

Q. Do you still use 8 bit machines?

A. Most definitely. I regularly use my trusty Spectrum 128K+, as well as messing around with Commodore 64's, Oric's, Vic 20's, Dragon 32's, ZX81's etc. My machines of current interest are the CGL/Sord M5 and the Mattel Aquarius.

Q. How did you first become involved with computers?



A. Blimey... I've got to think about that one... I think it was around 1982, when my brother bought a ZX81. He wasn't particularly interested in it, but was too mean to let me use it regularly, so I had to pay him some of my pocket money to 'hire' it. I eventually bought it from him,

but always wanted something a bit more powerful. A friend of mine's brother had a Spectrum in the winter of 1983, which we played on when the school was shut down due to snow. I then got a Spectrum 48K as an 'early' Xmas present in the summer of 1984. I don't remember anything from that summer...other than sitting in a darkened room playing games like Lunar Jetman and Zzoom.

Q. Tell our reader about Cronosoft what is it the company does and when the company was founded?

A. Cronosoft, put simply, is a small software house, that publishes games for systems which are no longer commercially viable in the mainstream.

Although we DO (usually) offer these new games as emulator files, the majority, and indeed the point of Cronosoft is to make them available for people to buy them as original cassettes, with inlays, artwork etc. We don't charge much for the games - usually £2.99 each, and the buyer gets a game which comes in a glossy package, that they will want to play and keep.

Q. What machines are the games produced for?

A. We currently produce games for the Spectrum (48K and 128K), Commodore 64, Commodore 16/Plus 4, Vic 20, and Amstrad CPC. We also have releases due for the BBC/ Electron and Dragon 32.

Q. Do you also have a full time job?

A. Yes I do - I sell old computers and games via EBAY full time (I gave up my regular job and started selling full time in 2001), which I do from an office on an industrial estate.

Q. Are the game developers paid?

A. Yes - for each £2.99 game that is sold, a royalty payment of £1.00 goes to the author of the game. Games tend to have an infinite shelf life, so funds tend to trickle in over a very long period. We're still selling copies of our first release, Egghead in Space, which appeared in 2002.

Q. Can anyone submit a game to you what is the usual procedure?

A. Yes - and we welcome it. Just email it to me at chaosmongers@yahoo.com and we'll check it out. We try to maintain a high standard, so if it requires a few tweaks, or isn't accepted, then don't be disheartened. We usually produce artwork for it, though if the author wants to provide their own, then that's fine.

Q. What format are the games released on and how much do they cost?

A. Games are mostly on cassette, at a price of either £1.99 or £2.99 - the corresponding emulator versions are usually about half this price.

If a game has been released elsewhere as freeware, then it's advisable to set the price at £1.99 - people still do like to own the original version.

We can offer Commodore software on disk, though we don't have specific packaging for this format yet.

Q. Some of the Jonathan Caldwell games are really good not that the others are in any way bad but Jonathan's games really capture the 8 bit era will he be producing games for other platforms rather than just the Spectrum?

A. As far as I know, JC won't be working on other platforms, as he's a Spectrum expert through and

through. He's toyed with the idea of working on the CPC, with it sharing a lot of the Spectrums characteristics, as well as being a Z80 based micro. Maybe he'll surprise us... who knows? Everything JC does is highly secretive until it's very nearly finished - then he'll surprise us all with something particularly special...

Q. What has been your favourite Cronosoft release so far?

A. That's a hard one... I could narrow it down to 2 releases. GAMEX is a masterpiece of efficient programming, as it has 16 classic games like Pacman, Missile Command, Robotron etc. all crammed into a single load 48K Spectrum game, based around a share trading theme. JC has superb skills when it comes to doing the impossible, and his attention to detail is spot on.

FARMER JACK IN HARVEST HAVOC is another of my favourites, as Bob Smith has taken a pure arcade game play style (Mr. Do!) and adapted it to a format that hasn't experienced that genre before - his follow-up release to the game looks especially promising (though I can't give much away) in exactly the same way. Bob's games are also very highly polished and are a joy to behold.

Q. Would you like to see fully licensed and authorised 8-bit software back on the shop shelves, say in the form of an official emulator with games package?

Hmmm... I don't know. I really don't think it could be done any more. In the old days, small independent computer shops existed, alongside places like Woolworths, WHSmith, and Boots, where you could buy games. Retro Computing isn't big enough for anyone to make a worthwhile profit, so it's really not going to interest the likes of GameStation or GAME (except for the buying and selling of Sega/Nintendo games). Huge cold warehouses like PC World too are exactly the wrong type of place too. The internet and mail order though, provides the ideal outlet, and keeps costs low too.

Q. Have you turned down any games for publication?

A. Yes, though not as many as you'd think. There are some submissions that have been particularly bad (which I can't mention, though they had been written in BASIC, and crashed regularly).

Q. What's been the biggest seller and lowest selling title so far?

A. The biggest seller I believe is Egghead in Space, though Platform Game Designer is up there too. It wouldn't be fair on the authors to mention the lowest sellers, but of course, more obscure formats are not going to sell as well as the more common Spectrum & C64.

Q. How do you produce the tape inlays?

Mostly, our artwork is done by a great artist called Graham Richards, who never fails to amaze. Examples of his artwork are EGGHEAD ENTERTAINS, IZZY WIZZY, GAMEX, STRANDED, TREASURE ISLE, BLITZ 2000. Sometimes the author produces the art (FARMER JACK, or the COSINE games on the Commodore), and sometimes I produce them (FUN PARK, ZXFM

2005). They are all inkjet printed onto photo paper. Nothing particularly high-tech!

Q. How are the tapes and disks produced, in house or via a duplication system?

A. Everything is done manually at the moment. We buy our tapes in bulk from a duplication plant, though do the duplication ourselves. It can be a bit tedious and time consuming, but we're not talking 1000's of copies.

Q. Is it a one-man business, or do you have help?

A. I mentioned Graham, who does the artwork. Nich Campbell helps out immensely with the CPC duplication, as I can't handle that aspect myself. Freelance journalist Shaun Bebbington helps out big time with publication, getting us in Micro Mart magazine, and helps push the games by getting the word around.



Q. Have you met any of the authors/programmers you work with?

A. Some of them. Jonathan Cauldwell often comes down to the computer/retro shows that appear around the country, and I've also met Chris Snowden

(C16 author) at RETRO NORTH last year.

I've also had the pleasure in talking to some famous names too (though not Cronosoft authors of course), whilst being at the shows; Matthew Smith, Jon Hare, Richard Joseph, Archer MacLean.

Q. What games do you play to relax?

A. I love to play games by authors I particular admire the style of. Apart from the usual 'Ultimate' games, I particular like Jeff Minter (Sheep in Space, Llamatron), Don Priestly (Minder, Trapdoor), Dave Reidy (Skool Daze, Wheelie), Sensible software (Wizkid, Mega-lo-mania). Being the first person to play a new game is pretty good too.

Q. Have you had to drop any title due to copyright problems?

A. We were worried about Football Manager 2005, though we stuck "ZX" in front of it, and no-one complained!

Q. Has the press been favourable to you I seem to remember something in retro gamer about cronosoft?

A. RETRO GAMER have been great, and feature most of our new releases. Some of the reviews have caused controversy (Farmer Jack in particular), though on the whole it's been very good. MICRO MART also feature our games too. There is also a lot of support from online publications and websites (like yourselves) in lots of countries. We've had a lot of support in countries such as Spain, Portugal and Eastern Europe too.

- X1541 - The Idiot's Guide

<http://www.geocities.com/cdsixfour/x1541.htm>

The finished product - the X1541



This page is here to help those of us out there who have NO IDEA about transferring games between a PC and the Commodore 64. It's called the idiot's guide because even an idiot is supposed to be able to do it! This includes myself as I was once an idiot in regards to the X1541....

What's .zip, .lha, .d64, .lnx, .z64 and !! all about?

For those of you who have nearly no knowledge of file archiving, seeing .zip at the end of a downloaded file will not make much sense to you. You'll see files all over the net with a .zip extension, including my page. To the uninitiated, a .zip file is usually a compressed file (or files) that are compacted into one file and placed on the web or sent in emails so that connection time is kept short and so that the files take up little space. Another well known compressor is lha (a.k.a. lzh. This can be opened with recent versions of lha). If you're looking for help on using these compressors, go to this site. It's mostly a case of placing the compressor in your DOS folder on your C drive and following the instructions contained within the file itself.

So, if you need a unzipper, PKUNZIP is probably the most standard one to get - and if you need it or any other archival programs, this site gives you the most complete treatment of archival programs to download that I know of. If you're using Windows, then Winzip is really the only way to go. It handles long filenames, whereas PKUNZIP can't handle them and refuses to extract them. Some zips on the C64 FTP sites contain long filenames (unfortunately) that can't be extracted under PKUNZIP. Why Microsoft initially had the 8.3 filename convention in the first place really baffles me.

.d64 file extensions are disk image extensions. The files are images of a Commodore 1541 disk, and contain all the code that a 1541 disk side would. These files are loaded by most C64 emulators and are treated like a 1541 disk. This is usually the result after transferring C64 1541 disk sides to the PC.

.lnx files are LYNXed files, usually done with a program called "Ultimate Lynx" or "Ultimate Lynx 3" which is a C64 program that packs several files into a single file. The Star Commander can open these and the files contained in it can be copied into disk images. However, the latest release of the Star Commander has difficulty with some lynx files created with Ultimate Lynx 3. Star Commander tends to operate well only with the standard lynx format. In this case, the lynxed file itself can be copied into a disk image and unpacked with Ultimate Lynx 3 from a C64 or an emulator. The Star Commander makes it a lot easier, however, but occasionally it will report that the lynx file is "corrupt" when really it can't understand the format. Should you need Ultimate Lynx 3, I have it for you to download. I've recently put Ultimate Lynx 3 on the disk image next to Ultimate Lynx 1, so now you should be able to extract files lynxed with Ultimate Lynx 3, too.

Another file type that can be found in many C64 archives are Zip-coded disks (not to be confused with .zip files!). They appear as 1!example, 2!example, 3!example, and 4!example. These are packed files that constitute all tracks and sectors of a 1541 disk side. Some wise-guys have even decided to give them a .z64 extension, even though they are recognised by their "!" style prefixes. These .z64 files should be treated as Zip-coded disks (although I

personally disapprove that they should be called .z64 files).

Zip-coded files appear as x!example, a!example, b!example, etc. They are simply packed files. Both Zip-coded disks and files can be depacked with a PC program called 64Copy, or on the 64 with Zip-Code utilities. They are rare, but if you find them copy them into a .d64 image and run them through the Zip-code utilities. When depacking Zip-coded disks, beware of the "Zip-DOS read" option. With many zip-coded disks, leaving this on YES while depacking can corrupt the data on the final product. If you need zip-code utilities, I have them for you to download.

The Best Way

Although there is more than one way, the best way to transfer programs cross-platform between a PC and C64 is to use a Commodore 64 disk drive (The 1541) connected to a IBM compatible PC. You connect a cable (called the X1541 cable) from the serial port on the 1541 and connect it to the LPT parallel printer port on your PC. From there you use a transfer program (I recommend the Star Commander although there are several other transfer utilities available on the net. After that it's simple.

The reason why this is the best method is because the 5.25" drives on IBM machines are MFM format drives while the 1541 is a GCR format drive. These formats are incompatible. Not only that, but 1541 drives are "smart" because they contain the necessary on board electronics and disk operating firmware, whereas IBM drives don't necessarily. Hooking a 1541 up to an IBM is much simpler. Text files can be transferred with a 1571 and a program called the "Big Blue Reader" if you want. The 1571 can read both MFM and GCR. Transferring by this method is very slow though, so forget it unless you want to convert C64 word processor files to an IBM wordprocessor.

So where do I get the X1541 cable from?

Ahhh... The PC is easy to get. If you don't have a 1541 disk drive (Or your old drive is broken) you can order a new one from CMD but beware the \$ factor. The X1541 cable, however.... you'll have to build yourself. Also, the author of the Star Commander has a team that builds quality cables at very reasonable prices.

IMPORTANT NOTE:

At this point it is probably worth mentioning that if you have a Pentium II motherboard (or better - I think), that the X1541 cable WILL NOT WORK on the Star Commander. The only cable that will work is the XE1541 cable. This requires extra components. All is explained over here.

But I don't know how to make one!

I personally had no idea about soldering a cable together when I first thought about building a X1541 cable. I did some reading on the topic and after some practice I found myself building a fully working cable!!! If you don't know where to start when soldering or you can't understand the X1541 diagrams, I'll explain. I'm no electrician, but I can point you in the right direction. You don't need talent to build a cable or even to solder. An hour or so of practice is all you need.

There is another way to create a crude X1541 cable without having to solder.

So what will I need?

Go down to your local electronic parts/hobby shop and buy the following:

A soldering iron - A cheap one will do. Preferably one with a narrow tip. It will be touching small surfaces. Resin flux solder - Preferably with the smallest diameter wire possible. I use 0.7mm. Remember it must be RESIN FLUX solder. Resin flux is used for electronic soldering.

Wire - It doesn't matter what type of wire, as long as they're not bare wires and have some plastic shielding. I used copper wire. Try to get different coloured wires so that you can tell them apart.

Wire stripper - To get the plastic cover off the wire!

Steel wool - To polish surfaces before soldering.
Shrink tubing - To keep all the wires together to make the cable. I used a tubing 5.0mm in diameter. The diameter of the shrink tubing will usually depend on the diameter of the wire you're using. You may have to use your good judgment in deciding which ones to get.

Male 6 pin din plug - This bit goes into your 1541 serial port.

Male D25 solder plug - This bit goes into your PC's LPT port. It's called a D25 plug in electronic supplies stores. Make sure it's the solder variety. You'll notice it has catchment sockets to collect solder on the other side of the pins.

Male D25 casing - To cover the D25 plug! I prefer using a plastic casing as opposed to a metal casing
Sticky tape / Blu tak - to hold things in place while you solder.

A copy of the X1541 specifications - If you choose to work without one I hope you know what you're doing! You must have a good memory! Joe Forster has the specs on his X1541 page

Remember this:

A male plug has pins on it that stick out. A female plug has holes that these pins go in. So if you've got a dirty mind, sexual innuendo such as this will help you remember!! The X1541 cable has two male plugs, so they'll both have pins sticking out! These are the ones you get!

It may be helpful for those who have never soldered before to buy several plugs before building the cable to practice on first. This way, if you mess up your plug you have a spare to work on.

Step 1

Firstly, we're going to create the cable part. If you notice the specifications of the X1541, you can't make the cable more than a metre long. I recommend the cable to be about 40-50cm long. Cut your wires to about 20cm longer than the length you wish to make the cable. This is so you have some room for error should you mess up and have to cut the wire some more.

Next, we're going to get those wires down the shrink tubing. This may require some patience depending on how large the diameter of the shrink tubing is and the wires you have. If you do have difficulty putting the wires down the tubing, look at the diagram and all your wires. Hopefully you'll have different coloured wires. Now decide which coloured wire will be for each connection. I decided like this:

COLOUR	- CBM	- IBM
RED	- Ground	- Ground
BLACK	- Reset	- Init
BLUE	- Clock	- AutoFeed
BROWN	- Atn	- Strobe
GREEN	- Data	- Select In
YELLOW	- Autodetect connection (optional)	

Now, notice where the wires are on the CBM serial diagram you have? Well In my case, the Black reset wire and Green Data wire are above the other three wires on the diagram. What I did was to push the wires down the shrink tube in this arrangement so that they came out untangled and in this arrangement by the time they came out the other end. The longer your shrink tube is, however, the harder this may be. If the wires tangle inside the shrink tube, they will have trouble going down. Try not to let this happen for your sanity's sake! It would be great if the wires inside didn't tangle because eventually when you shrink the tubing it will look professional, because there will be no bumps in the cable because of tangled wires. Eventually you will have five wires running through the shrink tube. Now we're ready to solder!!

Step 2

OK, now that we've done the easy bit, it's time for the harder bits.

Pull the wires through the tube so that they have even length on both ends of the tube. Plug in your soldering iron and allow it to heat up. Soldering is not too difficult, but there are a few things to remember:

Don't burn yourself! It can get real hot. Try to have a place to rest your soldering iron when not using it. A soldering iron stand is obviously the best thing for this, but still you may not want to get one, and you don't have to either. I have been burnt before by a soldering iron and it's not funny! Use steel wool to clean surfaces that you solder before soldering. This is so the solder has no trouble rolling off the tip of the soldering iron instead of bubbling up on the tip.

Heat up the surface with the iron you wish to solder before you solder (In this case our soldering catchment sockets at the back of both plugs). Try not to overdo this because the plastic around the pins (especially the 6 pin din) has melted on me before and the pin I was working on fell out! (it was fixed again by heating up the pin and pushing it back into place, where it cooled back into position). Heating the surface is necessary because if the surface isn't warm enough for long enough you'll do a bad solder which can be easily pulled apart.

Soldering itself is straightforward. There are many techniques, but I simply placed the wire in the pocket for soldering, lay the solder wire on top of that, and then applied the soldering iron until the solder melted, filling the socket and welding into the surface. I pushed more solder into the connection as needed. Try not to add too much solder though. More solder doesn't necessarily mean a stronger connection. Firstly, let's do the D25 plug. You can do the 6 pin din first if you want, but the D25 plug is harder in my opinion, especially if you mess up. So if you do mess the D25 up after you do the 6 pin, too bad. I suggest you practice soldering first before you work on the cable proper. Use some spare wire and some extra plugs.

The sticky tape and blu tak comes in handy when you try to keep the wire in position and the plug in place while you hold the solder in the socket, the wire under the solder, and the soldering iron. Unless you're an octopus, you'll soon realize that soldering isn't quite that easy and that the plug won't stay still. The wire keeps moving out of the plug's soldering socket etc. BE PATIENT! Once everything is in place, make the solder.

Once it's been soldered and the solder has dried and become hard, check to make sure that the connection has been soldered properly. This can be done by pulling the wire fairly hard (but NOT TOO HARD!), to see if the soldering has worked well (If it hasn't the solder will break off the socket, or the wire will snap - effectively forcing you to do a better job next time!). Remember: allow the solder to dry before testing the connection! Also, check to make sure that the solder hasn't connected any other sockets next to the one you are working on. Check to make sure that the wires will not cross either. This is very important. The Ground connection on the D25 plug is not difficult to do as the diagram may suggest. Simply strip the wire you intend to use for the ground connection so that the exposed wire can cover across all the ground sockets on the back of the D25. After this, it is simply a matter of soldering the wire to all the sockets. Easy.

Should you want to, you can add the Autodetect connection into the D25 plug on pins 2 and 15 (Yes, the 2 and 15 pins on the D25 are wired together!). This is not necessary when using the Star Commander, but if you decide to use the X1541 cable with the original X1541 transfer program, then I suggest you make it. Heck, why not do it, as you have your soldering iron out at the moment. I made it on my plug anyway. It makes it a true X1541 cable.

Make sure you solder the right wire in the right socket! Check your X1541 specifications. The D25 plug you have may even have the correct numbers for each individual pin on it. Remember that the X1541 specifications show the female plugs of the LPT port in the PC and the serial port in the 1541. To help you remember which pin is which, place the plug with the solder sockets facing up next to the diagram. Now it should be easy to see which pins are which. Some plugs you may buy may be even so helpful as to have the numbers of the pins next to them. If you mess up, you can always "unsolder" a connection by applying the soldering iron to the connection, and then pulling the wire out.

Same goes if you accidentally add more solder than you should to a socket, and it spills onto another socket connecting them. This, however, leaves the socket in a bit of a mess. Don't let this worry you though. Keep trying! In most cases, your mess-ups are salvageable. If you mess up on the D25 plug, saving your work can be harder. Only just recently I soldered two connections together accidentally. When I tried to unsolder, the solder got stuck all over the plastic part of the plug. Getting the solder off then was impossible, as I melted the plastic part with my soldering iron trying to get the solder off! It ended up as a complete mess.

With any luck, you'll have managed to solder all the connections correctly on the D25 plug! Well Done! Now you can get the D25 back cover and cover the D25 plug with it. There's no instructions that come with assembling the back-cover, and there are lots of different back cover models around for the D25 plug.

You may just have to examine the back cover you have and experiment a bit. The type that I have also has a place inside the back cover where a metallic gripper can be screwed in place around the cable. This can be implemented to reduce pressure on the soldered connections should the cable be pulled hard.

Step 3

Right! Now that you're feeling a bit more confident about soldering, it should be much easier to solder the 6 pin din to your cable. Firstly, you'll notice that the 6 pin din plug you have should have a plastic or rubber casing around it. Pull this casing off, and push it onto the X1541 cable that we're building. Make sure you put this on the right way so that when you're finished soldering, it can be pulled back over the plug! DON'T FORGET to do this step or you may find that you'll have to unsolder your connections on the 6 pin din plug in order to put the cover back on the plug! (I admit to having done this!). Be careful with the other parts of the din plug as not to lose them. You'll notice that there is the main plug which carries the pins, and two metal coverings that hook over the main plug. One of the metal coverings has a long claw-like hook. You'll notice that the sockets for the din plug are hollow so that you can place the wires down the sockets before soldering. Unfortunately, this doesn't make your life too easy!

Now, shorten the wires coming from the other end of the X1541 cable you're building. Not too short, but so that the metal backing with the long claw-like cradle on it can wrap itself around the shrink tubing on the cable. Soldering the wires to the din pins is not that easy. Try to get the solder both in the sockets and outside the sockets so that they cover the wire and socket completely.

When you thrust the wires down the shrink tubing in the arrangement according to the X1541 plans, arranging the wires now SHOULD be easier. It still may not be, but persevere! Firstly, I suggest doing the Reset plug because if you soldered all the outer sockets first, you would have a lot of trouble doing the inner Reset socket. Once this is done, complete soldering all the other sockets with their correct wire. Yet again, be careful which socket they are going into.

The din plug I bought even had small numbers of the corresponding pins on the main plug. As with the D25 plug, check all the wires to make sure they are soldered correctly and do not cross over. Also make sure they are in close (But not touching) and away from the metal covering when you place that back over the main plug once you have finished soldering. Blu Tack or something sticky comes in handy in keeping the main din plug still while you solder. It tends to roll around a bit on the table.

Once this has all been done, replace the metal coverings on the main plug and try to wrap the metal claw-like hook on the metal covering around the cable. Once you are sure everything is correct, slide the din plug plastic cover down the cable and back over the din plug.

The shrink tubing around the cable can be shrunk (as its name suggests) to fit snugly around the wires in the cable. Do this on a heat source, NOT a naked flame. You want to shrink the cable, not burn it. You can use a hot light globe, electric heater, or a jug or bowl of hot water. There are specialist heat-shrink tools to do this professionally, but since they are so

expensive you're better off not using them for just one cable! Using a bowl of hot water is probably the easiest and best method, as it gives an even finish to the cable. Just make sure that the shrink tubing has no punctures, and you don't accidentally drop the ends of the cable into the hot water! The reasons for this are quite obvious I think, as you will be plugging this cable into your PC! Boiling water may bubble as you place the cable in, but don't worry as this is because you are displacing air pockets in the water that are escaping, as steam!

And that's it! You've made a X1541 cable! Well done!

So that's it? But I'm still stuck!

Still having trouble making the cable? The parts you bought don't match the description that I gave? Can't solder the connections? In this case, send me an email and tell me what your problem is, I may be able to help you out. If you have no time to build one or can't be bothered building one, you may like to email Joe Forster at the Star Commander homepage, and he'll give you some details for ordering a cable. I used to have time to build these things not so long ago, but due to how busy I am with life in general, not to mention the CD, and the fact that I'm having trouble locating the diodes where I live now (not in a city!) I've had to give it up!

Remember to check all the connections you made on your X1541 cable. If you are sure that they are correct, yet the cable doesn't work on a transfer program, then you'll have to contact the author(s) of that program to find out what the problem is.

Who knows? you may have enjoyed building the cable and would like to put your soldering iron to other uses! It could become a new hobby!

Disclaimer

My instructions for building a X1541 cable is simply advice from me to you, whether you accept it or not is your choice. I have built several X1541 cables before using this method. I will not be held responsible if you damage your PC by building a bad cable, or doing something stupid like permanently soldering electronic parts to your PC printer port (which is not what I'm endorsing) because you misunderstood me. If that happens, it's YOUR fault!

I doubt very much that disaster will befall you though. One of my cables had a loose reset cable once and all that did was cause Star Commander to experience trouble transferring things as the reset wire bounced around connecting other wires. Still, you won't have any trouble at all if you loosely follow my advice and take care in your work!

GOOD LUCK!

Star Commander homepage
<http://sta.c64.org/sc.html>

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Commodore Free would like to thank Rio Baan" for the article reprint

Commodore Night 2007

Max from MCC

Before telling you how we spent a nice evening last November, let me tell you a little bit more about my little C= history...

The origins

My parents bought me a C64+1541 drive in 1984, after a year of ZX81 exploration. What a difference it was ! A couple of friends had also this terrific machine, Christophe DW in my neighborhood, and Hugues DJ , the son of one of my father's colleague. The exchanges of ideas, softwares and tricks were intense! As were the deprived sleep nights we passed, trying to break some machine code, just for the fun.



Commodore Night roots

Many years and a few PC later, I discovered in 2004-2005 several well-known emulators (CCS64, VICE) running on PC and also on my brand new iMac G5 (Power 64). I was astonished to see that all the games we loved and played for hours were available on new machines, with high quality graphics and sound. I then gathered a couple of old friend, and the Commodore Night 2006 was born. It was thus an event centered on emulation more than playing with original machines, even though I brought my old C64 and an SX64 that a colleague offered to me for that occasion. The SID chip of the SX was dead, and the C64'SID surrendered after the event.



Getting some oldies

For the 2007 edition, I thought it would be nice to play on REAL machines. The event had to be brilliant, as we celebrated the C64 25th anniversary! But my C64 and the SX were not enough. I then traveled on eBay to get other stuffs, and gathered a

few 64's (classic and C64C versions), a DTV64, a C128 and an Amiga 500, plus an old Mac SE30 (for my friend Torx who is a real Mac-o-phile). And I don't talk about all the joysticks, 1541 drives and monitors sold with the machines. I also got some original games.

The party

On November 24th, my old friend Hugues DJ (Bug from MCC) came to set all this mess up with me.



With our nice t-shirts, we felt like if we were 18 again... My lovely wife cooked delicious lasagnas. A dozen of old friends came to join us in the evening to make all these beasts live again. What a pleasure. With some Belgian beers, nice videos and some notes of

Visa Röster.... If you look well on YouTube, you may find some of our dedicated production. All the attendees could compete in Summer Games, Zorro or Pitstop 2. We didn't loose our reflexes of the eighties, with a Quickshot II or an old Atari stick. Who said microcomputers did not conditionate people?

Maybe another edition in 2008?

More informations on

<http://homepage.mac.com/endocrine.solutions/mcc64/index.html>

Greetings to all C64 lovers,

Max from MCC
1984-1989
Commodore C64 user & fan
Retrocomputing adept 2004-?

<http://c64mcc.blogspot.com/>

CMD and Maurice Randel where did it all go wrong?

It seems that users are venting out there frustrations about Maurice in various Commodore related chat rooms, I have read everything from users trying to take him to court or reporting him to the authorities all the way up to arranging a mob to go round and beat the guy up complete with baseball bats.

For myself and I would imagine anyone who has purchased equipment from Maurice its very frustrating situation to be in. I ordered a Scpu over 3 years ago and am still waiting; I had little in the way of an email to apologise and my asking for a refund or even asking Maurice to explain in the magazine has come to nothing I cant see the point of phoning long distance as others have tried and just had verbal abuse from Maurice.

I personally feel Maurice is now over his head with to many orders and will never find the time to complete any of these ever!, software or hardware I think he is so behind he has just given up. I remember reading that Maurice lost his father recently to cancer and I am truly sorry if this is true, but why not just be upfront and apologise and explain what has happened instead of letting people think the worse. Personally I tried going down the Paypal rout to claim but it would appear that to much time has passed so its now looking like I have lost my money sending screaming emails to paypal didn't exactly help me.

Getting upset and sending threats isnt going to help me and while I am not happy to loose money what can I do? keep complaining and sending nasty emails and moaning in chat rooms? I think we need to move on,

if someone can claim back the money somehow maybe if we all hire a solicitor (more cost) and have a mass court case we may get something back. Otherwise I think we need to look at the future and remove CMD from Maurice, who may continue to support Geos and Wheels with updates or just turn his back on many loyal customers,.

I think the rights to produce the CMD hardware should be removed from Maurice as soon as possible and given to someone who can better utilise them, while I realise there is little monetary gain in CMD products and the development of new products is more a labour of love then a full time job, I think many users would be interested in the rights to produce devices.

I would really like to see the following for the continuation of CMD products
The current devices

- **CMD Hard disk**
- **CMD Supercpu**
- **CMD Floppy drive**
- **CMD Ramlink**

of course we need software to go with these products and Maurice owns the rights to Geos and wheels,

yes geos is free but you can only use the free version with PD public domain software not the commercial software we all want to utilise, I don't mind paying for software, I am not saying it should all be free. The CMD hardware should continue as is To ensure full compatibility with existing products Wheels/geos etc. this would be the quickest option for the products and may even see hardware back on line from companies like Protovisions and I would like to see a new line of products to be created from scratch

like a combined Accelerator and hard disk using Solid state medium, like the IDE 64 but a Commercial sealed unit with slots for adding Solid media and interfaces for external disks maybe using USB/ fire wire, and a slot inside to add an accelerator add-on, various options are available but I think the designs need pooling together to form one device, although floppy disks have now been dropped from the PC world many people still use them for 8 and 16 bit systems, maybe this could all be combined into one device.

Costs are always difficult to work out how much would some one pay for a device, If the Cmd original products could be mass produced rather than produced by hand using plastic casing or moulded metal cases then costs could be reduced, although the SCPU and ramlink use very hard to find memory modules and this should be addressed, of course fully compatible with existing hardware.

Maybe if enough people wanted such devices we could generate a market in the hope someone would take up the CMD redesign. As I have said no one is going to get rich selling products to Commodore users, well except maybe Maurice who owes money to people and hasn't paid back or produced the goods. Its a shame that all this has happened, as Maurice asked for donations to buy the rights to produce CMD products in the first place.

Maurice has been offered help on many occasions but would rather work alone to produce devices, with Scpu accelerators selling for mega money on ebay does this show demand for products? Maybe I could print a list of CMD products and the number of people wanting them in the Magazine? also the amount you think the products should cost, to give the designers an idea whether it would be worth spending time to do the projects.

well that's what I think, and while I am still a little upset about my loss I know others who have lost a lot more poor Alan from Commodore scene took money for the import service and sent it to Maurice after years of promises the goods never arrived and Alan is now having to refund from his own pocket. Maurice if you are reading this please feel guilty you have caused a lot of stress to people. I dont want to be badmouthing as I have said there must be a reason and from what people say Maurice is a good guy, lets hope something can be resolved but quickly, whoever Maurice licences CMD products and IP from please take it back

Comments welcome
Commodore Free

Prophet 64 Discontinued

MSSIAH

MIDI SID SOFTWARE

INTEGRATED APPLICATIONS & HARDWARE

I looked at the Prophet 64 website www.prophet64.com and was shocked to see that the product is discontinued! Then after my initial disbelief I read about the MSSIAH Midi sid software Integrated Applications and hardware. This is everything the Prophet WAS and then some, because it features an integrated midi interface. If you are like me and cant solder two wires together never mind small electrical components then you will have been looking for something just like this.

Although an interface was designed for the prophet, it wasn't sold as a commercial device instead you had to manufacture the device yourself. Now us none solderers can live in joy with the MSSIAH as its from what I read basically a prophet 64 interface with combined midi ports.

I have included the F.A.Q from the website, as this is the only information I can find about the device at the present time, of course when the device is released and I have purchased one I will give you a full write up.

Mssiah QQA (Quick Questions & Answers)

-What is the Mssiah?

The Mssiah is a hardware cartridge for the Commodore 64. Plug it in and you'll have five different applications that turn your C64 into a Midi synthesizer. Check out the Prophet64 - Mssiah's predecessor, for more details.

Mssiah is short for Midi SID Software Integrated Applications and Hardware pointing out that the Midi interface is built into the cartridge.

-What differs the Mssiah and the Prophet64 Cartridge?

The programs are practically the same with some upgrades and improvements. The biggest difference is the ability to run full Midi mode in every application.

-What differs running the Mssiah in full midi and hooking up a Prophet64 to the infamous "Firestarter Midi Interface"?

The "Keyboard" interface on the Prophet64 receives simple note data and slide/accent triggers. Mssiah receives full midi data like notes, velocity, control changes, pitch bends etc. on up to six tracks simultaneously. Several modes of operation are provided.

-Is the Mssiah compatible with the Prophet64?

Yes, Mssiah loads Prophet64 files.

-Is SDR still supported?

Yes.

-Is SID2SID still supported?

Yes.

-Is Sync24 still supported?

External synchronization uses MIDI clock, just plug in your midi cable and swing away your fav. sequencer software/machine. Every app except the Sequencer still has DIN sync option in case you want to hook it up directly to your old gear.

-Are potentiometers still supported?

Yes.

-Is the Mssiah compatible with my Datel midi interface?

No, and there's no need for that. Mssiah has its own midi interface built into the cartridge.

-Can I use Mssiah's midi interface with other music applications?

No.

-Is the Mssiah compatible with the Firestarter Midi Interface?

Yes, for synchronization and SDR only since we've taken away the "keyboard" mode.

-Is there a Midi out?

No.

-Do you have any screen shots / pictures of the new Mssiah?

Not at this point, they will be posted later.

-Is there a "tracker" with the new Mssiah?

No.

-How do you pronounce Mss..muss..mussyay???

Just like "Messiah". We dropped the 'e' because it didn't really fit the acronym..

-Cartridge? Well, that was...err.."Hoss", "Ben", "Little Joe" and "Adam", right?

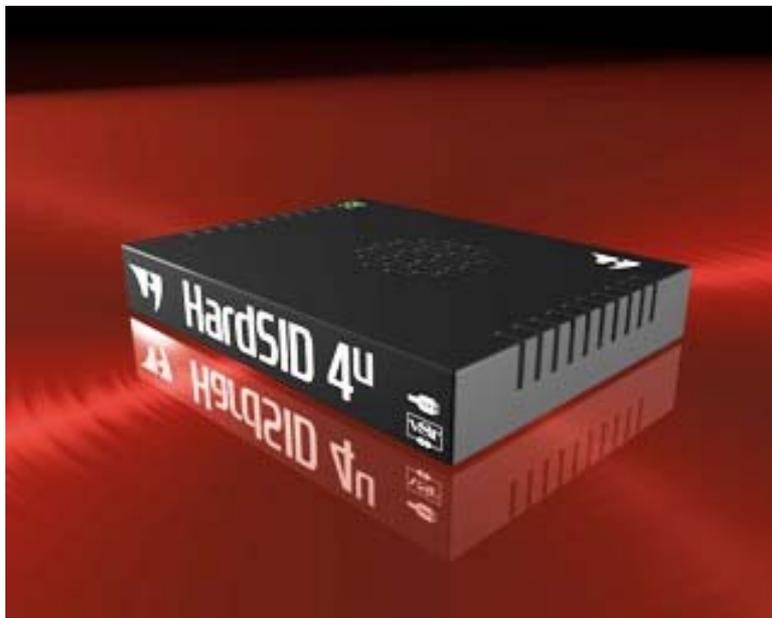
No. You're referring to the 60s show "Bonanza" and those were the Cartwites... Cartridge is the computer industry term used for a plastic case with various electronics inside. The unit plugs into a host system instantly loading whatever is on the cartridge.

HardSID 4U

"a HardSID... for you!"

<http://www.hardsid.com>

The HardSID 4U



is the most powerful SID synthesizer since the legendary C64! USB connection (compatible with both 2.0 & 1.1)

.Isochronous USB endpoint for low-latency audio VSTi interface with 8000Hz update rate on all SID registers (free)

Wave-in VSTi pin for routing 8000Hz signals to any registers (example: playing other VSTi's sound on the volume register)

Full automation of all VSTi parameters

Superior sound quality (.it is a HardSID!)

Support for up to four SID chips (6581/8580/6582 in any combination)

Updateable firmware over USB

Microsoft Vista compatible (drivers for Win2000/XP/Vista)

..and if you're a C64 fan

Cycle-accurate playback of your favorite SID tunes
Digitized sound + high-speed playback with low CPU utilization

Seamless playback of .sid tunes while you work on your PC by providing a huge playback buffer for non-VSTi applications

The HardSID 4U Studio Edition

Full physical separation of the SIDs from the USB driven circuits

100% elimination of EMI (Electromagnetic interference) noise that may come from your PC via USB

Many PC parts (sometimes the USB controller itself) are generating electromagnetic interference (EMI) which travels through the USB cable into your USB Audio device (HardSID 4U in this case). Even if you use a cable with built-in EMI suppression some of the noise will work its way through to your audio device.

So, if any part in your PC isn't properly electromagnetically shielded, the EMI noise will be audible when low level audio is played. EMI noise can not be perfectly removed by any suppression method except by expensive physical separation of circuits connected to the PC from the audio circuits.

Suppressed EMI noise is still perfectly acceptable for hobby usage, but if you're planning to record your work/art in studio quality, you should consider going for the HardSID 4U Studio Edition, since it physically separates your audio circuits from the ones connected to your PC.

Connectors

Four mono dry outputs for the best sound quality (2x stereo jacks)

Mixed output for the easiest usage (1x stereo jack - mono signal)

Four mono inputs for filtering external sources with SID filters (2x stereo jacks)

USB connector for connecting the unit to a desktop PC or a Notebook

DC-in connector for connecting the power supply (1A@12VDC)

forget the emulation... you need the REAL ONE!

Save a lot of money by pre-ordering!

Are you a HardSID owner? We appreciate your loyalty! See the details below! Pricing

HardSID 4U without SID

Original price: 299 EUR

Pre-order price: 249 EUR (you save 50 EUR)

Pre-order price for returning customers: 199 EUR (you save 100 EUR)

* Send us the serial number of your HardSID (PCI or ISA / single-SID or Quattro) card!

HardSID 4U Studio Edition without SID

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USB connector for connecting the unit to a desktop PC or a Notebook
DC-in connector for connecting the power supply (1A@12VDC)

Original price: 399 EUR
Pre-order price: 349 EUR (you save 50 EUR)
Pre-order price for returning customers: 299 EUR (you save 100 EUR)
* Send us the serial number of your HardSID (PCI or ISA / single-SID or Quattro) card!
Power Supply
220V/50Hz -> 1A@12VDC: 15 EUR
USB Cable
10 EUR

Shipping

via standard air-mail: 15 EUR
note: We're accepting pre-orders and offering these heavily reduced prices only for orders without SID.

Payment

The payment method for the pre-orders is bank/wire transfer.
Once you've sent us your ordering email we'll reply with the payment details (we reply personally, you won't get annoying automated emails) and then you can transfer the price using a bank account.

Ordering

Send us an email to sales@hardsid.com with one of the following subject lines:

Pre-Ordering HardSID 4U without SID
Pre-Ordering HardSID 4U Studio Edition without SID
Select the accessories you need and write those into your ordering email:

USB Cable

Power Supply (220V/50Hz -> 1A@12VDC)
If a 220V/50Hz power supply is not useable where you live, you'll have to buy a power supply yourself. It has to be able to provide 1A at 12VDC.

Polarity: the inner-pin is the positive: + --o) -- -
If you're a returning customer, don't forget to tell us your card's serial number!

We'll reply with the payment details very soon!

Shipping

Once you've sent us the price, it'll arrive here in about a week. We'll send you an email telling you about the arrival of you money. At this point you'll be registered into our shipping queue.

Please note: We're sending the packages in the order of payment. So, the sooner you transfer, the sooner you get your HardSID.

Status: The first HardSID 4U stock is under manufacturing currently. We'll be able to ship the first package in the queue around the middle of April 2008. We'll send you an email when we've actually sent your package.

VSTi Interface

The VSTi interface for your HardSID 4U
8000Hz update rate on all SID registers. This is not a dumb MIDI control interface!
Wave-in VSTi pin for routing 8000Hz signals to any SID registers. Example: playing another VSTi's sound on the volume register (drum sampler, guitar synth, anything...!) No other SID synth can do this!
Full automation of all VSTi parameters in your VST host
Advanced modulation for each oscillator (3x for each SID):
8x8 Modulation Matrix with selectable sources, targets and amount (-100% to 100%)
8 Modulation Source Combiners for advanced modulation
4 LFOs
4 Envelopes
Table editor for value sequencing at up to 8000Hz speed
Selectable filter curve for driving the famous analog SID filters (logarithmic/linear for the 8580/6581)
Up to four VSTi instances can run simultaneously (one for each SID)



Interview with Téli Sándó HardSID 4U

www.hardsid.com



Q. Please introduce yourself to our readers

A. We're two Middle Eastern - European guys with ordinary daytime jobs. We love the SID/C64 and we're spending some or more of our spare time to create SID devices.

Q. Can you give our reader a little history about yourself?

A. We always loved SID music, since our childhood. Things then changed: PCs and monitors displaced C64s and big TV sets. There were only emulators and emulators.. We seriously missed the SID sound, but had no plenty of space to assembly an original config day to day, then put it back into the cabinet. So, we wanted to create an ISA card that work inside the PC and uses a real SID. We spent lots of time achieving this. ..then the ISA bus was displaced by the PCI bus and we had to move on. Now that Notebook sales are reported to be higher than desktop PC sales over the world, we had to release an external device.

Q. for the benefit of the uninitiated "What is a HARDSID"?

A. HardSID 4U is a USB device for PCs that hosts real SID chips. It has two main purposes:

1. Using it as a serious VSTi synthesizer to produce music in professional studios.
2. Playing the original SID tunes and C64 games with the original sound.

All with the original 25yrs old SIDs with their analog filters. There are two meanings of '4U' is: 1. Sounds like 'for you!' 2. Two chars representing: four SIDs on USB

Q. Can you describe the history of the project, where did it all start?

Well, this is a duplicate question, I think ;)

Q. So are the original Hardsid cards available?

A. We have some ISA/PCI cards for keeping it for the future, but we don't build ISA/PCI cards already.

Q. The original cards were PCI and ISA these were for IBM PC systems only?

A. Yes. Once we created Mac OS X drivers too for listening to old SID music and playing C64 games, but a very few people were interested in the end. So, we stuck at the PC since then.

Q. SO why release the HardsidU?

A. The HardSID 4U can be connected to notebooks too which are the most popular computers today. ..the HardSID 4U has a seriously improved hardware. It has two CPUs and main memory, so it can act as a VST synth or a cycle-accurate classic SID music player. This all wasn't possible at such good quality With former SID hardware.

Q. The whole thing is an external sound module with Real SID chips inside?

A. Exactly.

Q. How many sid chips and what kind can be incorporated in the device?

A. Four SIDs. Any version (6581,8580,6582) in any combination.

Q. You include a VST front end can you explain this



part of the package?

A. It's like any other VSTi synth, except it drives semi-analog hardware instead of calculating wave data for the VST host. It can be driven by any ASIO driver inside a VST host application. It renders SID register data for the hardware at 8000Hz data rate (on any register). So it can even render samples to the volume register or things like that. It can run in up to four instances. Each instance drives one SID.

Q. So why not just create a VST instrument modelled on the SID chip what's the difference?

A. Why would you want to drive a real car when you have a simulator? It's not the same..

Q. Will the module be populated with SID chips?

A. Yes, after April 2008. Until then we offer very special prices by pre-ordering without SID chips.

Q. Some readers are going to ask "with the shortage of SID chips why didn't you just produce some more"?

A. Because we're just two guys like anyone else. ..and people say that the original method of producing those original SIDs in the old time does not exist already. ...and re-designed, differently manufactured SIDs will be not the same either. Only if some company would dig the old manufacturing methods out from somewhere, that would be the real solution.

Q. Do you think there ever will come a time when someone looks at the SID and realises its potential redesigns the chip and produces a modern day version in a buy off the shelf keyboard?

A. I don't think so. Mainly because of the very low number of available SIDs. ..like I said before, re-manufactured super-SIDs will just be another emulation..

Q. You do all these projects in your spare time?

A. Yes. We both have ordinary daytime jobs, like anyone else you know. ..and the most important thing: families. Yesterday morning, when I checked our website's MP3s (I've uploaded that night) in our living-room on decent size JBL speakers, my two years old little sun just said: "It's too loud!" So, I'll have to train him seriously to start enjoying SID music ;)

Q. Did many Commercial musicians use the Hard sid's?

A. I've got the impression that a lot more successful musicians are using HardSIDs than we can know of.. Most of them will never confess officially.

Q. Can you plug your website and give our readers a price for your new product?

Please check
www.hardsid.com

Also, check the pricing here:
<http://www.hardsid.com/order.php>

Q. Did you have many problems with the design?

A. Of course. This kind of development isn't described anywhere. You have to go the whole way yourself. ..which is loooooong..

Q. Why create a USB interfaced box what was wrong with PCI cards?

A. Like I said before, notebook connectivity, improved hardware. Serious VSTi and cycle-accurate playback capabilities. This all was missing before.

Q. Does the package software and hardware run on any other computer systems? Linux, Apple Mac, Amiga and if not do you have plans to include these?

A. It is compatible with Windows OSs. We're not planning to move to other OSs currently. Maybe we will (Linux maybe?), but not in the near future.

Q. I posed the question in one issue of Commodore FREE Will sid chart, do you think a tune produced entirely on a commodore 64 with minimal external processing could ever make the charts?

A. If I had to answer to this question some years before, I would say it is insane....now I'm not sure that I won't happen.

Q. How many people are involved with the project?

A. Only two: My childhood friend makes the hardware, I'm doing everything else (firmwares, drivers, VST plugin, web site, etc...). Of course we work seriously in touch, since he has to design everything depending on my needs and I have to code things depending on his actual solutions.

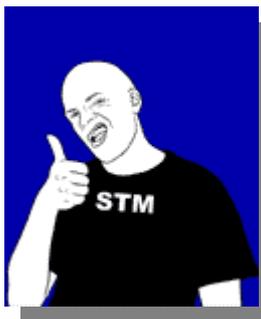
Regards,
Téli Sándor, Hard Software



Interview with From "PRESS PLAY ON TAPE" Roc=k On !



PPOT (left to right): Jesper Holm Olsen, Søren Trautner Madsen, Theo Engell-Nielsen, Martin Koch, André Tischer Poulsen, and Uffe Friis Lichtenberg.. Photo: Ditte Valente



Q - Please introduce yourselves to our reader

A. Hi, we are PRESS PLAY ON TAPE - the Commodore 64 revival band. We mainly play tunes from the games for the old home computer Commodore 64.

Q- The Band plays Commodore 64 "sid" tunes on real instruments

A. Yes, we do. We have always heard the tunes as music played on regular instruments and not as techno music. We really think some of these tunes come alive when real drums and bass are added. Mostly we play rock versions of the tunes.

Q- What instruments are used and who plays them

A. Two keyboard players: Theo Engell-Nielsen and André Tischer Poulsen. Two guitar players: Jesper Holm Olsen and Martin Koch. One drummer: Søren

Trautner Madsen, and One bass player: Uffe Friis Lichtenberg.

Q - Does the band play any other music?

A. Yes, we do play a couple of game tunes from the Amiga, and a few from other game consoles, like the Sony Playstation. On top of that we do, from time to time, play a tune for a special occasion. When we formed the band we were very careful about only being a 100% pure C64-band, but nowadays we tend to just play whatever we feel would be fun to do.

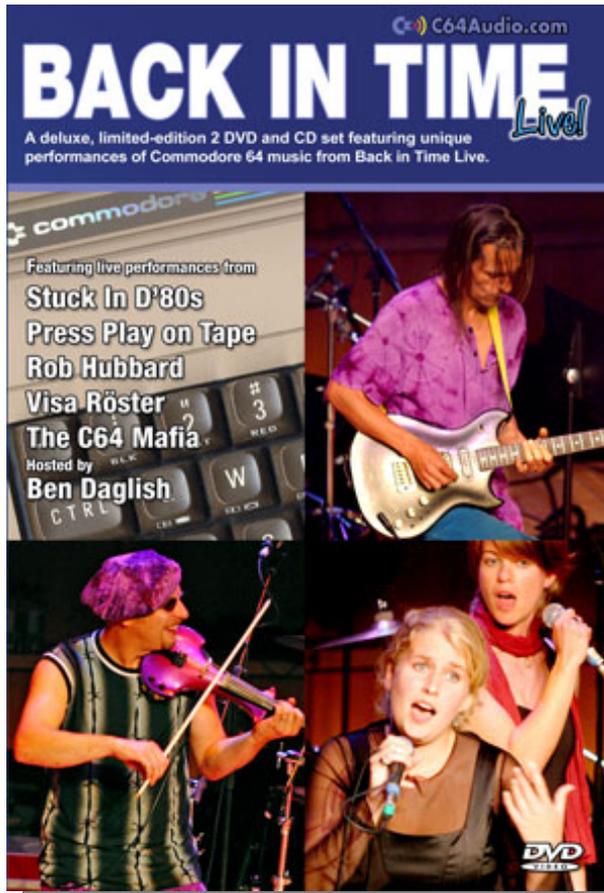
Q - Where have you performed

a. We have performed quite a number of concerts in Copenhagen, Denmark, where we live. We have also played four concerts in England, two in Norway and once in Germany.

Q - Some people may say why bother what is the point?

a. t's a trip down memory lane going to our concerts so if you're not sentimental about tunes from computer games, it's not for you. For





heard the story about a guy in the audience bringing his girlfriend and have her complaining about "what a Geeky band -- I don't bother seeing this", but afterwards she comes over and start talking about how she all of a sudden remembers that her little brother used to play on the C64 and she actually knew half of the tunes :)

Q - Where are you from and where will you be playing in 2008

A. We all met at the University of Copenhagen at the Department of Computer Science. Some of us played in another band that broke up and then we formed PRESS PLAY ON TAPE. We were all members of the demo group hybrıs/NEMESIS as well. At first it was meant as a joke but then somebody heard and we actually got asked to play before we knew any tunes for real-- suddenly it was serious business :) We will be playing at The Rock in Copenhagen, April 19th. No more gigs are planned right now.

Q - Are you available for hire? Weddings / funerals etc?

A. We are. We don't play weddings (other than band member's or funerals or regular parties as we are not a party band. We play at themed events.



Q - I have seen you live on 2 occasions both Back in time events, I was very surprised about the quality and professionalism of the band how much time does the band spend practising

A. Thanks. Happy to hear that. We spend one evening each week on a regular basis. When we have important gigs or are preparing an album we might meet more frequently. That being said we are by no means pro musicians, but the niche we have found here makes it possible for us to keep in touch as friends, have a lot of fun while doing it, and getting to play at the weirdest places where an "ordinary" cover-band would never play. We are still amazed sometimes at the events we actually do get to play. Like in 2005 where we where asked to do a support gig for a big Danish group called Mew whose main audience was teenage girls born AFTER the

those who like that, we have received a lot of positive feedback, and for a few we have changed their lives---just a little bit, we hope. For us it's about having fun, no more. We have a lot of fun whenever we meet to practice, and even more so when we're live on stage. If others find it enjoyable, then it's great!

Q - Do you have groupies and a website with merchandise?



a. We have a group of regulars to our concerts, which we think is nice. Wouldn't call them groupies but we have some fun memories and odd situations that again and again bring a

smile on our faces. We have had some merchandise---mostly t-shirts---on our homepage but most of it is sold out at the moment. Maybe it is time to do something about that.

Q - Are there girls watch you perform or is the audience predominantly guys?

A. Oh, yes. In the beginning girls were not that frequent but as the time has gone by we see more girls among the audience. That said, the audience is Mostly guys. More than once we have



Commodore64 went out of style. Only one thing to do: Overplay it and just dress up as über geeks (bicycle helmets, short pants, white socks, etc) and just act out in front of the 3000 people crowd. Surprisingly they actually enjoyed it!

Q - There was also a dvd of one of the events would you comment about this and seeing yourself on tv?

A. The DVD came about when we played in London in 2004 at a Back in Time event. Chris Abbott, the manager of the event, had it recorded on five video cameras and on a digital sound mixer. We got those, edited the concert ourselves and sent it back to Chris



on a hard disk. So to tell the truth, we had watched ourselves quite a lot before getting the actual DVDs :)

Q - Have you appeared on the local or international TV

A. We have had our share of minutes of fame, yes. We have

appeared on national TV and on a German channel as well. CNN mentioned us a few months back on their web site, too.

Q - Have you appeared in other Dvd's

A. Not that we know of, no. There is a german guy and his friends spending a lot of their free time doing a documentary on the Commodore 64 who interviewed us for that project, so we should appear on that :) see

<http://www.entsorger-film.de/>

Q - How seriously do you take yourselves?

A. We are very serious. We never joke about anything. Ever. And if you believe that...! No, we are not at all serious about ourselves. We're serious about having fun! We try to be very serious about being on stage, though.

Q - How has fame changed you?

A. Almost not at all. In the beginning we were very nervous when playing live but that have changed quite a lot. Also, in the beginning, we were impressed by all "the little things". That has faded away. We certainly feel much more at ease before a gig than we used to.

Q - How do you obtain the music, is it all reproduced by ear or do you use something like SID2MIDI

A. We use all the tricks that are in the book (and some that aren't). Nothing is sacred.

Q - "press play on tape" ok what prompted the band to use this as a name?

A. It is somewhat short. It is catchy. It spells retro. Those who have ever spent time playing on a C64 knows exactly what it means. It tells a story.

Q - How can our listener hear this music, do you sell commercially available Cd's

A. You can download some of our tunes, you can buy our CD's, you can watch videos on You Tube?. Go to our homepage and there are many ways.

Q - What introduced you to Commodore?

A. Many things. For all of us it was an interest in computers when we were (very) young. Not all of us had a C64 but those who did got it because it was one of the two big home computers of the time: C64 and ZX Spectrum. Chance... Or fate, perhaps? We really got into the music back then too. Sometimes we would go out and buy a game just because a particular compose made the music. Some of us recorded the music on cassette tapes and listened to it on our walkman!

Q - Honestly how many of the band own Commodore 64's

A. Four of us.

Q - Do you still use Commodore machines and if so what do you use them for?

A. They are still working, as are our Amigas. On rare occasions we turn them on and play a game or two. But not more than that.

Q - Do you use Real Commodore machines on stage?

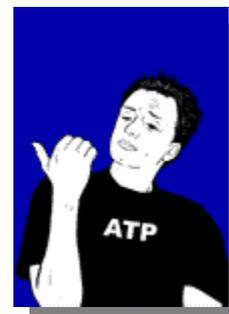
A. No. We dare not. We use a Windows based PC for playing some of our sample sounds. Even that we consider being risky. We've converted a broken C64 to a USB PC keyboard that we've used on some occasions.

Q - Have you any comments about the Prophet cartridge have you seen or used on of these devices?

A. Unfortunately not. We haven't had the chance yet.

Q - Time to plug the website and your merchandise, can you tell our reader what is available from the site?

A. Go to <http://www.PRESSPLAYONTAPE.com>



and get a lot of info about the band, our concerts, our CD's, listen to music, see videos, or even download them. Subscribe to our mailing list and get news about upcoming events, new releases etc. It is not a high-volume mailing list so don't be afraid :)

Q - Have you any final comments you would like to tell our reader?

A. Hope to see you at one of our concerts! If you plan to go to Copenhagen, Denmark and see us, be sure to book tickets as we have only experienced

playing for a full house. ROC=K ON!

THE END