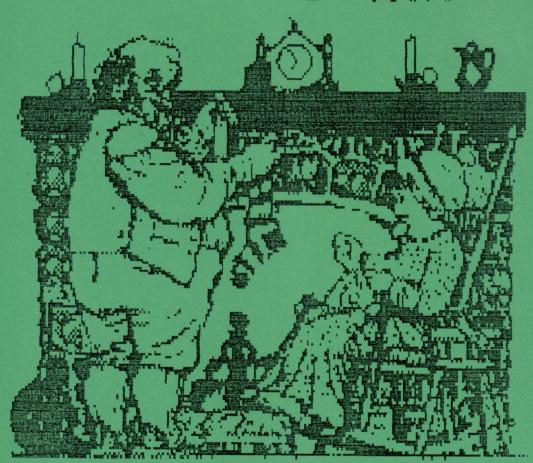
COCO - LINK

THE COLOUR COMPUTER MAGAZINE





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DOTTORSB FRED & ROSLYN REMIN

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BEMINS RAMBLING



My goodness, here we are at the end of another year. Is it just me or are they going really quickly these days! OK no wise cracks about getting older!

H

This also marks the end of year two for Fred and I putting COCO-LINK together. I won't say "writing" because it is all you COCO users out there doing that, we are simply the means of putting it all together. So a big CONGRATULATIONS to all out there that have contributed in one way or another with the magazine.

It also marks the start of the "SILLY SEASON", so a big Merry Christmas to all our subscribers and their families. We wish you all the best in 1995 and I hope the Jolly guy in the red outfit brings you lots of goodies.

Before I go on further I'd like to let you all know now (in case I forget actually), I am now working full-time so there will be no-one here during the day, however I will leave the answering machine on or you can call after 7pm each night or during the day on weekends.

I'd also like to apologise for being so late with this issue, it was almost ready when natural disaster hit, our son was admitted to hospital with appendicitis. Thus throwing mothers clockwork out the window. I am slowly catching up (very slowly).

For all those who use our BBS, we are still trying to fix the hardware problems, it appears our poor faithful can't handle the extreme temperatures of Townsville. I will let you know when we are up and running again.

Now for the bad news. It is with deep regret that I have to announce that John Morris in Sydney is NO LONGER an agent of REMCOMS. We wish John all the best and I thank him for all his support over the last few years.

Due to the fact that I am now working full time, we have purchased a P.O Box so that your letters and programmes do not sit in our hot, sunny mail box all day, our address is now;

REMCONS .
P.O BOX 787
THURINGOWA CENTRAL QLD 4817

Thankyou to everyone who returned the COCO REGISTRY form, the response was magnificant. There are still a few who haven't returned their form, if you are one of them, please do take the time to either return it by either mail or simply fax it back to us.

I have enclosed a few more (sorry) forms this issue. Firstly, the renewals for next years subscriptions, and secondly another dreaded survey form. This time it is for us. We want to know how we can improve on the magazine, so take the time, after all it is so we can improve what you have paid for.

Well that's it for now. Have a great XMAS everyone. See you next issue.



This poem is about Jim Eadsforth, a cocoist who lives in South Australiand if I am ever lucky enough to be the area he is certainly on the list people to visit.

TO JIN AT PUNYELROO CARAVAN PARK

If you're travelling near the Murray Make a stop at Punyelroo Find Jim there in his caravan And learn a thing or two.

If you've never heard of Punyelroo
It isn't hard to hunt
Just take a drive to Swan Reach, and
Ask the man on the punt.

You can stay there in a caravan Or just go for the day. Make sure that you don't miss it Now I've let you know the way.

Well, JIM came out from England A long, long time ago From a city there called Manchester, Where it rains a lot, you know!

He left it all behind him (including all that rain!) But one thing that he didn't leave Was his very active brain.

Living near the river
In peace & tranquility
With all the birds & sunshine
Looks pretty good to me.

Our T.V. wasn't working T'was no problem to him Before too long he'd fixed it (So thank you kindly, Jim)

He's not the kind to laze around He's kept right up to date In fact you won't believe that he Has taught a BEAR to talk.

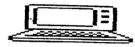
With his knowledge of technology He's got a talking BEAR (It's beaten me at Blackjack – That's really not quite fair!)

Now we've got his BEAR'S newsletter Full of fun & information. There should be more like you Jim, Then we'd be a better nation.

WENDY GOULD

REMCOMS

OPJIMIZE SELS



From JWT Enterprise comes the optimize sets 1 and 2. These utilities are primarily for use on a hard drive under OS-9. They defragment your files and float directories in order to optimize or speed up the operation of your system.

Optimize Set 1: This set includes: OPTIMIZE:

This utility actually modifies any disk or hard disk in order to spped disk accesses.

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ter.

This utility will allow you to determine the extent of fragmentation on your disk.

PRICE: \$45 + \$5 p+p

Optimize Set 2:

This set includes:

DIRCHECK;

The DIRCHECK utility allows you to check the integrity of the directory structure on any device or portion of a device.

DAMCHECK,

The DAMCHECK utility compares the disk allocation map with the current file structure on the disk to make sure that all files in the file structure are properly logged in the disk allocation map.

PRICE: \$35 + \$5 p+p

Buy both for \$60 + \$5 p+p

DIGITECH



Digitech Pro is an Australian produced software/hardware sound digitising system for the CoCo III.

With Digitech Pro you can connect your CoCo to any sound source including CD's, tape's, radio etc. The sound that you select and then adjusted into your own basic programme.

Digitech Pro requires a cable for this connection which can be made by you (instructions are included) or we can supply a cable.

This software/hardware combination is VERY user friendly, in fact you will be digitising your own sounds within minutes.

Requires CoCo III with 512K + cable.

PRICE: \$35 + \$5 p+p

To order either of these products contact: REMCOMS 100 Whitsunday Dve KIRWAN QLD 4817

Phone & Fax: (077) 734 884

THE

HARDWARE

HACKER

by Dr. Marty Goodman

Not just questions and answers, but complete hardware quidance!

Several folks have asked me about the use of error correction and data compression on telecommunications applications in general, and over Telenet and Tymnet to Delphi in particular. All modem 14,400 bps, and many modern 2400 bps modems support one or both of the two common protocols for error correction and data compression.

One protocol is that set by the European CCITT. The error correction protocol is called CCITT V.42, and the data compression protocol is called CCITT V.42bis. The naming of these protocols can be confusing. These designations refer to capabilities in the firmware inside the modem. They do not refer to the hardware protocol by which the data is being put on the line. However, the terms CCITT V.22bis, CCITT V.32 and CCITT V.32bis refer, respectively, to the hardware protocols for putting data on the phone line used for the current standards for transmission at 2400. 9600 and 14,400 bits per second, respectively.

All modems I have seen that support the CCITT type error and data compression also support the older NRP Micronet Protocol) type of error and data compression. MNP levels 3 and 4 are error correction protocols. MNP level 5 and up refers to schemes for data compression. Telenet and Tymnet, when used at 2400 bps and faster, support NNP level 3 or 4 error correction. Neither supports data compression.

Speed Conversion & Handshaking:

All modems that support these features have the capability of having your computer talk to the modem at a data rate faster than that which the modem is connected to the telephone line. This is needed. because if you use data compression, your modem may want to send to your computer data faster than it is receiving the information on the line, for it is decompressing the information, and thus exanding it. This is called "speed conversion". This means that, while your modem may be putting data on the phone line at 2400 bits per second, your computer is talking to it at 4866 or 9600 bps.

In order to work properly, your modem need a means of telling your computer to stop sending data to it briefly so it can catch up, in case you send stuff to it faster than it can compress and transmit it. The same is true in the other direction. This is referred to as "handshaking".

Handshaking is typically done in one of two ways: hardware or software. The hardware approach to handshaking is by far the best way to go. In this approach, two lines on the RS-232 port are used... one by the modem to tell the computer when to pause, and the other by the computer to tell the modem when to pause. The two lines typically used are the RTS and CTS lines. Thus, to fully use data compression, you need to have a hardwre RS-232 port that supports the RTS and CTS lines, and you need to have a terminal programme that knows about RTS/CTS hardware handshaking. so that you can activate that feature.

An alternative to hardware handshaking is the XON/XOFF software approach. XON/XOFF software handshaking works pretty well if you are dealing only with ASCII text data (7 bit data, and just a few control characters). However, because the XON and XOFF characters are, themselves, ASCII characters, this kind of handshaking is useless if you are dealing with 8 bit binary information.

Preparing your Modem:

To utilise the MNP or CCITT features of a modem, you need to set up that modem for that kind of operation. Sadly, as of this writing, there is little standardisation among makers of modems as to what commands to give to activate and adjust these properties of the modem. The term "Hayes Compatible" is meaningless in this area. For example: ALL "Hayes Compatible" modems can be made to dial "555-1212" with the command "AT DT 555-1212". However, consider: To set a "Hayes Compatible" Prometheus PROODEN 9600 Plus to 'auto reliable' MNP mode and enable RTS/CTS hardware handshaking you'd give it the command "AT *E1 *F3. But to set a Multitech Multimodem 224E in the same fashion, you'd give it the command "AT &E1 SEA". Thus, while many features of a "Haves Compatible" modem are standardised and can be used without any specific information on the particular make, model, and brand of modem, use of error correction and data compression capabilities usually absolutely requires careful study of the owners manual for the particular modem.

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The most important things to look for in setting up you modem include:

1. Set the modem for verbose responses (AT V1) and for expanded MNP / error protocol responses. The command(s) for this will vary from modem to modem. The effect of this is to tell your modem to announce to you after it connects whether or not it is in a protocol mode. Different makes and models of modems give differing amounts of useful information as to what they are doing. Most will distinguish between no protocol and error correction (often referred to as "reliable") mode, though many will not distinguish between whether or not they have added data compression to error correction in their connect message. Some will tell you whether they are using MNP or CCITT protocols, others may not.

Set the modem for "auto reliable" operation. This typically is done

using the command AT &EI or AT *EI, but the command may be different on your modem. Some modems, including some Hayes brand modems, use various "5" registers to control some of these functions. "Auto Reliable" means that the modem will look at information it receives from the host modem at the time of its attempting to make a connection, and automatically decide whether or not to turn on its special features depending on whether or not the host modem can support them.

 Set the modem for hardware CTS/RTS handshaking. In most cases, you should also set the modem for "Speed Conversion".

There are many other parameters that some other modems allow you to set. On some you can specifically enable MNP but not CCITT protocol, or vice versa. On many you can tell the modem to utilise error correction, but to not utilise data compression even if the host modem supports that. This last can be important, for with MNP data compression, occasionally the file will actually be expanded a little if the file you are trying to "compress" is already compressed using one or another of the various compression / archive utilities.

Practical Guidelines:

On Telenet and Tymnet with Delphi, there's no use for Data Compression ICCITT V.42bits or MNP level 5 or higher) capability in the modem because those services currently don't support that in the dial-up modes. Data compression is a nice convenience if you are on line interacting wth a bulletin board, looking at one screen after another, for data compression can increase the effective speed of ASCII character transmission two-fold or more, making new screens appear considerably quicker on your terminal as you negotiate around a BBS.

Data compression is currently of very limitd value in downloading specific files, for these days most files of any substantial size that you might want to download are already compressed with one or another "archive" type programme, and further compression is usually not possible with modem firmware. Indeed, as I noted, MNP5 may slightly expand such files!

Error correction (MNP up through level 4 and / or CCITT V.42) is highly desirable in almost all situations. It will virtually eliminate extraneous characters caused by "line noise". Indeed. MNP or CCITT error correction works so very well that my standard test of a new modem with that feature is to connect to Delphi using Telenet and MNP level 4, then pick up a voice telephone that is on the modem line and whistle into the phone for a few seconds, then hang up the voice phone. If the MNP feature is working properly, nothing appears on the terminal screen, and after hanging up the voice handset I can continue where I left off typing to Delphi, without any problems. If MNP is not working, garbage will appear on screen and the connection may even break.

As a minor technical point, I might as well note that MNP error correction does do a tiny amount of data compression as a side effect of the way it is implemented. In MNP level 3 and 4. asynchronous data is converted to a synchronous data stream, and with Class Three a 2400 bps connection can yield a thoughput of roughly 2600 bps (108% efficiency), and with MMP level 4 the implementation of variable block size into the protocol yields a throughput of roughly 2900 bps (120% efficiency) with a 2400 bps hardware connection. This efficiency is, of course, typically attained only if you have a continuous stream of data, as in a "straight ASCII, no handshake" type of download, and if you have your computer talking to your modem at a higher bps rate than the rate at which the modem is connect to the phone line.

I wrote this article to include items of interest both to folks who knew nothing about modem protocol error correction and data compression, and to those who already use these capabilities. Hopefully, this article has given you an overview of the subject... a framework within which to ask more detailed questions and seek answers from appropriate references and "experts".

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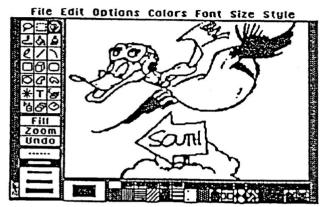
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CO Max III



CoCo Max III is absolutely the best drawing package available for the CoCo 3, and it does more than just let you draw. CoCo Max III includes animation, text, color mixing and more features than you would think possible. It combines incredible speed with dazzling graphics and it is a joy to use even its most powerful features.

Pictures, graphs, flyers, cards, signs, school projects, labels, buttons and anything else you might dream of creating is now possible with CoCo Max III. Is it any wonder that the majority of CoCo Gallery pictures in the last five months were created with CoCo Max?

Thousands of CoCo users have found that you don't have to be an artist to have fun with CoCo Max. You'll wonder why you waited so long to get the incredible CoCo Max III.

CoCo Max III is the best because it includes: - a huge picture area (two full hi-res 320x192 screens) editing window - Zoom mode for detail work - 28 drawing tools which you just point and click on - shrink and stretch - rotation at any angle (1.5 degree steps) - 512K memory support (all features work with 128K too) - an Undo feature to correct mistakes - you can even Undo an "Undo" - Animation - special effects - color sequencing (8 colors, variable speed) - thirteen fonts (more available) - each font has eight different sizes - five style options (bold, italic, 3D, etc.) for thousands of font/size/style combination possibilities. - the CoCo Show "slide show" program - color editing of patterns - automatic pattern alignment - prints in single and double size - smart lasso (move text over a background...) - advanced tools: arc, ray, cube, etc. - select 16 of the 64 colors (all 64 colors are displayed at once for selection!) - picture converter (CoCo Max II, MGE, BASIC) - extensive prompting - "glyphic" clipbook of rubber stamps - double click shortcuts - color mixing (additive/subtractive/none) - money back guarantee - sophisticated data compression saves disk space - pull down menus (no commands to remember) - forty paintbrush shapes - two color lettering - spray can - scrapbooks of pictures - error free - Y-cable or multipack not required - high speed hi-res interface (NOT INCLUDED) - disk is not copy protected (NOT INCLUDED) - disk is not copy protected - amazing "flowbrush" - RGB and composite monitor support - replace color - printing on black and white printers in five shades of gray - full color printing with optional drivers for the NX-1000 Rainbow and CGP220 - entirely rewritten for the CoCo 3

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DMP105/106/130.OKI182/192. CGP220
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by Des RAE

Are you running out of desk space?? Sick of having metal boxes everywhere with hardware in it?? Then this may be the answer you have been looking for.

In about June 1994, I was able to get a trip to Townsville for an instructional course for work on servicing a particular brand of Laser Printer.

During my stay at Townsville I was fortunate enough to have time to see Fred and Ros Remin and family.

Whilst at the Remins residence I noticed Fred had his floppy drives in an IBM case along with a hard drive or two.

I thought it was a brilliant idea and I wondered why I had not evenconsidered doing it myself.

A few months passed before I had the oppourtunity to be able to do thesame myself.

I was fortunate enough to be given a Tandy 1999 TX computer.(IBM Clone)
The machine worked perfectly except I had no monitor. So I decided this would hold my CoCo hardware instead, as I already own an IBM Clone (386 SX49 which I built).

I will assume you have some electronics experience and should you blow yourself up, dont blame me. You have been WARNED!! I removed the upper cover from the machine. This is done by simply undoing two screws on the front of the unit in the lower left and right corners.

After undoing the screws, the top cover will just slide back and off.

On the right side of the unit, you will see the two floppy drive bays. The one I acquired had a 360k 5 1/4° and a 720k 3 1/2° drive.

The 360k drive I sold as I used my two existing floppy drives (360kl.Firstly remove all cards installed the machine and place them into anti-static bags for safe keeping.

The power supply I believe is a good place to move to. Simply disconnect the power connector from the mother board. Also remove the connector to the floppys, and if installed, remove the supply to the hard drive. Undo the 5 retaining screws from the rear of the unit that hold the supply. Also remove the extra two screws inside that hold the power supply to the floppy bays.

Now we need to remove the floppy drive bay from the unit. You will see on the very right side of the machine a single screw holding that edge to the mainframe.

Remove that screw, along with the screw on the left side holding that edge to the main frame. The floppys will not come out as one unit. Now you will see the bare motherboard exposed in full glory!! Remove the few screws holding it to the base of the machine, as well as the speaker cable. There will also be a few plastic clips holding the motherboard.

These are easily undone by using a small pair of pliers, you may crimp the connectors and the GENTLY ease the board up.

Once this is accomplished the motherboard can also be placed in ananti-static bag and placed in a safe spot.

You should now see in front of you a completely bare shell. Now the hard work begins. My set up included two hard drives and two floppy drives. My two hard drives are a 5 1/4" 20 Meg Segate and a 3 1/2" 30 Meg Kyocera Hard Drive. The Kyocera came with the 1000 so I decided to use it was well,

and use it's original mounting point. It's original mounting point was vertical and on the left side of the floppys mounted directly to the drive bays.

My next problem was to find a place to fit the 5 1/4" hard drive, and have enough cable to run between the two hard drives. I settled upon placing the 5 1/4" hard drive under the floppy bays. To stop the underside of the hard drive's electronics being fried as they would have landed directly on the shell of the PC, I decided to use some anti-static shielding. For this, I robbed the shielding out of an old 16k Colour Basic CoCo 1 I started out with 13 years ago. (I had been using this for previous experiments. Seeing though it was not an Extended Colour Basic and could not have a disk drive attached. I decided it would be great for a hack).

I removed the shield from the CoCo and marked on it the outline of the hard drive. This was done very accurately by running a pen around the edges and then cutting it out with a pair of scissors. (I can see many electonic engineers reading this and shuddering. But what the hell, it works and I'm proud of it!)

Next we need to flatten out the stand off's on the bottom the PC case. There is about three of these we need to get rid of. The ones in question are located under the floppy drive bays. There is one at the front of the machine. There is one at the very right of the case, and one located at the rear right of the case.

The standoff's have been made at manufacture by punching a device into the sheet metal to make it protrude. To get rid of these you can use your imagination. For me to rid myself of the objects, I took the case to the shed and bashed them flat on our anvil with a ballpin hammer. This hammer I found made very light work of them.

Now that's done we can make a quick dummy fit of the case to mark the hole for the hard drive. Begin by inserting the bare 5 1/4" hard drive underneath where the floppy's normally reside. Next insert the floppy cage and slide the hard drive as far forward as you possibly can on the shell of the PC. Next insert the power supply.

You will now see how much spare room you have to play with. (About 10 milimeters between the hard drive and the power supply.

Now mark the positions of the screw holes in the hard drive on to the PC shell. This can be done by using a pencil.

Now remove the power supply, drive bays, and hard drive. The holes you just marked need to be drilled out to approximately 4 milimeters in diameter.

After the holes have been drilled, we can place the hard drive into position. But before doing so, we need to place the anti-static layer on first. Ok, now the anti-static shield is in place and holes have been made for the screws to protrude, we can now place the hard drive on top of the shield.

Next we can feed 3.5 milimeter bolt through from the base of the case to hold the hard drive in place. The bolts will need to be about 12 milimeters or so long. Place bolts though each hole and secure the ends with nuts and perhaps a washer. This completes the hard part of the exercise.

Now with the hard drive mounted we can feed the data cables though from the rear of the case. This is easily done as there is a nice hole provided at the rear of the machine which all cables required will fit easily through. The hole is located on the right side rear of the case underneath the power supply. There is a copper shim along it. The shim will easily pull off and can be discarded.

Now feed the data cables though for the first hard drive and connect them. If you dont do it now, it will be next to impossible later on. Now you can place the floppy drive bays in the machine. These can now be secured to the mounting points on the case.

You will also at this point need the data cable from your existing floppy drives. You will need to disassemble your current drive case and remove the cable. Now feed it through the rear of the PC case. If you have not done so already, now would be a good time to put your CoCo drives into the PC case. Just open your existing drive case, remove the power leads and data cables and insert the drives into the bays in the PC case.

We are almost finished. You will notice the power supply has a few power leads. You may also notice that we are two power supply connectors down as there is no connectors for running the two hard drives we are installing. There is a power connector for the floppys and a connector for the motherboard. We shall be modifying the connector for the keyboard for our own purposes.

To do the modification we need to open the power supply up. (Well, we dont really, it just makes life a little easier to read the markings on the power supply. The supply opens easily by removing two screws and the rear of the cover will pop off. (With a little bit of force it will come off! You will have to disconnect the fan also. It's probably also a wise idea at this point to take to the fan and supply with an air gun and get rid of the dust and cob webs.

You will see in the lower right corner of the supply the connector for the keybaord. There is about 15 or so wires coming from that point to the outside world. We are interested in only four of these wires. The wires we are most interested in are the Ground, Five Volt, Twelve Volt, and the other ground.

We need to connect these four wires into a female drive connector. This is then going to have a double adaptor plugged into it and then run to each hard drive. The wiring for the plug is simple. A diagram is shown below to assist in the connection.

Front view of connector on disk drive.

Pin Power

1 +12 Volts
2 12 Volt return (ground wire number one)
3 5 Volt return (ground wire number two)
4 +5 Volts

You need to run the wires from the power supply to the new cable in this order. You may choose not to put in the female adaptor. The reason being is that you can purchase a double adaptor from the local Tandy store which is made for powering two floppies from one connector. I will let you decide the best way to connect the double adaptor. I ran the wires from the power supply to a female adaptor. This you can also purchase from Tandy. I then plugged the adaptor I purchased from Tandy in to the female connector.

Now this has been done, the power supply can be re-assembled. The second hard drive can now be put back into it's original position on the side of the floppy bays and fastened.

Now feed the data cables through hole in the PC case for the second hard drive, and connect them. By now, we should have all the drives with their data cables connected and the drive bays secured as well. Now connect the new double adaptor to the two hard drives. (This is why I suggested to install a female on the power supply. It's so we can install and remove the power cables without removing the power supply).

α

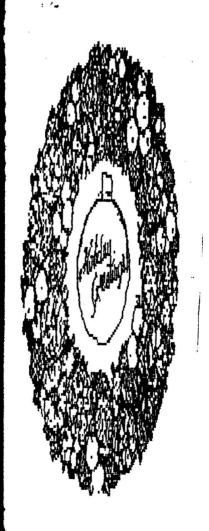
Now install the power supply and connect to the two floppies and the extra wires to the double adaptor.

Now put the cover back on the PC Case and your finished.

You can now sit this unit underneath your monitor and run the data cables along the right side of the unit to your Multi-pak interface.

While I'm at it, I must thank Stan Blazejewski for setting up the hard drives for me under 059 as I had no idea where to start. Without the efforts of Stan, I would never have finished this project.

Thank you Stan.





Those Darn Marbles is an arcade game for the CoCo3 512K. Requires a joystick, I found the deluxe to have more control than the small black ones. It's available on disk only and comes on four disks.

THOSE DARN MARBLES the name says it all but as yet I have not called that marble anything so mild.

The game is a 3D maze in which you use a joystick to steer a marble around it. Sounds easy enough. FORGET IT! For a start it takes great skill to keep the marble on track and if that isn't enough the game comes with its own monsters and traps. What with moving bridges and acid traps you can spend quite a bit of time either trying to move on them or around them. This time is important as there is endless life but a time limit.

There are walls with invisible holes and invisible bridges to help but as yet I am still looking for them. A magic wand also appears and will grant an extra 16 seconds to the clock. Do not rely on this wand or expect to see it too often, it is random and I found 9 out of 16 times is of no help. It seems to want to help me when there is no chance of completing the level.

The first level is quite simple. The second I thought was impossible to get through without the help of the wand. The acid pits are designed so there is no guarantee of getting through this level regardless of the skill acquired. The third level is conquerable, while the fourth is still a mystery to me.

The graphics of T.D.M. is good if you have time to look around, I'd played the game for about 3 days before I noticed anything but the actual maze or the marble. The marble has a face and is quite distracting when it bumps into a wall. I find I watch the face instead of where the marble is going.

I found the loading of the levels extremely long but my biggest complaint is that there's no pause button which can be frustrating if the phone rings. Overall I find the game is well worth the wait, the frustration and the addictiveness.

Gaye Brady.

Available soon from REMCOMS:

PRICE: \$50 + \$5 postage

P.C.C.C. Peninsular Colour Computer Club

The PCCC is a user group which could arguably be the longest running CoCo user group in Australia. The club has been going strong for over 12 years that I know of and is still a plethora of information on the CoCo.

The are based on the Mornington Peninsular (Frankston), and can be contacted by telephoning:

Greg MacKenzie (059) 838 991

Bob Charleston (059) 791 922

Stan Blazejewski (03) 580 4605

SPORTSware's

Barbarian *Quest*

Disributed By: RICK'S COMPUTER ENTERPRISE(U.S.A) & REMCOMS (Australia)

By Peter MORGAN

The setting: Back in the days when Kingdoms were young, in the land of LYNN. An evil wizard (Lothor) turns Princess (Leonore) into a walking Zombi after Lothor stole her sole and smashed it into 15 pieces. have to collect. After all the stongest and best soldiers have gone (trying to reclaim the Princess's sole) you Hector, an uneducated street brawler, the son of a pig farmer, present yourself to the Queen. A tear comes to her eye as she walks you to the castle gate. She saus nothing, fearing she is just sending another young man to his doom.

It is recommended that you have a deluxe joystick with two buttons, you can use the spacebar as the second button if you haven't. It is a little confusing

having nine positions to put the stick in plus two buttons and a multiple of combinations of stick and buttons to Jump, Punch, Stab, Run, Climb.

You begin play at the castle gate. You move along finding creatures & men to kill, fire pits jump (although landed in quite a few [hunderd]) and items to collect. Some of these dangerous. items are There are four levels (I haven't made it off the first yet) of play outside, in a castle, and levels. two dungeon seem to get GAME OVER over and over again.

FEATURES:

The graphics are pretty good although the trees look like lightning strikes upside down. it colourful and the people look a bit like people. The sound effects are ok but there is no score. background gameplay is good just a bit confusing at first with all of the movements available. The one flaw I have found in the game is that when you continue at the end of a game you only get one life instead of four which you get at the whether this is start intentional Or not unknown.

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Control:JOYSTK KEYS
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Max-10

HE DAZZLING WORD PROCESSOR

probably already have a word processor, and you bably wish it had these features:

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can print multiple columns on a page.

Not limited by printer capabilities: fonts up to 24 coints (1/3") high, superscripts, small print, etc.

Fully integrated spelling checker (incredibly fast). no need to exit program to check spelling.

Graphics can be imported from just about anything (CoCo Max; MGE; BASIC; even Macintosh pictures from a BBS) and resized to fit your document.

Full screen preview including graphics.

x-10 has all these unique features, plus all the tures you are used to in your current word cessor. Even with all this, you don't give up anything. x-10 is easier to use, more intuitive, faster and more werful than anything else. It's not just a word cessor, it's a desktop publisher.



Max-10: \$50

FONTS - \$25 cach Dictionary \$20

F-10 requires a CoCo 3, at least 1 disk, & joystick or mouse the drivers included: IBM/Epson and compatibles: DMP 105, DMP106, DMP130; CGP220 (B&W); Gemini/Star



Some of the many features of Max-10:

Blinding speed - printing in multiple columns - online dictionary - spell checking - graphics can be mixed with text - full justification of proportionally sized characters - bold, italic, underline superscript and subscript type styles - superb file support, just point and click - "Undo" lets you correct mistakes - easy to use, no commands to remember - any graphics program can be used - pictures can be shrunk or stretched to fit - right and left alignment - centering - variable line spacing - page numbering - current page number displayed on the screen - variable tab stops - left and right margins - tabs and margins can vary in the same document cut and paste text and graphics anywhere in the file - page break shows on the screen - pull down menus are quick and simple to use - lightning fast access to any point in the document with the scroll box - twenty fonts (styles and sizes), more available - any number of character sizes and styles can be mixed on the same line - up to more than 120 characters per line, depending on font size, style and letters - headers and footers, even with graphics - file compatibility with other word processors - right, left, bottom and top margins - word wrap - set starting page - type ahead - key repeat - key click - scroll up and down - ASCII file output for compatibility - disk directory - kill files- block cut, copy and move - global search and replace - paragraph indent - clipboard - merge - show file (on disk) - free memory display - page count - paragraph count - graphics can be resized and moved - multiple fonts - error recovery - true lowercase - 512K memory support (all features work with 128K too) - complete point and click cursor control - moving, clearing and changing blocks of text is ridiculously easy, just point and click at each end of the text block - onscreen ruler - preview file before loading - search and replace - disk is not copy protected - more than 35 pages of text

CoCo Max III and Max-10 Perfect Together

You do not need CoCo Max III to insert and print graphics in Max-10. Max-10 works with any graphics creation program, and you can also use graphics downloaded from bulletin boards.

Similarly, you do not need Max-10 to create graphics with text in CoCo Max III. There are tremendous lettering capabilities in CoCo Max III, with its many fonts, styles, and sizes.

Together Max-10 and CoCo Max III are an unbeatable combination. This desktop publishing system is better than anything you've ever seen on a CoCo. We are so confident that you will use, and enjoy using the two software packages, that we offer an unconditional money back guarantee. Stop wasting your time and effort using inferior or obsolete products. Move up to the new generation of CoCo software now.



My personal system, pathlists, more Multi-Vue, and boots.

What is it?

A few folks have asked about my personal machine - and what the heck, I like to brag anyway. Pretty much everthing runs on a CoCo3 (this column, CoNect, stupid carpentry business) while play is a range of hardware from CoCo2 to KNA depending on what's in stock.

The main box is a 2Meg 6309 Puppo MPak, with Burke & Burke/ST251 (40Meg buffered seek), 720K and 360K halting floppies and a plain jane Mini232 card (shades of the sixties! double pumper 4 bbl, too!)

This box runs a very conservative (nowadays) Patch OS-9 + Powerboost flavour of OS-9, usually under MultiVue. Being a terrifically organised individual, there are usually about a half dozen aps open, which is what got me started on OS-9 patches in the first place.

The trials and tribulations of maintaining this box ensure I'll always have something to write about. In fact, a truly ancient widebed Epson has been added to the printer array, so expect a piece on multiple printers one of these days.

AppAlert:

That fun loving Canadian Bob van der Poel has released a new shareware programme. Diskcat creates an index file of all your disks, floppy or hard drive. It can then quickly find all instances of any file or directory name. I'm finding files presumed lost years ago! Did I say it was fast? Skip lunch next week, send Bob the twenty bucks.

Pathlist Shorthand:

The standard OS-9 pathlist begins at a device, for example /p or /d1. Depending on the device, it may extend on to further divide the device. Most commonly, a disk drive is divided by topic into smaller directories, similar to a thesis outline.

Now that I've given you the unique opportunity to remember that English teacher, on to pathlist shorthand. A full pathlist is simply separated with slashes, so:

(default drive)
USR
WRITE
TW68M
art8.doc

becomes:

/dd/usr/write/tw68m/art8.doc

Pathlists are not case sensitive. In addition, each shell remembers two locations - one for commands and one for data. The current data position is usually referred to as dot, and in fact can be specified with a dot (period) on the command line. Kind of useless, since dot is a default (dir and dir. are the same command).

The beginning slash is significant. It means this pathlist extends all the way from a device to the final destination. Leave the initial slash off, and OS-9 adds dot to the beginning - so from /dd/usr you could use /dd/usr/desk/filename or desk/filename or even ./desk/filename (if your weird).

There is another shorthand, dot dot ... backs up one position. This is a bit more useful. Lets assume we are in /dd/usr/tcom/dearc and want to copy a file to /dd/usr/tcom/file you can use copy file ../file. Easy, huh?

Variations on a theme:

Over the years, Tandy released quite a few OS-9 programmes, and every

possible variation of OS-9 was used at one time or another. Collecting all of these programmes under one boot can be tricky.

The easiest programmes to transport are those not written specifically for the Colour Computer - they usually were written for the greatest common denominator. Remember, machines like the GIMIX were running level two long before the CoCo. Programmes like Dynacalc took care to be compatible with both variants of OS-9 and require little more than copying off the original boot disk to install under level two. Another example is the C compiler - look in time.h 'ifdef leveltwo...'hmmm.

Graphics programmes are more difficult. In an attempt to maximize the CoCco's speed, Tandy used a very machine specific graphics driver—not only is it different than anybody else, it's different than itself! Graphics applications therefore fall into three groups—Level1 vdg, Level2 vdg, and Level2 windows. Other than MultiVue, Rogue, and CoCo Artists, I can't think of any Level2 windows apps released by Tandy.

Still, there is hope. With some careful fitting, vdgint can be inserted alongside windint or grfint. The vdgint supplied with level2 contains both CoCo2 and CoCo3 versions, which contributes to it's huge size (a 'tiny' CoCo3 only vdg is available). Still, this vdgint will co-exist, and we can create windows to use it.

To obtain the Very Dumb Green window itself, use TANDY xmode. Type Ø is a traditional (inverted lower case) screen while type 1 gives a Tlvdg version, with real letters for letters.

xmode/w14 type = 0 iniz/w14 shelli=/w14& or program<>>>/w14&

This bit of code can be placed in a shellscript - replace the shell line with one to run the programme itself - this way, it's creation is transparent to the user. Under

MultiVue, you'll set the aif to call shell as the programme, with the name of the shellscript as a parameter. In this case, don't forget the ampersand! It's needed to allow the intermediate window (which was called when clicking on the AIF) to die. Otherwise it's stuck until the vdg programme ends.

Some programmes, for instance
DeskNate3, have to run on the term
device as shipped. Luckily, most
have been patched so you don't need
to go back to the old 32 column TERN,
just obtain the pd patches for your
programmes. Most of these patches
also include extensions for MultiVue
for instance the DeskNate patch
removes the lame menu window. Each
app runs directly from a MultiVue
icon.

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There are two situations when it's not practical to run a game under the main boot. Under Level2, you'll probably find King's Quest3, Leisure Suit Larry, and Flight Simulator just don't fit in a single boot. It is possible to squash them in using the VRM package, but most users will have to rip altogether too much out. If you've ever seen KQ3 under MultiVue, you'll know it's not worth the effort. Everything stops!

Instead, go ahead and make a new boot for these games. After all, any of these three take hours to play. The time spent rebooting isn't significant. Obviously, the easiest thing to do is simply add your drive descriptors (and HD drives) to the wdg boot that came with the game, possibly Boosting or Mitroing (is that the word?). Anyone with the patience to enjoy these games might like to attempt an improved version. Use VRN to repace the dedicated drivers - this way you can squeeze at least grfint in there to allow an "emergency" window on the side. And it is kind of fun to fire up multiple iterations. Amaze your friends!

The Tandy video system isn't totally compatible, and some things won't go under Level2. Since a 3 can't run original Level1, you'll have to find a copy of Level1, v2. This isn't that

difficult - Tandy sold quite a few games with Levellv2. Perhaps the best one to rob is Interbank Incident's boot, since it also has the SpeechPak drivers.

Be careful mixing utilites. Level1v2 is still Level1 - added utilities should come from a Level1 package. Incidentally, if you are running Level1 on a CoCo2, you might want to check out 1v2 anyway - many system modules were tweaked beyond simply getting it CoCo3 compatible.

More tricks:

Hard drive users will soon run into another problem - directory size. Some games, especially adventures, are composed of dozens of data files. Putting 2 or 3 of these into a single directory results in what is known in more knowledgeable circles as a mess.

The text clutter is bad enough, but under MultiVue things get really painful - it can take minutes for MVue to read in one of these giant directories, and all you can do is stare at that stupid hourglass in the meantime.

So we dig in our bag of tricks again and come up with... a procedure file! For this example, assume //dd/usr/games is the main games directory, and all games are to be run from there. The dance goes like this:

First, create a new directory in games for the new programme, and copy all it's data files there. Go back to usr/games, and set up an AIF to create the proper window type. Instead of the programme itself, this AIF should run a procedure file, similar to the 'create a vdg' AIF above. This procedure file will have to be placed in usr/games if using the stock shell. With shell plus, it can be placed in the cmds directory (provided the execute attribute is set) - a much better location.

All this file has to do is chd to the games subdirectory and run the game. This can be combined with the vdg maker file (if needed). Now, you have no reason to ever go into any games data directory - just click on the pretty submarine (or whatever), and the system will take over from there, chd to the proper data dir, and run the game - the user never sees anything, and quitting the game kills this path, dropping you back into gshell, wherever it is.

Some games aren't properly housebroken, leaving hi-score files in the current data directory and causing another form of directory clutter. The result is the same - MultiVue slows down and text directories become unreadable. I do the same thing to these, changing data to /dd/sys/scores before running the game.

Incidentally, you may want to break with convention somewhat, and start these subdirectory names with a lowercase letter. If aif files are capitalised, gsort will put the icons first, and the cluster of subdirectories will fall to the end of the list. Depending on how many games you've installed, they may drop out of sight completely.

The Wrap:

I'm going to crawl in my hole and die now. Those who care will be happy to know the disk of the month is 'cc3fix' - a collection of stuff to assist in cramming it all under a normal boot.

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BACK TO BASICS

by

FRED REMIN

As I promised in my last Back to Basics article, this time we will delve into some of the commands available for the CoCo and how to make them work to get the best out of them. Before we start however I must say thank you to George McLintock for his article in the last magazine, it came in very handy as I was in the scrub and could not produce the article myself. I do hope that you all learnt from Georges missive.

The first command that we will have a look at is the PRINT command. This command is very versatile and even more so on the CoCo 3 with it's additional 40 and 80 column screens. What does PRINT do? Well in a nutshell the command will print whatever you like where ever you like on either of the screens available to you.

Lets start with the real basics on a 16K machine. With the computer booted print in the following;

16 PRINT THIS VILL BE PRINTED.

Now type in RUN (ENTER).

The screen should now have printed on the left hand side the words,

THIS VILL BE PRINTED

Pretty straight forward isn't it, but lets now go a little further.

With the PRINT command you can also use a number of punctuation marks which will force the computer to behave in different ways. Lets write a very small programme to demonstrate.

Type in the following;

10 CLS 20 A*="FRED REMIN" 30 PRINT"HI, "A*,

Now run the programme, what should have happend is, HI is printed on the left and FRED REMIN in the next column on the right. This has happened because the 'comma' tells the computer to print in the next column. The 'comma' in conjunction with the PRINT command can be used to do column printing to the screen. Fairly easy isn't it.

This time do the same but change the 'comma' with a semicolon (;). Now run the programme again, this time everything has been printed together. The semicolon (;) forces the computer to basically "crunch up" all the printing, this can be used to pack what you print together.

Now try it without any punctuation marks, this will force the computer to print on the next line.

But I know you want more, as they say in the DENTEL ads, and yes there is a lot more.

Another handy little routine for the PRINT command is the "PRINT C" command. What this does is tell the computer to print your text "at" a certain location determined by you. To find this location go to the back of your instruction manual and find the "Low Resolution Text Screen Worksheet (32 X 161. By looking at this sheet you can determine exactly where your printing will begin on the screen. For example the command

PRINT @ 36, "FRED REMIN"

would print FRED REMIN starting 4 columns in and 2 down on the screen. Another example is the one in the manual which is PRINT @ 230,"A SCREEN FULL OF MAGIC". This will print the words A SCREEN FULL OF MAGIC in the centre of your screen. Have a bit of a play around with this command, it can do quite a lot for you, for example when making up a menu for your programme.

What You want MORE???

Well how about the TAB command in conjunction with PRINT?

The TAB command can be used to print things in nice neat columns, to demonstrate try the following small programme;

10 CLS 20 FOR Z = 500 TO 509 30 PRINT TAB (10); Z 40 NEXT Z

Now run the programme, see how easy it is to print nice neat columns using the TAB command in conjunction with PRINT.

Well what you should do now is go and have a cup of coffee and then come back and have a bit of a play around with what we have covered so far.

Once you have done that I will try to confuse you even more by expanding a little on this versatile command.

Back already are we?

Ok then lets keep going. So far we have used the PRINT command simply to print text to the screen but it can be used to print to either TAPE or DISK as well as a PRINTER.

What we are going to use now is the #command with PRINT. This tells the computer that you wish to print to a device, that device being either a TAPE (#-1), a DISK (#1) or a PRINTER (#-2).

To use this command to write information to a tape we would use something like this;

10 OPEN "0", #-1, "CHECKS"
20 PRINT #-1, "PUBLIC HOSPITAL"
30 CLOSE #-1

How does it work? Well with a tape connected to your computer and with PLAY and RECORD depressed when you run the above programme the following occurs. Firstly line 10 would label an area on your tape where it will store data as a file named "CHECKS", it will OPEN "0" this area on the TAPE (\$-1) and call it "CHECKS".

Next line 20 would PRINT to the TAPE(#-1) PUBLIC HOSPITAL, and finally line 30 would CLOSE the TAPE (#-1) file off.

The same procedure could be used for a disk system simply by exchanging #-1 with #1, basically minus 1 means TAPE and just 1 on it's own means DISK.

To print to a printer all you need to do is exchange the #-1 or #1 for #-2. As an example the line,

16 PRINT #-2, "HELLO PRINTER"

Mould print HELLO PRINTER on your printer. Simple isn't it!!

You can also incorporate the TAB command with a PRINT #-2 statement, this can make for some pretty fancy printing on your printer, for example to print out an inventory or even a purchase order etc.

At this point again what you should do is have a bit of a break and go and have a cup of coffee or something, (maybe a FOUREX or VB). When you come back have a bit of a play around with what we have covered so far, do not try and remember it all in one sitting. Hook up your tape, disk, printer or even all three and experiment with the commands that we have covered. Remember that you can not blow anything up, if the computer crashes, then just turn everything of for about 15 seconds and then start again.

Well now that you are back, did you know that your computer is nothing more than a great big calculator?

Yep, everything that happens on your computer is a result of a mathematical equation, except that your computer only counts in ones and twos, commonly known as binary.

To this end, using the PRINT command we can make the computer do our maths homework for us or even add, subtract, divide etc to help out with our monthly budget. Try the following command;

PRINT 13+3/8

You should end up with the answer of 2, that is the computer added 13 and 3 then divided this by 8 finally printing the answer on the screen for you.

If you think about it, using this capability in conjunction with the other commands that we have covered for example the TAB command, then you could very easily come up with a programme that would calculate your budget and then print it neatly through your printer on paper for you.

You can also use the command;

PRINT USING "format";data eg
10 PRINT USING "##.###";200/2

would print the answer to 3 decimal places. Have a look in the back of your manual for the other 'formats' that can be used with the PRINT command. These include:

- # Formats numbers
- Decimal point
- , Prints comma to the left of every third character ** Fills leading spaces with
- asteriks

 Prints leading dollar sign
- ## Floating dollar sign
 + leading or trailing sign
- Exponential format
- Minus sign after negative number
- ! Prints first character of a string

plus two.

Again have a bit of a play around with these formats in conjunction with the PRINT command, with a little bit of manipulation they can come in very handy.

What we have done in this installment is scratch the surface of the PRINT command for you. With a little bit of imagination and some experimenting you can use this versatile command to do just about anything, as we have seen it can print text to the screen, to a file on tape or disk and to a printer. By using a number of formats we can use the PRINT command to do just about any mathematical equation for us as well.

By using the TAB or PRINT @ command we can make some fairly fancy printouts on a printer, maybe an inventory programme or a monthly budget. As you can see once you have mastered the PRINT command you are only limited by your own imagination.

So have a go, experiment, play around with it and send in your creations to this magazine so that everyone can benefit from your work.

Next time I get a chance to again do this Back to Basics article, I will pick another of the many commands available on the Colour Computer and hopefully help you to understand them better so that you can use them to write your own programmes rather than pay heaps of dollars to get one that does not really do what you want it to.

Until next time, READ THE INSTRUCTIONS and keep on cocoing.

Fred Remin.

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SUBSCRIPTION

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*********
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GRAPHICS

nt

of

8

THE OPERA HOUSE

by Bill BALDACCHINO

```
5 CLEAR5000:POKE65497.0
10 WIDTH40:CLS8:ATTR2,7
20 LOCATE11,3
30 PRINT"**OPERA HOUSE**"
40 LOCATE18,6:PRINT"BY"
50 LOCATE11.8
60 PRINT"BILL BALDACCHINO"
70 LOCATE11,10
80 PRINT"ROSELANDS N.S.W."
90 LOCATE12,15
100 PRINT"PRESS ANY KEY"
110 LOCATE11,18
120 PRINT"***** AND *****
130 LOCATE10,22:ATTR2,7,B
140 PRINT"PLEASE BE PATIENT"
150 As=INKEYs: IFAs=""THEN150
160 HSCREEN4: PALETTECMP
170 HCOLOR1
180 HLINE(0,0)-(640,192), PSET, B
190 HLINE(12,2)-(635,190),PSET,B
200 HPAINT(1,1),1,1
210 PALETTEØ,63
220 HCOLOR2
230 FORX=12T0635STEP2
240 HLINE(X,2)-(X,70), PSET
250 NEXT
260 HCOLOR3
270 FORX=12T0635STEP2
280 HLINE(X,70)-(X,190),PSET
290 NEXT
300 HCOLOR1
310 FORX=290T0350STEP2
320 HLINE(X,166)-(X,190).PSET
330 HLINE(X+40,164)-(X+40,190)
, PSET
340 HLINE(X+80,162)-(X+80,190)
350 HLINE(X+140,161)-(X+140,190)
360 HLINE(X+160,162)-(X+160,190)
, PSET
370 HLINE(X+190,158)-(X+190,190)
380 HLINE(X+230,155)-(X+230,190)
390 HLINE(X+248,153)-(X+248,190)
, PSET
```

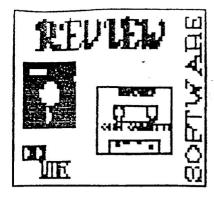
```
400 HLINE(X+268, 151)-(X+268, 189)
. PSET
410 HLINE(X+290,149)-(X+290,190)
, PSET
420 NEXT
430 FOR R=1T053
440 READ A,B,C,D,E,F,G
450 HCIRCLE(A,B),C,D,E,F,G
460 NEXT
470 DATA 310,110,134,1,1,.90,.99
480 DATA 253,78,163,1,1,.85,.99
490 DATA 480,66,175,1,1,.52,.62
500 DATA 90,80,180,1,1,.83,.98
510 DATA 192,93,120,1,1,.54,.66
520 DATA 82,95,27,1,1,.58,.72
530 DATA 55,95,12,1,1,.80,.0
540 DATA 86,74,170,1,1,.84,.99
550 DATA 210.70,180,1,1,.90,.01
560 DATA 278,100,188,1,1,.53,.64
570 DATA 205,115,115,1,1,.54,.65
580 DATA 487,123,125,1,1,.56,.67
590 DATA 542,94,415,1,1,.49,.58
600 DATA 312,89,66,1,1,.66,.84
610 DATA 375,95,130,1,1,.51,.59
620 DATA 338,135,120,1,1,.50,.64
630 DATA 425,134,160,1,1,.57,.68
640 DATA 175,130,110,1,1,.88,.95
650 DATA 494,126,128,1,1,.54,.65
660 DATA 303,114,135,1,1,.91,.99
670 DATA 220,100,150,1,1,.92,.04
680 DATA 164,110,200,1,1,.94,.03
690 DATA 464,152,200,1,1,.58,.66
700 DATA 456,122,20,1,1,.30,.50
710 DATA 447,125,18,1,1,.34,.58
720 DATA 440,130,20,1,1,.48,.70
730 DATA 365,90,80,1,1,.21,.28
740 DATA 365,95,82,1,1,.20,.27
750 DATA 365,100,84,1,1,.20,.28
760 DATA 242,146,120,1,1,.90,.0
770 DATA 296,158,110,1,1,.74,.82
780 DATA 347,158,125,1,1,.54,.68
790 DATA 278,120,81,1,1,.07,.18
800 DATA 276,129,80,1,1,.05,.15
810 DATA 290,118,90,1,1,.18,.37
820 DATA 290,72,130,1,1,.20,.28
830 DATA 402,80,25,1,1,.55,.85
840 DATA 380,192,280,1,1,.60,.71
850 DATA 300,94,80,1,1,.08,.15
860 DATA 430,188,165,1,1,.69,.77
870 DATA 206,100,160,1,1,.95,.04
880 DATA 435,141,168,1,1,.58,.68
890 DATA 435,141,170,1,1,.57,.68
900 DATA 510,138,155,1,1,.56,.65
910 DATA 290,118,150,1,1,.91,.98
920 DATA 300,150,60,1,1,.77,.96
930 DATA 255,150,100,1,1,.89,.99
940 DATA290,86,140,1,1,.22,.32
950 DATA 367,104,55,1,1,.20,.29
960 DATA 367,107,60,1,1,.18,.27
970 DATA 365,108,70,1,1,.20,.26
```

```
980 DATA 365,112,70,1,1,.26,.29
                                                  1550 DATA 174,103,160,110
  990 DATA 439,62,199,1,1,.24,.28
                                                        1560 DATA 150,114,155,114
  1000 HCOLOR1
                                                         1570 DATA 185,117,190,117
  1010 HLINE(267,135)-(327,115)
                                                        1580 DATA 190,117,194,113
  , PSET
                                                        1590 DATA 190,117,196,117
  1020 HLINE(235,153)-(267,135)
                                                       1600 DATA 196,117,198,113
  , PSET
                                                        1610 DATA 196,113,230,111
  1030 HLINE(246,145)-(279,135)
                                                   1620 DATA 196,115,222,122
  .PSET
                                                         1630 DATA 200,134,225,153
 1040 HPAINT(332,123),1,1
                                                        1640 DATA 218,135,223,135
 1050 FOR L=1T0183
                                                       1650 DATA 223,135,223,133
 1060 READ A,B,C,D
                                                 1660 DATA 442,105,540,117
1670 DATA 540,117,557,124
                                                                                                  TIO S
 1070 HLINE(A,B)-(C,D),PSET
 1080 NEXT
                                                                                                  7 9
                                                       1680 DATA 557,124,570,129
                                                  1690 DATA 570,129,584,131
1700 DATA 584,131,615,143
1710 DATA 615,143,640,147
 1090 DATA 444,102,545,113
                                                                                                  1 30
 1100 DATA 545,113,560,120
                                                                                                  रम् कुहा
 1110 DATA 560,120,575,125
                                                                                                  1. 3. 3.
 1120 DATA 575,125,590,127
                                                       1720 DATA 448,140,444,130
 1130 DATA 590,127,620,139
                                                      1730 DATA 387,124,436,122
1740 DATA 440,132,442,139
1750 DATA 420,132,394,134
 1140 DATA 620,139,650,143
                                      1750 DATA 420,132,394,134
1760 DATA 420,132,444,140
1770 DATA 444,140,448,141
1780 DATA 388,122,404,139
1790 DATA 384,122,388,139
1800 DATA 384,122,388,122
1810 DATA 404,139,398,139
1820 DATA 292,167,287,171
1830 DATA 292,167,283,160
1850 DATA 393,167,283,160
1850 DATA 330,108,280,125
1860 DATA 280,125,250,138
1870 DATA 250,138,227,152
1880 DATA 250,142,310,120
1900 DATA 310,120,325,117
1910 DATA 325,117,330,117
1920 DATA 242,146,280,135
1930 DATA 242,146,280,135
1930 DATA 275,167,284,173
1960 DATA 255,170,275,167
1950 DATA 255,170,227,156
2000 DATA 255,170,227,156
2000 DATA 274,175,260,170
2030 DATA 274,175,260,170
2030 DATA 256,165,256,170
2040 DATA 256,165,256,170
2050 DATA 250,169,220,168
2070 DATA 250,169,220,168
2070 DATA 250,169,220,168
2070 DATA 253,168,280,188
2080 DATA 258,110, 72,110
2100 DATA 65,110, 54,104
2110 DATA 58,110, 63,117
2130 DATA 63,117, 78,117
 1150 DATA 65, 95, 65, 99
 1160 DATA 65, 99, 55, 99
                                                        1760 DATA 420,132,444,140
 1170 DATA 55, 99, 55,104
 1180 DATA 55,104, 47,104
 1190 DATA 47,104, 47,110
 1200 DATA 47,110, 5,110
                                                                                                    1210 DATA 5,120, 80,170
 1220 DATA 80,170, 80,177
                                                                                                  4 4.2
1230 DATA 80,177, 74,178
1240 DATA 74,178, 87,192
                                                                                                  - 201
                                                                                                 176 6
 1250 DATA 70, 83, 90, 90
                                                                                                 030
 1260 DATA 70, 83, 70, 94
1270 DATA 70, 94, 84, 88
                                                                                                  A Company
1280 DATA 92, 90, 90,103
1290 DATA 90,103, 93,103
1300 DATA 93,100,125,112
1310 DATA 125,112,150,117
1320 DATA 150,117,148,121
1330 DATA 148,121,200,134
1340 DATA 200,140,118,118
1350 DATA 220,132,230,136
1360 DATA 224,147,238,149
1370 DATA 118,118,100,110
1380 DATA 100,110, 88,107
1390 DATA 88,107, 70, 91
1400 DATA 363, 87,387, 69
1410 DATA 65,100, 88,127
1420 DATA 88,127,117,130
1430 DATA 117,130,220,168
1440 DATA 220,168,220,155
1450 DATA 220,155,200,140
1460 DATA 90,108, 90,127
1470 DATA 118,118,118,130
1480 DATA 101, 97,128,102
1490 DATA 101, 97,100,104
1500 DATA 130,110,150,114
1510 DATA 161,110,153,115
1520 DATA 161,110,185,113
1530 DATA 185,113,185,117
1540 DATA 185,113,174,103
```

```
2750 DATA 550,20,550,42
2760 DATA 550,25,645,28
2770 DATA 438,124,540,117
2780 DATA 443,128,548,121
2790 DATA 446,132,557,125
2800 DATA 446,132,557,125
2800 DATA 446,161,632,146
2820 DATA 280,180,635,151
2830 DATA 280,180,635,151
2830 DATA 286,185,635,156
2840 DATA 292,167,420,159
2850 DATA 320,189,635,161
2860 DATA 420,160,440,161
2870 DATA 285,173,430,163
2880 DATA 390,189,635,166
2890 DATA 445,189,635,170
2900 DATA 494,189,635,170
2900 DATA 538,189,635,174
2910 DATA 538,189,635,179
2920 HLINE(5,30)-(35,52),PSET,B
2930 HLINE(10,40)-(20,52),PSET,BF
2940 HLINE(50,25)-(60,50),PSET,BF
2950 HLINE(50,25)-(60,50),PSET,BF
2970 HLINE(82,42)-(110,50)
,PSET,BF
   2150 DATA 69,125, 45,110
   2160 DATA 69,125, 85,125
  2170 DATA 130,185,257,174
  2180 DATA 137,192,108,170
  2190 DATA 108,170, 80,170
  2200 DATA 90,170, 5,115
  2210 DATA 80,170,105,192
  2220 DATA 77,176, 93,192
  2230 DATA 390, 35,640, 45
  2240 DATA 240, 33,320, 30
  2250 DATA 5, 52,110, 49
  2260 DATA 110,135,110,145
  2270 DATA 115,135,115,145
  2280 DATA 110,135,107,133
  2290 DATA 107,133,107,143
  2300 DATA 107,143,110,145
  2310 DATA 110,135,115,135
  2320 DATA 110,145,115,145
 2330 DATA 108,133,113,133
 2340 DATA 113,133,115,134
 2350 DATA 170,165,170,175
 2360 DATA 170,165,175,165
 2370 DATA 170,175,175,175
 2380 DATA 175,165,175,175
                                                      , PSET, BF
 2390 DATA 167,163,167,173
                                                     2980 HLINE(112,20)-(134,40)
 2400 DATA 167,163,169,165
                                                      ,PSET,B
 2410 DATA 167,163,172,163
                                                     2990 HLINE(112,20)-(112,50),PSET
 2420 DATA 172,163,175,164
                                                     3000 HLINE(256,10)-(285,32)
 2430 DATA 167,174,169,175
                                                      , PSET, BF
 2440 DATA 250,145,252,152
                                                     3010 HLINE(220,18)-(256,18),PSET
 2450 DATA 260,142,262,152
                                                   3020 HLINE(285,22)-(330,22),PSET
3030 HPAINT(630,39),1,1
 2460 DATA 270,138,273,154
 2460 DATA 270,138,273,154
2470 DATA 280,136,283,154
2480 DATA 290,138,293,156
                                                 3030 HPAINT(630,39),1,1
3040 HPAINT(500,37),3,1
3050 HPAINT(130,30),2,1
3060 HPAINT(57,30),3,1
3070 HPAINT(17,32),3,1
3080 HPAINT(120,42),3,1
3090 HPAINT(300,27),3,1
 2480 DATA 290,138,293,156
 2490 DATA 300,136,303,154
 2500 DATA 310,136,313,154
 2510 DATA 320,134,323,154
 2520 DATA 330,133,333,150
 2530 DATA 340,132,342,146
                                                      3100 HPAINT(250,27),3,1
 2540 DATA 340,126,340,132
                                                      3110 HCOLOR0:FORX=14T018
2550 DATA 330,118,330,132
                                                  3120 FORY=35T048 STEP4
3130 HLINE(X,Y)-(X,Y),PSET
2560 DATA 320,119,320,134
2570 DATA 310,120,310,135
                                                   3140 HLINE(X+15,Y)-(X+15,Y),PSET
3150 HLINE(X+26,Y+2)-(X+26,Y+2)
2580 DATA 300,123,300,135
2590 DATA 290,127,290,137
                                                      ,PSET
3160 HLINE(X+37,Y-4)-(X+40,Y-4)
2600 DATA 280,132,280,137
2610 DATA 270,134,270,137
                                                     , PSET
2620 DATA 180,145,180,154
                                                      3170 HLINE(X+60,Y+1)-(X+62,Y+1)
2630 DATA 180,145,185,147
                                                      , PSET
2640 DATA 185,147,185,156
                                                    3180 HLINE(X+103,Y-10)-(X+107
2650 DATA 182,147,182,155
                                                      ,Y-10),PSET
2660 DATA 78, 90, 90, 96
                                                   3190 HLINE(X+227,Y-15)-(X+229,Y-15),PSET
2670 DATA 100,100,129,106
2680 DATA 155,113,185,117
                                                   3200 HLINE(X+260,Y-20)-(X+262,Y-20),PSET
3210 HLINE(X+250,Y-21)-(X+252
2690 DATA 197,112,225,119
2700 DATA 197,113,227,112
2710 DATA 221,134,225,145
                                                   ,Y-21),PSET
3220 HLINE(;
,Y-10),PSET
2720 DATA 222,150,226,152
                                                     3220 HLINE(X+280,Y-10)-(X+284
2730 DATA 118,118,132,113
2740 DATA 350,14,550,20
```

```
3230 HLINE(X+380,Y-14)-(X+384
                                    3740 HPAINT(220,152),0,1
  , Y-14), PSET
                                        3750 HPAINT(85,92),1,1
 3240 HLINE(X+390,Y-12)-(X+394
                                        3760 HPAINT(85,100),3,1
  , Y-12), PSET
                                        3770 HPAINT(190,122),3,1
 3250 HLINE(X+420,Y-15)-(X+424
                                        3780 HPAINT(90,70),0,1
  ,Y-15),PSET
                                        3790 HPAINT(112,70),0,1
 3260 HLINE(X+435,Y-13)-(X+439
                                     3800 HPAINT(150,70),0,1
3810 HPAINT(600,133),0,1
 , Y-13), PSET
                                    3820 HPAINT(438,130),0,1
3830 HPAINT(250,160),0,1
 3270 HLINE(X+450,Y-14)-(X+454
 , Y-14), PSET
 3280 HLINE(X+470,Y-14)-(X+474
                                    3840 HPAINT(250,165),0,1
 , Y-14), PSET
                                        3850 HPAINT(263,167),0,1
                                     3860 HPAINT(270,178),0,1
 3290 HLINE(X+490.Y-13)-(X+494
                                                                   1 30S.
 ,Y-13),PSET
                                        3870 HPAINT(278,171),0,1
                                      3870 HPAINT(278,171),0,1
3880 HCIRCLE(248,164),2
3890 HCIRCLE(265,166),2
                                                                  1 9 50
 3300 HLINE(560,30)-(635,32),PSET
 3310 HLINE(560,35)-(635,37),PSET
                                        3890 HCIRCLE(265,166),2
 3320 NEXTY, X
                                        3900 HCIRCLE(238,159),2
 3330 HCOLOR3: WINDOW
                                        3910 HCOLORØ
 3340 HLINE(75,106)-(85,112),PSET
                                     3920 FORX=1T014
3930 READ A,B,C,D
 3350 HLINE(92,115)-(106,117),PSET
 3360 HLINE(125,123)-(145,129)
                                        3940 HLINE(A,B)-(C,D), PSET
 .PSET
                                        3950 NEXT
 3370 HLINE(170,135)-(190,141)
                                        3960 DATA 438,125,538,118
          : ••
                                        3970 DATA 442,129,548,122
 3380 HPAINT(550,110),2,1
                                       3980 DATA 446,133,555,126
 3390 HPAINT(15,90),2,1
                                       3990 DATA 448,138,567,130
                                     4000 DATA 440,162,620,148
4010 DATA 290,168,420,160
4020 DATA 282,174,432,164
 3400 HPAINT(15,185),2,1
 3410 HPAINT(300,40),2,1
3420 HPAINT(150,175),3,1
3430 REM LIGHTS
                                      4030 DATA 283,181,635,152
4040 DATA 288,186,635,157
3440 HCOLOR1
3450 FORX=25TO 45STEP15
                                      4050 DATA 320,190,635,162
3460 FORY=105T0165STEP3
                                      4060 DATA 390,190,635,167
3470 HCIRCLE(X,Y),5,0
                                       4070 DATA446,190,635,171
3480 HLINE(X,Y)-(X,Y+10),PSET
                                       4080 DATA 492,190,635,175
                                     4090 DATA 544,189,635,180
3490 HLINE(X+1,Y)-(X+1,Y+10),PSET
3500 HLINE(X-1,Y)-(X-1,Y+10),PSET
                                       4100 PALETTE3,35
3510 X=X+13
                                        4110 PALETTE1.0
3520 Y=Y+5
                                        4120 PALETTE2,10
3530 NEXTY
                                        4130 HBUFF1,300:HBUFF2,300
3540 NEXTX
                                        4140 HBUFF3,300:HBUFF4,300
3550 HPAINT(520,140),3,1
                                     4150 HBUFF5,300:HBUFF6,300
3560 HPAINT(430,115),3,1
                                      4160 HBUFF7,300:HBUFF8,300
3570 HPAINT(120,90),0,1
                                      4170 HBUFF9,300:HBUFF10,300
3580 HPAINT(210,90),0,1
                                      4180 HCOLOR1
3590 HPAINT(290,90),0,1
                                      4190 HDRAW"BM30,60;R34;G2;L2
3600 HPAINT(400,60),0,1
                                       ;G2;L28;U4;BR30;H4;L4;G2;L1
3610 HPAINT(370,60),0,1
                                      ;G2;L1"
3620 HPAINT(385,80),0,1
                                       4200 HPAINT(35,62),0,1
3630 HPAINT(235,120),0,1
                                       4210 HGET(20,55)-(65,65),1
3640 HPAINT(260,120),0,1
                                      4220 HGET(20,55)-(61,65),2
3650 HPAINT(350,100),1,1
                                       4230 HGET(20,55)-(57,65),3
3660 HPAINT(385,100),1,1
                                       4240 HGET(20,55)-(52,65),4
3670 HPAINT(120,107),1,1
                                       4250 HGET(20,55)-(48,65),5
3680 HPAINT(120,102),2,1
                                       4260 HGET(20,55)-(44,65),6
3690 HPAINT(170,113),1,1
                                      4270 HGET(20,55)-(40,65).7
3700 HPAINT(174,108),2,1
                                      4280 HGET(20,55)-(36,65),8
3710 HPAINT(220,115),2,1
                                      4290 HGET(20,55)-(32,65),9
3720 HPAINT(220,120),1,1
                                       4300 HGET(20,55)-(28,65),10
3730 HPAINT(225,138),1,1
                                       4310 FORX=0TO 35STEP4
```

```
4320 HPUT(X,65)-(X+44, 75),1,PSET
   4330 PLAY" VØ; A"
   4340 ON BRK GOTO4880
   435Ø NEXT
  4360 HPUT(39,65)-(79,75),2,PSET
  4370 PLAY" VØ; A"
  4380 HPUT(43,65)-(79,75),3,PSET
  4390 PLAY" VØ; A"
  4400 HPUT(47,65)-(79,75),4,PSET
  4410 PLAY" VØ; A"
  4420 HPUT(51,65)-(79,75),5,PSET
  4430 PLAY" VO; A"
  4440 HPUT(55,65)-(79,75),6,PSET
  4450 PLAY VO; A"
  4460 HPUT(59,65)-(79,75),7,PSET
  4470 PLAY"V0; A"
  4480 HPUT(63,65)-(79,75),8,PSET
  4490 PLAY"VØ; A"
  4500 HPUT(67,65)-(79,75),9,PSET
  4510 HPUT(71,65)-(79,75),10,PSET
  4520 'HPUT(71,65)-(79,75),10,AND
  4530 HCOLOR2
  4540 HLINE(50,65)-(79,75), PSET, BF
  4550 HGET(61,55)-(65,65),2
 4560 HGET(57,55)-(65,65),3
 4570 HGET(53,55)-(65,65),4
 4580 HGET(49,55)-(65,65),5
 4590 HGET(45,55)-(65,65),6
 4600 HGET(41,55)-(65,65),7
 4610 HGET(37,55)-(65,65),8
 4620 HGET(33,55)-(65,65),9
 4630 PLAY"VØ;A;A;A;A;A;A
 4640 HPUT(424,65)-(428,75),2,PSET
 4650 PLAY" VØ; A"
 4660 HPUT(424,65)-(432,75),3,PSET
 4670 PLAY" VO; A"
 4680 HPUT(424,65)-(436,75),4,PSET
 4690 PLAY"VØ; A"
 4700 HPUT(424,65)-(440,75),5,PSET
 4710 PLAY"VO; A"
 4720 HPUT(424,65)-(444,75),6,PSET
4730 PLAY" VØ; A"
4740 HPUT(424,65)-(448,75),7,PSET
4750 PLAY" VØ; A"
4760 HPUT(424,65)-(452,75),8,PSET
4770 PLAY"V0;A"
4780 HPUT(424,65)-(456,75),9,PSET
4790 PLAY"V0;A"
4800 FORX=424T0590STEP4
4810 HPUT(X,65)-(X+44,75),1,PSET
4820 PLAY"V0;A"
4830 NEXT
4840 HLINE(550,65)-(635,75)
, PSET, BF
4850 PLAY"V0;A;A;A;A;A"
4860 ON BRKGOTO4880
4870 GOTO4210
4880 WIDTH32:PALETTECMP:CLS
4890 PRINT@197, "GOODBYE FROM
SYDNEY": POKE65496, Ø: END
```



' CRYSTAL CITY '

A Review by Desmond Rae

Requirements:-

128k CoCo3, Disk Drive, Joystick.

Game Scene:- The superior technology of the evil Overlords has ensnared yet another innocent planet; however, this one contains the Crystal City, bastion of democracy and independance. Earth has had enough! Break through level upon level of their virtually invulnerable defences, defeat the end guardians, and make your way ever closer to freeing the slaves of the Crystal City! This amazing arcade game is an achievement in its own right.

Full 128k/512k Utilization! Superfast horizontal hardware scrolling on the 128k CoCo 3! Wild digital sound effects and background music score! 30 minutes or over 30 megabytes, of non-repeating 320x200 resolution, 16 colour graphics! This game has it all! Can you save the Crystal City from unbeatable foes?? Upon receiving this game and after seeing Photon I was prepared for the unxepected from the inner depths of circuitry from the CoCo 3.

I was not disappointed. Once the game started I was presented with a title screen. From the screen you can select what level to start from. There are three levels, and any can be selected by pressing the appropriate numeral key on the keyboard, but only from the title screen.

Also while at the title screen you may view the high scores, and you may also adjust the height of the screen. The reason for this, and I quote, "If the scoreline at the bottom of the screen flashes, or scrolls to the left during game play, then you must fine tune the game for your computer. This may be done when ever your see the scoreboard.

left during game play, then you must fine tune the game for your computer. This may be done when ever your see the scoreboard. By pressing the 'F' key. When the fine tune menu appears, choose a new setting. Most will need 4 or 5. This setting becomes default for future sittings. For this information to be updated, the disk must NOT be write protected, or it will reset to the default of 4. A number to high or too low will cause the screen to display in monochorome.

The game is brilliant to play, plenty of action and sound effects, but sadly no background music like the advert said. I even changed CoCo's in case it was a hardware fault, but still nothing. But anyway even though there is no music it still is enjoyable. It is not recommended for people with slow reflexes or you will not even make half way on stage one.

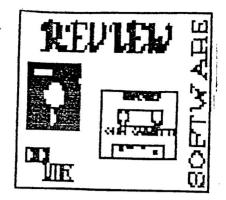
Upon successfully completing a level, the screen clears and you are presented with a heap of balls being fired from the base of the screen and taking off and exploding in the air like fireworks. This effect on it's own is worthy of purchasing the program as it is very well done. I would like to be able to get a copy of just that routine to show any people who say the CoCo 3 is a waste of space, and show them it is just as cabable to do what the PC and Amiga can do. This would save me completing a level to show the people in question. All in all it's a pretty good game.

For those that are interested it was written by Jeremy Spiller. Those who are fimilar with the Rainbow would have seen numerous programs over the years by Jeremy. Obviously all the experience has paid off.

So if your looking for a Christams present to buy for yourself then this is one to put near the top of the list, but underneath where you have written Photon!

Happy CoCoing, till next time,

÷z.



' PHOTON '

A Review by Desmond Rae

Requirements :-

128k or 512k CoCo 3, Disk Drive, and Joystick.

Game Scene:- Energy is everything; your home world depends on it. However, someone or something is slowly siphoning it away. As your world's champion, you must climb in to the experimental Power Tank to challenge this nemesis and it's minions. Your key lies with the ability to teleport solid mass. Use this to manipulate and explore the endless stronghold of the ememy, and to exploit the free-floating DUPES (Dense Units of Photon Energy) to destroy the menacing plasma Droids. Be cautious though; those DUPES can be deadly too!!

Upon starting the game, you are presented with the Title screen. It consists of a few things. You have the ability to select One or Two Players. Turn the Sound on or off. Select what level to start on, from level 1 to level 15.

Also on the Title screen there is a multitude of coloured balls circulating the screen and writing the word PHOTON on the screen. The Ultra-Smooth animation on the title screen is just a small taste of what is to come. Upon selecting your starting level (I highly recommend you start at level 1 until you get the hang of it) Then select either one or two players.

Level 1 starts and I could not believe my ears. In the background I could hear a music score running. The music playing is the best I have heard from a CoCo 3 game so far. The music is also in REAL-TIME! And the sound effects are also in Real Time. I was a bit doubtful at first but after a short time I was convinced the Sound was in Real Time.

So, after mastering the technique of either sucking or blowing on blocks in my Power Tank on this level, I move a block or four and exit the level. With this done, the screen cleared and I was presented with an animated picture of Ludevide. Ludevide is the "Baddie" who created all of the mazes. He speaks with a digitized voice and will announce how well he thinks you are going. There will also be a written message at the top of the screen giving a slight insight in to the next screen.

The animation is something to be seen to be believed. Ludevides head is shown and his mouth moves to the speech. Around his neck is a necklace that rotates around his neck. While this is happening, his head and necklace are bouncing around the screen. It is a little hard to describe but fantastic to watch.

If you are not into games very much, I'm sure you would be after playing this one. I found it very enjoyable and also highly addictive. I have made it up to level 19 and no further. But I have seen in the Scoreboard section of CoCo Friends Disk Magazine that Rick Cooper has made it to level 51!! This game was written by Jeff Steidl. If any of you have seen the program GrafExpress, this is written by the same person. This would explain why the sound is almost identical to the demo for GrafExpress, and explains it's high quality.

In ending I would like to say if you were thinking of what game to buy next, I would make sure it was Photon. This game has it all!!

Happy CoCoing, till next time.

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Here is a list of CoCo gear that Ian Hedges has for sale:

1 x CoCo 3 (128K) with detachable
keyboard (keyboard has built-in numeric
pad) \$25
1 x box full of accessories (Joysticks,
leads, & all sorts of components). \$10
1 x VIP Desktop & Manuals (CoCo3) \$10
1 x 500 Peeks, Pokes & Exec's \$5
1 x Supplement to above
1 x 300 Peeks, Pokes & Exec's(CoCo3)\$5
1 x Hi-res Interface \$10
1 x box full of mags and books \$10
100 (approx) disks full of games,
utilities, graphics etc \$40

Buy separately or complete for \$75. Postage is included in all prices quoted. You can get in touch with Ian by phone on: (67) 269 2921

CONSIGNMENT NO: 4

The following is another consignment available through RENCOMS. If there is anything you are interested in just drop me a line / fax or leave a message on the machine.

1 x CoCo3 (512K)	\$150
1 x CoCo3 (128K)	\$75
1 x CM8 Monitor	*200
1 x Multipak (modified for Co	Co31 \$75
1 x Homewade floppy controlle	er -
40 track double sided	\$50
2 x Economy joysticks	each \$5
4 x Deluxe joysticks	each \$10
1 x 059 Level 2	\$50
1 x 0S9 Level 2 Development K	it . \$20
1 x C Compiler	\$40
1 x Pascal Compiler	\$40
1 x TRS Copy	\$5
1 x Deskmate 3	\$25
1 x Multi-Vue	*25
1 x CoCo Artist	\$5

1 × Phantomgraph
1 x Home Publisher
1 x Dynacalc
1 x Filter Kit \$10
1 x Stylograph \$10
1 x OS9 Level 2 (Public Domain) , \$5
1 x Wild & MV Utilities \$10
1 x Disk Doctor V2.0 \$10
1 x Hard Drive Utilities \$10
1 x King's Quest III
1 x Zone Runner \$16
1 x Sub Battle
1 x Carmen Sandiego
1 x Microscopic Mission \$10
1 x Rogue
1 each of Thexder, Doubleback, Tetris, Soko Ban, Malcolm Mortar, Shanghai,
Colour Scripsit 2, Sprinster and Bridge Tutor (ROM PAKS) each #5
1 each of Eight Ball, King Cuthbert,
Investigations into Integral, Quix,
Color Compac, Calculus and
Typing Tutor (TAPES)each \$5
1 x Logo (DISK)
1 x CoCo3 Service Manual \$10
1 x Complete Rainbow Guide to OS9 LvII
Vol 1 by D. Puckett & P. Dibble \$10
1 x Inside OS9 Lv II by K. Darling \$10
1 x Motorola Mc6809 Microprocessor
Programming Manual
1 x CoCo Disk System - Owners Manual
& Programming Guide \$5
1 x Going Ahead with Extended Color
Basic \$10
1 x Mc6809 Cookbook
1 x Color Computer Graphics \$5
1 x TRS80 Color Computer Assembly
Language Programming \$5
••••

The fellowing in a series of the series
The following is a package being sold
by a gentleman here in Townsville. If there is anything you would like give
him a call.
nam w vull,
1 x CoCo 3 (128K)
1 x CM8 Monitor (\$2.0)
1 x 30 meg Hard drive (not formatted)
1 x Double side disk drive
1 x Multinak

1 x CoCo 3 (128K) 1 x CM8 Monitor \$2.0.
1 x 30 meg Hard drive (not formatted) 1 x Double side disk drive 1 x Multipak
Various disks both OS9 and Basic programmes.
You can call Frank Stevens and make him an offer for these on:

(077) 892 981

*ANTILU
Bob Barker in Glenfield NSW is on the lookout for an RGB Monitor, willing to pay a good price if in good condition.
You can reach Bob by mail only and the address is:
Bob Barker PO Box 223

The following two items are from Ron Lidgard.

GLENFIELD NSV 2167

with us.

1	X	40meg hard drive to suit CoCo3	
• •	•	requires controller	100
1	X	XSPELL (OS9 spell checker)	\$49

You can ring Ron on (67) 286 2776.

The next list for sale are what is left from Consignment NO: 1. Once again if anything interests you get in touch

1 x Competition joystick	\$15
1 x Complete Rainbow Guide to OS	9 LvII
A Beginners Guide to Windo	ws. \$30
1 x Orchestra-90*CC	\$10
1 x Sub Battle	\$10
1 x Flight Simulator II	\$10
1 x King's Quest III	\$10
1 x Microscopic Mission	\$10
1 x The Sands of Egypt	\$5
1 x Zone Runner	\$10
1 x Donut Dilema	\$10

Now for Consignment NO: 2.

1 x Multi Vue \$25
1 x 059 Disk Manager Tree \$16
1 x 059 Multi Menu \$10
1 x 059 Tools II \$15
1 x 059 Screen Print \$10
1 x T/S SPELL
1 x T/S WORD
1 x T/S EDIT
As in all our consignments give us a

As in all our consignments, give us a call if anything interests you.

COCO FRIANS DISK MAGANIE

'The most exciting new product for the CoCo Since...?"



COCO FRIENDS DISK MAGAZINE (CFDM) is devoted exclusively to those who still enjoy running under RS Dos. The standard system needed to use CFDM is CoCo 3, RGB monitor, at least one disk drive, and the RS Dos which came with your CoCo 3.

CFDM is a monthly disk based publication which is produced on a "flippie" disk. When you "Run" the "magazine" side of CFDM, you'll be greeted with a beautiful cover picture by CoCo Friend James Gibbons. Pressing any key takes you to the magazine's colorful Main Menu. There you'll find 14 sections which are filled with entries. Sections included are: About CFDM; About this Issue; Active CoCo; Advertisements; CoCo Friends Art Gallery; Articles of the Month; Family Tree; Forum; From the Editor; Letters to the Editor; Potpourri; Programs of the Month; Reviews; and Question & Answers.

Next you will enter a Section and find a number of entries written by our CoCo Friends from all over the world. Each issue of CFDM contains from 60 to 80 entries. Some sections contain documentation about the many programs and graphics found on the "flip-side" of CFDM.

The "flip-side" or "program" side of CFDM is filled with contributions of wonderful programs and graphics from our many CoCo Friends! Each issue has from 2 to 4 hi-res pics and from 8 to 15 neverbefore-seen programs.



The above software is available in Australia through REMCOMS

RICK'S COMPUTER ENTERPRISE

PRICES:

- 1 issue _ \$9.00
- 3 issues = \$25.00
- 6 ISEUES = \$45.00

AUSTRALIAN OS-9 USERGROUP PUBLIC DOMAIN LIBRARY

21 Virgo Street INALA. Qld. 4077 Australia.

INTRODUCTION

Welcome to the Australian OS-9 Usergroup Public Domain Library!
WHERE I AM:

My address you'll see at the top of the page. My phone number is:

(07) 2787209

Please only call me between the hours of 10:00 AM and 9:00 PM.

You supply the b

a colonari

Also, I can be reached by FAX on:

(07) 3728325

Please mark your FAX: ATTENTION: Bob Devries

WHAT I HAVE:

Currently in the PD Library I have a large quantity of OS-9/6809, OS-9/68000, OS9000, and RSDOS software. The list is made up of:

OS-9 Community Network Library files
approx 23MB
Australian OS-9 Usergroup archives
12 disks (80 trk CoCo OS-9)
OS-9 Usergroup (USA) disks
11 disks (80 trk CoCo OS-9)
The OS-9 Project (TOP - OS-9/68000)
15 disks (80 trk CoCo OS-9)
OS-9 listserver files from Princeton
Size unknown at this stage
COCO listserver files from princeton
Size unknown at this stage

Also, I will make available the file lists from the Internet sites, wuarchive, and chestnut.

There are, of course, many duplications in the libraries, except for the TOP library, which is somewhat unique. In the OCN library, there are 322 RSDOS programmes of various types, mostly BASIC, but some picture files (Pmode 4), some MUSICA files, and others.

GETTING FILE LISTS

You can get lists of the files in the PD Library, by sending me up to four OS-9 formatted blank disks. On them I will put text files which will list the file names, and in some cases, a short description. These can be read with the OS-9 'list' command, or 'more' (which I can supply), or they can be loaded into a word processor. Listing them to a printer would work, too, however, the list is very long, so be prepared!

WHAT DOES IT COST:

I will supply the text files FREE, except for return postage!

After that, I will charge \$2.00 PER DISK, plus return postage. You supply the disk(s), formatted on your computer.

Quantity discounts are available, please ask.

DISK FORMATS:

I can read and write the following formats:

COCO OS-9

80 track double or single sided, 5.25" or 3.5"

40 track double or single sided, 5.25"

35 track single or double sided, 5.25"

OS-9/68000

Currently any Microware supported 3.5" format, but only double density, I can't do high-density disks.

COCO RSDOS

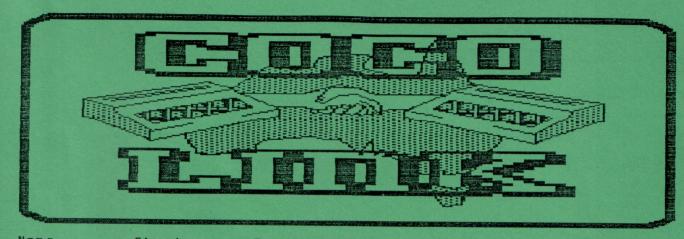
35 track double or single sided, 5.25"

Other disk formats MAY be available, please ask me.

CONCLUSION:

Membership of this PD Library is NOT restricted to members of the Australian OS-9 Usergroup, so show this letter to fellow OS-9 and

This is your best opportunity to get OS-9 and RSDOS PD software. Put some new life into your computer! Get some PD programmes today!

Regards, Bob Devries Australian OS-9 Usergroup PD Library 

g t t r d e

Name	Street	Town/Stat/PC	Phone	
Alway Peter	PO Box 821	Boronia Park/NSW 2111	02 816 2130	
Barker Bob	PO Box 223	Glenfield / NSW 2167	OL CIG EI30	
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Boardman Willia	om 10 Eltham Ave	Pt Lincoln/SA 5606	086 82 2385	
Bye Graham	9 Airlie Bank R	d Morwell/VIC 3840	051 34 5954	
Comeron Willian	n 2/22 Warren St	St Lucia/QLD 4067	07 371 4736	
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Ikin John	42 Spruce Dve	Rowvitte/VIC 3178	03 759 6853	
Johnson Fraser	35 Robson Ave	Gorokan/NSW 2263	043 923 298	
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Remin Fred (1)	3/1 Franklin St	East Doncaster/VIC	03 842 8545	
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*********	** ** ** * * * * * * * * * * * * * * * *	************************	******	
If you would like your name included in the above list in order to help other coccists				
and to maintain	contact betwee	n us, then send the above information	to me for	

us, then send the above information to me for

Do you know of the existence of a user group in your area or are you considering starting one up again? Let me know the details including the contact names and phone numbers, meeting place, times etc, and I will print it in this magazine. REMEMBER, USER GROUPS ARE THE BACKBONE OF THE COCO COMMUNITY!

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