

Conect  
449 South 90th Street  
West Allis, Wisconsin 53214

Merry Christmas Everybody! Looks like we made it through 92 okay. I'd like to thank everyone who helped get CoNect off the ground! The first few months have been a little bit like watching grass grow, but now the ball is rolling! Expect a flurry of new product releases first quarter of 1993.

#### Sources:

If you use OS9 and haven't bumped into the OS9 User's Group yet, you owe it to yourself to give them a call. Membership entitles you to access to their most excellent software collection, as well as the new bi-monthly version of their newsletter. (The tee shirts they are selling, 'Kick Butt in Real Time', are pretty cool too)

OS-9 Users Group  
PO Box 71131  
Des Moines, Iowa 50325

Those who subscribe to the Rainbow have no doubt seen the ads from FARNA Systems. Owner Frank Swygert is helping carry the Disk Basic CoCo onward into the nineties. He's got some neat hardware also, (some of it you will remember from the old days). There is a partial FARNA catalog included for your convenience.

#### Adding Stuff:

Some people have accused the CoCo of having the lamest excuse for a system buss ever designed into a home computer. Although it's not really that bad, there are a few problems with it.

First, it's not very robust. The CoCo2 has no buffering on the buss at all, depending on the CPU to not only drive the motherboard, but also anything plugged into it. Things are a little better in the CoCo3- not only did Tandy add a buffer on the data lines, but the internal address line fan out is smaller, leaving more power for external hardware.

The second problem lies in the decoding (or lack of it) supplied by the machine. A single hardware select is provided- one that 'selects' a space twice as large as required. With only a limited address range available for hardware, you certainly don't want to waste any. But the CoCo does just that!

There is also a single ROM select. This becomes a problem because of Tandy's insistence on designing all of it's addons to run on a tape based CoCo1. Everything they made had internal software in ROM, and these ROMs reside in the same place as Disk Basic. Even though the actual hardware in these cards has no problems co-existing with a disk controller, the 2 ROMs will conflict, and the machine crashes!

The final problem comes from using one line for 2 uses. The cart line is expected to send interrupts from hardware devices, AND autostart ROMPacks.

There have been many solutions to these problems used in the past, the most well know being the MultiPak. From an engineering standpoint, it remains the ultimate buss fix. By switching /SCS (hardware), /CTS (rom), and /CART (interrupt), between it's four slots, it solves the problem by avoiding it. You still don't have enough select lines, but you can change where the

few available go.

Historically, it's size and cost were the main thing wrong with a MultiPak. A new problem has popped up- the 'small' MPI's use a couple of custom chips which are no longer available.

Another popular alternative is the infamous Y-Cable. This approach had a few problems. First, using Tandy cards on one can be a real chore- the internal ROM must be disabled or removed. Second flaw is more insidious. The added capacitance of even a few inches of ribbon cable does terrible things to the buss timing, and crosstalk between the individual wires introduces unneeded noise. The upshot can be erratic disk operation.

An alternative MPI style expansion is available. The SlotPak only has 2 switched slots with a third unswitched. It also doesn't switch the CART line, which is great for OS9, but means no ROMPaks.

Lastly, the XPander takes a different tack. The select lines are not switched at all. Instead, the hardware select (/SCS) can be split into 2 separate ones. Software select goes either to the currently selected hardware, or always to the disk controller. If you choose, the XPander can sense a ROMPak inserted in it's single external slot, and disable the internal ones so the ROMPak can be ran. Lastly, the built in serial port is fully decoded and doesn't care what you are doing on the expansion slots.

#### Wish Lists-

Many things formerly available for the CoCo have become quite rare. There is a law stating the harder something is to find, the more people will want it.

A company like CoNect often obtains single examples of rare software or hardware, and it's not easy to figure out what to do with them. They can't be put in the catalog- it would be folly to list something that will be sold out 2 days after a bi-monthly catalog mails, especially if it's not likely to be replaceable soon.

So what we've done is establish a 'wish list'. If you need something thats usually not around, just drop us a line and your name will be added to one of these lists. When one becomes available, you will be contacted and given the chance to purchase it.

And thats about it for December- my turkey awaits.

Merry Christmas!

Ricku

New Color Computer Hardware

CoNect Mouse Tamer 105....\$19.95 Tired of plugging and unplugging cables? You need the Mouse Tamer! Swap port switch exchanges Mouse and Joystick. (L&R becomes R&L) Switchable Mouse resolution

CoNect RS-232 Port 103....\$49.95 A complete seven line port for flow control. Jumpers for address (\$FF68 or \$FF6C) and normal/swapped CD. Requires MultiPak, SlotPak, powered Y-Box or add \$9.95 for external +/- 12VDC power supply.

CoNect Dual RS-232 (Superceded- look for new product announcement next month. Dual port with FIFO buffering)

CoNect Y-Box 101....\$29.95 Not just another hacked together ribbon cable, the CoNect Y-Box provides physical support of add-ons. Locking plate prevents accidents!

CoNect Power-Y 102....\$39.95 As above, but supplies +/- 12volts for RS-232 Paks, etc.

CoNect XPander 106....\$109.95 At last, INTERNAL expansion for the CoCo! 2 internal slots, as well as maintaining the existing external one! RS-232 port onboard- doesn't use a buss slot! Package includes XPander board, new case bottom, and power supply for serial port. Can be upgraded to a PoCo by adding LCD driver board and battery supply.

Custom RS232 Cable \$12.00 Please select from the following options:  
 CPUside- DB25, DB9, CoCo 4 pin 'bitbanger'  
 Modemside- DB25 or DB9  
 Inside- normal, nullmodem, DCD/DSR swap (for SACIA)

Drive Power Converter \$6.00 FD-502:Install older 5.25 drive in FD-502 case.  
 FD-501:Install 3.5 or newer 5.25 in FD501 case.  
 (3.5 mounting rails not included)

Tandy Color Computer 3 3334...\$99.95 New, in box. (128K) With all manuals and accessories. Also available with Hitachi 6309 cpu installed, add \$25.

Tandy Hi-Resolution Joystick Interface 3028....\$9.95 The original Tandy unit lives! Only a few left. (Trust me, you'd rather have a Mouse Tamer)

Tandy One Button Color Mouse 3025....\$12.95 Plugs into joystick port or optional Hi-Res adapter.

Tandy Joysticks 3008a...\$4.95 Pair of one button free floating joysticks.

Tandy Deluxe Joystick 3012b...\$9.95 Two button stick- free floating or spring centered modes. Made by Kraft.

Tandy Orchestra-90cc 3143....\$12.95 Five voice sterio syth. with percussion.

Really weird Stuff...

MC-10 Ram Upgrade 3013....\$9.95 16K RAM module.

Pocket Computer Cassette Interface 3503....\$14.95 The original Tandy cassette interface .

## Disk Extended Color Basic-

## RomPaks-

## Games-

## New CoCo3 RomPaks: (Still in the Package)

Unused Surplus: (Still in the shrinkwrap!)

Ghanabwana	Tandy	\$4.95	A Steve Bjork arcade game. CoCo3 patch included free.
One-on-One	Tandy	\$8.95	Fun basketball game. Two player or challenge the CoCo. RGB color patch included.
PitStop2	Epyx	\$7.95	'Pole Position' type racing game with Pit stops! Six tracks. Two player or race the CoCo. RGB color patch included.

Arkanoid	Taito	\$5.95	Breakout type 'smash the bricks' game
Color File 2	Tandy	\$3.95	CoCo database. Saves to tape.
Color Scripsit 2	Tandy	\$4.95	CoCo2/3 tape based word processor. 38x24 display on CoCo3.
GFL Football	GameStar	\$4.95	Single player football game. Overhead and players point of view, many teams of different ability.
Rad Warrior	Epyx	\$6.95	A Nintendo type 'running man' arcade.
Shanghai	Activision	\$6.95	Mah Jongg for the CoCo3. Nice graphics.
Thexder	Sierra	\$5.00	'Nintendo style' shoot 'em up with a twist!

Used Software: (Original Disk and DOCs)

Dallas Quest	DataSoft	\$9.95	J.R. and the gang still live in this graphic adventure. Loss of color muddles some of the graphics on RGB systems.
FlightSim1	Tandy	\$3.95	CoCo 2 flight simulator.
Pitfall 2	Activision	\$4.95	Fairly challenging dodge the meanies type maze game. RGB color patch included.
Rocky's Boots	Learning Co.	\$9.95	Learning game teaches science and logic. 'Electronic erector set' for ages 9 and up
Sands of Egypt	DataSoft	\$9.95	Graphic adventure in ..... Fairly hard for beginning mapmakers.

Used CoCo3 PomPaks: (with DOCs)

Castle of Tharrodad	Tandy	\$5.00	Update of the old Dungeons of Daggorith game with mouse control. Save game without cassette!
Thexder	Sierra	\$3.95	'Nintendo Style' shoot 'em up with a twist!

New CoCo2 RomPaks: (In the Box)

Dungeons of Daggorith	RS	\$6.95	Maze type adventure with meanies.
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## Applications-

Used Software: (Original Disk and DOCs)

Disk EDTASM	RadioShack	\$24.95	6809 assembler/editor/debug. Very nice package with impressive DOCs. Can be patched for 80cols. on CoCo3.
Graphicom	Cheshire Cat	\$12.95	CoCo2 drawing program, with modem capabilities.
Color Profile	RadioShack	\$19.95	CoCo2 database.
Investograph	Tandy	\$8.95	Investment analysis for the CoCo 2. Can download data direct from Comuserv or Dow Jones.
Telewriter 64	Cognitec	\$19.95	The standard for CoCo2 word processing.

## OS9 Level1 and Level2-

## Applications-

## Unused Software: (Still in the shrinkwrap)

CoCo Artist	Tandy	\$5.95	Window-based graphics program.Can output OS9 window format files- just merge file to window for instant gfx.
DeskMate	Tandy	\$11.95	CoCo2 Calendar, Text Editor, Index Cards, Paint, Ledger, and Telecom.
D.L. Logo	RadioShack	\$24.95	Logo for OS9.
Dynacalc	Tandy	\$39.95	Very nice spreadsheet for CoCo.Lvl1 boot included,or runs in 40 & 80 col. windows under your Lv12.
Home Publisher	Tandy	\$12.00	DeskTop publishing for CoCo3. Could be faster, but worth 12 bucks.
Micro Illustrator	Tandy	\$4.95	Level 1 drawing program.
Multi-View	Microware	\$19.95	GUI for Level2. Includes WindInt and DOCs for the cgfx library.
OS9 Level1	Microware	\$40.00	DOS and assembler for CoCo1/2.
OS9 Level2	Microware	\$40.00	DOS and Basic09 for CoCo3.
Patch_OS9	CoNect	\$3.95	A whole pile of OS9 patches/upgrades from various authors, and a nifty install program. 2 disks full!
PhantomGraph	Tandy	\$22.00	5 types of graphs.Use as a standalone or import Dynacalc and Sylk files.
Screen Dump Util	Tandy	\$4.95	Level1 screens to printer
T/S Spell	Tandy	\$12.95	Decent OS9 spellchecker, can be used with any editor. 100,000 dictionary.
Wiz and Wiz Pro	F.Hogg	\$14.95	OS9 terminal programs.

## OS9 Level1 and Level2-

## Games-

## Unused Surplus: (Still in the shrinkwrap!)

Donald Ducks Playground	Sierra	\$9.95	Disney learning game- logical thinking, matching skills, money changing. ages 7 to 11
Flight Simulator 2	SubLogic	\$12.95	The ultimate flight simulator for the CoCo3. Very nice gfx!
Interbank Incident	Tandy	\$12.95	Mouse driven CoCo2 adventure includes version 2 boot for CoC
Kings Quest 3	Sierra	\$19.95	3d adventure.5 disks of 16 color graphics make this a 'must have 512K required.
Koronis Rift	Epyx	\$8.95	Arcade/Adventure game for CoCo3 Nice fractal graphics.
Mickey's Space Adventure	Sierra	\$9.95	Disney Learning Game- mapping, problem solving, planetary science. ages 8 and up
Microscopic Mission	Activision	\$9.95	Save the patient while battling the deadliest enemy of all, the human body!
Rescue on Fractalus	Epyx	\$7.95	Destroy the jaggies while you attempt to rescue your downed allies.Nice fractal graphics.
Rogue	Epyx	\$9.00	Maze adventure runs in text or graphics screens.
Sub Battle Simulator	Epyx	\$11.00	Command American or German submarine in WW2.
Where in the World is Carmen Sandiego?	Broderbund	\$9.95	Learn world geography while chasing the elusive Carmen Sandiego.
Winnie the Pooh in the hundred acre wood	Sierra	\$9.95	Disney learning game- mapreading, reading skills, logical thinking, ages 7 and up.
Zone Runner	Tandy	\$7.00	Interstellar Commerce.

## Used Software: (Original disk and DOCs)

Biosphere	Tandy	\$7.00	Balance the ecosystem and save an endangered species.Includes version2 boot for CoCo3.
Rogue	Epyx	\$5.00	Maze adventure runs in text or graphics screens.

Coming Soon.....

### The PoCo

You CAN take it with you! CoNect and FARNA Systems are happy to announce the first affordable LapTop style Color Computer. For about the cost of a color monitor, you can have:

- \* 640x200 Display- compatible with DECB or OS9 Windowing System.
- \* Expansion Slots- 2 internal slots, both can support a 'full size' card  
1 external slot, you can still play Tetris on the plane!
- \* Built in RS232- Doesn't take up valuable slot space. This port supports all of the common lines-TD, RD, DCD, DTR, DSR, CTS, RTS
- \* 2 hour battery- Plus the PoCo can be operated from AC while the battery is charging with the included Adaptor/charger.

I can here you thinking 'That won't fit in a CoCo case!' and you are half right. The kit comes with a new lower case shell to reposition the mother-board and allow all the goodies to fit.

#### Options:

- \* Dual RS-232- MUST be part of the initial order. This is a substitute for the original port, not an add on.
- \* Internal Trackball- Mounts in the blank space to the left of the keyboard. Resolution and port used are switchable.

In addition to a 128/512K CoCo, you supply the mass storage and modem. The following configurations are possible:

#### Floppy Drive system:

A 3.5 inch floppy drive and it's controller mounted internally. The included drive cable provides an external connector to allow your FD-50x case to be plugged in to the PoCo at your desk, for greater storage. You will have to reconfigure the FD-xxx case as drives /d1 and /d2.

#### Hard Drive System:

If you have an autoboot hard drive system, the floppy can be replaced with a 3.5 inch half-height(or smaller) hard drive. The external drive connector still allows you to plug in the FD-50x case while at your desktop.

#### Dual Drive System:

If you have 1/3 height devices, both a floppy and a hard drive will fit.

#### Internal Modems:

Floppy systems, which use only one slot of the XPander, have room to mount a standard size modem card over the motherboard. Voltages available from the PoCo supply are 5,+12, and -12.

Systems that use both internal slots, like hard drive PoCo's, only have room for a 'pocket' modem placed underneath the keyboard.

#### What Doesn't fit:

The DISTO 1 meg upgrade will not fit. It MIGHT be possible to install one in a floppy system, but the tiny amount of disk storage available and the extra power drain make it impractical.

The Burke & Burke hard drive system will take a bit of hacking. The XT type controller is just a bit wide to plug and go.

### About CoNect

Aren't you sick of watching CoCo suppliers disappear one by one? Well, we intend to reverse that trend! CoNect manufactures it's own line of hardware for the Color Computer, as well as selling anything else we can get our hands on!

True, it's almost impossible to make a living from the CoCo- but what the heck! That's what day jobs are for! We intend to be around as long as anyone still needs supplies for their CoCo or 'KMA' OS9 system.

You've no doubt noted this isn't the fanciest catalog that's ever been printed. The cash goes into the products, not the hype!

#### Ordering Info:

Our mailing address is:

CoNect  
449 South 90th  
Milwaukee, WI 53214

Or call (414) 258-2989 evenings after 5:00 Central. In addition, EMail can be left on Delphi (RICKULAND), or Internet (RICKULAND@delphi.com).

We accept personal checks or money orders. Sorry, no plastic yet.

All orders please include \$4.00 for shipping and handling. Some larger items may carry an additional shipping charge- if so it will be stated in that item's description.

#### Legal Stuff:

All hardware manufactured by us carries a 90 day limited warranty. Used hardware has been tested, unfortunately, we can't guarantee anything more than it will work when you receive it.

Software that doesn't boot will be 'repaired or replaced' at our option. What this means is, anything we have (or can get) more of will be replaced with a new copy. Used or surplus software will be restored from our master copy if the original disk is returned.

WANTED!!!!!!!!!!!!!!!!!!!!!!!!!!!!

CoNect is interested in buying your old Color Computer or 'KMA' (TC9/TC70, MM/1, SystemIV) hardware and software, in any quantity. However, a certain amount of overhead accompanies each separate transaction, so prices will be much more favorable for 'collections' of stuff, vs individual software packages.

We are also interested in your original software packages or hardware designs. CoNect can assist in production, and pays competitive royalties for each unit sold.

FARNA Systems  
Color Computer Software, Hardware, & Books /A--/A  
904 2nd Avenue \* Warner Robins /- -  
Georgia, 31098-1029 (USA) \ /  
Phone 912-328-7859 Fax: 912-328-0870 \ /

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FARNA Systems came into being purely to support the Tandy Color Computer. The owner (Frank Swygert, DSRTFOX on Delphi) runs the business on his CoCo 3 system even though he installs IBM based business computers! FARNA is always interested in new products of any type. If you have something marketable, please let us know! It is best to send a disk with the program and docs (disk ASCII file okay) for evaluation. We will also trade your old sort/hard ware and books for new software! Let us know what you want, and what you have to trade. Trades will of necessity be in our favor, we are a business! Send a list of all you are willing to trade and we will select acceptable items. TRADES MUST BE ORIGINAL WITH DOCUMENTATION! There will be some exceptions made, but few and far between. Explain!

**CoCo Family Recorder:** Our premier product! Absolutely THE BEST genealogy data system for the CoCo 3! An 80 column monitor and two disk drives are required. **\$24.95**

**Keep-Track:** A small business general ledger (double entry accounting system). Very good, and the only one currently available! Runs on any CoCo 1/2/3 disk system. **\$24.95**

**Accounts Receivable Module-** for keep-track. **\$10.00**

**Omega File:** Good general purpose programmable database. Allows up to 15 fields with 255 characters per field. Print or sort on any field. Completely menu driven! CoCo 1/2/3 disk. **\$24.95**

**Little Black Book:** An address and phone number database that also prints address labels. CoCo 1/2/3 disk. **\$12.95**

**VT0:** A Video Tape Organizer (database). This one will also print labels (1"x3" type). CoCo 1/2/3 disk. **\$12.95**

**OS-9 Quick Reference Guide:** Patterned after the CoCo Basic guide sent with the CoCo 3 except for OS-9! Has command syntax, error codes, VDG screen codes, ...much more! A handy 40 page 5 1/2"x8" desktop book. Level 1 or 2. **\$7.95**

**Companion Disk-** The most popular and recommended patches from Delphi! **Lvl2 ONLY. with book: \$2.50 alone: \$5.00**

**Programming the 6809:** Written by Zaks & Labiak, recommended by Motorola. 362 pages with 150 illustrations. Covers machine language programming, no experience required! **\$22.95**

OS-9 INVOICE/INVENTORY MANAGER - \$24.95 Print your invoices simply by typing in customer information and a part number! Inventory can also be entered in computer listing (does NOT subtract from inventory when an invoice is issued). Prints a customer item list which includes part number, description, and retail price, and an inventory report which prints the above plus your cost! Supports multi-users under either OS-9 Level I or II. Requires Basic-09. Comes complete with source code! License agreement states that you MUST send in any modifications to the source for consideration to incorporate into future versions/upgrades. In return, one free upgrade is returned for any modifications used. Just for participating (even if the upgrades are not used in future versions) any further upgrades will only be \$5.00 each. FARNA retains the right to raise this price upon major version revisions.

RETURN OF THE RASCAN VIDEO DIGITIZER!!! - \$170.00 The Rascan Video Digitizer will convert still video images to computer images. You must have a total still image, as the digitizing process takes about 15 seconds. Use a camcorder to tape the subject for 30-60 seconds then digitize the recorded image. Some new VCRs have a digital freeze frame which can be used. Most VCRs freeze are a little fuzzy- fuzziness will digitize also! Features include: \* Plugs into Joystick ports (both)- no MPI needed! \* Brightness & Contrast controls \* \* Color Burst Signal Filter \* Images can be exported to Max-10, CoCo Max 3, and Color Max 3 \* Resolutions of: 640x200 (16 gray levels with dithering), 640x200 (4 actual gray levels), 320x200 (16 colors), 320x200 (4096 colors). Did I mention it can do COLOR scans? These are more difficult than the normal black & white scans. Color requires taking three shots of the image, each with a separate color filter. The three images are then displayed in sequence 60 times/second to create a color image. A minor drawback to the system is that images are stretched a little horizontally, making people appear just a little "fatter". Nevertheless, the Rascan was hailed as "the best Color Computer digitizer" by Ed Eilers in the last Rainbow review (December 1990, page 83).

A \$40 down payment is required. A postcard will be sent for the remainder once the digitizers arrive at FARNA. The Rascan is actually made in Australia, so allow 8-10 weeks for delivery. Note that the down payment IS NOT refundable.

<< \*\* ADD \$1.50 TO EACH ORDER FOR SHIPPING AND HANDLING! \*\* >>  
Canada add \$2.50, all others \$5.00 for surface, \$10 for air.