



Bellingham OS-9 Users Group



Gimix, CoCo, Atari, Mac
6809 - 68K OS-9 Level 1, 2, 3

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OS-9 MEETINGS:

Meetings are held at 7:30 p.m., the second Thursday of each month in room 109 at Sehome High School. Meetings are not held during the summer (July-Aug).

BENEFITS TO MEMBERS:

As a participating member of our new Bellingham OS9 Users Group you enjoy many benefits:

1. Newsletter
2. OS9 Bulletins
3. Public Domain Library
4. Technical help
5. Lectures and demonstrations
6. Periodic group purchases
7. Membership List
8. Access to GIMIX Level-III OS9

HELP WANTED!

Our group needs editorial volunteers. If you can contribute with information or helpful experiences of your own, please contact Rodger Alexander. The health of our newsletter depends on contributions made by many members of our group.

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SUBSCRIPTION INFORMATION:

Newsletters are available free to those in attendance at the monthly meetings. If you would like to receive the newsletter in advance by mail, a subscription rate of rate of \$3 for 6 monthly issues or \$6 for 12 monthly issues is available.

Contact: Rodger Alexander
 3404 Illinois Lane
 Bellingham, WA 98226
 (206) 734-5806
 Delphi: "SALZARD"

CoCo-3 Status

EDITOR'S NOTE: Recently a CoCo-3 user living in Mexico requested information about the current status of the CoCo since he had been out of touch for over 3 years. I found the responses by Zack Session and Mike Knudsen to be both depressing and encouraging.

Q: IS THE COCO 3 DOING ALRIGHT?

A: No "official" word from Tandy but rumor is that they are no longer manufacturing CoCo3s. Rumor also is that there are enough in warehouses to last 2-3 years at the current rate of sale.

Q: ARE THERE ANY NEW PROGRAMS?

A: Tandy long ago quit looking for new programs, and the great Level 2 OS9 Upgrade has remained stalled out for legal/economic reasons. Other than that, the joint's been jumping:

RSDOS:

Max-10 WYSIWYG grafix word processor/formatter - terrific

Coco-Max III and Color-Max III paint programs - terrific

Several desktop publisher newsletter programs

OS9:

MVCanvas paint program - close to Coco-Max and Col-Max III

Window Writer word proc/formatter (ASCII text only)

UltiMusE-III MIDI music notation editor/player, using "virtual memory" to store 256K worth of music score

RIBBS, OS9-BBS and lots of other BBS systems

Commercial and PD replacements for GShell

Dynamite PD modem/terminal programs

Great PD utilities and picture viewers and games

(Apologies for anything I left out)

Q: WHAT ABOUT 512K UPGRADES? ARE PRICES GOING UP OR DOWN?

A: Current prices for 512K upgrades from third partys is \$80-\$90. We also have a 1 Meg (yes!) upgrade for about \$200 plus the price of a 512K job. And PC-type keyboard adapters for \$100-. And 3rd-party MultiPaks.

Q: ANYTHING ABOUT HARD DRIVES?

A: I guess you haven't been around for a while! Everybody who is anybody now has a HD on their CoCo. From what I can tell the most common configurations are:

- o Burke&Burke XT interface with MFM drive
- o Some kind of SCSI arrangement (there are several)
- o The "Eliminator" super controller

Q: I HAVN'T SEEN A RAINBOW MAGAZINE IN 2 YEARS. A SUBSCRIPTION COST \$70.

A: \$70 a year for the Rainbow? It's questionable that it's worth \$31 a year anymore! The Rainbow is shrinking fast, but at the same time their technical and OS9 content has been increasing. Since Falsoft also publishes PCM, a Tandy PC-Cloner's rag, it's a matter of time till Lonnie Falk follows Tandy to the point of phasing out Coco support

for MessyDOS.

Q: ANYTHING I SHOULD KNOW THAT I DIDN'T ASK ABOUT?

A: You must have heard about the Frank Hogg Tomcat (Coco-4) board/bus, and Paul Ward's MM/1 "Poor Man's Amiga" (68000 OS9/K box). The latter is under \$800 with 1 Meg RAM and a *complete* bundle of OS9/K with Microware's bles-sings.

ALSO: No RainbowFest this October, but users are already ginning up their own October Fest for Atlanta.

Two alternative mags have sprung up -- Coco Clipboard, and OSKer (OS9 only). Both are lots cheaper than the Rainbow.

Dale Puckett is working on a full-book history of the Coco and the people who made it go. A worthwhile project.

Oh yes, yesterday IBM re-introduced the PC Jr, er, excuse me, the PS/1. Basically a Tandy 1000 at IBM prices sold thru Sears.

Multi-Vue

Configuring MV to your Hard Drive: by Tim Koonce

Multi-Vue is pretty simple to install. Unfortunately, they didn't bother explaining it in the manual. <Sigh> Here are step by step directions:

1) Make a new boot disk. Use the WindInt module from the MultiVue disk instead of the GrfInt module from the OS9 Level II disk. WindInt does everything GrfInt does, but it also supports pull-down menus and such.

2) Put the "Gshell" program in your CMDS dir. Also put the "control" program there. If you want/have space, include the others.

3) make a directory /dd/CMDS/ICONS, and put all of your icons in that directory. Make sure they have exec attributes!

4) Copy the "env.file" to the SYS directory.

5) Edit the env.file:

If you have 512k, Uncomment the line RAM=512, and comment out or delete the line RAM=128

If you have a Hi-res mouse adapter, change "PTRRES" to be 1.

6) Now you're all set!

Just include any programs you want to run in the CMDS dir, put the AIF files on a disk somewhere, and type the following:

```
control -e
gshell
```

The first line can be included in your startup file, it prompts the "control" program to read your env.file and set the mouse resolution, default palettes, etc. The second line starts the gshell program, from which you can run programs. Just click on a disk drive to "open" that disk, and have fun!

Once you get further into it, you'll want to start installing some of the patches floating around to correct bugs in WindInt and GShell. In particular, there are patches to fix two potentially serious problems in GShell: It can't handle directories with more than 255 entries (only a problem if you have a hard disk), and it sets up if the OS a file with a three-letter extension and no matching AIF file. This second one is one you might run into. The patches are fairly easy to install.

MV 80 Column Patch: by Mark Griffith and Mike Sweet

If you have a 512K CoCo then you probably select the 80x24 screen option via the VIEW menu every time you start using Multi-Vue. Wouldn't it be nice if Multi-Vue would default to the 80 column screen? The solution is a simple patch to location \$3547 which contains the window type of the initial screen. Possible values are:

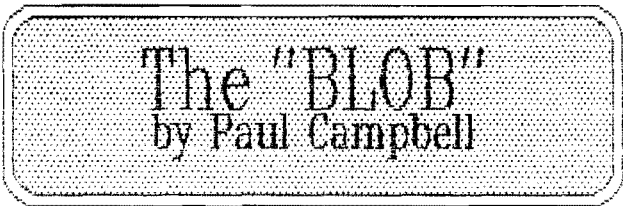
- \$06 - Type 6 (40 columns, 4 colors)
 - \$07 - Type 7 (80 columns, 4 colors)
 - \$08 - Type 8 (40 columns, 16 colors)
- (This is documented in the file gshell.mods.doc which is distributed with the 1.24a patches.)

You can change the byte using OS9's DEBUG or a Disk Editor or, best of all, MODPATCH utility.

Use EDIT or your favorite text editor to create the following script file:

```
l gshell
c 3547 6 7
v
```

Load GSHELL into memory and then enter: "MODPATCH <scriptfile>" That's it!



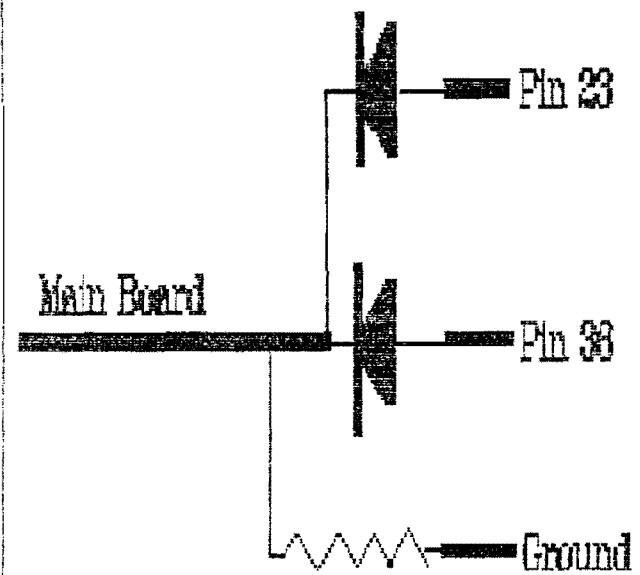
The BLOB (Boot List Order Bug) manifests itself in many ways, but it really shows up with the Disto SCII, especially when using the CC3Disk irq driver. Usually the problem is caused by the position of the floppy drive descriptors

in the boot-list. It doesn't take much....just a few bytes in position either way makes a big difference.

One solution is to make sure that all of your drive descriptors and the first or last half of CC3Disk (forgot which half) fall within the same 8K block in the system map or you WILL have trouble.

The BLOB problem can also exist with the Radio Shack disk controller. Your disk controller may not be fully decoded (mine wasn't) which causes all sorts of wierd errors to occur when the hard driver interface tried to duke it out with the floppy controller for address space. You need to decode the SCS line for 1.1 (old larger controllers but not 1.0 which has problems of it's own) controllers.

Get 2 diodes and a 1K ohm resistor. Cut the trace going to pin 36 (SCS). Tie one diode going from one side of the cut to the other side. Tie the other one from pin 23 (address bit 4) to the same side (far side of the cut). Tie a resistor (1K) from ground to the same place. Radio Shack's Disk Controller (DECB 1.1) hardware "hack":



Level-II Pascal

Microware's PASCAL compiler was designed to use the OS9 Level-I assembler. The PASCAL OBJECT code created by PascalT are actually ASM source code which will not compile directly with the Level-II RMA, the source formats are too different. If you know a little about assembly, it shouldn't be too hard to convert the source manually. Heck, if PascalT generates "neatly organized" source, it shouldn't be hard to write a quickie program to do the conversion auto-magically. The actual program code should need no change, just need to change the program directives which mark the begin/end of program, and begin/end of data, and make some minor changes to the way data is declared.

Basically, to do the conversion, you must:

- 1) Change the "mod" statement into the corresponding "psect" statement.
- 2) Get rid of "emod"
- 3) Put the data declarations into a "vsect" section
- 4) Put "endsect" statements in the right places
- 5) make sure your labels have the same case... RMA_IS_case-sensitive.

I've probably forgotten something (haven't use ASM in years), but this should get you started.

Here is the general format of an RMA program:

```
irp1
use /dd/defs/os9defs.a Include system
                           defs file.

endc
```

```
* The "psect" directive replaces the
* "mod" statement.
* The "mod" statement also contains
* the data size, and the address of the
* program name, both of which are
* unnecessary for RMA/Rlink.
psect ...      Start of "program" section.

vsect          Start of "variable" section.
* Data here. Unlike ASM, use "*" to
* refer to the current data location,
* rather than "."
* ASM progs must set a label (often
"edata") to indicate the data size,
* and include this label in the "mod"
* statement.
* RMA/Rlink doesn't need this
endsect       End of "variable" section
* Program code goes here
* ASM's "emod" statement is unneces-
* sary, as is the label used in the "mod"
* statement to indicate the size of the
* code.
endsect       End of "program" section.
```

---Tim Koonce---

I've had succes converting ASM source to RMA following similar steps to those just mentioned by Tim. Since I don't have ASM this has been necessary to use programs like those in the Complete Rainbow Guide to OS9. One thing I noted (and this is a totally uninformed observation) is that RMA didn't like the ORG statements in the ASM source or references to * and . (such as ORG * or EQU).

I just dropped any statement like these and the programs seemed to work all right (these are the statments found near the end of the ASM source and also after variable declarations. There were two very good articles in Rainbow Magazine about RMA, ASM and conversions

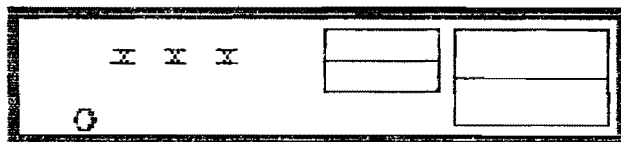
between the two earlier this year that really helped me understand the things I was blindly trying out. You might want to check them out. (I forget which issues.)

—Jonathan M. Beach—

MM/1 Report by Kevin Darling

PC-type case:

Lemme see. I looked thru the June computer shopper trying to find an example of PC type case the MM/1 will be packaged in. Check out Computer Products Corp's ad about page 25...see the low-profile case? Looks kind of like this:



X = Push Buttons

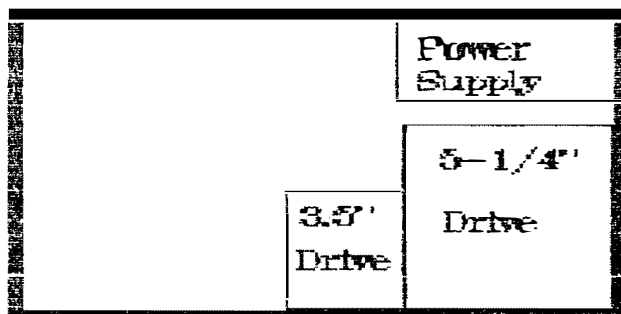
O = Keyboard Connector

2 x 3.5" and 2 x 5.25" FDrives

Dimensions: 4" high. 18" deep

Might even be able to fit a 3.5"HD under the FDs in the middle. Not sure. I assume the power supply has a fan, and puts out maybe 75 watts (?). You don't need much since the cpu stuff is all CMOS. Oh. From the top it looks like this (smaller scale):

— Ports —



FRONT

Video:

Also you might be interested in a Video (VHS) that is being made about the MM/1. They were down here yesterday to meet Dan Robins and start filming. Since I refused to let my MM/1 out of my house (when I'm here) <grin>, they'll hafta film that part later this week sometime. Don't no if viewing it on TV will do it justice. Although seeing gfx drawn at 5 to 6 times (at least) the speed of a CoCo will mean something.

Kevin Pease makes me jealous of his 68030 prototype of the MM/1 which is 25-30 times as fast as a CoCo. What takes a minute to draw on a coco takes him 2 seconds.

The windows are still pretty primitive at this stage, but work is moving along nicely, now that much of the core routines are done (cwarea, circle, lines, etc). Just added 90x60 screens last night. Talk about tiny chars! But read-able to my surprise on a CM-8. Going to try 120x60 (6x8 font) tonight.

—Kevin Darling—

Script Files by Rodger Alexander

Anytime you want a program executed in the startup procedure file, or any type of batch or script-file, to obtain input from the keyboard you must re-direct the input path properly. For example, to set the time in startup you do a:

```
setime </1
```

This is because during the execution of the startup procedure file standard input is the procedure file itself. /1 is stan-

dard output which is the device specified in your Init module. Initially it is /TERM, but most people I've talked to have patched that to /W or /W1 or some other /Wn.

You may recall the HOMEWORK article in April's Newsletter where a Menuing script-file for Dynacalc required redirection of the input path, otherwise Dynacalc would crash everytime you pressed the ESC key.

```
chd /d1
chx /d1/cmds
dynacalc </1
display 1b 24      * clears screen
chd /d0
chx /d0/cmds
mainmenu          * execute and
                  * display main
                  * menu
```

Atlanta CoCo-Fest by Newton White

Yes, there will be the First Annual Atlanta Coco (and OS9) Fest! October 6 and 7, Saturday and Sunday... clock times not exactly set yet. Dave Myers of CoCoPRO! Products is hosting the event with The Atlanta Computer Society, Inc. as hosting CoCo Club. The TC boxes, MM/1 and a host of other software/hardware vendors will be in attendance. Count on Kevin and other CoCo world personal-ities to be there... there will be seminars, door prizes and a lot of other goodies!

Dave will be selling the tickets and hotel rooms thru the mail and by phone (313-481-DAVE), as well as his BBS. I'll keep you posted on when the tickets, etc. will

go on sale... also his mailing address and BBS number. Look for more info and advertisements in upcoming Rainbows, CoCo Clipboards, MOTD, OSK'er, BBS's, the international COCO and OS9 Fido nets.

Make your plans now for an exciting

HEY! The heck with Atlanta, what about the Great Pacific Northwest?!

Plans are in the works for our very own CoCo Festival to be held in the greater Seattle area this Fall-Winter. Updates will be posted here.

Besides, I can't speak Alabamian anyway, no how!

BBS Listing

The following BBS list will be of interest to CoCo and OS9 users.

*FAR POINT (Seattle, WA) [Fido-Net]
(206) 285-8335 Level-II OS9 BBS*

*BASE ACCUMULATOR (Bellevue)
(206) 455-3410 Level-II OS9 BBS*

*LONGVIEW COCO (Lonview, WA)
(206) 425-5804 Basic09 RiBBS*

*DATA WAREHOUSE (Spokane, WA)
1-(509) 325-6787 Level-II OS9 BBS*

*TIME MACHINE (Tri-City, WA)
1-(509) 586-2559 Cobbs BBS*