

OS-9 Newsletter

Volume III No. 1

Bellingham OS-9 Users Group

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Basic09 Part -4 Tutorial

by Scott Honaker & Rodger Alexander

So far we have created a **MAIN MENU** Procedure that provided a screen format and a menu selection of all the possible options available in order to operate the database program. We also have completed a **CREATE**, **VIEW** and **ADD** option Procedures. And last month we added the **OPEN_REC** Procedure so that we could *view* the records we *created*.

This month we will add the **DEL_REC**ords Procedure and the **EDIT_REC**ords Procedure. Both of these Procedures are written by **Jeff Brittan** from the Seattle 68xxxMUG. Jeff's Edit Procedure is so excellent that I personally used it to replace the **ADD** Procedure that was presented earlier. This made the entire database more consistent and very professional in appearance. You're really going to like this one!

DELETE PROCEDURE:

As with all procedures within this database, we have to pass the appropriate parameters, **seek** the current record and in some way "**delete**" the record. In this case we will mark or replace the first letter of the first name with an exclamation mark "!".

Procedure Del_Rec

```
TYPE address=FName:STRING[10];
LName:STRING[15]; address1:STRING
[20]; address2:STRING[20];
city:STRING[15]; state:STRING[2]; zip:
STRING[10]; phone:STRING[14]
PARAM DB_Path:BYTE; Top:INTEGER;
Current:INTEGER
DIM X:INTEGER
DIM tmp:STRING[32]
DIM Option:STRING[1]
DIM rec:address
```

```
IF DB_Path=0 THEN END \ ENDIF \REM No
valid output path
```

```
PRINT \ PRINT "Delete This Record
(Y/N) ";
100 RUN inkey(Option) \ IF Option=""
THEN 100
```

```
IF Option="Y" OR Option="y" THEN
SEEK #DB_Path, (Current-1)*SIZE(rec)
GET #DB_Path,rec
```

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```
rec.FName="!" +RIGHT$(rec.FName, LEN(re
c.FName) -1)
```

```
SEEK #DB_Path, (Current-1)*SIZE(rec)
PUT #DB_Path,rec
ENDIF
END
```

EDIT PROCEDURE:

Jeff Brittan did a super job on the *Edit Procedure*. Each field name is listed above the menu with the current field to edit HIGHLIGHTED. Such a little thing that adds such a professional look. Since the *Edit Procedure* in a sense serves the same purpose as the *Add Procedure* you may choose (like I did) to replace the *Add Procedure* with the *Edit Procedure*.

PROCEDURE Edit_Rec

```
TYPE address=FName:STRING[10];
LName:STRING[15]; address1:STRING
[20]; address2:STRING[20];
city:STRING[15]; state:STRING[2]; zip:
STRING[10]; phone:STRING[14]
PARAM DB_Path:BYTE; Top:INTEGER;
Current:INTEGER; Menu:STRING[1]
```

```
DIM X, Y, CHANGE:INTEGER
DIM INCHAR:STRING[1]
DIM rec:address
DIM FDATA(8):STRING[20]
DIM FLEN(8):INTEGER
DIM LABEL:STRING[12]
DIM SPACES:STRING[20]
```

```
IF DB_Path=0 THEN END\ENDIF\REM No valid
output path
```

```
DATA 10,15,20,20,15,2,10,14
FOR Y=1 TO 8
```

```
  READ X \FLEN(Y)=X
NEXT Y
DATA "First Name :", "Last Name  :", "1st
Address:", "2nd Address:"
, "City:", "State:", "Zip Code:", "Phone #:"
```

```
SPACES="" \ FOR X=1 TO 20
\SPACES=SPACES+" " \NEXT X
```

```
IF Menu="A" OR Menu="a" THEN
  Top=Top+1
  Current=Top
  FOR X=1 TO
8\FDATA(X)=LEFT$(SPACES,FLEN(X))\NEXT X
  GOTO 100
ENDIF
```

```
SEEK #DB_Path, (Current-1)*SIZE(rec)
GET #DB_Path,rec
```

```
FDATA(1)=rec.FName
FDATA(2)=rec.LName
FDATA(3)=rec.address1
FDATA(4)=rec.address2
FDATA(5)=rec.city
FDATA(6)=rec.state
FDATA(7)=rec.zip
FDATA(8)=rec.phone
```

```
100
FOR Y=1 TO 8
  WHILE LEN(FDATA(Y))<FLEN(Y) DO
    FDATA(Y)=FDATA(Y)+" "
  ENDWHILE
  READ LABEL
  RUN GFX2("CURXY",0,Y+3)
  PRINT LABEL; " "; FDATA(Y); " ";
NEXT Y
```

```
200
SHELL "TMODE -ECHO"
RUN GFX2("CURXY",11,21) \ PRINT " F2 =
Return ";
```

```
Y=1 \CHANGE=0
300
X=13 \RUN GFX2("CURXY",12,Y+3) \RUN
GFX2("REVOFF")
PRINT " "; FDATA(Y); " ";
400
RUN GFX2("CURXY",X,Y+3) \ PRINT "";
```

```
GET #0,INCHAR
WHILE INCHAR<>CHR$(B2) DO
  IF INCHAR=CHR$(0C) THEN
    REM *** UP
    RUN GFX2("CURXY",12,Y+3) \RUN
GFX2("REVOFF")
    PRINT " "; FDATA(Y); " ";
    IF Y>1 THEN Y=Y-1
    ELSE Y=8
  ENDIF
```

```
GOTO 300
ENDIF
```

```
IF INCHAR=CHR$(0A) OR
INCHAR=CHR$(0D) THEN
  REM *** DOWN
  RUN GFX2("CURXY",12,Y+3) \RUN
GFX2("REVOFF")
  PRINT " "; FDATA(Y); " ";
  IF Y<8 THEN Y=Y+1
  ELSE Y=1
ENDIF
GOTO 300
ENDIF
```

```
IF INCHAR=CHR$(08) THEN
  REM BACKSPACE
  IF X>13 THEN
    X=X-1
  ENDIF
  GOTO 400
ENDIF
```

```
IF INCHAR=CHR$(09) THEN
  REM FORWARD ARROW
  IF Y>=1 AND X<FLEN(Y)+12 THEN
    X=X+1
  ENDIF
  GOTO 400
ENDIF
IF Y>0 AND X<=FLEN(Y)+12 AND
INCHAR>=CHR$(20) AND INCHAR<CHR$(5B
) OR Y>0 AND X<=FLEN(Y)+12 AND
INCHAR>CHR$(60) AND INCHAR<CHR$(7B
) THEN
  RUN GFX2("CURXY",X,Y+3) \ PRINT
INCHAR;
  FDATA(Y)=LEFT$(FDATA(Y),X-
13)+INCHAR+RIGHT$(FDATA(Y),FLEN(Y)+12-
X)
  X=X+1
  IF X>FLEN(Y)+12 THEN X=X-1
ENDIF
CHANGE=1
ENDIF
```

```
GOTO 400
ENDWHILE
```

```
RUN GFX2("CURXY",12,Y+3) \RUN
GFX2("REVOFF")
PRINT " "; FDATA(Y); " ";
SHELL "TMODE ECHO"
IF CHANGE=1 THEN
  rec.FName=TRIM$(FDATA(1))
  rec.LName=TRIM$(FDATA(2))
  rec.address1=TRIM$(FDATA(3))
  rec.address2=TRIM$(FDATA(4))
  rec.city=TRIM$(FDATA(5))
  rec.state=TRIM$(FDATA(6))
  rec.zip=TRIM$(FDATA(7))
  rec.phone=TRIM$(FDATA(8))
  SEEK #DB_Path, (Current-1)*SIZE(rec)
```

```
PUT #DB_Path,rec
ENDIF
END
REM '==== END Edit_Rec =====
```



Disk Drive Jumper Settings

There may come a time when you try to hook up a floppy drive that has dip switches or jumpers whose markings you don't know, particularly if it's an older drive like you may find dirt cheap at a swap meet.

Here's a list of some of the more common possibilities, and a short explanation of their meanings. These notes have come from a variety of sources which more or less agreed on the descriptions - so they should be fairly reliable.

Mark Function

BC This option enables the disk change signal at pin 34 of the ribbon cable connector on the drive. If BC is jumpered, pin 34 will go active low when the drive door is opened and will go active high if the door is closed and a step pulse occurs.

DS Used in multi-drive systems to allow the drive motor to be controlled by the drive select signal.

HC This option causes a constant head load after the drive is ready, to allow for proper seating of the disk. **DO NOT!** use HC with HM or HS!!

HM This option causes the heads to load when MOTOR ON line goes low, a disk is in the drive, and the drive door is closed. Do not use with the HC option! HM may be used together with the HS option.

HS This option causes the heads to load when the drive is ready and selected by the DRIVE SELECT signal. Do not use with the HC option! HS may be used together with the HM option.

MM This option causes the spindle motor to start when a logical 0 occurs in the MOTOR ON line to the drive and a disk is installed.

MS This allows the motor to be enabled with the DRIVE SELECT signal.

MX When this is enabled the I/O lines to the drive are always enabled, regardless of the Drive Select setting.

RD This option is for the normal ready function. It behaves the same as the SR option given below.

RY This option determines the status of the READY line on pin 34. When the jumper/switch is open the READY line is disconnected.

SR This option enables the standard ready function for the drive. The signal on the READY line (pin 34) will go low when the power is on, the spindle has reached 300 RPM, and the drive is selected.

WP This option enables/disables the write protect feature of the drive.

--Delphi; OS-9 Sig --

DESKMATE-3

Modpatch file and Basic09 Procedure

Deskmate 3 operates in almost exactly the same fashion as Deskmate 2. You have the choice of operating in either a joystick, mouse, or keyboard environment. One could have only wished though, for a hi-res joystick interface driver to optionally select from, but....

Desmate-3 runs on a VDG screen in either 40 or 80 columns. To change between 80 column and 40 column text modes, select the ICON BAR (the little asterisk in a circle). From the ICON BAR selections, choose DISPLAY (the television). Select your mode at this point. It is also at this point, where you may select the colors of the text displayed in this application. For RGB monitor owners this is ideal!

One of the features that is included with Deskmate 3, is in the Telecom program, and that includes XMODEM protocol uploading and downloading. This means that you can upload and download in either the DC4/DC2 capture protocol or XMODEM. The XMODEM feature does not include linefeeds, so keep this in mind during ASCII uploads.

To take advantage of Deskmate 3's XMODEM protocol uploading and downloading facilities, make sure that you either have enough space on disk to save the file or have the file available for uploading. While the host is in a wait state to receive your XMODEM file, select FILE (top left selection on screen), and from that menu, select SEND FILE to upload XMODEM, or select RECV FILE to download XMODEM. At this point a small window will appear and ask you if you want to use XMODEM. If you select YES, the file will be sent in the XMODEM protocol. If you select NO, the file will be sent in the DC4/DC2 CAPTURE protocol. Both are available on CompuServe. Remember that Deskmate 3 does NOT add linefeeds to text files. The number of blocks being sent or received is noted by the number of dots that accumulate on the screen.

ADDFEED PROCEDURE:

The following Basic09 Procedure will add LINEFEEDS to your ASCII text files

Procedure: Addfeed

DIM inline,filename:STRING[150]

DIM path1,path2:BYTE

PRINT "Pathlist of file to add linefeeds to:";

INPUT filename

OPEN #path1,filename:READ

CREATE #path2,"/dd/aftemp":WRITE

10 INPUT #path1,inline

PRINT #path2,inline+CHR\$(10)

IF EOF(#path1) THEN

GOTO 20

ENDIF

GOTO 10

```
20 CLOSE #path1
CLOSE #path2
SHELL "DEL "+filename
SHELL "COPY /dd/aftemp "+filename
SHELL "DEL /dd/aftemp"
END
```

HACKER'S HEAVEN:

The following *modpatch* file will modify the *DESK* program in *Deskmate-3's* CMDS directory. Use a text editor, or *EDIT* to create the following *modpatch* file.

DESKPATCH:

```
l desk
1c50 30 44 (/d0/CMDS to /dd/CMDS)
1c6a 54 57 (/term to /w7)
1c6b 45 37 (You can replace 37)
1c6c 52 0d (to any other window #)
1c6d 4d 00
1c6e 0d 00
v
```

Remember to load *desk* into memory before running this *modpatch* procedure. To run the procedure, type:
MODPATCH <DESKPATCH

-Dan Robins;CIS#73007,2473-

TowerFest II

by Rodger Alexander

Last October, Port O'CoCo Club of Port Orchard, sponsored an all day session in which CoC's were installed into PC type cases. Most of these cases were "tower" type thus the name "Tower Fest".

Those participating in the October session were Randy Kirschenmann, John Schliep, Donald Zimmerman and Donald Zoncker. For the most part, the installations were successful, but were complicated by the variations in the styles and demensions of each case.

February 16 is the date of our next "Tower Fest" and will be held at Jeff Brittan's shop in Seattle. Those would like to attend are requested to contact me by phone or by letter. Please provide me with the following information:

1. Physical description of the case, including the precise measurments of the length, width and height.
2. Which version of multipak you will be installing. **OR** If your are not using a multipak, what are you using ('Y' Cable, Powered Ribbon Cable, Disto 3 in 1 or 4 in 1).
3. What hard drive interface will you be using (if any).

Based on the information provided, each participant will receive an individual "parts" list, basic instructions for the installation session, and supplimentary information.

--Rodger Alexander--

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Computer Swap Meet

January 25th was the date of the first ever AM Computer Swap Meet on the Olympic Penninsula. Acutal location was the Kitsap Country Fairgrounds near Silverdale. Our CoCo Club set up an informational boot and displayed our new banner. It looked great!

AND WERE THERE CROWDS!

Of course, we saw the usual people show up. (Do those people buy more stuff each time???) And there were many new faces. The best part was just plain traffic. So people know we exist. (CoCo User Groups) And next door was the Computer Bank Charity. They just had a little stuff to sell, but made \$90 for the cause, but did generate a lot of interest and even had a few dollars just given to the Computer Bank Charity because it's a great idea.

Donald Zimmerman

FOR SALE

Color Computer-3 w/512K Memory Upgrade
Two Double Sided Floppy Drives (FD-502)
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Best Offer.....Call Al Bryant: (206) 347-1392

Software, Report

DiskCopy 2.1
(c)Copyright 1992

DiskCopy is designed to easily copy files from one directory to another, or from one media to another, regardless of the size or format. *DiskCopy* features include:

- Verify
- Comparison checking
- Copy prompting
- Automatic destination formatting
- Automatic volume naming
- Sequential volume naming
- Automatic boot generation
- Sequential media destinations
- External list processing
- Internal help

Operating in much the same way that the DSAVE utility works, *DiskCopy* is faster and easier to use. Instead of generating shell commands, which have to be piped through the shell or executed from a batch file, internal routines are used thereby reducing overhead. Copy, verification and comparisons are faster because they are internal rather than separate modules.

Lastly, you needn't worry about the location of your data directory before using *DiskCopy*... it doesn't care!

COMMAND STRUCTURE:

DISKCOPY -<opts> <source> <destination 1>
[<destination 2>.....]

opts: b - make destination bootable
c - compare files
f - format destination
h - help me
i - input file names from <source>
n="Volume name [@]"
@ - add a two digit number this location (optional)
p - prompt before copying
v - verify on (copy only)

Use any, all or none of the options it doesn't matter. If you do choose to use an option, however, it must be specified first and be preceded by a dash "-". In all cases, except one, the source and destination paths must be preceded by the forward slash "/". The one case where it is not necessary is with the I option (read on).

Examples:

DISKCOPY /D0/CMDS /D1 #24K
copies all files in /D0/CMDS to /D1 giving 24k for the copy buffer

DISKCOPY -BCFN="My Disk Backup"V /D0 /D1 #16K
copies all files from /D0 to /D1 making it bootable, formatting using the name "My Disk Backup", comparing the copies and allowing 16k for the copy buffer.

DISKCOPY -FN="Backup Disk @"V /D0 /D1/D2/D1 #40K
copies all files from /D0 using /D1 first as the destination, then /D2. A two digit sequence number is added to the volume name when formatting.

DISKCOPY -I COPYFILE /D2
copies all files listed in in file COPYFILE to /D2.

DiskCopy allocates 256 bytes for the copy buffer unless a larger buffer is specified as the shell modifier. You should probably consider a minimum buffer size of 24k to ease the wear and tear on the two drives being used.

In all cases listed above, when a "media full" error (ERROR #248) is intercepted, *DiskCopy* deletes the last file copied (which won't be complete) and proceeds according to the options being used. Up to four destination media devices can be specified, and upon reaching the last specified, the software prompts the user that more space is needed.

OPTIONS

Verify: Divides the buffer space in half using the second half to read the information just written. The information is then compared with the copy buffer. Write verification errors cease copying the file at the point where the

information was found incorrect. (See ERROR PROCESSING for other information.)

Compare: Does a comparison check of the files after copying is completed.

Prompt: Prompts you before copying any file. If you specify 'N' at the prompt the copy is aborted. 'Y' continues copying and 'C' continues copying and turns prompting off.

Format Links the FORMAT command whenever a new disk is placed in the destination drive, or in the case of multiple destinations whenever a new destination is required. *** Warning *** Use this option only with drive to drive copying or you may format your source drive.

n="Backup @": Sets the name parameter for FORMAT. The name is used only in conjunction with the format option. If not specified, you'll be prompted to give a name before FORMAT is called. You may tell *DiskCopy* to number the volumes by using the '@' character. When used, *DiskCopy* adds a two digit number to the name: "Backup 01", "Backup 02", etc. You may use the '@' character anywhere in the name, for example n="Disk @-Utilities" will produce "Disk 01-utilities". Be certain your name and the 2 digit number does not exceed 32 characters or unexpected results may occur.

Boot: Tells *DiskCopy* you want to link OS9Gen if OS9Boot is found on the source drive. OS9Boot is not copied if this option is not used.

Input names: Files specified in the <source> file will be used instead of directory entries. (see below for specifics).

Help: Gives you an idea of the command structure and then exits *DiskCopy*. No source or destination is required. This option is specified with an 'H' instead of '?' to make it compatible with Shell+ which uses '?' as a wildcard character.

SOURCE FILES

When using the "I" option, *DiskCopy* opens the file named and reads the names to copy from there. A full pathname to the source file is required unless there is a path specified in the file. For example:

Command: **DISKCOPY -I /D0/DATA/FILENAMES /D2**
Filename: FILENAMES
Contents: File1, File2, File3

The full pathname is required, because there is no path in the file. In the next example:

Command: **DISKCOPY -I FILENAMES /D2**
Filename: FILENAMES
Contents: /D0/DATA
File1
File2
File3

No pathname is required because it would be assumed that FILENAMES is in your current data directory. This method was chosen to allow for another neat thing to occur:

```
Command: DISKCOPY -I FILENAMES /D2
Filename: FILENAMES
Contents /D1/DATA
          File1
          File2
          /D0/DATA
          File3
```

This would now copy /D1/DATA/File1, /D1/DATA/File2 and /D0/DATA/File3 all to the same destination. The destination, as always, can be a subdirectory. How many times have you needed to archive files from different directories and had to copy them all over to a common directory. Now you can just build a file and let DiskCopy take over the details.

DESTINATIONS:

A few users have expressed an interest in seeing multiple destination devices be used. Now you have that option and it should be very helpful to users with hard drives. Up to four destinations can be specified (they MUST be devices) and not necessarily differing. Just separate the devices with a comma ",".

Example:

DISKCOPY -FN="Disk Backup @"V /H0 /D0,/D1,/D2 #56K
DiskCopy starts with device /D0 and continues until it is done with device /D2. At that time it prompts you to insert more disks and goes back to using device /D0.

ERRORS:

Error trapping is an important function of this software. Some are easily managed by Diskcopy and rectified, but sometimes the software needs user help. Read/Write errors cause the error number to be displayed and the following:

Continue, Retry or Fail (C/r/f)?

The software can display the message either after a copy attempt or directory change. Answering "C" for continue goes on to the next file or directory. "R" deletes the file (not valid for directories) and attempts to recopy the file. **Fail** stops Diskcopy. The choice is yours.

FINALLY:

I hope that you find this software useful. If you discover any problems please don't hesitate to contact me. If you benefit from using the software, let me know, I like hearing that the hours of work I put into developing these things are helpful. My username on Delphi is: DKINDBERG

--Darren J Kindberg:Delphi --

Installing the Development Pack

The Development Pack comes with several files which aid in development with the Microware C Compiler. Also included are some new Command files, a text editor, a relocatable macro assembler and utilities. If you are using a hard drive, I recommend copying all of the additional commands. Put a copy of Side A of the floppy in device /d0 and enter:

```
OS9: chd /d0/cmds
OS9: dsave /d0 /dd/cmds ! shell
OS9: chd /d0/sys
OS9: merge errmsg /dd/sys/errmsg
>/dd/sys/errmsg.new
OS9: del errmsg
OS9: merge helpmsg /dd/sys/helpmsg
>/dd/sys/helpmsg.new
OS9: del helpmsg
OS9: dsave /d0 /dd/sys ! shell
OS9: chd /dd/sys
OS9: del errmsg
OS9: rename errmsg.new errmsg
```

```
OS9: del helpmsg
OS9: rename helpmsg.new helpmsg
```

Take out that floppy and put in a copy of Side B and enter:

```
OS9: chd /d0/defs
OS9: dsave /d0 /dd/defs ! shell
OS9: chd /d0/lib
OS9: dsave /d0 /dd/lib ! shell
```

Development Pack Considerations with C

With the Development Pack you get a new assembler, a new linker and two supplemental libraries, most notable, the Graphics Library documented in the MultiVue Manual. Indeed, to utilize either of these two libraries, you will have to use the new linker provided. This means that you need to tell your "front end" to use the different assembler and linker. cc1

This is the most difficult. You will need to download CPATCH.AR in the Languages Library on CompuServe (or use EZGen from Burke and Burke) in order to patch the modules *rma* (the new assembler) and *rlink* (the new linker) to rename them *c.asm* and *c.link*. You will need to delete the original *c.asm* and *c.link* prior to installing that patch.

cc2

This is a little easier. If you have cc2, written by Delphi/Rainbow's own Rick Adams. Just edit the source file *cc2.c* and change the following lines:

(Continued next page)

CHANGE:

```
docmd("C.ASM %s.a -o=%s.r\u", basename(file),
basename(file));
```

TO READ:

```
docmd("rma %s.a -o=%s.r\u", basename(file),
basename(file));
```

AND CHANGE:

```
docmd("C.LINK /dd/lib/cstart.r%s %s -
o=%s%s%s\u",
```

TO READ:

```
docmd("rlink /dd/lib/cstart.r%s %s -
o=%s%s%s\u",
```

Then recompile it with: OS9: cc1 cc2.c

Another thing I have done is to merge the libraries *sys.l* and *cgfx.l* with *clib.l*. Oh, before I get to that, I would also highly recommend downloading "The Kreider Lib". It is a replacement file for *clib.l* written by Carl Kreider. It fixes problems in the original library plus adds a whole bunch of new calls.

Now back to the supplemental libraries. To merge them enter:

```
OS9: chd /dd/lib
```

```
OS9: merge cgfx.l sys.l clib.l >n.clib.l
```

```
OS9: rename clib.l old.clib.l
```

```
OS9: rename n.clib.l clib.l
```

NOTE: THE ORDER OF INPUT FILES IN THE MERGE STATEMENT IS VERY IMPORTANT. DO NOT CHANGE IT OR YOU WILL GET AN UNUSABLE LIBRARY.

Doing this merge will cause all links to take longer, but you don't need to specify any libraries with the -l option (as depicted on page 10-2 of the MultiVue manual) anymore. If you make use of the make utility supplied with the Development Pack, you may decide not to merge your libraries in order to be able to minimize your link times.

I hope this little file helps you and speeds you on your way to cranking out some quality C code for the Color Computer 3.

Zack C. Sessions: CIS: 76407,1524

Delphi: ZACKSESSIONS

GENie: Z.SESSIONS

□

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HARDWARE:

2 MEGS of RAM:

Constructing your own 2 Meg upgrade
Marty Goodman 6/91

Auto Boot OS-9

Instruction and *DEBUG* code required to burn a 27C56 eeprom to autoload OS9 on power up.
Steve Hilton 6/91

Basic09 Patch for PROFILE:

Patch to run *PROFILE* under OS-9 Level 2.
Bruce Ondersma

CoCo in a PC

Instructions and diagrams on 3 different installations of the CoCo into PC cases.
Rodger Alexander & Craig Dubois 4/91

Convert MODEMPAK to RS-232 PAK:

Complete instructions for "hacking" a cheap *modempak* into an *RS-232 PAK*.

Wes Gale, Delphi 6/91

Double DOS

Instructions for loading two DOS codes into one 27128 EPROM and wiring to a switch.

Skyline, Delphi 7/91

Enhanced IRQ Hack:

Two hacks: One to the CoCo and the other to the older Multipak.

Dennis McMillan 1/91

Hi-Speed Upgrade:

Increase CoCo speed 15% by replacing stock crystal with 32MHz crystal.

Mark Johnson 11/91

Keyboard Switch & PC Power Supply

Diagram and instructions for required wiring.

Rodger Alexander 7/91

Make your own 512K

Stack 4164 chips to replace the 4464 DRAM chip to achieve 512K.

Marty Goodman, Delphi 7/91

OS-9 TIPS:

1. PC-Case turbo switch to control hi-rez joystick interface.

2. Wiring the "keylock" switch on a PC-Case.3

3. Speed up boot by changing the interleave on track one. Brian White 3/91

Repair your own Multipak

Step by step testing, analysis and repair.

DELPHI; OS9Sig 6/91

Simple Switch for your Hi-Res Interface:

Modify your hi res joystick interface box to switch the hi-res components in and out.
T. Warren 9/91

MISCELLANEOUS:**28 and 32 pin 27 series EPROM Pinouts**

27 series EPROM pinout table.
Delphi;OS9Sig 7/91

Bernie's Bit Bucket:

Burke & Burke chip replacements. Update on new release of REPACK and EZGEN. Setting OSTERM remote mode strings to properly answer the phone. New & Used stuff from CoCoPro. Review of VED and info on the MM/1 2/91

Bernie's Bit Bucket:

IRIDIUM: World Wide Cellular Phone System using a constellation of 77 satellites. 3/91

Bernie's Bit Bucket:

Setting up your hard drive for MULTI-VUE Complete instructions and script files 5/91

Bernie's Bit Bucket:

How to get Deskmate-3 to work on a Hard Drive. 9/91

Bernie's Bit Bucket:

I got my MM/1 and sent it back. 10/91

Bernie's Bit Bucket:

What RAINBOW didn't tell you about the MM/1 12/91

'C' Routine that doesn't exist:

Special handler codes to enhance C
Jason Bucata;Delphi 7/91

Cheap Ads in the Rainbow

FARNA System compiling multiple ads to create full page economical rate ads.
Francis G. Swygert 12/91

CoCo Pro Catalog

Bernie's Bit Bucket 2/91

New & used Hardware/Software/Book 2/91

Computer Class Ham Radio License:

F.C.C. announces "new" no-code option for above 30 MHz Technician Class to entice computer techies into the world of Ham Radio and Packet BBS.

Delphi;OS9 Sig 1/91

Computer Swap Meet

Report on CoCo booth at the January Kent Commons Swap Meet

Donald Zimmerman 2/91

Computer Club "Rules to Success"

Success story of Port O'CoCo Club
Donald Zimmerman 10/91

CORRECTIONS:

IRQ Hack (JAN'91) 2/91

Going from "RS-DOS" to "OS-9": What's wrong with OS-9 and what can we do to make the conversion easier for the novice user.

Stephan Pagan & Eddie Kuns 1/91

Fragmentation:

Cause and effect of fragmentation
Delphi 11/91

GNU and "Copyleft":

Report on Free Software Foundation 5/91

Latest Greatest Upgrades for OS-9:

Listing and description of all the available Public Domain files that contain Level Two Upgrade routines/modules/patches.

Mark Farrell 10/91

MM/1 Announces MM/1 Kit 1/91

MM/1 INFO:

Bernie's Bit Bucket 2/91

MM/1 at Rainbowfest

Mike Knudsen;uucp 5/91

MM/1 Report

5/91

MM/1 Report

7/91

New OS-9 Bulletin Board:

Announcement of new OS9 Tacoma BBS.

Chris Johnson 8/91

New OS-9 Users Group

The formation of a new OS-9 Users Group to replace the old one. Purpose and Duties.

Donald Vaillancourt;Delphi 8/9

G-Windows:

NEW PRODUCT ANNOUNCEMENTS from Frank Hogg Laboratory.

Frank Hogg 12/91

G-Windows:

MORE ON G-WINDOWS; review

Delphi;OS9 Sig 12/91

NW CoCo Festival:

Preview of Port O'CoCo CoCo Fest in June

Rodger Alexander 4/91

NW CoCo Festival

Updated report on Festival 5/91

NW CoCo Festival

Complete report on all the session at the first annual NW CoCo Fest.

Rodger Alexander 6/91

NW CoCo Festival "A Final Look"

Pictorial review of speakers/events 7/91

OS9 Community Network International:

New OS-9 Users Group with listing of local officers.

FidoNet;OS9 Sig 11/91

OS-9 Level Two "UPGRADE":

THE FINAL CHAPTER: History and status of the OS-9 Level Two Upgrade.

Kevin Darling;Delphi 9/91

Public Domain Library:

Complete listing of Bellingham OS-9 Users Group 6 Meg Library 8/91

PWD/PXD Mysteries:

Article explains how PWD & PXD work.

Zack Sessions;Delphi 12/91

Route 68 Bridge:

A new 68K Magazine 10/91

Signetics' 68070 IC^2 Serial Port

Description of the build in serial port in the 68070 used in the MM/1

Delphi;OS9Sig 5/91

System-4 PT68K Update

2/91

Ten Commandments for C Programmers:

Humorous King James style list of rules.

Henry Spencer 12/91

The OS for "US":

Comparative discussion on Computer Operating Systems

Delphi;OS9Sig 2/91

TC70 Announcement

1/91

TC9 "Frank Hogg Report"

4/91

TC9 "FHL's TIGER"

5/91

TC9 "Tom Cat Update"

2/91

TC9 "68K on the TC-9"

8/91

TC9 "TomCat to PC-XT"

8/91

Tower Fest in Port Orchard:

Report on an all day hardware session installing CoCo's into PC Cases.

Rodger Alexander 10/91

VDG Games from Multi-Vue:

Script file to execute Sub-Battle from MV

Kevin Darling 10/91

We Need to Standardize OS-9/OSK

Proposal to organize a committee to force standard between manufacture's.

Joel Ewy;Delphi 5/91

Welcome to OS-9:

Article on getting started in OS-9

Bob Kemper 5/91

Why you must upgrade your Multipak:

Explanation of the READ WRITE problems between the Multipak and the CoCo-3.

Marty Goodman 8/91

Xmodem Padding Problems

Why the problem and how to fix it.

Delphi;OS9 Sig 11/91

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2. Returning 512K CoCo to 128K 1/91

3. How to make OSTerm behave when running other graphic programs concurrently. 1/91

4. How to modify window descriptors in your boot file. 1/91

5. OS9 availability on PC 386/486's 2/91

6. Securing a loose 512K ram board. 2/91

7. Corrosion on edgcard connectors 2/91

8. SubBattle on a double sided disk 2/91

9. Putting 2 B&B interfaced in MPI 2/91

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AGFX.L (graphics library) 10/91

ALIAS (multiple name utility) 11/91

AR (archive utility) 10/91

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CC3GO 10/91

CC3IO 10/91

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CLIB.L (Krieder Library) 10/91

CLIBT.L (Krieder Library) 10/91

CMPFIX (creates modpatch mods) 11/91

COCODEX3 (database) 4/91

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CP (copy/unlink/link) 10/91

CSTART.R (Linker fix) 10/91

DATAMASTER (database) 4/91

DATAMOD (Shell+ Utility) 10/91

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SETIME	10/91			PLAYTT(play sounds from a menu);	
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UNZIP (de-archive utility)	10/91			Delphi;OS9Sig	9/91
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VU (text viewer supreme)	10/91				

SOFTWARE:

Phantomgraph "PATCH" for 10X Printer:
Modpatch file for *dmpibm.drv* printer driver for use with Star Gemini 10x/15x printers.

Kevin Darling;Delphi 8/91

Basic09 Patch for PROFILE:

Patch to run *PROFILE* under OS-9 Level 2.

Bruce Ondersma 8/91

G-Windows:

MORE ON G-WINDOWS; review

Delphi;OS9 Sig 12/91

Level One Modpatch Files:

CC3Disk and D0 level one patches.

Rodger Alexander 11/91

More Shell+ Scriptfiles:

RAMDISK; PCTL (printer controller); WCTL (window control); ENV (environment setup); SET-WILD (turn wildcard on and off); BATCHFMT(batch formatting disk) DESKMATE (run deskmate apps); PLAYTT(play sounds from a menu); ADDRESS(build an address file); MAN (online manuals); TYME (digital clock)

Steve Clark 2/91

OSTERM 2.08 "Patches"

Patches to allow other port addresses

Delphi;OS9Sig 2/91

Screen Savers:

Using Shell+ script files to create a screen saver menu.

Keneth Thompson;Delphi 12/91

Using MODPATCH to "patch" OS-9:

Instructions and script files for using MOD-PATCH to patch DELDIR.

Delphi;OS9Sig 9/91

VDG Games from Multi-Vue:

Script file to execute Sub-Battle from MV

Kevin Darling 10/91

TUTORIALS:**Basic09 Database (Part-1)**

Variable types and Defining your own data types for use in a database program.

Scott Honaker/Rodger Alexander 9/91

Basic09 Database (Part-2)

Components of a database and passing parameters. *MainMenu, Create Database, Add Record, Open Database*

Scott Honaker/Rodger Alexander 11/91

SUBSCRIPTION INFORMATION:

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Club Activity Report

*Bellingham OS9 Users Group - Longview CoCo Club
Mt. Rainier CoCo Club - Port O'CoCo Club - Seattle 68xxx Mug*

Bellingham OS9 UsersGroup

We have not been actively meeting since last June. But starting in February we will be running an advertising campaign promoting our meetings to be held the 2nd Wednesday of each month at Fairhaven Middle School's Library located in the Fairhaven District, 2 miles south of Bellingham City Center, .

The February 12th meeting will feature a viewing of the club's tutorial video tapes, a display of the club's "products" and a survey of the needs of the new members.

-- Rodger Alexander --

Port O'CoCo Club

The January 20th meeting was a celebration of how much alive the CoCo community really is. Twenty people came from all over the Puget Sound area to discuss and exchange shareware and public domain programs.

The first half hour of the meeting was devoted to business. We started by passing out copies of our roster of the group. We now have 38 people on our phone list. Each of these people are called just before each monthly meeting thanks to the efforts of Phyllis Armstrong. This process has promoted higher and higher attendance each month.

We also asked for each person's birthday. We now have a donation from Port Orchard's finest movie theater of a free ticket for each member during his/her birthday month. Of course, the person has to attend the meeting to get the ticket! We talked about having themes for each meeting. That idea will be tried for the next year. We also passed out cards of the dates for each meeting for the year of 1992, created by Dan Staham.

A quick recap of the success of the Kitsap Mall Computer Fair last weekend was presented. Our banner was a big success and lots of people talked with the club members who gave up part of their weekend to man the booth.

Finally, we talked about the upcoming Computer Swap Meet at the Kitsap Fair Grounds. It will be the first swap meet on the Peninsula. We will be there representing the

CoCo Community as well as promoting the Computer Bank Charity.

After the dry stuff was out of the way we made a "around the room" introduction of each person. We gave our name, our strength, and what we wanted to know. There were lots of surprised looks as we worked around the room. Common interests were found and answers to some of the questions were shouted out.

Port O' CoCo purchased about 100 cassette-based programs last month. The hope had been that those programs could be on disk. Well, the task was much larger than originally thought. So now the programs have been divided among three members to transfer them to disk and label them accordingly. The beginning benefits of this process will be available next month.

Shortly before 8 pm members broke into groups according to what they wanted and what they knew. Five systems were up and running for demonstration, instruction and/or duplication. There was a great deal of floating from group to group.

In the middle of all this there was a small computer system that was given to the club at the Kitsap Mall Computer Fair. We auctioned that off to someone who wanted just the controller. He turned around and sold some of the piece he didn't want.

Meetings usually wind down about 9:30, but this one didn't start breaking up until 10:30. There were hold-ons who were there until 11 pm!

Next month's meeting is February 17th. We will have two speakers. Larry Cloud of Cloud's Corner will talk about BBSs, how to get on them and what you can do with them. He plans to have an active system going so those who want to sign onto his BBS may do so. Secondly, a representative from Radio Shack will speak on how to communicate with Tandy to get, learn or do what you want. He will have a handout of steps, names and phone numbers. If you have questions or need directions to the meeting call 871-0319 evenings.

-- Donald Zimmerman --

Seattle 68xxx Mug

The January meeting was a flop! At least in terms of the planned agenda. The hard drive on the club's CoCo would

not boot so the demo and Basic09 Lesson with the database program that the club had been writing was delayed while everyone tried to get the system to boot. Two and a half hours later.....the computer still would not boot and it was determined that the hard drive allocation table was bad and would require a re-format.

Scott handed the computer over to Rodger to do the re-format honors and the meeting ended. But not until copies of the most recent updates of the *PDS Database* were made for those wanting them.

February 4th's meeting will feature a special presentation of the most powerful, high tech software available to today's computer owners. YES, most of it will be MS-Dos and Macintosh. Unfortunately a 68K OS-9 machine is not available, but some super 68K Industrial OS-9 software literature will be available to compare against the *other* systems.

Mt. Rainier CoCo Club

The Parkland/Spanaway Library has raised it's rates so we are looking for another location. Haven't decided yet as to where the meeting will be held, However we're determined that no fee's will be charged.

Until we find a new "home" we are asking those wishing to attend the January 11th meeting, please call (206)472-0228.

-- John Schliep --

BENEFITS TO SUBSCRIPTION MEMBERS

As a subscribing member of the Bellingham OS-9 Users Group, you enjoy the following benefits:

1. Monthly Newsletter
2. FREE Public Domain Library (6 Megs)
3. FREE Classified Ads
4. Technical Assistance (734-5306)
5. On-Line OS-9 Conference (676-5787)

1.2 & 1.4 Meg floppies

I got the software/hardware modifications from a file named *CC3DIS.AR*, but it only works for the older 12volt. disk controller (Disk Rom version 1.0), the ones with a 1793 controller chip. It doesn't work with the 1773 chips as it doesn't use the old 8inch high density mode.

It require's 2 chips: a 74LS74 and a 74LS158 plus a 3.9k 1/4 watt resistor and a optional toggle switch to select the normal double density drive. It has a IPatch file for patching *cc3disk* and comes with a 1.2 and 1.44 meg floppy descriptors. It even has the faster 500kbyte transfer rate.

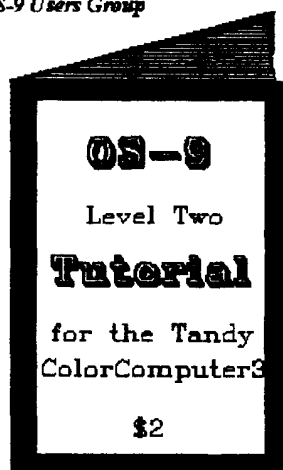
The hardware modification requires 18 jumper wires and piggybacking the two chips.

-- Mark Johnson --

Bellingham OS-9 Users Group
Presents

5
Chapters

44
Pages



"Updates"
Disk
included

written by
Scott Honaker and Rodger Alexander
Mail \$2 + \$1 shipping/handling to:
Bellingham OS-9 Users Group
3404 Illinois Lane, Bellingham, Wa 98226

Washington CoCo/OS9 Clubs

Bellingham OS-9 Users Group

Meets the 2nd Wednesday of each month at 7:30pm.
Fairhaven Middle School Library
110 Park Ridge Rd., Bellingham

Mt. Rainier CoCo Club

Meets the 2nd Tuesday of each month at 7pm
Call (206) 472-0228 for meeting location

Longview/Kelso CoCo Club

Call Steve Hammond for meeting information
(206) 577-7316

Port O'CoCo Club

Meets the 3rd Monday of each month at 7:30pm
Stock Market Grocery
Port Orchard

Seattle 68xxx Mug

Meets the 1st Tuesday of each month at 7:30pm
Gugenheim Hall, University of Washington

Washington State BBS List

FAR POINT BBS (Seattle)
 RiBBS (Fido NET)
 (206) 285-8335

COLUMBIA HTS. BB (Longview/Kelso)
 RiBBS (Fido NET)
 (206) 425-5804

DATA WAREHOUSE BBS (Spokane)
 RiBBS (Fido NET)
 (509) 325-6787

BARBEQUED RIBBS (Bellingham)
 PC-Board (PC-Net)
 (206) 676-5787 - CoCo Conference #5

OS-9 TACOMA BBS (Tacoma)
 RiBBS (Fido NET)
 (206) 566-8857

COCO EXPRESS BBS (Anacortes)
 RiBBS (Fido NET)
 (206) 293-1057

Color Computer Video Library



Fixing the Multipak "TRQ"
Installing a 2nd floppy drive
Installing 512K Memory Board
Installing a Burke & Burke Hard Drive

\$10

Bellingham OS-9 Users Group
 3404 Illinois Lane; Bellingham, Wa. 98226

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