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OS-9 Hi-Res Screen Dump Utilities

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Introduction

The disk provided with this package contains CGSDUMP (Color Dump Program) and BWS Dump (Black and White Dump Program), which let you print high resolution graphic displays from a Color Computer in 4 colors or in black and white (monochrome).

CGSDUMP and BWS Dump provide the useful and practical ability to print the graphics screens from OS-9.

Required Equipment

- Color Computer with 64K
- Standard television set (color recommended)
- Color disk drive #0 kit
- Printer Cable
- CGP-220 Ink-Jet Printer for color printing or any Tandy Dot Matrix Printer with bit image capabilities for monochrome printing: LPVII, LPVIII, DMP100, 105, 110, 120, 200, 400, and 420.

Note: If your printer prints half-width pictures, check the owner's manual for instructions on how to set your printer to the expanded print mode.

Installing CGSDUMP or BWSDUMP

Before OS-9 can use the graphics dumps, they must reside on the current execution directory, usually /D0/CMDS. To install either program, follow this procedure:

First boot the OS-9 System Master as outlined in GETTING STARTED WITH OS-9.

If you have 1 drive:

1. Type:

```
load copy (ENTER)
```

2. Insert DUMP disk in drive when OS-9 prompt returns.

3. Type:

```
copy /d0/cgsdump /d0/cmds/cgsdump -s  
(ENTER)
```

4. At the prompt, insert the System Master and press (ENTER)

5. Insert DUMP disk in drive when the OS-9 prompt returns.

6. Type:

```
copy /d0/bwsdump /d0/cmds/bwsdump -s  
(ENTER)
```

7. At the prompt, insert the System Master and press (ENTER)

If you have 2 drives:

1. Insert DUMP disk in Drive 1.
2. Type:

```
copy /d1/cgsdump /d0/cmds/cgsdump  
(ENTER)
```

```
copy /d1/bwsdump /d0/cmds/bwsdump  
(ENTER)
```

Picture Files

With CGSDUMP and BWSDUMP you can print a picture file on the printer or print a graphics display that is currently on the screen.

A picture file is an exact copy of graphic screen memory saved on disk that the dump utilities can use instead of an allocated graphic screen.

All path lists, such as picture file names or output file names, must be preceded by a space.

Operation

Standard Options

With CGSDUMP and BWS Dump you can use some standard OS-9 options. These include sending the output to some device other than the printer and printing pictures from places other than from the screen (picture files).

Example:

```
bwsdump /d0/logopic ENTER
```

prints the picture stored on the root directory of Drive 0 in a file called logopic.

You can also send the output to a device other than the printer by using the S option. At the end of the command line, use a > symbol and the pathlist to where the output should go.

Example:

```
bwsdump -s >/d0/picture ENTER
```

The - sign signals the start of the option list, and the s tells the dump program that the output will be sent to a path specified at the end of the command line. This sends the output of BWS Dump to a file called picture in the root directory of Drive 0. You can then use the OS-9 shell command LIST to send the contents of the file to the printer as many times as required.

Example:

```
list /d0/picture >/p ENTER
```

Note: A space must appear between the option list and the path list. If no graphic screen is allocated and no path list is specified then an Error #246 (not ready) will occur.

Color Printing

1. Be sure that you have properly connected the CGP-220 Ink-Jet Printer and that you have selected the correct baud rate with the XMODE command.
2. Type:

```
cgsdump ENTER
```

The contents of the graphics screen are printed, using green, yellow, blue, and red with a horizontal resolution of 128. Vertical resolution is 192 for all modes.

Color Options

To select options, preface the option or the list of options with a minus sign (-).

CGSDUMP has a wide variety of color sets that match those of the Color Computer. To select a color option, place the color option number after the minus sign.

Color Option Table

Color Option Number	Color 1	Color 2	Color 3	Color 4
0	green	yellow	blue	red
1	white	cyan	magenta	orange
2	black	blue	red	white
3	black	red	blue	white
4	black	cyan	yellow	green
5	black	yellow	cyan	green
6	black	white		
7	white	black		
8	black	green		
9	green	black		

Color options 6 - 9 have a horizontal resolution of 256; all others have a horizontal resolution of 128.

Example:

```
cgsdump -8 ENTER
```

prints the screen using black and green

```
cgsdump -9s >/d0/picture ENTER
```

sends the output to /d0/picture and swaps black and green

Monochrome Printing

1. Be sure the computer is connected to a Tandy printer with bit image capabilities.
2. Type:

```
bwsdump ENTER
```

The contents of the graphics screen is printed, using the graphics mode of DMP 105, 110, 200, 400, 420.

Monochrome Options

To select options, preface the option or list of options with a minus sign.

BWSDUMP has several options with which you change the way the picture looks on paper. These options include inverse and expansion capabilities.

To select options, place the corresponding letter in the option list.

Option Name	Select	Description
Inverse	I	swap black and white
Condensed	C	more contrast and larger (not for LPVII)
LPVII mode	7	small picture for LPVII, LPVIII and DMP100 (LPVII works only in this mode)

Examples:

```
bwsdump -7i [ENTER]
```

prints the screen using LPVII mode with black and white swapped.

```
bwsdump -c >/d0/picture [ENTER]
```

sends output to /d0/picture and selects the condensed mode option.