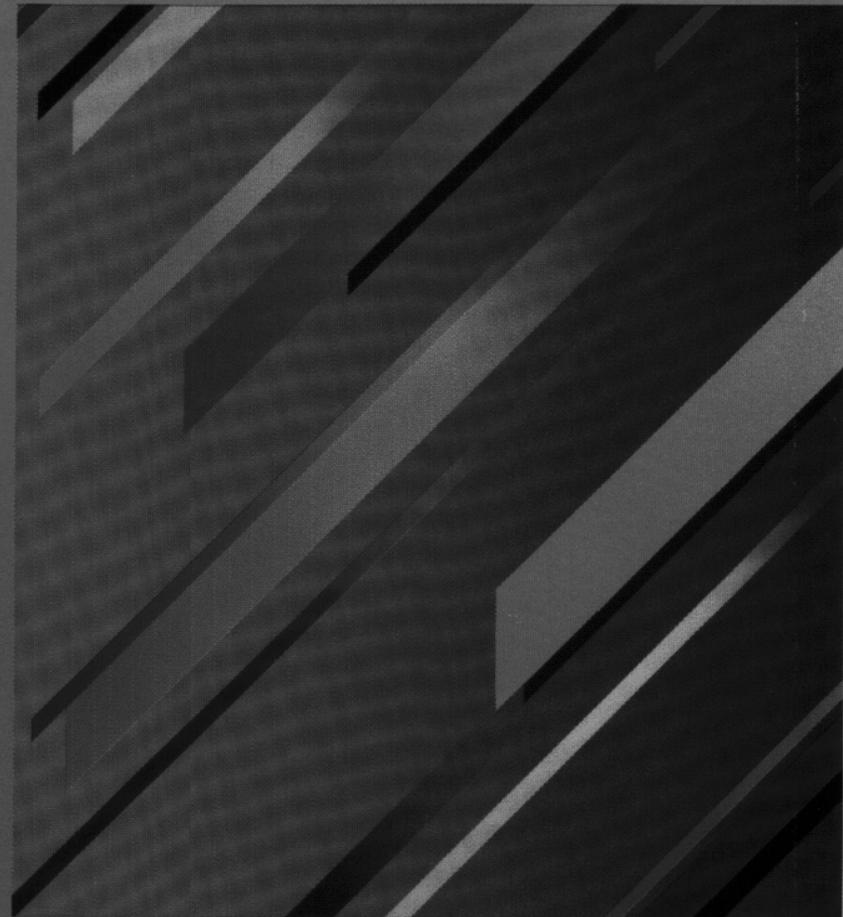


TANDY®
Color Computer

Cat. No. 26-3221

OS-9 Hi-Res Screen Dump Utilities



RADIO SHACK, A DIVISION OF TANDY CORPORATION

**U.S.A.: FORT WORTH, TEXAS 76102
CANADA: BARRIE, ONTARIO L4M 4W5**

TANDY CORPORATION

AUSTRALIA

91 KURRAJONG AVENUE
MOUNT DRUITT, N.S.W. 2770

BELGIUM

PARC INDUSTRIEL
5140 NANINNE (NAMUR)

U. K.

BILSTON ROAD WEDNESBURY
WEST MIDLANDS WS10 7JN

TERMS AND CONDITIONS OF SALE AND LICENSE OF TANDY COMPUTER
EQUIPMENT AND SOFTWARE PURCHASED FROM RADIO SHACK
COMPANY-OWNED COMPUTER CENTERS, RETAIL STORES AND RADIO
SHACK FRANCHISEES OR DEALERS AT THEIR AUTHORIZED LOCATIONS

LIMITED WARRANTY

I. CUSTOMER OBLIGATIONS

- A CUSTOMER assumes full responsibility that this computer hardware purchased (the Equipment) and any copies of software included with the Equipment or licensed separately (the Software) meets the specifications, capacity, capabilities, versatility, and other requirements of CUSTOMER.
- B CUSTOMER assumes full responsibility for the condition and effectiveness of the operating environment in which the Equipment and Software are to function and for its installation.

II. LIMITED WARRANTIES AND CONDITIONS OF SALE

- A For a period of ninety (90) calendar days from the date of the Radio Shack sales document received upon purchase of the Equipment, RADIO SHACK warrants to the original CUSTOMER that the Equipment and the medium upon which the Software is stored is free from manufacturing defects. **This warranty is only applicable to purchases of Tandy Equipment by the original customer from Radio Shack company-owned computer centers, retail stores, and Radio Shack franchisees and dealers at their authorized locations.** The warranty is void if the Equipment's case or cabinet has been opened or if the Equipment or Software has been subjected to improper or abnormal use. If a manufacturing defect is discovered during the stated warranty period, the defective Equipment must be returned to a Radio Shack Computer Center, a Radio Shack retail store, a participating Radio Shack franchisee or a participating Radio Shack dealer for repair, along with a copy of the sales document or lease agreement. The original CUSTOMER'S sole and exclusive remedy in the event of a defect is limited to the correction of the defect by repair, replacement, or refund of the purchase price, at RADIO SHACK'S election and sole expense. RADIO SHACK has no obligation to replace or repair expendable items.
- B RADIO SHACK makes no warranty as to the design, capability, capacity, or suitability for use of the Software, except as provided in this paragraph. Software is licensed on an "AS IS" basis, without warranty. The original CUSTOMER'S exclusive remedy, in the event of a Software manufacturing defect, is its repair or replacement within thirty (30) calendar days of the date of the Radio Shack sales document received upon license of the Software. The defective Software shall be returned to a Radio Shack Computer Center, a Radio Shack retail store, a participating Radio Shack franchisee or Radio Shack dealer along with the sales document.
- C Except as provided herein, no employee, agent, franchisee, dealer, or other person is authorized to give any warranties of any nature on behalf of RADIO SHACK.
- D **EXCEPT AS PROVIDED HEREIN, RADIO SHACK MAKES NO EXPRESS WARRANTIES, AND ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE IS LIMITED IN ITS DURATION TO THE DURATION OF THE WRITTEN LIMITED WARRANTIES SET FORTH HEREIN.**
- E Some states do not allow limitations on how long an implied warranty lasts, so the above limitation(s) may not apply to CUSTOMER.

III. LIMITATION OF LIABILITY

- A **EXCEPT AS PROVIDED HEREIN, RADIO SHACK SHALL HAVE NO LIABILITY OR RESPONSIBILITY TO CUSTOMER OR ANY OTHER PERSON OR ENTITY WITH RESPECT TO ANY LIABILITY, LOSS OR DAMAGE CAUSED OR ALLEGED TO BE CAUSED DIRECTLY OR INDIRECTLY BY "EQUIPMENT" OR "SOFTWARE" SOLD, LEASED, LICENSED OR FURNISHED BY RADIO SHACK, INCLUDING, BUT NOT LIMITED TO, ANY INTERRUPTION OF SERVICE, LOSS OF BUSINESS OR ANTICIPATORY PROFITS OR CONSEQUENTIAL DAMAGES RESULTING FROM THE USE OR OPERATION OF THE "EQUIPMENT" OR "SOFTWARE," IN NO EVENT SHALL RADIO SHACK BE LIABLE FOR LOSS OF PROFITS, OR ANY INDIRECT, SPECIAL, OR CONSEQUENTIAL DAMAGES ARISING OUT OF ANY BREACH OF THIS WARRANTY OR IN ANY MANNER ARISING OUT OF OR CONNECTED WITH THE SALE, LEASE, LICENSE, USE OR ANTICIPATED USE OF THE "EQUIPMENT" OR "SOFTWARE." NOTWITHSTANDING THE ABOVE LIMITATIONS AND WARRANTIES, RADIO SHACK'S LIABILITY HEREUNDER FOR DAMAGES INCURRED BY CUSTOMER OR OTHERS SHALL NOT EXCEED THE AMOUNT PAID BY CUSTOMER FOR THE PARTICULAR "EQUIPMENT" OR "SOFTWARE" INVOLVED.**
- B RADIO SHACK shall not be liable for any damages caused by delay in delivering or furnishing Equipment and/or Software.
- C No action arising out of any claimed breach of this Warranty or transactions under this Warranty may be brought more than two (2) years after the cause of action has accrued or more than four (4) years after the date of the Radio Shack sales document for the Equipment or Software, whichever first occurs.
- D Some states do not allow the limitation or exclusion of incidental or consequential damages, so the above limitation(s) or exclusion(s) may not apply to CUSTOMER.

IV. SOFTWARE LICENSE

- RADIO SHACK grants to CUSTOMER a non-exclusive, paid-up license to use the TANDY Software on one computer, subject to the following provisions:
- A Except as otherwise provided in this Software License, applicable copyright laws shall apply to the Software.
- B Title to the medium on which the Software is recorded (cassette and/or diskette) or stored (ROM) is transferred to CUSTOMER, but not title to the Software.
- C CUSTOMER may use Software on one host computer and access that Software through one or more terminals if the Software permits this function.
- D CUSTOMER shall not use, make, manufacture, or reproduce copies of Software except for use on one computer and as is specifically provided in this Software License. Customer is expressly prohibited from disassembling the Software.
- E CUSTOMER is permitted to make additional copies of the Software **only** for backup or archival purposes or if additional copies are required in the operation of one computer with the Software, but only to the extent the Software allows a backup copy to be made. However, for TRSDOS Software, CUSTOMER is permitted to make a limited number of additional copies for CUSTOMER'S own use.
- F CUSTOMER may resell or distribute unmodified copies of the Software provided CUSTOMER has purchased one copy of the Software for each one sold or distributed. The provisions of this Software License shall also be applicable to third parties receiving copies of the Software from CUSTOMER.
- G All copyright notices shall be retained on all copies of the Software.

V. APPLICABILITY OF WARRANTY

- A The terms and conditions of this Warranty are applicable as between RADIO SHACK and CUSTOMER to either a sale of the Equipment and/or Software License to CUSTOMER or to a transaction whereby Radio Shack sells or conveys such Equipment to a third party for lease to CUSTOMER.
- B The limitations of liability and Warranty provisions herein shall inure to the benefit of RADIO SHACK, the author, owner and/or licensor of the Software and any manufacturer of the Equipment sold by Radio Shack.

VI. STATE LAW RIGHTS

The warranties granted herein give the **original** CUSTOMER specific legal rights and the **original** CUSTOMER may have other rights which vary from state to state.

OS-9 Hi-Res Screen Dump Utilities

Contents

Introduction	1
Required Equipment	1
Installing CGSDUMP or BWS Dump	2
Picture Files	3
Operation	4
Standard Options	4
Color Printing	5
Color Options	5
Monochrome Printing	7
Monochrome Options	7

OS-9 Hi-Res Screen Dump Utilities Programs:
© 1984 Tandy Corporation.
All Rights Reserved.

OS-9 Hi-Res Screen Dump Utilities Program Manual:
© 1984 Tandy Corporation.
All Rights Reserved.

OS-9 Operating System: © 1983 Microware Systems
Corporation and Motorola Incorporated.
All Rights Reserved.
Licensed to Tandy Corporation.

TRS-80 is a registered trademark of Tandy Corporation.

Reproduction or use, without express written permission from Tandy Corporation, of any portion of this manual is prohibited. While reasonable efforts have been taken in the preparation of this manual to assure its accuracy, Tandy Corporation assumes no liability resulting from any errors or omissions in this manual, or from the use of the information contained herein.

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 BWSHDUMP 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 BWSHDUMP 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.