
DORADOCOLOR

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INTERNAL

Uses: COLOR

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INTRODUCTION

This package is the Xerox Lisp software driver for the Dorado (Xerox 1132) color display.

NECESSARY HARDWARE

You need a Xerox 1132 with color card and a third party color display. Please contact your Xerox representative for details concerning acquiring and setting up all the required hardware. Some notes on configuring the Conrac color monitor are given at the end of this document.

Assuming you have all the hardware you need, turn it all on. This means

- (1) Your 1132 is running Xerox LISP.
- (2) Your 1132 has an 1132 color card installed.
- (3) Your color display is plugged in and powered on.
- (4) Three cables for red, green, and blue signal connect the 1132 color card to the color display.

Any reconnections should be made while your 1132 is off. Until you issue some software commands, a black color display is normal.

DORADOCOLOR SOFTWARE

The DORADOCOLOR package provides the machine dependent portion of software that is needed to drive your color display assuming you are using an 1132 with 1132 color card. Other than LOADING the DORADOCOLOR package and turning the DORADOCOLOR package on using the function `COLORDISPLAY`, all additional functionality is provided by and documented with the `COLOR` package. There are no DORADOCOLOR functions that the user needs to call directly. The user calls functions described in the `COLOR` documentation. A single exception to these comments is a global variable `\DORADOCOLOR.LEFTMARGIN` which controls the period of time the display controller should wait before turning on the color guns. `\DORADOCOLOR.LEFTMARGIN` is normally set to 56; if this value causes odd results with your monitor, try setting `\DORADOCOLOR.LEFTMARGIN` a little higher or

lower and reinitializing the display. (You can reinitialize the display by calling COLORDISPLAY twice in succession).

Once your hardware is on, you can proceed to issue COLOR commands to your hardware. You should have the DORADOCOLOR package already LOADED from your LIBRARY directory. That is, you've already done something like (FILESLOAD DORADOCOLOR). At this point it may be convenient to follow this documentation along with the documentation for COLOR in the Lisp Library Packages Manual. If you now type

```
(COLORDISPLAY 'ON 'DORADOCOLOR)
```

your display will now change from total black to a color test pattern with horizontal and vertical stripes. The sequence of events is that there should be a noticable flicker on your color display, followed by a white wall covering the color display, followed by the painting of this white wall with horizontal and vertical stripes of color woven together. There are now some simple tests you can do to satisfy yourself that your hardware is working. Here is a small list of things to try:

```
(SETQ CSBM (COLORSCREENBITMAP))

(BLTSHADE 'WHITE CSBM)

(BLTSHADE 'RED CSBM)

(BLTSHADE 'GREEN CSBM)

(BLTSHADE 'BLUE CSBM)

(SETQ DS (DSPCREATE CSBM))

(DRAWLINE 0 0 500 500 10 'REPLACE DS 'YELLOW)

(DRAWLINE 500 0 0 500 10 'REPLACE DS 'CYAN)
```

Assuming all has gone well to this point, you should now be able to try all the functions described in the COLOR package documentation. The COLORDemo package is a good source of test programs to try — (IL:LOAD 'COLORDemo.LCOM) to get this package. Both COLOR and COLORDemo documentation are in your LispUsers' Manual.

KNOWN BUGS

As of 11/88, there are several known bugs with the color code. Dragging the mouse off the right hand edge of the display appears to hang the Dorado. Also, color fonts do not seem to work (probably because in Medley AC fonts are unrotated using pilotbtt) .

APPENDIX - THE CONRAC COLOR MONITOR

This section describes configuring the Conrac color monitor (model 7211C19) for use with the Dorado.

Back Panel - Connections need to be made as follows: each color cable (red, green, blue) should be connected to the color-corresponding IN terminal. The black cable should be connected to the SYNC/HDRIVE IN terminal. The rocker switches next to the connectors should be set to 75 ohms.

Front Panel - The BRIGHT and CONTRast knobs push in to configure to their preset settings, pull out for adjustment. The SCREEN buttons should be toggled out, the CHANNEL button should be toggled out.

Internal Switches - If after connecting the monitor and starting up the color software, the display does not appear to be in sync, you may need to check the internal settings inside the monitor. To do so, you will need to remove the cover and several internal metal panels (which may be screwed to the bottom of the monitor as well). Viewed from the front of the monitor, on the left hand side is the Scan Board, on the right hand side is the Video Board. Adjustments should be made with the power off, exercise caution!

On the Scan Board, there is a Scan Rate Jumper (pins 52-61) which controls the scan rate (different resolutions). This jumper should be in the bottom position (pins 52-59), specifying low resolution (525 lines).

Below it to the left are three potentiometers, the lower one (R126) controls the horizontal hold for low resolution. Other "pots" of interest control pincushion (R65), width (R78), height (R4), v-hold (R2), v-center (R24), h-center (R90).

On the Video Board, there is a Sync Jumper (pins 35-37) which controls the sync rate. This jumper should be in the upper position (pins 35-36).

Further details can be found in the Conrac 7211 Manual.