Silicon Graphics[®] O2[®]: Silicon Graphics 1600SW Software Installation Guide for IRIX[®] 6.3

This flier provides instructions for installing the IRIX 6.3 Patch Set and IRIX 6.3 Silicon Graphics 1600SW Flat Panel Monitor software on an O2 workstation running IRIX 6.3. It also provides information on accessing the flat panel monitor's Display Properties panel, adjusting the timing tables, and calibrating the ColorLock sensor.

System Setup for Software Installation

Use your existing monitor with your O2 workstation that is running IRIX 6.3 to install the IRIX 6.3 patch set and flat panel monitor software.

Caution: The software does not install properly if you have attached the flat panel monitor before installing the software.

Installing the Patches and Software

Note: Several patches in the IRIX 6.3 patch set are required for the Silicon Graphics 1600SW Flat Panel option. It is important that you install the entire patch set.

Follow these instructions to install the patches:

- 1. Insert the IRIX 6.3 Patch Set CD in the CD-ROM drive. Wait a few seconds while the system reads the CD, and then double-click the CD-ROM drive icon on the desktop. If you have a root password set, you are prompted to enter it.
- 2. Double-click the *Readme* file, then click *OK* when you are finished reading the file.

Document Number 007-3991-002

- 3. In the Software Manager window, select all the patches for installation. Verify that patches shown as upgrade and/or new have been selected.
- 4. Click *Start* to begin installation.
- 5. Follow the installation instructions that are displayed in Software Manager.
- 6. When the installation is complete, remove the IRIX 6.3 Patch Set CD from the drive by clicking the right mouse button on the CD icon, and choosing Eject CD-ROM.
- 7. From the Toolchest, choose System > Shut Down System. Click the button next to Power Off the System and click *OK*.

You are ready to begin your hardware installation. See the O2: *Silicon Graphics* 1600SW *Flat Panel Monitor Installation Guide* for instructions.

Note: After installing the hardware, return here for information about adjusting the timing tables. The information for accessing the Display Properties Panel is different for IRIX 6.3 than for IRIX 6.5.x and later. Also, some of the information in the Display Properties panel is displayed differently in the two releases. The *O2: Silicon Graphics 1600SW Flat Panel Monitor Installation Guide* refers only to the 6.5.x and later Display Properties Panel.

Adjusting Timing Tables and Calibrating with ColorLock Technology

Timing tables determine important characteristics that control your Silicon Graphics 1600SW monitor. Unlike CRT monitors, the 1600SW monitor supports only one resolution, 1600 pixels wide by 1024 pixels tall. However, you can adjust the refresh rate of your panel. This is explained in "Adjusting the Flat Panel Monitor's Refresh Rat" on page 4.

See Chapter 2, "Calibrating the Flat Panel Monitor With the ColorLock Sensor" of the O2: *Silicon Graphics 1600SW Flat Panel Monitor Adapter Installation Guide* to calibrate the 1600SW monitor when it is attached to an O2 workstation.

Caution: For the 1600SW Settings Control Panel to function properly in calibration mode in IRIX 6.3, you must have a default version of */var/X11/xdm/Xservers* in place on your system. The default settings for this file are:

:0 secure/usr/bin/X11/X -bs -nobitscale -c -pseudomap 4sight -solidroot sgilightblue -cursorFG red -cursorBG white

If your file differs, follow these steps as *root* before attempting to calibrate your panel:

- Copy the current version of your Xservers file. Type: cp /var/X11/xdm/Xservers /var/X11/xdm/Xservers.copy
- 2. Edit the file /var/X11/xdm/Xservers to contain only the default values listed above.

Caution: Save your work before running the command in the next step. Running the command means all current X sessions are lost.

- 3. Type the command: /usr/gfx/stopgfx; sleep 2; /usr/gfx/startgfx
- 4. Log in to all color calibration accounts and run the calibration procedure.
- 5. When you have finished calibrating, restore your Xservers file. Type:

mv /varX11/xdm/Xservers.copy /var/X11/xdm/Xservers

6. Type the command: /usr/gfx/stopgfx/; sleep 2; /usr/gfx/startgfx

Adjusting the Flat Panel Monitor's Refresh Rate

The refresh rate is a measure in Hertz (Hz), of the number of times the screen is drawn to the flat panel in one second. The default refresh rate for the 1600SW flat panel monitor is 50 Hz. This setting works very well for most applications. If you need to display NTSC video, however, use the 60 Hz timing table to ensure the proper NTSC frame rate. The 48 Hz table is used in the film industry.

Because the 1600SW flat panel monitor is an all-digital device, there is no screen flicker visible in any of the timing tables provided. In IRIX 6.3 or later, you can change monitor timings using the Xscreen utility.

📥 Display Propertie	?5	•
Current Timing	1600x1024 (50 Hz), 32 bits	
New Timing	1600x1024_50p 🖃	
Framebuffer Depth	32 🗖	
Eramebuffer Me	monulleage	9 50 MPstos
Death Duffer (Current)		0.00 MPstos
Depth Bui	ier (Current)	0.00 MBytes
	(Maximum)	6.50 MBytes
Texture Memory (Current)		0.00 MBytes
Main Memory Size		128 MBytes
Save	Save & Apply	Quit

Figure 1 Accessing the Display Properties Panel

To start Xscreen, follow these steps:

- 1. From the Toolchest, open a UNIX shell.
- 2. At the prompt, type xscreen

The Display Properties panel appears similar to that shown in Figure 1.



Figure 2 Choosing a Timing Format

3. To set the timing format, click and hold the New Timing pulldown menu.

A list of choices appears as shown in Figure 2.

- 4. Choose one of the first three choices:
 - 1600x1024_60p
 - 1600x1024_50p (the default setting)
 - 1600x1024_48p

Caution: Choosing any one of the other choices results in a strange or unacceptable display on the screen.

5. Click the Save & Apply button to save and apply your choice.

Note the following:

- The refresh rate appears in the timing table name following the _ character. For example, 1600x1024_60p indicates a refresh rate of 60 Hz.
- Flat panel settings have a "p" suffix.
- Unlike with conventional CRT monitors, the fastest possible timing is not always the most desirable for your application. The flat panel monitor should be flicker-free at any of the timings (48 Hz, 50 Hz, and 60 Hz). The O2 system software default for the 1600SW flat panel monitor is 50 Hz.
- When displaying NTSC video, select the 60 Hz timing table (1600x1024_60p).

Caution: When using 60 Hz timing, change your desktop background to Solid to keep spurious lines from appearing on your screen. These lines are the result of an interaction between the monitor timing and the workstation graphics subsystem, and appear only with complex backgrounds and the 60 Hz timing table.

To change your background, from the Toolchest choose Desktop > Customize > Background.

^{©1999,} Silicon Graphics, Inc. All rights reserved.

Silicon Graphics, IRIX, and O2 are registered trademarks and ColorLock is a trademark of Silicon Graphics, Inc. UNIX is a registered trademark in the United States and other countries, licensed exclusively through X/Open Company, Ltd.