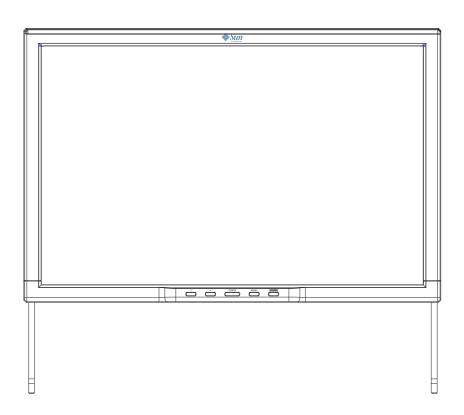


# **User's Guide**

Sun Part No. 875-4056-10

24-inch LCD Flat Panel Monitor

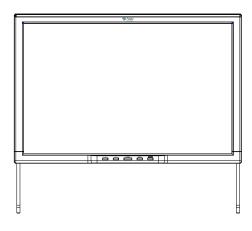


# 24-inch LCD Flat Panel Monitor

# **WDZF**

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#### **Notation**

Please read the following safety instructions as they are designed to prevent damage to property and harm to the user.

### Warning / Caution



Failure to follow directions noted by this symbol could result in bodily harm or damage to equipment.

#### **Notation Conventions**



Prohibited



Important to read and understand at all times



Do not disassemble



Disconnect the plug from the outlet



Do not touch



#### Power

When you do not use your computer for long periods of time, set your computer to DPM (Display Power Management).

### Installation

- Do not cover the vents on the monitor cabinet.
  - Improper ventilation may cause overheating.

## Cleaning



To clean the monitor case, wipe with a slightly moistened, soft fabric.

To clean the surface of the LCD, wipe either with a soft, dry cloth or a cloth slightly damped with water. No not use any chemicals.



### Other



- Do not remove cover (or back). No user serviceable parts inside.
  - Refer servicing to qualified service personnel.



 If your monitor does not operate normally or if there are any unusual sounds or smells coming from it - unplug it immediately and contact an authorized dealer.



Never insert anything metallic into the monitor openings.



### China RoHS

液晶显示器 LCD Monitor							
零部件名稱	有毒有害物质或元素 Tozic or Hazardous Substances and Elements						
Part Name	铅 (Pb) Lead	汞 (Hg) Mercury	镉(Cd) Cadmium	六价铬(Cr6+) Hexavalent Chromium	多溴联苯(PBB) Polybrominated biphenyls	多溴二苯醚(PBDE) Polybrominated diphenylethers	
液晶显示屏 LCD DISPLAY	0	X	О	0	0	0	
液晶显示屏灯管 Backlight lamps	0	X	О	0	О	0	
电路板组件 Circuit cards	0	0	0	0	0	О	
缆绳 <i>Cables</i>	0	0	О	0	O	О	
封入物 Enclosure	0	0	0	0	О	0	

O:表示该部件的所有均质材料中此有毒或有害物质的含量均低于 SJ/T 11363-2006 中的限制要求。

O: Indicates that this toxic or hazardous substance contained in all of the homogeneous materials for this part is below the limit requirement in SJ/T 11363-2006.

X:表示该部件所使用的均质材料中至少有一种此有毒或有害物质的含量高于 SJ/T 11363-2006 中的限制要求。

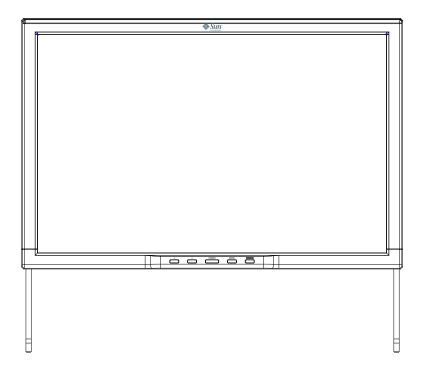
X: Indicates that this toxic or hazardous substance contained in at least one of the homogeneous materials used for this part is above the limit requirement in SJ/T 11363-2006.



## Introduction

## Unpacking

#### **Monitor and Stand**

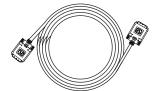


Please make sure the following items are included with your monitor. If any items are missing, contact your dealer.

#### Signal cable -HD-15



#### Signal cable - DVI



#### Signal cable - USB2.0



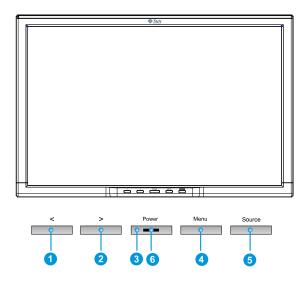
#### Getting Started Guide





### Introduction

#### Front



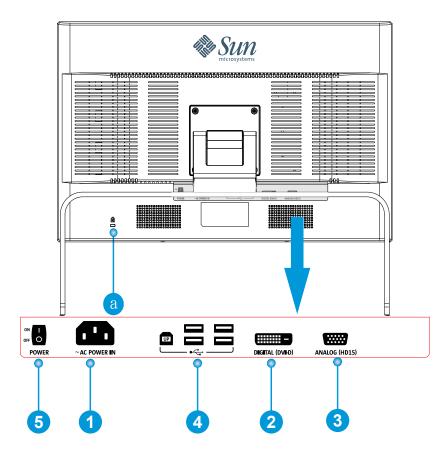
Press the MENU button (4) to display the OSD (On Screen Display) menu on the screen.

- 1. There are a total of 6 OSD submenus divided by categories. Select the desired submenu by pressing the OSD button < or > (1 and 2).
- 2. Press the OSD button MENU (4) to activate the selected function or associated submenu.
- 3. If you selected submenu, now select the sub-function you want by using < or > (1 and 2)
- 4. Set the desired value using the OSD button < or > (1) and (2)
- 5. The current settings are automatically saved when you return to the previous level or exit the OSD menu. Repeat steps 2–5 to make further adjustments as needed.
- 6. The OSD menu automatically disappears if no changes are made for more than 45 seconds (default setting). The current settings will be saved. You can close it manually by pressing the button SOURCE (3).
- 7. Use this button to turn the monitor on and off.(3)
- 8. This light glows green during normal operation and goes amber during power saving.(6)



### Introduction

#### Rear



**1.** Power Port Connect the power cord for your monitor to the Power Port on the

back of the monitor.

**2.** DVI Port Connect the DVI Cable to the DVI Port on the back of your Monitor.

**3.** HD-15 Port Connect the signal cable to the 15-pin, HD-15 connector on the back

of your monitor.

**4.** USB Port The monitor features four USB ports (one upstream and four downstream).

**5.** Main Power Switch If your monitor will not be used for a long period of time, it is recommended

to switch off.

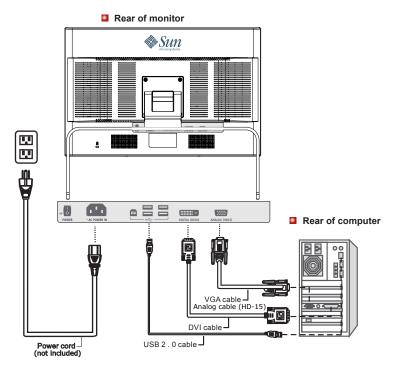
**a.** Locking Port For connecting Kensington© compatible security devices.

**Note:** See Connecting Your Monitor for further information regarding cable connections.



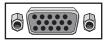
Setup

### **Connecting Your Monitor**



- 1. Connect the power cord for your monitor to the power port on the back of the monitor. Plug the power cord for the monitor into a nearby outlet.
- 2. Using the HD-15 (Analog) connector on the video card.

  Connect the signal cable to the 15-pin, HD-15 connector on the back of your monitor.



**3.** Using the DVI (Digital) connector on the video card. Connect the DVI Cable to the DVI Port on the back of your Monitor.



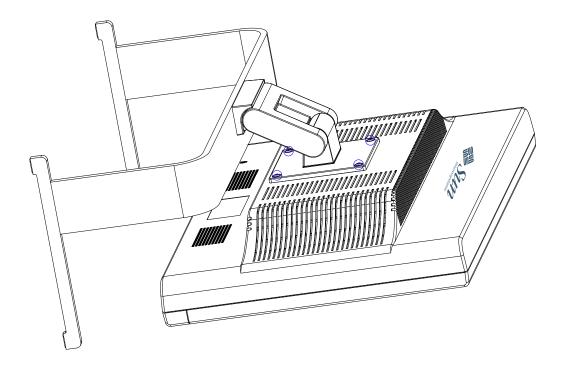
- **4.** The monitor features four USB2.0 ports (one upstream and four downstream). Connect the USB cable to USB port on your system and USB upstream port on your monitor.
- **5.** Turn on your computer and monitor. If your monitor displays an image, installation is complete.
- ◆ If you properly connect your monitor using the DVI connector but get a blank screen, push the SOURCE button to see if the monitor status is set to analog.



Setup

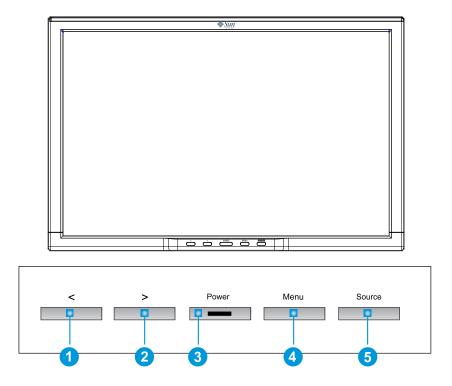
Installing alternate mounts for the monitor

(3rd party mounts are available for this monitor via the VESA-compliant mounting configuration.)



- **1.** Turn off your monitor and unplug its power cord.
- **2.** Lay the LCD monitor face-down on a flat surface with a cushion beneath it to protect the screen.
- **3.** Remove the four screws circled in blue in the above diagram and then remove the cover plate.





- 1. These buttons allow you to highlight and adjust items in the menu. 1 2
- 2. Use this button to exit the active menu or the OSD (On-Screen Display). 5
- 3. Use this button to open the OSD and activate a highlighted menu item. 4
- **4.** Use this button for source adjustment direct access, **5** when the menu system is not active.



# Brightness/Gain/Size (Gain not available in DVI digital mode)

**OSD** 

How to adjust



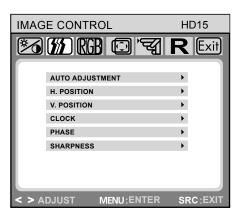
### Brightness/Gain/Size

**Brightness**: Adjusts brightness by using the buttons < or > (1) and (2).

**Gain**: Adjusts screen gain by using the buttons < or > (1 and 2).

**Size**: Adjusts screen size by using the buttons < or > (1) and (2).

# mage Control (not available in DVI digital mode)



### Image Control

Auto Adjustment: Automatically selects the optimal settings for image parameters (image position, phase, etc.) by using the button MENU

(4).

H. Position: Controls the picture's horizontal position.V. Position: Controls the picture's vertical position.

**Clock**: Adjusts the internal clock frequency for the analog video input.

**Phase**: Adjusts the internal clock phase for fine-tuning the displayed image to the analog video input.

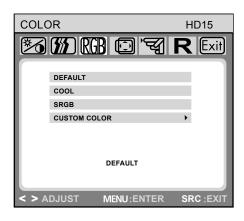
**Sharpness**: Controls image sharpness (only for resolutions less than 1280 × 1024 pixels).





**OSD** 

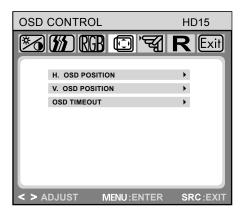
#### How to adjust



### Color

This menu lets you select a preset color temperature (Default, COOL, sRGB, and CUSTOM COLOR) by pressing the OSD buttons< or > (1 and 2). Changes to the color temperature take immediate effect on screen. If you wish to set individual color values, select the Custom Color option. Then press the MENU button (4) to select the red, green and blue settings and set the desired value using the OSD buttons < or > (1 and 2). The current settings are automatically saved when you return to the previous level or exit the OSD menu.

## **OSD** Control



### OSD Control

**H. OSD Position:** Controls the OSD menu's horizontal position.

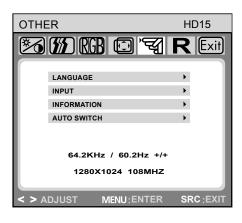
V. OSD Position: Controls the OSD menu's vertical position.
OSD Timeout: Determines how long (in seconds) the OSD menu waits before closing automatically after no action has been performed.





**OSD** 

#### How to adjust



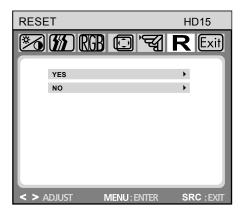
### Other

**Language:** English, French, German, Italian, Netherlands, Polish, Russian, Spanish.

**Input:** Controls the selection of the input signal. The monitor allows you to make the following connections: analog graphics card via the 15-pin mini HD-15 interface, digital graphics card via the 24-pin DVI-D interface.

**Information:** There is an optional OSD window (on/off) that displays the newly adjusted screen resolution settings.

**Autoswitch:** This option allows you to decide if the auto adjustment function should take effect after each change to the monitor's resolution.



### Reset

**Yes:** Resets the monitor to original factory settings.

**No:** Exits the reset function without changing the settings.



## Troubleshooting

### Check List

Note

Before calling for service, check the information in this section to see if you can remedy any problems yourself.

Symptom	Check List	Solutions	
No images on the screen. I cannot turn	Is the power cord connected properly?	Check the power cord connection.	
on the monitor.	Is the main power switch on the back of the monitor in the on position?	Switch the main power switch to On position.	
	Can you see "No Signal, Check Signal Cable" on the screen?	Check the signal cable connection.	
	Can you see "OUT OF FREQUENCY "on the screen?	You may see this message when the signal from the video card exceeds the maximum resolution and frequency that the monitor can properly handle.	
		Adjust the maximum resolution and frequency that the monitor can properly handle.	
	There is no image on the screen. Is the power indicator on the monitor AMBER?	The monitor is in PowerSaver mode.	
		Press a key on the keyboard to activate the monitor and restore the image on the screen.	
		If there is still no image, check input source Then press any key on the keyboard again to activate the monitor and restore the image on the screen.	
	Connected using the DVI cable?	You may get a blank screen if you boot the system before you connect the DVI cable, or disconnect and then reconnect the DVI cable while the system is running, as certain graphic cards may not send out video signals with no monitor attached. Connect the DVI cable and then reset the video.	



## Troubleshooting

### Check List

Symptom	Check List	Solutions
The screen shows strange colors or just	Does the screen display improper colors?	Check the signal cable connection.
black and white.		Make sure the computer's video card is fully inserted in its slot.
	Has the computer's video card been set properly?	Set the video card to the correct resolution.

#### Check the following items if there is trouble with the monitor.

- **1.** Check if the power cord and the video cable(s) are properly connected to the computer.
- **2.** For analog video, do not exceed 75Hz when using the maximum resolution. For digital video, do not exceed 75Hz for any resolution over 1280x1024. Any resolution higher than that is limited to 60Hz refresh frequency.

**Note:** If problems repeatedly occur, contact an authorized service center.



## **Troubleshooting**

#### Self-Test Feature Check

Your monitor provides a self test feature via a status light and on-screen warning message that allows you to check whether your monitor is functioning properly.

### Black Screen

#### 1. Power indicator is off

Make sure the power cable is connected properly (see section "Connecting").

Make sure that the monitor was turned on using the power switch (including power switch on the rear).

#### 2. Power indicator lights amber

Perhaps a power saving mode is active? Press any key on your keyboard or click the mouse button.

#### 3. Power indicator lights green

Indicates normal operation of the monitor.

#### 4. "No Signal!" message

Is the signal cable connected to the monitor and the computer's graphics port? (see section "Connecting Your Monitor")

#### **Display Problems**

#### Image is displaced to the left/right or to the top/bottom

If the image appears normal but off-center for the analog video input, you can adjust it using the OSD function under "Image Control" called "Auto Adjustment". There are no such adjustments for digital video (DVI-D) as they are not needed.



## Specification

#### General

General

<b>Model Name</b>	WDZF
LCD Panel	
LODT AIR	
Size	24.1 inch diagonal

Display area 518.4mm (20.4 inch) (H) x 324.0mm (12.7 inch) (V)

**Pixel Pitch** 0.270mm (0.01063 inch) (H) x 0.270mm (0.01063 inch) (V)

Type AM-TFT-LCD

Synchronization

**Horizontal** 30 ~ 94 kHz (Analog), 30~82kHz (Digital)

**Vertical** 56 ~ 76 Hz

Display Colors

16,777,216

Resolution

**Optimum resolution** 1920 x 1200@60Hz (Digital and Analog)

**Maximum resolution** 1920 x 1200@75Hz (Analog only, but 1920 x 1200@60Hz is preferred)

Input Signal, Terminated

RGB Analog , DVI Compliant Digital RGB.

Separate H/V sync,TTL level positive or negative

Maximum Pixel Clock

203 MHz (Analog), 165 MHz (Digital)

Power Supply

100-240 V AC, 50-60 Hz

Signal Cable

15pin-to-15pin HD-15 cable, detachable, 1.8m DVI-D to DVI-D connector, detachable, 3.0m

Power Consumption

105 Watts maximum (90 Watts typical; includes 20 Watts of USB power)

Dimensions (WxDxH) / Weight

568.0 x 240.0 x 482.3 mm / 8.0kg

568.0 x 97.9 x 373.6 mm (Without Stand)



## Specification

### General

#### **VESA Mounting Interface**

100mm x 100mm (for use with Specialty Mounting hardware.)

#### **Environmental considerations**

**Operating** Temperature:  $50^{\circ}F \sim 104^{\circ}F(10^{\circ}C \sim 40^{\circ}C)$ 

Humidity: 10% ~ 80%, non-condensing

**Storage** Temperature: -4°F ~113°F (-20°C ~ 45°C)

Humidity: 5% ~ 95%, non-condensing



## Specification

### **Preset Timing Modes**

If the signal transferred from the computer is the same as the following Preset Timing Modes, the screen will be adjusted automatically. However, if the signal differs, the screen may go blank while the power LED is on. Refer to the video card manual and adjust the screen as follows.

**Table 1. Preset Timing Modes** 

Display Mode	Horizontal Frequency (kHz)	Vertical Frequency (Hz)	Pixel Clock (MHz)	Sync Polarity (H/V)
VESA, 640 x 480	37.500	75.000	31.500	-/-
VESA, 640 x 480	37.861	72.809	31.500	-/-
VESA, 800 x 600	35.156	56.250	36.000	+,-/+,-
VESA, 800 x 600	37.879	60.317	40.000	+/+
VESA, 800 x 600	46.875	75.000	49.500	+/+
VESA, 800 x 600	48.077	72.188	50.000	+/+
VESA, 1024 x 768	48.363	60.004	65.000	-/-
VESA, 1024 x 768	56.476	70.069	75.000	-/-
VESA, 1024 x 768	60.023	75.029	78.750	+/+
VESA, 1280 x 1024	63.981	60.020	108.00	+/+
VESA, 1280 x 1024	79.976	75.025	135.00	+/+
SUN, 1152 x 900	61.846	66.003	95.500	+/-

The optimal resolution and only resolution recommended for this monitor is 1920x1200@60Hz. These preset timing modes are offerred only to help assure that video will be displayed under most boot or hot-plug conditions. It is recommended to change to 1920x1200@60Hz once video from the computer system is seen on the display.



#### Information

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