

TFT LCD Color Computer Display

Operating Instructions _____

***SDM-HS53
SDM-HS73
SDM-HS93***

Owner's Record

The model and serial numbers are located at the rear of the unit. Record these numbers in the spaces provided below. Refer to them whenever you call upon your dealer regarding this product.
Model No. _____ Serial No. _____

WARNING

To prevent fire or shock hazard, do not expose the unit to rain or moisture.

Dangerously high voltages are present inside the unit. Do not open the cabinet. Refer servicing to qualified personnel only.

FCC Notice

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
 - Increase the separation between the equipment and receiver.
 - Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
 - Consult the dealer or an experienced radio/TV technician for help.
- You are cautioned that any changes or modifications not expressly approved in this manual could void your authority to operate this equipment.

IMPORTANTE

Para prevenir cualquier mal funcionamiento y evitar daños, por favor, lea detalladamente este manual de instrucciones antes de conectar y operar este equipo.

If you have any questions about this product, you may call:

**Sony Customer Information Center
1-800-222-SONY (7669)**

or write to:

**Sony Customer Information Center
1 Sony Drive, Mail Drop #T1-11, Park Ridge, NJ 07656**

Declaration of Conformity

Trade Name: SONY
Model No.: SDM-HS53/HS73/HS93
Responsible Party: Sony Electronics Inc.
Address: 680 Kinderkamack Road, Oradell,
NJ 07649 USA
Telephone No.: 201-930-6972

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

NOTICE

This notice is applicable for USA/Canada only. If shipped to USA/Canada, install only a UL LISTED/CSA LABELLED power supply cord meeting the following specifications:

SPECIFICATIONS

Plug Type	Nema-Plug 5-15p
Cord	Type SVT or SJT, minimum 3 × 18 AWG
Length	Maximum 15 feet
Rating	Minimum 7 A, 125 V

NOTICE

Cette notice s'applique aux Etats-Unis et au Canada uniquement.

Si cet appareil est exporté aux Etats-Unis ou au Canada, utiliser le cordon d'alimentation portant la mention UL LISTED/CSA LABELLED et remplissant les conditions suivantes:

SPECIFICATIONS

Type de fiche	Fiche Nema 5-15 broches
Cordon	Type SVT ou SJT, minimum 3 × 18 AWG
Longueur	Maximum 15 pieds
Tension	Minimum 7 A, 125 V



As an ENERGY STAR Partner, Sony Corporation has determined that this product meets the ENERGY STAR guidelines for energy efficiency.



BZ03

Table of Contents

Precautions	4
Identifying parts and controls	5
Setup	7
Step 1: Connect the display to your computer	7
Step 2: Connect the power cord	8
Step 3: Secure the cords and close the back cover	8
Step 4: Turn on the monitor and computer	9
Adjusting the tilt	9
Customizing Your Monitor	10
Adjusting to the desired brightness	10
Navigating the menu	10
Adjusting the backlight (BACKLIGHT)	11
Adjusting the contrast (CONTRAST)	11
Adjusting the black level of an image (BRIGHTNESS)	11
Adjusting the picture's sharpness and centering (SCREEN)	12
Adjusting the color temperature (COLOR)	13
Changing the gamma setting (GAMMA)	14
Changing the menu's position (MENU POSITION)	14
Selecting the on-screen menu language (LANGUAGE)	14
Additional settings	14
Technical Features	15
Power saving function	15
Reducing the power consumption (Eco mode)	15
Automatic picture quality adjustment function	15
Troubleshooting	16
On-screen messages	16
Trouble symptoms and remedies	17
Self-diagnosis function	19
For details on the specifications of the SDM-HS53/HS73/HS93, refer to the supplementary document "Quick Setup Guide."	

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- Windows® and MS-DOS are registered trademarks of Microsoft Corporation in the United States and other countries.
- IBM PC/AT and VGA are registered trademarks of IBM Corporation of the U.S.A.
- VESA and DDC™ are trademarks of the Video Electronics Standards Association.
- ENERGY STAR is a U.S. registered mark.
- Adobe and Acrobat are trademarks of Adobe Systems Incorporated.
- All other product names mentioned herein may be the trademarks or registered trademarks of their respective companies.
- Furthermore, "™" and "®" are not mentioned in each case in this manual.

Precautions

Warning on power connections

- Use the supplied power cord. If you use a different power cord, be sure that it is compatible with your local power supply.

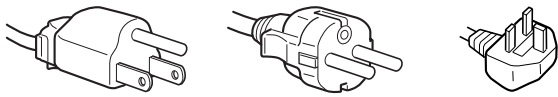
For the customers in the U.S.A.

If you do not use the appropriate cord, this monitor will not conform to mandatory FCC standards.

For the customers in the UK

If you use the monitor in the UK, be sure to use the appropriate UK power cord.

Example of plug types



for 100 to 120 V AC for 200 to 240 V AC for 240 V AC only

The equipment should be installed near an easily accessible outlet.

Installation

Do not install or leave the monitor:

- In places subject to extreme temperatures, for example near a radiator, heating vent, or in direct sunlight. Subjecting the monitor to extreme temperatures, such as in an automobile parked in direct sunlight or near a heating vent, could cause deformations of the casing or malfunctions.
- In places subject to mechanical vibration or shock.
- Near any equipment that generates a strong magnetic field, such as a TV or various other household appliances.
- In places subject to inordinate amounts of dust, dirt, or sand, for example near an open window or an outdoor exit. If setting up temporarily in an outdoor environment, be sure to take adequate precautions against airborne dust and dirt. Otherwise irreparable malfunctions could occur.

Handling the LCD screen

- Do not leave the LCD screen facing the sun as it can damage the LCD screen. Take care when you place the monitor by a window.
- Do not push on or scratch the LCD screen. Do not place a heavy object on the LCD screen. This may cause the screen to lose uniformity or cause LCD panel malfunctions.
- If the monitor is used in a cold place, a residual image may appear on the screen. This is not a malfunction. The screen returns to normal as the temperature rises to a normal operating level.
- If a still picture is displayed for a long time, a residual image may appear for a while. The residual image will eventually disappear.
- The LCD panel becomes warm during operation. This is not a malfunction.

Note on the LCD (Liquid Crystal Display)

Please note that the LCD screen is made with high-precision technology. However, black points or bright points of light (red, blue, or green) may appear constantly on the LCD screen, and irregular colored stripes or brightness may appear on the LCD screen. This is not malfunction.

(Effective dots: more than 99.99%)

Maintenance

- Be sure to unplug the power cord from the power outlet before cleaning your monitor.
- Clean the LCD screen with a soft cloth. If you use a glass cleaning liquid, do not use any type of cleaner containing an anti-static solution or similar additive as this may scratch the LCD screen's coating.
- Clean the cabinet, panel, and controls with a soft cloth lightly moistened with a mild detergent solution. Do not use any type of abrasive pad, scouring powder, or solvent, such as alcohol or benzene.
- Do not rub, touch, or tap the surface of the screen with sharp or abrasive items such as a ballpoint pen or screwdriver. This type of contact may result in a scratched picture tube.
- Note that material deterioration or LCD screen coating degradation may occur if the monitor is exposed to volatile solvents such as insecticide, or if prolonged contact is maintained with rubber or vinyl materials.

Transportation

- Disconnect all cables from the monitor and grasp the support and base sections of the display stand firmly with both hands when transporting. If you drop the monitor, you may be injured or the monitor may be damaged.
- When you transport this monitor for repair or shipment, use the original carton and packing materials.

Disposal of the monitor

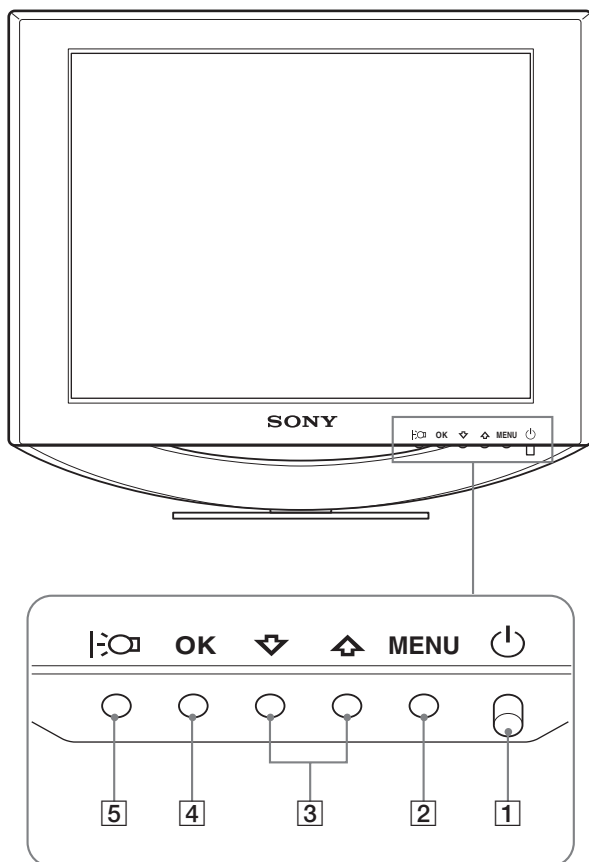
- Do not dispose of this monitor with general household waste.
- The fluorescent tube used in this monitor contains mercury. Disposal of this monitor must be carried out in accordance to the regulations of your local sanitation authority.

Identifying parts and controls

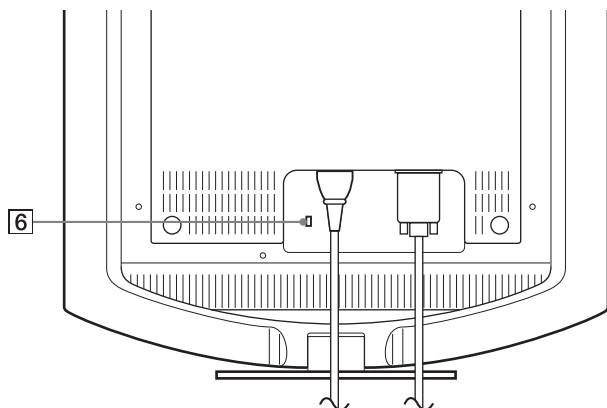
See the pages in parentheses for further details.

The ⏻ (power) switch and the control buttons are on the lower right part of the front of the monitor.

Front of the LCD display



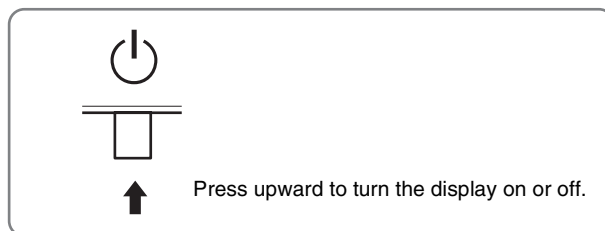
Rear of the display stand



1 ⏻ (Power) switch and indicator (pages 9, 15, 19)

To turn the display on or off, press the ⏻ (power) switch upward.

The power indicator lights up in green when the display is turned on, and lights up in orange when the monitor is in power saving mode.



2 MENU button (pages 10, 11)

This button displays or closes the main menu.

3 ⬆/⬇ buttons (page 11)

These buttons function as the ⬆/⬇ buttons when selecting the menu items and making adjustments.

4 OK button (page 11)

This button selects the item or executes the settings in the menu.

5 ☀ button (page 10)

This button is used to change the brightness of the screen.

6 Security Lock Hole

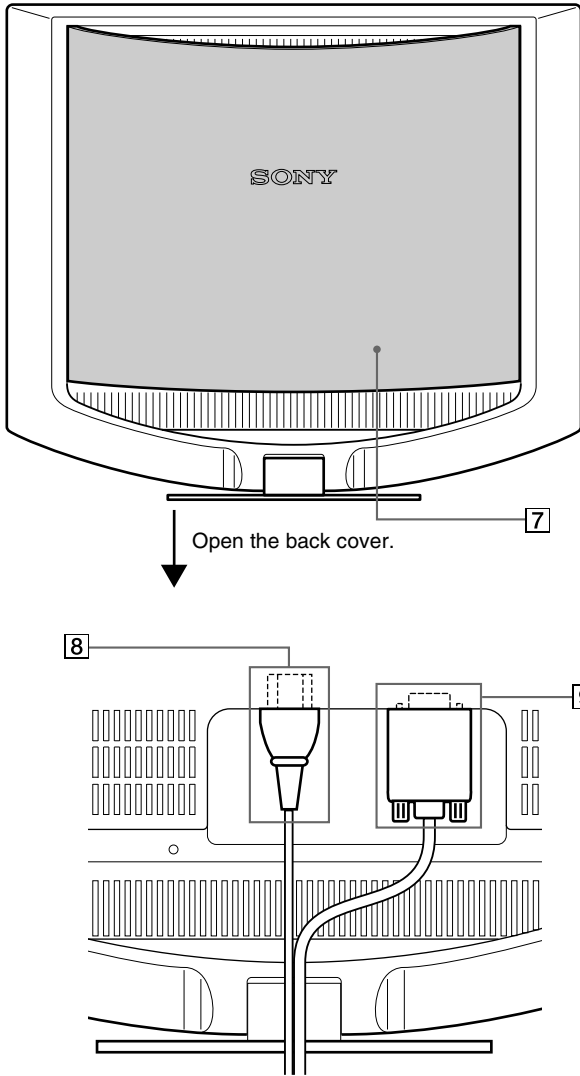
The security lock hole should be applied with the Kensington Micro Saver Security System.

Micro Saver Security System is a trademark of Kensington.

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(continued)

Rear of the LCD display



The illustration of the back of the monitor show here is the SDM-HS53.

7 Back cover (page 8)

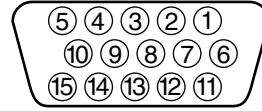
Open this cover when you connect/disconnect cables or cords.

8 AC IN connector (page 8)

Connect the power cord (supplied).

9 HD15 (RGB) input connector (page 7)

This connector inputs RGB video signals (0.7 Vp-p, positive) and SYNC signals.



Pin No.	Signal
1	Red
2	Green
3	Blue
4	ID (Ground)
5	DDC Ground*
6	Red Ground
7	Green Ground
8	Blue Ground
9	DDC + 5V*
10	Ground
11	ID (Ground)
12	Bi-Directional Data (SDA)*
13	H. Sync
14	V. Sync
15	Data Clock (SCL)*

* DDC (Display Data Channel) is a standard of VESA.

Setup

Before using your monitor, check that the following items are included in your carton:

- LCD display
- Power cord
- HD15-HD15 video signal cable
- Cord strap
- Utility/Instruction Manual CD-ROM (utility software for Windows/Macintosh, Operating Instructions)
- Warranty card
- Quick Setup Guide

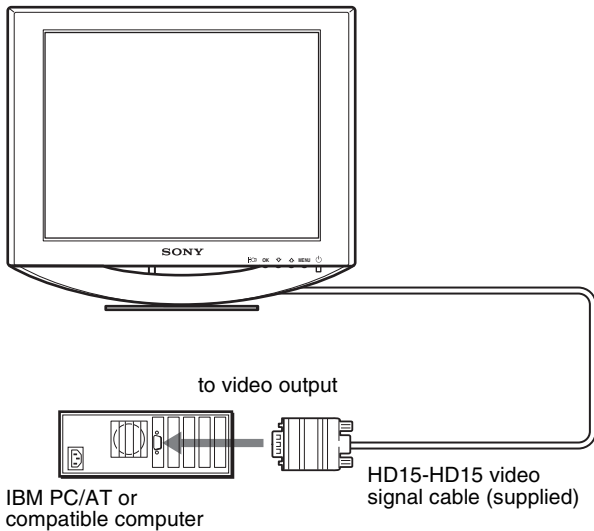
Step 1: Connect the display to your computer

Turn off the monitor and computer before connecting.

Notes

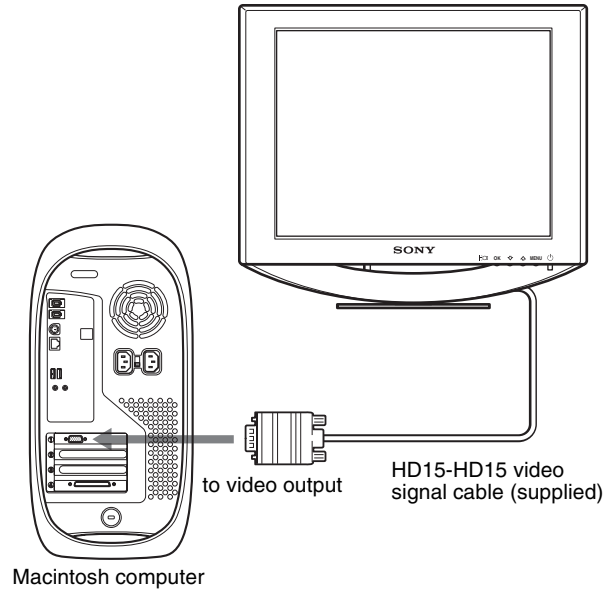
- Do not touch the pins of the video signal cable connector as this might bend the pins.
- Check the alignment of the HD15 connector to prevent bending the pins of the video signal cable connector.

■ Connecting to an IBM PC/AT or compatible computer



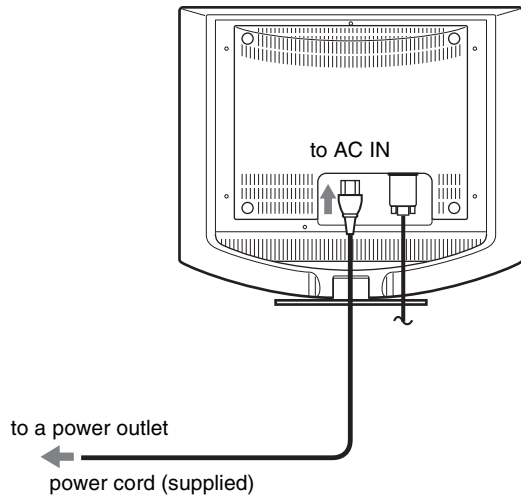
■ Connecting to a Macintosh computer

When connecting this monitor to a Macintosh computer, use the Macintosh adapter (not supplied) if necessary. Connect the Macintosh adapter to the computer before connecting the cable.



Step 2: Connect the power cord

With the monitor and computer switched off, first connect the power cord to the monitor, then connect it to a power outlet.

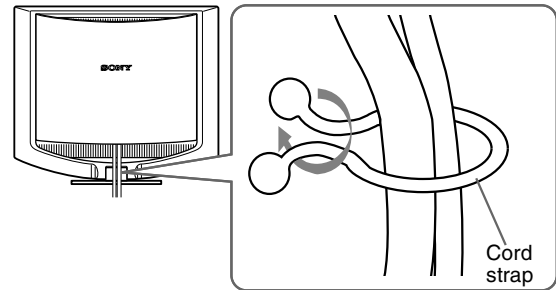


The illustration of the back of the monitor show here is that of the SDM-HS53.
The same applies for the SDM-HS73/HS93 model.

Step 3: Secure the cords and close the back cover

1 Bundle the cables and cords.

Using the supplied cord strap, bundle the cables and cords.




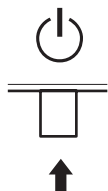
The illustration of the back of the monitor show here is that of the SDM-HS53.
The same applies for the SDM-HS73/HS93 model.

2 Close the back cover.

Step 4: Turn on the monitor and computer

1 Press the (power) switch upward.

The  (power) indicator of the monitor lights up in green.



2 Turn on the computer.

The installation of your monitor is complete. If necessary, use the monitor's controls to adjust the picture.

If no picture appears on your screen

- Check that the power cord and the video signal cable are properly connected.
- **If NO INPUT SIGNAL appears on the screen:**
The computer is in the power saving mode. Try pressing any key on the keyboard or moving the mouse.
- **If CABLE DISCONNECTED appears on the screen:**
Check that the video signal cable is properly connected.
- **If OUT OF SCAN RANGE appears on the screen:**
Reconnect the old monitor. Then adjust the computer's graphics board within the following ranges.

	SDM-HS53	SDM-HS73/HS93
Horizontal frequency	28–61 kHz	28–80 kHz
Vertical frequency	48–75 Hz	48–75 Hz
Resolution	1024 × 768 or less	1280 × 1024 or less

For more information about the on-screen messages, see “Trouble symptoms and remedies” on page 17.

No need for specific drivers

The monitor complies with the “DDC” Plug & Play standard and automatically detects all the monitor's information. No specific driver needs to be installed to the computer.

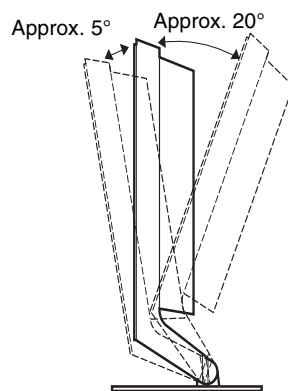
The first time you turn on your computer after connecting the monitor, the setup Wizard may appear on the screen. In this case, follow the on-screen instructions. The Plug & Play monitor is automatically selected so that you can use this monitor.

The vertical frequency turns to 60 Hz.

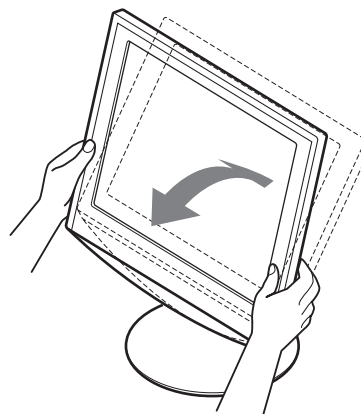
Since flickers are unobtrusive on the monitor, you can use it as it is. You do not need to set the vertical frequency to any particular high value.

Adjusting the tilt

This display can be adjusted within the angles shown below.



Grasp the lower sides of the LCD panel, then adjust screen tilt.



To use the display comfortably

This display is designed so that you can set it up at a comfortable viewing angle. Adjust the viewing angle of your display according to the height of the desk and chair, and so that light is not reflected from the screen to your eyes.




Customizing Your Monitor

Before making adjustments


Connect the monitor and the computer, and turn them on.
Wait for at least 30 minutes before making adjustments for the best result.



You can make numerous adjustments to your monitor using the on-screen menu.

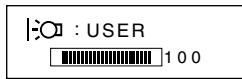
Adjusting to the desired brightness


Pressing the  button, you can change the brightness of the screen. Each time you press the  button, the  mode changes as follows.

HIGH → MIDDLE → LOW → USER → HIGH

The brightness of the screen will decrease as the  mode setting changes from HIGH to LOW.

If you select USER, you can adjust the backlight level by pressing the / buttons, the same as when you select BACKLIGHT using the menu.

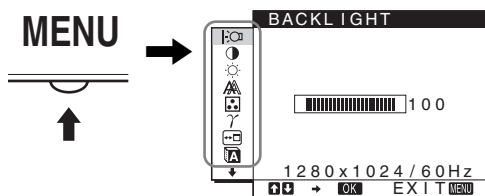










Only while the  mode is set to USER, are the BACKLIGHT, CONTRAST, and BRIGHTNESS items of the menu available (page 11).

If you select LOW, the power consumption is reduced (page 15).

Navigating the menu

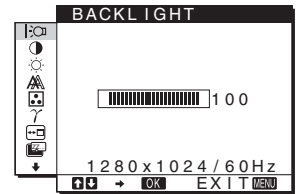
Press the MENU button to display the main menu on your screen. See page 11 for more information on using the MENU button.



Use the / and OK buttons to select the icons in the above main menu illustration. The following ~ menu appears. Keep pressing  to scroll down until the icons in menu  appear. See page 11 for more information on using the / and OK buttons.

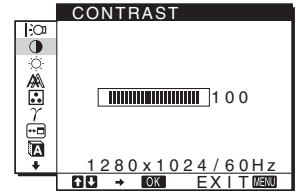
1 BACKLIGHT (page 11)

Select the BACKLIGHT menu to adjust the brightness of the backlight.



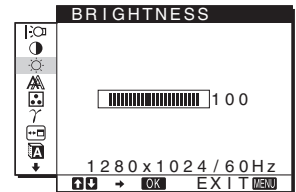
2 CONTRAST (page 11)

Select the CONTRAST menu to adjust the picture contrast.



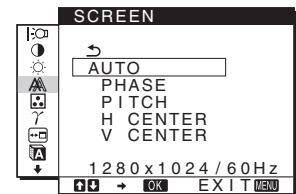
3 BRIGHTNESS (page 11)

Select the BRIGHTNESS menu to adjust the picture brightness (black level).



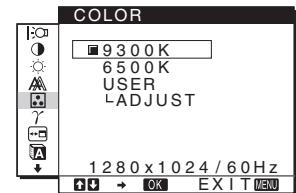
4 SCREEN (page 12)

Select the SCREEN menu to adjust the picture's sharpness (phase/pitch) or its centering (horizontal/vertical position).



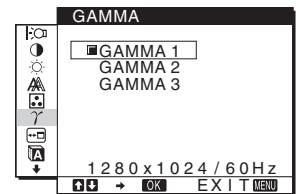
5 COLOR (page 13)

Select the COLOR menu to adjust the color temperature of the picture. This adjusts the tone of the screen.



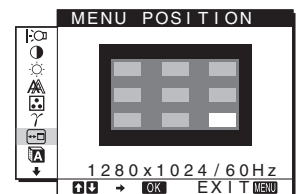
6 GAMMA (page 14)

Select the GAMMA menu to change the picture's color shade setting.



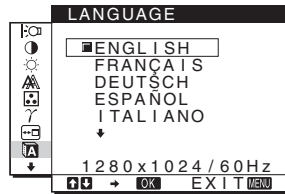
7 MENU POSITION (page 14)

Select the MENU POSITION to change the on-screen menu position.





8 LANGUAGE (page 14)

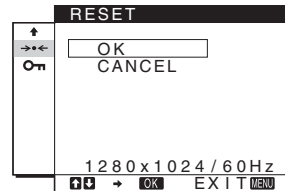
Select LANGUAGE to change the language used on menus or messages.



9 Other menus (page 14)

Set the following menu items.

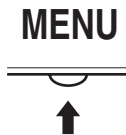
- RESET 
- MENU LOCK 




Using the MENU, , and OK buttons

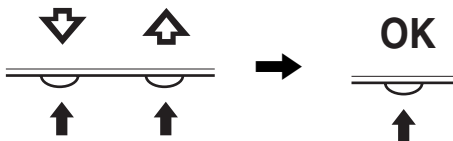
1 Display the main menu.

Press the MENU button to display the main menu on your screen.




2 Select the menu you want to adjust.

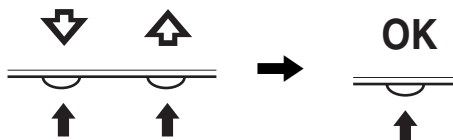
Press the  buttons to display the desired menu. Press the OK button to select the menu item.



3 Adjust the menu.

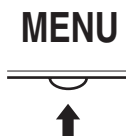
Press the  buttons to make the adjustment, then press the OK button.

When you press the OK button, the setting is stored, then the display returns to the previous menu.



4 Close the menu.

Press the MENU button once to return to normal viewing. If no buttons are pressed, the menu closes automatically after about 30 seconds.




Resetting the adjustments

You can reset the adjustments using the RESET menu. See page 14 for more information on resetting the adjustments.

Adjusting the backlight (BACKLIGHT)

If the screen is too bright, adjust the backlight and make the screen easier to see.

Note

The backlight cannot be adjusted when the  mode is set to HIGH, MIDDLE, or LOW (page 10).

1 Press the MENU button.

The main menu appears on the screen.

2 Press the buttons to select (BACKLIGHT) and press the OK button.


The BACKLIGHT menu appears on the screen.

3 Press the buttons to adjust the light level and press the OK button.

Adjusting the contrast (CONTRAST)

Adjust the picture contrast.

Note

The contrast cannot be adjusted when the  mode is set to HIGH, MIDDLE, or LOW (page 10).

1 Press the MENU button.

The main menu appears on the screen.

2 Press the buttons to select (CONTRAST) and press the OK button.


The CONTRAST menu appears on the screen.

3 Press the buttons to adjust the contrast and press the OK button.

Adjusting the black level of an image (BRIGHTNESS)

Adjust the picture brightness (black level).

Note

The brightness cannot be adjusted when the  mode is set to HIGH, MIDDLE, or LOW (page 10).

1 Press the MENU button.

The main menu appears on the screen.

2 Press the buttons to select (BRIGHTNESS) and press the OK button.

The BRIGHTNESS menu appears on the screen.


3 Press the buttons to adjust the brightness and press the OK button.

Adjusting the picture's sharpness and centering (SCREEN)

Automatic picture quality adjustment function

When the monitor receives an input signal, it automatically adjusts the picture's position and sharpness (phase/pitch), and ensures that a clear picture appears on the screen (page 15).

Note

While the automatic picture quality adjustment function is activated, only the  (power) switch will operate.

If the automatic picture quality adjustment function of this monitor seems to not completely adjust the picture

You can make further automatic adjustment of the picture quality for the current input signal. (See AUTO below.)

If you still need to make further adjustments to the picture quality

You can manually adjust the picture's sharpness (phase/pitch) and position (horizontal/vertical position).

These adjustments are stored in memory and automatically recalled when the display receives the same input signal. These settings may have to be repeated if you change the input signal after reconnecting your computer.

Make further automatic adjustments to the picture quality for the current input signal (AUTO)

1 Press the MENU button.

The main menu appears on the screen.

2 Press the buttons to select (SCREEN) and press the OK button.

The SCREEN menu appears on the screen.

3 Press the buttons to select AUTO and press the OK button.

Make the appropriate adjustments of the screen's phase, pitch and horizontal/vertical position for the current input signal and store them.

4 Press the buttons to select and press the OK button.

Return to the menu screen.

Adjust the picture's sharpness manually (PHASE/PITCH)

You can adjust the picture's sharpness as follows.

1 Set the resolution to 1024 × 768 (SDM-HS53) 1280 × 1024 (SDM-HS73/HS93) on the computer.

2 Load the Utility Disk.

3 Start the Utility Disk and display the test pattern.

For Windows

Click [Utility] → [Windows]/[Win Utility.exe].

For Macintosh

Click [Utility] → [Mac]/[Mac Utility].

4 Press the MENU button.

The main menu appears on the screen.

5 Press the buttons to select (SCREEN) and press the OK button.

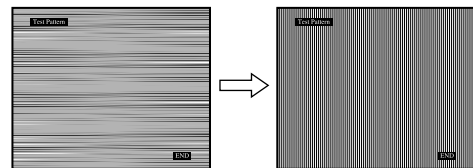
The SCREEN menu appears on the screen.

6 Press the buttons to select PHASE and press the OK button.

The PHASE menu appears on the screen.

7 Press the buttons until the horizontal stripes are at a minimum.

Adjust so that the horizontal stripes are at a minimum.



8 Press the OK button.

Return to the SCREEN menu.

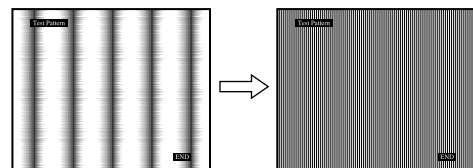
If vertical stripes are observed over the entire screen, adjust pitch by the following steps.

9 Press the buttons to select PITCH and press the OK button.

The PITCH menu appears on the screen.

10 Press the buttons until the vertical stripes disappear.

Adjust so that the vertical stripes disappear.



11 Click on the screen to turn off the test pattern.

12 Press the OK button.



Return to the SCREEN menu.

13 Press the buttons to select and press the OK button.

Return to the menu screen.

■ Adjust the picture's position manually (H CENTER/V CENTER)


If the picture is not in the center of the screen, adjust the picture's centering as follows.

- 1 Load the Utility Disk.**
- 2 Start the Utility Disk and display the test pattern.**
For Windows
Click [Utility] → [Windows]/[Win Utility.exe].
For Macintosh
Click [Utility] → [Mac]/[Mac Utility].
- 3 Press the MENU button.**
The main menu appears on the screen.
- 4 Press the ↑/↓ buttons to select  (SCREEN) and press the OK button.**
The SCREEN menu appears on the screen.
- 5 Press the ↑/↓ buttons to select H CENTER or V CENTER and press the OK button.**
The H CENTER or V CENTER menu appears on the screen.
- 6 Press the ↑/↓ buttons to center the test pattern in the screen.**
- 7 Click [END] on the screen to turn off the test pattern.**
- 8 Press the OK button.**
Return to the SCREEN menu.
- 9 Press the ↑/↓ buttons to select  and press the OK button.**
Return to the menu screen.

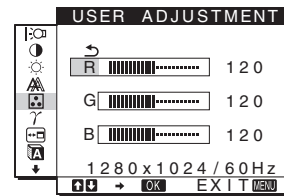
Adjusting the color temperature (COLOR)


You can select the color level of the picture's white color field from the default color temperature settings.

Also, if necessary, you can fine tune the color temperature.

- 1 Press the MENU button.**
The main menu appears on the screen.
- 2 Press the ↑/↓ buttons to select  (COLOR) and press the OK button.**
The COLOR menu appears on the screen.
- 3 Press the ↑/↓ buttons to select the desired color temperature and press the OK button.**
Whites will change from a bluish hue to reddish hue as the temperature is lowered from 9300K (default setting) to 6500K.

Fine tuning the color temperature (USER ADJUSTMENT)



- 1 Press the ↑/↓ buttons to select ADJUST and press the OK button.**
The USER ADJUSTMENT menu appears on the screen.
- 2 Press the ↑/↓ buttons to select R (Red) or B (Blue) and press the OK button. Then press the ↑/↓ buttons to adjust the color temperature and press the OK button.**
Since this adjustment changes the color temperature by increasing or decreasing the R and B components with respect to G (green), the G component is fixed.
- 3 Press the ↑/↓ buttons to select , then press the OK button.**
The new color setting is stored in memory for USER ADJUSTMENT and automatically recalled whenever USER is selected.
The main menu appears on the screen.

Changing the gamma setting (GAMMA)

You can associate the picture's color shade on the screen with the picture's original color shade.

- 1 Press the MENU button.**
The main menu appears on the screen.
- 2 Press the ↑/↓ buttons to select γ (GAMMA) and press the OK button.**
The GAMMA menu appears on the screen.
- 3 Press the ↑/↓ buttons to select the desired mode and press the OK button.**

Changing the menu's position (MENU POSITION)

You can change the menu position if it is blocking an image on the screen.

- 1 Press the MENU button.**
The main menu appears on the screen.
- 2 Press the ↑/↓ buttons to select \square (MENU POSITION) and press the OK button.**
The MENU POSITION menu appears on the screen.
- 3 Press the ↑/↓ buttons to select the desired position and press the OK button.**
There are three positions each for the top, center and bottom of the screen.

Selecting the on-screen menu language (LANGUAGE)

You can change the language used on menus or messages displayed on this monitor.

- 1 Press the MENU button.**
The main menu appears on the screen.
- 2 Press the ↑/↓ buttons to select A (LANGUAGE) and press the OK button.**
The LANGUAGE menu appears on the screen.
- 3 Press the ↑/↓ buttons to select a language and press the OK button.**
 - ENGLISH
 - FRANÇAIS: French
 - DEUTSCH: German
 - ESPAÑOL: Spanish
 - ITALIANO: Italian
 - NEDERLANDS: Dutch
 - SVENSKA: Swedish
 - РУССКИЙ: Russian
 - 日本語: Japanese
 - 中文: Chinese

Additional settings

You can adjust the following options:

- RESET $\rightarrow\leftarrow$
- MENU LOCK $\text{O}\pi$

- 1 Press the MENU button.**
The main menu appears on the screen.
- 2 Keep pressing the ↓ button until the icon of the desired option item appears.**
- 3 Press the ↑/↓ buttons to select the desired option item and press the OK button.**
Adjust the selected option item according to the following instructions.

■ Resetting the adjustment data to the defaults

You can reset the adjustments to the default settings.

- 1 Press the ↑/↓ buttons to select $\rightarrow\leftarrow$ (RESET) and press the OK button.**
The RESET menu appears on the screen.
- 2 Press the ↑/↓ buttons to select the desired mode and press the OK button.**
 - OK: To reset all of the adjustment data to the default settings. Note that the A (LANGUAGE) setting is not reset by this method.
 - CANCEL: To cancel resetting and return to the menu screen.

■ Locking the menus and controls

You can lock the control of buttons to prevent accidental adjustments or resetting.

- 1 Press the ↑/↓ buttons to select $\text{O}\pi$ (MENU LOCK) and press the OK button.**
The MENU LOCK menu appears on the screen.
- 2 Press the ↑/↓ buttons to select ON or OFF and press the OK button.**
 - ON: Only the O (power) switch will operate. If you attempt any other operation, the $\text{O}\pi$ (MENU LOCK) icon appears on the screen.
 - OFF: Set $\text{O}\pi$ (MENU LOCK) to OFF. If you set the $\text{O}\pi$ (MENU LOCK) item to ON, only this menu item can be selected.

Technical Features

Power saving function

This monitor meets the power-saving guidelines set by VESA, ENERGY STAR, and NUTEK. If the monitor is connected to a computer or video graphics board that is DPMS (Display Power Management Signaling) compliant, the monitor will automatically reduce power consumption as shown below.

SDM-HS53

Power mode	Power consumption	⏻ (power) indicator
normal operation	25 W (max.)	green
active off* (deep sleep)**	1 W (max.)	orange
power off	1 W (max.)	off

SDM-HS73

Power mode	Power consumption	⏻ (power) indicator
normal operation	45 W (max.)	green
active off* (deep sleep)**	1 W (max.)	orange
power off	1 W (max.)	off

SDM-HS93

Power mode	Power consumption	⏻ (power) indicator
normal operation	50 W (max.)	green
active off* (deep sleep)**	1 W (max.)	orange
power off	1 W (max.)	off

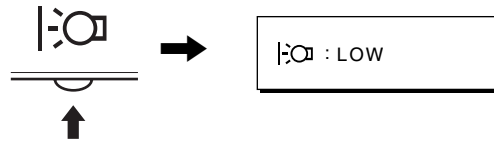
* When your computer enters the “active off” mode, the input signal is cut and NO INPUT SIGNAL appears on the screen. After 5 seconds, the monitor enters the power saving mode.

** “deep sleep” is the power saving mode defined by the Environmental Protection Agency.

Reducing the power consumption (|:⏻ mode)

If you set the |:⏻ mode to LOW by pressing the |:⏻ button on the front of the monitor, the backlight level is reduced and the power consumption is reduced, too.

Press the |:⏻ button several times until LOW appears.



LOW appears on the screen and the backlight level is reduced. LOW automatically disappears after about 5 seconds.

Automatic picture quality adjustment function

When the monitor receives an input signal, it automatically matches the signal to one of the factory preset modes stored in the monitor’s memory to provide a high quality picture at the center of the screen.

For input signals that do not match one of the factory preset modes, the automatic picture quality adjustment function of this monitor automatically adjusts the picture position, phase, and pitch, and ensures that a clear picture appears on the screen for any timing within the monitor’s frequency range (horizontal: 28 – 61 kHz (SDM-HS53), 28 – 80 kHz (SDM-HS73/HS93), vertical: 48 – 75 Hz).

Consequently, the first time the monitor receives input signals that do not match one of the factory preset modes, the monitor may take a longer time than normal for displaying the picture on the screen. This adjustment data is automatically stored in memory so that next time, the monitor will function in the same way as when the monitor receives the signals that match one of the factory preset modes.

In all modes as above, if the picture is adjusted, the adjustment data is stored as a user mode and automatically recalled whenever the same input signal is received.

Note

While the automatic picture quality adjustment function is activated, only the ⏻ (power) switch will operate.

Troubleshooting

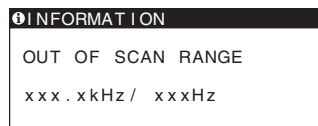
Before contacting technical support, refer to this section.

On-screen messages

If there is something wrong with the input signal, one of the following messages appears on the screen. To solve the problem, see “Trouble symptoms and remedies” on page 17.

If **OUT OF SCAN RANGE** appears on the screen

This indicates that the input signal is not supported by the monitor’s specifications. Check the following items.



If “xxx.x kHz/xxx Hz” is displayed

This indicates that either the horizontal or vertical frequency is not supported by the monitor’s specifications.

The figures indicate the horizontal and vertical frequencies of the current input signal.

If “**RESOLUTION > 1024 × 768**” is displayed (SDM-HS53)

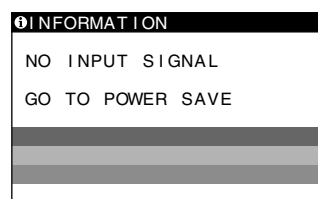
This indicates that the resolution is not supported by the monitor’s specifications.

If “**RESOLUTION > 1280 × 1024**” is displayed (SDM-HS73/HS93)

This indicates that the resolution is not supported by the monitor’s specifications.

If **NO INPUT SIGNAL** appears on the screen

This indicates that no signal is being input.

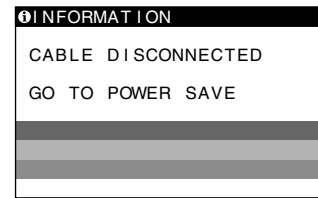


GO TO POWER SAVE

The monitor will enter the power saving mode after about 5 seconds from the time the message is displayed.

If **CABLE DISCONNECTED** appears on the screen

This indicates that the video signal cable has been disconnected.









GO TO POWER SAVE

The monitor will enter the power saving mode after about 5 seconds from the time the message is displayed.



Trouble symptoms and remedies

If a problem is caused by the connected computer or other equipment, please refer to the connected equipment's instruction manual. Use the self-diagnosis function (page 19) if the following recommendations do not resolve the problem.

Symptom	Check these items
No picture	
If the  (power) indicator is not lit, or if the  (power) indicator will not light up when the  (power) switch is pressed,	<ul style="list-style-type: none"> • Check that the power cord is properly connected. • Check that the  (power) switch is in the “on” position.
If the  (power) indicator is green or flashing orange,	<ul style="list-style-type: none"> • Use the self-diagnosis function (page 19).
If CABLE DISCONNECTED appears on the screen,	<ul style="list-style-type: none"> • Check that the video signal cable is properly connected and all plugs are firmly seated in their sockets (page 7). • Check that the video input connector's pins are not bent or pushed in. • A non-supplied video signal cable is connected. If you connect a non-supplied video signal cable, CABLE DISCONNECTED may appear on the screen before entering the power saving mode. This is not a malfunction.
If NO INPUT SIGNAL appears on the screen, or the  (power) indicator is either orange or alternating between green and orange,	<ul style="list-style-type: none"> • Check that the video signal cable is properly connected and all plugs are firmly seated in their sockets (page 7). • Check that the video input connector's pins are not bent or pushed in. <p>■ Problems caused by a computer or other equipment connected, and not caused by the monitor</p> <ul style="list-style-type: none"> • The computer is in the power saving mode. Try pressing any key on the keyboard or moving the mouse. • Check that your graphics board is installed properly. • Check that the computer's power is on. • Restart the computer.
If OUT OF SCAN RANGE appears on the screen,	<p>■ Problems caused by a computer or other equipment connected, and not caused by the monitor</p> <ul style="list-style-type: none"> • Check that the video frequency range is within that specified for the monitor. If you replaced an old monitor with this monitor, reconnect the old monitor and adjust the computer's graphics board within the following ranges: Horizontal: 28 – 61 kHz (SDM-HS53), 28 – 80 kHz (SDM-HS73/HS93) Vertical: 48 – 75 Hz
If you are using Windows and replaced an old monitor with this monitor,	<ul style="list-style-type: none"> • If you replaced an old monitor with this monitor, reconnect the old monitor and do the following. Select “SONY” from the “Manufacturers” list and select “SDM-HS53,” “SDM-HS73” or “SDM-HS93” from the “Models” list in the Windows device selection screen. If the model name of this monitor does not appear in the “Models” list, try “Plug & Play.”
If using a Macintosh system,	<ul style="list-style-type: none"> • If you use the Macintosh adapter (not supplied), check that the Macintosh adapter and the video signal cable are properly connected (page 7).
Picture flickers, bounces, oscillates, or is scrambled	<ul style="list-style-type: none"> • Adjust the pitch and phase (page 12). • Try plugging the monitor into a different AC outlet, preferably on a different circuit. <p>■ Problems caused by a computer or other equipment connected, and not caused by the monitor</p> <ul style="list-style-type: none"> • Check your graphics board manual for the proper monitor setting. • Confirm that the graphics mode (VESA, Macintosh 19" Color, etc.) and the frequency of the input signal are supported by this monitor. Even if the frequency is within the proper range, some graphics boards may have a sync pulse that is too narrow for the monitor to sync correctly. • Adjust the computer's refresh rate (vertical frequency) to obtain the best possible picture.

GB

(continued)

Symptom	Check these items
Picture is fuzzy	<ul style="list-style-type: none"> Adjust the brightness and contrast (page 11). Adjust the pitch and phase (page 12). <p>■ Problems caused by a computer or other equipment connected, and not caused by the monitor</p> <ul style="list-style-type: none"> Set the resolution to XGA (1024 × 768) on your computer (SDM-HS53). Set the resolution to SXGA (1280 × 1024) on your computer (SDM-HS73/HS93).
Picture is ghosting	<ul style="list-style-type: none"> Eliminate the use of video cable extensions and/or video switch boxes. Check that all plugs are firmly seated in their sockets.
Picture is not centered or sized properly	<ul style="list-style-type: none"> Adjust the pitch and phase (page 12). Adjust the picture position (page 13). Note that some video modes do not fill the screen to the edges.
Picture is too small	<p>■ Problems caused by a computer or other equipment connected, and not caused by the monitor</p> <ul style="list-style-type: none"> Set the computer's resolution to the screen's resolution.
Picture is dark	<ul style="list-style-type: none"> Adjust the brightness using the BRIGHTNESS menu (page 11). Adjust the backlight (page 11). Adjust the brightness using the  button (page 10). It takes a few minutes for the display to become bright after turning on the monitor.
Wavy or elliptical pattern (moire) is visible	<ul style="list-style-type: none"> Adjust the pitch and phase (page 12).
Color is not uniform	<ul style="list-style-type: none"> Adjust the pitch and phase (page 12).
White does not look white	<ul style="list-style-type: none"> Adjust the color temperature (page 13).
Monitor buttons do not operate ( appears on the screen)	<ul style="list-style-type: none"> If the menu lock is set to ON, set it to OFF (page 14).

Displaying this monitor's information

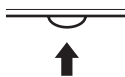
While the monitor is receiving a video signal, press and hold the MENU button for more than 5 seconds until the information box appears.

Press the MENU button again to make the box disappear.

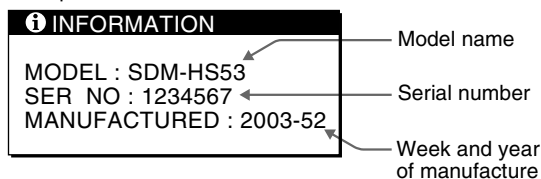
If any problem persists, call your authorized Sony dealer and give the following information:

- Model name: SDM-HS53 or SDM-HS73 or SDM-HS93
- Serial number
- Detailed description of the problem
- Date of purchase
- Name and specifications of your computer and graphics board

MENU

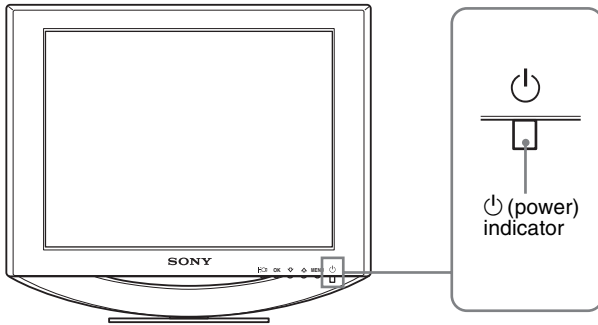


Example



Self-diagnosis function

This monitor is equipped with a self-diagnosis function. If there is a problem with your monitor or computer(s), the screen will go blank and the ⏻ (power) indicator will either light up in green or flash orange. If the ⏻ (power) indicator is lit in orange, the computer is in power saving mode. Try pressing any key on the keyboard or moving the mouse.



If the picture disappears from the screen and the ⏻ (power) indicator is green

- 1 Turn off the ⏻ (power) switch and disconnect the video signal cables from the monitor.**
- 2 Turn the monitor on by pressing the ⏻ (power) switch.**

If all four color bars appear (white, red, green, blue), the monitor is working properly. Reconnect the video signal cables and check the condition of your computer(s).

If the color bars do not appear, there is a potential monitor failure. Inform your authorized Sony dealer of the monitor's condition.

If the picture disappears from the screen and the ⏻ (power) indicator is flashing orange

Press the ⏻ (power) switch twice to turn the monitor off and then on.

If the ⏻ (power) indicator lights up in green, the monitor is working properly.

If the ⏻ (power) indicator is still flashing, there is a potential monitor failure. Count the number of seconds between orange flashes of the ⏻ (power) indicator and inform your authorized Sony dealer of the monitor's condition. Be sure to note the model name and serial number of your monitor. Also note the make and model of your computer and graphics board.