

Trinitron® Color Graphic Display

Multiscan 17se II

Multiscan 20se II

Operating Instructions _____ **EN**

Mode d'emploi _____ **F**

Manual de instrucciones _____ **ES**

GDM-17SE2T
MODEL: **GDM-20SE2T**

Owner's Record

The model and serial numbers are located at the rear of the unit. Record the serial number in the space provided below. Refer to these numbers 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 set. Do not open the cabinet. Refer servicing to qualified personnel only.

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.

INFORMATION

This product complies with Swedish National Council for Metrology (MPR) standards issued in December 1990 (MPR II) for very low frequency (VLF) and extremely low frequency (ELF).

INFORMATION

Ce produit est conforme aux normes du Swedish National Council for Metrology de décembre 1990 (MPR II) en ce qui concerne les fréquences très basses (VLF) et extrêmement basses (ELF).

Hinweis

Dieses Gerät erfüllt bezüglich tieffrequenter (very low frequency) und tiefstfrequenter (extremely low frequency) Strahlung die Vorschriften des „Swedish National Council for Metrology (MPR)“ vom Dezember 1990 (MPR II).

INFORMACIÓN

Este producto cumple las normas del Consejo Nacional Sueco para Metrología (MPR) emitidas en diciembre de 1990 (MPR II) para frecuencias muy bajas (VLF) y frecuencias extremadamente bajas (ELF).

Hinweise

- Aus ergonomischen Gründen wird empfohlen, die Grundfarbe Blau nicht auf dunklem Untergrund zu verwenden (schlechte Erkennbarkeit, Augenbelastung bei zu geringem Zeichenkontrast).
- Aus ergonomischen Gründen sollten nur Darstellungen auf dunklem Hintergrund bei Vertikalfrequenzen ab 60 Hz (ohne Zeilensprung) benutzt werden.
- Die Konvergenz des Bildes kann sich auf Grund des Magnetfeldes am Ort der Aufstellung aus der korrekten Grundeinstellung verändern. Zur Korrektur empfiehlt es sich deshalb, die Regler an der Frontseite für H STAT und V STAT so einzustellen, daß die getrennt sichtbaren Farblinien für Rot, Grün und Blau bei z.B. der Darstellung eines Buchstabens zur Deckung (Konvergenz) gelangen. Siehe hierzu auch die Erklärungen zu H STAT und V STAT.

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 x 18 AWG
Length	Maximum 15 feet
Rating	Minimum 7A, 125V

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 x 18 AWG
Longueur	Maximum 15 pieds
Tension	Minimum 7A, 125V



This monitor complies with the TCO 1992 guidelines for power saving when used with a computer equipped with VESA Display Power Management Signaling (DPMS).



This monitor is Energy Star Compliant when used with a computer equipped with VESA Display Power Management Signaling (DPMS). The Energy Star emblem does not represent EPA endorsement of any product or service.

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Introduction

Congratulations on your purchase of a Sony Multiscan SE series monitor!

This monitor incorporates over 25 years of Sony experience with Trinitron display technology, ensuring excellent performance and outstanding reliability.

The advanced design of the SE series together with Digital Multiscan Technology allows it to sync to any video mode within its wide scan range. In addition, its three factory preset color modes and three user adjustable color modes give you unprecedented flexibility in matching on-screen

colors to hard copy print outs. Furthermore, this monitor features digital controls with OSD (On Screen Display). It delivers easier adjustment by visualizing your control statement. All together, it delivers incredible performance with the quality and support you can expect from Sony.

The GDM-17SE2T is the model used for illustration purposes.

Precautions

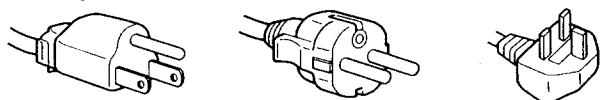
Installation

- Prevent internal heat build-up by allowing adequate air circulation. Do not place the unit on surfaces (rugs, blankets, etc.) nor near materials (curtains, draperies) that may block the ventilation holes.
- Do not install the unit near heat sources such as radiators or air ducts, nor in a place subject to direct sunlight, excessive dust, mechanical vibration or shock.
- Do not place the unit near equipment which generates magnetism, such as a converter or high voltage power lines.

Warning on Power Connection

- Use a proper power cord for your local power supply.
For the customers in U.S.A.
If you do not do this, this monitor will not conform to mandatory FCC standards.
For the customers in UK
If you use the monitor in UK, please use the supplied UK cable with UK plug.

Examples of plug shape:



for 100 to 120 V AC for 220 V to 240 V AC for 240 V AC only

Maintenance

EN

- 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, alkaline cleaner, 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, like a ball point pen or a screw driver. Otherwise, this type of contact may result in a scratched picture tube.

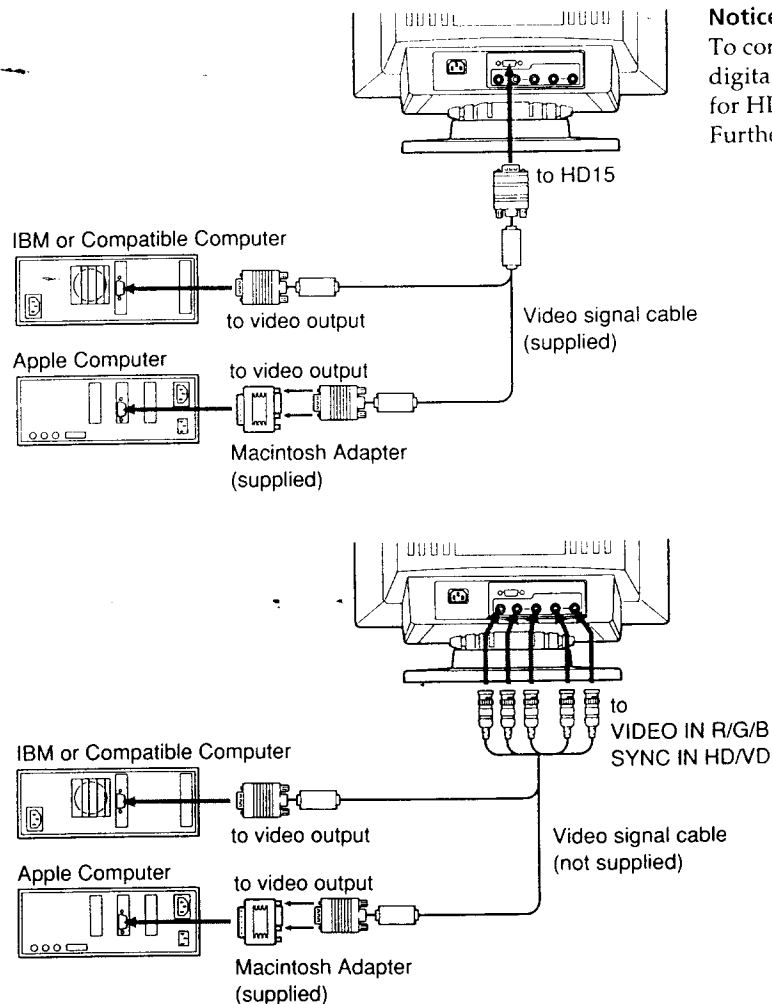
- Before disconnecting the power cord, wait for at least 30 seconds after turning off the power switch to allow for the discharging of static electricity on the CRT display surface.
- After the power has been turned on, the CRT is demagnetized for approximately 5 seconds. This generates a strong magnetic field around the bezel, which may affect the data stored on magnetic tapes or disks near the bezel. Place such magnetic recording equipment and tapes/disks apart from this unit.

The socket-outlet should be installed near the equipment and be easily accessible.

Getting Started

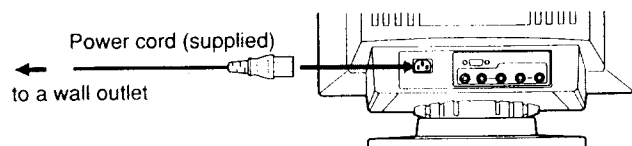
This monitor will sync with any IBM or compatible system equipped with VGA or greater graphics capability. Although this monitor will sync to other platforms, including Macintosh and Power Macintosh system, a cable adapter is required. Please consult your dealer for advice on which adapter is suitable for your needs.

Step 1: With the computer switched off, attach the video signal cable to the monitor (HD15/5 BNC's) and attach the other end to the video card.



Note: Use HD15 (Female)-HD15(Male without No.9 pin) adapter (not supplied) for current DOS computer which has no compliance of DDC 2AB and its No.9 pin is disconnected.

Step 2: With the monitor switched off, attach the power cord to the monitor and the other end to the power outlet.



Step 3: Turn on the monitor and computer.

Step 4: Switch the input connector according to the adjustment procedure on page 10.

Step 5: If necessary, adjust the user controls according to your personal preference.

The installation of your monitor is complete. Enjoy your monitor.

Notice

To comply with the limits of FCC Class B and IC Class B for digital device, please attach the supplied video signal cable for HD15 input or SMF-400 (sold separately) for BNC input. Furthermore, each cable has ferrite cores on it.

Using your Monitor

Preset and User Modes

The Multiscan 17seII/20seII has factory preset modes for the 10 most popular industry standards for true "plug and play" capability.

When using a video mode that is not one of the 10 factory preset modes, some fine tuning may be required to optimize the display to your preferences. Simply adjust the monitor according to the preceding adjustment instructions. The adjustments will be stored automatically and recalled whenever that mode is used.

A total of 15 user-defined modes can be stored in memory. If the 16th mode is entered, it will replace the first.

For less common modes, and modes that evolve in the future, the Digital Multiscan Technology of the Multiscan 17seII/20seII will perform all of the complex adjustments necessary to ensure a high quality picture for any timing in its frequency range. However, due to the wide variety of video boards on the market, it may be necessary for the user to fine tune the vertical/horizontal size and centering.

Recommended horizontal timing conditions

Horizontal sync width duty should be: >4.8% of total horizontal time.

Horizontal blanking width should be: >3.0 μ sec.

Note: For Windows[®] users, check your video board manual or the utility program which comes with your graphic board and select the highest available refresh rate to maximize monitor performance.

GDM-17SE2T

No.	Resolution (dots \times lines)	Horizontal Frequency	Vertical Frequency	Graphics Mode
1	640 \times 480	31.5 kHz	60 Hz	VGA Graphic ¹⁾
2	720 \times 400	31.5 kHz	70 Hz	VGA Text ¹⁾
3	640 \times 480	43.3 kHz	85 Hz	VESA ²⁾
4	832 \times 624	49.7 kHz	75 Hz	Macintosh 16" Color ³⁾
5	800 \times 600	53.7 kHz	85 Hz	VESA ²⁾
6	1024 \times 768	60.0 kHz	75 Hz	Macintosh 19" Color ³⁾
7	1280 \times 1024	64.0 kHz	60 Hz	VESA ²⁾
8	1024 \times 768	68.7 kHz	85 Hz	VESA ²⁾
9	1152 \times 870	68.7 kHz	75 Hz	Macintosh 21" Color ³⁾
10	1280 \times 1024	80.0 kHz	75 Hz	VESA ²⁾

GDM-20SE2T

No.	Resolution (dots \times lines)	Horizontal Frequency	Vertical Frequency	Graphics Mode
1	640 \times 480	31.5 kHz	60 Hz	VGA Graphic ¹⁾
2	720 \times 400	31.5 kHz	70 Hz	VGA Text ¹⁾
3	640 \times 480	43.3 kHz	85 Hz	VESA ²⁾
4	832 \times 624	49.7 kHz	75 Hz	Macintosh 16" Color ³⁾
5	800 \times 600	53.7 kHz	85 Hz	VESA ²⁾
6	1024 \times 768	60.2 kHz	75 Hz	Macintosh 19" Color ³⁾
7	1024 \times 768	68.7 kHz	85 Hz	VESA ²⁾
8	1152 \times 870	68.7 kHz	75 Hz	Macintosh 21" Color ³⁾
9	1280 \times 1024	91.1 kHz	85 Hz	VESA ²⁾
10	1600 \times 1200	93.8 kHz	75 Hz	VESA ²⁾

1) VGA is a trademark of IBM Corporation.

2) VESA is a trademark of Video Electronics Standard Association.

3) Macintosh is a trademark of Apple Computer Inc.

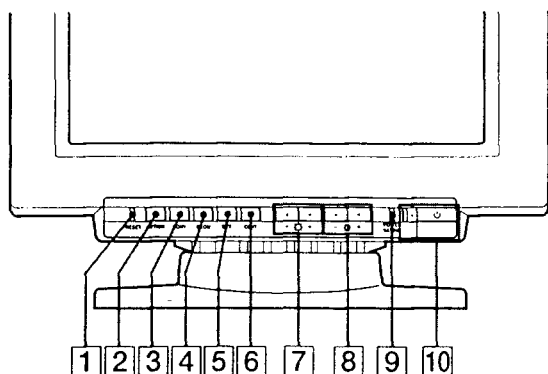
4) Windows[®] is a registered trademark of Microsoft Corporation in the United States and other countries.

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Functions of Controls

See the given pages for further description.

Front

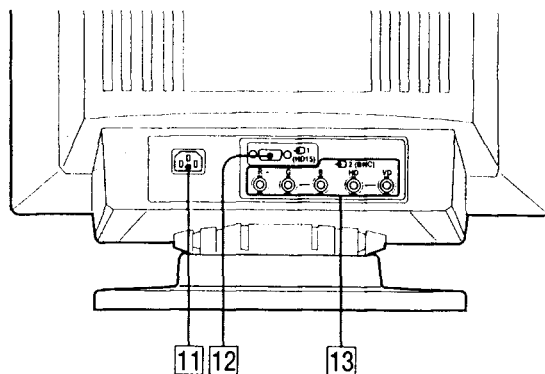


- 1 RESET button (page 11)**
Press to reset the adjustment data to the factory-preset levels.
- 2 OPTION button (page 9-11)**
Press to set the option items, such as control lock and color temperature.
- 3 CONV (convergence) button (page 9)**
Press to adjust the vertical and horizontal convergence.
- 4 GEOM (geometry) button (page 8)**
Press to adjust the rotation and pincushion.
- 5 SIZE (picture size) button (page 8)**
Press to adjust the vertical and horizontal picture size.
- 6 CENT (center) button (page 7)**
Press to adjust the vertical and horizontal picture position.
- 7 (brightness) -/+ (↓/↑) buttons (page 7-11)**
Press to adjust the brightness.

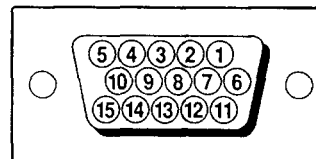
-/+ (↓/↑) buttons also adjust the each item.
- 8 (contrast) -/+ (←/→) buttons (page 7-11)**
Press to adjust the contrast.

-/+ (←/→) buttons also adjust the each item.
- 9 POWER SAVING indicator (page 12)**
Lights up when the monitor is in the Power Saving Modes.
- 10 power switch and indicator (page 12)**
Press to turn the monitor on or off. The indicator lights up when the monitor is turned on.

Rear



- 11 AC IN connector**
Plug in an AC power cord.
- 12 Video input 1 connector (HD15)**
The cable accepts RGB video signals (0.714 Vp-p, positive) and SYNC signals.



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

* Display Data Channel (DDC) Standard by VESA

- 13 Video input 2 connectors (5 BNC)**
The cable accepts RGB video signals (0.714 Vp-p, positive) and SYNC signals.

Adjustments

You can adjust the picture to your preference by following the procedure described below.

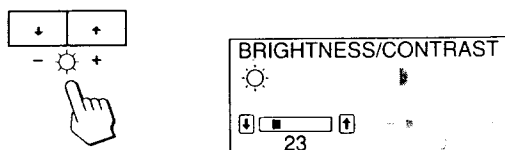
You can adjust all items on the OSD (On Screen Display). The item being adjusted is indicated in white on the OSD.

Before adjusting the items, turn on the unit and connect a video cable to the computer/work station.

Adjusting the Picture Brightness

The adjustment data becomes the common setting for all input signals received.

- 1 Press the / button.
The "BRIGHTNESS/CONTRAST" OSD (On Screen Display) appears.



- 2 Press the / buttons to adjust picture brightness.
↓ ... for less brightness
↑ ... for more brightness

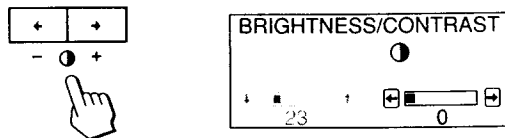
The "BRIGHTNESS/CONTRAST" OSD disappears 3 seconds after you release the buttons.

To reset, press the RESET button while the OSD is on.

Adjusting the Picture Contrast

The adjustment data becomes the common setting for all input signals received.

- 1 Press the / button.
The "BRIGHTNESS/CONTRAST" OSD (On Screen Display) appears.



- 2 Press the / button to adjust picture contrast.
← ... for less contrast
→ ... for more contrast

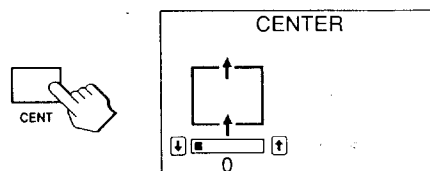
The "BRIGHTNESS/CONTRAST" OSD disappears 3 seconds after you release the buttons.

To reset, press the RESET button while the OSD is on.

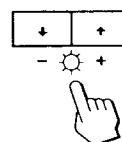
Adjusting the Picture Centering

The adjustment data becomes the unique setting for the input signals received.

- 1 Press the CENT button.
The "CENTER" OSD (On Screen Display) appears.

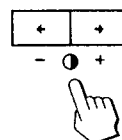


- 2 For vertical adjustment
Press the / buttons.



↓ ... to move down
↑ ... to move up

For horizontal adjustment
Press the / buttons.



← ... to move left
→ ... to move right

To erase the "CENTER" OSD, press the CENT button again. The "CENTER" OSD automatically disappears 10 seconds after you release the buttons.

To reset, press the RESET button while the OSD is on.

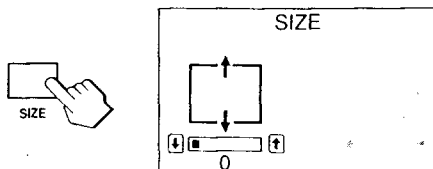
EN

Adjustments

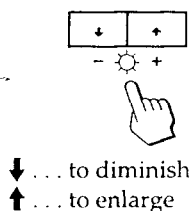
Adjusting the Picture Size

The adjustment data becomes the unique setting for the input signals received.

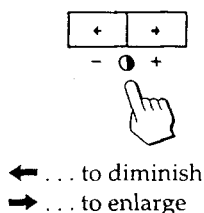
- 1 Press the SIZE button.
The "SIZE" OSD (On Screen Display) appears.



- 2 For vertical adjustment
Press the / buttons.



For horizontal adjustment
Press the / buttons.



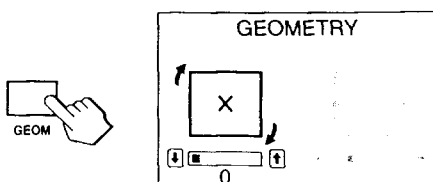
To erase the "SIZE" OSD, press the SIZE button again.
The "SIZE" OSD automatically disappears 10 seconds after you release the buttons.

To reset, press the RESET button while the OSD is on.

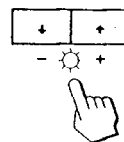
Adjusting the Picture Rotation

The adjustment data becomes the common setting for all input signals received.

- 1 Press the GEOM button.
The "GEOMETRY" OSD (On Screen Display) appears.



- 2 Press the / buttons.



To erase the "GEOMETRY" OSD, press the GEOM button again.

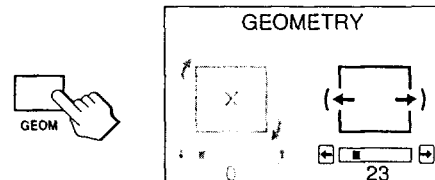
The "GEOMETRY" OSD automatically disappears 10 seconds after you release the buttons.

To reset, press the RESET button while the OSD is on.

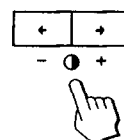
Adjusting the Pincushion

The adjustment data becomes the unique setting for the input signals received.

- 1 Press the GEOM button.
The "GEOMETRY" OSD (On Screen Display) appears.



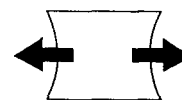
- 2 Press the / buttons.



left arrow ... to diminish the picture sides



right arrow ... to expand the picture sides



To erase the "GEOMETRY" OSD, press the GEOM button again.

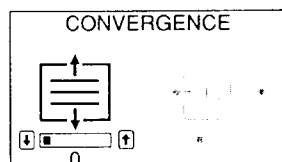
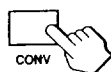
The "GEOMETRY" OSD automatically disappears 10 seconds after you release the buttons.

To reset, press the RESET button while the OSD is on.

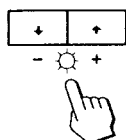
Adjusting the Convergence

The adjustment data becomes the common setting for all input signals received.

- 1 Press the CONV button.
The "CONVERGENCE" OSD (On Screen Display) appears.

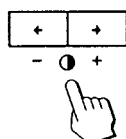


- 2 For vertical adjustment
Press the $\odot \downarrow / \uparrow$ buttons.



\downarrow ... to move Red down and Blue up
 \uparrow ... to move Red up and Blue down

For horizontal adjustment
Press the $\odot \leftarrow / \rightarrow$ buttons.



\leftarrow ... to move Red to the left and Blue to the right
 \rightarrow ... to move Red to the right and Blue to the left

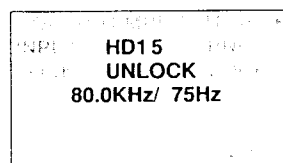
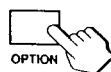
To erase the "CONVERGENCE" OSD, press the CONV button again.
The "CONVERGENCE" OSD automatically disappears 10 seconds after you release the buttons.

To reset, press the RESET button while the OSD is on.

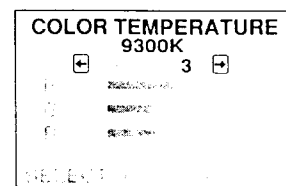
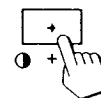
Setting the Color Temperature

The selected color temperature becomes the common setting for all input signals.

- 1 Press the OPTION button.
The OPTION OSD (On Screen Display) appears.

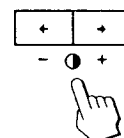


- 2 Press the $\odot \rightarrow$ button.
The "COLOR TEMPERATURE" OSD appears.



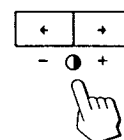
- 3 Adjust with the $\odot \leftarrow / \rightarrow$ and $\odot \downarrow / \uparrow$ buttons.
There are three color temperature modes on the OSD.
The factory settings are 1 : 5000K, 2 : 6500K, and 3 : 9300K.

To select 5000K, 6500K or 9300K
Press the $\odot \leftarrow / \rightarrow$ buttons.

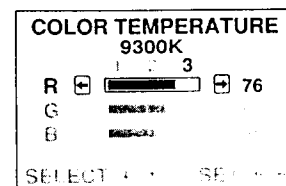
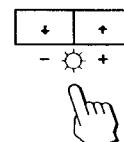


To obtain the desired color temperature

- 1 Press the $\odot \leftarrow / \rightarrow$ buttons to select the 1, 2 or 3 mode.



- 2 Press the $\odot \downarrow / \uparrow$ buttons to select R, G or B.



- 3 Press the $\odot \leftarrow / \rightarrow$ buttons to adjust the color temperature.

The "5000K," "6500K" or "9300K" disappears.
The color temperatures are memorized in the each mode-1, 2 and 3 until you reset each.

To erase the "COLOR TEMPERATURE" OSD, press the OPTION button again.
The OSD automatically disappears 30 seconds after you release the buttons.

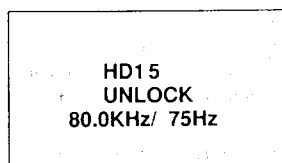
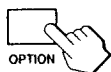
To reset, press the RESET button while the OSD is on.

Adjustments

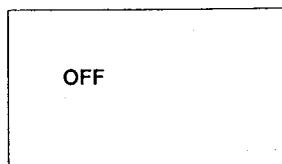
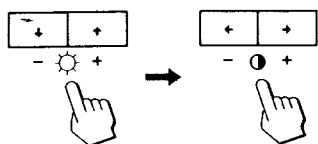
Canceling the Moire (GDM-20SE2T only)

The adjustment data becomes the unique setting for the input signals received.

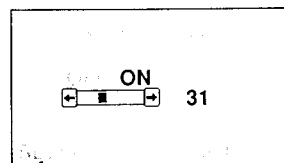
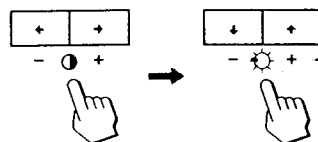
- 1 Press the OPTION button.
The OPTION OSD (On Screen Display) appears.



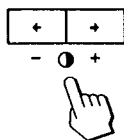
- 2 Press the buttons to select "CANCEL MOIRE" and then press the button.



- 3 Press the buttons to select "ON" and then press the button.



- 4 Press the buttons to adjust for minimum moire.



To erase the "CANCEL MOIRE" OSD, press the OPTION button again.
The OSD automatically disappears 30 seconds after you release the buttons.

To reset, press the RESET button while the OSD is on.

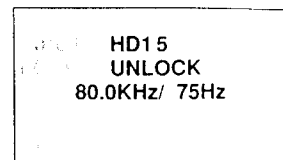
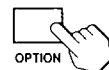
Note

When the moire is cancelled, the picture may be fuzzy.
Adjust the moire gradually from 0, and stop the adjustment as near to 0 as possible.

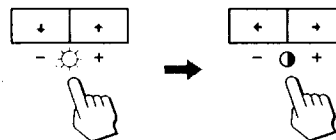
Switching the Input Connector

As the monitor has two sets of input connectors, you can switch between two input video signals. It is necessary to select the connector type (HD15/5 BNC's) correctly according to the connection.

- 1 Press the OPTION button.
The OPTION OSD (On Screen Display) appears.



- 2 Press the buttons to select "INPUT" and then press the button to select "HD15" or "BNC."




When you switch between input sources, the monitor screen is muted for a moment (Mute) then the signal through the selected input is displayed. If the selected input do not receive any video signals, the monitor automatically returns to the other input after Mute and the OPTION OSD appears.

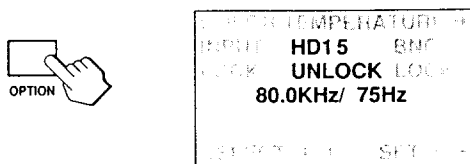
To erase the OPTION OSD, press the OPTION button again.
The OSD automatically disappears 30 seconds after you release the buttons.





If two computers are connected to the monitor (one to each input), when one of the computers is turned on or restarted, or the monitor goes into power saving mode, the monitor may switch to the other input because the signal is temporarily interrupted. Select the input which you use, following the above steps.

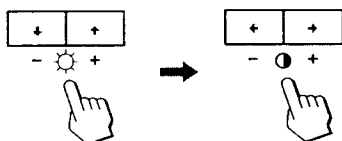
Locking the Controls





This feature allows you to lock the monitor so that all the buttons, except the  power switch and OPTION button, on the front panel cannot be operated (Lock mode). Hence, your settings cannot be modified. With this function, you can ensure that your settings will remain the same even when the control buttons are exposed to others. To release the Lock mode, set it to off (UNLOCK) position. Normally keep this function set to off (UNLOCK) position.

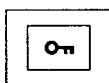
- 1 Press the OPTION button.
The OPTION OSD (On Screen Display) appears.





- 2 Press the / buttons to select "LOCK" and then press the / buttons to select "LOCK."



The / buttons do not work on the OPTION OSD. The control buttons on the front panel except the OPTION button do not work. If you press any button except the  power switch and OPTION button, the  mark appears on the screen.



To Cancel the Control Lock

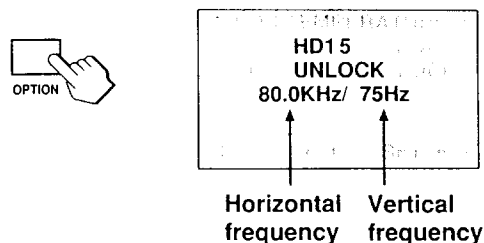
Press the OPTION button again.
Press the / buttons to select "UNLOCK."

To erase the OPTION OSD, press the OPTION button again.
The OSD automatically disappears 30 seconds after you release the buttons.

Checking the Signal Frequency

It is possible to check the current vertical and horizontal frequencies of the input signal received.

Press the OPTION button.
The OPTION OSD (On Screen Display) appears.



Resetting the Adjustment Data to Factory-preset Levels

To reset an adjustment item

If you want to reset the color temperature

Select one of the three color temperature modes, (See "Setting the Color Temperature" on the page 9), and then press the RESET button before the OSD (On Screen Display) disappears.

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If you want to reset the other adjustment items

Press the button of the adjustment item you want to reset, and then press the RESET button before the OSD (On Screen Display) disappears.

To reset the brightness, contrast, size, center and pincushion adjustment data at once (for the received signal)

Press the RESET button with something like a coin for one second when no OSD is shown.



To reset all adjustment data to factory-preset levels

Press and hold the RESET button for more than 2 seconds.
All adjustment data including the brightness and contrast are reset to factory-preset levels.



Power Saving Function

This monitor is capable of 3 states of reduced power consumption.

By sensing the absence of one or both sync signals coming from the host computer, it will reduce power consumption as follows.

Mode	State	Power consumption	Required resumption time	POWER SAVING indicator	⏻ (power) indicator
1	Normal operation	≤ 140 W	—	off	green on
2	Standby (1st step of power saving)	≤ 100 W	approx. 3 sec.	orange on	green on
3	Suspend (2nd step of power saving)	≤ 15 W	approx. 3 sec.	orange on	green on
4	Active-off (3rd step of power saving)	≤ 5 W	approx. 10 sec.	orange on	off
5	Power-off	0 W	—	off	off

Power Saving Operation

The H-sync is not present.



The unit goes into standby state.

The V-sync is not present.



The unit goes into suspend state.

Both the H-sync and V-sync are not present.



The unit goes into active-off state.

The monitor requires a videocard or screen saver software which switches off one or both sync signals to activate the power saving function.

Caution: The Power Saving function will automatically put the monitor into the Active-off state if the power switch is turned on without any video signal input. Once the horizontal and vertical syncs are sensed, the monitor will automatically return to its Normal operation state.

Plug and Play

This monitor complies with the DDC™1, DDC2B and DDC2AB which are the Display Data Channel (DDC) standards of VESA.

When a DDC1 host system is connected, the monitor synchronizes with the V. CLK in accordance with the VESA standards and outputs the EDID (Extended Display Identification) to the data line.

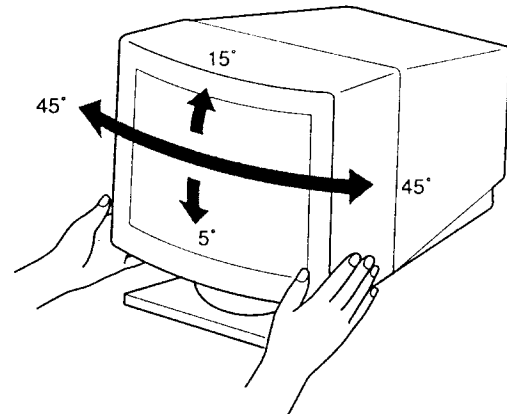
When a DDC2B or DDC2AB host system is connected, the monitor automatically switches to each communication.

DDC™ is a trademark of Video Electronics Standard Association.

Use of the Tilt-Swivel

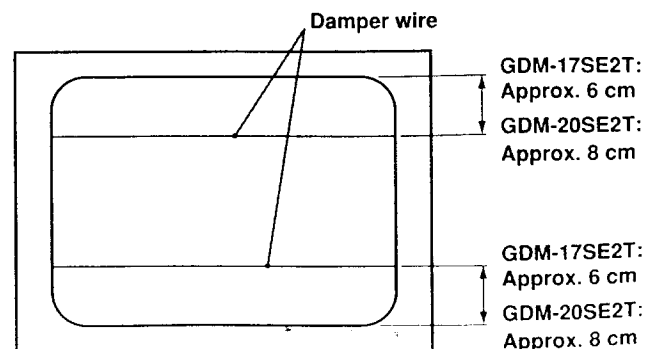
With the tilt-swivel, this unit can be adjusted to be viewed at your desired angle within 90° horizontally and 20° vertically.

To turn the unit vertically and horizontally, hold it at its bottom with both hands as illustrated below.



Damper Wire

Using a white background, very thin horizontal stripes on the screen are visible as shown below. These stripes are damper wires. These wires are attached to the aperture grille inside the Trinitron tube and are there to damp vibrations of the aperture grille in order to prevent them from influencing the picture quality.



Specifications

GDM-17SE2T

Picture tube	0.25 mm aperture grille pitch 17 inches measured diagonally (16" visual) 90-degree deflection
Video image area	Approx. 328 × 242 mm (w/h) (13 × 9 5/8 inches)
Resolution	Horizontal: Max. 1280 dots Vertical: Max. 1024 lines
Standard image area	Approx. 300 × 225 mm (w/h) (11 7/8 × 8 7/8 inches) or Approx. 293 × 234 mm (w/h) (11 5/8 × 9 1/4 inches)
Deflection frequency	Horizontal: 30 to 85 kHz Vertical: 48 to 150 Hz
AC input voltage/current	100 to 120 V, 50/60 Hz, 1.7 A 220 to 240 V, 50 – 60 Hz, 1.2 A
Power consumption	Max. 140 W
Dimensions	403.6 × 426.3 × 450 mm (w/h/d) (16 × 16 7/8 × 17 3/4 inches)
Mass	Approx. 20 kg (44 lb)

GDM-20SE2T

Picture tube	0.25 mm aperture grille pitch 20 inches measured diagonally (19" visual) 90-degree deflection
Video image area	Approx. 389 × 293 mm (w/h) (15 3/8 × 11 5/8 inches)
Resolution	Horizontal: Max. 1600 dots Vertical: Max. 1200 lines
Standard image area	Approx. 373 × 280 mm (w/h) (14 3/4 × 11 1/8 inches) or Approx. 350 × 280 mm (w/h) (13 7/8 × 11 1/8 inches)
Deflection frequency	Horizontal: 30 to 96 kHz Vertical: 48 to 160 Hz
AC input voltage/current	100 to 120 V, 50/60 Hz, 1.7 A 220 to 240 V, 50 – 60 Hz, 1.2 A
Power consumption	Max. 150 W
Dimensions	472 × 493.5 × 501 mm (w/h/d) (18 5/8 × 19 1/2 × 19 3/4 inches)
Mass	Approx. 30 kg (66 lb 2 oz)

Design and specifications are subject to change without notice.

Troubleshooting

This section may help you isolate a problem and as a result, eliminate the need to contact technical support, allowing continued productivity.

No picture

- ➔ If neither the ⏻ (power) indicator nor the POWER SAVING indicator is not lit.
 - Check that the power cord is properly connected.
 - Check that the power switch is in the "on" position.
 - ➔ If the POWER SAVING indicator is lit.
 - Check that your computer power switch is in the "on" position.
 - The monitor will recover when you press any key on the keyboard of the computer.
 - Check that the video cable is properly connected and all plugs are firmly seated in their socket.
 - Check that the 5 BNC's are connected in the right order (from power cord side: Red-Green-Blue-HD-VD).
 - Ensure that no pins are bent or pushed in the HD15 connector of the cable.
 - Check that the video card is seated completely in a proper bus slot.
 - Check that the video frequency range is within that specified for the monitor.
 - If using a Macintosh system, check that the Macintosh adapter and the video signal cable are properly connected.
 - ➔ If the ⏻ (power) and/or the POWER SAVING indicators are both flashing.
 - Turn the monitor off and on. If the indicator is off, the monitor is in the normal condition. If the indicator is still flashing, there is a potential monitor failure.
 - ➔ If you do the above procedures and the monitor does not recover.
 - Unplug the video cable (HD15/5 BNC's) then press and hold the ⏻ + button for 2 seconds to display the color bars. Then, turn the monitor off and on by pressing the ⏻ power switch.
- If the monitor does not recover, the monitor is out of order.


Picture is scrambled

- ➔ Check your graphics board manual for the proper monitor setting on your Multiscan 17seII/20seII.
- ➔ Check this manual and confirm that the graphic mode and the frequency at which you are trying to operate is supported. Even within the proper range some video boards may have a sync pulse that is too narrow for the monitor to sync correctly.

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Troubleshooting

Color is not uniform

- ➔ Trip the  power switch once to activate the Auto-degauss cycle. This function is to demagnetize the metal frame of the CRT to obtain neutral field for uniform color reproduction. If a second degauss cycle is needed, allow a minimum interval of 20 minutes for the best result.

You cannot adjust the monitor with the buttons on the front panel

- ➔ If the control lock is set to on, set it to off using the OPTION OSD. (page 11)
You will be able to adjust the monitor.

White does not look white

- ➔ Adjust color temperature using the OPTION OSD. (page 9)
- ➔ Check that the 5 BNC's are connected in the right order (from power cord side: Red-Green-Blue-HD-VD).

Screen image is not centered or sized properly

- ➔ Adjust centering, size or geometry using the OSD. (page 7, 8)
- ➔ Some video modes do not fill the screen to the edge of the monitor. There is no single answer to solve the problem. There is a tendency to have this problem on higher refresh timings.


Edges of the image are curved

- ➔ Adjust pincushion using the OSD. (page 8)

White lines show red or blue shades at edges

- ➔ Adjust the convergence using the OSD. (page 9)

Picture is fuzzy

- ➔ Adjust the contrast and brightness using the OSD (page 7).
- ➔ Trip the  power switch once to activate the Auto-degauss cycle. This function demagnetizes the metal frame of the CRT to obtain neutral field for uniform color reproduction. If a second degauss cycle is needed, allow a minimum interval of 20 minutes for the best result.
- ➔ If red or blue shades are found at the edge of images, adjust convergence using the OSD. (page 9)
- ➔ (GDM-20SE2T only)
If the moire is cancelled on the OPTION OSD, the picture may be fuzzy.
— Select "OFF" on the OPTION OSD. (page 10)

Picture bounces or has wavy oscillations

- ➔ Isolate and eliminate any potential sources of electric or magnetic fields. Common causes for this symptom are electric fans, fluorescent lighting, laser printers, and so on.
- ➔ If you have another monitor close to this monitor, increase the distance between them to reduce the interference.
- ➔ Try plugging the monitor into a different AC outlet, preferably on a different circuit.
- ➔ Try the monitor on a completely different computer in a different room.

Picture appears to be ghosting

- ➔ Eliminate the use of video cable extension cable and/or video switch boxes if this symptom occurs. Excessive cable length or weak connection can produce this symptom.

Two fine horizontal lines (wires) are visible

- ➔ These wires stabilize the vertically striped Aperture Grille. This Aperture Grille allows more light to pass through to the screen giving the Trinitron CRT more color and brightness.

Wavy or elliptical (moire) pattern is visible

- ➔ Due to the relationship between resolution, monitor dot pitch and the pitch of some image patterns, certain screen backgrounds, especially gray, sometimes show moire. This can only be eliminated by changing your desktop pattern.
- ➔ (GDM-20SE2T only)
Cancel the moire using the OPTION OSD. (page 10)
May be modified according to the model.

- If the problem persists, call your authorized Sony dealer from a location near your monitor.
- Note the model name and the serial number of your monitor. Also note the make and name of your computer and video board.