

# PLASMA

## Display

CMP307XU

37" High Resolution XGA



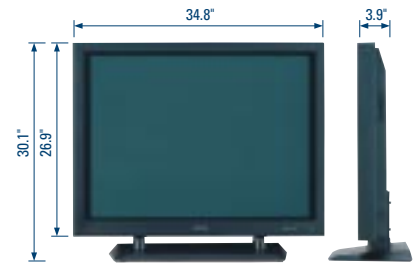
- ◆ High resolution XGA (1024 x 768)
- ◆ 4:3 aspect ratio
- ◆ 160 degree viewing angle
- ◆ Theater operation (capable of 16 million colors)
- ◆ Multiscan capability (PC Analog RGB)
- ◆ Standard video inputs (BNC, s-video)
- ◆ Built-in screen saver
- ◆ Internal speakers

**HITACHI**

# 37-Inch High Definition Plasma Display

Model		CMP307XU
<b>General</b>		
Power supply	AC100~120V   200-240V	
Frequency	50/60Hz	
Power consumption	390W (typical)	
Dimensions	34.8" (W) x 26.9" (H) x 3.9" (D)(excluding stand)	
Weight	65 lbs., 9 ozs. (excluding stand)	
<b>Display characteristics</b>		
Effective display area	29.6" (horizontal) x 22.2" (vertical)	
Aspect ratio	4 : 3	
Number of pixels	1024 (horizontal) x 768 (vertical) pixels	
Pixel pitch	0.735 (horizontal) x 0.735 (vertical) mm	
Number of colors (gray levels)	2.09 million colors (128 gray levels)/16.7 million colors (256 gray levels)	
Brightness	150cd/m <sup>2</sup> (typical) at white peak (with front filter, 2.09-million-color mode)	
Contrast ratio	400 : 1 (typical, no ambient light, 2.09-million-color mode)	
Viewing angle	More than 160°	
<b>Signal input and terminals</b>		
Video	Analog (PC) RGB 1	Format/frequency: R, G, B, H, V/fH: 24 - 80kHz; fV: 50 - 75Hz
		Level/impedance: R, G, B = 0.7Vp-p/75Ω
		Synchronization: H/V separate sync.: TTL, H/V composite sync.: TTL, G sync.: 0.3Vp-p Connector: 15 pin mini D-Sub
	Analog (PC) RGB 2	Format/frequency: R, G, B, H, V/fH: 24 - 80kHz; fV: 50 - 75Hz
		Level/impedance: R, G, B = 0.7Vp-p/75Ω
		Synchronization: H/V separate sync.: TTL, H/V composite sync.: TTL, G sync.: 0.3Vp-p Connector: BNC x 5
	Video 1 composite	Format: video or S-video (NTSC/PAL/SECAM)
		Level/impedance: 1.0Vp-p/75Ω
		Synchronization: Composite sync. signal Connector: RCA pin x 1, S terminal x 1
	Video 2 component	Format: Y, PB, PR or Y, CB, CR
		Level/impedance: Y = 1.0V; PB/CP, PR/CR = 0.7Vp-p/75Ω
		Synchronization: Weighted on Y signal Connector: RCA pin x 3
Audio	3 inputs	Stereo signal supplied with video 2 input and RGB 1 input: L/R 470mV high impedance Connector: RCA pin (L/R) x 3
		Connector: 8 pin mini DIN
Control terminal	Connector: 8 pin mini DIN	
<b>Signal output</b>		
	Speaker output	2W + 2W (built-in 3.9" x 1.2" speakers x 2)
<b>Controls</b>		
Switches/Buttons		Main Power switch, Sub Power button Adjustment buttons (Input Changeover, Adjustment Menu, Selection, Sound Volume Adjustment)
Main adjustment	Video signal	Contrast, brightness, color, color tone, sharpness
	RGB signal	Contrast, brightness, display size, vertical position, horizontal position, clock frequencies, clock phase
	Audio signal	Volume, balance, high, low, mute
Remote control	Infrared remote control unit provided	
Power management	VESA DPMS, International ENERGY STAR <sup>®</sup> compliant	
<b>Environmental conditions</b>		
Temperature	Operating temperature: 5 - 35°	
Humidity	Operating humidity: 20 - 80% (non-condensation)	
<b>Regulations</b>		
Safety	UL1950, CSA C22.2 No.950	
EMI	FCC class A	
<b>Supplied accessories</b>		
Table stand, AC power cable (L = 5' 11"), interface cable (D-Sub 15P connector; L = 5' 11"), infrared remote control unit (2x AA batteries included), user manual		

## External dimensions



## Corresponding personal computer signals

### Signal mode

Signal	Resolution frequencies Hz	Vertical frequencies MHz	Horizontal frequencies MHz	Dot clock frequencies MHz
VGA	640 x 400	70.08	31.47	25.18
	640 x 480	59.94	31.47	25.18
VESA	640 x 400	72.81	37.86	31.50
	640 x 480	75.00	37.50	31.50
	800 x 600	56.25	35.16	36.00
	800 x 600	60.32	37.88	40.00
	800 x 600	72.19	48.08	50.00
	800 x 600	75.00	46.88	49.50
	1024 x 768	60.00	48.36	65.00
	1024 x 768	70.07	56.48	75.00
Apple	1024 x 768	75.03	60.02	78.75
	1280 x 1024	60.02	63.98	108.00
	640 x 480	74.55	35.00	30.24
	832 x 624	74.93	49.73	57.28
	1024 x 768	56.42	60.24	80.00

\* Due to the interpolation necessary for the operation of digital display devices such as PDP at full screen, it is recommended that display monitors utilize the native resolution (1024x768 for CMP307XU) capability of the panel and are operated at their optimal resolution when text or fine lines are being viewed.

# HITACHI

## Hitachi America, Ltd. Computer Division

2000 Sierra Point Parkway, MS: 760  
Brisbane, CA 94005-1835

\* XGA and VGA are registered trademarks of IBM Corp. All other brandnames and product names are trademarks, registered trademarks or trade names of their respective holders.

<http://www.plasma-displays.com>  
888-355-9775

Specifications and product offerings subject to change without notice  
© 2000 Hitachi America, Ltd. All rights reserved.  
Printed in USA. DS.PFam.0600

# FEATURES

The following features are provided by the color Plasma Display Monitor.

## Large-screen, high-definition plasma display panel

The 37-inch color plasma display panel, with a resolution of 1024 (H) x 768(V) pixels, creates a high-definition, large-screen (aspect ratio : 4:3) and low-profile flat display. Free from electromagnetic interferences from geomagnetic sources and ambient power lines, the panel produces high-quality display images free from color misconvergence and display distortion.

## Multimedia input support

The monitor comes complete with a mini-D-sub terminal and a BNC terminal for RGB input and with a composite/S terminal and a component terminal for video input, and even with stereo audio input terminals. It allows hooking up with a number of devices, from PCs to video gear.

## Multiscan converter and progressive LSI

The multiscan converter provides a broad multiscan range of signals (\*1), from video signals (15 kHz) to PC analog video signals. Video input is subjected to progressive processing by a dedicated LSI to offer better video quality.

(\*1) Video performance of input signals in excess of 1024 x 768 (fields) is not guaranteed, as they appear in a simplified display mode.

## Easy-to-use remote controller and EasyMenu

The remote controller included eases the work of setting display controls. Further, the on-screen display system, EasyMenu, displays the status of signal reception and display control settings in an easy-to-view fashion.

## Power saving system

International energy star and a power saving system are provided. The power-saving system operates automatically to reduce power consumption even when there is no video input signal.

### Notes about This Manual

- The information in this manual is subject to change without notice.
- While meticulous care has been taken in the preparation of this manual, you are requested to notify your dealer or us should you have any comments, views or questions about our product.
- Fully understand the prerequisites to using the product, such as hardware and software specifications and constraints, in using the product. We are not held liable for damages caused by improper handling of the product.
- Reproduction of this manual in whole or in part without our prior written permission is prohibited.
- The product names mentioned in this manual may be trademarks or registered trademarks of their respective owners.

# CONTENTS

<b>FEATURES</b> .....	<b>1</b>
<b>CONTENTS</b> .....	<b>2</b>
<b>SAFETY GUIDELINES</b> .....	<b>3</b>
<b>INSTALLATION INSTRUCTIONS</b> .....	<b>7</b>
Standard accessories .....	7
Installation .....	7
Anti-tumble measures .....	7
Component Names .....	8
Installation and Cabling .....	10
Handling the Remote Controller .....	12
<b>OPERATING INSTRUCTIONS</b> .....	<b>13</b>
Turning Power On and Off .....	13
Input Selection .....	14
Volume Adjustment .....	14
Contrast Adjustment .....	15
Sound Mute .....	15
Input Signal Status Display .....	15
On-Screen Display System, EasyMenu .....	16
<b>OTHER FEATURES</b> .....	<b>22</b>
Automatic Store .....	22
Reset (Settings Initialization) .....	23
Signal Check .....	23
Switching the Display Method .....	24
Power Save Mode .....	25
Sound Mode .....	25
<b>TROUBLESHOOTING</b> .....	<b>26</b>
Symptoms That Seemingly Appear to be Failures .....	26
Actions to Correct Abnormal Displays .....	27
<b>PRODUCT SPECIFICATIONS</b> .....	<b>28</b>
General Specifications .....	28
Signal Input .....	29
Factory Settings .....	30

# SAFETY GUIDELINES

This monitor is designed to be safe to use. However, due to high voltage of about 400 V, fire or serious injury may occur unless you use this monitor in correct way. You are strongly suggested to follow the instruction shown below in order to avoid such injury.



**Keep the safety guideline**

**Do not use the monitor if it fails**

**If you find something unusual ,**

- ◆ If smoke comes out,
- ◆ If there is a strange smell,
- ◆ If water enters the case,
- ◆ If you drop the monitor or damage the cabinet,



- (1) Turn off the monitor
- (2) Disconnect the power plug from the power point
- (3) Request for repair

Warning and Caution are indicated in this guide and monitor itself.



**Warning**

Fire or electric shock may cause death or serious injury unless you follow the instruction.



**Caution**

Electric shock or other accidents may cause serious injury or damage of your properties.

ENGLISH

# SAFETY GUIDELINES(continued)

ENGLISH



**Warning**

Fire or electric shock may cause death or serious injury unless you follow the instruction below.

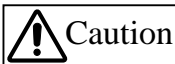
- **If something smells strange or smoke comes from the monitor:**  
Turn off the monitor and disconnect the power plug from the power point immediately. Contact service center after confirming that the smoking has stopped.  
If you continue to operate the monitor with such abnormal condition, it may cause fire or you may receive an electric shock.
- **Do not drop water or a foreign substance on to the monitor.**  
If you drop water or a foreign substance on to the monitor, it may cause fire or an electric shock. If it happens turn off the monitor and disconnect the power plug from the power point and ask service center for instruction.
- **Do not put the monitor on an unstable place.**  
If you put the monitor on an uneven or unstable place, it may fall down and you may be injured. Put the monitor on a flat surface strong enough to take the weight.
- **Do not apply shock to the monitor.**  
If no picture, glass broken, smoke or something is smelling after applying shock to the monitor, turn off the monitor and disconnect the power plug from the power point immediately. Then, call the service center. If you continue to operate the monitor with such abnormal conditions, it may cause fire or you may receive an electric shock.
- **Do not disassemble or modify the monitor.**  
There is high voltage portion inside of the monitor. Disassembling or modification of the monitor may cause fire or electric shock.
- **Do not use the monitor in wet environment.**  
If you use the monitor in a wet place such as bath or shower room, it may cause fire or electric shock. Using the monitor beside a window when snowing or raining or by a seaside are not recommended.
- **Do not damage or modify the power cord.**  
If you put something heavy on the power cord or pull, squeeze, heat the cord, it may be damaged and it may cause fire or electric shock. If the power cord is damaged, call service center.



**Warning**

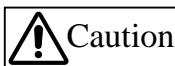
Fire or electric shock may cause death or serious injury unless you follow the instruction.

- **The enclosed power cord must be used!**  
Failure to do so may cause electric shock hazard or fire hazard.  
**In USA/Canada**, use a UL LISTED/CSA LABELLED or CERTIFIED power cord set meeting the following specifications :  
Rating: min. 125V, 10A , Length: max. 3.0m , Type: SVT or SJT  
Plug type: NEMA 5-15P figure, Parallel blade, Grounding type
- **Use only the correct voltage power outlet with safety ground connection!**  
100 - 120 V for USA, Canada, etc. 200 - 240 V for Europe, etc.  
(This monitor will automatically adjust to the input voltage 100 - 120 / 200 - 240V.)
- **Be careful of power cord connection!**  
Before inserting the plug of the power cord into a socket of the correct voltage, check that the connection portion of the power cord is clean (with no dust). Then, insert the plug of power cord into the socket firmly, otherwise it may cause electric shock or fire hazard.
- **Do not touch the power plug when lightning is close to you.**  
You may receive an electric shock.
- **Do not touch the power plug with wet hands.**  
You may receive an electric shock.
- **Do not obstruct a ventilation hole.**  
If you obstruct a ventilation hole during the operation of the monitor or just after switching off the power, it may cause a fire or electric shock due to heating up the monitor.
  - Do not put the monitor screen side up.
  - Do not put the monitor on a shelf or in a cabinet.
  - Do not put the monitor on a carpet or mattress.
  - Do not cover the monitor with a cloth.



Electric shock or other accidents may cause serious injury or damage to your property.

- **You must to check the user manual of the computer when you connect to the monitor.**  
The weight of the monitor or obstructing the ventilation hole of the computer equipment may cause distortion or damage of the computer equipment.
- **Disconnect the power plug from the power point when you carry the monitor.**  
Carrying the monitor without disconnecting the power plug from the power point may damage the cord and cause a fire or electric shock. You are advised to carry the monitor with two persons. Handle with care when you carry the monitor, particularly take care of glass screen.
- **When you disconnect the power plug.**  
You have to grasp the power plug itself, do not pull the power cord.  
If you pull the power cord, you may damage it and it may cause a fire or electric shock.  
Do not touch the power plug just after disconnecting it from the power point or you may receive an electric shock.
- **Disconnect the power plug from the power point when you don't use the monitor for a long time.**  
This is just for your safety.
- **Do not put the monitor in atmosphere with soot, steam, high humidity, and dust.**  
It may cause a fire or electric shock.
- **Do not put the monitor in high temperature atmosphere.**  
Do not put the monitor in the place exposed to the direct rays of the sun or inside car under the burning sun for a long period of time. Heat may cause a fire, transformation, or melting of the monitor.
- **Do not put things on the monitor.**  
Do not put things on the monitor or give some shock to the monitor.  
The monitor may fall down or drop from a desk. And it may cause injury.



You may have serious injury or your property may be damaged unless you follow the instruction below.

- **Do not bundle the power cord.**  
It will be heated up or it may cause a fire.
- **Caution for 200 - 240V operation only**  
This equipment relies on the protective devices in the building installation for short - circuit and over - current protection. Refer to the following table for the suitable number and location of the protective devices which should be provided in the building installation.

**INFORMATIVE EXAMPLES OF PROTECTIVE DEVICES IN SINGLE - PHASE EQUIPMENT OR SUB - ASSEMBLIES**

	Protection against	Minimum number of fuses or circuit - breaker poles	Location
Case A: Equipment to be connected to POWER SYSTEMS with earthed neutral reliably identified, except for Case C below.	Earth faults	1	Phase conductor
	Overcurrent	1	Either of the two conductors
Case B: Equipment to be connected to any supply, including IT POWER SYSTEMS and supplies with reversible plugs, except for Case C below.	Earth faults	2	Both conductors
	Overcurrent	1	Either of the two conductors
Case C: Equipment to be connected to 3 - wire power systems with earthed neutral reliably identified.	Earth faults	2	Each phase conductor
	Overcurrent	2	Each phase conductor

Verify that the protective devices in the building installation meets the conditions in the table prior to installing the equipment.

- **Remove the power cord for complete isolation!**  
For complete isolation from the power source, remove the power cord from the monitor or from the wall socket.

# SAFETY GUIDELINES(continued)

## Precautions

### ● Installation environment

Do not obstruct a ventilation hole.

Do not put the monitor on carpet or blanket, or near a curtain which has a possibility of obstructing a ventilation hole of the monitor.

Do not put the monitor in the following places.

- ◆ Hot places such as near heater, place exposed to the direct rays of the sun.
- ◆ A place where the temperature is widely changing.
- ◆ Places with soot, dust or high humidity.
- ◆ Poor air ventilation place.
- ◆ Place near fire.
- ◆ A wet place such as bathroom, or shower room.
- ◆ Place where you can trip over it.
- ◆ Always vibrating or strongly vibrating places.
- ◆ Distorted or unstable places.

### ● How to view the monitor.

If you use the monitor in too dark a room, your eyes may become tired. Please use it in a reasonably bright room.

Avoid direct rays of the sun or room falling on to the screen in order to prevent eye fatigue.

To use the monitor for a long time may cause damage to your eyes such as "Dry eye" or "Short-sightedness"

Please take a rest of 10-15 min. for every one hour viewed. Please watch the monitor in downward direction.

### ● How to clean the monitor.

Before cleaning the monitor, turn off the monitor and disconnect the power plug from the power point.

When cleaning the monitor, do not spray directly the screen or cabinet with cleaner.

Use a clean, dust free, dry and soft cloth. If it is not enough, then use a cloth with non-alcoholic or non-ammoniac detergent.

Do not rub the surface of the screen with ball-point-pen or screw-driver etc.

### ● Prevention of an obstacle to TV/Radio receivers

This monitor has been designed pursuant to the FCC Rules and so on in order to prevent a problem to TV/Radio receivers.

However, this monitor may cause a problem to TV/Radio receivers if you put this monitor close to them.

### ● Precautions for the monitor

- Use the attached signal-cable when you connect the monitor with PC equipment. Do not use other signal-cables.

- Confirm the connector is fixed tightly when the signal cable is connected.

Also confirm the screws on the connector are tightened.

- Plug the power cord of the monitor into a different socket from that for other equipment, such as TV, Radio etc..

- Use a plug with ground terminal and make sure that it connects to the ground.

### ● Precautions for TV & Radio

- Keep the monitor away from TV or Radio.

- Adjust TV or radio antennas in order for the monitor not to receive interference.

- The antenna cable of TV or Radio should be kept away from the monitor.

- Use a coaxial cable for antenna.

You can check if this monitor influences TV/Radio receivers by turning off all other equipment other than the monitor.

If you can find a problem receiving TV/Radio when using the monitor, check the instructions mentioned above.

### ● Precaution during transportation

Please pay attention when you transport this monitor because it is heavy.

Furthermore, use the specific carton box and its packaging materials when the monitor is transported.

### ■ FCC (Federal Communications Commission) Statement Warning

**WARNING:** This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

**INSTRUCTIONS TO USERS:** This equipment complies with the requirements of FCC (Federal Communication Commission) equipment's provided that following conditions are met.

**CAUTION:** Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

(1) Power cord : The grounded power supply cord must be used.

(2) Signal cable : The provided signal cable must be used.



# INSTALLATION INSTRUCTIONS

## Standard accessories

- This product is complete with the display monitor, plus the accessories shown below.
- If any of these accessories is missing, please contact your dealer.



Instruction manual  
(this book)



Remote-control  
transmitter



Size AA  
batteries x 2



Power cable



Signal cable, mini-  
D-sub 15-pin



M4 screw x 2



Hook x 2

- Read the instruction manual (this book) and the warranty card carefully and keep them in a safe place for handy reference.
- Retain the packing materials for use in future shipping or relocation.

## Installation

- To preserve the performance of this product and to maintain safety, always use one of the special mount units for installation.
- Special mount units (options): Wall Mount Unit (CMPAK04), Ceiling Mount Unit (CMPAT04)

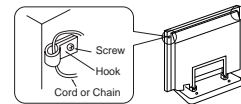
<b>WARNING</b>	<ul style="list-style-type: none"> <li>■ Use one of the special mount units to install this product. A mount of insufficient strength or inadequate design can cause overturning or dropping and result in fire, electrical shock or injury. Please note that this company assumes absolutely no responsibility for personal injuries or property damage caused by use of other mount units or improper installation.</li> </ul>
<b>CAUTION</b>	<ul style="list-style-type: none"> <li>■ Installation of the wall mount unit and ceiling mount unit can be dangerous, so do not attempt this work yourself. Ask your dealer to provide the name of a qualified installer.</li> <li>■ In order to prevent an internal temperature increase, maintain a space of 10cm or more between the sides and other objects such as walls, etc., so that the ventilation holes are not blocked.*</li> </ul>

## Anti-tumble measures

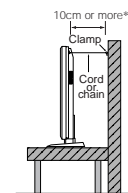
<b>CAUTION</b>	<ul style="list-style-type: none"> <li>■ Have this unit mounted in a stable place. Take measures to prevent it from tumbling down to avoid possible physical injury.</li> </ul>
----------------	---

### Securing to a wall or post

- 1) Using M4 screws (two), fasten the hooks included to the screw holes at both ends of the top of the rear of the set as shown.

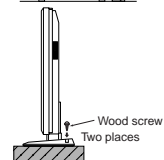


- 2) Using a commercially available cord, chain and clamp, secure the set to a firm wall or post.



### Securing desktop

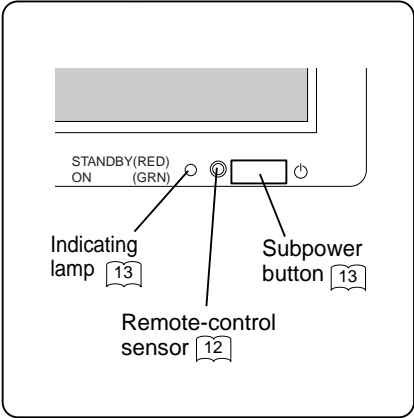
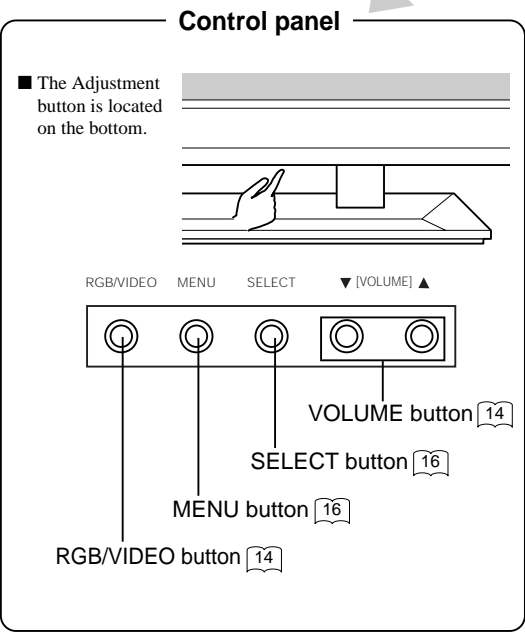
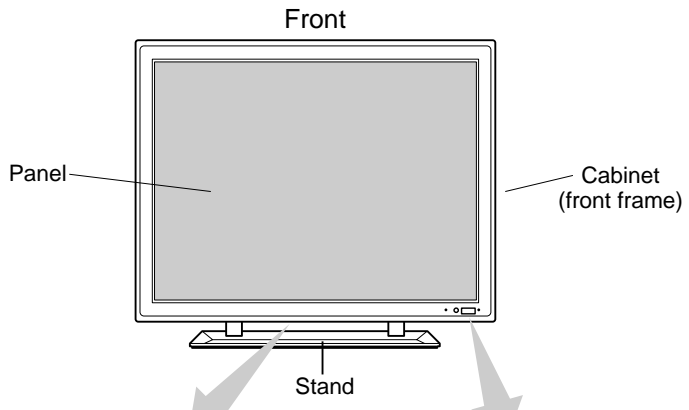
- 1) Using wood screws (two), fasten the set to the clamping screw holes on the rear of the stand as shown.
- 2) Using commercially available wood screws, secure the set firmly in position.



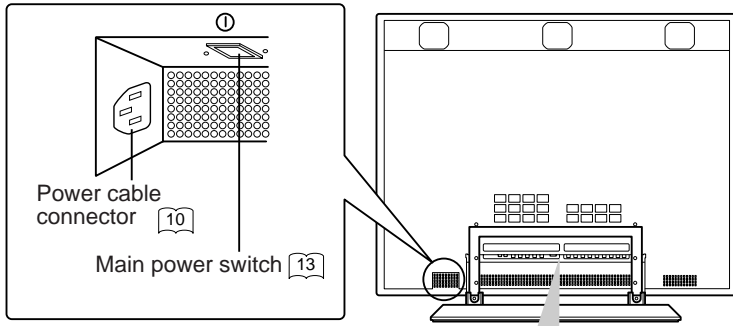
# INSTALLATION INSTRUCTIONS (continued)

## Component Names

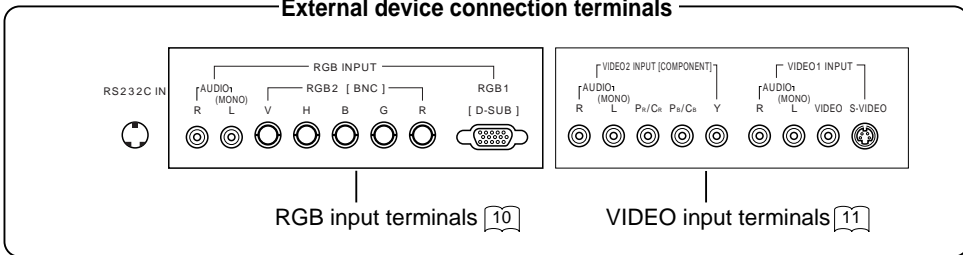
ENGLISH



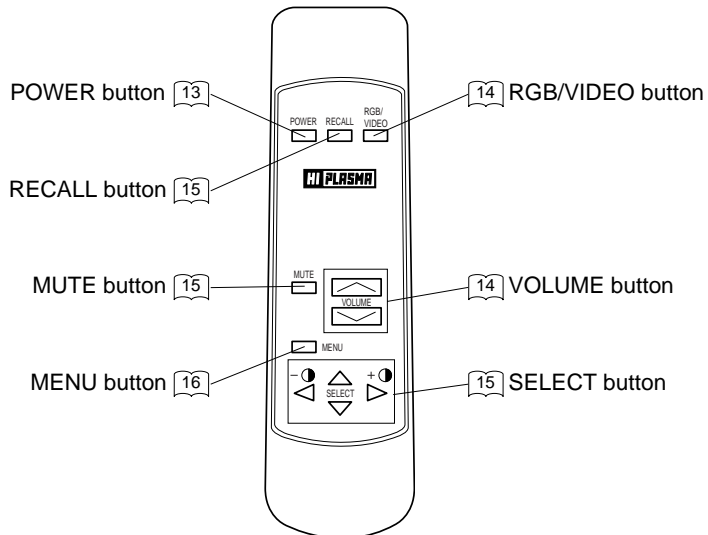
Rear



External device connection terminals



Remote controller



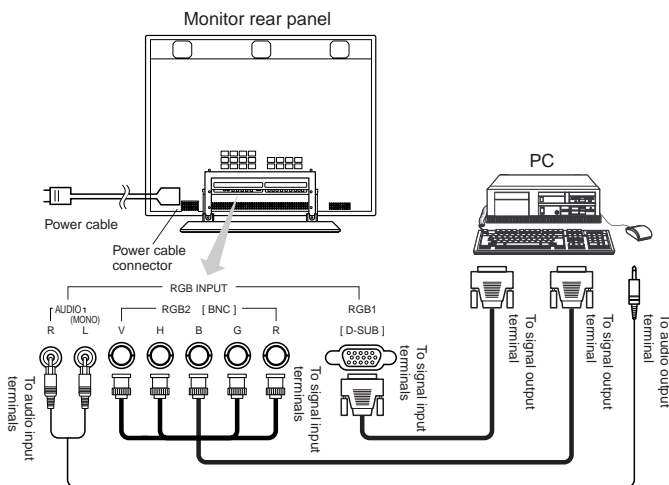
# INSTALLATION INSTRUCTIONS (continued)

## Installation and Cabling

ENGLISH

### Connecting to the PC

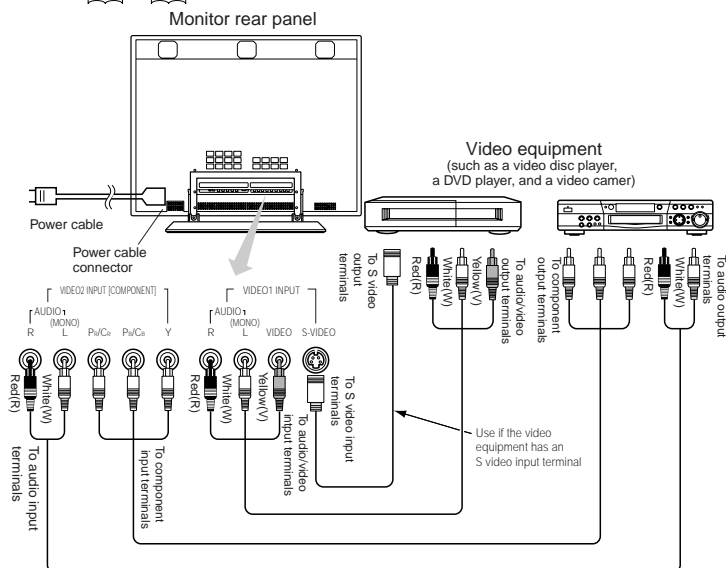
- Read Usage Notes ( 3 to 6 ) carefully to ensure maximum safety before proceeding to these steps:
  - (1) Make sure that the display signals produced by your PC meet the specifications of this product.
    - For the specifications of this product, see Product Specifications ( 28 to 30 ).
  - (2) Choose an appropriate site and install the product on a level table where the stand is secure.
    - Install the monitor to have ready access to a power socket.
  - (3) Make sure that the monitor's power switch is off.
    - The monitor is shipped with the power switch off.
  - (4) Make sure that your PC's power switch is off.
  - (5) Interconnect the signal input terminal (RGB1) on the monitor rear panel and the display signal output terminal of the PC to each other using the signal cable included.
    - Optional cables are needed to connect to the RGB2 input and audio input terminals.
    - If the signal cable included does not match your PC, consult your dealer after reading the section "Signal Input".
  - (6) Insert one end of the power cable included into the rear-panel power cable connector and the other end into a power socket.
    - If a power adapter is used, ground the grounding wire to avoid electrical shocks and radio interference. (Complete grounding before connecting the power plug to a power supply. Before disconnecting the grounding wire, be sure to disconnect the power plug from the power supply first.)
  - (7) Turn on the monitor, then the PC to make sure that a display image appears on the monitor screen.
    - For instructions on turning on the monitor and adjusting its display images, see "Operating Instructions" ( 13 to 21 ).



## Connecting to Video Equipment

(such as a video disc player, a DVD player, or a video camera)

- Read Usage Notes ( [ 3 ] to [ 6 ] ) carefully to ensure maximum safety before proceeding to these steps:
  - (1) Choose an appropriate site and install the product on a level table where the stand is secure.
    - Install the monitor to have ready access to a power socket available.
  - (2) Make sure that the monitor's power switch is off.
    - The monitor is shipped with the power switch off.
  - (3) Make sure that the video equipment's power switch is off.
  - (4) Interconnect the signal input terminal on the monitor rear panel and the video equipment's signal output terminal to each other using an optional cable.
  - (5) Insert one end of the power cable included into the rear-panel power cable connector and the other end into a power socket.
    - If a power adapter is used, ground the grounding wire to avoid electrical shocks and radio interference. (Complete grounding before connecting the power plug to a power supply. Before disconnecting the grounding wire, be sure to disconnect the power plug from the power supply first.)
  - (6) Turn on the monitor, then the video equipment's to make sure that a display image appears on the monitor screen.
    - For instructions on turning on the monitor and adjusting its display images, see "Operating Instructions" ( [ 13 ] to [ 21 ] ).



- If video equipment with an S video input terminal is used, cabling by the S video cable is recommended to provide finer video quality. (If an S video input terminal and a video input terminal connect to the monitor at the same time, S video input would govern.)

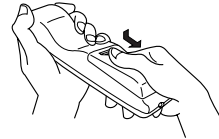
# INSTALLATION INSTRUCTIONS (continued)

## Handling the Remote Controller

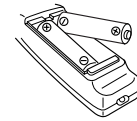
ENGLISH

### Loading Batteries

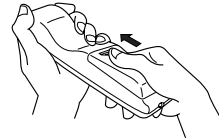
- (1) Open the battery cover.
  - Slide the battery cover towards the arrow mark while pressing it.



- (2) Load batteries.
  - Load two Size AA batteries included observing the correct polarities.
  - When replacing the batteries, always use the R6P AA (or SUM-3) type.

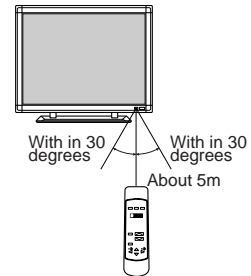



- (3) Close the battery cover.
  - Slide back the battery cover towards the arrow mark.



### Handling the Remote Controller

- Use the remote controller within about 5 m from front of the unit's remote-control sensor and within 30 degrees on both sides.



 <b>CAUTIONS</b>	<ul style="list-style-type: none"> <li>■ Do not use batteries of any kind not recommended for this product. Do not use new and old batteries together. The batteries could explode or leak, resulting in fires, physical injury, or stains.</li> <li>■ When loading batteries, observe their correct polarities as marked on the product. If loaded in the wrong direction, the batteries could explode or leak, resulting in fires, physical injury, or stains.</li> </ul>
<b>TIPS</b>	<ul style="list-style-type: none"> <li>■ Do not drop or impact the remote controller.</li> <li>■ Do not splash the remote controller with water or put it on a wet object to avoid possible failures.</li> <li>■ Before leaving the remote controller out of use for an extended period of time, remove the batteries from it.</li> <li>■ If the remote controller begins to lack responsiveness, replace the batteries.</li> <li>■ Strong light such as direct sunlight impinging on the photoreceptor of the remote control can cause operational failure. Position this unit to avoid direct contact with such light.</li> </ul>

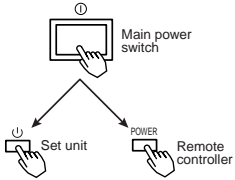
# OPERATING INSTRUCTIONS

ENGLISH

## Turning Power On and Off

- To turn on the set power supply, set the MAIN POWER switch (Ⓜ) of the main unit to ON and then press the SUB POWER button (Ⓜ) or the POWER button of the remote control.
- To turn off the set power supply, press the SUB POWER button (Ⓜ) of the main unit or the POWER button of the remote control, then set the MAIN POWER switch (Ⓜ) to OFF.
  - For normal operations, leave the main power switch (Ⓜ) set to ON and use the sub power button or the Power button of the remote control to turn the power on and off.
  - The indicating lamp lights when the power is turned on.

Indicating lamp	Power status
Lit in red	OFF
Lit or flickering in green	ON



When the indicating lamp blinks in green or the message “POWER SAVE” or “OUT OF FREQUENCY” appears on the screen, there is something unusual about the status of reception. See “Symptoms That Seemingly Appear to be Failures.” [26](#)

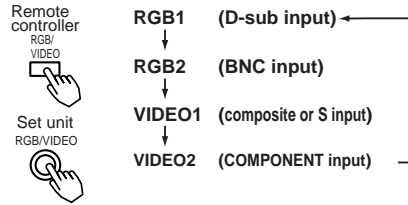
<b>TIPS</b>	<ul style="list-style-type: none"> <li>■ Avoid repeatedly turning the monitor on and off at short time intervals.                             <ul style="list-style-type: none"> <li>● Failures might result from such operation.</li> </ul> </li> <li>■ Turn off the main power switch (Ⓜ) before leaving the monitor out of use for an extended period of time.</li> <li>■ If a power failure occurs while the set is running, it would be powered on upon recovery from the failure. Turn off the unit main power switch before leaving the set.</li> </ul>
-------------	--

# OPERATING INSTRUCTIONS (continued)

## Input Selection

- Press the RGB/VIDEO button on the remote controller or the unit to switch the input in the sequence of RGB1 → RGB2 → VIDEO1 → VIDEO2 → RGB1.

- The kinds of input for which SKIP has been selected with the on-screen display system, EasyMenu (21), are skipped.



## Volume Adjustment

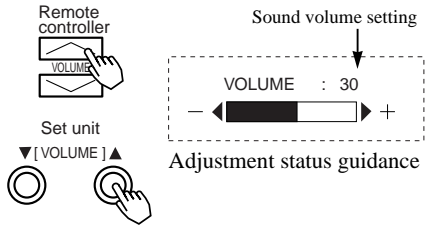
- While the on-screen display system, EasyMenu (16) is not on display, press the remote controller VOLUME button (up/down arrow) or (up/down triangle) (or the unit VOLUME button ▲ or ▼) to adjust the sound volume.

- The adjustment status will be displayed as guidance while you press these buttons.

- While the guidance is on display, press (up arrow) or ▲ to turn up the volume.
- While the guidance is on display, press (down arrow) or ▼ to turn down the volume.

- You can also adjust the sound volume setting via the on-screen display system, EasyMenu (16)

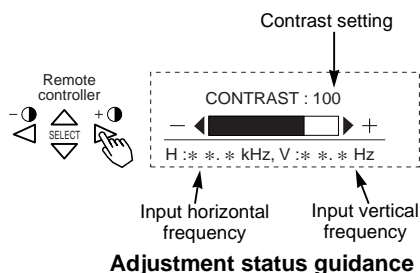
- The sound volume adjustment mode will exit when no keys are entered for 5 seconds. (The adjustment status guidance will disappear automatically.)





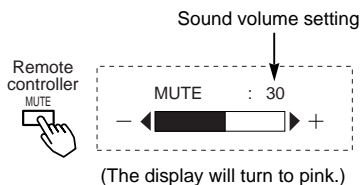
## Contrast Adjustment

- While the on-screen display system, EasyMenu [16], is not on display, press the remote controller SELECT button ◀ or ▶ to adjust the contrast.
  - When you press these buttons, the status of contrast adjustment and the input horizontal (H) and vertical (V) frequencies of the input signal will be displayed in a guidance image.
  - While the guidance is on display, press the ◀ key to narrow the difference between darkness and brightness.
  - While the guidance is on display, press the ▶ key to widen the difference between darkness and brightness.
  - You can also adjust the contrast setting via the on-screen display system, EasyMenu [16].
  - The contrast adjustment mode will exit when no keys are entered for 5 seconds. (The adjustment status guidance will disappear automatically.)



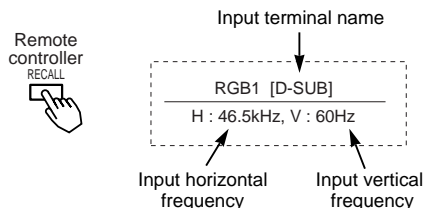
## Sound Mute

- Press the remote controller MUTE button to mute the sound temporarily.
  - When you press the button, [MUTE] (pink) and the status of volume setting will be displayed in a guidance image.
    - While the sound is muted, press the [VOLUME DOWN] button to turn down the volume.
    - While the sound is muted, press the [VOLUME UP] button to cancel the mute.
  - You can also adjust the sound volume setting of the mute via the on-screen display system, EasyMenu [16].
- Press the remote controller MUTE button once again and the mute will be canceled and the guidance will change to VOLUME (blue), enabling the volume to be heard.
  - When MUTE is used, the guide display will continue for 5 sec. and then turn off.
  - The set itself does not have a MUTE button.



## Input Signal Status Display

- Press the remote controller RECALL button to display the status of input signals on the screen.
- Press the remote controller RECALL button once again to exit the screen display.
  - The contrast adjustment mode will exit when no keys are entered for 5 seconds.
  - The set itself does not have a RECALL button.



# OPERATING INSTRUCTIONS (continued)

## On-Screen Display System, EasyMenu

ENGLISH

- Press the MENU button to open an adjustment menu allowing you to complete various adjustments and settings using the SELECT buttons (remote controller  $\triangle$ ,  $\nabla$ ,  $\triangleleft$ , and  $\triangleright$  keys, or the set SELECT key).

- Press the SELECT buttons (remote controller  $\triangle$  and  $\nabla$  keys) to move the pink marker to select an item.

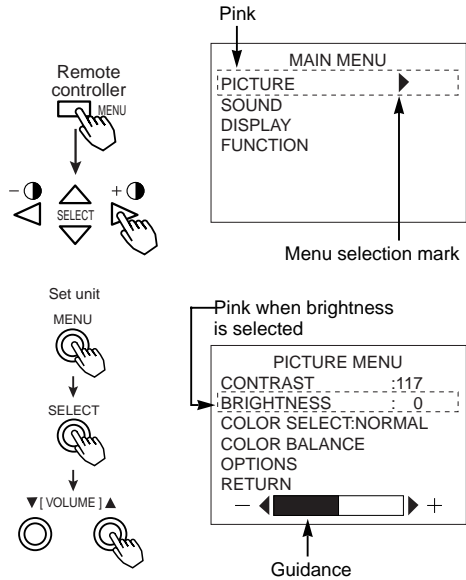
- Press the VOLUME button and the  $\blacktriangle$  and  $\blacktriangledown$  keys of the main unit ( $\triangleleft$  or  $\triangleright$  key of the remote control) to adjust or set the selected item, or to switch the menu.

- When a choice is followed by “:”, it indicates that the choice can be adjusted or changed.

- When a choice is followed by  $\blacktriangle$ , a menu can be opened by pressing the remote-controller SELECT button  $\triangleright$  or the set VOLUME button  $\blacktriangle$ .

- When [RETURN] is selected, press the remote-controller button SELECT  $\triangleleft$  or the set VOLUME button  $\blacktriangledown$  to exit to the original menu

- For information on adjusting and setting choices, see [17] to [21].





- Press the MENU button once again to exit the adjustment menu.
  - The adjustment menu will close automatically when no keys are entered for 10 seconds.

### HINTS

- Burn-in (residual image) can occur if the same image is displayed for an extended time. To reduce this possibility, change the display contents at suitable intervals. To reduce this, it is recommended that you either change the display contents at an appropriate interval or use the Burn In function [18].
- If special images created on a PC or any other equipment (such as those composed of a checker-flag pattern) are displayed across the screen, the hue may be varied depending on the contrast or brightness setting.

## Adjustment Item List





Menu item	Selected characters	Adjustment item			Setup hint	
M A I N	PICTURE (in RGB is selected)	CONTRAST	Contrast	Narrows the gap between brightness and darkness.	Broadens the gap between brightness and darkness.	Adjust for maximum visibility to suit the ambient brightness.
		BRIGHTNESS	Brightness	Black is subdued for increased overall darkness.	Black is set off for increased overall brightness.	Adjust to prevent black from spreading across the screen.
		COLOR SELECT	Color mode	COOL ↑ NORML ↑ WARM ↑ USER	COOL ← ↓ NORML ↓ WARM ↓ USER	Set to the desired colors.
	COLOR BALANCE	R-GAIN	Red gain	Red is weakened.	Red is strengthened.	Sets the color adjustment selected by the user with COLOR SELECT.
		G-GAIN	Green gain	Green is weakened.	Green is strengthened.	
		B-GAIN	Blue gain	Blue is weakened.	Blue is strengthened.	
	OPTIONS	PRESENTATION	Presentation	Sets to PUBLIC.	Sets to THEATER.	It can be selected in 60 Hz vertical frequency or less. Normally set to PUBLIC. Set to THEATER to increase the number of colors, even when the screen is dark.
		GAMMA	Gamma correction	1.0 ↓ 2.2 ↓ 2.8	1.0 ← ↓ 2.2 ↓ 2.8	Normally set to 2.2.
		VIDEO LEVEL	Input signal level	Set to 0.7 V.	Set to 1.0 V.	Normally set to 0.7 V. If white is found to spread across the screen, set to 1.0 V.

















ENGLISH

# OPERATING INSTRUCTIONS (continued)

## Adjustment Item List (continued)

ENGLISH



Menu item	Selected characters	Adjustment item			Setup hint
M A I N  P I C T U R E (in VIDEO is selected)	CONTRAST	Contrast	Narrows the gap between brightness and darkness.	Broadens the gap between brightness and darkness.	Adjust for maximum visibility to suit the ambient brightness.
	BRIGHTNESS	Brightness	Black is subdued for increased overall darkness.	Black is set off for increased overall brightness.	Adjust for visibility to suit the darkness of black hair.
	COLOR	Color (color density)	Lightens colors.	Darkens colors.	Adjust for desired density, somewhat for lighter colors for a natural look.
	TINT	Tint	Enhances red and weakens green.	Enhances green and weakens red.	Adjust for a nice looking skin color.
	SHARPNESS	Sharpness	Softens display images.	Sharpens display images.	Normally set to middle, and towards- for increased softness.
M A I N  O P T I O N S	COLOR SELECT	Color mode	COOL ↑ NORMAL ↑ WARM	COOL ↓ NORMAL ↓ WARM	Set to the desired colors.
	PRESENTATION	Presentation	Sets to PUBLIC.	Sets to THEATER.	Normally set to PUBLIC. Set to THEATER to increase the number of colors, even when the screen is dark.
	GAMMA	Gamma correction	1.0 ↑ 2.2 ↑ 2.8	1.0 ↓ 2.2 ↓ 2.8	Normally set to 2.2.
	VIDEO LEVEL	Input signal level	NORMAL ↑ +10% ↑ +20%	NORMAL ↓ +10% ↓ +20%	Normally set to NORMAL. If white is found to spread across the screen, set to +10% or +20%.
M A I N  S O U N D	VOLUME	Sound volume	Turns down the volume.	Turns up the volume.	Adjust for the desired sound volume. 
	BALANCE	Sound balance	Enhances left-side sound.	Enhances right-side sound.	Adjust to taste.
	TREBLE	Treble	Suppresses treble.	Enhances treble.	
	BASS	Bass	Suppresses bass.	Enhances bass.	
	MUTE VOLUME	Mute volume	Turns down the sound volume. Minimum 0.	Turns up the sound volume. Maximum pre-mute sound volume.	Varies the sound volume when the MUTE button is pressed. 



Menu item	Selected characters	Adjustment item			Setup hint		
M A I N	DISPLAY (in RGB is selected)	DISPLAY AREA	NORMAL	NORMAL ↔ FULL		Set the display as desired. Images are easier to adjust at the NORMAL setting. <span style="float: right;">24</span>	
			SXGA signal vertical frequency 60Hz during reception	NORMAL ↑ UP/LF ↑ UP/RI ↑ DW/LF ↑ DW/RI ↑ CENTER ←	NORMAL ↓ UP/LF ↓ UP/RI ↓ DW/LF ↓ DW/RI ↓ CENTER ←		
		H.POSITION	Horizontal position	Moves the horizontal position to left. 	Moves the horizontal position to right. 		Adjust the left-side display position.
		V.POSITION	Vertical position	Moves down the vertical position. 	Moves up the vertical position. 		Adjust the vertical display position.
		CLOCK	Dot clock frequency	Reduces the dot clock frequency (shrinks the right side). 	Increases the dot clock frequency (expands the right side). 		Adjust for maximum character clarity. <span style="float: right;">27</span>
	PHASE	Dot clock phase	Slows the dot clock phase (shifts slightly to left). 	Advances the dot clock phase (shifts slightly to right). 	Adjust for clear character visibility. <span style="float: right;">27</span>		
	DISPLAY INIT.	INITIALIZE	Display initialization	Set to Yes. The Display menu adjustment values will be cleared and the Display menu will return.	Set to No. The Display menu will return, the adjustment values will not be cleared.	Clear the user signal preset data. <span style="float: right;">23</span>	
	DISPLAY (in VIDEO is selected)	DISPLAY SIZE	Display size	NORMAL ↓ WIDE ↓ SQ.N ↓ SQ.W ←	NORMAL ← ↓ WIDE ↓ SQ.N ↓ SQ.W	Set SQ.N or SQ.W when a squeezed signal is to be input. NORMAL or WIDE should be used normally. <span style="float: right;">24</span>	
		H.POSITION	Horizontal position with an aspect ratio of 4: 3 and WIDE setting.	Moves the horizontal position to left. 	Moves the horizontal position to right. 	Adjust when images and text around the edge of the screen are difficult to see. Operates when the screen size is WIDE or SQ.WIDE. <span style="float: right;">24</span>	
			Horizontal position with an aspect ratio of 16: 9 and WIDE setting.	Moves the horizontal position to left. 	Moves the horizontal position to right. 		
V.POSITION	Vertical position with an aspect ratio of 4: 3 and WIDE setting.	Moves down the vertical position. 	Moves up the vertical position. 				

# OPERATING INSTRUCTIONS (continued)

## Adjustment Item List (continued)

ENGLISH

Menu item		Selected characters	Adjustment item			Setup hint	
M A I N	FUNCTION	LANGUAGE	Language selection	ENGLISH (E) ↑ DEUTSCH (D) ↑ ESPAÑOL (N) ↑ ITALIANO (I) ↑ FRANÇAIS (F)	ENGLISH (E) ↓ DEUTSCH (D) ↓ ESPAÑOL (N) ↓ ITALIANO (I) ↓ FRANÇAIS (F)	The default is ENGLISH.	
		AUTO FREQ.	Input status automatic display	Set to OFF.	Set to ON.	Set to OFF if you find the frequency display appearing upon signal change embarrassing.	
		HALFTONE	Half tone	Set to OFF. Half tone display is not possible when the Adjustment menu screen is opened.	Set to ON. Half tone display is possible when the Adjustment menu screen is opened.	Set to OFF when the border(Half tone) of the Adjustment menu is bothersome.	
	FUNCTION (in RGB is selected)	INTERPOLATION	Enlargement	Set to DOUBLE.	Set to LINEAR.	Set to DOUBLE to see characters or images crisp or to LINEAR to view them smooth.	
	FUNCTION	VIDEO 1	LINE INTP.	Line correction	Set to OFF.	Set to ON.	Set to ON when playing a 3D-video disc. Set to OFF in most cases.
			3D COMB	Three-dimensional Y/C separation	Set to OFF.	Set to ON.	Set to OFF if video images appear unnatural. Set to ON in most cases.
		VIDEO SYSTEM	Video system	AREA1 ↑ AREA2 ↑ NTSC ↑ PAL ↑ SECAM ↑ 4-NTSC ↑ M-PAL ↑ N-PAL	AREA1 ↓ AREA2 ↓ NTSC ↓ PAL ↓ SECAM ↓ 4-NTSC ↓ M-PAL ↓ N-PAL	Select the color system that corresponds to the video input signal.  Note : NTSC,PAL,SECAM and NTSC 4.43 are switched automatically when AREA 1 is set.  NTSC,M-PAL and N-PAL are switched automatically when AREA 2 is set.	
		VIDEO 2	COMPONENT SD1	480i signal color matrix	Set to Cb/Cr to suit the Y/CB/CR signals.	Set to Pb/Pr to suit the Y/PB/PR signals.	Set to suit the color matrix of the input signal.
			COMPONENT SD2	European SDTV signal color matrix			
	COMPONENT HD1		480P signal color matrix				
COMPONENT HD2	720P signal color matrix						
COMPONENT HD3	1080i signal color matrix						

Menu item		Selected characters	Adjustment item			Setup hint	
M U N I T N	F A C T I O N	INPUT SELECT	RGB1 INPUT	RGB1 input selection	Sets to SKIP. Do not select when switching inputs.	Sets to SELECT. Select when switching inputs.	Setting an unused jack to SKIP can accelerate switching speed. In this case, the selected jack will not be displayed on the screen.
			RGB2 INPUT	RGB2 input selection			
			VIDEO1 INPUT	VIDEO1 input selection			
			VIDEO2 INPUT	VIDEO2 input selection			
			RGB1 SOUND	RGB1 audio			
			RGB2 SOUND	RGB2 audio			
	BURN REDUCTION	SCREEN SAVER	Burn-in reduction function	Sets to OFF.	Sets to ON.	The image will move automatically to reduce burn-in. The amount of movement is set with "Moving Dots" and the move time is set with "Moving Timer" (1 - 60 min.). (Use zero (0) to check the movement range. The movement time would be approximately 1 sec.)	
		MOVING DOTS	Amount of screen movement selection.	Reduces the amount of movement.	Increases the amount of movement.		
		MOVING TIMER	Movement time interval selection.	Reduces the time interval.	Increases the time interval.		
		INVERSE	Color inversion	Sets to OFF. There is no color inversion.	Sets to ON. There is color inversion.		
WHITE		White	Sets to YES. The Pattern menu returns.(The display is not all white.)	Sets to NO. The display is all white and the Pattern menu returns.	Reduces panel residual images when executed after displaying still images.		

# OTHER FEATURES

## Automatic Store

ENGLISH

- Approximately 1 sec. after adjustment is completed, the adjustments will be recorded as shown in the table below.

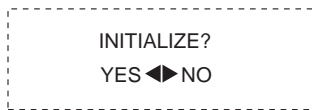
Item	Display	Registration condition	Reproduction condition
Sound volume Sound balance Treble Bass Mute volume Input status automatic display Half tone Enlargement Line correction Three-dimensional Y/C separation HD signal Input select	VOLUME BALANCE TREBLE BASS MUTE VOLUME EASY MENU HALF TONE INTERPOLATION LINE CALE 3D Y/C COMPONENT INPUT SELECT	One set can be recorded.	During normal signal reception.
Brightness Contrast Gamma correction Input signal level Display area	BRIGHTINES CONTRAST GAMMA VIDEO LEVEL DISPLAY AREA	One set can be recorded during common RGB1, RGB2 input; one set of two can be recorded during normal signal reception with common VIDEO 1, VIDEO 2 input.	During normal signal reception.
Horizontal position Vertical position Dot clock frequency Dot clock phase	H.POSITION V.POSITION CLOCK PHASE	One group can be recorded for each signal mode.	During recording and when the same signal mode is detected.

- The previously recorded items will be lost.
- The signal mode can be identified by the horizontal/vertical sync frequency and the sync signal polarity. Different signals with which all the elements are the same or similar will be handled as the same signal.
- RGB1 and RGB2 inputs have common elements that can be recorded for each signal mode. Because of this, when the contents are recorded with RGB1 (or RGB2), there may be loss of adjustment during RGB2 (or RGB1) reception in the same signal mode.



### Reset (Settings Initialization)

- The Easy Menu shown to the right will be displayed when the SELECT button is used to select DISPLAY and moreover DISPLAY INT is selected from the On-screen Display System Easy Menu [16] during RGB1/RGB2 input. If the ◀ key (select Yes) of the SELECT button is pressed at this time, the user adjustment values in the table below for the signal currently being received will be deleted and the factory settings will be restored.
- Pressing the ▶ key (select No) cancels deletion and returns the DISPLAY menu.



#### DISPLAY menu item

Horizontal position	H.POSITION
Vertical position	V.POSITION
Dot clock frequency	CLOCK
Dot clock phase	PHASE

### Signal Check

- The status of signal reception is checked automatically and the result is displayed on the screen.

Status	Display	Example
Signals are received normally.	<ul style="list-style-type: none"> <li>•The input terminal and the horizontal and vertical frequencies are displayed in a guidance image.</li> </ul>	<p>Eithe VIDEO1 or VIDEO2 is displayed on VIDEO input.</p>
A sync signal could not be detected. *Also includes the status of the VESA-DPMS sync signal.	<ul style="list-style-type: none"> <li>•The guidance message "POWER SAVE" is displayed for about 5 seconds.</li> <li>•In the event of continued absence of a sync signal, the power indicating lamp flickers and the monitor enters power save mode.</li> </ul>	
The input signal does not meet display specifications or erratic. [28] [30]	<ul style="list-style-type: none"> <li>•Displays OUT OF FREQUENCY. and the Guide. (After 5 sec. have elapsed, the display darkens and display continues until the correct signal is received.)</li> </ul>	

# OTHER FEATURES (continued)

## Switching the Display Method

ENGLISH

- The display method can be switched by changing the settings of the display area (when the RGB input jack is selected) or display size (when the Video input jack is selected).

- Switching when the RGB input jack is selected





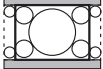

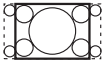
Input signal ( [30] ) (Resolution)	Display area setting (DISPLAY AREA)	
	NORMAL (normal number of pixels)	FULL (expanded number of pixels)
640 x 400	640 x 400	1024 x 768 <sup>1)</sup>
640 x 480	640 x 480	
800 x 600	800 x 600	
832 x 624	832 x 624	
1024 x 768	1024 x 768	
1280 x 1024	1024 x 768 <sup>2)</sup> (Squeezed display, partial display)	

- 1) The expanded processing method ( [20] INTERPOLATION) becomes effective.
- 2) The display status and display area is changed each time the SELECT button is pressed, or each time the < or > keys of the remote control are pressed. (Refer to [19] Display Area) Display may not be correct in some cases, depending on the signal conditions.

### HINTS

- To maximize display performance, it is recommended that the 1024 x 768 (vertical frequency 60Hz) input signal specifications be used.

- Switching when the Video Input jack is selected

Problem	This setting is used normally.	When it is desired to slightly enlarge images when black stripes appear at the top and bottom of the screen.	When it is desired to view a Squeeze signal image.	When it is desired to slightly enlarge a Squeeze signal image.
Display size setting (DISPLAY SIZE)	NORMAL	WIDE	SQ.N	SQ.W
	Normal display	Enlarge the entirety	Vertical compression	Enlarge horizontally
Input signal	4:3 signal 	4:3 signal 	Squeeze signal <sup>1)</sup> 	
Display screen				
Remarks		All four edges of the screen are missing. Adjust the horizontal and vertical positions [19] when text is missing.		The left and right side of the screen are missing. Adjust the horizontal position [19] when text is missing.


- 1) The video signal when a screen with an aspect ratio (the ratio between the sides and width of the screen) of 16: 9 is compressed to 4: 3.

\*  indicates signals and  indicates screens in the chart above

## Power Save Mode


- When the RGB input jack is selected
- This unit meets the power-saving requirements of VESA and International Energy Program.  
When this unit is connected to a VESA DPMS computer, the Power Save (Standby/Suspend/Off) mode can be set to be activated automatically when the computer is not being used to reduce power consumption by this unit.

RGB sync signal	Horizontal	Yes	No	Yes	No
	Vertical	Yes	Yes	No	No
Video signal		Active (normal display)	Blank (no video)		
Operation mode		On	Off <sup>1)</sup>		
Display lamp		Lights green	Blinks green		
Power consumption		390W	7W or less		



1) Press the MENU or SELECT button to enter sound mode. 

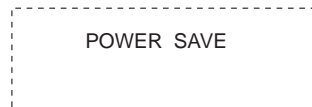
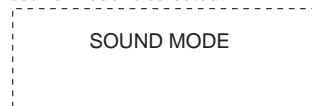
- When the Video Input jack is selected
- When there is no video signal input, the power-saving system operates to reduce the power consumed by the sunit.

Video signal	Yes	No
Operation mode	On	Off <sup>1)</sup>
Screen display	Normal display	Blank (no video)
Display lamp	Lights green	Blinks green
Power consumption	390W	7W or less

1) Press the MENU or SELECT button to enter sound mode. 

## Sound Mode

- If you press the MENU mode while the monitor has power save mode  turned off, sound output is enabled by cancelling the off setting of power save mode.
  - The Easy Menu shown to the right appears on the screen when the sound mode is selected.  
After approximately 5 sec., the brightness of the Easy Menu lowers and display continues until the sound mode is canceled.
  - In sound mode, sound volume can be adjusted.
- Press the MENU button to cancel sound mode.
  - The power save mode  is activated when this mode is canceled.
  - When an input signal is present, the sound mode is canceled automatically, the On mode is activated and the input signal is displayed.





















# TROUBLESHOOTING

## Symptoms That Seemingly Appear to be Failures

ENGLISH

- Make the checks suggested below depending on the symptoms observed. If the symptoms remain uncorrected, contact your dealer.

 <b>WARNING</b>		■ Customer servicing can be hazardous.																											
Symptom		Point to check	See page																										
<ul style="list-style-type: none"> <li>● The screen appears blank with the power-indicating lamp off.</li> </ul>		→Check the way the power cable is connected. →Make sure the main power switch is on. →Press the power switch.	10 11 13																										
<ul style="list-style-type: none"> <li>● The message "POWER SAVE" is displayed.</li> </ul>		No sync signal is detected. →Check the way the signal cable is connected. →Check to see if the input selection matches the connection terminal. →When RGB input is selected, make sure the computer switch is turned on and the power save mode of the computer is off.	10 11 13																										
<ul style="list-style-type: none"> <li>● The screen appears blank with the power indicating lamp flickering in green.</li> </ul>				<ul style="list-style-type: none"> <li>● The message "OUT OF FREQUENCY" is displayed.</li> </ul>		An input signal is not received normally. →Check to see if the input signal matches the monitor specifications. →Check the way the signal cable is connected.	10 11 23 28 30	<ul style="list-style-type: none"> <li>● The power indicating lamp is normally lit but the screen appears blank.</li> </ul>		→Check the contrast and brightness settings (adjust them for higher contrast and brightness). →Check the way the signal cable is connected.	10 11 15 17	<ul style="list-style-type: none"> <li>● The display image appears flowing slantwise.</li> </ul>		→Adjust the dot clock frequency and phase. (Adjust the dot clock frequency first, the dot clock phase next.)	19 27	<ul style="list-style-type: none"> <li>● Text displayed across the screen appears vertically streaked, with the characters in vertical columns blurred.</li> </ul>		<ul style="list-style-type: none"> <li>● Text displayed across the screen appears blurred.</li> </ul>		→Adjust the dot clock phase for the clearest viewing.	19 27	<ul style="list-style-type: none"> <li>● A fine pattern flickers when displayed on the screen.</li> </ul>		<ul style="list-style-type: none"> <li>● The remote controller does not work.</li> </ul>		→Check to see if the batteries are loaded in the remote controller in opposite direction. →Check to see if the batteries in the remote controller are OK.	12	<ul style="list-style-type: none"> <li>● There are locations on the screen that are different from the periphery (*).                      *Points that do not light, points with brightness different from that of the periphery, points with color different from that of the periphery, etc.</li> </ul>	
<ul style="list-style-type: none"> <li>● The message "OUT OF FREQUENCY" is displayed.</li> </ul>		An input signal is not received normally. →Check to see if the input signal matches the monitor specifications. →Check the way the signal cable is connected.	10 11 23 28 30																										
<ul style="list-style-type: none"> <li>● The power indicating lamp is normally lit but the screen appears blank.</li> </ul>		→Check the contrast and brightness settings (adjust them for higher contrast and brightness). →Check the way the signal cable is connected.	10 11 15 17																										
<ul style="list-style-type: none"> <li>● The display image appears flowing slantwise.</li> </ul>		→Adjust the dot clock frequency and phase. (Adjust the dot clock frequency first, the dot clock phase next.)	19 27																										
<ul style="list-style-type: none"> <li>● Text displayed across the screen appears vertically streaked, with the characters in vertical columns blurred.</li> </ul>				<ul style="list-style-type: none"> <li>● Text displayed across the screen appears blurred.</li> </ul>		→Adjust the dot clock phase for the clearest viewing.	19 27	<ul style="list-style-type: none"> <li>● A fine pattern flickers when displayed on the screen.</li> </ul>		<ul style="list-style-type: none"> <li>● The remote controller does not work.</li> </ul>		→Check to see if the batteries are loaded in the remote controller in opposite direction. →Check to see if the batteries in the remote controller are OK.	12	<ul style="list-style-type: none"> <li>● There are locations on the screen that are different from the periphery (*).                      *Points that do not light, points with brightness different from that of the periphery, points with color different from that of the periphery, etc.</li> </ul>		→High-precision technology is used to manufacturing the plasma display panel but, in some cases, there are minor defects in some parts of the screen. Please note that this is not a malfunction.	—												
<ul style="list-style-type: none"> <li>● Text displayed across the screen appears blurred.</li> </ul>		→Adjust the dot clock phase for the clearest viewing.	19 27																										
<ul style="list-style-type: none"> <li>● A fine pattern flickers when displayed on the screen.</li> </ul>				<ul style="list-style-type: none"> <li>● The remote controller does not work.</li> </ul>		→Check to see if the batteries are loaded in the remote controller in opposite direction. →Check to see if the batteries in the remote controller are OK.	12	<ul style="list-style-type: none"> <li>● There are locations on the screen that are different from the periphery (*).                      *Points that do not light, points with brightness different from that of the periphery, points with color different from that of the periphery, etc.</li> </ul>		→High-precision technology is used to manufacturing the plasma display panel but, in some cases, there are minor defects in some parts of the screen. Please note that this is not a malfunction.	—																		
<ul style="list-style-type: none"> <li>● The remote controller does not work.</li> </ul>		→Check to see if the batteries are loaded in the remote controller in opposite direction. →Check to see if the batteries in the remote controller are OK.	12																										
<ul style="list-style-type: none"> <li>● There are locations on the screen that are different from the periphery (*).                      *Points that do not light, points with brightness different from that of the periphery, points with color different from that of the periphery, etc.</li> </ul>		→High-precision technology is used to manufacturing the plasma display panel but, in some cases, there are minor defects in some parts of the screen. Please note that this is not a malfunction.	—																										

## Actions to Correct Abnormal Displays

- When RGB input is selected, the display screen may not be normal in some cases, depending on the system devices connected. When this happens, always make the following adjustments.

Symptom 1	Text displayed across the screen appears vertically streaked, with some characters blurred (display 1). The display image appears flowing (display 2) (RGB input).	
Example	<p><b>Display 1</b></p>	<p><b>Display 2</b></p>
Adjustment procedure	<ol style="list-style-type: none"> <li>① Press MENU button to open the adjustment menu.</li> <li>② Press the ▾ key of the SELECT button 2 times and select DISPLAY.</li> <li>③ Press ▷ to open the DISPLAY menu.</li> <li>④ Press the ▾ key 3 times and select CLOCK. (Adjust the clock by displaying a fine pattern, such as a character string, or vertical streak pattern across the screen.)</li> </ol>	
	<ol style="list-style-type: none"> <li>⑤ Press ▷ or ◁ to make the text appear uniform across the screen.</li> <li>⑥ If the text appears blurred across the screen, make the adjustment instructed in Symptom 2.</li> </ol>	<ol style="list-style-type: none"> <li>⑤ Press ▷ or ◁ to make the text appear without flickering.</li> </ol>

■ The display image may be momentarily disturbed during clock adjustment but this is not a failure.

Symptom 2	Text displayed across the screen appears blurred in its entirety (display 3). A fine pattern flickers when displayed on the screen (display 4).	
Example	<p><b>Display 3</b></p>	<p><b>Display 4</b></p>
Adjustment procedure	<ol style="list-style-type: none"> <li>① Press MENU button to open the adjustment menu.</li> <li>② Press the ▾ key of the SELECT button 2 times and select DISPLAY.</li> <li>③ Press ▷ to open the DISPLAY menu.</li> <li>④ Press the ▾ key 4 times and select PHASE. (Adjust the phase by displaying a fine pattern, such as a character string, or vertical streak pattern across the screen.)</li> </ol>	
	<ol style="list-style-type: none"> <li>⑤ Press ▷ or ◁ to make the text appear clean across the screen.</li> </ol>	<ol style="list-style-type: none"> <li>⑤ Press ▷ or ◁ to make the text appear without flickering.</li> </ol>

# PRODUCT SPECIFICATIONS

■ Product specifications and designs are subject to change without notice.

ENGLISH

## General Specifications

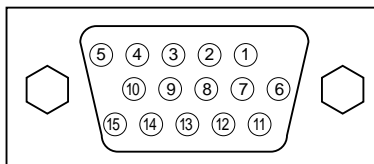
Type		CMP307XU	
Plasma Display Panel	Effective screen size	Approx. 37inches, Aspect ratio 4:3 (753 mm (H), vertical 564 mm (V))	
	No. of pixels	1024 (H) x 768 (V) pixels	
	Pixel pitch	0.735mm (H) x 0.735mm (V)	
	Display color adjustment	2,090,000 colors / 16,700,000 colors	
	Brightness / contrast	150cd/m <sup>2</sup> (brightness) at white peak; 400: 1 (standard) in a dark room.	
	Viewing angle	Horizontal/vertical 160 degrees or more.	
Input signals	Input terminals	RGB input	VIDEO input
		RGB1 input terminal : mD-Sub 15 pin x 1 RGB2 input terminal : BNC x 5 RGB audio input terminal : RCA pin (L/R) x 1	VIDEO1 video input terminal : Composite video RCA pin x 1 VIDEO1 S video input terminal : S VIDEO, S terminal x 1 VIDEO1 audio input terminal : RCA pin (L/R) x 1 VIDEO2 video input terminal : Composite video RCA pin x 3 (Y,Pb/Pr,Cb/CR) VIDEO2 audio input terminal : RCA pin (L/R) x 1
	Video signals	0.7 V/1.0 Vp, analog RGB	NTSC, 480i, 480p, 720p, 1080i
	Audio signals	L/R 470mV, high impedance	L/R 470mV, high impedance
	Sync signals	H/V separate, TTL level	—
		H/V composite, TTL level	—
		Sync on green, 0.3 Vp-p	—
Synchronizing signal frequency	Horizontal	24kHz ~ 64kHz	—
	Vertical	50Hz ~ 75Hz	—
Video clock frequency	108MHz or less		—
Color density (at white peak)	9300K + 6MPCD (normal)	9400K - 9MPCD (normal)	
Speaker output	2W+2W (EIAJ) (10cm x 3cm built-in speaker x 2)		
Input power	AC100 - 120 / 200 - 240V(automatically selected) 4.3A / 2.2A Power consumption 390W		
External dimensions	884 (W) x 684 (H)x 99.7 (D) (mm) : (excluding the stand) 884 (W) x 766 (H)x 300 (D) (mm) : (including the stand)		
Mass	29.8 kg (excluding the stand), 32.8 kg (including the stand)		
Ambient conditions	Temperature	Operating: 5°C to 35°C, Storage : 0°C to 40°C	
	Relative humidity	Operating: 20% to 80%, Storage : 20% to 90% (non-condensing)	

- 28 ■ The monitor takes at least 30 minutes to attain the status of optimal picture quality.  
 ■ Use RGB input signals in non-interlaced mode.

## Signal Input

- RGB terminal (D-sub 15-pin connector)

Pin	Input signal
1	R. video
2	G. video or SYNC. on Green
3	B. video
4	No connection
5	No connection
6	R.GND
7	G.GND
8	B.GND
9	No connection
10	GND
11	No connection
12	Bi-directional Data (SDA)
13	H. sync or H/V composite sync
14	V.sync.
15	Data Clock (SCL)



- When different kinds of input signals are simultaneously input to the monitor via a graphics board or the like, the monitor will automatically select the signals in the following priority order:

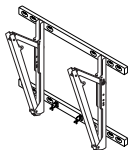
Sync signal type	Priority
H/V separate sync.	1
H/V composite sync.	2
G. video or SYNC. on Green	3

- To preserve the performance of this product and to maintain safety, always use one of the special mount units for installation.  
Special mount units (options): Wall Mount Unit (CMPAK04), Ceiling Mount Unit (CMPAT04)

<b>WARNING</b>	<ul style="list-style-type: none"> <li>■ Use one of the special mount units to install this product. A mount of insufficient strength or inadequate design can cause overturning or dropping and result in fire, electrical shock or injury. Please note that this company assumes absolutely no responsibility for personal injuries or property damage caused by use of other mount units or improper installation.</li> </ul>
----------------	--

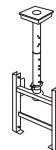
**HINTS**

- Wall-mount unit



Type : CMPAK04  
Angle change type : 0 ~ 20° Adjustment five steps is possible.  
External dimensions : 675 (W) x 560 (H) x 77 (D) (mm)

- Ceiling mount unit



Type : CMPAT04  
Angle change type : 0 ~ 25° Adjustment five steps is possible.  
External dimensions : 480 (W) x 959 (H) x 330 (D) (mm)

# PRODUCT SPECIFICATIONS (continued)

## Recommended Signal List

ENGLISH

- Screen controls are factory-preset for the following signal modes (RGB input):

No.	Signal mode			Horizontal frequency (kHz)	Dot clock frequency (MHz)	Remarks
	Signal name	Resolution	Vertical frequency (Hz)			
1	VGA	640 X 400	70.08	31.47	25.18	
2		640 X 480	59.94	31.47	25.18	
3	VESA	640 X 480	72.81	37.86	31.50	
4		640 X 480	75.00	37.50	31.50	
5		800 X 600	56.25	35.16	36.00	SVGA
6		800 X 600	60.32	37.88	40.00	SVGA
7		800 X 600	72.19	48.08	50.00	SVGA
8		800 X 600	75.00	46.88	49.50	SVGA
9		1024 X 768	60.00	48.36	65.00	XGA (recommended mode)
10		1024 X 768	70.07	56.48	75.00	XGA
11		1024 X 768	75.03	60.02	78.75	XGA
12		1280 X 1024	60.02	63.98	108.00	SXGA compressed / partial
13	Apple	640 X 480	66.67	35.00	30.24	
14		832 X 624	74.55	49.73	57.28	
15		1024 X 768	74.93	60.24	80.00	

- The type of video board or connecting cable used may not allow for correct displays Set H.POSITION, V.POSITION, CLOCK and PHASE.
- When a signal has been input with a vertical frequency of greater than 60Hz, it may not be possible to obtain smooth display of animated images in some cases.
- The monitor differentiates the signal modes according to the horizontal and vertical frequencies and the horizontal and vertical sync signal polarities. Note that different signals having all these elements alike may be handled as the same signal.
- Use of this monitor with the input signal timings specified below is recommended. A predefined setting may not be reproduced correctly with an extremely long front porch or back porch or with an extremely short data display time.

		Front porch	Sync width	Back porch	Blanking width
Horizontal timing	Horizontal frequency 24 kHz to 52 kHz	0.1 μs or more	2.0-3.8 μs	1.2 μs or more	3.5 μs or more
	Horizontal frequency 52 kHz to 64 kHz	0.1 μs or more	0.8-3.0 μs	1.1 μs or more	2.3 μs or more
Vertical timing		1H more (H : Horizontal sync)	200 μs or more	400 μs or more	450 μs or more