FUJITSU

WIDE PLASMA DISPLAY
P63XHA70W

Plasmavision™

AVM
II
Advanced Video Movement
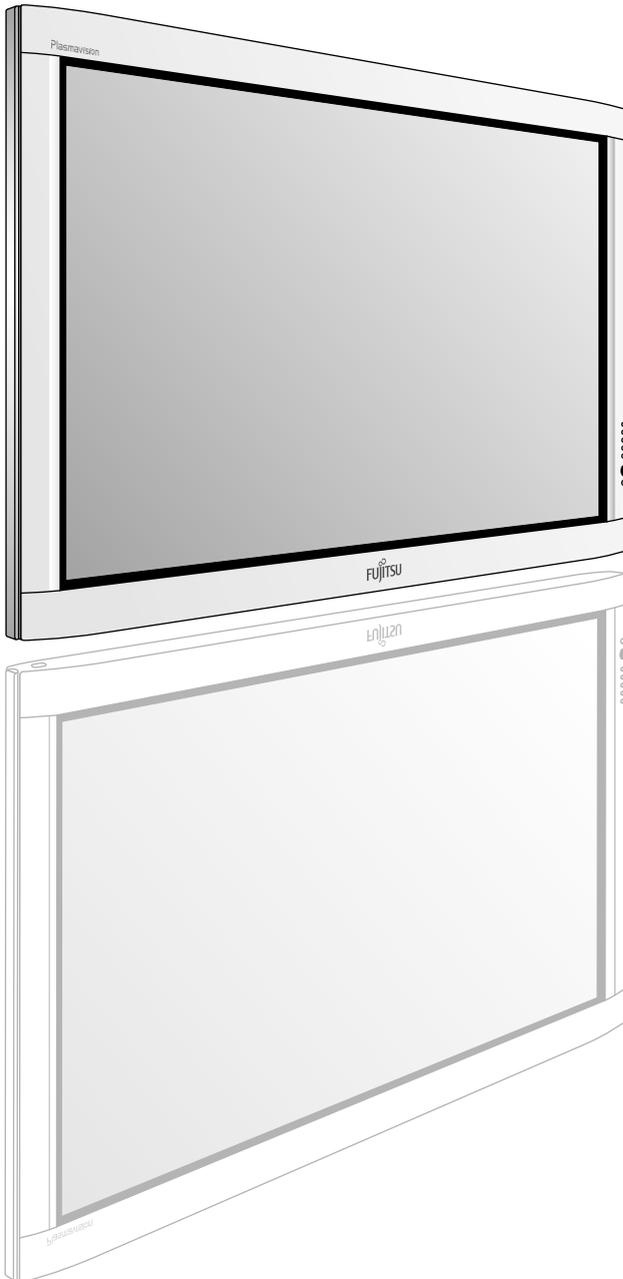
Before using the display, read this manual carefully so that you know how to use the display correctly.
Refer to this manual whenever questions or problems about operation arise. Be sure to read and observe the safety precautions (see the separate "Safety Precautions" manual).
Keep this manual where the user can see it easily.
* Installation and removal require special expertise. Consult your product dealer for details.
* Even if "British English" is selected at "Language" of the On-screen display, this manual explains by "American English".
* The last digit of MODEL NO. (10 digit alphanumeric characters) indicated on the product means the body color indication alphabet or the management number.
* The pictures and diagrams in this manual are meant to complement the explanations and may differ slightly from the actual things.

FUJITSU GENERAL LIMITED

CONTENTS

INFORMATION

- Receptacle

  Make sure that the power cord's grounding wire is grounded.

  The plasma display comes with a 3-prong power plug; one prong is connected to the grounding wire. If you have only a 2-hole receptacle, you will need to have it replaced. Contact your dealer for more information.

- Have the plasma display inspected and cleaned by your dealer at regular intervals.

- Do not display the same picture for a long time, because part of the screen may "burn-in" and create a residual image if the same picture is displayed for an extended period of time. To prolong the life of the plasma display, we recommend the use of the "Screen Orbiter" settings. (See P. E-28) When a residual image was created, reduce the residual image by using the "White screen" settings. Note that there may also be cases when it can not be recovered completely. (See P. E-29)

- When the screen size is set to "Normal" and a picture was displayed for a long time, a residual image may be created at the boundary with the part at which an image is not displayed. We recommend that you use a screen size other than "Normal". (See P. E-15)

- High-precision technology has been used in the manufacture of the plasma display panel, in which the effective pixels exceeds 99.99%. However, please be aware, that fewer than 0.01% of the pixels may be missing or remain constantly lit.

- Some models are fitted with a radiator fan to prevent the plasma display's internal temperature from rising during operation. Be careful of the air emitted by the radiator fan, as it may be hot.

- Contact your dealer when causing a bad influence to the plasma display and other audio-visual equipment mutually.

  You may need to move your plasma display if it produces degraded pictures or noise due to electromagnetic radiation, or if the infrared remote control does not function properly.

- Pictures may not be displayed properly if you connect a non-standard PC to the RGB input terminal. In this case, contact your dealer for more information.

- The protective circuit, built into the display, automatically turns off the power if the display has a problem. In this case, you will see that the power indicator lamp flashes red or green.

Warning

If the power indicator lamp flashes red or green, this signifies that the display has developed a problem. When this happens, be sure to unplug from the receptacle to prevent fire or electric shock. Then contact your dealer.

- It is important to install the plasma display in a location close to a receptacle, and where the emergency stop button can be easily reached.

CHECKING ACCESSORIES

User's Manual	Safety Precautions	Power cord	AA battery (2)	Remote control
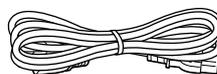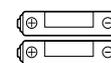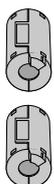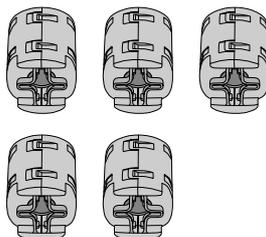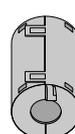
Small ferrite core (2)	Large ferrite core A (5)	Large ferrite core B	Wire clamper

Note
- Cables for connecting the display to external equipment are not supplied. Contact your dealer for more information on these supporting products.
- The pictures and diagrams in this manual are meant to complement the explanations and may differ slightly from the actual things.

INSTALLATION

- To prevent the plasma display's internal components from overheating, make sure that the plasma display is installed in a well-ventilated location.

- Be sure to use the optional stand, wall-mounting unit or the other mounting unit when installing the plasma display. Also, be sure that your dealer performs the installation.

- See the appropriate instruction manual for additional information on the mounting hardware you select.

- To prevent an accident and ensure safety in the event of an earthquake, fix the plasma display securely into the position as described below.

- Use the diagram below to determine how much space is needed to ensure proper heat radiation. This is a minimum space requirement; therefore, provide at least as much space as indicated below.

  * Make sure that the plasma display is installed in a location where the temperature can be maintained between 0°C and 40°C (between 32°F and 104°F)

  * Never attempt to tilt the plasma display sideways or backward.

  * To prevent the power cord and other cables from being accidentally pulled, make sure that they run along the wall or through corners.

  * To prevent accidents and ensure safety in the event of an earthquake, secure the plasma display to prevent it from tipping over.

Display Section

Front	Side
Upper (cm) — 10 — Left 10 — 10 Right — Lower 5	(cm) Wall — 5
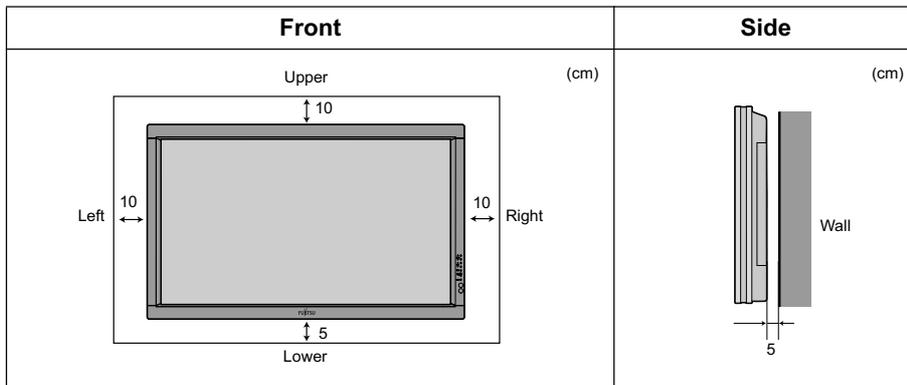
ATTACHING THE FERRITE CORES

- The ferrite cores are used to reduce noise. Attach them correctly as shown in the following illustrations.
- Carefully check the terminals for position and type before making any connections.

Large ferrite core A (5)

When connecting the cable to S-video input terminal and HDMI input terminal (4), attach one of these large ferrite cores A to the cable near the terminal.

S-video Cable

Ferrite core

HDMI Cable
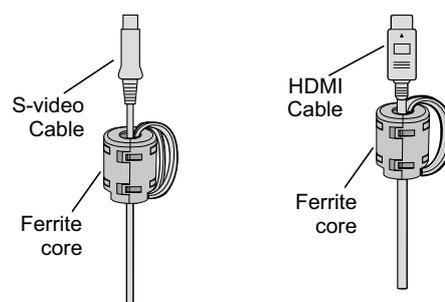
Ferrite core

Large ferrite core B (1)

When connecting the power cord to the power input terminal, attach large ferrite core B near the terminal of the power cord as shown below.

Ferrite core
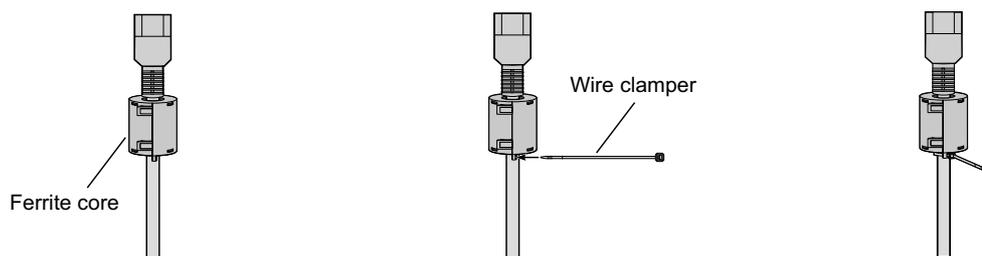
Wire clamper

(1) Attach large ferrite core B to the power cord.

(2) Pass the wire clamper through the hole.

(3) Wrap the wire clamper around the power cord and fasten securely.

Small ferrite core (2)

When connecting a cable to the external speaker output terminal, attach one of these ferrite cores to the cable near the terminal.

Ferrite core

Ferrite core
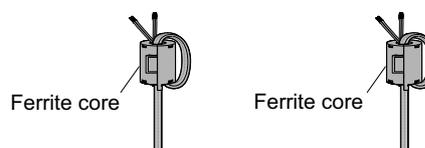
Note

- The external view is meant to be a representation of the actual unit and is not to scale; therefore, it may differ from the actual shape and size of the product.
- Due to the fragile and highly precise equipment, it is very important to pack properly before transportation using only the packing materials provided.

Reference

E-5

PART NAMES AND FUNCTIONS

DISPLAY SECTION – FRONT
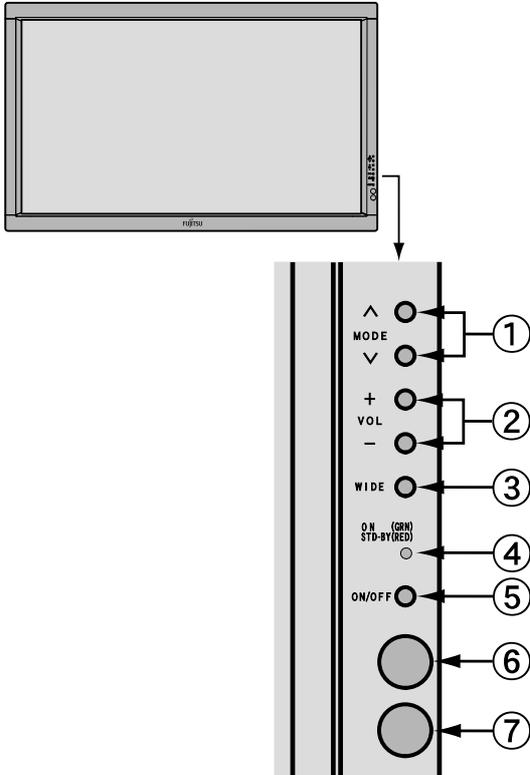
① **Input mode selection button**

Switches the input modes (Video mode and RGB mode).

② **Volume button**

Adjusts the sound volume.

③ **Wide screen selection button**

Switches the screen over to a desired wide screen.

④ **Power indicator lamp**

This lamp shows the state of the power supply.

Lit (red):	Standby state
Lit (green):	Power ON state
Flashing (red or green):	Malfunction (Flashes differently depending on the type of malfunction.)

⑤ **ON/OFF button**

Turns the power "ON" and "OFF (standby state)".

⑥ **Remote control signal receiver**

Receives the signals from the remote control.

⑦ **Ambient Sensor**

Detects the brightness of ambient light.

It is important not to obstruct it for full functionality of the feature.

Warning

If the power indicator lamp flashes red or green, this signifies that the plasma display has developed a problem. When this happens, be sure to remove the power plug from the receptacle and contact your dealer. In this circumstance, leaving the plasma display power ON can result in fire or electric shock.

DISPLAY SECTION – BOTTOM

⑬

⑰ ⑯⑮ ⑭ ⑫ ⑪ ⑩ ⑨ ⑧⑦ ⑥⑤ ④ ③② ①
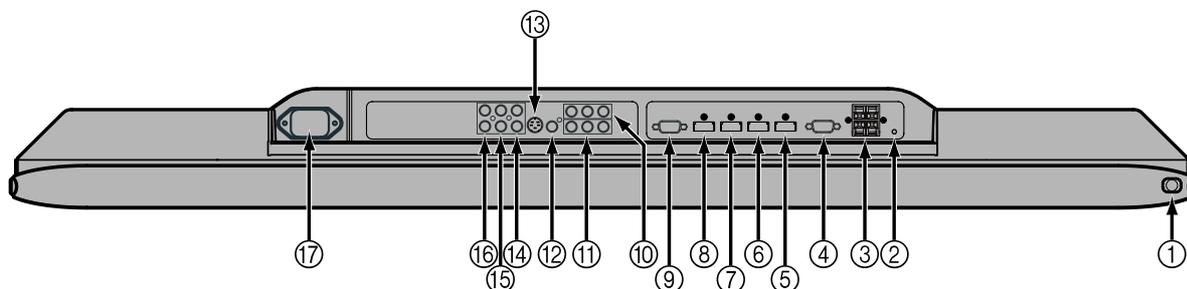
① ⏻ / I power switch

If this button is pressed when the power indicator lamp is off, the indicator lamp will light.
The power can be turned on and the standby mode selected by using the remote control or the control panel of the display.
If this button is pressed when the power indicator lamp is lit, the indicator lamp will go out.
*Power is still supplied to parts of the display even if the indicator lamp is off.

② **Expansion terminal (EXP. PORT)**

Currently, this terminal is not functional and is provided to accommodate future technology enhancements. Do not connect any cable to this terminal.

③ **External speaker output terminal (EXT SP)**

Connect this terminal to the optionally available speaker.
When connecting a cable, attach a ferrite core to the cable. (See P. E-5.)
*See the speaker instruction manual for more information.

④ **RS-232C terminal (RS-232C)**

This terminal is provided for you to control the display from the PC. Connect it to the RS-232C terminal on the PC.

⑤ **HDMI input terminal (VIDEO8 INPUT/HDMI)**

⑥ **HDMI input terminal (VIDEO7 INPUT/HDMI)**

⑦ **HDMI input terminal (VIDEO6 INPUT/HDMI)**

⑧ **HDMI input terminal (VIDEO5 INPUT/HDMI)**

Connect this terminal to the HDMI output terminal of DVD recorder/player or other video equipment.
If the HDMI output is connected, an Audio signal cable does not need to be connected.
When connecting a cable, attach a ferrite core to the cable. (See P. E-5.)

⑨ **RGB1 input terminal (RGB1 INPUT/mD-sub)**

Connect this terminal to the output terminal of a PC, set-top box, game, etc.

⑩ **Component Video input terminal (VIDEO3 INPUT)**

⑪ **Component Video input terminal (VIDEO4 INPUT)**

Connect this terminal to the Component Video output terminal of DVD recorder/player or satellite receiver.

⑫ **Video input terminal (VIDEO1 INPUT)**

Connect this terminal to the video output terminal of your VCR.

⑬ **S-video input terminal (VIDEO2 INPUT)**

Connect this terminal to the S-video output terminal of your VCR.
When connecting a cable, attach a ferrite core to the cable. (See P. E-5.)

⑭ **Audio3 input terminal (AUDIO3 INPUT)**

⑮ **Audio2 input terminal (AUDIO2 INPUT)**

⑯ **Audio1 input terminal (AUDIO1 INPUT)**

Connect this terminal to the audio output terminal of VCR or PC, etc.

⑰ **Power input terminal**

Connect this terminal to the power cord supplied with the plasma display.
When connecting the cord, attach a ferrite core to the cord. (See P. E-5)

Note
• The pictures and diagrams in this manual are meant to complement the explanations and may differ slightly from the actual things.

E-7

The table below shows the settings of Audio inputs. (Factory setting)

Video input	Audio input
RGB1(mD-sub)	Audio1
Video1(Video)	Audio2
Video2(S-video)	Audio2
Video3(Component Video)	Audio3
Video4(Component Video)	Audio3
Video5(HDMI)	Audio4(HDMI)
Video6(HDMI)	Audio5(HDMI)
Video7(HDMI)	Audio6(HDMI)
Video8(HDMI)	Audio7(HDMI)

DESCRIPTION OF INPUT TERMINALS

mD-sub input terminal
(RGB1 INPUT/mD-sub)
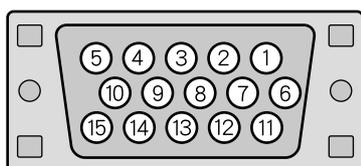
Pin No.	Input signal	Pin No.	Input signal
1	Red	9	—
2	Green	10	Ground
3	Blue	11	—
4	—	12	—
5	Ground	13	Horizontal synchronization
6	Ground	14	Vertical synchronization
7	Ground	15	—
8	Ground	Frame	Ground

RS-232C terminal (RS-232C)
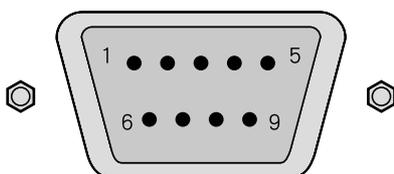
Pin No.	Signal
1	DCD (Data Carrier Detect)
2	RD (Received Data)
3	TD (Transmit Data)
4	DTR (Data Terminal ready)
5	GND (Ground)
6	DSR (Data Set Ready)
7	RTS (Request To send)
8	CTS (Clear To Send)
9	RI (Ring Indication)

HDMI input terminal (VIDEO5-8 INPUT/HDMI)

Pin No.	Input signal	Pin No.	Input signal
1	T.M.D.S. Data2+	11	T.M.D.S. Clock Shield
2	T.M.D.S. Data2 Shield	12	T.M.D.S. Clock–
3	T.M.D.S. Data2–	13	CEC
4	T.M.D.S. Data1+	14	Reserve
5	T.M.D.S. Data1 Shield	15	DDC Clock
6	T.M.D.S. Data1–	16	DDC Data
7	T.M.D.S. Data0+	17	Ground (for +5V)
8	T.M.D.S. Data0 Shield	18	+5V Power
9	T.M.D.S. Data0–	19	Hot Plug Detect
10	T.M.D.S. Clock+	Frame	FG

TRADEMARK INFOMATION

HDMI™ HIGH DEFINITION MULTIMEDIA INTERFACE

HDMI , the HDMI logo and High-Definition Multimedia Interface are trademarks or registered trademarks of HDMI licensing LLC.

REMOTE CONTROL

For details, see page ➔
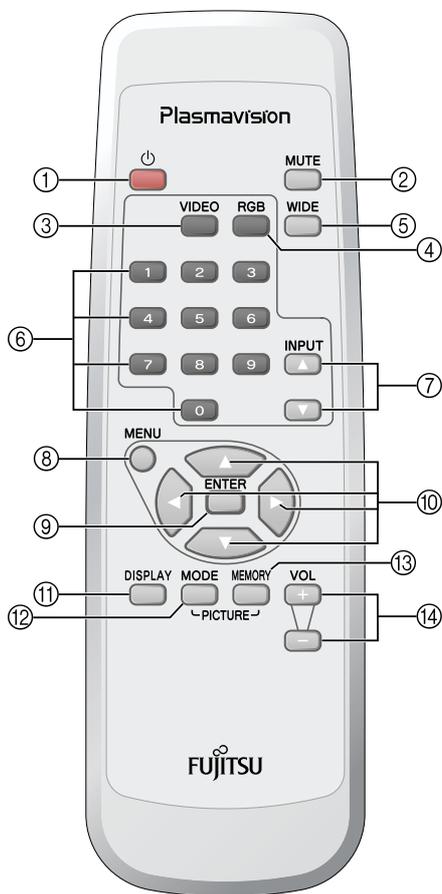
① (POWER button) ➔ E-13

Switches between Power On and Standby.

② (MUTE button) ➔ E-14

Press to temporarily mute the audio.
To return the audio to normal, press this button once again, or press the $\overset{VOL}{(+)}$ or $\overset{VOL}{(-)}$.

③ (Video input mode selector button) ➔ E-13

Press to select VIDEO1 - 8.

④ (RGB input mode selector button) ➔ E-13

Press to select RGB1.

⑤ (WIDE button) ➔ E-15

Press to switch the screen size.

⑥ ⓪ ～ ⑨ (Number buttons) ➔ E-13

Use to select the Video mode.

⑦ $\overset{INPUT}{(▲)}$ or $\overset{INPUT}{(▼)}$ (INPUT buttons)

Press to switch the Video or RGB mode.

⑧ (MENU button) ➔ E-18–E-30

Press to display or hide the menu screen.
Use for picture or audio adjustment.

⑨ (ENTER button) ➔ E-18–E-30

Press to confirm the setting you made with the adjustment buttons.

⑩ , , , or (Adjustment buttons) ➔ E-18–E-30

Press to select the adjustment item or adjust the value in the menu screen.

⑪ (DISPLAY button) ➔ E-14

Press to display the input mode and screen size status.
The status is displayed for about five seconds.

⑫ (PICTURE MODE button) ➔ E-14

Press to switch the Picture Mode.

⑬ (PICTURE MEMORY button) ➔ E-14

Press to recall a Picture Memory.

⑭ $\overset{VOL}{(+)}$ or $\overset{VOL}{(-)}$ (Volume adjustment buttons) ➔ E-14

Press to adjust the volume.

Note
• Some functions are not available depending on the state or condition of use.

USING THE REMOTE CONTROL

PUTTING BATTERIES IN THE REMOTE CONTROL

(1) To remove the cover, slide it outwards while pressing it down.

(2) Place two AA batteries in the remote control. Make sure that the batteries are properly oriented.

(3) Close the cover until it snaps into place.

PRECAUTIONS

To prevent malfunction, do not apply any form of severe shock to the remote control. To prevent malfunction or deformation, do not allow the remote control to become wet and keep it away from hot surfaces or heating equipment. Do not clean the remote control using a cloth dampened in a volatile solvent, such as benzene or thinner.

EFFECTIVE RANGE FOR THE REMOTE CONTROL

When using the remote control, be sure to point it directly at the plasma display's signal receiver. Make sure that there are no obstacles between the remote control and the plasma display's signal receiver.

Display – front

Display – side

Upper
20°
20°
Lower

Left 30° 30° Right

5 m (Front)
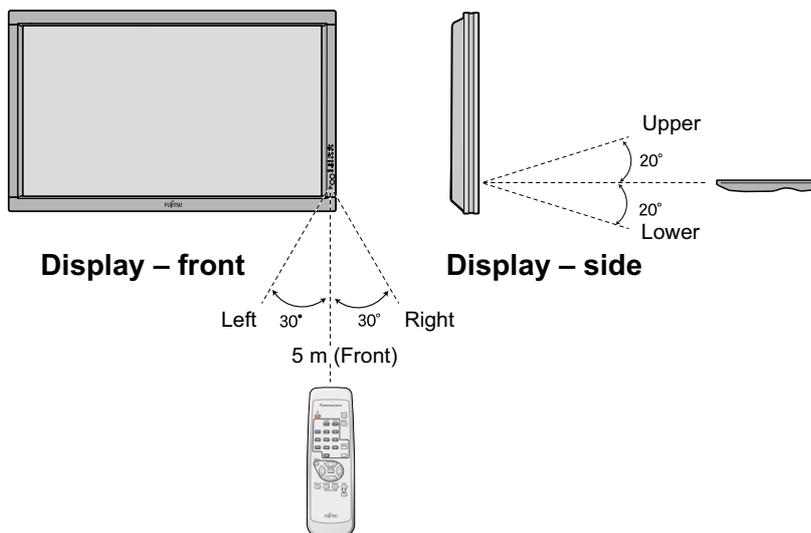
CAUTION

It is very important to use replacement batteries of the same type as the originally used. Do not use rechargeable batteries (Ni-Cd, etc.).

When disposing of used batteries, please comply with governmental regulations or environmental public institution's rules that apply in your country/area.

Note

• The remote control will not function properly if the batteries are dead. Be sure to replace them as needed.

• The remote control may not function properly if a high-frequency fluorescent lamp or the like is used. In this case, move the lamp or use the remote control from a different position.

CONNECTING THE DISPLAY TO EXTERNAL EQUIPMENT

DVD RECORDER/PLAYER, SATELLITE TUNER

• Connect the video signal cable to the HDMI input terminal, component video input terminal, S-video input terminal, or the video input terminal.

• If the equipment to be connected is equipped with HDMI output terminal and component video output terminal, it is recommended to connect to one side or the other. (If the HDMI output is connected, an Audio signal cable does not need to be connected.)

Antenna (commercially available product)

To component video outputs

To video output

To S-video output

To video input

To audio outputs

To S-video input

To audio inputs

To component video inputs

Display bottom

To HDMI input

To HDMI output
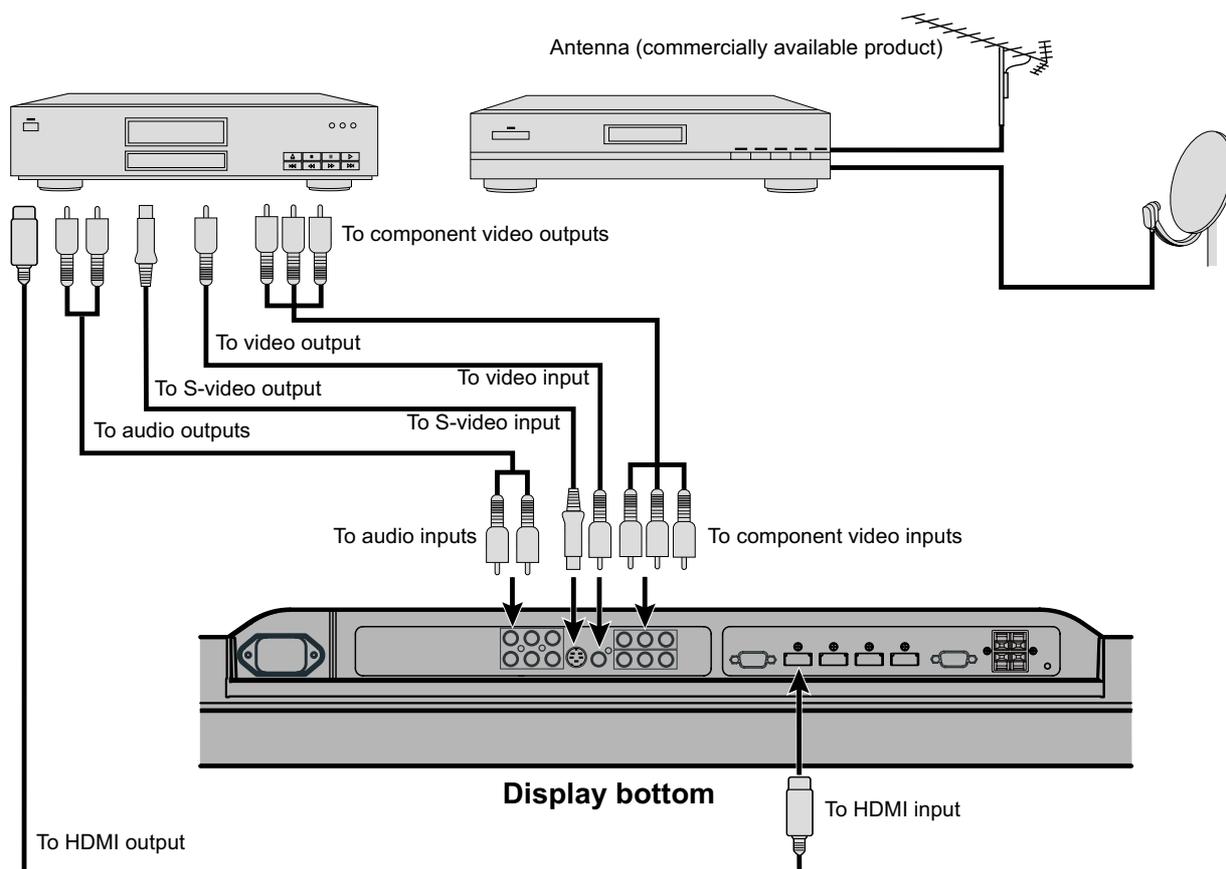
CONNECTING THE DISPLAY TO EXTERNAL EQUIPMENT (CONTINUED)

VCR/PC

• Connect the video signal cable to either the S-video input terminal or the video input terminal.

• If the unit to be connected is equipped with S-video output terminal, it is recommended to connect to the S-video terminal.

• As the cable for connecting a PC differs with the PC model, please consult your dealer for information on the right cable to purchase.

Display bottom
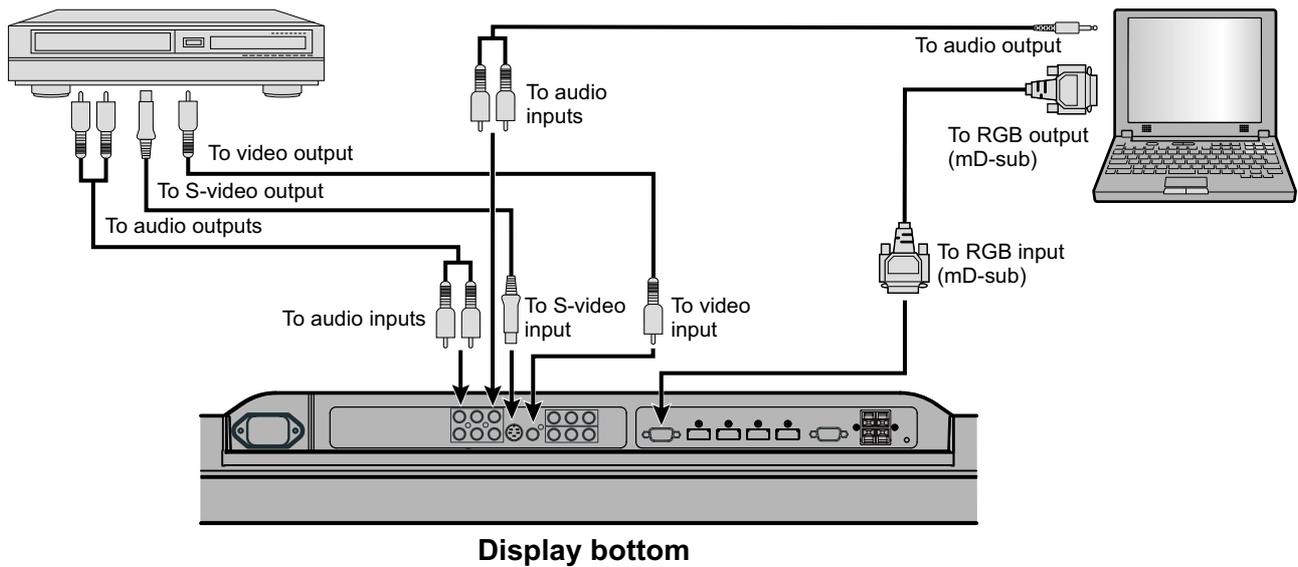
Note
• Be sure to turn off power of the plasma display and external equipment before making any connections.
• Loose connectors can result in picture or color problems. Make sure that all connectors are securely inserted into their terminals.
• Also refer to the instructions for the component to be connected.
• When inputting audio, connect to the terminals corresponding to the used video input or RGB input.

BASIC OPERATIONS

TURNING THE POWER ON AND STAND-BY

1 Press ⏻/I to the left at the bottom of the display to the ON ⏻ state.

The power lamp lights up.

2 Press ⏻ on the remote control.

The color of the power lamp changes from "Red" to "Green".

3 Press VIDEO or RGB.

Select the video mode to input.

4 Press ⏻ when the power is ON.

The color of the power lamp changes from "Green" to "Red" and the the power turns "OFF (Stand-by state)".

* You can also use the buttons on the display's control panel to perform these steps.

RGB INPUT MODE

1 Press RGB to select the input mode.

You can select RGB1.

• RGB1: mD-sub

* For selection of the input terminal, see "SETTING THE INPUT TERMINALS" on P. E-27.

RGB1 mode

VIDEO INPUT MODE

1 Press VIDEO to select the input mode.

You can select from VIDEO1 mode to VIDEO8 mode.

You can also change VIDEO mode by pressing **1** – **8** during "Video" indication on the screen by pressing VIDEO.

The video modes corresponding to each input terminal are as follows.

• VIDEO1: Video
• VIDEO2: S-video
• VIDEO3: Component Video
• VIDEO4: Component Video
• VIDEO5: HDMI
• VIDEO6: HDMI
• VIDEO7: HDMI
• VIDEO8: HDMI

* For selection of the input terminal, see "SETTING THE INPUT TERMINALS" on P. E-27.

Video1 mode

Note
• Some functions are not available depending on the state or condition of use.

BASIC OPERATIONS (Continued)

ADJUSTING THE VOLUME

Adjusting the volume

Press [VOL +] to increase the volume.

Press [VOL −] to reduce the volume.

* Note that the volume level remains stored even when you turn OFF the power.

Muting the audio

Press [MUTE].

The audio is removed.

Press again to restore the audio to the original level.

* The mute mode can also be released by pressing the volume buttons.

When the volume adjustment button is pressed

* You can also use the buttons on the display's control panel to perform these steps.

CONVENIENT FUNCTIONS

On-screen information

Press [DISPLAY].

The mode is indicated on the screen for 5 seconds.

Picture Mode

Press [PICTURE MODE].

This button can be used to switch the picture mode.

In the picture mode, you can switch between the set status and the fine mode.

* For the picture mode settings, see "Picture Mode (P. E-20)".

Picture Memory

Press [PICTURE MEMORY].

This button can be used to recall the settings of the picture memories 1 – 8. Each time this button is pressed, the setting changes as follows.

→ **Memory1** → **Memory2** → **Memory3** → **Memory4** → **Memory5** → **Memory6** → **Memory7** → **Memory8** →

* For the picture memory settings, see "Picture Memory (P. E-20)".

Note
• Some functions are not available depending on the state or condition of use.

E-14

WATCHING PICTURES ON THE WIDE SCREEN

SWITCHING BETWEEN SCREEN SIZES

E-15

1 Press ⬚ .

The currently selected mode will appear.

Normal mode

2 Press ⬚ to select a desired Screen Size.

Each time you press ⬚ , a different Screen Size appears. The sequences used are as follows:

• Video mode (SD signal)

→ **Normal** → **Wide1** → **Wide2** → **Zoom1** → **Zoom2** →

• Video mode (HD signal)

→ **Wide1** → **Wide2** →

• RGB mode

→ **Normal** → **Wide** → **Zoom** →

* Depending on the type of signal, some aspects may not be selected.

Wide1 mode

* You can also use the buttons on the display's control panel to perform these steps.
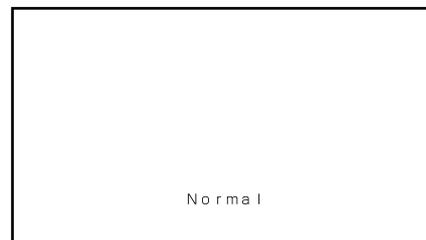
Note
• When the WIDE mode is set to "Normal", and pictures are shown for an extended time, a residual image or "burn-in" may be created. The burn-in may occur at the boundary where the left and right borders of the picture meet the vertical bars. To reduce the chance of "burn-in" when watching in the "Normal", we recommend you set the "Background" to "Light Gray". (See P. E-29)
• When a residual image was created, it is reduced by using the "White Screen" settings. Note that there may also be cases when it can not be recovered completely. (See P. E-29)
• A variety of Screen Sizes are available with this display. Remember that if you select a mode with an aspect ratio (ratio of frame width to frame height) different from that of the TV program or video media, the pictures will appear differently than if you had selected a mode having the same aspect ratio.
• Showing a movie or similar premium event at a different aspect ratio from its original one at any event site, restaurant, or bar for profit-making purposes or for a public audience may constitute a copyright infringement.
  For films, try to select a mode having the same aspect ratio as the original picture; this enables the director's original intentions to be preserved.
• See P. E-24 for how to adjust the picture size and position.

E-15

WATCHING PICTURES ON THE WIDE SCREEN (Continued)

SCREEN SIZE

Normal

Displays pictures of normal size (i.e., a 4:3 aspect ratio).

Wide1

• Video mode (SD signal)

Displays natural-looking pictures of normal size on the wide screen.

• Video mode (HD signal)

Displays wide size (16:9 aspect ratio) pictures.

Picture of Normal size → Wide1
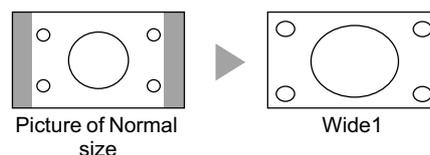
Wide2

• Video mode (SD signal)

Ideal for displaying vertically extended pictures such as anamorphic (squeezed widescreen) pictures.

• Video mode (HD signal)

An HD signal picture displayed in normal size is displayed as wide screen with minor image stretching.

Vertically extended picture → Wide2

Picture of Normal size → Wide2
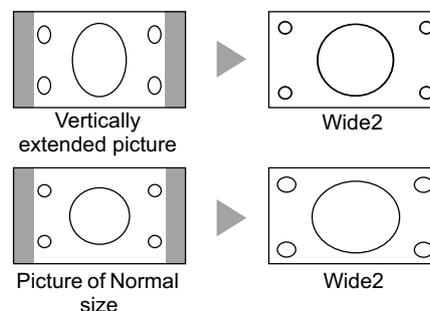
Wide

Displays normal size picture as wide screen.

Zoom1/Zoom

Enlarges horizontally extended pictures equally in all directions to maintain the aspect ratio constant.

Horizontally extended picture → Zoom1
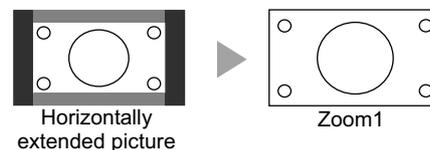
Zoom2

Reduces the height of horizontally extended pictures with captions, without eliminating the caption. Only the height of pictures is reduced, not the height of the caption.

(Captions may not be easy to read, however, depending on the picture.)

* The Zoom mode display method may be different, depending on the input signal.

Horizontally extended picture with caption → Zoom2
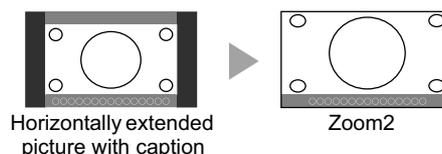
ASPECT RATIO

The following aspect ratios are available.

VHF/UHF broadcasting, BS broadcasting	4:3 aspect ratio
HDTV broadcasting	16:9 aspect ratio
Vista Vision size	1.85:1 aspect ratio
Cinema Scope size	2.35:1 aspect ratio

Note

You may find dark areas on top and at the bottom of the screen if you select one of the Zoom modes for media while using the Vista Vision or Cinema Scope size i.e., the sizes used frequently for picture software.

• Some functions are not available depending on the state or condition of use.

ADJUSTMENT MENU

The numbers in parentheses ( ) indicate the reference page numbers.

MENU				
	PICTURE (E-18)	Signal Contrast (E-19)		
		Drive Contrast (E-19)		
		Brightness (E-19)		
		Color (E-19)		
		Tint (E-19)		
		Sharpness (E-19)		
		Ambient Sensor (E-19)		
		Picture Mode (E-20)		
		Precision Setting (E-20)	Black Level (E-21)	
			Detail Gradation (E-21)	
			3D NR (E-21)	
			CODEC NR (E-21)	
			Image Enhance (E-21)	Image identify (E-21)
				Chroma Transient (E-21)
			Color Temp. (E-22)	
			User Color Temp (E-22)	
			Color Focus (E-22)	
			Progressive Scan (E-23)	24 Frame Mode (E-23)
				30 Frame Mode (E-23)
				Jaggies Filter (E-23)
				Motion Setting (E-23)
			PAL 3D Y/C (E-23)	
		Picture Memory (E-20)		
		Default		
	POSITION/SIZE (E-24)	Position (E-24)		
		Size (E-24)		
		Default		
	AUDIO (E-25)	Treble (E-25)		
		Bass (E-25)		
		Balance (E-25)		
		Loudness (E-25)		
	FEATURES (E-26)	Adjustment (E-26)	Dot Clock (E-26)	
			Clock Phase (E-26)	
			Clamp Position (E-26)	
			Auto Calibration (E-26)	
		On Screen Menu (E-26)	OSD (E-26)	
			Language (E-26)	
			Name Select (E-27)	
		Input Terminal (E-27)	Video Input (E-27)	
			S-video Input (E-27)	
			D-SUB Input (E-27)	
		Others (E-28)	Auto Off-NO SIG. (E-28)	
			Audio Input (E-28)	
			Screen Orbiter (E-28)	
			Direct Setting (E-29)	
			Code Setting (E-29)	
			White Screen (E-29)	
			Background (E-29)	
			Information (E-29)	
	FACTORY DEFAULT (E-30)			

Note
• Some functions are not available depending on the state or condition of use.

BASIC PROCEDURE OF ADJUSTMENT MENU

• Shown below is the basic procedure used to change the options on the ADJUSTMENT MENU. (Ex.: Adjusting tint setting (Tint))
  Selecting the adjustment mode for adjustment or setting. (The items to be adjusted or set are stored for each adjustment mode.)

1 Press ⟲MENU.

The main menu screen will appear.

2 Press ◁ or ▷ to select "PICTURE".

Each time you press ◁ or ▷, one of the available menus appears in the following sequence:

PICTURE ↔ POSITION/SIZE ↔ AUDIO ↔ FEATURES ↔ FACTORY DEFAULT

The PICTURE Menu screen will appear.

"PICTURE" selected in the main menu screen

3 Press △ or ▽ to select "Tint".

4 Press ENTER.

The "Tint" adjustment screen will appear.
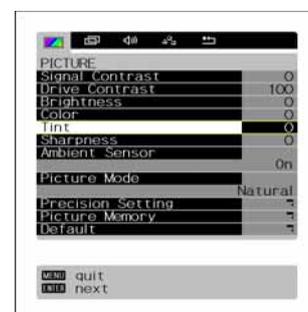
"Tint" selected in the PICTURE Menu screen

5 Press ◁ or ▷ to change tint values.

▷ : More greenish colors

◁ : More purplish colors

6 Press ENTER to store.

7 Press ⟲MENU when you finish.

"Tint" adjustment screen

* Repeat steps 3, 4, 5 and 6 when you wish to make changes to other options.

* Select "Default" and press ENTER.
  The PICTURE items are changed back to the default settings available when the plasma display was purchased.

* Press ⟲MENU to halt the operation in progress.
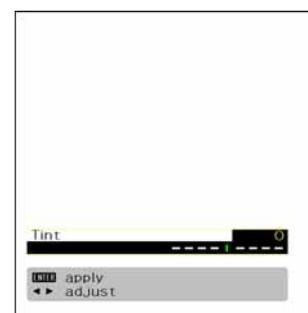
Note
• On-screen information disappears if you do not take any action for about 60 seconds.
• Some functions are not available depending on the state or condition of use.
• The adjustment range varies with the display signal. You can adjust the display quality to the value you want within the adjustable range.

E-18

ADJUSTING THE PICTURE

• Picture-related items can be set and adjusted in the Picture Adjustment Screen. See BASIC PROCEDURES OF ADJUSTMENT MENU on P. E-18 for the basic procedures.

Signal Contrast

Press ⦿ to increase the input signal contrast.

Press ⦿ to reduce the input signal contrast.

Press ⦿ to store.

Drive Contrast

Press ⦿ to raise the display's luminance level, and increase the contrast.

Press ⦿ to lower the display's luminance level, and reduce the contrast.

Press ⦿ to store.

*   If Ambient Sensor is ON, the change made by this adjustment may be difficult to be recognized in too bright or dark a place.

Brightness

Press ⦿ to increase the brightness.

Press ⦿ to reduce the brightness.

Press ⦿ to store.

Color

Press ⦿ to darken the color.

Press ⦿ to lighten the color.

Press ⦿ to store.

Tint

Press ⦿ to change the tint to a more greenish color.

Press ⦿ to change the tint to a more purplish color.

Press ⦿ to store.

Sharpness

Press ⦿ to sharpen the Sharpness.

Press ⦿ to soften the Sharpness.

Press ⦿ to store.

Ambient Sensor

Ambient Sensor can be set.

Automatically adjusts the picture quality to an optimized level that matches the brightness of the ambient light.

Each time ⦿ or ⦿ is pressed, the setting is switched.

↔ **On** ↔ **Off** ↔

Press ⦿ to store.

Note
• If the operation is not executed for about 60 seconds, the menu disappears.
• Some functions are not available depending on the state or condition of use.
• The adjustment range varies according to the display signals. Make adjustments to your preferred picture quality within the adjustment range.
• Depending on the type of signal, it may not be possible to make some of the settings or adjustments.

ADJUSTING THE PICTURE (Continued)

Picture Mode

Each time you press ⦗◦⦘ or ⦗◦⦘, the available choices appear in the following sequence.

↔ **Natural** ↔ **Fine** ↔ **Effective** ↔ **Conventional** ↔ **Still** ↔

Natural	Enables you to watch pictures with natural color tones and high picture clarity. This mode is suitable for watching movies or TV.
Fine	Best for watching movies in darkened rooms.
Effective	Best for watching TV in bright environments.
Conventional	Displays a screen approximating that of a conventional TV screen.
Still	Suitable for watching static images such as computer or still camera images.

Press ⦗ENTER⦘ to store.

Precision Setting

Enables advanced picture quality adjustments.

See P. E-21 for details.

Picture Memory

Eight groups of picture adjustment settings can be stored, enabling you to quickly switch to your desired group of settings for watching picture.
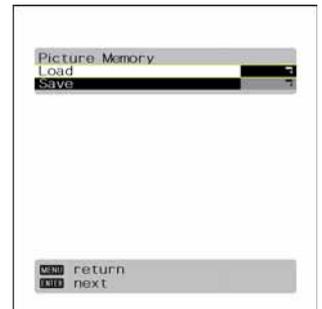

Picture Memory Selection Screen

[Load]: Use ⦗◦⦘ or ⦗◦⦘ to select Memory 1 - 8. When ⦗ENTER⦘ is pressed, the values becomes the picture adjustment values stored in the selected Memory.
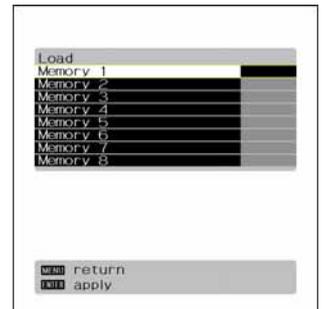
"Load" Selection Screen

[Save]: Use ⦗◦⦘ or ⦗◦⦘ to select Memory 1 - 8. If ⦗ENTER⦘ is pressed, the current picture adjustment values are stored to the selected Memory.
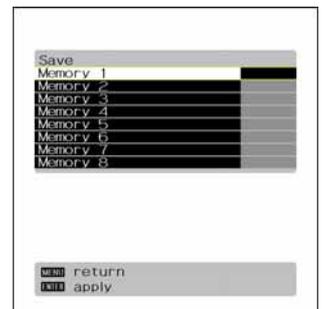
"Save" Selection Screen

PRECISION SETTING

Even more advanced picture quality adjustments can be made as required.

Black Level

Press ⊙ to strengthen the reproduction of black. (Provides a picture quality with deep blacks.)

Press ⊙ to weaken the reproduction of black.

Press ENTER to store.

Detail Gradation

Corrects the gradation of the light and dark areas of the picture.

Each time ⊙ or ⊙ is pressed, the setting is switched.

↔ **On** ↔ **Off** ↔

Press ENTER to store.

Precision Setting Selection Screen

3D NR

This enables noise reduction processing with respect to the input signal noise level (reduces screen flicker for more comfortable viewing).

Each time you press ⊙ or ⊙, the available choices appear in the following sequence.

↔ **Off** ↔ **Min.** ↔ **Mid.** ↔ **Max.** ↔

Press ENTER to store.

CODEC NR

This enables noise reduction processing of mosquito noise or block noise generated when digital picture signals are recorded or replayed.

Each time you press ⊙ or ⊙, the available choices appear in the following sequence.

↔ **Off** ↔ **Min.** ↔ **Mid.** ↔ **Max.** ↔

Press ENTER to store.

Image Enhance

This performs detailed image quality settings.

• Image identify (for RGB)

This function discerns between the natural image display section and the text display section, and performs correction to enable an optimized display for each.

Each time ⊙ or ⊙ is pressed, the setting is switched.

↔ **Off** ↔ **On** ↔

Press ENTER to store.

• Chroma Transient

This function corrects the color contours.

Each time ⊙ or ⊙ is pressed, the setting is switched.

↔ **Off** ↔ **On** ↔

Press ENTER to store.

Note
- If the operation is not executed for about 60 seconds, the menu disappears.
- Some functions are not available depending on the state or condition of use.
- The adjustment range varies according to the display signals. Make adjustments to your preferred picture quality within the adjustment range.
- Depending on the type of signal, it may not be possible to make some of the settings or adjustments.

ADJUSTING THE PICTURE (Continued)

Color Temp.

Use ⊙ or ⊙ to specify a desired color temperature. Each time you press ⊙ or ⊙, one of the available choices appears in the following sequence:

↔ **-3500K** ↔ **…** ↔ **Std.** ↔ **…** ↔ **+3500K** ↔ **User** ↔

[-3500K]: More reddish colors

[+3500K]: More bluish colors

[User]: User Color Temp. setup

Press ⎵ ENTER to store.

User Color Temp.

Use ⊙ or ⊙ to select Red, Green, or Blue, and adjust the color temp. for each.

Press ⊙ : to strengthen the selected color.

Press ⊙ : to weaken the selected color.

Press ⎵ ENTER to store.

Color Focus

This enables correction with respect to specific color hues within the image.

Independent correction of the hue of skin colors, blue skies, and so on, enables a more brilliant display.

Color Focus (Reddish color) Settings Screen

• **[Reddish Color]**

With red at the center, performs the following corrections with respect to the range from magenta to yellow.

[Tint]: Use ⊙ and ⊙ to adjust the hue.

[Color]: Use ⊙ and ⊙ to adjust the color depth.

[Red]: Use ⊙ and ⊙ to adjust the strength of the red color range.

[Green]: Use ⊙ and ⊙ to adjust the strength of the green color range.

[Blue]: Use ⊙ and ⊙ to adjust the strength of the blue color range.

Press ⎵ ENTER to store.

Adjustments can be made in the same way for:

• **[Greenish Color]: (With green at the center, performs corrections with respect to the range from yellow to cyan.)**

• **[Bluish Color]: (With blue at the center, performs corrections with respect to the range from cyan to magenta.)**

• **[Targeting Red]**

This function corrects the hue and color depth with respect to Red.

[Tint]: Use ⊙ and ⊙ to adjust the hue.

[Color]: Use ⊙ and ⊙ to adjust the color depth.

Press ⎵ ENTER to store.

Adjustments can be made in the same way for:

• **[Targeting Yellow]** **(Performs correction with respect to Yellow.)**

• **[Targeting Green]** **(Performs correction with respect to Green.)**

• **[Targeting Cyan]** **(Performs correction with respect to Cyan.)**

• **[Targeting Blue]** **(Performs correction with respect to Blue.)**

• **[Targeting Magenta]** **(Performs correction with respect to Magenta.)**

• **[Targeting White]**

Corrects red, green, and blue with respect to white.

[Red]: Use ⊙ and ⊙ to adjust Red.

[Green]: Use ⊙ and ⊙ to adjust Green.

[Blue]: Use ⊙ and ⊙ to adjust Blue.

Press ⎵ ENTER to store.

Progressive Scan

This sets the conversion processing of interlace signals to block receive signals.

• **24 Frame Mode**

This function enables the optimized display of movies, etc. with 24 frames/second signals.

Each time ⊙ or ⊙ is pressed, the setting is switched.

↔ **Auto ↔ Off ↔**

Press ⊡ to store.

• **30 Frame Mode**

This function enables the optimized display of movies, etc. with 30 frames/second signals.

Each time ⊙ or ⊙ is pressed, the setting is switched.

↔ **Auto ↔ Off ↔**

Press ⊡ to store.

• **Jaggies Filter**

This function alleviates the phenomenon where jagged diagonal lines can be seen when interlace signals are input, thus enabling a smoother motion picture display.

Each time ⊙ or ⊙ is pressed, the setting is switched.

↔ **Auto ↔ Off ↔**

Press ⊡ to store.

• **Motion Setting**

The detecting sensitivity for motion picture is set.

The response of the picture processing is valued in the motion picture priority setting.

Press ⊙: to specify still picture priority.

Press ⊙: to specify motion picture priority.

Press ⊡ to store.
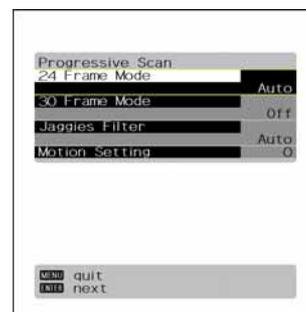
Progressive Scan Settings Screen

PAL 3D Y/C (for Video (PAL))

Improves color smearing, blurring, and dot noise when watching PAL signal Video. Set to OFF when the image is unnatural.

↔ **On ↔ Off ↔**

[On]: Enable 3D Y/C separation

[Off]: Disable 3D Y/C separation

Press ⊡ to store.

Note
• If the operation is not executed for about 60 seconds, the menu disappears.
• Some functions are not available depending on the state or condition of use.
• The adjustment range varies according to the display signals. Make adjustments to your preferred picture quality within the adjustment range.
• Depending on the type of signal, it may not be possible to make some of the settings or adjustments.

E-23

ADJUSTING SCREEN POSITION AND SIZE

• You can make changes to all screen adjustment options in the POSITION/SIZE Menu. See P. E-18 for the basic procedures.

• The changes you make will be stored for the selected input mode. Therefore, you need to select a desired input mode before making any changes.

POSITION/SIZE Menu screen

Screen Position

Horizontal position (Horizontal)

⊙ : Moves screen picture to the right.

⊙ : Moves screen picture to the left.
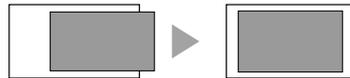
Vertical position (Vertical)

⊙ : Moves screen picture up.

⊙ : Moves screen picture down.

Press ⊡ to store.

"Position" adjustment screen

## Screen Size

Screen picture width (Width)

⊙ : Increases width.

⊙ : Reduces width.

Screen picture height (Height)

⊙ : Increases height.

⊙ : Reduces height.

Press ⊡ to store.

"Size" adjustment screen

ADJUSTING AUDIO

- You can make changes to all audio adjustment options in the AUDIO Menu. See P. E-18 for the basic procedures.

- The changes you make will be stored for the selected input mode. Therefore, you need to select a desired input mode before making any changes.

Treble

Press ⊖ or ⊕ to make adjustments.

    ⊕ : Stronger treble

    ⊖ : Weaker treble

Press ENTER to store.

Bass

Press ⊖ or ⊕ to make adjustments.

    ⊕ : Stronger bass

    ⊖ : Weaker bass

Press ENTER to store.

Balance

Press ⊖ or ⊕ to make adjustments.

    ⊕ : Shifts the volume balance towards the right.

    ⊖ : Shifts the volume balance towards the left.

Press ENTER to store.

Loudness

Corrects the balance between bass and treble for easy listening even with weak volume.

Each time you press ⊖ or ⊕, one of the available choices appears in the following sequence:

    ↔ **Off** ↔ **On** ↔

Press ENTER to store.

AUDIO Menu screen

Note
- If the operation is not executed for about 60 seconds, the menu disappears.
- The adjustment range varies according to the display signals. Make adjustments to your preferred picture quality within the adjustment range.
- Depending on the type of signal, it may not be possible to make some of the settings or adjustments.
- AUDIO menu will not be displayed when "No Audio" is selected. (See P. E-28.)

E-25

OTHER ADJUSTMENTS

FEATURES setup screen has the following 4 options.

See P. E-18 for the basic procedures.

[Adjustment]: Can make a fine adjustment of pictures such as Dot Clock, Clamp Position.

[On Screen Menu]: Can make a display setting such as OSD, Language. (See P. E-26–E-27.)

[Input Terminal]: Can make an input terminal setting such as Video Input. (See P. E-27.)

[Others]: Used to make Screen Orbiter and other settings. (See P. E-28–E-29.)

ADJUSTMENT

Dot Clock, Clock Phase, Clamp Position, and Auto Calibration are adjusted as shown in the following chart.

Select the item with ⌄ or ⌃, and then adjust with ◁ or ▷. Finally, press ENTER to implement the adjustments.

Adjustment Item	Contents of Adjustments	Operation
Dot Clock (mD-sub)	You may find the vertically-striped pattern in pictures, depending on the clock frequency of your PC's processor. If you experience blurring, you can obtain a clearer picture by adjusting the "Dot Clock".	Use ◁ or ▷ to adjust to minimize vertically-striped pattern in pictures.
Clock Phase (mD-sub)	Pictures and the outline of letters may blur or flicker as the clock phase of your PC may be different. In this case, adjust the clock phase manually. Normally, the automatic setting ensures the optimal value.	When "Manual" is selected, use ◁ or ▷ to adjust to minimize pictures blur.
Clamp Position (mD-sub, Comp. video)	Adjusts the extremely dark or bright pictures. Normally, the automatic setting ensures the optimal value.	Use ◁ or ▷ to adjust pictures optimally.
Auto Calibration (mD-sub)	Adjusts the dynamic range of images to the optimum. Performed while a white screen signal is received.	Display the Auto Calibration screen. Select "Execute" and press ENTER. Press ⌄ or ⌃ to select "Yes", and press ENTER.

ON SCREEN MENU

On-screen Display Information (OSD)

You can use this option to select from following display indication.

Each time you press ◁ or ▷, one of the available choices appears in the following sequence:

   ↔ **On (OSD:bright)** ↔ **On (OSD:dark)** ↔

[On (OSD:bright)]: On-screen information shown in light color.

[On (OSD:dark)]: On-screen information shown in dark color.

Press ENTER to store.

* If the screen picture is too bright, some characters may be difficult to watch when [On (OSD:dark)] is selected.
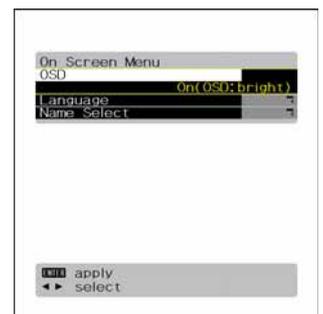
OSD selection screen

Language (Language)

You can use this option to select the language displayed on the screen.

(1) Select "Language" and press ENTER.

The "Language" selection screen will appear.

(2) Press ⌄ or ⌃ to select your desired language.

American English

British English

Deutsch   (German)

Español   (Spanish)

Français   (French)

Italiano   (Italian)

Русский   (Russian)

(3) Press ENTER.

The menu is displayed in the selected language.

"Language" selection screen

Name Selection (Name Select)

You can change the settings for indications for video inputs and RGB inputs.

RGB input

You can change the settings for indications for the RGB inputs.

Select the desired indication in accordance with the connected equipment.

Each time $\langle\cdot\rangle$ or $\langle\cdot\rangle$ is pressed, the setting is switched. (In the case of RGB 1)

↔ **RGB1** ↔ **PC1** ↔ **PC2** ↔ **DVD1** ↔ **DVD2** ↔ **STB** ↔ **Satellite** ↔ **Cable TV** ↔

Press ⏎ to store.

Video input

You can change the settings for indications for the VIDEO inputs.

Select the desired indication in accordance with the connected equipment.

Each time $\langle\cdot\rangle$ or $\langle\cdot\rangle$ is pressed, the setting is switched. (In the case of VIDEO1)

↔ **Video1** ↔ **DVD1** ↔ **DVD2** ↔ **VCR1** ↔ **VCR2** ↔ **GAME** ↔ **Camcorder** ↔ **STB** ↔ **Satellite** ↔ **Cable TV** ↔

Press ⏎ to store.

SETTING THE INPUT TERMINALS

Video/S-video Input Terminal

You can use this option to select the color format appropriate for the input signal.

Each time you press $\langle\cdot\rangle$ or $\langle\cdot\rangle$, one of the available modes appears in the following sequence:

↔ **Auto** ↔ **NTSC** ↔ **PAL** ↔ **SECAM** ↔ **PAL60** ↔ **N-PAL** ↔ **M-PAL** ↔ **4.43NTSC** ↔

[Auto]: Automatically selects NTSC, PAL, SECAM, PAL60, N-PAL, M-PAL and 4.43NTSC.

[Other than Auto]: You need to select a system appropriate to the input signal.

Press ⏎ to store.
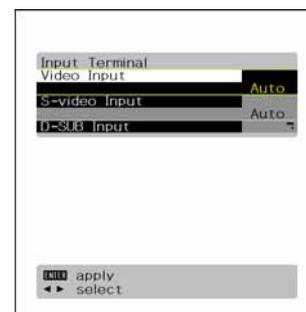
Input Terminal Settings Screen

D-SUB Input Terminal

You can use this option to select the signal system it will receive to D-SUB Input terminal.

(1) Select D-SUB Input and press ⏎.

D-SUB Input screen appears.

(2) Select the signal system to receive.

Each time you press $\langle\cdot\rangle$ or $\langle\cdot\rangle$, one of the available choices appears in the following sequence:

↔ **RGB-PC** ↔ **Decoder** ↔

[RGB-PC]: For using RGB of PC

[Decoder]: For using digital broadcast tuner

(3) Press ⏎ to store.

Note
- If the operation is not executed for about 60 seconds, the menu disappears.
- Some functions are not available depending on the state or condition of use.
- The adjustment range varies according to the display signals. Make adjustments to your preferred picture quality within the adjustment range.
- Depending on the type of signal, it may not be possible to make some of the settings or adjustments.

E-27

OTHER ADJUSTMENTS (Continued)

OTHER SETTINGS

Auto Off-NO SIG.

You can make to the standby state automatically when the no signal state continued during set up time.

(1) Select "Auto Off-NO SIG." and press ⏻.

The "Auto Off-NO SIG." setting screen will appear.

(2) Press ⌄ or ⌃ to select the "Time".

Press ⟨ or ⟩ to select the amount of time before the standby state starts.

↔ Off ↔ 1 min. ↔ 15 min. ↔ 45 min. ↔ 60 min. ↔

Press ⏻ to store.

* The numerical value is the approximate amount of time before the standby state starts.

(3) You can assign the black or white color for the background color at the no signal state.

Press ⌄ or ⌃ to select the "Background".

Press ⟨ or ⟩ to select the displayed background displayed.

↔ Black ↔ White ↔

Press ⏻ to store.

* The background color changes to assigned color state after approximate 20 seconds at the no signal state.

"Auto Off-NO SIG." selection screen

Audio Input

You can use this option to select the available terminals to receive the audio from input equipment.

(1) Select "Audio Input" and press ⏻.

The "Audio Input" setting screen will appear.

(2) Press ⌄ or ⌃ to select video input terminal.

(3) Select a related audio input terminal.

Each time you press ⟨ or ⟩, one of the available choices appears in the following sequence:

↔ No Audio ↔ Audio1 ↔ Audio2 ↔ • • • • • ↔

[No Audio]: No audio in the corresponding mode.

[Audio 1-3]: Selects Audio 1 through 3 for receiving audio in the corresponding mode.

[Audio 4-7]: HDMI

* There is also "Audio Input" that cannot be selected.

* Repeat steps (2) and (3) for each piece of input equipment.

(4) Press ⏻ to store.

* AUDIO menu will not be displayed when "No Audio" is selected.
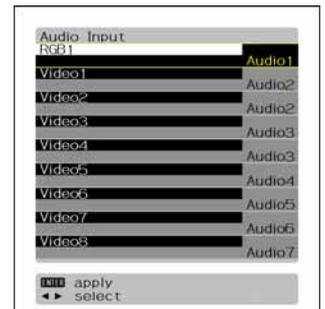
"Audio Input" setting screen

Screen Orbiter (for RGB)

You can use this option to move the screen position to minimize phosphor-induced "burn-in".

Follow the steps below.

(1) Select "Screen Orbiter" and press ⏻.

The "Screen Orbiter" setting screen will appear.

(2) Press ⌄ or ⌃ to select "Mode/Time".

(3) Select a desired pattern.

Each time you press ⟨ or ⟩, one of the available choices appears in the following sequence:

↔ Off ↔ Time ↔ Mode ↔

[Off]:   Disables Screen Orbiter.

[Time]:   Moves the pattern approximately every one hour.

[Mode]:   Moves the pattern when the power is turned ON or when you switch between modes.

(4) Press ⌄ or ⌃ to select "Moving Area".

(5) Press ⟨ or ⟩ to select the range for moving the pattern.

Each time you press ⟨ or ⟩, one of the available choices appears in the following sequence:

"Screen Orbiter" setting screen

E-28
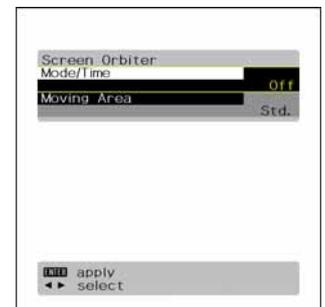
↔ **Min.** ↔ **Std.** ↔ **Max.** ↔

[Min.]: Pattern moves in small range. (About 5 pixels)

[Std.]: Pattern moves in moderate range. (About 10 pixels)

[Max.]: Pattern moves in wide range. (About 15 pixels)

(6) Press ⌷ᴇɴᴛᴇʀ to store.

* When the Screen Orbiter function is operated, some screen contents at the top, bottom, right or left of the screen may move offscreen.

Direct Setting (for RGB)

You can use this option to switch the setting for RGB input signal.

Each time you press ⟨·⟩ or ⟨·⟩, one of the available choices appears in the following sequence:

↔ **Auto** ↔ **VGA** ↔ **WVGA** ↔ **480P** ↔ **XGA** ↔ **WXGA** ↔ **SXGA** ↔ **SXGA**+ ↔

[Auto]: The optimum display is obtained automatically for input signals.

[Others]: The optimum resolution setting is fixed for each signal.

Press ⌷ᴇɴᴛᴇʀ to store.

* In Auto mode, the resolution of VGA, WVGA, 480P, XGA, WXGA, SXGA and SXGA+ may not be automatically distinguished. Switch to the fixed display when the image is not displayed properly.

* Signals that are not applicable depending on the model or input terminals may not be displayed.

Code Setting (for RGB)

Normally, use this option in Auto mode.

White Screen

You can use this option to display white over the entire screen to minimize phosphor burn-in.

Each time you press ⟨·⟩ or ⟨·⟩, one of the available choices appears in the following sequence:

↔ **Off** ↔ **On** ↔

Press ⌷ᴇɴᴛᴇʀ to store.

Background

When the screen size was set to "Normal", to reduce "burn-in", the brightness of the part at which left and right images are not displayed can be set. Normally, we recommend that "Light Gray" be used.

Each time you press ⟨·⟩ or ⟨·⟩, the settings is switched.

↔ **Black** ↔ **Dark Gray** ↔ **Light Gray** ↔

Press ⌷ᴇɴᴛᴇʀ to store.

* Burn-in can still occur if the Normal mode is shown for extended periods.

Information

Displays system operation status.

Select "Information" and press ⌷ᴇɴᴛᴇʀ.

The "Information" screen will appear.

[Mode]:	Input mode appears at the upper right corner of the screen
[Freq. Scan Mode]:	Frequency scanning
[Input Signal]:	Video mode
[Input Sync]:	Signal type
[Freq.]:	Synchronized signal frequency, polarity
[Preset No.]:	RGB code number
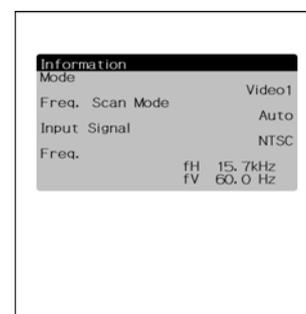
Information screen
(Video Mode)

Note

- If the operation is not executed for about 60 seconds, the menu disappears.
- Some functions are not available depending on the state or condition of use.
- The adjustment range varies according to the display signals. Make adjustments to your preferred picture quality within the adjustment range.
- Depending on the type of signal, it may not be possible to make some of the settings or adjustments.

E-29

INITIALIZATION OF USER ADJUSTMENT VALUE

You can restore the values of the adjustment/setting made in the MENU to factory settings.

1 **Press** ⭕ **.**
The main menu screen will appear.

"FACTORY DEFAULT" selected in the main menu screen

2 **Press** ◁ **or** ▷ **to select "FACTORY DEFAULT".**

Each time you press ◁ or ▷, one of the available menus appears in the following sequence:

PICTURE ↔ POSITION/SIZE ↔ AUDIO ↔ FEATURES ↔ FACTORY DEFAULT

The FACTORY DEFAULT Menu screen will appear.

3 **Press** ⭕ **.**

• Displays the message of whether to proceed with the initialization.

Displays the message of whether to proceed the initialization

4 **Press** ⌄ **or** ⌃ **to select the Yes.**

5 **Press** ⭕ **.**

• The message of having completed the initialization will be displayed after initializing.

6 **Press** ⭕ **when you finish.**

Displays the message of having completed the initialization

OPTIONS

Wall-mounting Bracket	0° to 15° mounting angle	P-WB6300	
Ceiling unit	5° to 25° mounting angle	P-CT6300	
Desktop Stand unit		P-TT6300	
Speaker (1 set of 2 speakers)		P-50SP01 (for attaching to the display)	
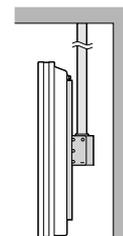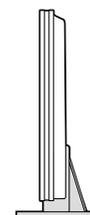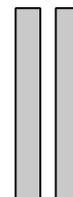
* When installing an option, make sure that all installation requirements for that option (as given in the relevant instruction manual) are met.

* The colors of options do not match the display colors perfectly.

* To improve the function and performance of optional accessories, specifications and part names may change. Consult your local dealer before purchasing.

Warning

To prevent injury, fire, and electric shock, arrange for options to be initially installed (or installed at a different location) by your dealer.

CAUTION

This display (P63XHA70) is for use only with Fujitsu General Limited's option (P-WB6300, P-CT6300, P-TT6300).

Using this display with other option can cause instability resulting in possible injury.

MAIN SUPPORTED SIGNALS

The plasma display can store up to four types of signals for RGB adjustment values. The plasma display uses the first-in, first-out method; therefore, the first input signal is cleared when the fifth one is input.

Input the signal you want to store and adjust to a desired screen according to "ADJUSTING SCREEN POSITION AND SIZE".

When the adjustment has been made, it is automatically stored. Thus, when the plasma display receives the same signal later, pictures will be displayed in accordance with the adjustment value most recently stored.

Main corresponding signals (RGB mode)

Display (dots x lines)	Horizontal frequency (kHz)	Vertical frequency (Hz)	Signal
640 x 480	31.47	59.94	VGA
640 x 480	37.50	75.00	VGA 75 Hz
640 x 480	43.27	85.01	VGA 85 Hz
720 x 400	31.47	70.09	400 lines
800 x 600	37.88	60.32	SVGA 60 Hz
800 x 600	46.88	75.00	SVGA 75 Hz
800 x 600	53.67	85.06	SVGA 85 Hz
1024 x 768	48.36	60.00	XGA 60 Hz
1024 x 768	60.02	75.03	XGA 75 Hz
1024 x 768	68.68	84.99	XGA 85 Hz
1280 x 1024	63.98	60.02	SXGA 60 Hz
1280 x 1024	79.98	75.03	SXGA 75 Hz
848 x 480	31.02	60.00	
852 x 480	31.72	59.97	
1360 x 768	47.71	60.01	
720 x 485	15.73	59.94	60 fields
720 x 575	15.63	50.00	50 fields

• With some input signals, "Out of range" may appear or the image may appear in black and white when the horizontal and vertical frequencies are outside their permissible ranges, or even when the frequencies are within their permissible ranges. In this case, match the input signal to a different frequency in the above table.

In the Comp.video and Video/S-video modes, the display has been factory-set as follows for different input signals:

Main corresponding signals (Comp.video, HDMI mode)

Horizontal frequency (kHz)	Vertical frequency (Hz)	Signal	HDMI
15.73	59.94	SDTV 480i	◯
15.63	50.00	SDTV 576i	◯
31.47	59.94	SDTV 480p	◯
31.25	50.00	SDTV 576p	◯
45.00	60.00	HDTV 720p	◯
37.50	50.00	HDTV 720p	◯
33.75	60.00	HDTV 1080i	◯
28.13	50.00	HDTV 1080i	◯

Main corresponding signals (Video, S-video mode)

Horizontal frequency (kHz)	Vertical frequency (Hz)	Signal
15.73	59.94	NTSC
15.63	50.00	PAL
15.63	50.00	SECAM
15.63	59.52	PAL60
15.63	50.00	N-PAL
15.73	59.95	M-PAL
15.73	59.94	4.43NTSC

Note

• Depending on the input signal, the display may show pictures of reduced size due to size reduction and interpolation.
• You can check input signals through "Information" on the FEATURES Menu screen. (See P. E-29.)
• In order to facilitate the explanations, pictures and diagrams in this manual may differ slightly from the actual items.
• All terms (i.e., company and product names) used in this document are trademarks or registered trademarks.

SPECIFICATIONS

WIDE PLASMA DISPLAY

Model	P63XHA70W		
Screen size	63" wide screen: 139.3 cm (W) x 78.3 cm (H) (159.8 cm diagonal) 54.8 inch (W) x 30.8 inch (H) (62.9 inch diagonal)		
Aspect ratio	16:9 (wide)		
Number of pixels	1920 (H) x 1080 (V)		
Weight	68.5 kg / 151 lbs		
Outer dimensions	150.4 (W) x 89.4 (H) x 12.3 (D) cm 59.2 (W) x 35.2 (H) x 4.8 (D) inch (does not include outer projections)		
Power supply	110-240 VAC 50/60 Hz		
Current rating	7.0-2.5 A		
External equipment terminals			
Video input terminals	VIDEO1 INPUT (Video input)	RCA terminal	1 Vp-p/75 Ω
	VIDEO2 INPUT (S-video input)	S terminal	Y: 1 Vp-p/75 Ω C: 0.286 Vp-p/75 Ω
	VIDEO3/VIDEO4 INPUT (Component video input)	3 RCA terminals	Y: 1 Vp-p/75 Ω P_B/C_B: 0.7 Vp-p/75 Ω P_R/C_R: 0.7 Vp-p/75 Ω
	VIDEO5/VIDEO6 VIDEO7/VIDEO8 INPUT (HDMI input, Video/Audio)	HDMI terminal (HDMI type A connector)	
PC input terminal	RGB1 input	mD-sub, 3 rows, 15-pin Picture signal: 0.7 Vp-p/75 Ω Synchronization signal: TTL level	
Audio terminals	2 audio input pin jacks (L/R) (3 lines) 500 mVrms		
Control terminal	RS-232C connector (D-sub 9-pin)		
External speaker output terminal	Max. output: 10 W + 10 W, 6 Ω		
Operating conditions	Temperature: 0 to 40 °C / 32 to 104 °F Humidity: 20 to 80 %		
Accessories	User's manual, Safety Precautions, Power cord, AA battery (2), Remote control, Small ferrite core (2), Large ferrite core A (5), Large ferrite core B, Wire clamper		

Regulation

- UL, CSA Safety: UL60065, C-UL
  - EMC: FCC Part 15, ICES-003 (CISPR22)
- CE Safety: EN60065
  - EMC: EN55022 (CISPR22)
  - EN55024 (CISPR24)
  - EN61000-3-2
  - EN61000-3-3
- AS Safety: IEC60065
  - EMC: AS/NZS 3548 (CISPR22)

Note

- Specifications and external appearance may be change for the sake of improvement.
- Viewing the screen constantly for extended periods can strain your eyes. Be sure to stay at a proper distance (at least 2.4 m or 7.9 feet) from the screen and to look occasionally away while working.
- Plasmavision™ is a worldwide trademark of Fujitsu General Limited and is a registered trademark in Japan, the U.S.A. and other countries or areas.

E-33

CLEANING AND MAINTENANCE

Precautions
Be sure to remove the power plug from the receptacle before cleaning the display.
Be sure not to clean the display using a cloth dampened with volatile solvents, such as benzene or thinner. Such solvents can harm the display's cabinet, the filter at the screen front, and the remote control. They can also cause paint to come off these sections.

Cleaning the Screen
Clean the screen gently with a soft cloth.
The screen surface is fragile. Never attempt to clean it with a hard material, press on it forcefully, or tap it.

Cleaning the Cabinet and Remote Control
Use a soft cloth for cleaning.
If the cabinet or remote control is heavily stained, soak a soft cloth in a mixture of water and detergent and squeeze it dry before wiping off the stains. Use a soft, dry cloth for final cleaning.

Cleaning the ventilation grille
Remove dust from the ventilation grille in the rear of the main unit periodically with a vacuum cleaner as the accumulated dust can increase the internal temperature of the main unit causing machine failure or fire hazard.

BEFORE OBTAINING SERVICE

In the event of problems with the display, check the following explanations before contacting your dealer for servicing.

Problem	Action
• Power does not turn ON.	• Check whether the power plug is securely inserted into the receptacle.
• No pictures are displayed.	• Check cables for disconnection. • Check whether the power for all input equipment is ON. • Check for connection to wrong terminals or for wrong input mode. • Check whether the input mode display is colored pink. Special setup may have been made. Return to original setup or initialize the User adjustment value.
• Remote control does not function properly.	• Check for incorrect battery orientation. • Check for dead batteries. • Check for distance from the display. • Check whether you are pointing the remote control transmitter properly at the display's receiver. • Check for any obstacle between the remote control and the display.
• The display makes a snapping sound.	• This sound is produced when the cabinet expands or contracts due to variations in temperature. This sound does not indicate that the display has a problem.
• The display makes a buzzing sound.	• The display has fans to maintain the temperature of internal components at a constant level. This sound is produced by the fan as it rotates. (Applies to models equipped with a fan)
• There are spots on the screen.	• Check whether your AV equipment is affected by interference from automobiles, trains, high-voltage transmission lines, neon signs or other potential sources of interference.
• Degraded colors/tints	• Check whether all picture adjustments have been properly made. (See "Adjusting the Picture" on P. E-19–E-20.)
• Improper screen position/size	• Check whether screen position and size have been properly adjusted. (See "Adjusting Screen Position and Size" on P. E-24.)
• No audio	• Check cables for disconnection. • Check whether the proper audio input has been selected. (See "Audio Input" on P. E-28.)
• If "Out of range" appears, the display is receiving a signal whose picture or signal cannot be reproduced by the display. • The screen turns to black and white.	• Signals that are not supported by this display have been input. Check which signals are supported. (See "MAIN SUPPORTED SIGNALS" on P. E-32.)
• If "Error message Condition 1" appears, the fan is defective.	• Remove the power plug from the receptacle, and contact your dealer for repairs. (Applies to models equipped with a fan)
• If "Error message Condition 2" appears, the display's internal components are extremely hot.	• Remove the power plug from the receptacle. (You can turn the power back ON again when the components have cooled sufficiently.) If the message appears again when you turn the power back on, remove the power plug from the receptacle, and contact your dealer for repairs.
• If "Change refresh rate to 60Hz" appears.	• The picture may get blurred with vertical frequency of other than 48.3-51.8 or 58.4-61.4 (Hz). Change the setting of your PC, etc.
• If the power indicator lamp flashes red or green.	• Remove the power plug from the receptacle, and inform your dealer about how the lamp flashed. The power indicator lamp flashes differently depending on the type of problem.

Note
• Functions may not be available with some models and some device options.