FUJITSU

WIDE PLASMA DISPLAY
P42XTA51U
P50XTA51U
P55XTA51U
P63XTA51U

Plasmavision™

AVM
II
Advanced Video Movement

Before using the plasma display, read this manual carefully so that you know how to use the plasma display correctly.
Three manuals of the "Safety Precautions" , this "User's Manual" and "Speaker Unit Installation Manual"are supplied with the plasma display. Especially, be sure to read and observe the "Safety Precautions".
Refer to this manual whenever questions or problems about operation arise.
Keep this manual in the place where the user can see it easily.
* Installation and removal require special expertise. Consult your dealer for details.
* The last digit of Model No. (10 digit alphanumeric characters) indicated on the product means the body color indication alphabet or the management number.

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.

- Pictures may become "burn-in" into the screen phosphors if the screen is left on for extended periods of time. To ensure that the plasma display has a prolonged service life, be sure to use settings such as the screen orbiter or white screen settings. These settings will ensure that the same picture or pattern is not constantly displayed for long periods. (See P. E-38-E-39.)

- 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.

ACCESSORIES

Safety Precautions	This manual	Speaker unit installation manual	Remote Control	AA Battery (2)
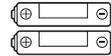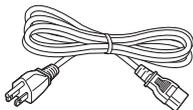
Power Cord	Large ferrite core (2, for power cord and RS-232C cable)	Small ferrite core (2, for external speaker cable)	Spacer (4)
	See P. E-14 for the installation procedure.	See P. E-14 for the installation procedure.	See P. E-41 for the installation. (for 42"/50" models)
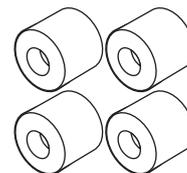
For speaker installation

For 42" / 50" / 55" model
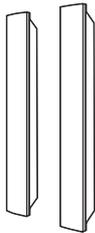
Speaker Unit (2)	Screw (8)	Holder-A (2)	Holder-B (2)	Cushion (2)	Speaker cable (2)
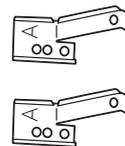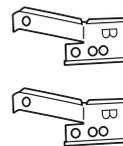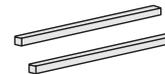
For 63" model

Speaker Unit (2)	Screw (8)	Holder (2)	Cushion (2)	Speaker cable (2)
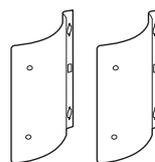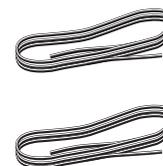
TRADEMARK INFORMATION

Dolby Digital

Manufactured under license from Dolby Laboratories. "Dolby" and the double-D symbol are trademarks of Dolby Laboratories.

HDMI (High-Definition Multimedia Interface)

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

CableCARD[TM]

CableCARD[TM] is a trademark of Cable Television Laboratories, Inc.

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 items.

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 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 ↑5 Lower	(cm) Wall 3.5 (for 42"/50" models) 5 (for 55"/63" models)
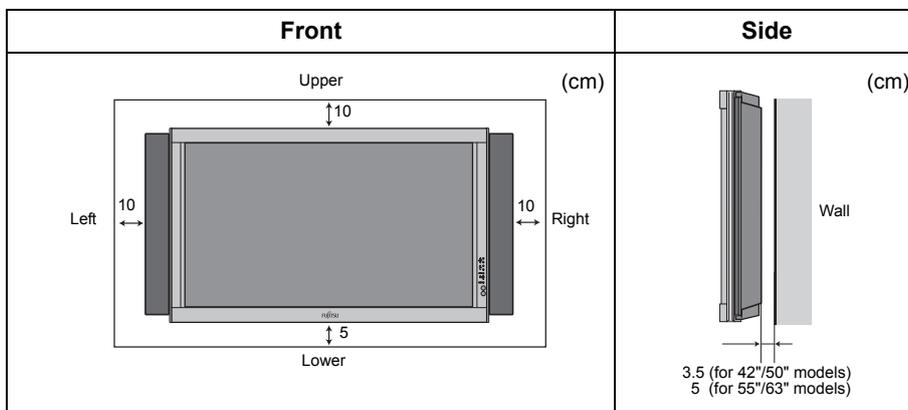
Note
- See P. E-41 for details on the options.
- The external view is meant to be a representation of the actual unit and is not to scale; therefore, it may differ from the actual shape and size of the product.
- Due to the fragile and highly precise equipment, it is very important to pack properly before transportation using only the packing materials provided.

PART NAMES AND FUNCTIONS

DISPLAY SECTION – FRONT

(Right section)
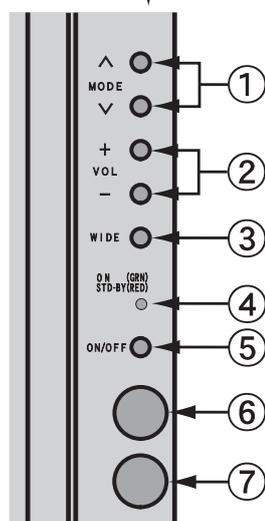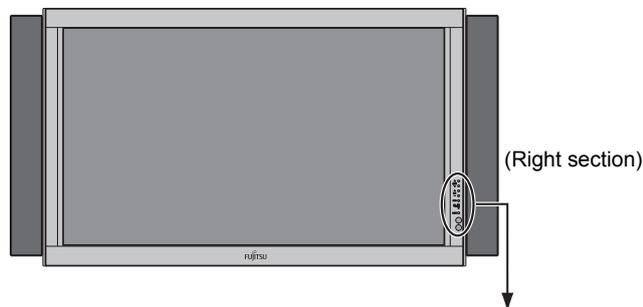
① **Input mode selection button**

Switches the input modes (Video mode, RGB mode and TV 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):	Stand-by 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
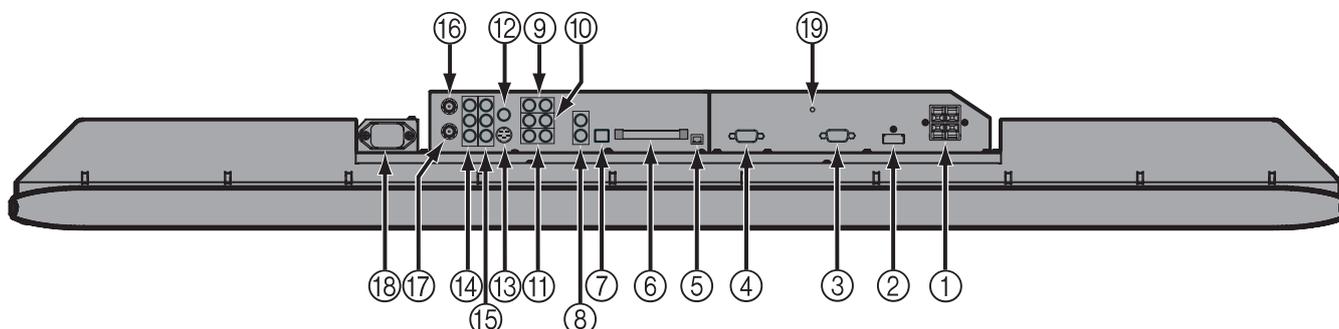
① **External speaker output terminal (EXT. SP)**

Connect these terminals to the speakers.

When connecting a cable, attach a ferrite core to the cable. (See P. E-14.)

* For details, see the speaker unit installation manual.

② **Video5 input terminal (VIDEO5 INPUT/HDMI)**

Connect this terminal to the HDMI output terminal of DVD recorder/player or other video source.

③ **RS-232C terminal (RS-232C)**

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

④ **RGB1 input terminal (RGB1 INPUT/mD-sub)**

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

⑤ **Maintenance terminal (SERVICE ONLY)**

This terminal is only for access by an Authorized Service Engineer. This should never be used by the end user.

⑥ **CABLE CARD slot (CABLE CARD)**

To receive cable TV programs insert the card supplied from cable TV provider. (See P. E-12.)

⑦ **Digital audio output terminal (AUDIO OUTPUT DIGITAL)**

Connect this terminal to the digital audio input terminal of the audio amplifier.

⑧ **Analog audio output terminal (AUDIO OUTPUT ANALOG)**

Connect this terminal to the analog audio input terminal of the audio amplifier.

⑨ **Audio1 input terminal (AUDIO1 INPUT)**

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

⑩ **Audio2 input terminal (AUDIO2 INPUT)**

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

⑪ **Audio3 input terminal (AUDIO3 INPUT)**

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

⑫ **Video1 input terminal (VIDEO1 INPUT/VIDEO)**

Connect this terminal to the Video output terminal of VCR or DVD recorder/player.

⑬ **Video2 input terminal (VIDEO2 INPUT/S-Video)**

Connect this terminal to the S-Video output terminal of VCR or DVD recorder/player.

⑭ **Video3 input terminal (VIDEO3 INPUT/Y P_B P_R)**

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

⑮ **Video4 input terminal (VIDEO4 INPUT/Y P_B P_R)**

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

⑯ **Cable TV antenna input terminal (Cable In)**

Connect this terminal to the cable TV antenna signal.

⑰ **VHF/UHF antenna input terminal (Antenna In)**

Connect this terminal to the VHF/UHF antenna signal.

⑱ **Power input terminal**

Connect this terminal to the power cord supplied with the plasma display.

When connecting a cable, attach a ferrite core to the cable. (See P. E-14.)

⑲ **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.

PART NAMES AND FUNCTIONS (Continued)

REMOTE CONTROL

For details, see page ➜.
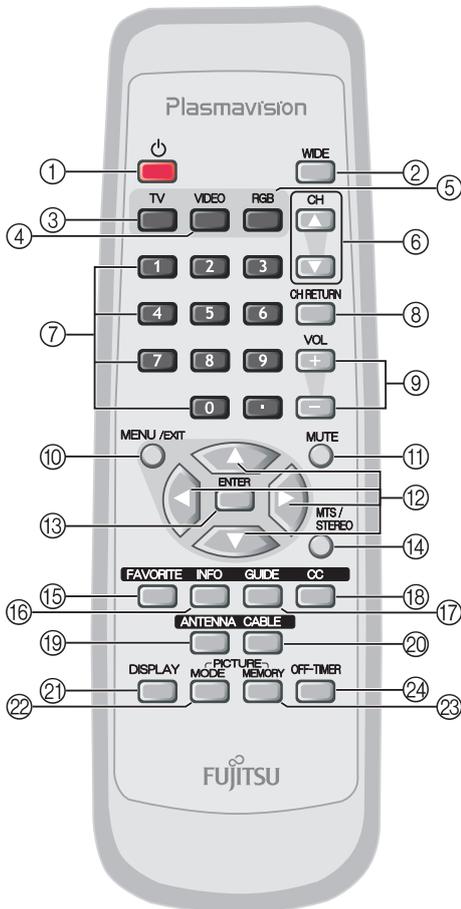
① ⏻ **(POWER button) ➜ E-17**

Switches between Power On and Standby.

② **(WIDE button) ➜ E-21**

Press to switch to a desired wide screen.

③ **(TV button) ➜ E-18**

Press to watch terrestrial TV broadcasting.

④ **(VIDEO button) ➜ E-18**

Press to switch from VIDEO1 through VIDEO5.

⑤ **(RGB button) ➜ E-18**

Press to select RGB1.

⑥ **(Channel Up/Down buttons) ➜ E-18**

Press to select the preset programs.

⑦ **0 ～ 9, · (Number buttons) ➜ E-18**

Press to directly select a channel.

⑧ **(Channel Return button) ➜ E-18**

Press to return to the previous channel, or switch to the Video mode or RGB mode.

⑨ **(Volume adjustment buttons) ➜ E-17**

Press to adjust the volume control.

⑩ **(MENU/EXIT button) ➜ E-23–E-40**

Press to display or hide the menu screen.

Use for Picture or Audio adjustment.

⑪ **(MUTE button) ➜ E-17**

Press to temporarily mute the audio. To restore the sound, press the button again. Instead, the ⊕ or ⊖ button can also be pressed.

⑫ **(Adjustment buttons) ➜ E-23–E-40**

Use these buttons to select the item or adjust the value of the on screen menu.

⑬ **(ENTER button) ➜ E-23–E-40**

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

⑭ **(MTS/STEREO) ➜ E-20**

Press to select the audio mode such as MTS (Multi-channel TV Sound) or stereo.

⑮ **(FAVORITE button)** ➔ **E-19**

Press to recall an already registered Favorite Channel List, add the current channel to the Favorite Channel List, or delete an already registered channel.

⑯ **(Information button)** ➔ **E-20**

Press to display the current channel information.

⑰ **(Electronic Program Guide button)** ➔ **E-20**

Press to display the electronic program guide.

⑱ **(Closed Caption button)** ➔ **E-20**

Press to display the closed captions.

⑲ **(Antenna In button)** ➔ **E-18**

Press to switch to the signal input of Antenna In terminal.

⑳ **(Cable In button)** ➔ **E-18**

Press to switch to the signal input of Cable In terminal.

㉑ **(DISPLAY button)** ➔ **E-21**

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

㉒ **(PICTURE MODE button)** ➔ **E-21, E-25**

Press to switch the Picture Mode.

㉓ **(PICTURE MEMORY button)** ➔ **E-21, E-28**

Press to recall the Picture Memory.

㉔ **(OFF-TIMER button)** ➔ **E-21**

Press to specify the length of time until the power automatically turns off (stand-by state).

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.

Plasma display – front

Left 30° 30° Right

5 m (Front)

Remote Control

Plasma display – side

Upper
20°
20°
Lower

Remote Control
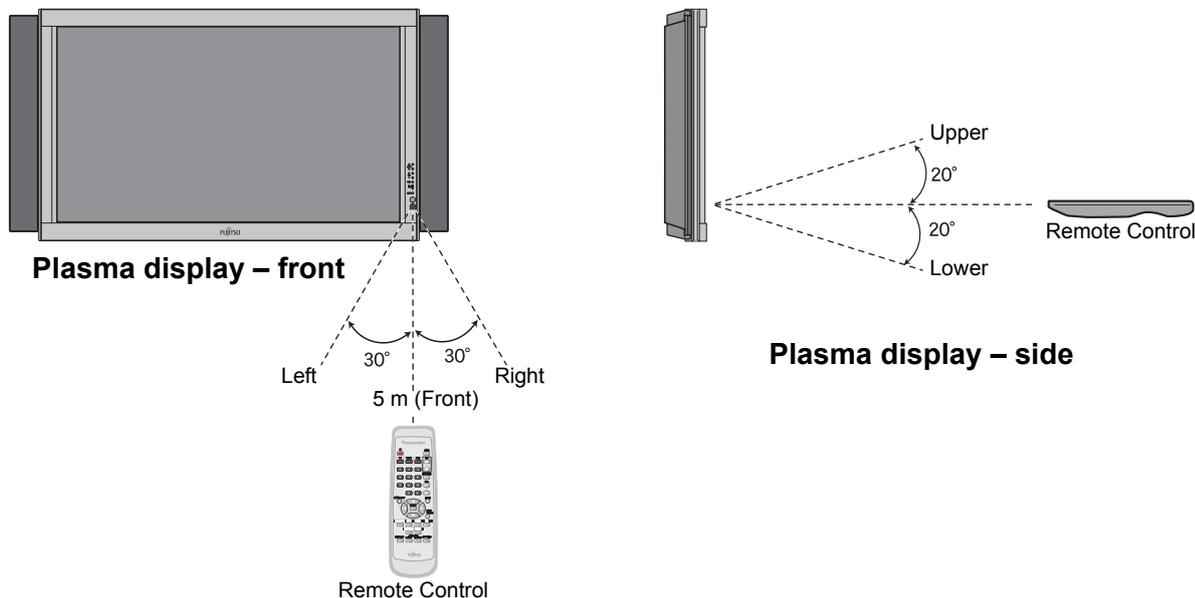
CAUTION

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.

BASIC CONNECTION AND PREPARATION OF THE SYSTEM

• Before this plasma display can be operated for the first time, the connections and settings below must be completed.

VHF/UHF antenna

To the receptacle for 3-prong power plug with grounding

To Speaker

To Speaker

Cable In

Antenna In

CABLE CARD

75 Ohm coaxial cable
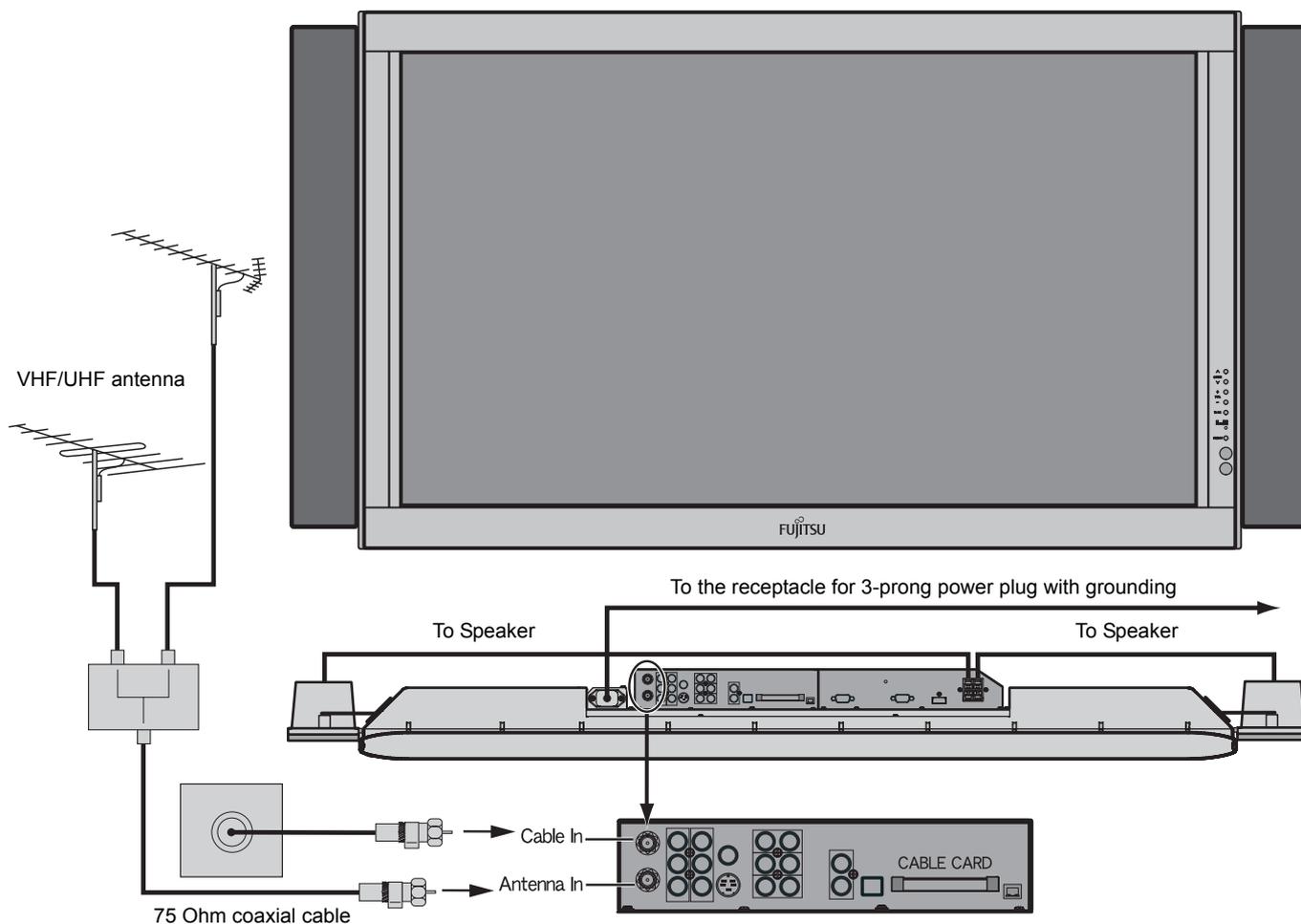
* For best reception (of terrestrial signal), an outdoor antenna (OTA) is recommended.

CONNECTIONS TO THE PLASMA DISPLAY

1. **Connect the antenna line (VHF/UHF). (If you are not connecting an antenna line, skip to step 2.)**

2. **Connect the CATV cable.**

   See the above figure for the connection of the CATV line.

3. **Connect the speakers. (For details, see the separate manual "Speaker Unit Installation manual.")**

4. **Connect external equipment such as a DVD Player. (For details, see "EXAMPLE OF CONNECTING EXTERNAL EQUIPMENT" P. E-16.)**

• The subsequent steps of the setting procedure are different between cable TV programs and terrestrial TV programs.

TO RECEIVE CABLE TV PROGRAMS (WITH CableCARD)

* To watch cable TV broadcasts, sign up with a cable-TV provider before installing and connecting the plasma display. For details, contact the cable-TV provider.

5. Insert the CableCARD.

The cable-TV provider supplies the CableCARD after you sign up for service. (Make sure the cable company knows you are requesting or upgrading to CableCARD service.)

Insert the CableCARD into the slot shown in the figure below before turning on the power for the first time after the purchase of the plasma display.

Upper side of the card
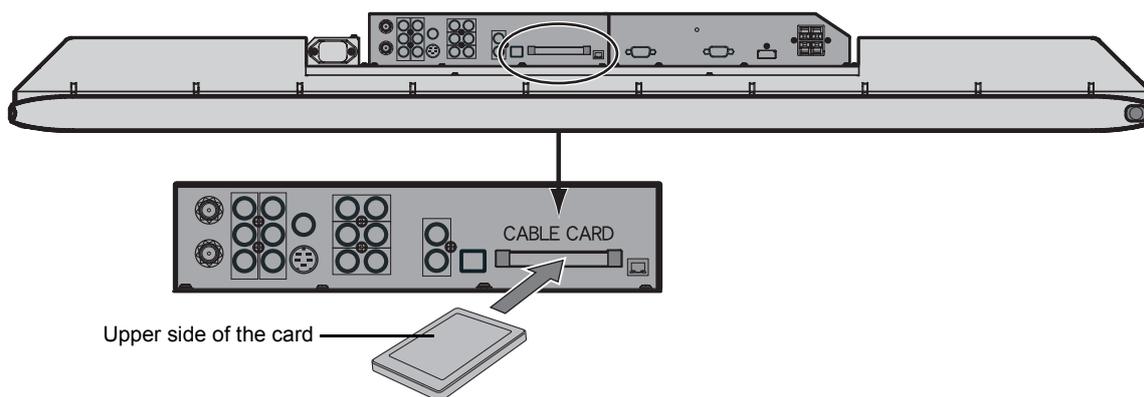
* Be sure to insert the CableCARD designated by the cable-TV provider.

6. Connect the power cord coming from the display to the outlet, and turn on the power supply. For further information, observe the content of "Power On" (P. E-17) .

7. Press ⬛ **to select the TV mode.**

8. The First Setup screen is displayed. Set the date and time.

9. Press ⬛ **to select signal of Cable In.**

10. Select a desired program.

About CableCARD

• The plasma display enables you to watch cable TV broadcasts without the set top box.
• To watch cable TV broadcasts, you need to sign up with a cable-TV provider in your region.
• The cable-TV provider supplies the CableCARD in response to the contract. You can watch cable TV broadcasts by inserting the CableCARD into the CABLE CARD slot in the plasma display.

Note

• Be sure to use only the CableCARD supplied by the cable-TV provider. Do not insert PCMCIA card other than CableCARD into the CableCARD slot.
• Slowly push in the designated CableCARD until it is locked.
• Insertion of an undesignated card may damage the CableCARD slot.
• First Setup is displayed when the power is turned on for the first time or after the power cable is disconnected from the outlet. In this case, perform Clock Set.
• Pictures will not display unless Cable In is connected.
• It may take time to obtain channel information.
• When a CableCARD has been inserted into the plasma display, the set's power consumption increases slightly. - in both the standby state and power on state.
• When the power cable is disconnected or broadcasts cannot be received (antenna was disconnected, etc.) after the cable card was inserted/set, it may be impossible to receive data from the cable TV provider. In this case, it may become impossible to view the contracted programs even if the power is turned on again. When this state occurred, please contact the cable TV provider.
• When upgrading the CableCARD firmware, do not remove the power cable or the CableCARD power supply. The CableCARD may be destroyed. The CableCARD firmware may be upgraded in either the standby state or power on state. For checking during upgrading, check the messages on the screen in the power on state.
• If you are using a CableCARD and the plasma display is not operating properly, try disconnecting and reconnecting the power cable and turning the plasma display power on.
• The CableCARD may be hot; remove with caution.

TO RECEIVE CABLE TV PROGRAMS (WITHOUT CableCARD)

(Continued from page E-11)

* To watch cable TV broadcasts, sign up with a cable-TV provider before installing and connecting the Plasma display. For details, contact the cable-TV provider.

5. **Connect the plasma display's power cord to the outlet, and turn on the power. (For details, see "Power ON" (P. E-17).)**

6. **Press** _{TV} **to select the TV mode.**

7. **The First Setup screen is displayed. Set the date and time.**

8. **Press** _{CABLE} **to select signal of Cable In.**

9. **Perform Auto Scan. For details, see "TUNER SETTING - Auto Scan - Cable" (P. E-33).**

10. **Select a desired program.**

TO RECEIVE TERRESTRIAL TV PROGRAMS

5. **Connect the plasma display's power cord to the outlet, and turn on the power. (For details, see "Power ON" (P. E-17).)**

6. **Press** _{TV} **to select the TV mode.**

7. **The First Setup screen is displayed. Set the date and time.**

8. **Press** _{ANTENNA} **to select signal of Antenna In.**

9. **Perform Auto Scan. For details, see "TUNER SETTING - Auto Scan - Antenna" (P. E-33).**

10. **Select a desired program.**

Note
• If the power cable is disconnected or a power failure occurs, First Setup will be displayed upon power recovery.

ATTACHING THE FERRITE CORES

The ferrite cores are used to reduce noise. Attach them correctly as shown in the following illustrations.

Be sure to turn off power of the plasma display and external equipment before making any connections.

Carefully check the terminals for position and type before making any connections.

Loose connectors can result in picture or color problems. Make sure that all connectors are securely inserted into their terminals.

Two large ferrite cores

When connecting the cord to the power input terminal, RS232C input terminal, attach one of these ferrite cores to the cord and the cable near the terminal.

Power Cord

RS232C Cable

Ferrite Core
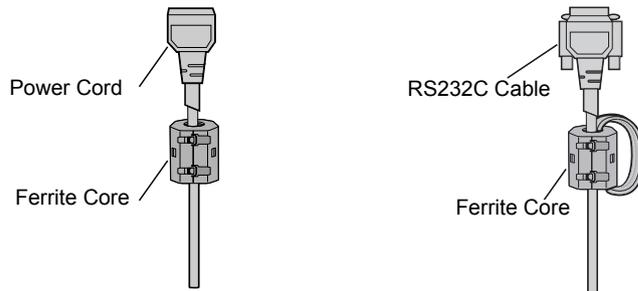
Ferrite Core

Two small ferrite cores

When connecting a cable to the external speaker output terminal, attach a ferrite core to the cable near the terminal.
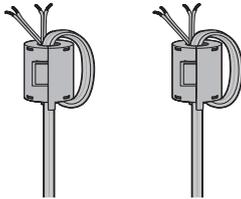
Note
• Cables for connecting the plasma display to external equipment are not supplied. Contact your dealer for more information on these products.
• In order to facilitate the explanations, pictures and diagrams in this manual may differ slightly from the actual items.

CONNECTING TO EXTERNAL EQUIPMENT

- Before external equipment is connected, all the power cables must be unplugged.
- For the terminal names, see P. E-7.
- If the equipment to be connected has an HDMI output terminal and component video output terminal, one or the other of the terminals should be connected.
- Refer to instruction manual for the equipment to be connected.
- There are three audio inputs (HDMI audio excluded). Set them according to Audio Input on P. E-38.
- To receive cable-TV programs, contact a desired cable-TV provider.

Bottom of the plasma display

CATV antenna input
VHF/UHF antenna input

EXP. PORT

RS-232C

Cable In

Antenna In

CABLE CARD

SERVICE ONLY

VIDEO3 INPUT Y PB PR

VIDEO4 INPUT Y PB PR

VIDEO1 INPUT VIDEO

VIDEO2 INPUT S VIDEO

AUDIO OUTPUT DIGITAL
AUDIO OUTPUT ANALOG

RGB1 INPUT mD-sub

VIDEO5 INPUT HDMI

AUDIO1 INPUT
AUDIO2 INPUT
AUDIO3 INPUT

Video output
S-Video output
Component Video
output

Audio output

Digital audio input
Analog audio input

Audio output

RGB output
(Analog)

HDMI output

External equipment (e.g., VCR, DVD recorder/player, or digital tuner)

Audio amplifier

Personal computer

HDMI-compatible external equipment (e.g., DVD player)

E-15

EXAMPLE OF CONNECTING EXTERNAL EQUIPMENT

- 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 out put terminal and Component Video output terminal, it is recommended to connect to only one of the terminals. If the HDMI output is connected, an Audio signal cable does not need to be connected.

DVD or VCR

To Audio output

To HDMI output

To S-Video output

To Video output

To Video input

To Component Video output

To Component Video input

To Audio input

Bottom of the plasma display

To S-Video input

To HDMI input
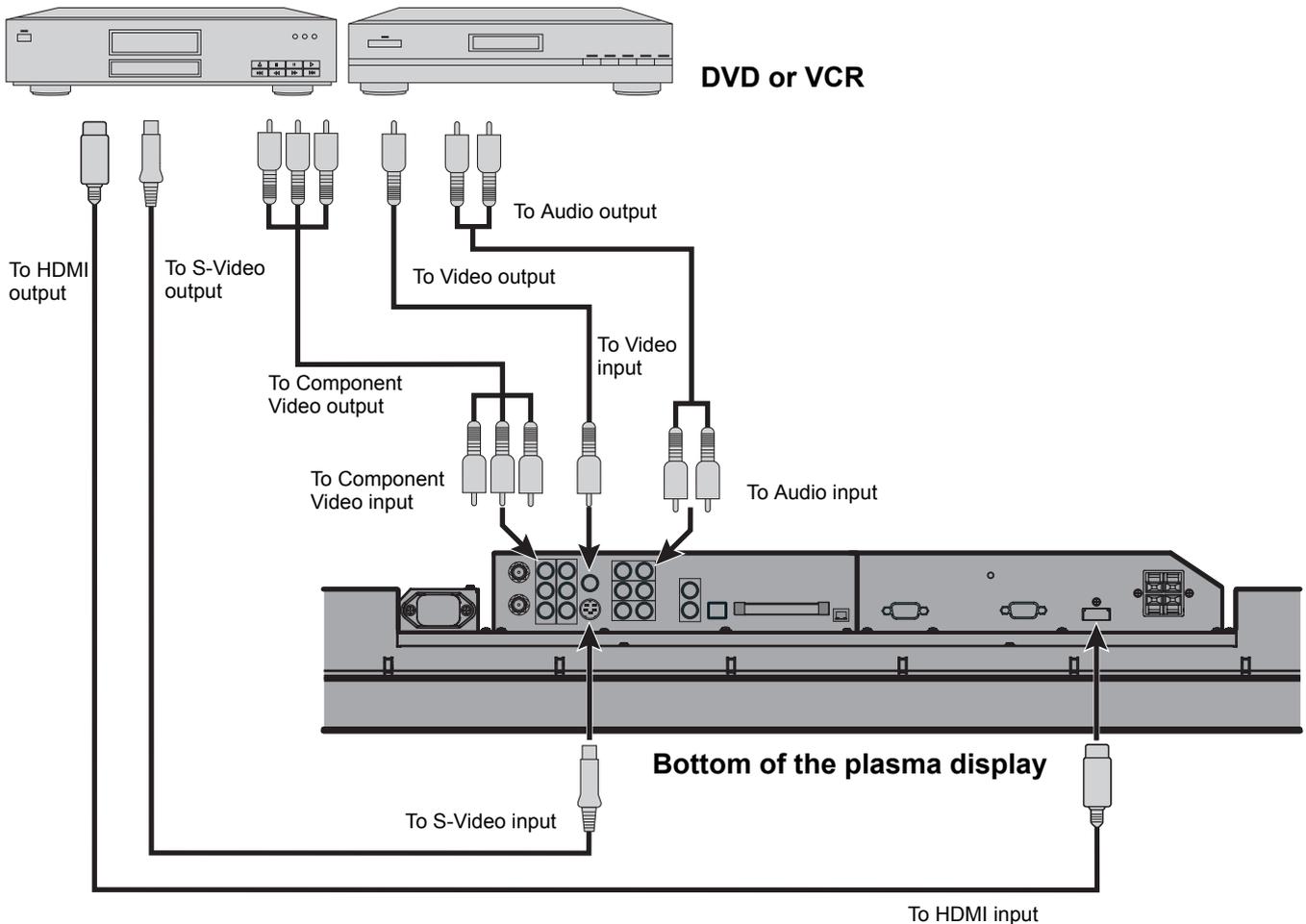
- The table below shows the settings of Audio inputs. (Factory setting)
* For changing of Audio input settings, see Audio Input on P. E-38.

Video input	Audio input
RGB1(D-sub)	Audio1
Video1(Video)	Audio2
Video2(S-video)	Audio2
Video3(Component Video)	Audio3
Video4(Component Video)	Audio3
Video5(HDMI)	Audio4(HDMI)

Note

- Unplug the power cord from the AC outlet before you connect external equipment.
- You should also refer to the instructions for the equipment to be connected.

BASIC OPERATIONS

Power ON

Turn "ON" the power.

1 **Press ⏻.**

The power is turned on, and the power lamp changes from "Red" to "Green."

Select the Video, RGB, or TV mode to enable ordinary operation.

* Make sure that the power cord is connected to a 3-core receptacle in advance. (See P. E-11 of "BASIC CONNECTION AND PREPARATION OF THE SYSTEM")

Power OFF (standby state)

Turn "OFF" the power (the plasma display placed in standby state).

1 **Press ⏻ when the power is "ON."**

The power lamp changes from "Green" to "Red" and the plasma display becomes the standby state.

VOL (Volume)

E-17

The volume can be adjusted.

To increase the volume, press ⧾ᵛᵒˡ.

To decrease the volume, press ⊝ᵛᵒˡ.
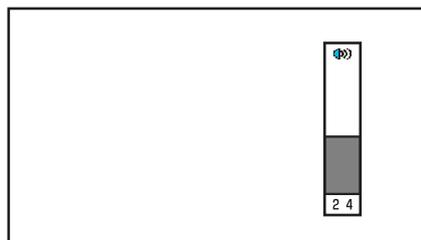
View when ⧾ᵛᵒˡ or ⊝ᵛᵒˡ is pressed

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

* An audio signal from an audio output terminal (AUDIO OUTPUT DIGITAL or AUDIO OUTPUT ANALOG) does not change.

MUTE

The sound can be temporarily muted.

Press ◯ᴹᵁᵀᴱ.

The sound is muted.

To restore the original sound volume, press the button again.

The volume can also be restored by pressing ⧾ᵛᵒˡ or ⊝ᵛᵒˡ.

* An audio signal from an audio output terminal (AUDIO OUTPUT DIGITAL or AUDIO OUTPUT ANALOG) does not change.

Note
- If the operation is not executed for about 60 seconds, the menu disappears.
- Some functions may not be available depending on the model or optional equipment.

E-17

WATCHING TV, VIDEO, OR PICTURES ON PC

TV

Select the TV mode to watch TV programs.

1 **Press TV.**

Terrestrial TV programs or cable TV programs are available. The last program No. that you watched is received.

2 **Press ANTENNA to watch terrestrial programs. Press CABLE to watch cable TV programs.**

3 **Select a desired Program No.**

There are two methods to select a Program No.

Using 0 - 9, or ·

Using CH▲ or CH▼

CH RETURN

The program can be toggled back to a previous channel, video input or RGB input.

Press CH RETURN.

The program reverts to the channel viewed immediately before the present channel. If the previous content was from another video input, the video mode reverts to that input.

ANTENNA/CABLE

Terrestrial or cable TV broadcastings can be selected.

Press ANTENNA.

The Antenna In signal is selected.

Press CABLE.

The Cable In signal is selected.

VIDEO

Select the video mode to watch pictures through video inputs.

Press VIDEO.

Each time this button is pressed, the video input mode is switched to the next one. The video input mode can also be switched directly by pressing VIDEO and then the number button on the remote control.

```
                                    Video1




```

View when the Video1 mode is selected

* For the settings of input terminals, see "EXAMPLE OF CONNECTING EXTERNAL EQUIPMENT" (P. E-16) and "Audio Input" (P. E-38).

RGB

Select the RGB mode to watch pictures through the RGB input.

Press RGB.

The RGB input mode is selected.

```
                                    RGB1




```

View when the RGB1 mode is selected

* For the settings of input terminals, see "EXAMPLE OF CONNECTING EXTERNAL EQUIPMENT" (P. E-16), "Selecting the settings of D-Sub Input terminal" (P. E-32), and "Audio Input" (P. E-38).

About Auto Lock (Parental Lock)
- Auto Lock is provided for parents to determine that TV programs and video pictures not good for their children are blocked.
- Restrictions on the watching of TV programs can be placed by channel, age, and program category.
- For details, see "Auto Lock (Parental Lock) Setting" on P. E-36.

# WATCHING A FAVORITE CHANNEL

ADDING A FAVORITE CHANNEL

A favorite program can be registered in the FAVORITE channel list.

1 **Press** FAVORITE.

The program you are watching and the registered programs are displayed.

If the current program is not yet registered, "Add" is displayed.
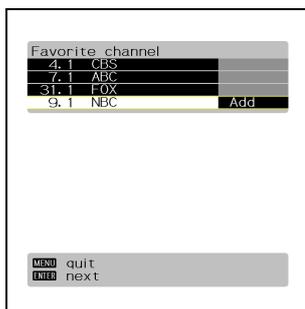
```
Favorite channel
 4. 1  CBS
 7. 1  ABC
31. 1  FOX
 9. 1  NBC              Add


MENU  quit
ENTER next
```
"Favorite Channel-Add" Screen

2 **Press** ENTER.

The current channel is registered in the FAVORITE channel list.

* The current channel is not registered unless you press ENTER after the program selection by pressing ⌃ or ⌄.

3 **Press** FAVORITE.

Press to exit the FAVORITE channel list.

WATCHING A FAVORITE CHANNEL

A program registered in the FAVORITE channel list can be watched.

1 **Press** FAVORITE.

The registered FAVORITE list is displayed.
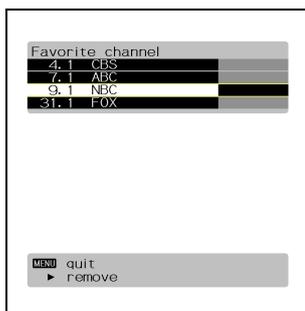
```
Favorite channel
 4. 1  CBS
 7. 1  ABC
 9. 1  NBC
31. 1  FOX




MENU  quit
 ►  remove
```
"Favorite Channel" Screen

2 **Select a target one from the channels registered by** ⌃ ⌄.

* The current channel is switched to the selected one.

3 **Press** FAVORITE.

Press to exit the FAVORITE channel list.

DELETING A FAVORITE CHANNEL

A registered program can be deleted from the FAVORITE channel list.

1 **Press** FAVORITE.

Press to display the registered channel list.

2 **Press** ⌃ **or** ⌄ **to select the channel to be deleted, and press** ▷. **"Remove" is displayed.**
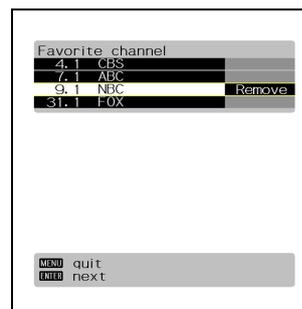
```
Favorite channel
 4. 1  CBS
 7. 1  ABC
 9. 1  NBC              Remove
31. 1  FOX




MENU  quit
ENTER next
```
"Favorite Channel-Remove" Screen

3 **Press** ENTER.

* The channel is deleted from the FAVORITE channel list.

4 **Press** FAVORITE.

Press to exit the FAVORITE channel list.

Note

• If the operation is not executed for about 60 seconds, the menu disappears.

CONVENIENT TV AND VIDEO FUNCTIONS

GUIDE

This function displays the GUIDE information for the current channel.

Press ⬚.

The program guide of the current broadcast is displayed.

Press ⬚ or ⬚ to select time.

The display disappears when you press ⬚ again.

* When received the program without GUIDE information, GUIDE information is not displayed in the menu even if the GUIDE key is pressed.

CC (Closed Caption)

This function switches the closed caption service.

Press ⬚.

The closed caption service is switched as shown below.

- For a closed caption service in analog mode:
  Each time this button is pressed, the service is switched between "off" and the closed-captioned TV program in analog mode.

- For a closed caption service in digital mode:
  Each time this button is pressed, the service is switched between "off," the closed-captioned TV program in analog mode, and the closed-captioned TV program in digital mode.

* For the setting of closed caption service, see "CC (Closed Caption) Service SETTING" on P. E-35.

MTS/STEREO

The audio mode is switched.

Press ◯.

Each time this button is pressed, the audio mode is switched.

The switching varies depending on the broadcasting contents.

* The switching method is determined by the program you are watching.
* The available language is determined by the program you are watching.
* If a stereo broadcast is hard to hear due to poor reception, change to Mono mode.
* Monaural sound is presented when SAP mode is selected.

INFO (INFORMATION)

This function displays the channel information of watching channel.

Press ⬚.

Displays the following indication.

The information display disappears when you press ⬚ again.

The current reception conditions and the Rating of program are displayed.

The following illustrations are used for the indication.

When receiving the signal corresponded to the following mode, highlights the indication.

📶▭	:Signal strength (applies to digital channels only)
HDTV	:High Definition Television
⬚	:Stereophonic Broadcasting
oo	:Sound Multiplex Broadcasting
CC	:Closed Caption Broadcasting
▯◖◗▯	:Dolby Digital Broadcasting

OTHER BASIC OPERATIONS

DISPLAY

Press □̇.

Press this button to display the Program No., input mode, and screen size status.

OFF TIMER

This function allows you to set the length of time before the plasma display automatically goes into standby state.

Press □̇.

The standby state is placed when the set time has passed.

Each time the button is pressed, the time setting is switched as shown below.

→ 30min. → 60min. → 90min. → 120min.
→ off →

PICTURE MODE

This function switches the picture mode.

Press □̇.

Each time the button is pressed, the mode is switched between the current picture mode and Fine mode.

* See P. E-25 for how to set PICTURE MODE.

* While you are watching pictures in Fine mode, pressing the button does not switch the mode.

PICTURE MEMORY

This function calls pictures which have been adjusted and registered. This button toggles among eight preset picture adjustment groups loaded into memory.

Press □̇.

Each time the button is pressed, the picture memory is switched as shown below.

→ Memory1 → Memory2 → Memory3 →
Memory4 → Memory5 → Memory6 →
Memory7 → Memory8 →
* See P. E-28 for how to set PICTURE MEMORY.

WIDE

This function switches among available picture display modes.

1 Press □̇.

The currently selected mode will appear.
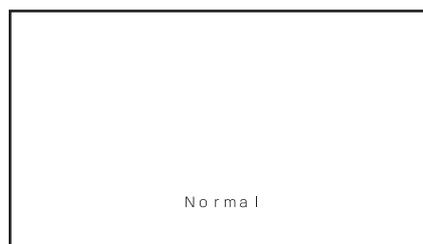
Normal

Normal mode

2 Press □̇ to select a desired display mode.

Each time you press □̇, a different display mode appears. Here are the display mode sequences.

TV mode

→ Normal → Wide1 → Wide2 → Zoom1 → Zoom2 →

Video mode

→ Normal → Wide1 → Wide2 → Zoom1 → Zoom2 →

RGB mode

→ Normal → Wide → Zoom →
* Depending on the type of signal, some aspects may not be selected.
* See P. E-29 for how to adjust the display size and position.
* The buttons on the plasma display can also be used for adjustments and settings.

Note
- Displaying a 4:3 picture in Normal mode for extended periods of time may cause burn-in.
- A variety of Screen Sizes are available with this plasma 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.
- In order to avoid copyright infringement, select a mode having the same aspect ratio as the original picture.

E-21

OTHER BASIC OPERATIONS (Continued)

Screen Size

Normal (TV, Video/RGB)

Displaying normal size picture (i.e. a 4:3 aspect ratio).

Wide1 (Video)

Picture of standard size ▶ Wide1
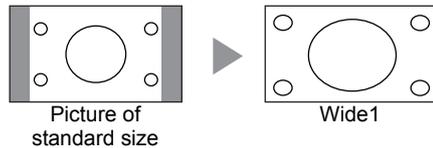
Displaying the natural-looking pictures of normal size on the wide screen.

Wide2 (Video)/Wide (RGB)

Vertically extended picture ▶ Wide2/Wide
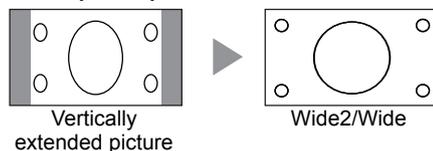
Ideal for displaying vertically extended pictures such as squeezed pictures.

Zoom1 (Video)/Zoom (RGB)

Horizontally extended picture ▶ Zoom1/Zoom
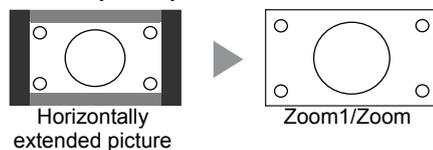
Enlarges horizontally extended pictures equally (proportionally) to maintain the aspect ratio constant.

Zoom2 (Video)

Horizontally extended picture with caption ▶ Zoom2
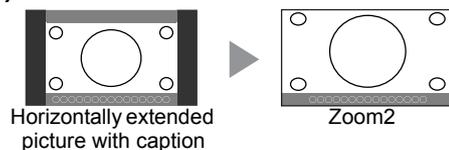
When watching horizontally extended pictures with captions, reduce the height so that the captions are not hidden. (Captions may not be easy to read, however, depending on the picture.)

Aspect Ratio

The following aspect ratios are available.

SD signal (4:3 aspect ratio)
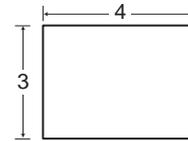
HD signal (16:9 aspect ratio)
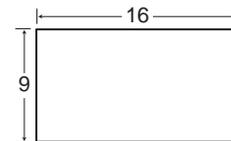
Vista Vision size (1.85:1 aspect ratio)
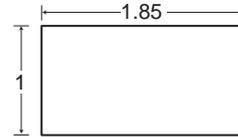
Cinema Scope size (2.35:1 aspect ratio)
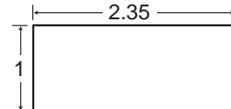
Note
- Depending on the type of signal, some aspects may not be selected.
- You may find dark areas on top and at the bottom of the screen even if you select one of the Zoom modes for media while using the Vista Vision or Cinema Scope size i.e. sizes frequently used for movie.

ADJUSTMENT MENU

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

|			
PICTURE(25)	Signal Contrast(25)		
	Drive Contrast(25)		
	Brightness(25)		
	Color(25)		
	Tint(25)		
	Sharpness(25)		
	Ambient Sensor(25)		
	Picture Mode(25)		
	Precision Setting(26)	Black Level(26)	
		Detail Gradation(26)	
		3D NR(26)	
		CODEC NR(26)	
		Image Enhance(26)	Chroma Transient(26)
			Image Identify(26)
		Color Temp.(26)	
		User Color Temp.(26)	
		Color Focus(27)	
		Progressive Scan(27)	24 Frame Mode(27)
			30 Frame Mode(27)
			Jaggies Filter(28)
			Motion Setting(28)
	Picture Memory(28)	Load(28)	
		Save(28)	
	Default		
POSITION/SIZE(29)	Position(29)	Horizontal(29)	
		Vertical(29)	
	Size(29)	Width(29)	
		Height(29)	
	Default		
AUDIO(30)	Treble(30)		
	Bass(30)		
	Balance(30)		
	Loudness(30)		
FEATURES(31)	Adjustment(31)	Dot Clock(31)	
		Clock Phase(31)	
		Clamp Position(31)	
		Auto Calibration(31)	
	On Screen Menu(31)	OSD(31)	
		Language(31)	
		Name Select(32)	
	Input Terminal(32)	D-SUB Input(32)	
	Clock Set(32)		
	Tuner(33)	Channel Setting(33)	Auto Scan(33)
			Channel Edit(33)
			D Audio Program(34)
			Audio Compression(34)
			D Audio Format(34)
			Fact Ch Reset(34)
		CableCARD(34)	
		Reboot(34)	
		Emergency Alert(34)	
	CC Service(35)	Display(35)	
		Analog(35)	
		Digital(35)	Service(35)
			Size(35)
			Style(35)
			Text(35) — Color(35) / Opacity(35)
			Background(35) — Color(35) / Opacity(35)
			Edge(35) — Style(35) / Color(35)
	Auto Lock(36)	Set Blocking(36)	
		Channel Blocking(36)	
		Block by Rating(37)	
		Change Password(37)	
	Others(38)	Auto Off-NO SIG.(38)	Time(38)
			Background(38)
		Audio Input(38)	
		Screen Orbiter(38)	Mode/Time(38)
			Moving Area(38)
		Direct Setting(39)	
		Code Setting(39)	
		White Screen(39)	
		Exhibition Mode(39)	
		Information(39)	
FACTORY DEFAULT(40)			

Note
- Some type of signal can not be selected.

BASIC PROCEDURES 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 /EXIT ⬭ **.**
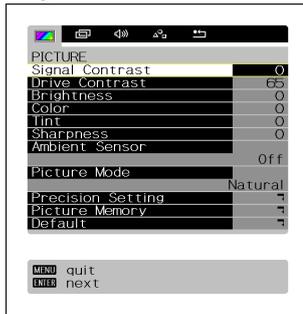
"PICTURE" selected in the main menu screen

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.

3 **Press** ⬭ **or** ⬭ **to select "Tint".**
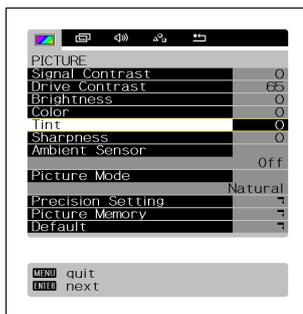
"Tint" selected in the PICTURE Menu screen

4 **Press** ENTER ⬭ **.**

The "Tint" adjustment screen will appear.

5 **Press** ◁ **or** ▷ **to change tint values.**
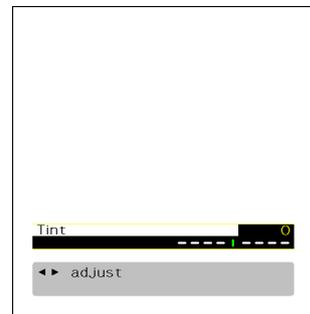
"Tint" adjustment screen

▷: More greenish colors

◁: More purplish colors

6 **Press** ENTER ⬭ **to store.**

7 **Press** MENU /EXIT ⬭ **when you finish.**

* 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 /EXIT ⬭ to halt the operation in progress.

ADJUSTING TO A DESIRED PICTURE (PICTURE MENU)

• Picture-related items can be set and adjusted in the Picture Adjustment Screen. See BASIC PROCEDURES OF ADJUSTMENT MENU on page E-24 for the basic procedures.

Signal Contrast

"Signal Contrast" can be adjusted.

Press ⊙ to increase contrast.

Press ⊙ to reduce contrast.

Press ENTER to store.

Drive Contrast

"Drive Contrast" can be adjusted.

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

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

Press ENTER 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

"Brightness" can be adjusted.

Press ⊙ to increase the brightness.

Press ⊙ to reduce the brightness.

Press ENTER to store.

Color

"Color" can be adjusted.

Press ⊙ to darken the color.

Press ⊙ to lighten the color.

Press ENTER to store.

Tint

"Tint" can be adjusted.

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

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

Press ENTER to store.

Sharpness

"Sharpness" can be adjusted.

Press ⊙ to sharpen the Sharpness.

Press ⊙ to soften the Sharpness.

Press ENTER 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 ENTER to store.

Picture Mode

"Picture Mode" can be set.
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.

Note
• If the operation is not executed for about 60 seconds, the menu disappears.
• Depending on the model, or the types of signals, some of the functions may not be available.
• 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-25

Precision Setting

Even more advanced picture quality adjustments can be made as required.
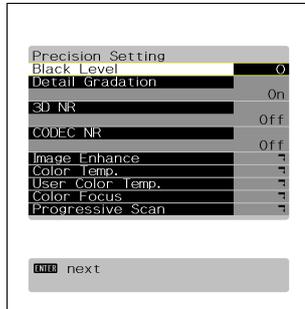
Precision Setting Selection Screen

Black Level

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

Press $\odot$ to weaken the reproduction of black.

Press $\overset{ENTER}{\bigcirc}$ to store.

Detail Gradation

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

Each time $\odot$ or $\odot$ is pressed, the setting is switched.

↔ On ↔ Off ↔

Press $\overset{ENTER}{\bigcirc}$ to store.

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 $\odot$ or $\odot$, the available choices appear in the following sequence.

↔ Off ↔ Min. ↔ Mid. ↔ Max. ↔

Press $\overset{ENTER}{\bigcirc}$ 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 $\odot$ or $\odot$, the available choices appear in the following sequence.

↔ Off ↔ Min. ↔ Mid. ↔ Max. ↔

Press $\overset{ENTER}{\bigcirc}$ to store.

Image Enhance

This performs detailed image quality settings.

• Chroma Transient

This function corrects the color contours.

Each time $\odot$ or $\odot$ is pressed, the setting is switched.

↔ On ↔ Off ↔

Press $\overset{ENTER}{\bigcirc}$ to store.

• Image Identify (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 $\odot$ or $\odot$ is pressed, the setting is switched.

↔ On ↔ Off ↔

Press $\overset{ENTER}{\bigcirc}$ to store.

Color Temp.

Use $\odot$ or $\odot$ to specify a desired color temperature. Each time you press $\odot$ or $\odot$, 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 $\overset{ENTER}{\bigcirc}$ to store.

User Color Temp.

Use $\frown$ or $\smile$ to select Red, Green, or Blue, and adjust the color temp. for each.

Press $\odot$: to strengthen the selected color.

Press $\odot$: to weaken the selected color.

Press $\overset{ENTER}{\bigcirc}$ 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.
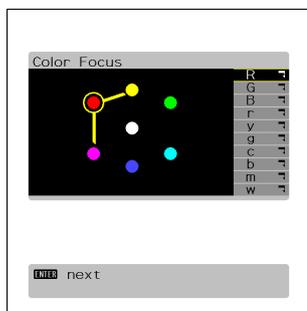
Color Focus (Reddish color) Settings Screen

- **[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.
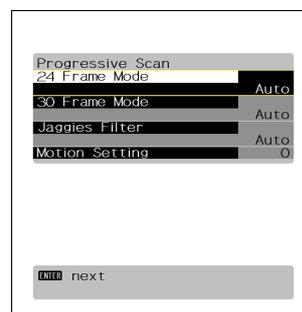
Progressive Scan Settings Screen

- **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 ENTER 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 ENTER to store.

Note
- If the operation is not executed for about 60 seconds, the menu disappears.
- Depending on the model, or the types of signals, some of the functions may not be available.
- 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

• **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 ⬚ᴱᴺᵀᴱᴿ 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 ⬚ᴱᴺᵀᴱᴿ to store.

Picture Memory

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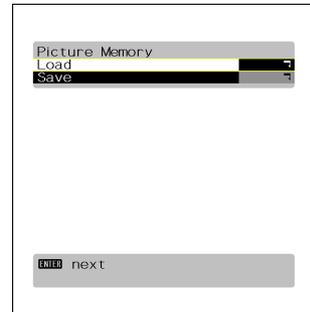
Picture Memory Selection Screen

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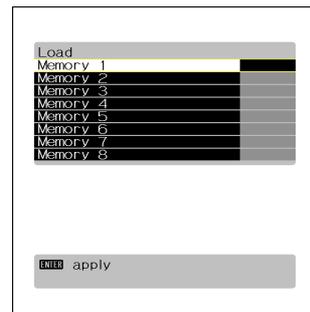
"Load" Selection Screen

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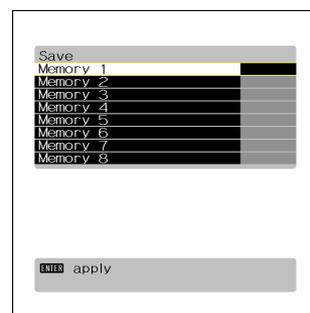
"Save" Selection Screen

E-28

ADJUSTING SCREEN POSITION AND SIZE (POSITION/SIZE MENU)

- You can make changes to all screen adjustment options in the POSITION/SIZE Menu.
- See Page E-24 for the basic procedures.
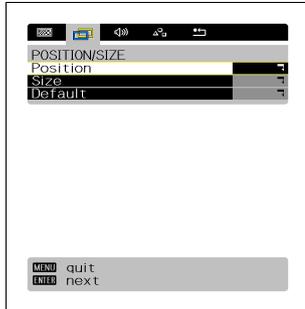
POSITION/SIZE Menu screen

- 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.
- The adjustment range may vary depending on the input signal.

Position
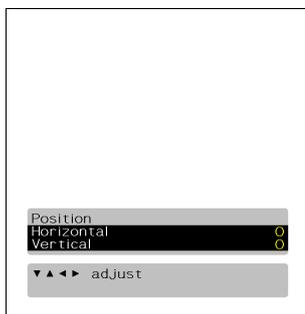
"Position" adjustment screen

Horizontal position (Horizontal)

⬡: Moves the screen picture to the right.

⬡: Moves the screen picture to the left.

Vertical position (Vertical)

⬡: Moves the screen picture up.

⬡: Moves the screen picture down.

Press ⌷ᴱᴺᵀᴱᴿ to store.
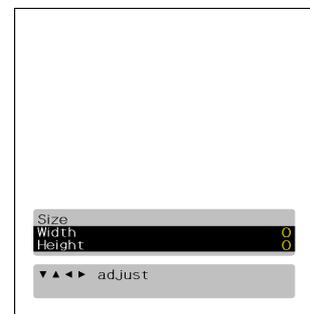
Size

"Size" adjustment screen

Screen width (Width)

⬡: Increases the width.

⬡: Reduces the width.

Screen height (Height)

⬡: Increases the height.

⬡: Reduces the height.

Press ⌷ᴱᴺᵀᴱᴿ to store.

Note
- If the operation is not executed for about 60 seconds, the menu disappears.
- Depending on the model or the optional devices, some of the functions may not be available. (The adjustment screen may also vary slightly.)
- 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

ADJUSTING TO DESIRED AUDIO (AUDIO MENU)

• You can make changes to all audio adjustment options in the AUDIO Menu. See Page E-24 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.
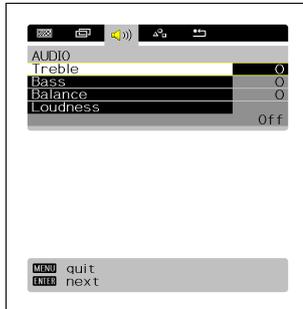
"Treble" screen

Treble

⌃: Stronger treble

⌄: Weaker treble

Press ENTER to store.

Bass

⌃: Stronger bass

⌄: Weaker bass

Press ENTER to store.

Balance

⌃: 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:

↔ On ↔ Off ↔

Press ENTER to store.

Note
• An audio signal from an audio output terminal (AUDIO OUTPUT DIGITAL or AUDIO OUTPUT ANALOG) does not change.

OTHER SETTINGS (FEATURES MENU)

• To adjust or set items such as Adjustment, On Screen Menu, Input Terminal, and Channel Setting, select "FEATURES" from the adjustment menu. See P. E-24 for the basic procedures.

• The items to be adjusted or set are stored for each input mode. Thus, execute the following operation after selecting the input mode for the adjustment or setting.

ADJUSTMENT ITEMS

Dot Clock (RGB)

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 ⊙ ⊙ to adjust to minimize vertically-striped pattern in pictures.

Press ENTER to store.

Clock Phase (RGB)

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.

Use ⊙ ⊙ to adjust to minimize pictures blur.

Press ENTER to store.

Clamp Position (RGB)

Adjusts the extremely dark or bright picture. Normally, the automatic setting ensures the optimal value.

Use ⊙ ⊙ to adjust pictures optimally.

Press ENTER to store.

Auto Calibration (RGB)

Adjusts the dynamic range of picture to the optimum. Execute while a white screen signal is received.

(1) Select "Execute" and press ENTER .

(2) Press ⊙ or ⊙ to select "YES", and press ENTER .

ON SCREEN MENU SETTING
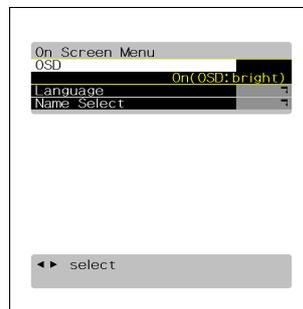
"On Screen Menu" Screen

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.

Language

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

Press ⊙ or ⊙ to select your desired language.

English
Español   (Spanish)
Français   (French)
Press ENTER .
The menu is displayed in the selected language.

Note
• If the operation is not executed for about 60 seconds, the menu disappears.
• Depending on the model, some of the functions may not be available. (The adjustment screen may also vary slightly.)
• 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-31

OTHER SETTINGS (FEATURES MENU) (Continued)

Name Select

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

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 ⊙ ⊙ is pressed, the setting is switched. (In the case of VIDEO1)

◄►Video1◄►DVD1◄►DVD2◄►VCR1◄►VCR2◄►
GAME◄►Camcorder◄►STB◄►Satellite◄►Cable TV ◄►

Press ⏎ᴱᴺᵀᴱᴿ to store.

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 ⊙ ⊙ is pressed, the setting is switched.

◄► RGB1◄► PC1 ◄► PC2 ◄►DVD1◄►DVD2 ◄►
STB◄►Satellite ◄► Cable TV ◄►

Press ⏎ᴱᴺᵀᴱᴿ to store.

Input Terminal SETTING

```
Input Terminal
D-SUB Input                    ▮



             ENTER  next
```
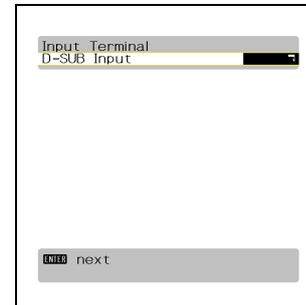
"Input Terminal" Screen

Selecting the settings of 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 ⏎ᴱᴺᵀᴱᴿ.
    D-Sub Input screen appears.
(2) Select the signal system to receive.
    Each time you press ⊙ or ⊙, 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
Press ⏎ᴱᴺᵀᴱᴿ to store.

Clock Set SETTING

The date and time can be set.

```
Clock Set
Year                        2005
Month                          1
Day                            1
Hour                           0
Minute                         0
Time Zone                Eastern
Daylight Saving              Off

◄►  select
```
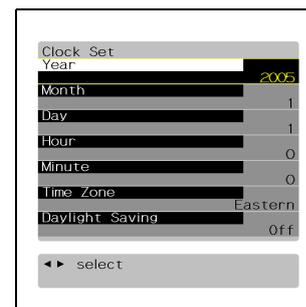
"Clock Set" Screen

Press ⊙ or ⊙ to select the item, and press ⊙ or ⊙ to set it.
Each time ⊙ or ⊙ is pressed, the items are selected in the following sequence:
Year ↔ Month ↔ Day ↔ Hour ↔ Minute ↔
Time Zone ↔ Daylight Saving
Press ⏎ᴱᴺᵀᴱᴿ to store.
* If a power failure occurs or the power cord is unplugged, set the clock again.
* The date and time are updated automatically while you watch digital cable TV broadcastings with the CableCARD being inserted in the card slot of the plasma display.

Tuner SETTING (TV)

The tuner setting procedure is as follows:
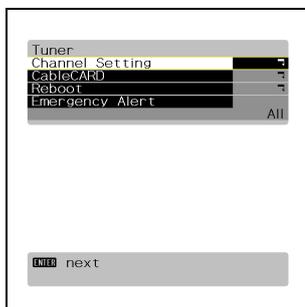
```
Tuner
Channel Setting
CableCARD
Reboot
Emergency Alert
                        All



ENTER next
```
"Tuner" Screen

Press ⌃ or ⌄ to select a target item below.
Channel Setting ↔ CableCARD ↔ Reboot ↔
Emergency Alert
Press ENTER to move on to the next step.

Channel Setting
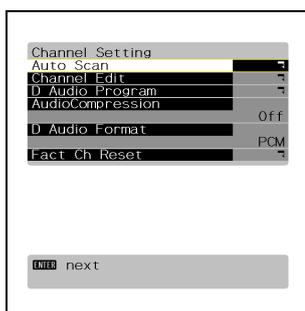
```
Channel Setting
Auto Scan
Channel Edit
D Audio Program
AudioCompression      Off
D Audio Format        PCM
Fact Ch Reset



ENTER next
```
"Channel Setting" Screen

Press ⌃ or ⌄ to select a target item below.
Auto Scan ↔ Channel Edit ↔ D Audio Program ↔
Audio Compression ↔ D Audio Format ↔
Fact Ch Reset
Press ENTER to move on to the next step.

Auto Scan
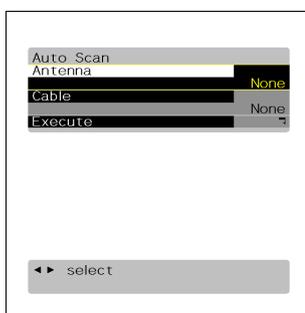
```
Auto Scan
Antenna
                      None
Cable
                      None
Execute



◄► select
```
"Auto Scan" Screen

Searches automatically for available channels.
(1) **Press ⌃ or ⌄ to select Antenna/Cable.**
Note
- If the operation is not executed for about 60 seconds, the menu disappears.
- Depending on the model, or the types of signals, some of the functions may not be available.
- The adjustment range varies depending on the display signal. Adjust to a desired picture quality in the allowable adjustment range.
- Setting and adjustment may be disabled depending on the signal type.

Press ◄ or ► to select the scan item of a receiving channel.

- Antenna

Antenna: ↔ None ↔ Antenna ↔

[Antenna]: Scans terrestrial channels.
[None]: No scanning.

- Cable

Cable: ↔ None ↔ Standard ↔ HRC ↔ IRC ↔

[Standard]: Scans channels in standard mode for cable TV broadcastings.
[HRC]: Scans channels in Harmonically Related Carrier mode for cable TV broadcastings.
[IRC]: Scans channels in Incrementally Related Carrier mode for cable TV broadcastings.
[None]: No scanning.
In the item of "Cable", set to "Standard" usually.
Please set HRC and IRC only when required from your cable TV provider.

(2) Execute

Press ⌃ or ⌄ to select Execute.

Press ENTER to start Auto Scan.

After all the channels are scanned, only receivable channels are input into the channel list.

* Scanning all the channels may take many minutes. To stop the scanning halfway, press MENU/EXIT .

Channel Edit
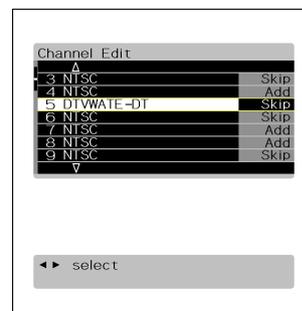
```
Channel Edit
  △
  3 NTSC              Skip
  4 NTSC              Add
  5 DTVWATE-DT        Skip
  6 NTSC              Skip
  7 NTSC              Add
  8 NTSC              Add
  9 NTSC              Skip
  ▽


◄► select
```
"Channel Edit" Screen

This function displays channels scanned by Auto Scan or channels registered with FAVORITE. When CH▲ CH▼ is operated, the function also determines whether to select the channel.

Press ⌃ or ⌄ to select a target channel.

Press ◄ or ► to switch between the items.

↔ Add ↔ Skip ↔

[Add]: Selects a channel.
[Skip]: Disables channel selection.

Press ENTER to store.

E-33

D Audio Program

This function selects an audio program available with the displayed channel.

Press ⌄ or ⌄ to select a target audio program.

Press ⏎ to determine the audio program.

* The audio language output and the language displayed on the screen may differ from each other. The language displayed is dependent on the signal being received from the broadcast station and therefore does not indicate any problem with the plasma display itself.

Audio Compression

This function sets an audio level for digital broadcastings. Select ON to limit the loudest sounds and boost the quietest sounds.

Press ⟨ or ⟩ to switch between the items.

↔ On ↔ Off ↔

[On]: Sets a target audio level.

[Off]: Turns off the compression effect.

Press ⏎ to store.

D Audio Format

You can select the audio format for the signal output from AUDIO OUTPUT DIGITAL terminal.

Switches as below by pressing ⟨ ⟩.

↔ PCM ↔ Dolby Digital ↔

Press ⏎ to store.

* When a program featuring Dolby Digital audio is selected, the sound comes from the AUDIO OUTPUT DIGITAL terminal.

* To receive programs available in Dolby Digital sound, set the "D Audio Format" of the on-screen menu to Dolby Digital.

* Programs that are not available in Dolby Digital sound will be output in PCM, even if the AUDIO OUTPUT DIGITAL is set to "Dolby Digital".

Fact Ch Reset

This function resets the current channel list to the factory setting.

(1) Select "Execute" and press ⏎.

(2) Press ⌄ or ⌄ to select "YES", and press ⏎.

CableCARD

This function displays information necessary for contacting your cable-TV provider.

• The information is not displayed unless the CableCARD is inserted.

Reboot

Reboot when the displayed picture and sound are not normal even when the receiving state is good. (Do not reboot when the picture and sound are normal.)

However, do not reboot when the updating firmware screen is displayed on-screen.

Press ⌄ or ⌄ to select "Yes", and press ⏎.

* All the displayed screens disappear.

Emergency Alert

When received the messages of Emergency Alert System (EAS), the plasma display will automatically display them.

This function sets the display switching to the emergency alert broadcast.

Press ⟨ or ⟩ to switch among the items.

↔ All ↔ Mid. ↔ High ↔

[All]: Switches to the emergency broadcast whenever an emergency alert is put on the air.

[Mid.]: Switches to the emergency broadcast when a mid-level emergency alert is put on the air.

[High]: Switches to the emergency broadcast when a high-level emergency alert is put on the air.

Press ⏎ to store.

* If you want to view the Emergency Alert massages at any time, please set "Emergency Alert" of on-screen display menu to "ALL".

CC (Closed Caption) Service SETTING

The closed caption service setting procedure is as follows.

The Closed Caption Service is available only when current TV program or video picture has the service information.
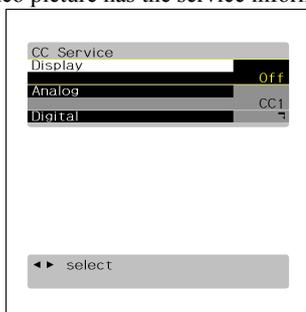
"CC Service" Screen

Display

This function determines whether to turn ON/OFF the closed caption service.
Press ⟨•⟩ or ⟨•⟩ to switch between the items.
↔ On ↔ Off ↔
Press ENTER to store.

Analog

This function sets the closed caption service for analog mode.
Press ⟨•⟩ or ⟨•⟩ to switch among the items.
↔ CC1 ↔ CC2 ↔ CC3 ↔ CC4 ↔ TXT1 ↔ TXT2 ↔
TXT3 ↔ TXT4 ↔
Press ENTER to store.

Digital

This function sets the closed caption service for digital mode. Settings such as program service, character style, and character size can be selected using the following functions.

Service
Press ⟨•⟩ or ⟨•⟩ to switch among the items.
↔ CS1 ↔ CS2 ↔ CS3 ↔ CS4 ↔ CS5 ↔ CS6 ↔
Press ENTER to store.

Size
A target character size can be set.
Press ⟨•⟩ or ⟨•⟩ to switch among the items.
↔ Default ↔ Small ↔ Large ↔
Press ENTER to store.

Style
A target character style can be set.
Press ⟨•⟩ or ⟨•⟩ to switch among the items.
↔ Default ↔ Style1 ↔ Style2 ↔ Style3 ↔ Style4 ↔
Style5 ↔ Style6 ↔ Style7 ↔
Press ENTER to store.

Note
- If the operation is not executed for about 60 seconds, the menu disappears.
- Depending on the model, or the types of signals, some of the functions may not be available.
- The adjustment range varies depending on the display signal. Adjust to a desired picture quality in the allowable adjustment range.
- Setting and adjustment may be disabled depending on the signal type.

Text
The color and transparency of characters can be set.
Press ⟨•⟩ or ⟨•⟩ to select Color/Opacity.

- Color
Press ⟨•⟩ or ⟨•⟩ to switch among the items.
↔ Default ↔ Black ↔ White ↔ Red ↔ Green ↔ Blue ↔
Yellow ↔ Magenta ↔ Cyan ↔
Press ENTER to store.

- Opacity
Press ⟨•⟩ or ⟨•⟩ to switch among the items.
↔ Default ↔ Solid ↔ Transparent ↔ Translucent ↔
Flashing ↔
Press ENTER to store.

Background
The color of the background and transparency can be set.
Press ⟨•⟩ or ⟨•⟩ to select Color/Opacity.

- Color
Press ⟨•⟩ or ⟨•⟩ to switch among the items.
↔ Default ↔ Black ↔ White ↔ Red ↔ Green ↔ Blue
↔ Yellow ↔ Magenta ↔ Cyan ↔
Press ENTER to store.

- Opacity
Press ⟨•⟩ or ⟨•⟩ to switch among the items.
↔ Default ↔ Solid ↔ Transparent ↔ Translucent ↔
Flashing ↔
Press ENTER to store.

Edge
The edge and color of characters can be set.
Press ⟨•⟩ or ⟨•⟩ to select Style/Color.

- Style
Press ⟨•⟩ or ⟨•⟩ to switch among the items.
↔ Default ↔ Raised ↔ Depressed ↔ Out Line ↔
Drop Shadow ↔
Press ENTER to store.

- Color
Press ⟨•⟩ or ⟨•⟩ to switch among the items.
↔ Default ↔ Black ↔ White ↔ Red ↔ Green ↔ Blue ↔
Yellow ↔ Magenta ↔ Cyan ↔
Press ENTER to store.

E-35

OTHER SETTINGS (FEATURES MENU) (Continued)

Auto Lock (Parental Lock) SETTING

Auto Lock is provided for the parents to determine that TV programs and video pictures not good for their children are blocked.

Restrictions on the watching of TV programs can be placed by channel, age, and program category.

Placing restrictions on the watching of TV programs by channel or age.
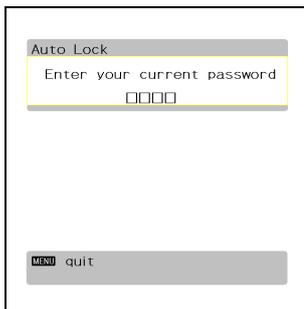
```
Auto Lock

   Enter your current password
           □□□□


   MENU  quit
```
"Auto Lock" Screen

Enter the Password ⊙ ⊙ ⊙ ⊙ (initial value).
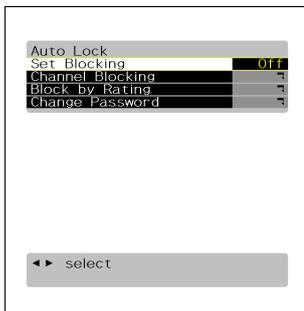
```
Auto Lock
Set Blocking            Off
Channel Blocking
Block by Rating
Change Password




◄ ► select
```
"MENU" Screen

Set Blocking

You can determine whether to enable/disable the parental lock you set for Channel blocking or Block by Rating. To enable the parental lock, turn ON this item after setting for Channel blocking or Block by Rating.

```
Auto Lock
Set Blocking            Off
Channel Blocking
Block by Rating
Change Password




◄ ► select
```
"Set Blocking" Screen

Press ◄ or ► to switch between the items.

↔ On ↔ Off ↔
[On]: Blocking
[Off]: Unblocking
Press ENTER to store.

* Plasma display is shipped from the factory with all AUTO LOCK settings in the unlock position.

Channel Blocking

You can determine whether to enable/disable the parental lock for the channel of the program you are watching.

The parental lock is set for channels displayed with Channel Edit.
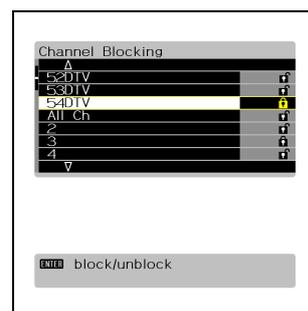
```
Channel Blocking
  ▲
  52DTV                 🔒
  53DTV                 🔒
  54DTV                 🔓
  All Ch                🔒
  2                     🔒
  3                     🔒
  4                     🔒
  ▼

ENTER  block/unblock
```
"Channel Blocking" Screen

Press ▲ or ▼ to select a target item.

Press ENTER to switch between blocking and unblocking.

* Before the parental lock can be applied, ON must be selected for Set Blocking.

E-36

Block by Rating

The parental lock of both Movie Rating system and TV Rating system can be set for TV broadcastings and video inputs.
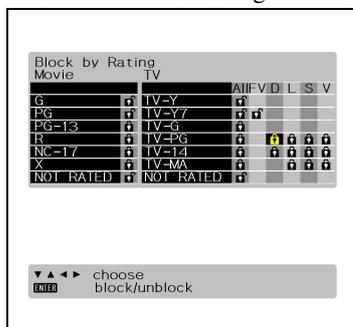
"Block by Rating" Screen
🔒 : Blocking,   🔓 : Unblocking

Symbols in the chart

G	For the general audience of all ages
PG	Parental guidance suggested. Some programs are not good for children.
PG-13	Some programs are not good for children at age 13 years or younger.
R	Parents' permission required for children at age 17 years or younger
NC-17	Not for children at age 17 years or younger
X	For adults only
NOT RATED	Not rated
TV-Y	For children of all ages
TV-Y7	For children of at age 7 years or older
TV-G	For general audience
TV-PG	Parents' permission is required.
TV-14	Firm warning to parents Program parents would find unsuitable for children under 14 years of age.
TV-MA	For adults only
FV	Fantasy Violence
D	Suggestive Dialogue
L	Adult Language
S	Sexual situations
V	Violence

Press ◄, ►, ▲, or ▼ to select a target item.
Press ENTER to switch between blocking and unblocking.

* Before the parental lock can be applied, ON must be selected for Set Blocking.

* No other rating category will be effected by selecting " NOT RATED".

• When blocked "NOT RATED" in the menu of AUTO LOCK, you may not receive information services such as Emergency Alert System (EAS), sports, news, public service announcements and weather.

Change Password

"Change Password" Screen

Enter a new 4-digit password, pressing ⓪ to ⑨ .
Enter the same number again.
The new password is stored.
It is important to note your password for future use.

Note
About Auto Lock (Parental Lock)

• Auto Lock can be set for TV and video inputs by age and program category.
• The Auto Lock system of the plasma display is compatible with both TV Rating system and Movie Rating system.
• The Auto Lock system is available for both analog TV broadcastings and digital TV broadcastings.
• Once Auto Lock is set, the plasma display does not show the restricted program (neither pictures nor audio) when receiving it.
• When receiving a program for which AUTO LOCK is set, the plasma display shows the password confirmation screen. To show the program, enter the password. All the settings for AUTO LOCK are reset temporarily when the password is entered. To enable AUTO LOCK, turn off the power (STANDBY), and then turn it ON again.
• The Auto Lock system is available only for TV broadcastings and video signals that are based on the parental lock standard. The AUTO LOCK feature will work only when a program rating is available.
• This function does not work in VIDEO5(HDMI).
• If the operation is not executed for about 60 seconds, the menu disappears.

E-37

SETTING OTHERS

Auto Off-NO SIG.

Adjusting the settings so that the standby state automatically starts up if the display remains in no signal state for an extended amount of time.
Selecting the background setting to indicate when the display is in the no signal state.
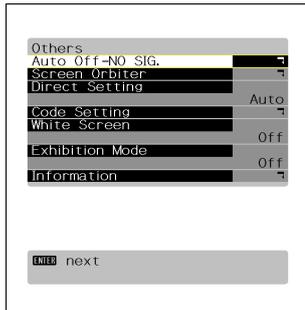
"Auto Off-NO SIG." settings screen

Time
(1) Press ⌃ ⌄ to select the "Time".
(2) Press ‹ › to select the amount of time before the standby state starts.
⟷ Off ⟷ 1 min. ⟷ 15 min. ⟷ 45 min. ⟷ 60 min. ⟷
Press ENTER to store.
* The numerical value is the approximate amount of time before the standby state starts.

Back ground
(3) Press ⌃ ⌄ to select the "Background".
(4) Press ‹ › to select the display background color.
⟷ Black ⟷ White ⟷
Press ENTER to store.
* The background color changes to assigned color state after approximately 20 seconds in the no signal state.

Audio Input
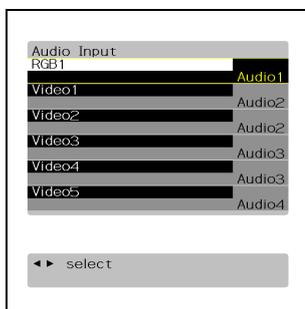
"Audio Input" selection screen

Selecting the available terminals to receive audio from the input equipment .
(1) Press ⌃ or ⌄ to select video input terminal.
(2) Select a related audio input terminal.
Each time you press ‹ or ›, one of the available choices appears in the following sequence:
⟷ No Audio ⟷ Audio 1 ⟷ Audio 2 ⟷ · · · ⟷

[No audio]: No audio in the corresponding mode. (No audio is output even when this video input mode is selected.)
[Audio 1-]: Selects Audio 1 through 3 for receiving audio in the corresponding mode.
* For the audio input terminals, see "CONNECTING TO EXTERNAL EQUIPMENT" (P. E-15) and EXAMPLE OF CONNECTING EXTERNAL EQUIPMENT" (P. E-16).
Press ENTER to store.
* Audio Input menu will not be displayed when "No Audio" is selected.

Screen Orbiter (RGB)
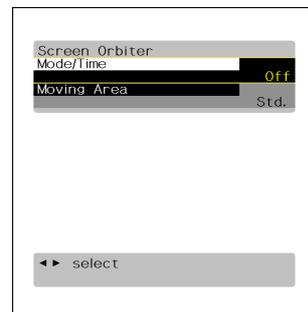
"Screen Orbiter" setting screen

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

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

Moving Area
(3) Press ⌃ or ⌄ to select "Moving Area".
(4) 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:
⟷ 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)
(5) Press ENTER 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 (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.

[Other than Auto]: The optimum resolution setting is fixed for each signal.

Press ⊙ to store.

* In Auto mode, the resolution of VGA, WVGA, 480P, XGA, WXGA, SXGA and SXGA+ may not be automatically detected for optimal use.

* Depending on the model or input terminals, some signals may not be available and therefore, not displayed.

Code Setting (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 ⊙ to store.

Exhibition Mode

This feature makes the picture adjustments revert to the default setting of adjustments you can prepare and memorize. This is useful in installations where unsupervised persons are likely to make temporary picture adjustments not optimum for the plasma display's ongoing purpose.

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

↔ Off ↔ On ↔

Press ⊙ to store.

* In Exhibition mode, the display returns to the memorized setting after about 5 minutes even if the adjustment is changed.

The setup will be cancelled when AC power is cut to the plasma display's power cord (e.g. power failure, unplugging the power cord, and so on).

Information

Displays system operation status.
Select "Information" and press ⊙.
The "Information" screen will appear.

[Mode]: The input mode or channel number is displayed
[Freq. Scan Mode]: Frequency scanning
[Input Signal]: Video mode
[Input Sync.]: Sync. Signal type
[Freq.]: Sync. Signal frequency, polarity
[Preset No.]: RGB code number
[Program No]: Channel-assigned number

```
Information
Mode
                          Video1
Freq. Scan Mode
                          Auto
Input Signal
                          NTSC
```
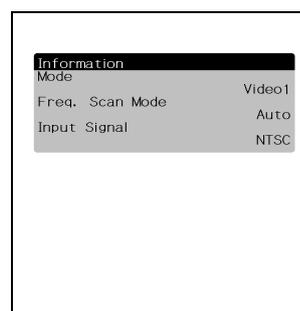
"Information" Screen (example of Video mode)

```
Information
Mode
                          RGB1
Freq. Scan Mode
                          Auto
Input Sync
                          Separate
Freq.
                   fH  48.3kHz/-
                   fV  60.0 Hz/-
Preset No.
                            12
```
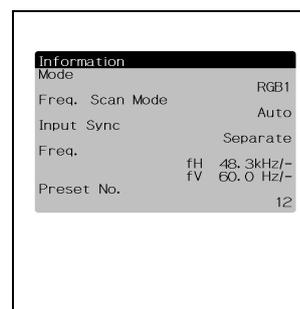
"Information" Screen (RGB mode)

```
Information
Mode
                          A:14.1
Freq. Scan Mode
                          Auto
Input Signal
                          NTSC
```
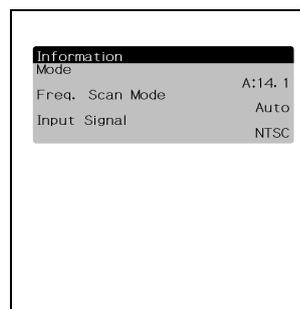
"Information" Screen (example of TV mode)

Note
• If the operation is not executed for about 60 seconds, the menu disappears.
• Depending on the model, or the types of signals, some of the functions may not be available.
• The adjustment range varies depending on the display signal. Adjust to a desired picture quality in the allowable adjustment range.
• Setting and adjustment may be disabled depending on the signal type.

E-39

INITIALIZATION OF USER ADJUSTMENT VALUE

Using the MENU to restore the values of the factory settings after adjustments have been made.

1 Press MENU/EXIT ○.

The main menu screen will appear.

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.

FACTORY DEFAULT
Execute

MENU quit
ENTER next

"FACTORY DEFAULT" selected in the main menu screen

3 Press ENTER ○.

FACTORY DEFAULT
Yes
No

Adjust and
Existing data
will be cleared.

ENTER return

Displays the message prompting you to proceed with the initialization.

• Displays the message prompting you to proceed with the initialization.

4 Press ⌃ or ⌄ to select the Yes.

5 Press ENTER ○.

FACTORY DEFAULT
Execute

Existing data
are cleared.

MENU quit
ENTER next
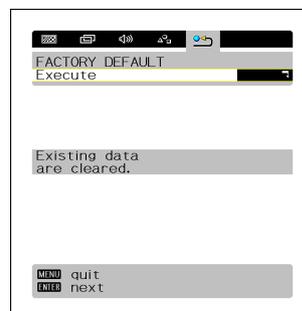
Displays the message of having completed the initialization

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

6 Press MENU/EXIT ○ when you finish.

Note
• If the operation is not executed for about 60 seconds, the menu disappears.
• Depending on the model, or the types of signals, some of the functions may not be available.
• The adjustment range varies depending on the display signal. Adjust to a desired picture quality in the allowable adjustment range.
• Setting and adjustment may be disabled depending on the signal type.
• If a new setting is made for Tuner, CC Service, or Auto Lock, it cannot be changed back to the factory default again.

E-40

OPTIONS

Wall-mounting Bracket	0° to 15° mounting angle	P-WB4201 (for 42"/50" model) P-WB6300 (for 55"/63" model)
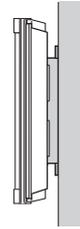
With a 42"/50" model

To install this plasma display with the wall-mounting bracket, install the accessory spacers between the plasma display and frame as shown in the figure at right.

For details, see the wall-mounting bracket installation manual.

Frame
Spacer B
Screw A
Attached spacer.
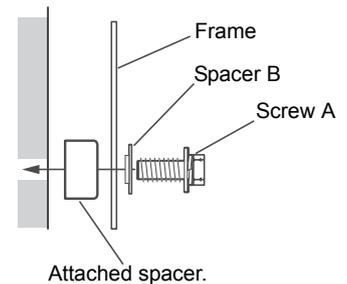
Ceiling unit	5° to 25° mounting angle	P-CT4200 (for 42"/50" model) P-CT6300 (for 55"/63" model)
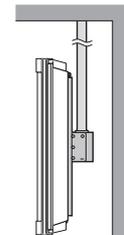
With a 42"/50" model

To install this plasma display with the ceiling unit, install the accessory spacers between the plasma display and frame as shown in the figure at right.

For details, see the ceiling unit installation manual.

Frame
Spacer B
Screw A
Attached spacer.
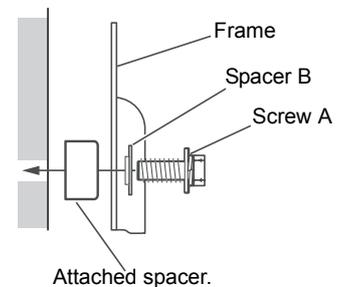
Desktop Stand unit	P-TT4202 (for 42"/50"/55" model) P-TT6300 (for 63" model)
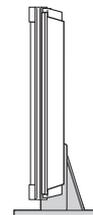
Warning

To prevent injury, fire, and electric shock, we recommend that the display be professionally installed.

Note

- When mounting the plasma display newly, it is important to ensure that all installation requirements for that mounting option are met. Refer to the corresponding Installation Manual.
- Please note that the color of options are not matched the color of plasma display perfectly.
- To improve the function and performance of optional accessories, the specifications and part names of the optional accessories may change. Consult your local dealer before purchasing.

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.

RGB1 INPUT

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

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

VIDEO3,4,5(HDMI) INPUT

Horizontal frequency (kHz)	Vertical frequency (Hz)	Signal	HDMI
15.73	59.94	SDTV 480i	○
31.47	59.94	SDTV 480p	○
45.00	60.00	HDTV 720p	○
33.75	60.00	HDTV 1080i	○

VIDEO1,2 INPUT

Horizontal frequency (kHz)	Vertical frequency (Hz)	Signal
15.73	59.94	NTSC

Antenna In : NTSC and ATSC

Note
- Depending on the input signal, the plasma display may show pictures of reduced size due to size reduction and interpolation.
- With some input signals, "Out of range" may appear even when the horizontal and vertical frequencies are within their permissible ranges. In this case, match the input signals to another frequency rather than those listed above.
- You can check input signals through "Information" on the FEATURES Menu screen.

CLEANING

Be sure to unplug the power cord from the receptacle before cleaning the plasma display.
Do not clean the plasma display using a cloth dampened with volatile solvents, such as benzene or thinner. Such solvents can harm the plasma 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 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 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 ventilation grille

The accumulated dust can increase the internal temperature of the main unit; therefore, remove dust from the ventilation grille in the rear of the plasma display periodically with a vacuum cleaner to avoid machine failure or fire hazard.

MAINTENANCE

If you encounter problems with the plasma display, check the following explanations before contacting your dealer for service.

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 plasma display. • Check whether you are pointing the remote control transmitter properly at the plasma display's receiver. • Check for any obstacle between the remote control and the plasma display.
• The plasma 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 plasma display makes a buzzing sound.	• The plasma 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 TO A DESIRED PICTURE" on P. E-25–E-28.)
• Improper screen position/size	• Check whether screen position and size have been properly adjusted. (See "ADJUSTING SCREEN POTISION AND SIZE" on P. E-29.)
• No audio	• Check cables for disconnection. • Check whether the proper audio input has been selected. (See "Audio Input" on P. E-38.)
• If "Out of range" appears, the plasma display is receiving a signal whose picture or signal cannot be reproduced by the plasma display. • The screen turns to black and white.	• Signals that are not supported by this plasma display have been input. Check which signals are supported. (See "MAIN SUPPORTED SIGNALS" on page E-42.)
• If "Error message Condition 1" appears, the fan is defective.	• Remove the power cord 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 cord 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 cord 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 cord from the receptacle, and inform contact your dealer, referencing the flashing pattern experienced. • The power indicator lamp flashes differently depending on the type of problem.
• The displayed picture and sound are not normal even when the receiving state is good.	Check as follows: (1) Press the ON/OFF button and wait for the set to enter the standby state, then turn the power back on and check the picture. (2) Disconnect and reconnect the power cable, and turn the power back on and place the set into the power on state and check the displayed picture. (3) When the power cable is not disconnected, perform the following operation: Execute "Reboot". (See "Reboot" on P. E-34.)

SPECIFICATIONS

WIDE PLASMA DISPLAY

Model	P42XTA51U	P50XTA51U	P55XTA51U
Screen size	42" wide screen: 92.1 cm (W) x 51.8 cm (H) (105.7 cm diagonal) 36.3 inch (W) x 20.6 inch (H) (41.7 inch diagonal)	50" wide screen: 110.6 cm (W) x 62.2 cm (H) (126.9 cm diagonal) 43.5 inch (W) x 24.5 inch (H) (50 inch diagonal)	55" wide screen: 122.9 cm (W) x 69.1 cm (H) (140.0 cm diagonal) 48.4 inch (W) x 27.2 inch (H) (55.1 inch diagonal)
Aspect ratio	16:9 (wide)		
Number of pixels	1024 (H) x 768 (V)	1366 (H) x 768 (V)	
Weight	37.0 kg / 82.0 lbs	46.6 kg / 103.0 lbs	55.0 kg / 121.3 lbs
Outer dimensions	118.8 (W) x 64.0 (H) x 8.7 (D) cm 46.4 (W) x 25.2 (H) x 3.4 (D) inch (does not include outer projections)	136.4 (W) x 72.6 (H) x 10.0 (D) cm 53.3 (W) x 28.6 (H) x 3.9 (D) inch (does not include outer projections)	152.9 (W) x 80.8 (H) x 12.5 (D) cm 59.7 (W) x 31.8 (H) x 4.9 (D) inch (does not include outer projections)
Power supply	AC120V 50/60 Hz		
External equipment terminals	Cable In TV 75 Ω: CATV 1-135 Antenna In TV 75 Ω: UHF/VHF 2-69 VIDEO1 INPUT (Video input) RCA terminal 1.0 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 3 RCA terminals Y: 1 Vp-p/75 Ω (Component video input) P_B/C_B: 0.7 Vp-p/75 Ω P_R/C_R: 0.7 Vp-p/75 Ω VIDEO5 INPUT HDMI terminal (HDMI type A connector) RGB1 input mD-Sub, 3 rows, 15-pin Picture signal: 0.7 Vp-p/75 Ω Synchronization signal:TTL level Audio1-3 INPUT 2 audio input pin jacks (L/R) (3 lines) 0.5 Vrms/22kΩ (Min.) Audio OUTPUT ANALOG 2 audio input pin jacks (L/R) (1 line) 0.5 Vrms/5kΩ (Max.) Audio OUTPUT DIGITAL Optical audio terminal (PCM / Dolby Digital) EXT. SP Max. output: 10 W + 10 W, 6 Ω RS-232C D-Sub 9-pin		
On-screen display language	English, Spanish, or French		
Operating conditions	Temperature: 0 to 40 °C / 32 to 104 °F Humidity: 20 to 80 %		
Accessories	3 user's manuals, 1 remote control, 2 AA batteries, 1 power cord, 2 large ferrite cores, 2 small ferrite cores, 4 spacers (for 42"/50" model), 2 speaker units, 8 screws, 2 holder-A, 2 holder-B, 2 cushions, 2 speaker cables		

Regulation

- UL, CSA Safety: UL6500, C-UL
  - EMC: FCC Part 15, ICES-003 (CISPR22)
  -         FCC Part76 Sec.76.605(12)

Note

- Specifications and external appearance are subject to change without notification for the sake improvement.
- Viewing the screen constantly for extended periods can strain your eyes. Be sure to stay at a proper distance (at least 1.6 m or 5.2 feet for 42" model / at least 1.9m or 6.2 feet for 50" model / at least 2.1 m or 6.9 feet for 55" model / at least 2.4 m or 7.9 feet for 63" model) from the screen, occasionally looking away from the screen during extended watching screen.
- 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-45

WIDE PLASMA DISPLAY

Model	P63XTA51U
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	1366 (H) x 768 (V)
Weight	80.0 kg / 177.0 lbs
Outer dimensions	171.0 (W) x 89.4 (H) x 12.3 (D) cm 67.3 (W) x 35.2 (H) x 4.8 (D) inch (does not include outer projections)
Power supply	AC120V 50/60 Hz

External equipment terminals	Cable In TV 75 Ω: CATV 1-135
	Antenna In TV 75 Ω: UHF/VHF 2-69
	
	VIDEO1 INPUT (Video input) RCA terminal 1.0 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 3 RCA terminals Y: 1 Vp-p/75 Ω
	(Component video input) P_B/C_B: 0.7 Vp-p/75 Ω
	                                                 P_R/C_R: 0.7 Vp-p/75 Ω
	VIDEO5 INPUT HDMI terminal (HDMI type A connector)
	
	RGB1 input mD-Sub, 3 rows, 15-pin
	                                        Picture signal: 0.7 Vp-p/75 Ω
	                                        Synchronization signal:TTL level
	
	Audio1-3 INPUT 2 audio input pin jacks (L/R) (3 lines) 0.5 Vrms/22kΩ (Min.)
	Audio OUTPUT ANALOG 2 audio input pin jacks (L/R) (1 line) 0.5 Vrms/5kΩ (Max.)
	Audio OUTPUT DIGITAL Optical audio terminal (PCM / Dolby Digital)
	EXT. SP Max. output: 10 W + 10 W, 6 Ω
	RS-232C D-Sub 9-pin

On-screen display language	English, Spanish, or French
Operating conditions	Temperature: 0 to 40 °C / 32 to 104 °F Humidity: 20 to 80 %
Accessories	3 user's manuals, 1 remote control, 2 AA batteries, 1 power cord, 2 large ferrite cores, 2 small ferrite cores, 2 speaker units, 8 screws, 2 holders, 2 cushions, 2 speaker cables

Regulation

• UL, CSA Safety: UL6500, C-UL
      EMC: FCC Part 15, ICES-003 (CISPR22)
                FCC Part76 Sec.76.605(12)

Note

- Specifications and external appearance are subject to change without notification for the sake improvement.
- Viewing the screen constantly for extended periods can strain your eyes. Be sure to stay at a proper distance (at least 1.6 m or 5.2 feet for 42" model / at least 1.9m or 6.2 feet for 50" model / at least 2.1 m or 6.9 feet for 55" model / at least 2.4 m or 7.9 feet for 63" model) from the screen, occasionally looking away from the screen during extended watching screen.
- 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.