

PLASMA TELEVISION

Operating Guide for 42EDT41A

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IMPORTANT SAFETY INSTRUCTIONS

SAFETY POINTS YOU SHOULD KNOW ABOUT YOUR HITACHI PLASMA TELEVISION

Our reputation has been built on the quality, performance, and ease of service of HITACHI Plasma Televisions.

Safety is also foremost in our minds in the design of these units. To help you operate these products properly, this section illustrates safety tips which will be of benefit to you. Please read it carefully and apply the knowledge you obtain from it to the proper operation of your HITACHI Plasma Television.

Please fill out your warranty card and mail it to HITACHI. This will enable HITACHI to notify you promptly in the improbable event that a safety problem should be discovered in your product model.

Follow all warnings and instructions marked on this plasma television.

	<p>CAUTION</p> <p>RISK OF ELECTRIC SHOCK DO NOT OPEN</p>			<p>The lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of a sufficient magnitude to constitute a risk of electric shock to persons.</p>
<p>CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER (OR BACK). NO USER SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.</p>				<p>The exclamation point within an equilateral triangle, is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.</p>

WARNING:

- TO PREVENT FIRE OR SHOCK HAZARD, DO NOT EXPOSE THIS PLASMA TELEVISION TO RAIN OR MOISTURE.
- THE PLASMA TELEVISION SHOULD NOT BE EXPOSED TO DRIPPING OR SPLASHING AND OBJECTS FILLED WITH LIQUIDS, SUCH AS VASES, SHOULD NOT BE PLACED ON THE TELEVISION.

NOTE:

- There are no user serviceable parts inside the television.
- Model and serial numbers are indicated on back side of the television.

CAUTION: Adjust only those controls that are covered in the instructions, as improper changes or modifications not expressly approved by HITACHI could void the user's authority to operate the Plasma Television.



MODIFICATIONS: The FCC requires the user to be notified that any changes or modifications made to this device that are not expressly approved by Hitachi America, Ltd. Home Electronics Division may void the user's authority to operate the equipment.


POWER SOURCE

THIS PLASMA TELEVISION IS DESIGNED TO OPERATE ON 120 VOLTS 60Hz, AC CURRENT. INSERT THE PLASMA TELEVISION POWER CORD INTO A 120 VOLT 60Hz OUTLET.

TO PREVENT ELECTRIC SHOCK, DO NOT USE THE PLASMA TELEVISION'S (POLARIZED) PLUG WITH AN EXTENSION CORD, RECEPTACLE, OR OTHER OUTLET UNLESS THE BLADES AND GROUND TERMINAL CAN BE FULLY INSERTED TO PREVENT BLADE EXPOSURE.

NEVER CONNECT THE PLASMA TELEVISION TO 50Hz, DIRECT CURRENT, OR ANYTHING OTHER THAN THE SPECIFIED VOLTAGE.

NOTE: This Plasma Television will display television closed captioning, ( or ) , in accordance with paragraph 15.119 of the FCC rules.


 **CAUTION:** Never remove the back cover of the plasma television as this can expose you to very high voltages and other hazards. If the television does not operate properly, unplug the Plasma Television and call your authorized dealer or service center.

IMPORTANT SAFETY INSTRUCTIONS

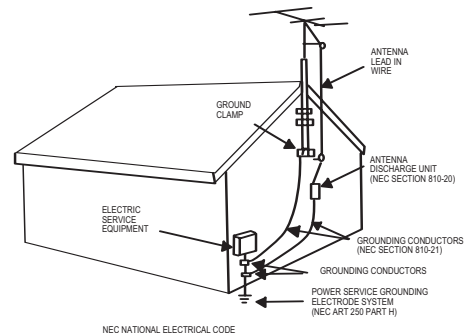


Read before operating equipment

Follow all warnings and instructions marked on this monitor.

1. Read these instructions.
2. Keep these instructions.
3. Heed all warnings.
4. Follow all instructions.
5. Do not use this apparatus near water.
6. Clean only with a dry cloth.
7. Do not block any ventilation openings. Install in accordance with the manufacturer's instructions.
8. Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
9. Do not defeat the safety purpose of the polarized or grounding-type plug. A polarized plug has two blades with one wider than the other. A grounding type plug has two blades and a third grounding prong. The wide blade or the third prong are provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.
10. Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.
11. Only use the attachments/accessories specified by the manufacturer.
12.  Use only with the cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with the apparatus. When a cart is used, use caution when moving the cart/apparatus combination to avoid injury from tip-over.
13. Unplug this apparatus during lightning storms or when unused for long periods of time.
14. Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.

15. Monitors are designed to comply with the recommended safety standards for tilt and stability. Do not apply excessive pulling force to the front, or top, of the cabinet which could cause the product to overturn resulting in product damage and/or personal injury.
16. Follow instructions for wall, shelf or ceiling mounting as recommended by the manufacturer.
17. An outdoor antenna should not be located in the vicinity of overhead power lines or other electrical circuits.
18. If an outside antenna is connected to the receiver be sure the antenna system is grounded so as to provide some protection against voltage surges and built up static charges. Section 810 of the National Electric Code, ANSI/NFPA No. 70-1984, provides information with respect to proper grounding for the mast and supporting structure, grounding of the lead-in wire to an antenna discharge unit, size of grounding connectors, location of antenna-discharge unit, connection to grounding electrodes and requirements for the grounding electrode.



Note to the CATV system installer: This reminder is provided to call the CATV system installer's attention to Article 820-40 of the NEC that provides guidelines for proper grounding and, in particular, specifies that the cable ground shall be connected to the grounding system of the building, as close to the point of cable entry as practical.

This product contains lead. Dispose of this product in accordance with applicable environmental laws. For product recycling and disposal information, contact your local government agency or the Electronic Industries Alliance at www.eiae.org (in the US) or the Electronic Product Stewardship Canada at www.epsc.ca (in Canada). For more information, call "1-800-HITACHI."

Do not place any objects on the top of the monitor which may fall or cause a child to climb to retrieve the objects.

PREVENTION OF SCREEN BURN

Continuous on-screen displays such as video games, stock market quotations, computer generated graphics, and other fixed (non-moving) patterns can cause permanent damage to television receivers. Such "SCREEN BURNS" constitute misuse and are **NOT COVERED** by your HITACHI Factory Warranty.

PUBLIC VIEWING OF COPYRIGHTED MATERIAL

Public viewing of programs broadcast by TV stations and cable companies, as well as programs from other sources, may require prior authorization from the broadcaster or owner of the video program material.

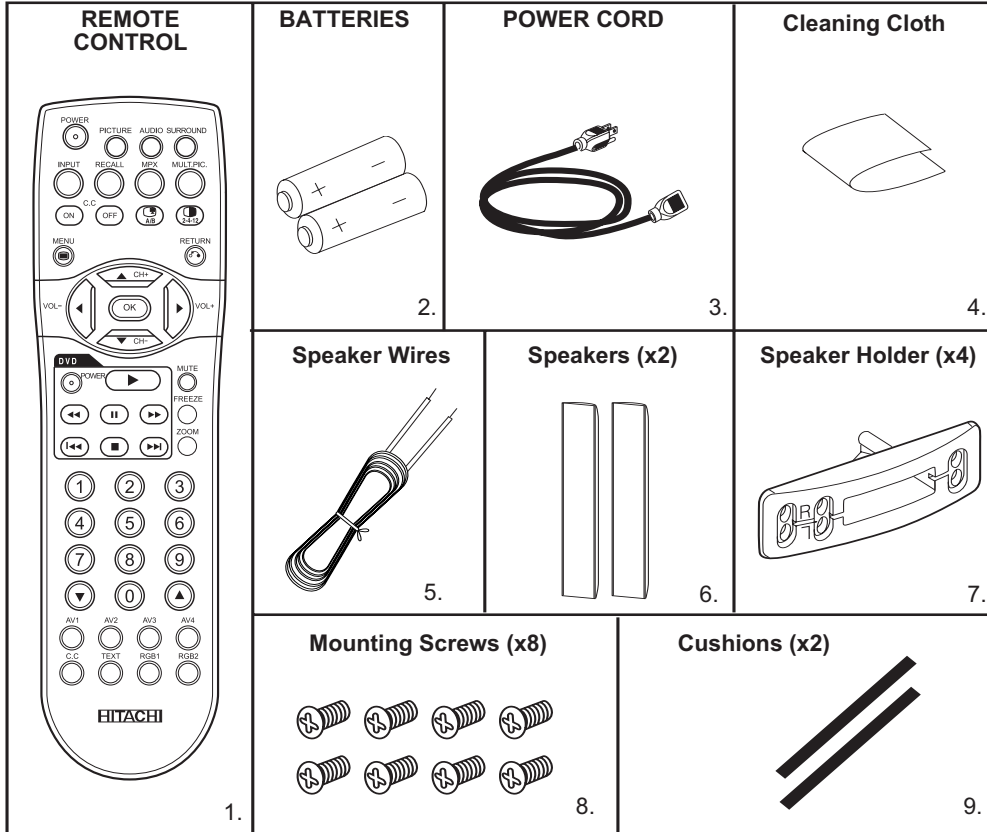
This product incorporates copyright protection technology that is protected by U.S. patents and other intellectual property rights. Use of this copyright protection technology must be authorized by Macrovision Corporation, and is intended for home and other limited consumer uses only unless otherwise authorized by Macrovision. Reverse engineering or disassembly is prohibited.



ACCESSORIES

Check to make sure you have the following accessories before disposing of the packing material.

FIRST TIME USE

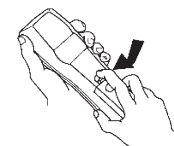
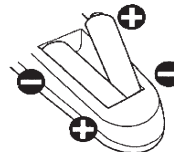
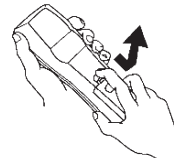


CAUTION: Ceiling mounting is not recommended. Mounting the panel on the ceiling does not provide adequate ventilation for the electronics or proper support for the front glass panel. This plasma television product is designed for a maximum tilting angle of 45 degrees from vertical.

- | | |
|--|-------------------------------|
| 1. Remote Control Unit CLU-W900 (P# HL02042) | 6. Speakers (x2) (P# GM01267) |
| 2. Two "AA" size, 1.5V batteries (P# FQ00021). | 7. Speaker Holder (x4) |
| 3. Power Cord (P#EV01841) | 8. Mounting Screws (x8) |
| 4. Cleaning Cloth (P# MS00931). | 9. Cushions (x2) |
| 5. Speaker wires (for monitor speakers). | |

REMOTE CONTROL BATTERY INSTALLATION AND REPLACEMENT

1. Open the battery cover. Slide back and remove the battery cover in the direction of the arrow.
2. Load batteries. Load two Size AA batteries included observing the correct polarities.
3. Close the battery cover. Replace the battery cover in the direction of the arrow and snap it back into place.



CAUTION: Danger of explosion if battery is incorrectly replaced. Replace with the same or equivalent type.

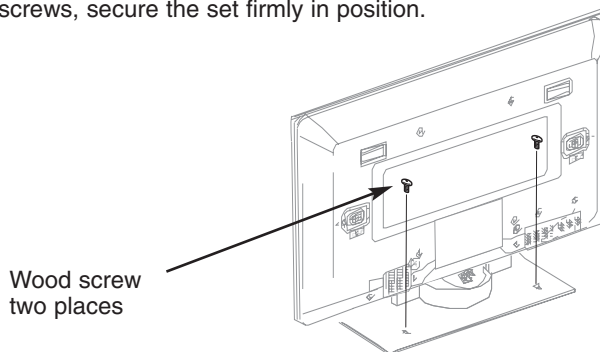
HOW TO SETUP YOUR NEW HITACHI PLASMA DISPLAY TELEVISION



To take measures to prevent the Plasma Television from tipping over and prevent possible injury it is important to mount the unit in a stable place.

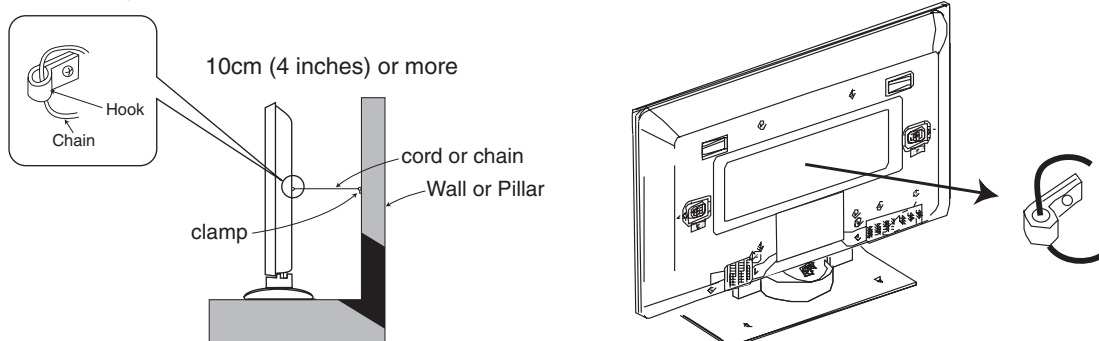
Securing to a table-top

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



Securing to a wall or pillar.

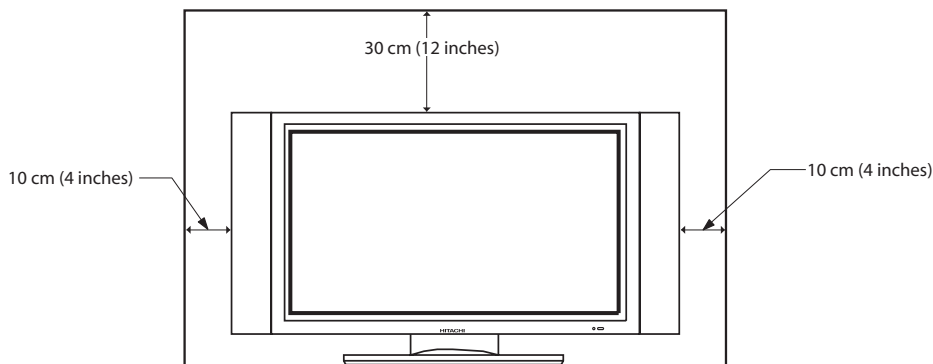
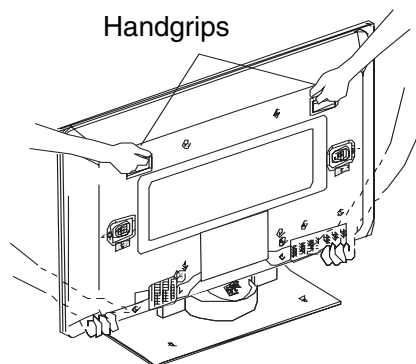
Using a commercially available cord, chain and clamp, secure the set to a firm wall or pillar.



- NOTES:**
1. Do not block the ventilation holes of the Plasma Television. Blocking the ventilation holes might cause fire or defect.
 2. The plasma display has one AC cord. In case of an abnormal symptom, unplug the AC cord.
 3. If you purchased the wall mount bracket option, please ask for professional installer. Do not install by yourself.

Caution when moving the main unit

As this product is heavy, whenever it is moved, two people are required to transport it safely. Whenever the unit is moved it should be lifted forward using the two handgrips at the back for the plasma television. When moving the Display Monitor, lift the handles and the bottom frame as shown below. Do not grab the speakers or the back cover when lifting.



ANTENNA

Unless your Plasma Television is connected to a cable TV system or to a centralized antenna system, a good outdoor color TV antenna is recommended for best performance. However, if you are located in an exceptionally good signal area that is free from interference and multiple image ghosts, an indoor antenna may be sufficient.

LOCATION

Select an area where sunlight or bright indoor illumination will not fall directly on the picture screen. Also, be sure that the location selected allows a free flow of air to and from the perforated back cover of the set. In order to prevent an internal temperature increase, maintain a space of 10 cm (4 inches) from the sides/back of the monitor, and 30 cm (12 inches) from the top of the television to the wall. To avoid cabinet warping, cabinet color changes, and increased chance of set failure, do not place the TV where temperatures can become excessively hot, for example, in direct sunlight or near a heating appliance, etc.



HOW TO SETUP YOUR NEW HITACHI PLASMA DISPLAY TELEVISION

FIRST TIME USE

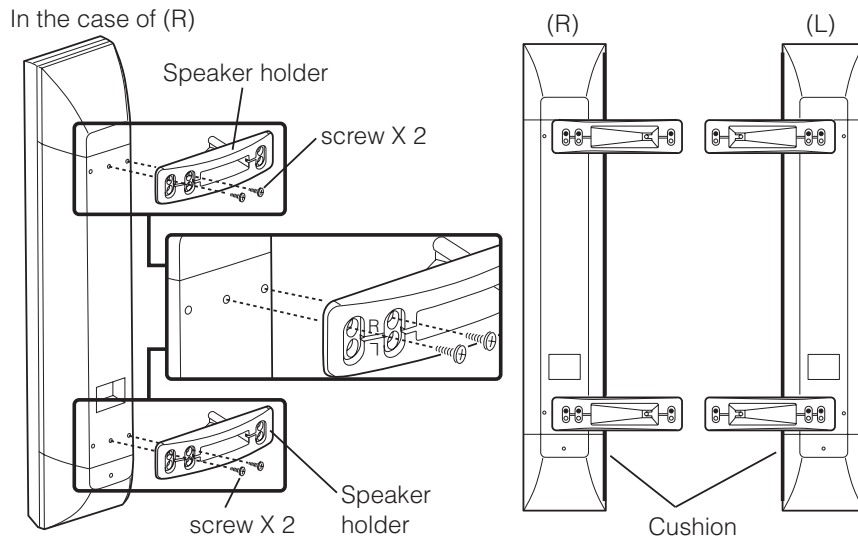
ATTACH THE SPEAKER SYSTEM TO THE MONITOR.



CAUTION: Make sure the monitor power is switched off (with the standby/ receive lamp switched off or red) before you connect or disconnect the speaker cables.

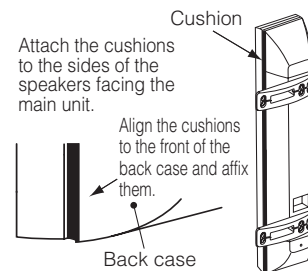
1. Attach the speaker brackets to the speaker systems.

Attach the screws in a position that allows you to read the speaker holder orientation markers (R), (L).



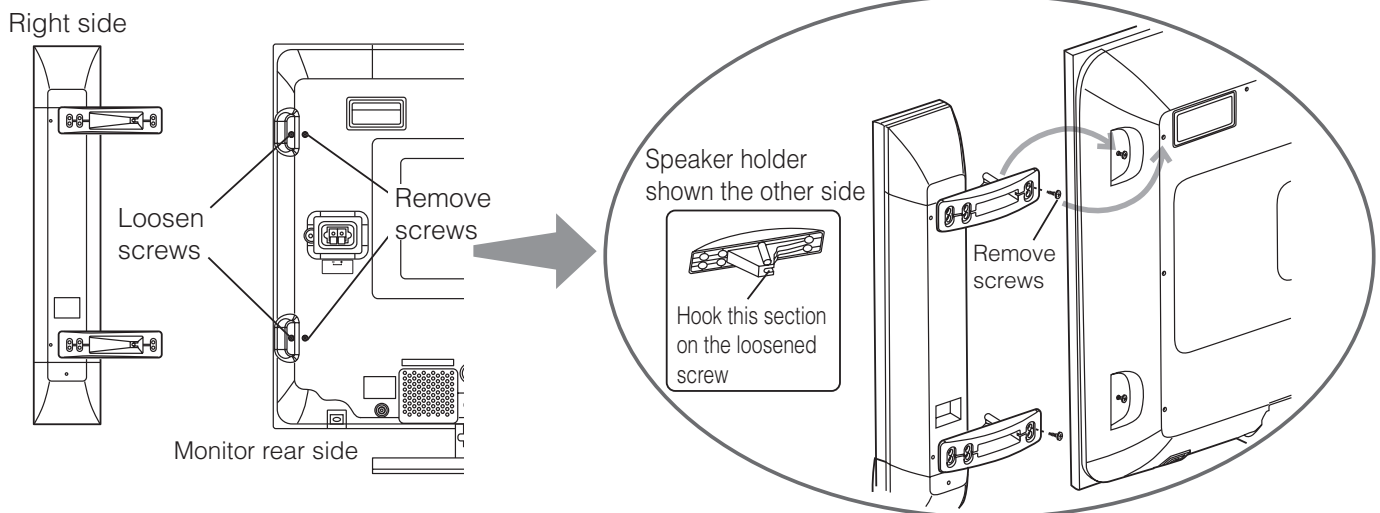
NOTES: USE OF CUSHIONS

In some cases, there can be a gap between the main unit and the speaker. You can attach the cushions provided to the side of the speaker system, if desired, to eliminate the gap.



2. Attach the speaker systems to the monitor.

Remove two screws on each side of the monitor as shown and keep them for re-install. Loosen two screws on each side of the monitor as shown so that the speaker holders can be slide on to them. Insert the loosened screws into the engaging holes of the speaker holders that are attached to the speaker system, and slide the screws downwards. Next, use the previously-removed screws to fasten the speaker holders into the mounting holes in the monitor. Tighten the four screws to secure.

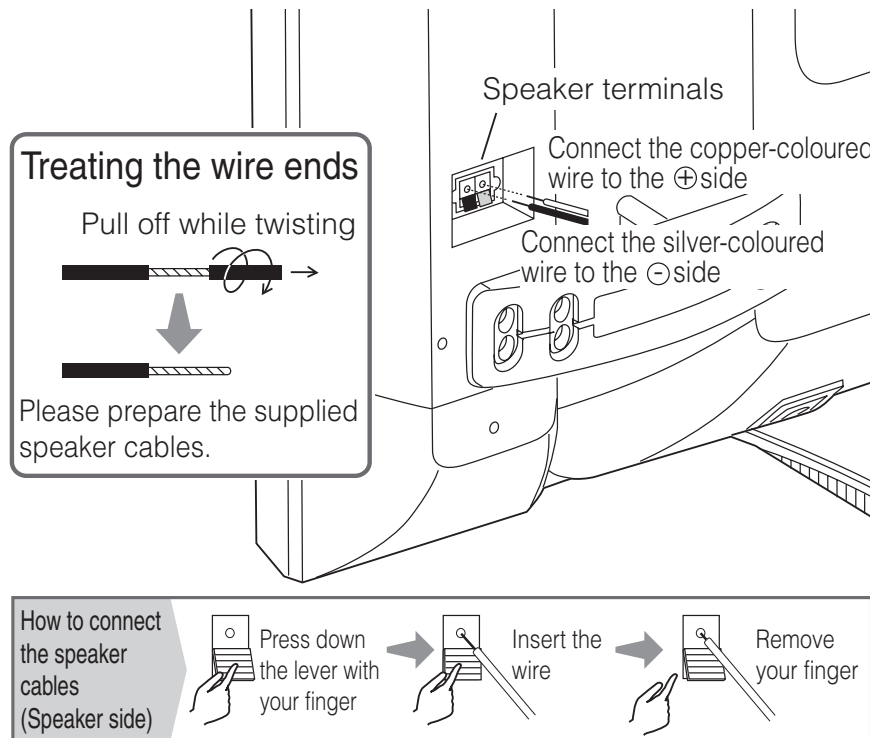


HOW TO SETUP YOUR NEW HITACHI PLASMA DISPLAY TELEVISION

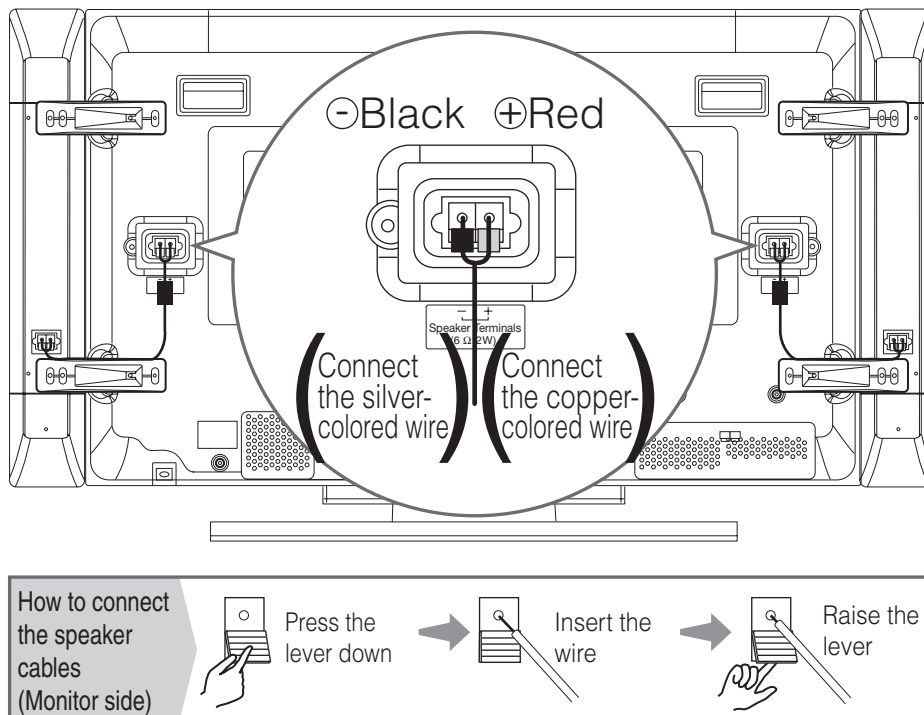


FIRST TIME USE

3. Attach the connection cables to the speaker system.



4. Attach the speaker connection cables to the monitor.



CAUTION: Be sure to insert the speaker cables securely. Lock the connection terminal level securely.



HOW TO SETUP YOUR NEW HITACHI PLASMA DISPLAY TELEVISION

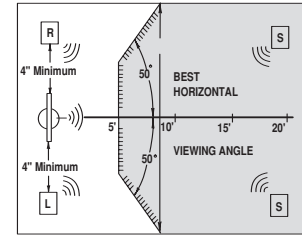
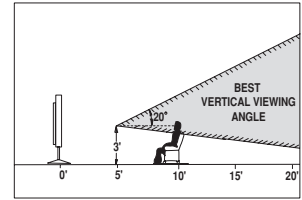
FIRST TIME USE

VIEWING

The major benefit of the HITACHI Plasma Television is its large viewing screen. To see this large screen at its best, test various locations in the room to find the optimum spot for viewing. The best picture is seen by sitting directly in front of the TV and about 8 to 18 feet from the screen.

During daylight hours, reflections from outside light may appear on the screen. If so, drapes or screens can be used to reduce the reflection or the TV can be located in a different section of the room.

If the TV's audio output will be connected to a Hi-Fi system's external speakers, the best audio performance will be obtained by placing the speakers equidistant from each side of the receiver cabinet and as close as possible to the height of the picture screen center. For best stereo separation, place the external speakers at least four feet from the side of the TV, place the surround speakers to the side or behind the viewing area. Differences in room sizes and acoustical environments will require some experimentation with speaker placement for best performance.



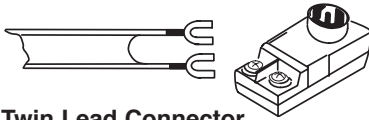
IMPORTANT NOTES

No.	Items	Notes
1	Arching sound from plasma display monitor's panel.	A buzzing sound might be heard when the plasma television is turned on in a very quiet room. This is due to the plasma panel drive circuit when it is functioning. This arching sound is normal and it is not a malfunction.
2	Interference for infrared equipment.	Some infrared rays are emitted from the plasma television's panel that might affect other infrared controlling equipment.
3	Bright and dark spots	High-precision technology is used to manufacture the plasma display panel; But in some cases, there are minor defects in some parts of the screen. Points that do not light, points with brightness different from that of the periphery, points with color different from that of the periphery, etc. Some pixels will always be on or always off. Please note that this is not a malfunction.
4	Picture Image (Spectrum)	When receiving still picture signals, (e.g. channel number indication or clock indication) for a while, you can see image-like when the picture varied. This is not a defect.
5	Display panel surface temperature is too high	The plasma display panel is lighting the phosphors by the discharge of internal radiation. In some cases, this may cause the temperature of the panel surface to increase. Please note that this is not a malfunction. The Plasma TV surface temperature is higher than a Cathode-ray-tube.
6	Plasma Surface	The plasma panel is made from glass. Heavy shock on the front panel might damage it.
7	Transportation	When the PDP monitor is transported horizontally, the glass panel has the possibility of being broken or increasing the picture defects. At the time of transportation, horizontal style is prohibited. More-over, please treat the plasma panel with great care because of a precision apparatus. Please instruct transporters so that it should be put into the packing box at the time of shipment.(There is a possibility that breakage of the panel or defects will increase.) Rough transportation might cause damage to the panel and pixel failure.
8	Image retention	The plasma monitor illuminates phosphor to display images. The phosphor has a finite illumination life. After extended periods of illumination, the brightness of the phosphor will be degraded to such extent that stationary images would burn-in that part of the screen as grayed-out images. Tips to prevent such image retention are: - Do not display images having sharp brightness differences or hi-contrast images, such as monochrome characters and graphic patterns, for long. - Do not leave stationary images appearing for long, but try to refresh them at appropriate intervals of time, or try to move them using screen saver function. - Turn down the contrast and brightness controls.
9	Luminosity and contrast	PDP television has luminosity and low contrast compared with CRT television.
10	Granular spots	When a screen is seen at point-blank range, a random fine grain may be visible to a dark part.
11	Disturbance to video apparatus	If an apparatus (VCR, etc.) antenna line is arranged near the monitor, the image may shake, or disturbance may be received.
12	About the use environment of PDP television (temperature)	Electric discharge/luminescence characteristic of the PDP panel also changes with peripheral temperature. Moreover, since there is also high power consumption value, a specified temperature environment is required.
13	Caution on prolonged storage	Storing the plasma television for a period of more than 2 to 3 months without use might cause an unstable picture when the set is turned on.
14	Operating	Operating altitude: 800 to 1,114hPa (6,194ft to -2,484ft). Operating temperature: 41°F to 95°F.
15	Storage	Storage Altitude: 300 to 1,114hPa (31,912ft to -2,484ft). Storage temperature: 5°F to 140°F.
16	Power ON or OFF	Frequent use of the Power ON or OFF might trigger the power protection circuit. If the TV does not turn ON, please wait a little before turning ON again.

HOOKUP CABLES



Most video/audio connections between components can be made with shielded video and audio cables that have phono connectors. For best performance, video cables should use 75-Ohm coaxial shielded wire. Cables can be purchased from most stores that sell audio/video products. Below are illustrations and names of common connectors. Before purchasing any cables, be sure of the output and input connector types required by the various components and the length of each cable.



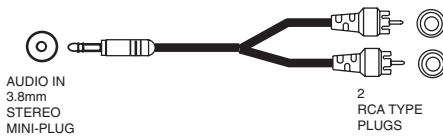
300-Ohm Twin Lead Connector

This outdoor antenna cable must be connected to an antenna adapter (300-Ohm to 75-Ohm).



Phono Connector

Used on all standard video and audio cables which connect to inputs and outputs located on the rear jack panel and front control panel.



Stereo Cable (3.5 mm plug to 3.5 mm plug)

This cable is used to connect from external audio out to the audio input (ex. RGB Input).



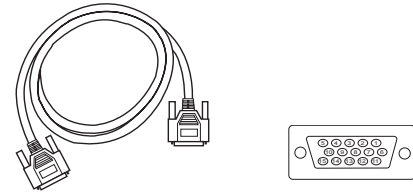
"F" Type 75-Ohm Coaxial Antenna Connector

For connecting RF signals (antenna or cable TV) to the antenna jack on the television.



S-Video (Super Video) Connector

This connector is used on camcorders, VCRs and laser-disc players with an S-Video feature in place of the standard video cable to produce a high quality picture.



D-SUB MINI 15-Pin Cable

This cable is used to connect a computer output to the D-SUB input located on the rear panel of the Monitor. The resolution should be set correctly to display the signal on the Plasma Monitor.

FIRST TIME USE



ANTENNA CONNECTIONS TO REAR PANEL JACKS

FIRST TIME USE

VHF (75-Ohm) antenna/CATV (Cable TV)

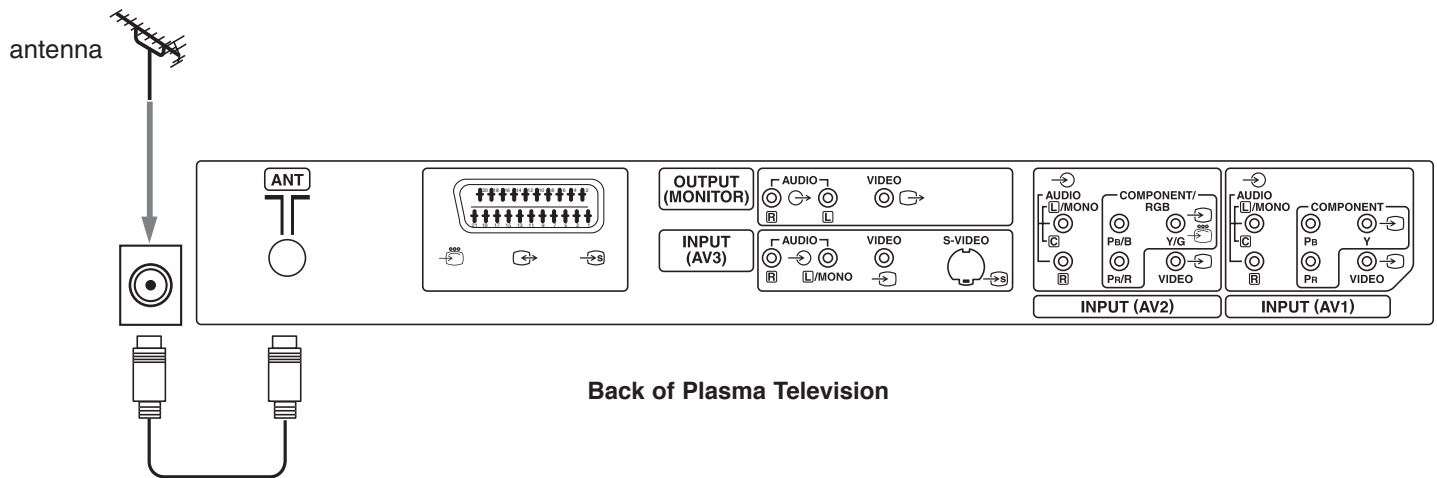
When using a 75-Ohm coaxial cable system, connect the outdoor antenna or CATV coaxial cable to the ANT (75-Ohm) terminal.

VHF (300-Ohm) antenna/UHF antenna

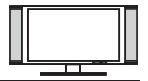
When using a 300-Ohm twin lead from an outdoor antenna, connect the VHF or UHF antenna leads to screws of the VHF or UHF adapter. Plug the adapter into the antenna terminal on the TV.

When both VHF and UHF antennas are connected

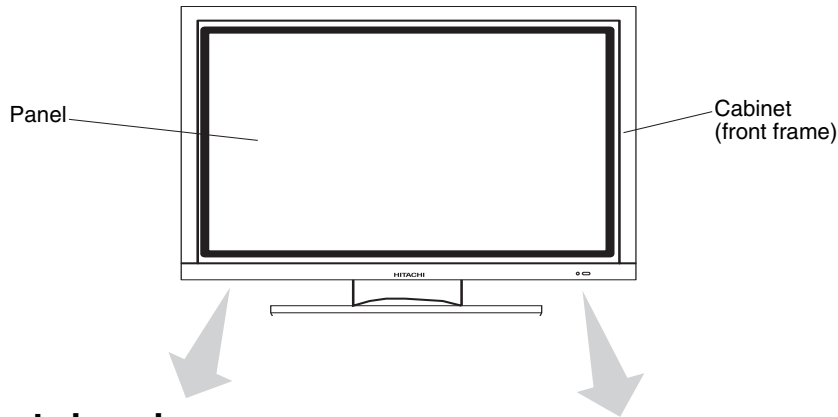
Attach an optional antenna cable mixer to the TV antenna terminal, and connect the cables to the antenna mixer. Consult your dealer or service store for the antenna mixer.



FRONT PANEL CONTROLS



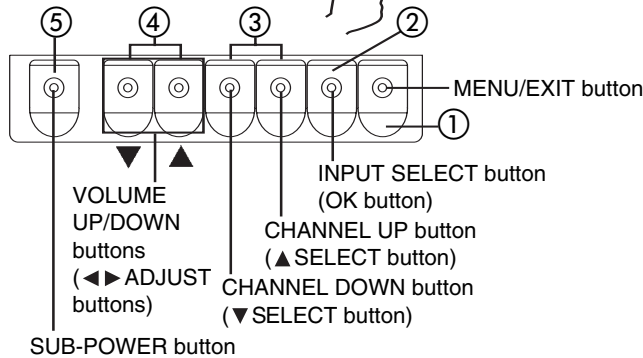
FRONT VIEW



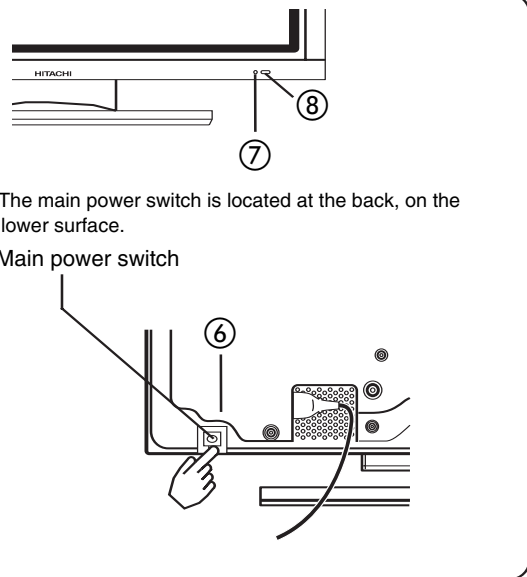
FIRST TIME USE

Control panel

- Adjustment buttons are located on the bottom.
- The back cover is provided with indications to distinguish the adjustment buttons.



• () indicates the function while the MENU is displayed on the screen.



- The main power switch is located at the back, on the lower surface.

Main power switch

① MENU/EXIT button

This button allows you to enter the MENU, making it possible to set TV features to your preference without using the remote. This button also serves as the EXIT button when in MENU mode.

② INPUT/SELECT button

Press this button to select the desired input, AV1 to AV4, RGB1 and RGB2. Your selection is shown in the top right corner of the screen. This button also serves as the SELECT/OK button when in MENU mode.

③ CHANNEL selector

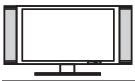
Press these buttons until the desired channel appears in the top right corner of the TV screen. These buttons also serve as the cursor down (▼) and up (▲) buttons when in MENU mode.

④ VOLUME level

Press these buttons to adjust the sound level. The volume level will be displayed on the TV screen. These buttons also serve as the cursor left (◀) and right (▶) buttons when in MENU mode.

⑤ SUB POWER button

Press this SUB POWER button to turn ON the Plasma television when not using the remote control power button



⑥ Plasma Television “MAIN POWER” switch

This power switch is for the complete system, and must be turned ON/OFF manually. It is recommended to leave the “MAIN POWER” to ON condition (lights red) for stand-by mode.

⑦ POWER light indicator

To turn the monitor ON, press the main power switch located on the lower right side of the monitor. A red stand-by indicator lamp located on the lower right corner of the front bezel will illuminate. The Display Monitor is now ready for remote on/off operation.

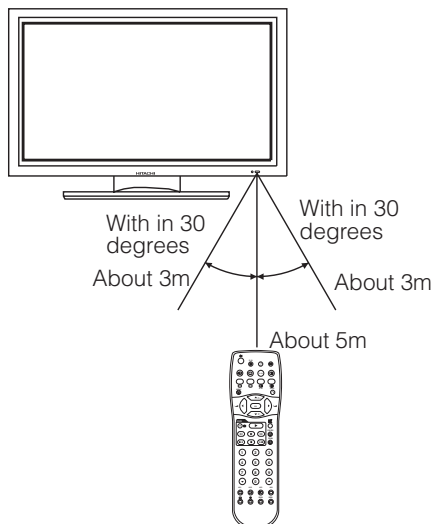
Indicating lamp

Indicating lamp	Power status	Operating
Off	Off	When the main power switch is set to OFF.
Lights red	Off (standby)	When the main power switch is ON, and the POWER button on the remote control or the SUB POWER button on the underside of the front of the frame is OFF.
Lights green	On	When the main power switch is ON, and the POWER button on the remote control or the SUB POWER button on the underside of the front of the frame is ON.
Lights orange	Off (Power Save)	When the main power switch is ON, and the POWER button on the remote control or the SUB POWER button on the underside of the front of the frame is ON. However, the status will be in POWER SAVE mode when in RGB1 or RGB2 input.

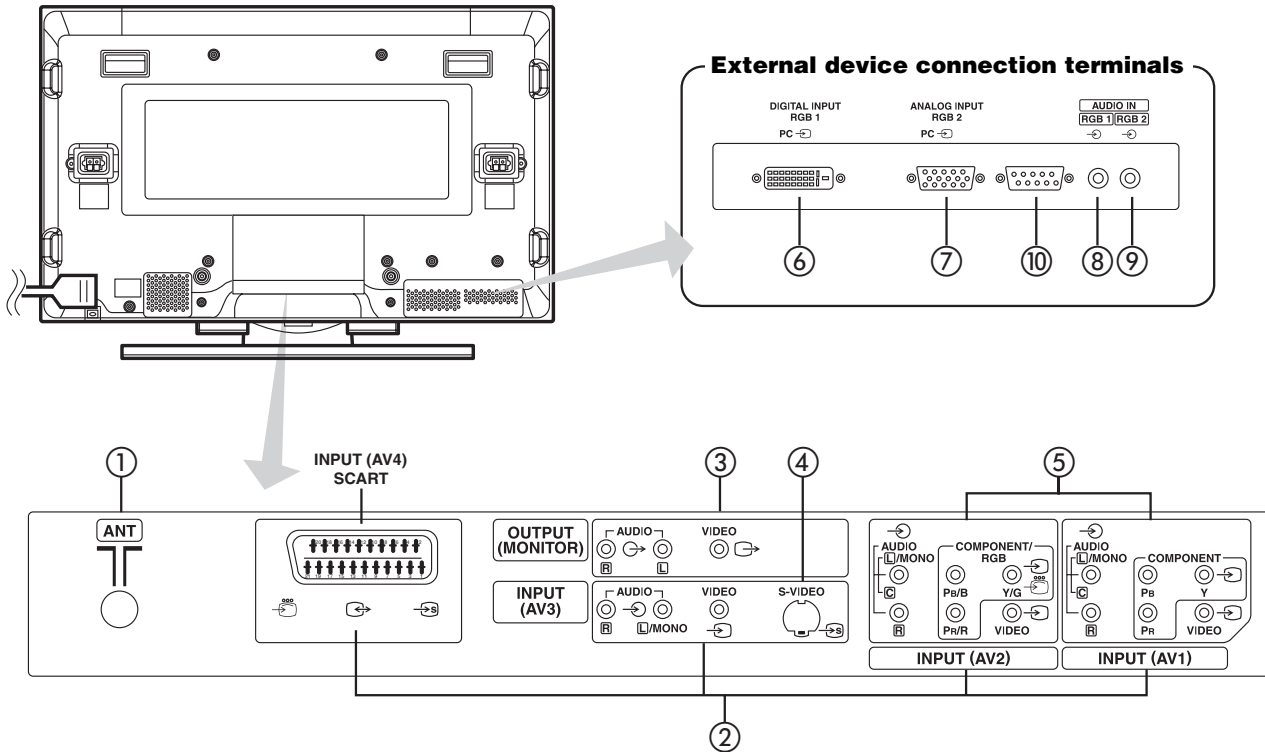
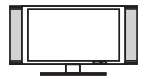
- NOTES:**
- Your HITACHI Plasma Television will appear to be turned OFF (lights orange) if there is no video input when RGB1 or RGB2 is selected. Check the Power Light to make sure the Plasma Television is turned off or in Stand-by mode (lights red) when not in use.
 - Remote Control can not turn ON/OFF the “MAIN POWER” of the Plasma Television.

⑧ REMOTE CONTROL sensor

Point your remote at this area when selecting channels, adjusting volume, etc.



REAR PANEL JACKS



- ① **Antenna Input**
Use the INPUT button to select Antenna.
- ② **Audio/Video Inputs AV1, AV2, AV3 and AV4**
By using the INPUT button, or the individual INPUTS buttons of the remote control, you can select each video source. Use the audio and video inputs to connect external devices, such as VCRs, camcorders, laserdisc players, DVD players etc. (if you have mono sound, insert the audio cable into the left audio jack).

NOTE: See page 20 for Input AV4 (SCART).

- ③ **MONITOR OUT**
These jacks provide fixed audio and video signals (ANTENNA, AV1~AV4) which are used for recording. Component signal to Input AV1 and AV2, RGB inputs will not have monitor output.
- ④ **S-VIDEO AV3**
AV3 provide S-VIDEO (Super Video) jacks for connecting equipment with S-VIDEO output capability.
- ⑤ **Component: Y-P_BP_R Inputs**
AV1 and AV2 provide Y-P_BP_R jacks for connecting equipment with this capability, such as a DVD player or Set Top Box. You may use composite video signal for AV1 and AV2.

NOTES:

1. S-Video has a higher priority over video input.
2. Your component outputs may be labeled Y, B-Y, and R-Y. In this case, connect the components B-Y output to the Plasma Monitor's P_B input and the components R-Y output to the Plasma Monitor's P_R input.
3. Your component outputs may be labeled Y-C_BC_R. In this case, connect the component C_B output to the Plasma Monitor's P_B input and the component C_R output to the Plasma Monitor's P_R input.
4. It may be necessary to adjust TINT to obtain optimum picture quality when using the Y-P_BP_R inputs (See page 36).
5. To ensure no copyright infringement, the MONITOR OUT output will be abnormal, when using the Y-P_BP_R jacks, and RGB inputs.



REAR PANEL JACKS

FIRST TIME USE

- ⑥ **RGB1 - Digital Input (DVI-PC / DVI-STB)**
Use this DVI input for your external devices with DVI output (see pages 20 and 55).
- ⑦ **RGB2 - Analog Input**
Use this 15-pin D-Sub input for your external devices with RGB output (see pages 20 and 55).
- ⑧ **RGB1 - Audio Input**
Connect audio for RGB1 input (if you have mono sound, insert the audio cable into the same jack).
- ⑨ **RGB2 - Audio Input**
Connect audio for RGB2 input (if you have mono sound insert the audio cable into the same jack).
- ⑩ **Service Adjustment Port**
This port is for service adjustment only.

CONNECTING EXTERNAL VIDEO SOURCES



The exact arrangement you use to connect the VCR, camcorder, laserdisc player, DVD player, or HDTV Set Top Box to your Plasma TV is dependent on the model and features of each component. Check the owner's manual of each component for the location of video and audio inputs and outputs.

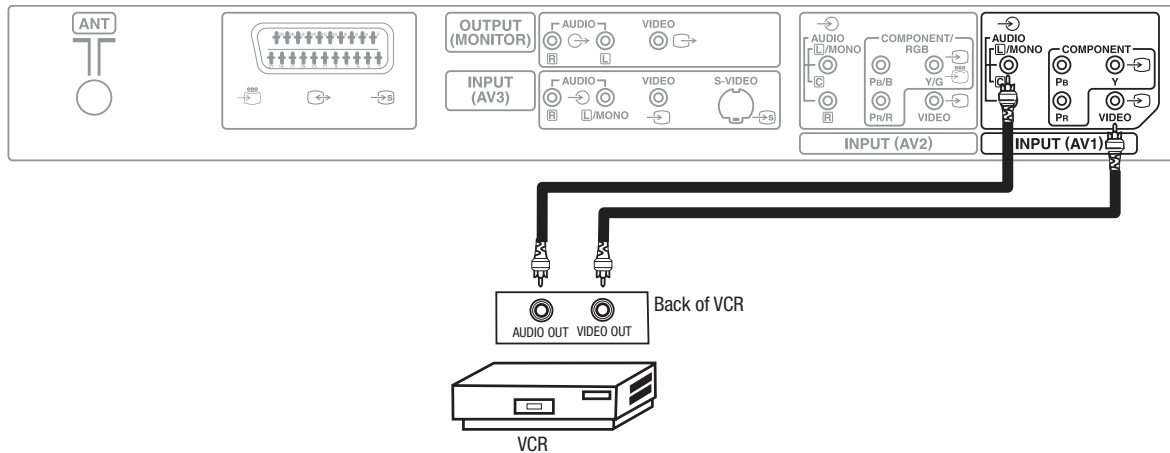
The following connection diagrams are offered as suggestions. However, you may need to modify them to accommodate your particular assortment of components and features. For best performance, video and audio cables should be made from coaxial shielded wire.

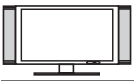
Before Operating External Video Source

Connect an external source to one of the INPUT terminals, then press the INPUT button on the Control panel located at the bottom of the display monitor or the INPUT button on the remote control repeatedly to cycle through the INPUT items.

CONNECTING A MONAURAL AUDIO SOURCE TO AV1~AV4

1. Connect the cable from the VIDEO OUT of the VCR or the laserdisc player to the INPUT (VIDEO) jack, as shown on the Monitor Rear Panel below.
2. Connect the cable from the AUDIO OUT of the VCR or the laserdisc player to the INPUT (MONO)/L(AUDIO) jack.
3. Press the INPUT button, repeatedly till you select AV1 to view the program from the VCR or the laserdisc player. The VIDEO label disappears automatically after approximately four seconds.
4. Press the INPUT button repeatedly till you select the ANTENNA input to return to the previous channel.



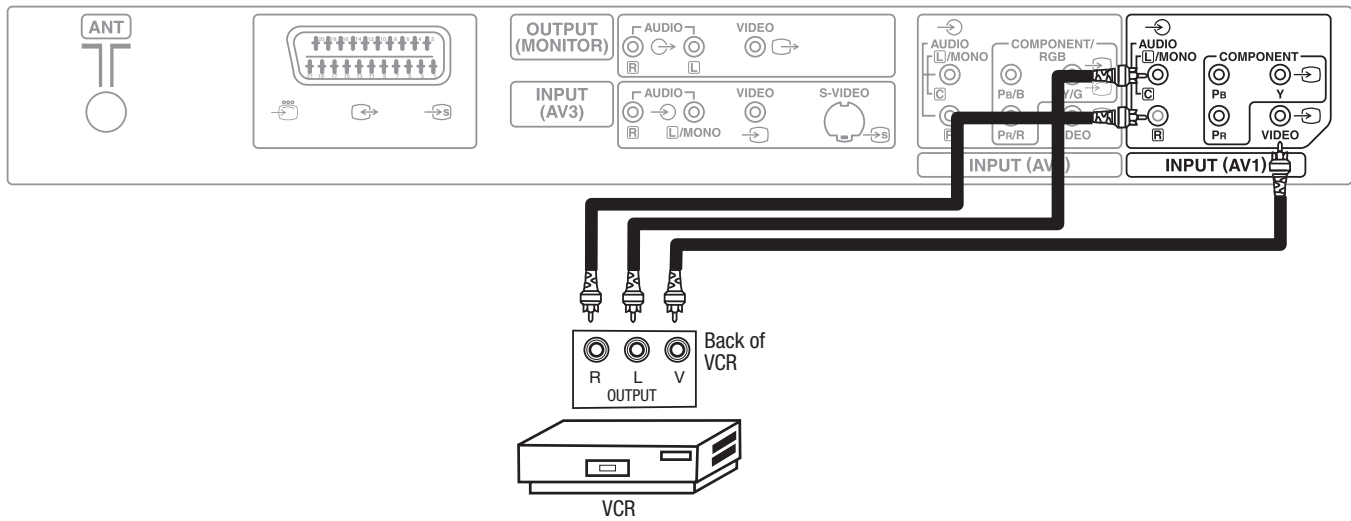


CONNECTING EXTERNAL VIDEO SOURCES

FIRST TIME USE

CONNECTING A STEREO VCR OR STEREO LASERDISC PLAYER

1. Connect the cable from the VIDEO OUT of the VCR or the laserdisc player to the INPUT (VIDEO) jack, as shown on the Monitor Rear Panel below.
2. Connect the cable from the AUDIO OUT R of the VCR or the laserdisc player to the INPUT (AUDIO/R) jack.
3. Connect the cable from the AUDIO OUT L of the VCR or the laserdisc player to the INPUT (AUDIO/L) jack.
4. Press the INPUT button, repeatedly till you select AV1 to view the program from the VCR or laserdisc player. The VIDEO label disappears automatically after approximately four seconds.
5. Press the INPUT button repeatedly till you select the ANTENNA input to return to the previous channel.



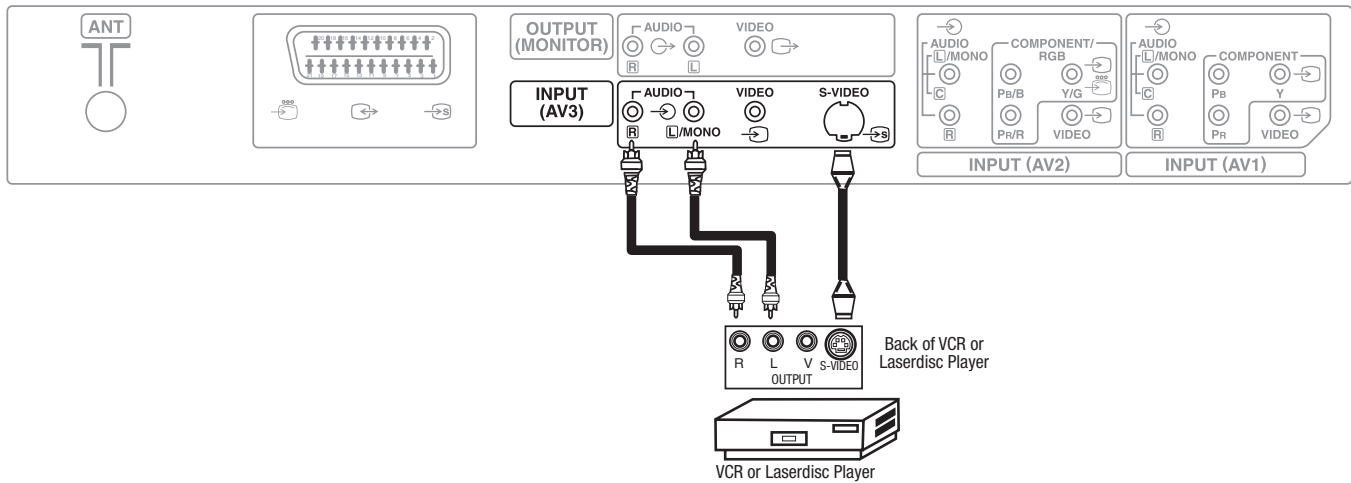
- NOTES:**
1. Completely insert the connection cord plugs when connecting to rear panel jacks. The picture and sound that is played back will be abnormal if the connection is loose.
 2. A single VCR can be used for VCR #1 and VCR #2, but note that a VCR cannot record its own video or line output. Refer to your VCR operating guide for more information on line input-output connections.

CONNECTING EXTERNAL VIDEO SOURCES

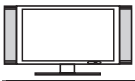


CONNECTING S-VIDEO VCR OR LASERDISC PLAYER

1. Connect the cable from the S-VIDEO OUT of the S-VHS VCR or the laserdisc player to the INPUT (S-VIDEO) jack, as shown on the Monitor Rear Panel below.
2. Connect the cable from the AUDIO OUT R of the VCR or the laserdisc player to the INPUT (AUDIO/R) jack.
3. Connect the cable from the AUDIO OUT L of the VCR or the laserdisc player to the INPUT (AUDIO/L) jack.
4. Press the INPUT button, repeatedly till you select AV3 to view the program from the VCR or laserdisc player. The VIDEO label disappears automatically after approximately four seconds.
5. Press the INPUT button repeatedly till you select the ANTENNA input to return to the previous channel.



- NOTES:**
1. Completely insert the connection cord plugs when connecting to rear panel jacks. The picture and sound that is played back will be abnormal if the connection is loose.
 2. A single VCR can be used for VCR #1 and VCR #2, but note that a VCR cannot record its own video or line output. Refer to your VCR operating guide for more information on line input-output connections.

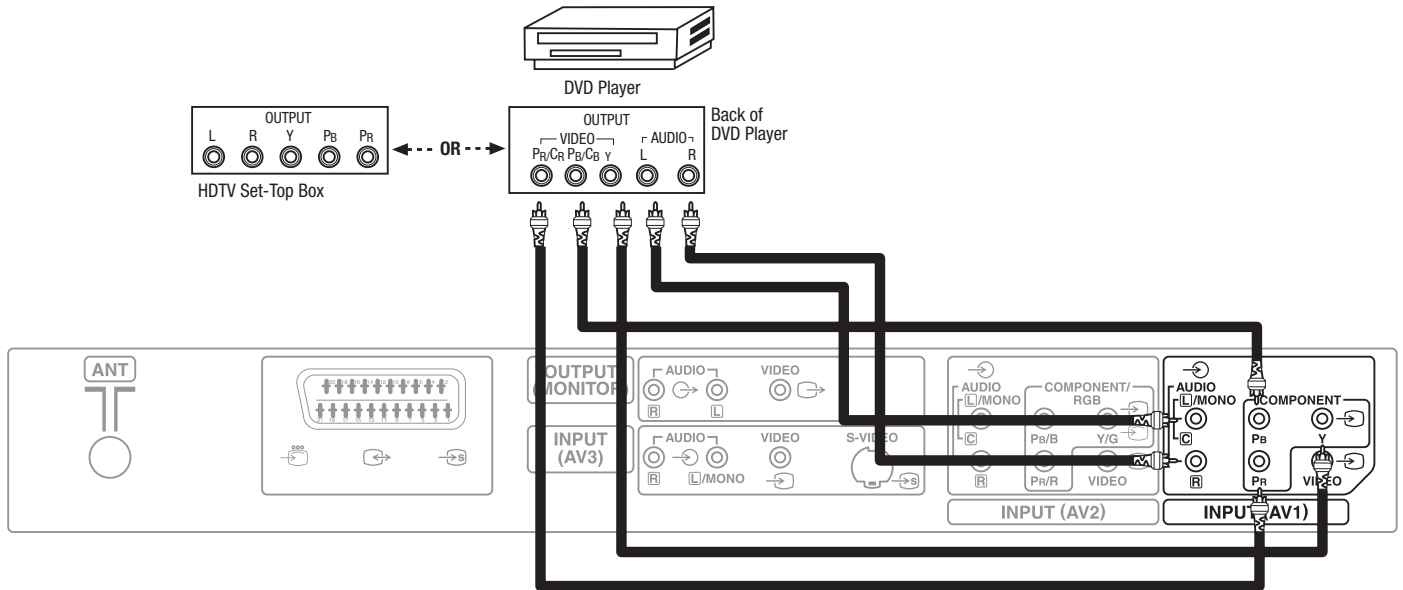


CONNECTING EXTERNAL VIDEO SOURCES

FIRST TIME USE

CONNECTING A STEREO LASERDISC/DVD PLAYER OR HDTV SET TOP BOX TO AV1 OR AV2 COMPONENT: Y-P_BP_R.

1. Connect the cable from the Y OUT of the Laserdisc/DVD player or HDTV set top box to the INPUT (Y) jack, as shown on the Monitor Rear Panel below.
2. Connect the cable from the C_B/P_B OUT or B-Y OUT of the Laserdisc/DVD player or HDTV set top box to the INPUT (P_B) jack.
3. Connect the cable from the C_R/P_R OUT or R-Y OUT of the Laserdisc/DVD player or HDTV set top box to the INPUT (P_R) jack.
4. Connect the cable from the AUDIO OUT R of the Laserdisc/DVD player or HDTV set top box to the INPUT (AUDIO/R) jack.
5. Connect the cable from the AUDIO OUT L of the Laserdisc/DVD player or HDTV set top box to the INPUT (AUDIO/L) jack.
6. Press the INPUT button, repeatedly till you select AV1 or AV2 to view the program from the Laserdisc/DVD player or HDTV set top box. The VIDEO label disappears automatically after approximately four seconds.
7. Press the INPUT button repeatedly till you select the ANTENNA input to return to the previous channel.

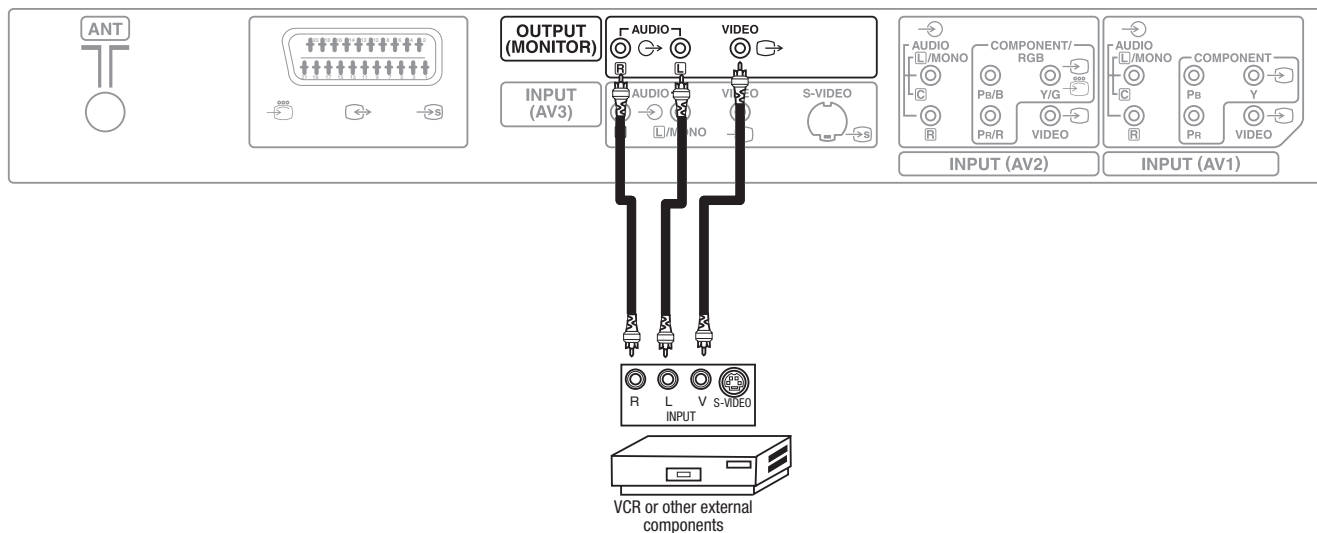


- NOTES:**
1. Completely insert the connection cord plugs when connecting to rear panel jacks. The picture and sound that is played back will be abnormal if the connection is loose.
 2. See page 21 for tips on REAR PANEL CONNECTIONS.

CONNECTING EXTERNAL AUDIO/VIDEO DEVICES

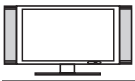


The MONITOR OUT terminal outputs video and audio of the ANTENNA and INPUTS AV1, AV2, AV3 and AV4. It does not output component video.



FIRST TIME USE

NOTE: If the OUTPUT (MONITOR) terminal is connected to an external monitor with a 75 Ohm terminal, it is possible to view the same image as on the main unit. But it is possible to monitor only the composite video signal from AV1, AV2, AV3 or AV4 input that is displayed on the screen at the time.

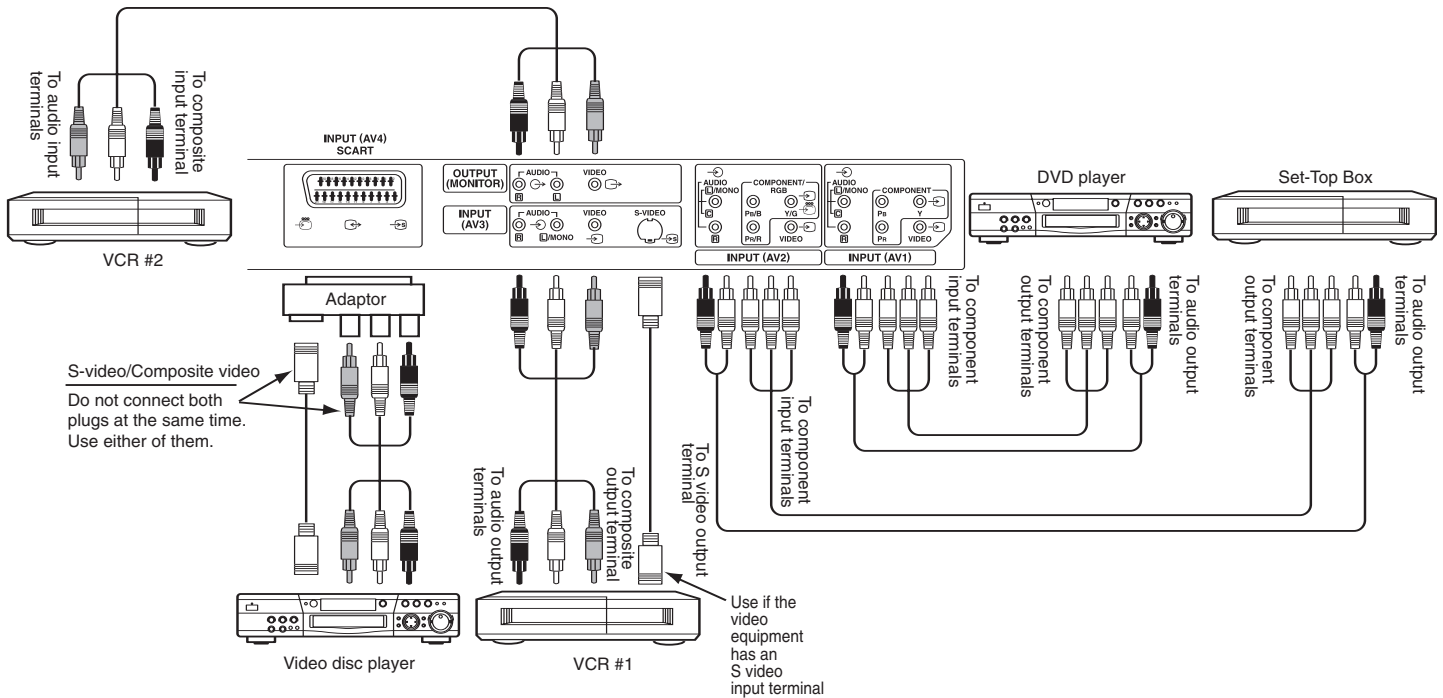


REAR PANEL CONNECTIONS

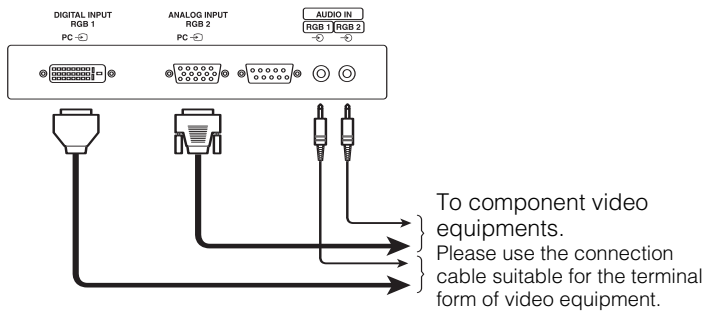
FIRST TIME USE

Connecting to a Video Imaging Device

1. Make sure that the power switch of the monitor is turned off.
2. Make sure that the power switch of the imaging device is turned off.
3. Use a commercially available cable and connector to connect the signal input terminal on the rear panel of this device and the signal output terminal of the imaging device.



With DVI-STB and RGB component setup



- NOTES:**
1. Cables are optional, except when specified.
 2. The SCART terminal Adaptor for (AV4) is optional.
 3. If video equipment with an S video output terminal is used, cabling by the S video cable is recommended to provide finer video quality. (If the S video input terminal and the video input terminal of AV3 connect to the monitor at the same time, S video input would govern.)
 4. If the adaptor is applied to AV4 input as shown in the drawing, it is impossible to receive RGB signal.

TIPS ON REAR PANEL CONNECTIONS



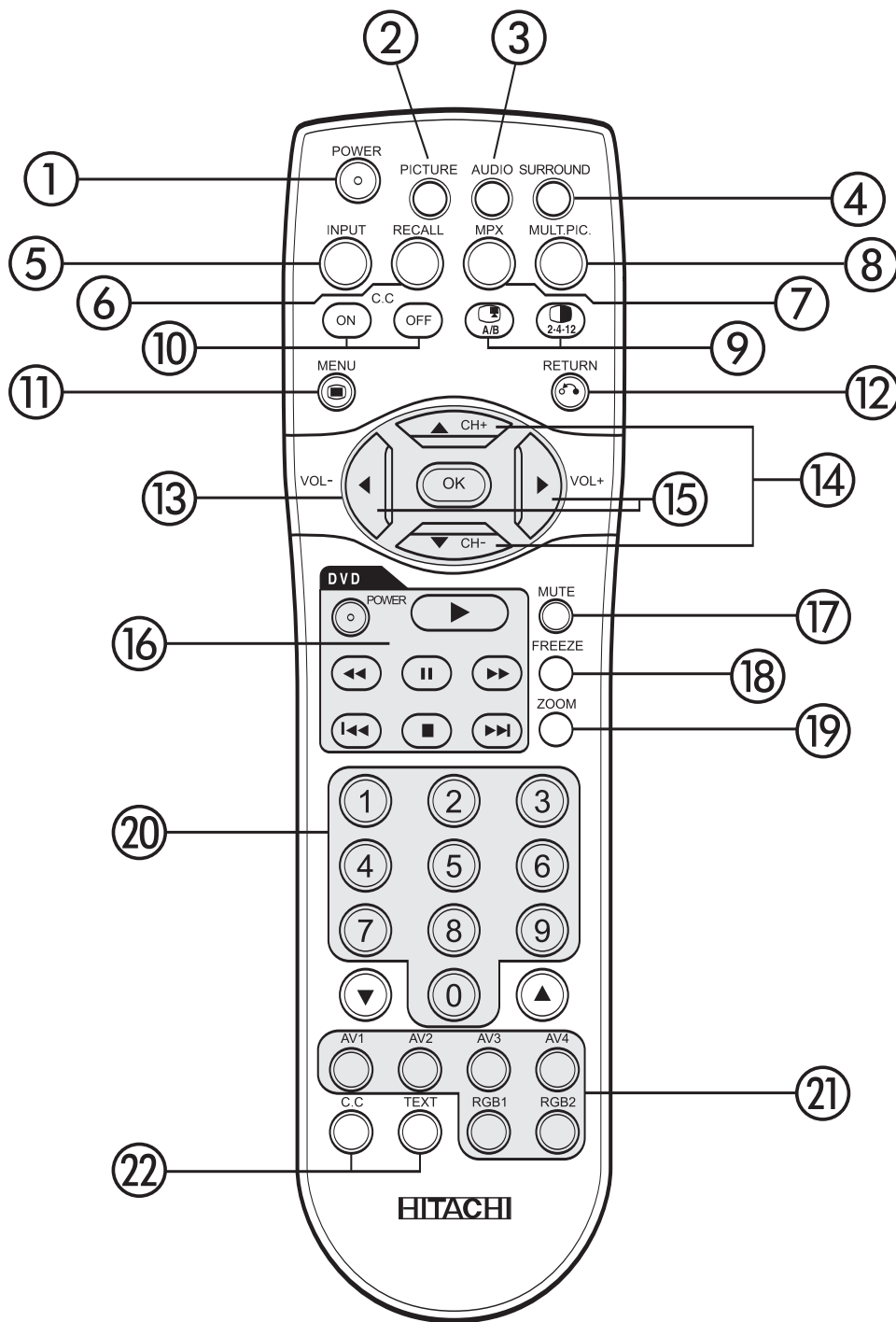
- S-VIDEO, YPbPR, connections are provided for high performance laserdisc players, VCRs etc. that have this feature. Use these connections in place of the standard video connection if your device has this feature.
- If your device has only one audio output (mono sound), connect it to the left audio jack on the Monitor Rear Panel.
- Refer to the operating guide of your other electronic equipment for additional information on connecting your hook-up cables.
- A single VCR can be used for VCR #1 and VCR #2, but note that a VCR cannot record its own video or line output. Refer to your VCR operating guide for more information on line input-output connections.
- Connect only 1 component (VCR, DVD player, camcorder, etc.) to each input jack.
- COMPONENT: Y-P_BP_R (AV1 & AV2) connections are provided for high performance components, such as DVD players and set-top-boxes. Use these connections in place of the standard video connection if your device has this feature.
- Your component outputs may be labeled Y, B-Y, and R-Y. In this case, connect the components B-Y output to the Monitor P_B input and the components R-Y output to the Monitor P_R input.
- Your component outputs may be labeled Y-C_BC_R. In this case, connect the components C_B output to the TV's P_B input and the components C_R output to the TV's P_R input.
- It may be necessary to adjust TINT to obtain optimum picture quality when using the Y-P_BP_R inputs.
- To ensure no copyright infringement, the MONITOR OUT output will be abnormal, when using the Y-P_BP_R, input jacks.
- AV1 or AV2 can accept both component and composite video signal.
- When using a DVI input from a Set-Top-Box, it is recommended to use a 1080i or 720p input signal.

Applicable video signals for each input terminal (See PRODUCT SPECIFICATIONS for details.)

Terminal	RCA/SCART				DVI		D-sub	
	CVBS	S-video	Component	RGB	PC	STB	RGB	Component
AV1	○		○					
AV2	○		○	○				
AV3	○	○						
AV4	○	○		○				
RGB1					○	○		
RGB2							○	○



HOW TO USE THE REMOTE TO CONTROL YOUR PLASMA TELEVISION



THE REMOTE CONTROL

- ① **POWER button**
Press this button to turn the TV set on or off .
- ② **PICTURE MODE button**
Press this button repeatedly to cycle through the Day and Night automatic picture mode settings.

NOTE: Not available on RGB1 and RGB2 inputs.

- ③ **AUDIO MODE button**
Press this button repeatedly to cycle through the automatic audio mode settings.
- ④ **SURROUND button**
Press this button to set the Matrix Surround setting to ON or OFF.

HOW TO USE THE REMOTE TO CONTROL YOUR PLASMA TELEVISION

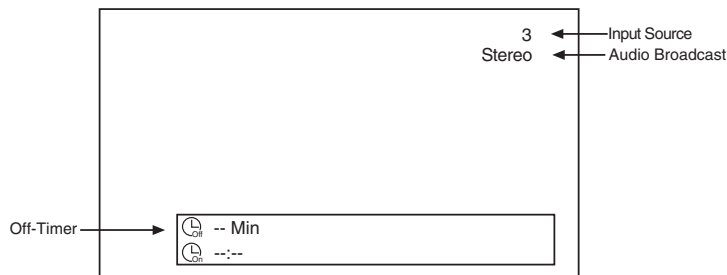


⑤ INPUT button

Press this button repeatedly to cycle through the Seven (7) available Inputs (ANT, AV1, AV2, AV3, AV4, RGB1 and RGB2).

⑥ RECALL button

Press this button when you want to check the channel being received, the picture or input signal source, the OFF timer and ON timer.



⑦ MPX button

Press this button repeatedly to cycle through the Multi-Channel Television Sound options. Multi-Channel Television Sound will allow you to select STEREO (a stereo broadcast), MONO (monaural sound) used when receiving a weak stereo broadcast or 2nd Audio Prog (SAP) which may be a secondary language, weather report, etc. The sources received will be displayed at the top right edge of the TV. The source you select will be displayed above the sources received. See example below for each selection when both stereo and second audio are received (monaural is always received).

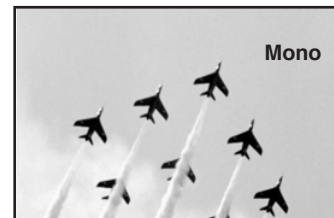
STEREO SELECTED



SAP SELECTED



MONO SELECTED



⑧ MULTI PIC. (Picture-in-Picture) button

See separate section on pages 27-30 for a description.

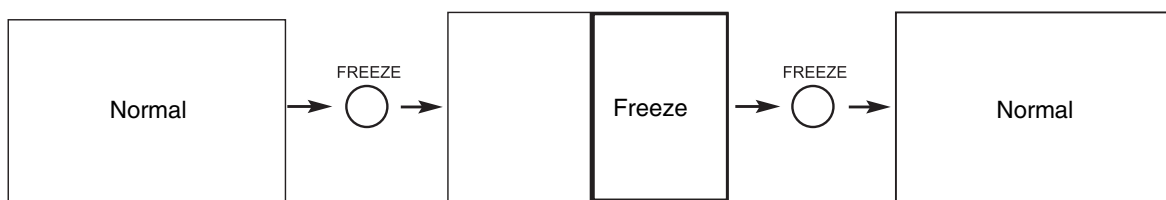
⑨ MULTI PICTURE MODE buttons

See separate section on pages 27-30 for a description.



HOW TO USE THE REMOTE TO CONTROL YOUR PLASMA TELEVISION

- 10 CLOSED CAPTION (C.C.) ON/OFF buttons**
Press the ON button to turn ON the Closed Caption and press the OFF button to turn OFF the Closed Caption.
- 11 MENU button**
Press the MENU button to start the On-Screen Display (OSD) mode. Press it again to EXIT/quit.
- 12 RETURN button**
Use this button while in the On-Screen Display mode. Press the RETURN button to navigate back one (1) On-Screen Display at a time.
- 13 CURSOR buttons / OK button**
All the On-Screen Display features can be set or adjusted by using the CURSOR buttons and the OK button, except for numeric entries.
- 14 CHANNEL UP (CH+ (▲)) / CHANNEL DOWN (CH- (▼))**
Press these buttons to select desired program channels.
- 15 VOLUME UP (VOL+ (▶)) / VOLUME DOWN (VOL- (◀))**
Press these buttons to select desired volume level.
- 16 DVD CONTROL buttons**
Use these buttons to operate the selected brand of DVD player.
- 17 MUTE button**
Press the MUTE button to turn the sound completely off. To restore the sound, press the MUTE button again or the VOLUME UP (VOL+ (▶)).
- 18 FREEZE button**
Press the button to freeze the picture.



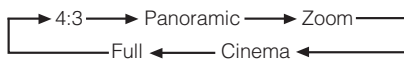
HOW TO USE THE REMOTE TO CONTROL YOUR PLASMA TELEVISION



19 ZOOM button

Each time the ZOOM button is pressed, the screen display size will change in sequence and the status will be displayed at the bottom of the screen.

NOTES: 1. During VIDEO signal input (AV1, AV2, AV3, AV4, RGB1 (set to [DVI-STB]) and RGB2 (set to [Component])).



2. The size will fix as Full mode and not change when receiving the component signal of 1080i/50, 1080i/60, or 720p/60.



Display size selection diagram

When you want to	Set the display size	Input signal	Display screen	Remarks
Play a 4:3 image in a 16:9 screen faithfully.	4 : 3			Blanking occurs on both sides.
Play a 4:3 image in a 16:9 screen with the height and width of the middle of the screen enlarged on equal scales and with both sides appearing somewhat enlarged.	Panoramic	(4:3 signal)		
Play a 16:9 VISTA size image in the 4:3 image faithfully reproduced on the 16:9 screen.	Zoom	 (Vista)		<ul style="list-style-type: none"> The 4:3 image is called a letterbox image. In some cases, some slight blanking may remain at the top and bottom.
Play a 21:9 Cinema size image in the 4:3 image expanded vertically on the 16:9 screen.	Cinema	 (Cinema)		In some cases, some slight blanking may remain at the top and bottom.
Play a 4:3 image faithfully in a 16:9 screen in the standard vertical size and horizontally squeezed.*	Full	 (Squeeze)		* An image with an aspect ratio of 16:9 shrunk horizontally to 4:3 to display in a 4:3 screen

Display area selection diagram (RGB input)

Resolution	Full display	Circular display				
		Normal	Real	Zoom1	Zoom2	Zoom3
640 X 480 (VGA)						
800 X 600 (SVGA)						
1024 X 768 (XGA)						
1280 X 1024 (SXGA)						
1600 X 1200 (UXGA)						

* VGA and W-VGA only

Processes such as compression (thinning) and expansion are performed for the above signal display. Because of this, there is a possibility that flicker may become noticeable on Zoom (1 ~ 3) depending on the display contents. If this occurs, turning the Vertical Filter On (see page 66) can reduce the flicker.

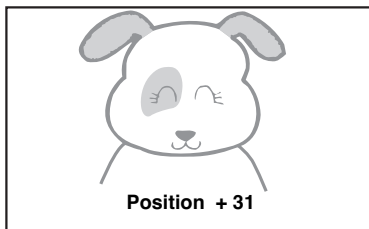


HOW TO USE THE REMOTE TO CONTROL YOUR PLASMA MONITOR

Vertical picture position can be adjusted for [Panoramic], [Zoom] and [Cinema] mode as follows.

1. Press ZOOM button and ▲,▼ SELECT buttons during picture size display.
2. Position display will appear.
3. Adjustment range of each picture size are as shown below.

[Panoramic]	- 12 to + 12
[Zoom] and [Cinema]	- 31 to + 31
4. When 1080i/50 or 1080i/60 component signal is received, vertical position can be adjusted only one step up. (The range: 0 to +1)



Press ▲



Press ▼

USING A WIDE-SCREEN MONITOR

- NOTES:**
1. This monitor has a screen mode selection feature. If an incompatible screen mode is selected to play certain software, such as a TV program, the image would appear different from the original. Take this into consideration when making screen mode choices.
 2. Use of this monitor in its enlarged display mode with the wide feature enabled in coffee shops, hotels and other establishments for commercial or public viewing purposes could infringe on the copyright holder's right protected by Copyright Law.
 3. When a normal 4:3 image is displayed over the entire screen in the Panoramic mode, parts of the periphery of the image may disappear and/or appear distorted in some cases. Use the 4:3 mode to view images, which were created in 4:3 mode. This mode allows 4:3 content to be viewed without picture distortion.

⑳ CHANNEL SELECTOR buttons

The CHANNEL SELECTOR buttons are used to select channels, lock access code, etc. Use the CHANNEL SELECTOR buttons to enter one, two or three numbers to select channels. Enter "0" first for channels 1 to 9, or simply press the single digit channel you wish to tune then wait for a few seconds for the TV to tune. Enter "1" first for channels 100 and above, wait for a few seconds till the 3 digit channel display icon appears then press the next 2 digits to completely tune the channel.

㉑ VIDEO (AV1 to AV4) / RGB (RGB1 and RGB2) buttons

Press these buttons to directly access the desired Input.

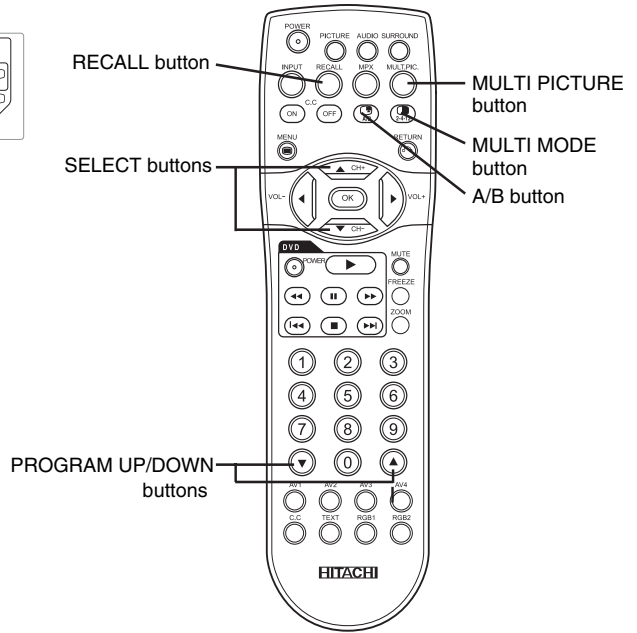
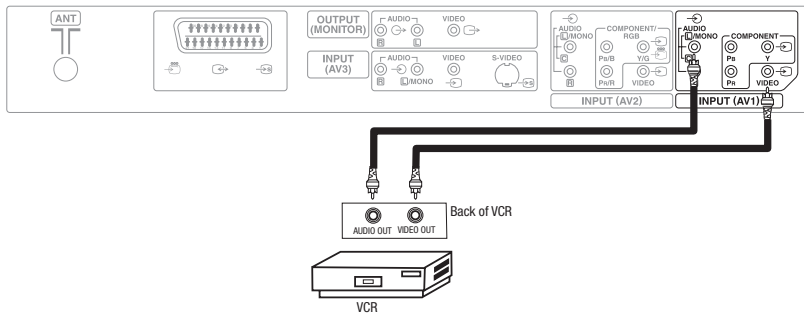
㉒ C.C / TEXT buttons

Press these buttons to directly change the Captions Mode to Captions and Text.

MULTI PICTURE (PinP)



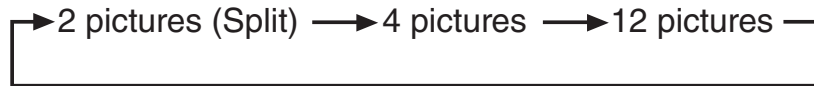
The Multi Picture feature is convenient when you want to watch more than one program at the same time. You can watch a TV program while viewing other programs from any of the video inputs.



Use above connection to view VCR program as a sub-picture while viewing another program as main picture (ANT, AV1, AV2, AV3, AV4, RGB1 or RGB2).

Displaying MULTI PICTURE

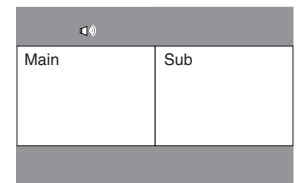
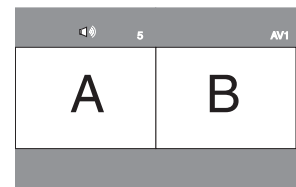
If the MULTI PICTURE button on the remote control is pressed, multi pictures will display. And then three types of the screen can be selected by pressing the MULTI MODE button on the remote control. The multi picture mode will change in the following sequence each time the MULTI MODE button is pressed.



Activating the Split mode from the TV screen

Pressing the MULTI PICTURE button one time will display 2 pictures.

- The speaker icon can be shifted left and right by pressing the A/B button; the audio will be output from the side on which the speaker icon is located.
- The same signal input cannot be selected for both screens at the same time.
- The TV channel can be changed by pressing the ▲ and ▼ PROGRAM UP/DOWN buttons on the remote control.
- The same signal input mode cannot be selected for each screens at the same time.
- Pressing the MULTI PICTURE button at the 2 picture mode will cancel the multi picture mode. And then, pressing the MULTI PICTURE button again will display the 4 pictures.
- Refer to the table for 2 pictures mode.



2 Pictures (Split)

Input terminal			ANT	AV1-AV4	AV1, AV2			RGB1	RGB2
	Main	Sub			576i 576p	480i 480p	1080i/50		
ANT	NTSC-M			○	○	○	○	○	
AV1-AV4	NTSC-M		○	○	○	○	○	○	
AV1, AV2	576i, 576p		○	○					
	480i, 480p		○	○					
	1080i/50		○	○					
	1080i/60		○	○					
RGB1	720p/60		○	○					
	STB								
RGB2	Component		○	○	○	○	○	○	

(○: Available)

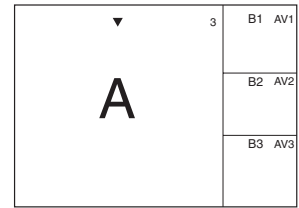


MULTI PICTURE (PinP)

Activating the 4 pictures mode from the TV screen

Pressing the MULTI MODE button one time at the 2 pictures mode will display 4 pictures.

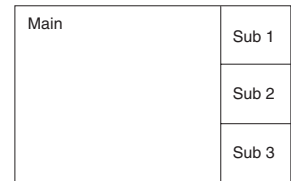
- Press [A/B] button to select picture A or picture B indicated by a red triangle. For pictures on right, press ▲ ▼ SELECT buttons to select picture. The selected channel number would change green.
- The TV channel can be changed by pressing the ▲ and ▼ PROGRAM UP/DOWN buttons on the remote control.
- The audio can only be output from picture A in 4 pictures mode.
- The same signal input mode cannot be selected for each screens at the same time.
- Pressing the MULTI PICTURE button at the 4 picture mode will cancel the multi picture mode. And then, pressing the MULTI PICTURE button again will display the 4 pictures.
- Refer to the table for 4 pictures mode.



4 Pictures

Input terminal	Sub	ANT	AV1-AV4	AV1, AV2			RGB1	RGB2		
		NTSC-M	NTSC-M	576i 576p	480i 480p	1080i/50	1080i/60	720p/60	STB	Component
ANT	Main	NTSC-M	○							
AV1-AV4	Sub	NTSC-M	○							
AV1, AV2	Main	576i, 576p	○							
		480i, 480p	○							
		1080i/50	○							
		1080i/60	○							
RGB1	Main	720p/60	○							
		STB								
RGB2	Sub	Component	○	○						

(○: Available)

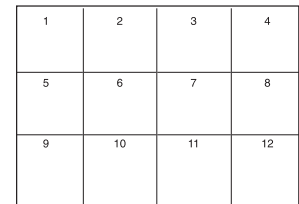


THE REMOTE CONTROL

Activating the 12 pictures mode from the TV screen

Pressing the MULTI MODE button one time at the 4 pictures mode will display 12 pictures.

- Starting from channel 1, preset channels will automatically display in sequence on the 12 windows.
- This function activates only in TV mode.
- After several seconds, it refreshes the picture one by one.
- Pressing the MULTI PICTURE button at the 12 picture mode will cancel the multi picture mode. And then, pressing the MULTI PICTURE button again will display the 12 pictures again.
- Pressing the MULTI MODE button at the 12 picture mode will display the 2 pictures (Split) mode.



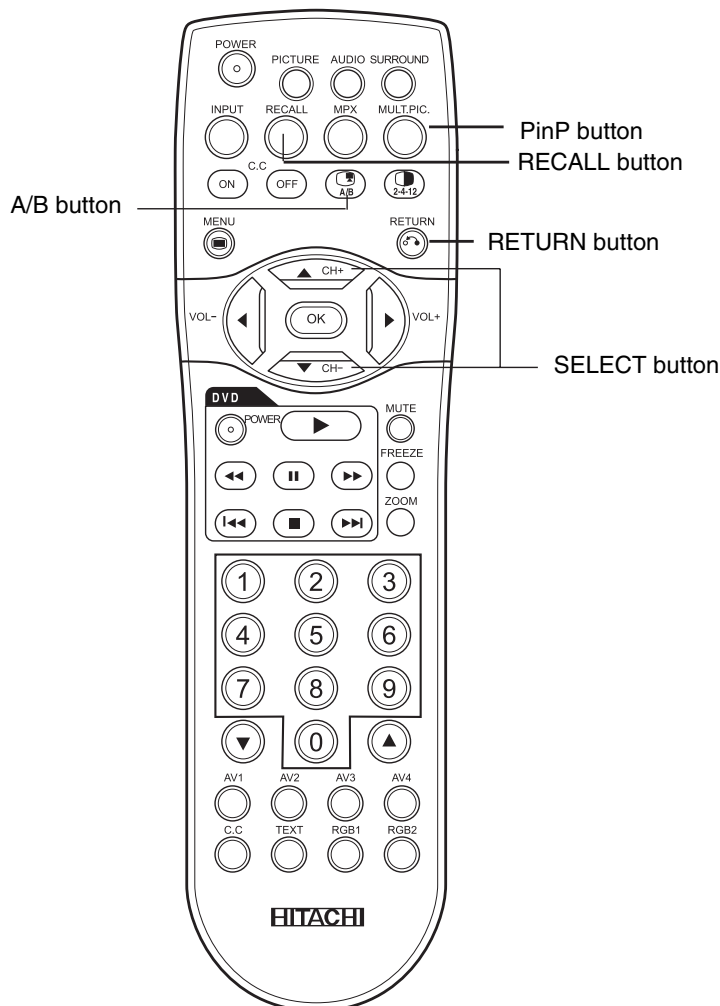
NOTES: 1. Even if the input of the horizontal / vertical synchronizing signal (or video signal) stops in the multi picture display, the mode will not change to power save mode.
2. Please be careful since image retention will occur if display is left in a multi picture display state for a long period of time

MULTI PICTURE (PinP)



Displaying MULTI PICTURE

If the PinP button on the remote control is pressed MULTI PICTURE will display.

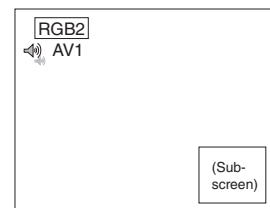


THE REMOTE CONTROL

Activating the P-in-P mode from the RGB input screen

Pressing the PinP button one time will display 2 pictures.

- This mode can be available from RGB1(DVI-PC) and RGB2(RGB) Input.
- The speaker icon can be shifted up and down by pressing the A/B button; the audio of the video will be output from the side on which the speaker icon is located.
- The sub-screen position can be selected up and down by pressing ▲ and ▼ SELECT buttons.
- The sub-screen can be selected with the AV1, AV2, AV3, AV4 and TV channel number buttons from the status that the speaker icon appears on the left side of AV* as shown in the diagram to the right.
- Pressing the PinP button again or the RETURN button will cancel the 2 pictures display.
- "Frequency Mode" in the Setup Menu should be set to Movie when sub-screen is the component signal of 1080i/50 or 1080i/60.

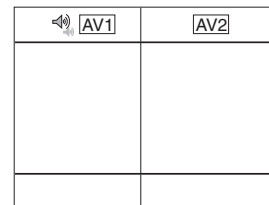


AV1: Displays the VIDEO input signal of the sub-screen.

Activating the Split mode from the video input screen

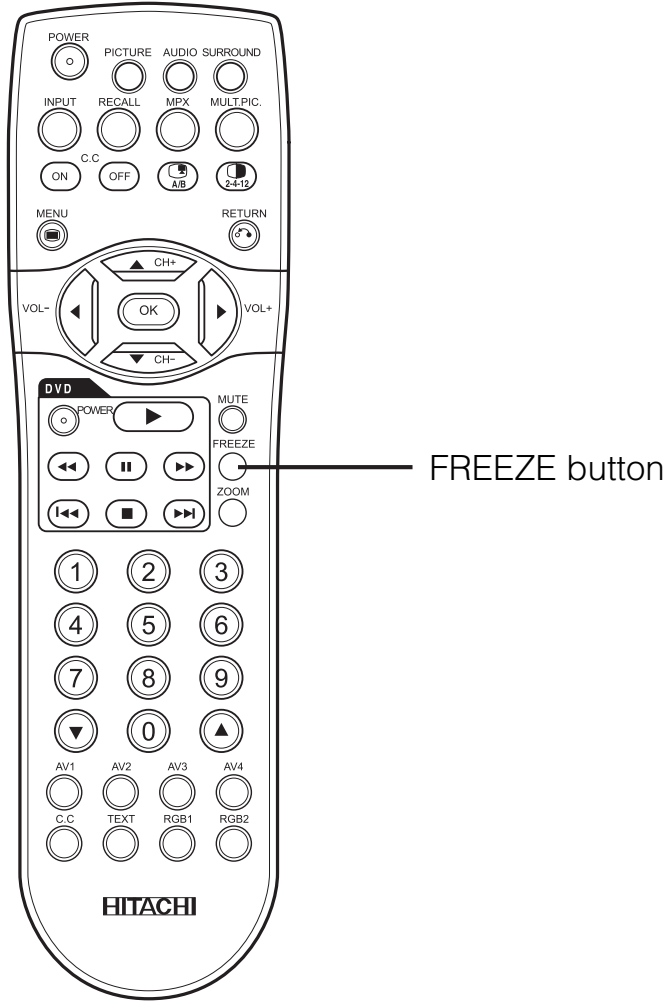
Pressing the PinP button one time will display 2 pictures.

- The speaker icon can be shifted left and right by pressing the A/B button; the audio of the video will be output from the side on which the speaker icon is located.
- The same video input mode cannot be selected for both screens at the same time.
- Pressing the PinP button again or the RETURN button will cancel the 2 pictures display.
- When the Video input is set to RGB Video, this Split mode is not possible.
- Refer to the table for 2 pictures (Split) mode.





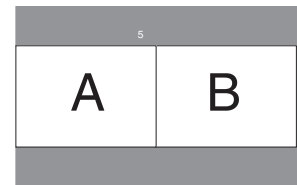
Picture Freezing



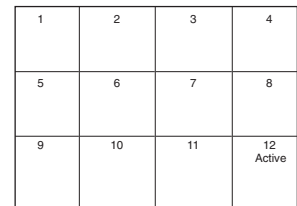
When the FREEZE button on the remote control is pressed, the screen transfers into the freeze mode.

- There are two types of freezing screen mode, Split and Strobe. These are possible to select at the “Freeze Mode” setting of the Function Menu.
- The Split mode will display 2 pictures from the same source on the screen with one active picture and the other still.
- The Strobe mode will display 12 pictures with the last picture active, while other 11 windows are still.
- Pressing the FREEZE button again changes the screen back to the normal picture.
- This function is also available from video input mode besides TV mode. Refer to the table for Freeze function as below:

[Split]



[Strobe]



	Split	Strobe
NTSC-M	○	○
576i	○	○
480i	○	○
576p	○	
480p	○	
1080i / 50	○	
1080i / 60	○	
720p / 60	○	
RGB, DVI-PC		

(○ Available)

HOW TO USE THE REMOTE TO CONTROL DVD FUNCTIONS



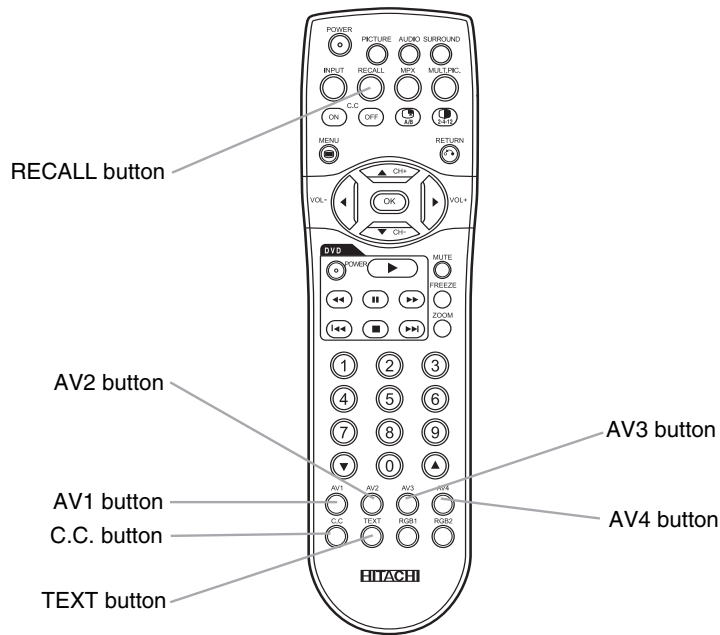
DVD Player Selection

You can use this remote control to operate the selected brand of DVD player by pressing the following buttons on the remote control simultaneously.

Brands of DVD Player	Press	Brands of DVD Player	Press
Hitachi	RECALL ①	RCA	RECALL ⑨
Pioneer	RECALL ②	Mitsubishi	RECALL ⑩
Panasonic	RECALL ③	Onkyo	RECALL AV1
Toshiba	RECALL ④	Zenith	RECALL AV2
Philips	RECALL ⑤	Orion	RECALL AV3
JVC	RECALL ⑥	Shinco	RECALL TEXT
Samsung	RECALL ⑦	Skyworth	RECALL AV4
Sony	RECALL ⑧	Bubuko	RECALL C.C.

Example

To operate HITACHI DVD player, press and hold the RECALL button, followed by the ① button.

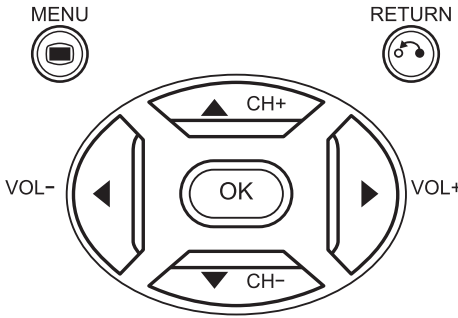


THE REMOTE CONTROL

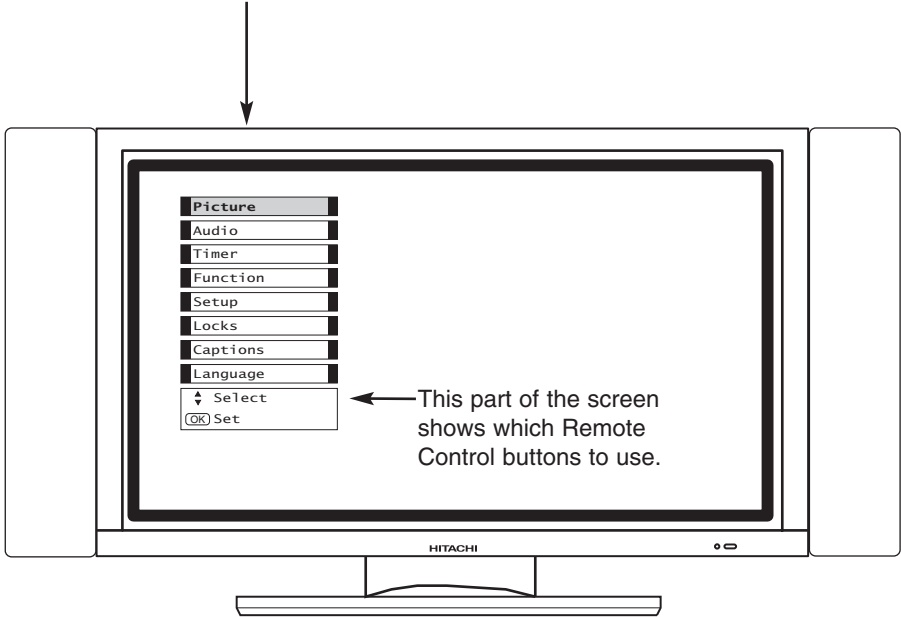
NOTE: Not all models of the listed brands can be operated using this remote control.

OSD (On-Screen Display)

- 1. Press MENU on the remote control to display the different features on your HITACHI Plasma Display Monitor.
- 2. Use the CURSOR buttons and the OK button to navigate to a different menu item.
- 3. Use the RETURN button to navigate back one On-Screen Display at a time.
- 4. Press the MENU button again on the remote control to quickly exit from a menu.



This part of the screen shows which selections are available.



OSD (On-Screen Display)

Picture

Picture Mode	Select between the two picture modes; Day and Night.
Contrast	Adjust contrast.
Brightness	Adjust brightness.
Color	Adjust color.
Sharpness	Adjust sharpness.
Tint	Adjust tint.
Color Temperature	Set this to Cool for less intense color with more blue, set to Normal for natural color, set to Warm for standard colors or Black and White for more reddish color.
Contrast Mode	Adjust Contrast automatically.
Reset	Reset/Restore to original factory settings.
YNR	Adjust to reduce picture signal noise.
CNR	Adjust to reduce color signal noise.
Film Mode	Turn ON/OFF the 3:2 Pulldown detection feature.
PAL Comb Filter	Function not available (grayed out)
LTI	Adjust the sharpness of the picture signal.
CTI	Adjust the sharpness of the color signal.
Black Enhancement	Use this function to enhance the shadow detail in dark scenes.
Auto Color	The AUTO COLOR function automatically monitors and adjusts the color to maintain constant color levels even after a program or channel changes. It also maintains natural flesh tones while preserving fidelity of background colors.
Reset	Reset/Restore to original factory settings.
Color Temp. Adjust	Select ON/OFF to change color temperature depending on the user's preferences.
Color Management	Adjust and balance individual colors to make either deeper or more pure according to preference.
Color Decoding	Adjust the percentage of Red, Green and Color according to preference.

Audio

Audio Mode	Select preset Audio Modes.
Treble	Adjust the treble.
Bass	Adjust the bass.
Balance	Adjust the balance.
SRS TruBass	Select SRS settings (Off, Wide, Normal).
Matrix Surround	Select Matrix Surround (On, Off).
Perfect Volume	Adjust volume in fixed setting.
Reset	Reset/Restore to original factory settings.

OSD (On-Screen Display)

Timers

Off Timer
On Timer

This function automatically sets the power to standby status when the indicated time period has elapsed.
This automatically sets the power from standby to ON when the indicated time period has elapsed.

Function

Screen Saver
Screen Wipe
Black Side Panel
Video Power Save
Freeze Mode
Default Zoom
Panel Life
Mode Display
ID Number
Inverse
Standby White
Gamma
Reset

Set Screen Saver to prevent screen burn.
Select Screen Wipe function.
Set the gray side bars on/off when watching 4:3 signals in standard mode.
Set to reduce power consumption for video input when there is no video input.
Select freeze between split (2 pictures) and strobe (12 pictures).
Select the screen display size (default).
Set to suppress the contrast to extend panel life.
Not Available (grayed out)
Not Available (grayed out)
Not Available (grayed out)
Not Available (grayed out)
Not Available (grayed out)
Not Available (grayed out)
Reset/Restore to original factory settings.

Setup

(Antenna Input)

Auto Tuning
Manual
Fine Tuning
Auto Off

Select Source for Auto Channel tuning.
Select Source for Manual channel tuning.
Adjust to fine tune the channel after Auto or Manual tuning.
Set Plasma TV to Auto power Off (On/Off)

Setup

(AV1~AV4 Input)

System
Color System
Video Input
Audio Input
Scart Output
RGB1
RGB2

Set to System 1 (European/Asia) System 2 (North America)
Set Color System
Set Video input signal.
Set Audio input signal.
Set Scart Output to TV/or Monitor
Set to DVI-PC or DVI-STB.
Set to RGB or Component (Auto, HDTV, SDTV/DVD).

Locks

Change Access Code
Engage Lock
Movie Ratings
TV Ratings
Canadian Ratings (ENG)
Canadian Ratings (FRN)

Change Lock access code.
Choose to lock channel, video input, and/or front panel.
Block various types of movies and video types based on motion picture ratings.
Block various types of movies and television programming based on a parental guide ratings.
Block various types of movies and television programming based on the Canadian ratings system.
Block various types of movies and television programming based on the Canadian French ratings system.

Captions

Caption Display
Captions

Set to OFF/ON/AUTO
Set to display dialogue/text.

Language

Set Menu options to English, French or Spanish.

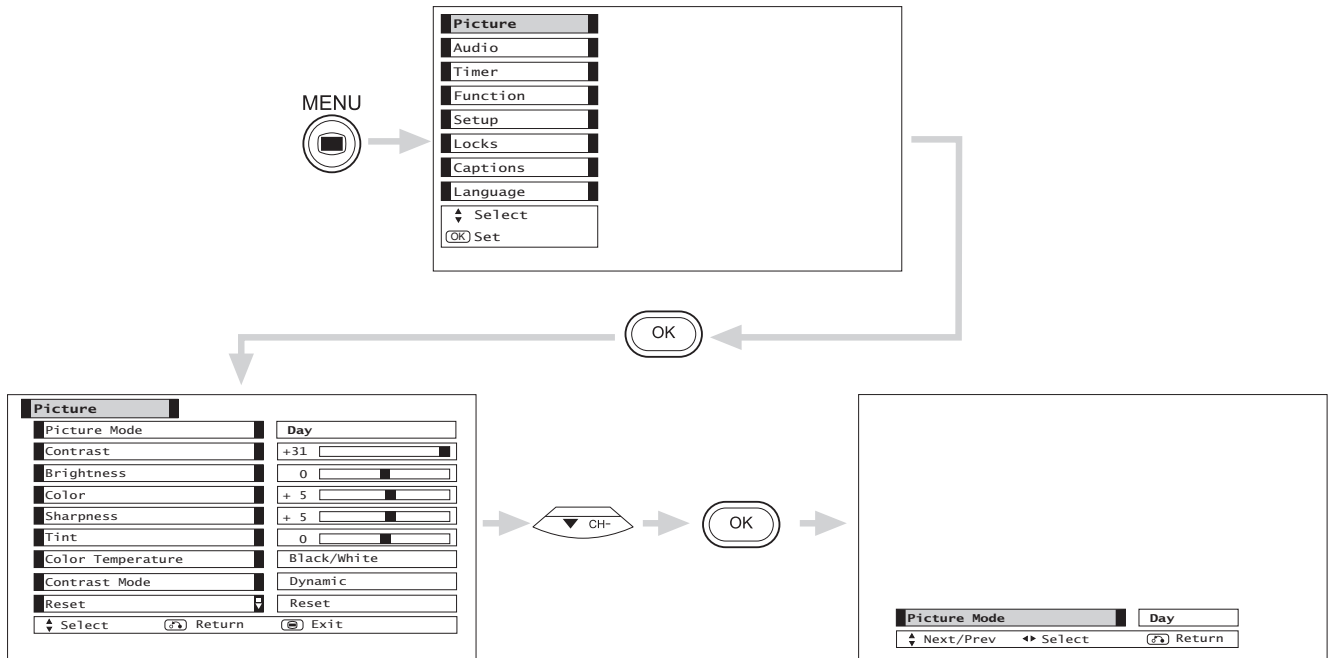
PICTURE

Picture

Select PICTURE to adjust picture settings and improve picture quality. You can independently customize each of the Video Inputs to your preference to increase viewing performance and pleasure depending upon the video program being viewed. If RESET is selected, only the selected input will reset to initial conditions.

Picture Mode

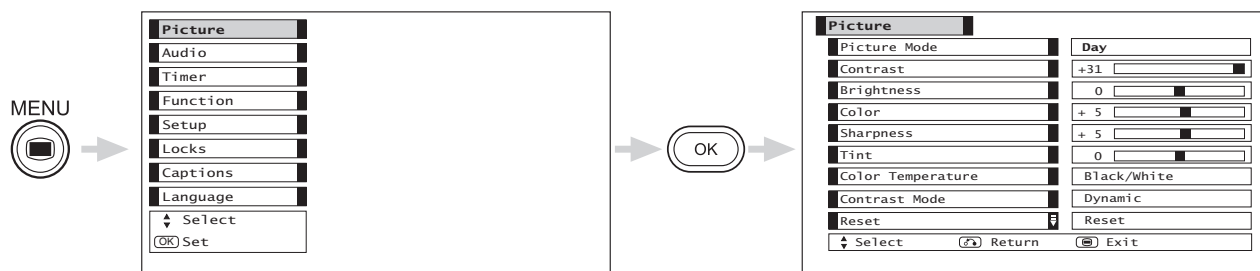
Use this function to choose from automatic picture settings to optimize your TV's performance.



Use CURSOR buttons ◀ or ▶ to select Picture Mode settings.

Function	Day	Night	Reset
Contrast	+ 31	+ 10	Reset the video menu settings on current input to the Day or Night conditions depending on the selected PICTURE mode.
Brightness	0	+ 3	
Color	+ 5	- 10	
Sharpness	+ 5	- 5	
Tint	0	0	
Color Temperature	Cool	Warm	
Contrast Mode	Dynamic	Normal	
YNR	High	Off	
CNR	Low	Off	
Film Mode	Off	Off	
PAL Comb Filter	Not Available	Not Available	
LTI	Middle	Off	
CTI	Middle	On	
Black Enhancement	High	Off	
Auto Color	Off	Off	

Press MENU to quit menu or press the RETURN button to return to previous menu.



Use the CURSOR buttons ▲ or ▼ to highlight the function to be adjusted.
 Press the OK button to select the function settings.
 Press the CURSOR button ◀ or ▶ to adjust the function.
 Press the RETURN button to navigate back one On-Screen Display at a time.
 Press MENU to quit menu.

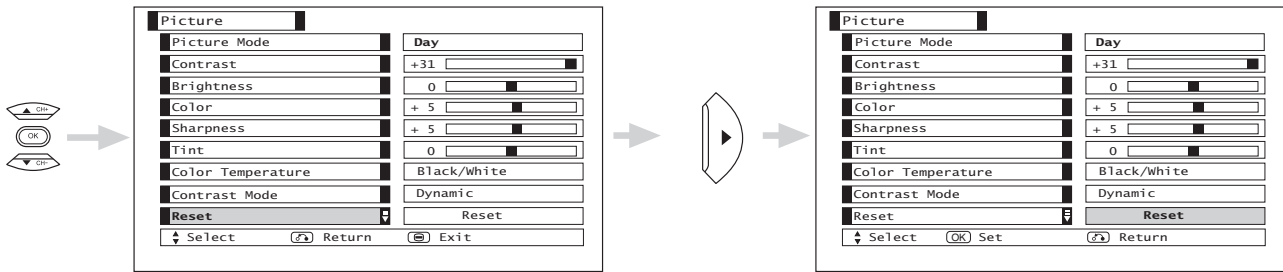
- | | |
|--------------------------|---|
| Contrast | Use this function to change the contrast between black and white levels in the picture. |
| Brightness | Use this function to adjust overall picture brightness. |
| Color | Use this function to adjust the level of color in the picture. |
| Sharpness | Use this function to adjust the amount of fine detail in the picture. |
| Tint | Use this function to adjust flesh tones so they appear natural. |
| Color Temperature | Set this to Cool for cooler color with more blue, set to Normal for more natural color, set to Warm for accurate color or set to Black/White for more reddish color. |
| Contrast Mode | Use this function to choose between 3 Contrast Mode settings. Set to Dynamic for darker images more in the level of Black, set to Normal for a balanced White to Black level, and set to Auto for automatic Contrast selection. |
| Black Enhancement | Use this function to enhance the shadow detail in dark scenes using the settings off, low, middle and high. |

- NOTES:**
1. If CONTRAST is selected, you are adjusting CONTRAST. The additional menu items BRIGHTNESS, COLOR, TINT, and SHARPNESS can be selected and adjusted in the same manner.
 2. It may be necessary to adjust TINT to obtain optimum picture quality when using the COMPONENT VIDEO Y-P_BP_R input jacks.

PICTURE

Reset Video Settings

This function allows you to Reset the Video Menu Settings of the present input to original factory settings.

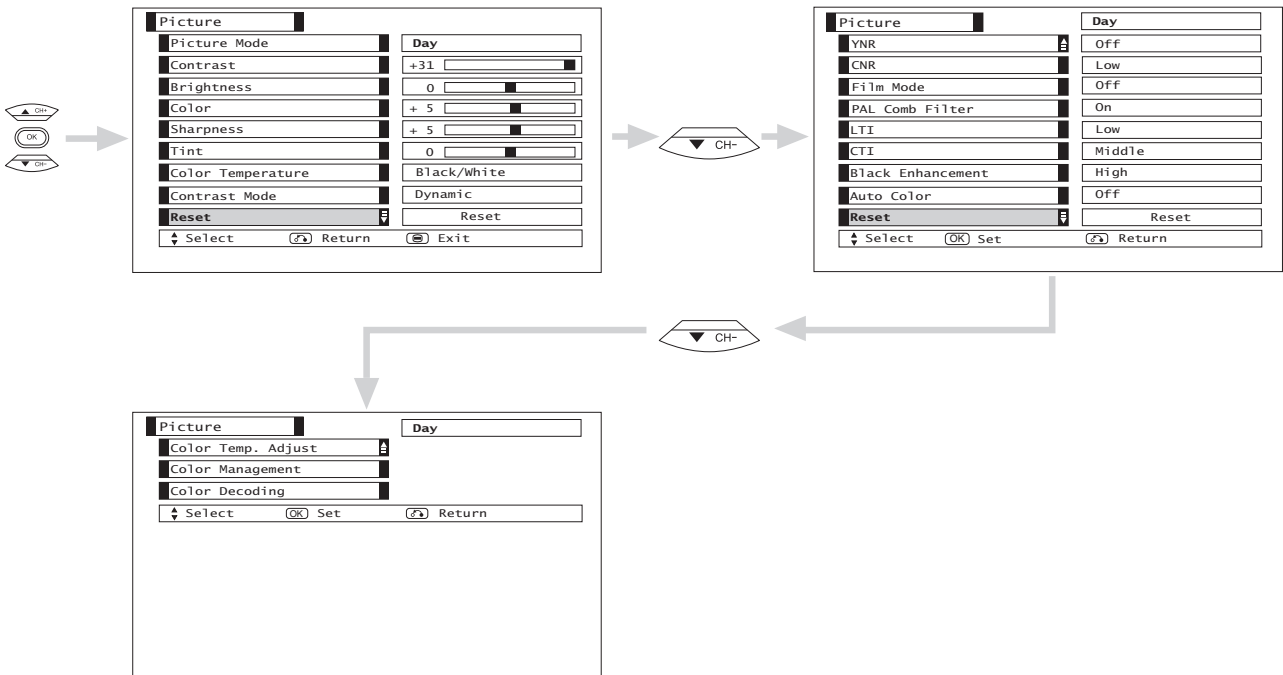


Use CURSOR buttons to highlight functions.
Press the OK button to set the Reset Video Settings.

Use the CURSOR buttons ▼ to access other video settings.

You can customize each of the Video Inputs to your preference to increase viewing performance and pleasure, depending upon the video program being viewed. If RESET is selected, only the selected Input will reset to the initial conditions as explained above.

If RESET is selected in AV1 Input, only AV1 Input will return to factory conditions.



YNR

Set to reduce picture signal noise reduction.

CNR

Set to reduce color signal noise reduction.

NOTE:

When selecting DVI-STB mode, CNR will automatically be set to off.

Film Mode

The Film Mode function turns ON or OFF the 3:2 PULLDOWN DETECTION SPECIAL FEATURE. Theatrical movies are shot on film at 24 frames or still pictures per second, instead of 30 frames or 60 fields like video. When film is transferred to video for television viewing, the disparity between the two frame rates must be reconciled. This involves a process known as 3:2 pulldown.

When Film Mode is turned ON from the VIDEO menu, your Hitachi Plasma Television will activate the circuitry for this special feature to improve video performance when watching film based sources.

- NOTES:**
1. When using Progressive Scan Component or DVI input (Ex. 480p, 720p), Film Mode will not be available (grayed out). Please see table below for additional information.
 2. All Video settings are independent of each other based on it's input (ANT, AV1~AV4).

PAL Comb Filter

This function will not be available (grayed out).

LTI

Set to adjust the sharpness of the picture signal.

CTI

Set to adjust the Sharpness of the Color Signal.

Black Enhancement

Use this function to enhance the shadow detail in dark scenes.

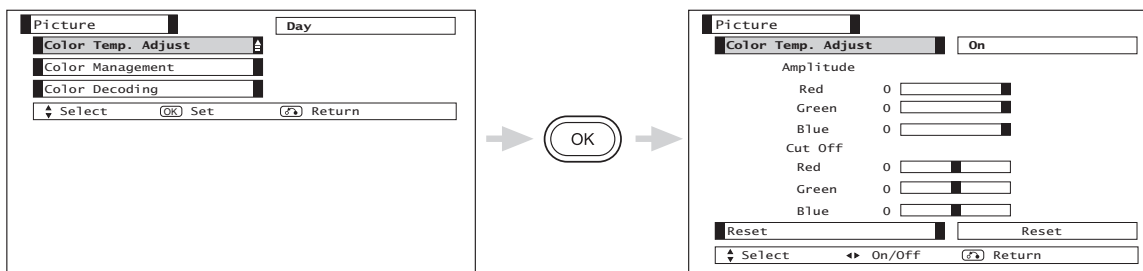
Auto Color

The AUTO COLOR function automatically monitors and adjusts the color to maintain constant color levels even after a program or channel changes. It also maintains natural flesh tones while preserving fidelity of background colors.

NOTE: When using Component or DVI-HDTV input, Auto Color will not be available (grayed out).

Color Temp. Adjust

Set to change color temperature depending on preference. Adjust Amplitude to increase/decrease colors Red, Green, Blue in Brighter scenes. Adjust Cut Off to increase/decrease Red, Green, Blue in Dark scenes.

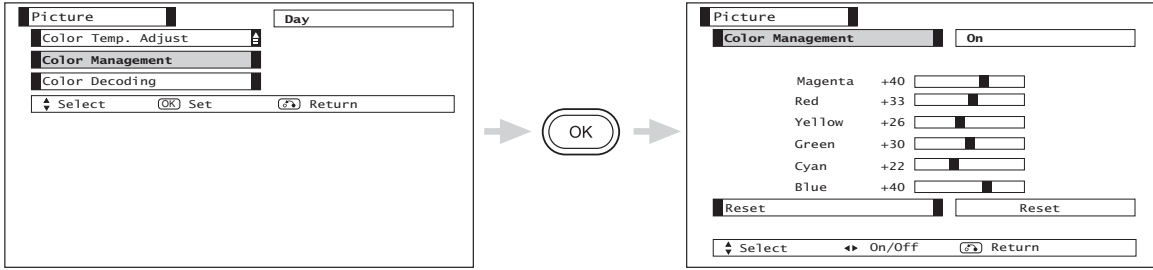


- Press CURSOR buttons ◀, ▶ to set to On/Off.
 Press CURSOR buttons ▲, ▼ to select color options.
 Press the OK button then use the CURSOR buttons ◀, ▶ to adjust settings.
 Press the MENU button to exit.

PICTURE

Color Management

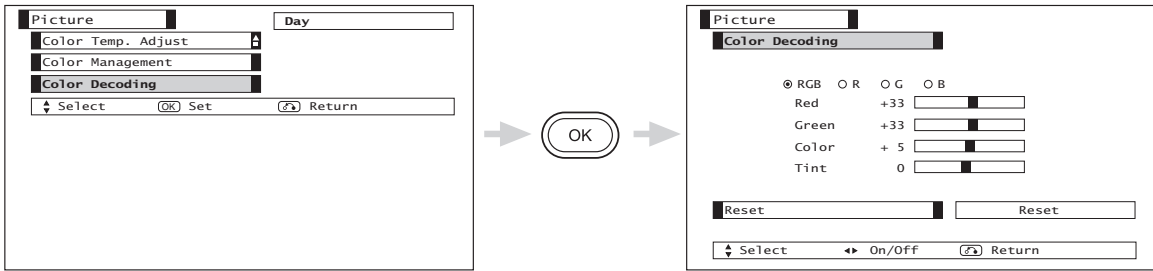
Use this function to adjust and balance the listed individual colors to make them either deeper or more pure depending on the user's preference.



Use the CURSOR buttons ◀, ▶ to set On/Off.
 Press the CURSOR buttons ◀, ▶, ▼, ▲, to highlight and adjust individual colors.
 Use the CURSOR buttons to highlight and select "Reset" to return all colors to default settings.

Color Decoding

Use this function to adjust and balance the percentage of Red, Green and Blue according to the user's preference in each of the four color temperature settings. Use TINT to adjust flesh tones so they appear natural.

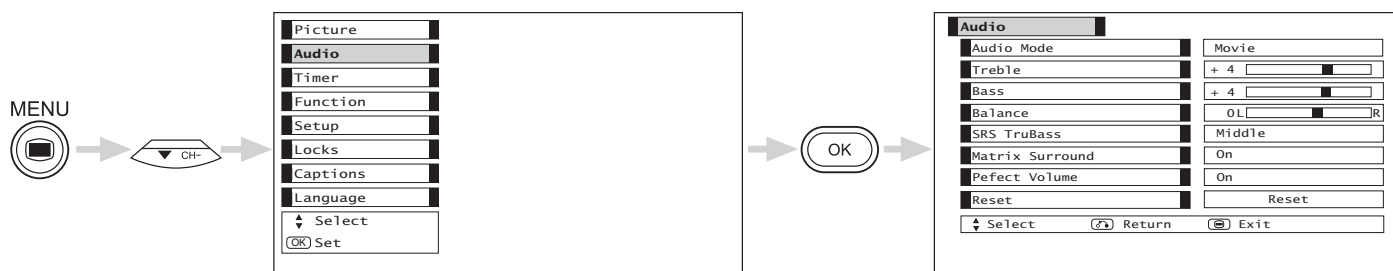


Use CURSOR buttons to highlight function.
 Press the OK button to select from 4 menu items.
 Press CURSOR buttons ◀, ▶, ▼, ▲, to highlight and adjust Red, Green, Color and Tint.
 Use CURSOR buttons to highlight and select "Reset" to return all settings to default.

NOTE: Color Decoding settings are independently stored in each of the 4 Color Temperature settings.

Audio

Select AUDIO to adjust the TV to your preference and to improve the sound quality.



Press CURSOR buttons ▲, ▼, to select menu item.
 Press CURSOR buttons ◀ or ▶ to adjust the function.
 Press EXIT to quit the MENU, or select Audio to return to the main menu.

Audio Mode

Use this function to choose from automatic audio settings to optimize your TV's performance.

Treble

This function controls the high frequency audio to all speakers.

Bass

This function controls the low frequency audio to all speakers.

Balance

This function will control the left to right balance of the Plasma TV internal speakers.

NOTE: If TREBLE is selected you are adjusting treble. The additional menu items Bass and Balance can be selected and adjusted in the same manner.



TruBass is an audio enhancement technology from SRS Labs that provides deep, rich bass on any speaker system without the need for a subwoofer or additional extra physical components. For systems with a subwoofer, TruBass complements and enhances the bass performance. This feature can be set to Off, Low, Medium and High.

NOTES: TruBass, SRS and the (●)® symbol are trademarks of SRS Labs, Inc. TruBass technology is incorporated under license from SRS Labs, Inc.

Matrix Surround

The Matrix Surround features the spacious sound effects of a stadium that can be turned ON or OFF.

Perfect Volume

This function will automatically adjust volume so each channel and input has the same average volume level.

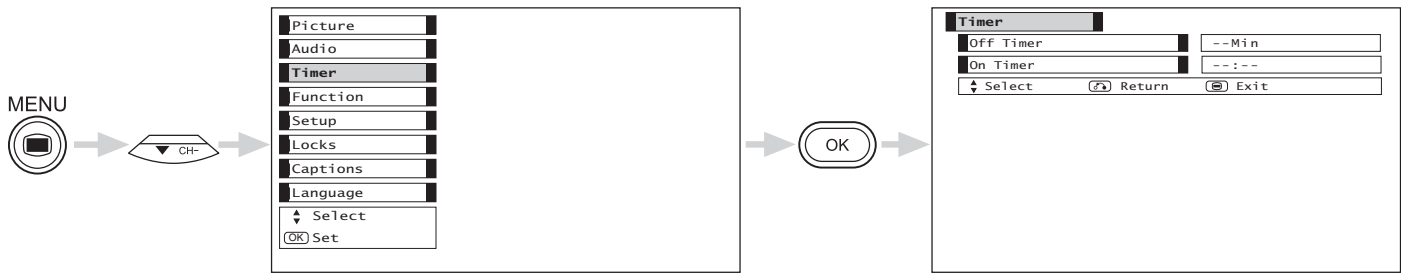
Reset

Reset/Restore to original factory settings.

TIMER

Timer

Use this function to set the power to standby status and from standby status to ON.



Press CURSOR buttons ▲, ▼ to select options.

Press CURSOR buttons ◀, ▶ to select OFF Timer settings (--, 30, 60, 90, 120 min).

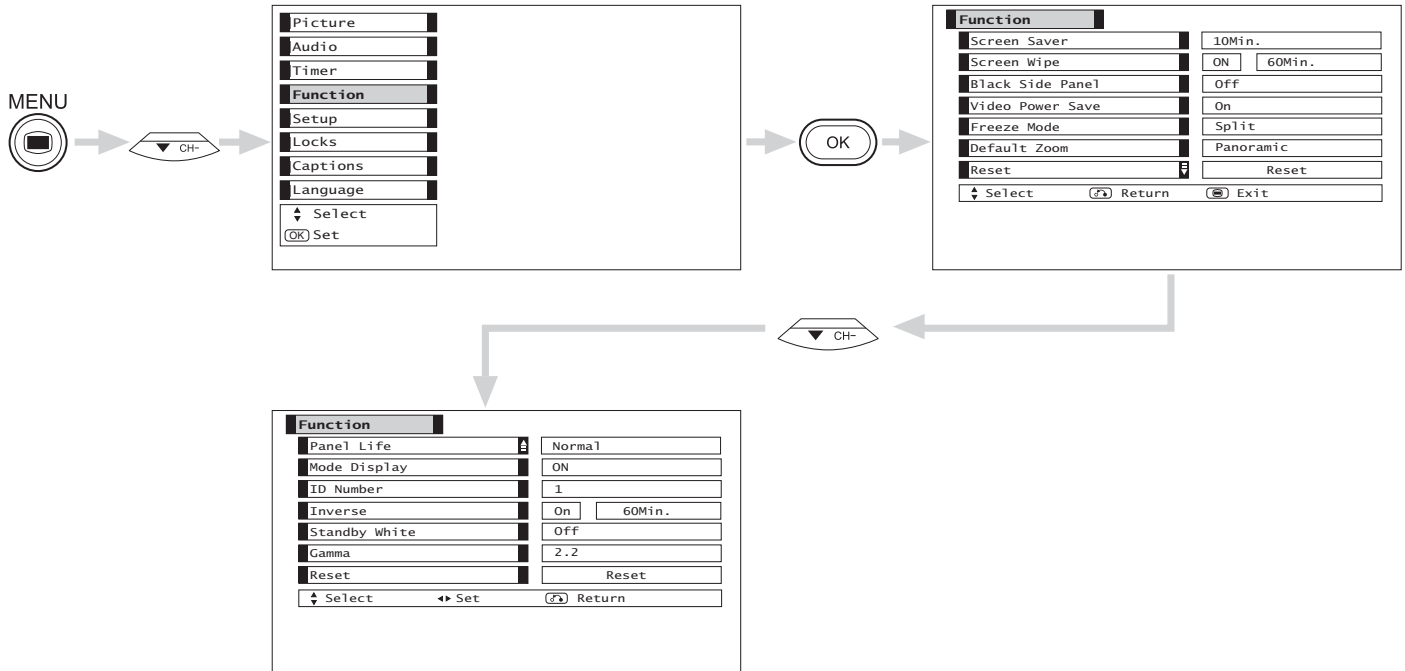
Press CURSOR buttons ◀, ▶ to select hour or minute of On Timer settings.

Press CURSOR buttons ▲, ▼ to adjust On Timer settings.

Press the MENU button to exit.

Function

Select Function to set the listed options.



Press CURSOR buttons to highlight and adjust options.
Press the MENU button to exit.

Screen Saver

Continuous on-screen displays such as video games, stock market quotations, computer generated graphics, and other fixed (non-moving) patterns can cause permanent damage to the Plasma Television. Use this feature to move the picture around the screen in small amounts, at set intervals, to reduce the panel image retention.

Screen Wipe

This is used to reduce the panel image retention that can occur with stationary pictures by the white field signal. Select On (continuous operation) or 60 Min. (time limit operation) and press the OK button. When the 60 minutes option is chosen and the 60 minutes elapses, the Plasma television will automatically set to standby mode. Press the MENU or RETURN button on the remote control to return to normal viewing.

Black Side Panel

This turns the gray sidebars On/Off when watching normal mode screen size area. It is always set to Off when the monitor powered On. It is recommended to set to Off to reduce the panel image retention.

Video Power Save

This is used to reduce power consumption for video input when there is no video signal. Setting it On will lead the monitor to the standby mode when the AV input with no signal is selected.

Freeze Mode

This selects the display condition of the FREEZE mode between Split (2pictures) and Strobe (12 pictures).

Default Zoom

This selects the screen display size that appears first when the power is turned on.

Reset

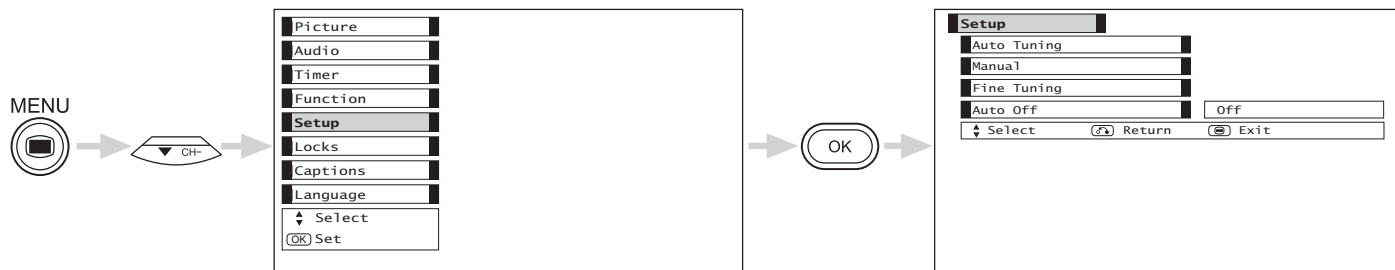
The original factory settings for the items of this Menu page can be restored by pressing the OK button.

FUNCTION

Panel Life	This function is to suppress the contrast of the screen regardless of the Contrast setting in the Picture Menu. By this control, power consumption can be reduced or degradation of a panel can be mitigated. The order of power consumption is Extend 2 < Extend 1 < Normal. If the Contrast setting is changed when this item is set to Extend 1 or 2, it will be changed to Normal automatically.
Mode Display	Not Available (grayed out)
ID Number	Not Available (grayed out)
Inverse	Not Available (grayed out)
Standby White	Not Available (grayed out)
Gamma	Not Available (grayed out)

Setup

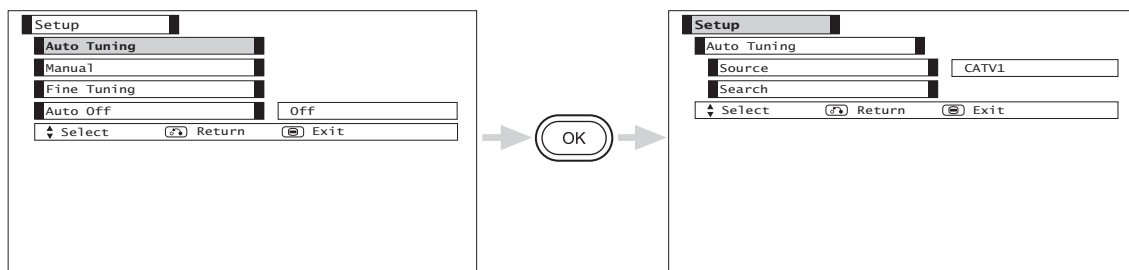
Select SETUP when setting up your TV for the first time in Antenna Input. Use the CURSOR buttons ▲ or ▼ on the remote to highlight the function desired.



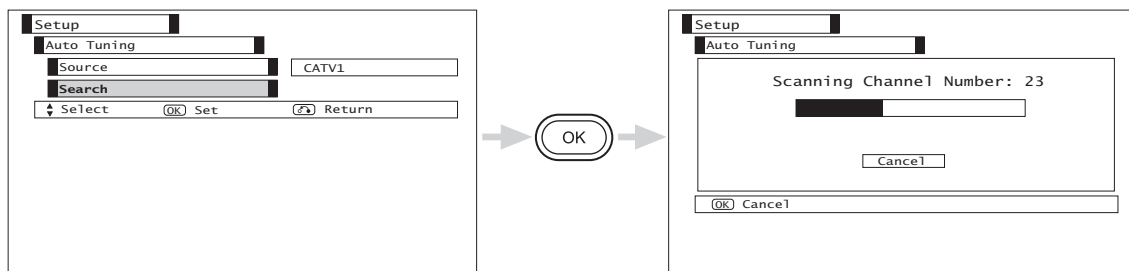
Press the CURSOR buttons to select the Sub-menu of your choice. Press the OK button to select.

Auto Tuning

Select Antenna input options from Air, CATV1 and CATV2.



Use the CURSOR buttons (▼, ▲) to select the source. Use the CURSOR buttons (◀, ▶) to change the source from Air, CATV1 and CATV2. Press the OK button to set. Use the CURSOR buttons to select the search option.

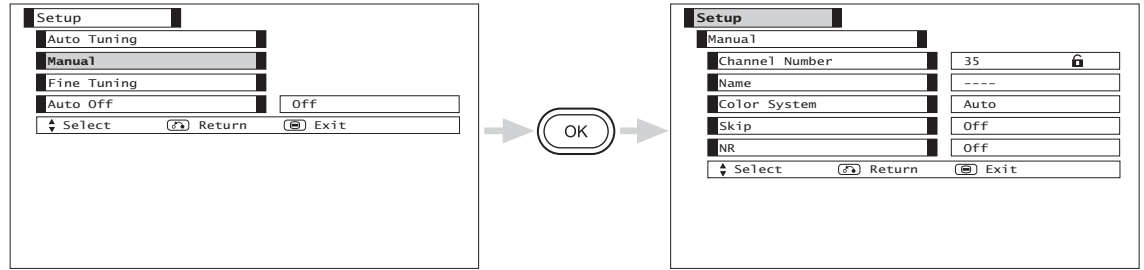


Press OK to CANCEL. Press the MENU button to quit the menu.

SETUP

Manual

Select this feature to manually tune each channel.

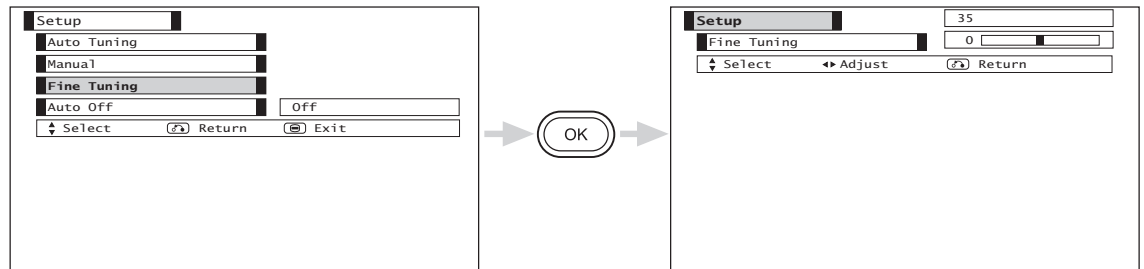


Use the CURSOR buttons (▼, ▲) to select other sub-menu items.

- Channel Number** Use the CURSOR buttons (◀, ▶) to set the channel numbers.
- Name** Use the CURSOR buttons (▼, ▲) to edit and enter channel name.
- Color System** Use the CURSOR buttons (◀, ▶) to set and choose between 2 different Color System settings (Auto, NTSC-M).
- Skip** Use the CURSOR buttons (◀, ▶) to set. If this is set to ON, that channel will be skipped while using the channel CH+ (▲) and CH- (▼) buttons. Skip is automatically set to ON for those non-broadcasting channels after channel search has been made.
- NR** Use the CURSOR buttons (◀, ▶) to set. If this is set to ON, it helps to reduce the noise interference visible on the screen especially in the weaker signal reception areas.

Fine Tuning

This feature is used to adjust the frequency data for the tuner depending on the user's preference.



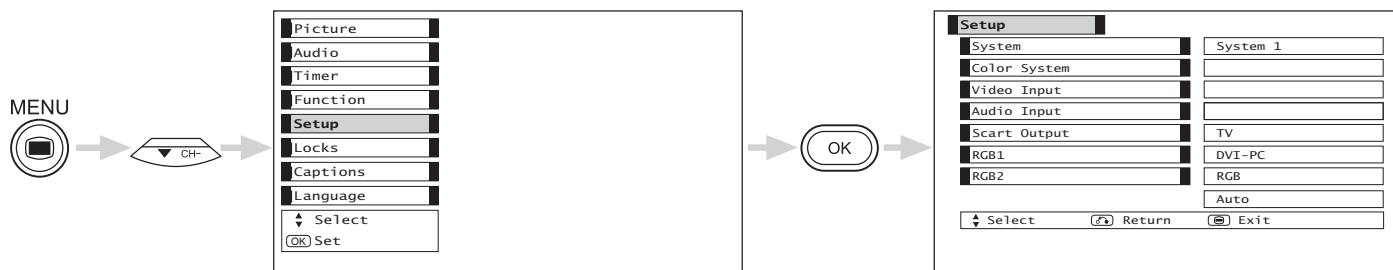
Use the CURSOR buttons (◀, ▶) to adjust frequency data.
Press the Menu button to exit.

Auto Off

If set to ON, the power will be turned off when there is no transmission signal and no operation for about 10 minutes in the TV mode.

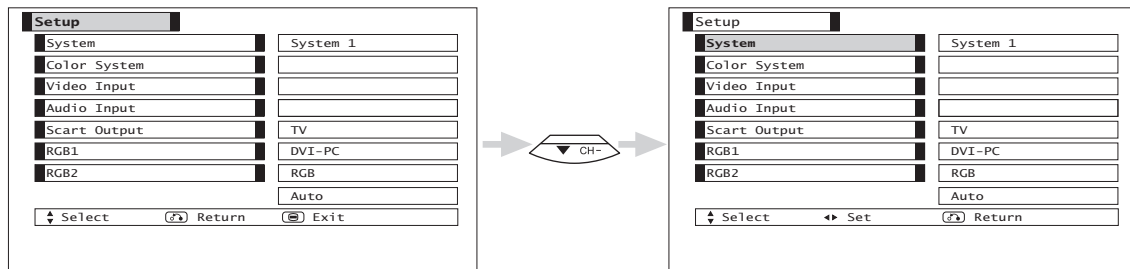
Setup

Select SETUP when setting up your TV for the first time in AV1, AV2, AV3, AV4 input. Use the CURSOR buttons ▲ or ▼ on the remote to highlight the function desired.



System

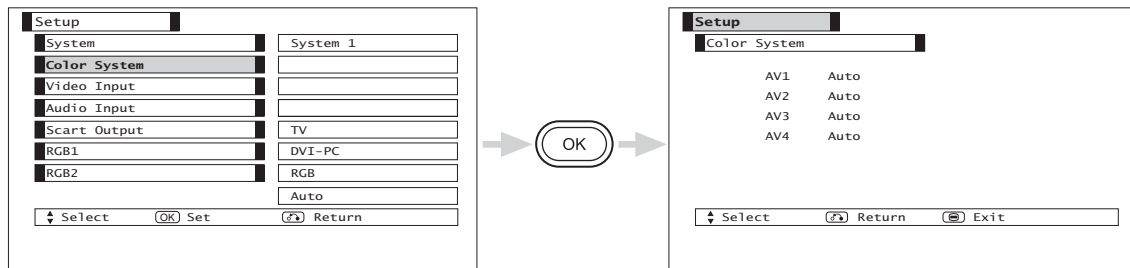
Select System 1 for Europe/Asia, System 2 for North America.



Press the CURSOR buttons ◀ or ▶ to set.

Color System

Select the Color System that corresponds to the color system of the signal from the equipment that is connected to the corresponding Video input terminal (AV1, AV2, AV3 and AV4). Set to Auto for automatic signal detection.



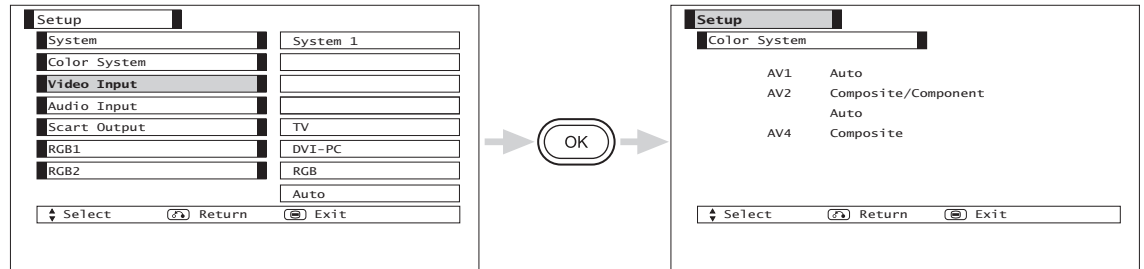
Use the CURSOR buttons (▼, ▲) to select the Video Input.
Use the CURSOR buttons (◀, ▶) to set Color System.

- NOTES:**
1. Normally set to Auto to automatically recognize the signal.
 2. When a component signal is received, the Color System and Auto Color options will be grayed out.
 3. PAL, SECAM and NTSC 4.43 signals are not available in North America.

SETUP

Video Input

Select the Video input that corresponds to the signal mode of the signal from equipment that is connected to the corresponding video input terminal (AV1, AV2, AV4).



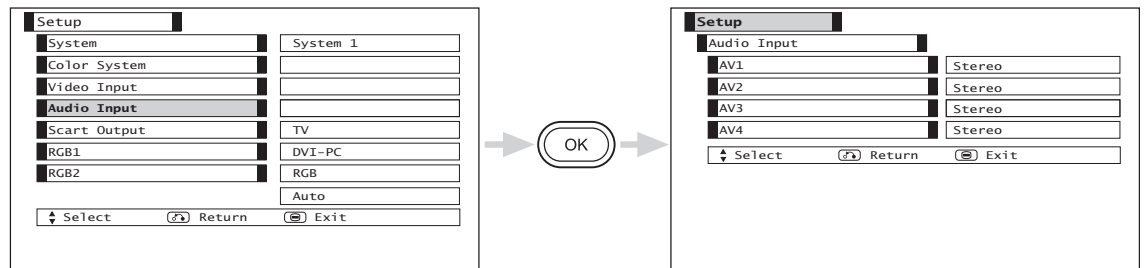
Use the CURSOR buttons (▼, ▲) to select the Video Input.
Use the CURSOR buttons (◀, ▶) to set the Video Input.

- AV1: Auto, HDTV, SDTV/DVD
- AV2 (1st Step): RGB, Composite/Component
- AV2 (2nd Step): Auto, HDTV, SDTV/DVD
- AV4: S-Video, Composite

NOTE: The RGB signal will be automatically recognized.

Audio Input

Select the Audio input that corresponds to the Audio signal from equipment that is connected to the corresponding audio input terminal (AV1, AV2, AV3, AV4).



Use the CURSOR buttons (▼, ▲) to select the Video Input.
Use the CURSOR buttons (◀, ▶) to set the Audio Input.

NOTE: If the Audio Input is a monaural sound, set to L/Mono.

Scart Output

Set to TV or monitor.

RGB1

Set to DVI-PC or DVI-STB.

RGB2 (1st Step)

Set to RGB or Component.

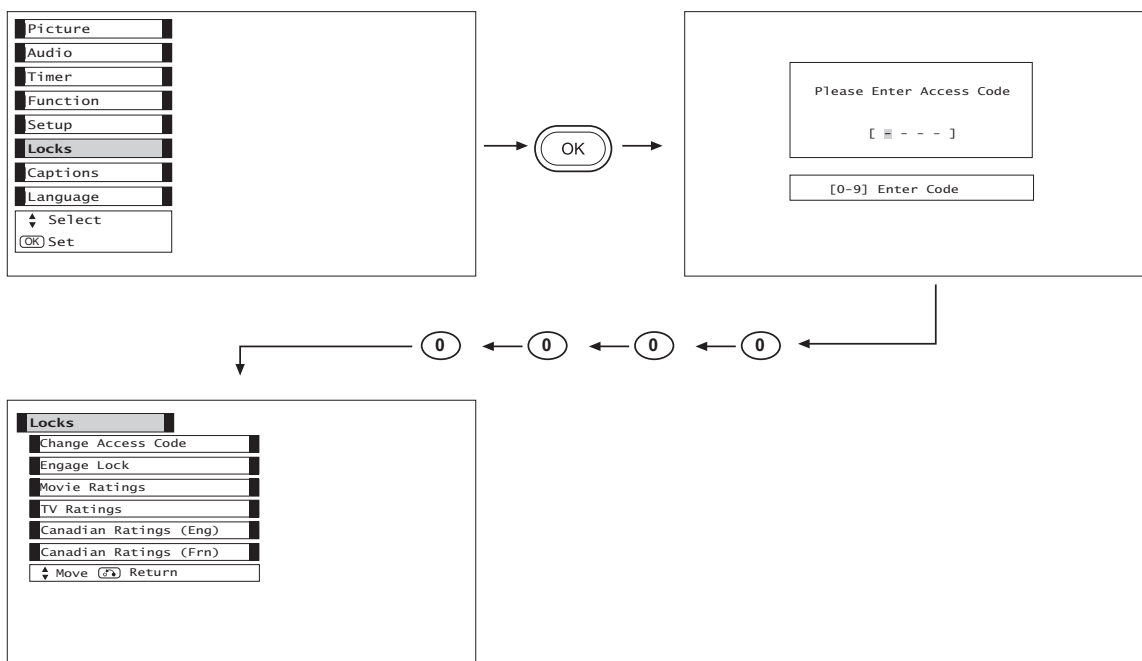
RGB2 (2nd Step)

Set to Auto, HDTV, SDTV/DVD

Locks

This function will block out the picture and sound of the selected channel or video input. It can also be used to keep the TV from being viewed for a scheduled time period that you set.

The code to enter the Locks feature is a four digit access code number. The factory preset code is 0000. Use the number buttons to enter the access code.



Use the CURSOR buttons ▲ or ▼ to highlight function and then press the OK button. To change the access code number, select Change Access Code. Enter a new four digit number.

Select CHANGE ACCESS CODE to change the factory preset code (0000) to your preference.

When ENGAGE LOCK is selected, SET CHANNEL LOCK, SET INPUT LOCK, and SET FRONT PANEL LOCK can be set individually.

When SET CHANNEL LOCK is turned on, the picture and sound for the chosen channel will be blocked out.

When SET INPUT LOCK is turned on, the picture and sound for all video inputs and the picture and sound for channels 3, 4 will be blocked out.

When PANEL LOCK is turned on, all buttons on the Front Panel will be deactivated, except the Power button.

When MOVIE RATINGS is selected, you can block various types of movies and video tapes based on motion picture ratings. Picture-in-Picture will also be blocked automatically (see page 49).

When TV RATINGS is selected, various types of television programming based on a parental guide ratings will be blocked. Picture-in-Picture will also be blocked automatically (see page 50).

Use CANADIAN RATINGS to block various types of movies and television programs based on the two rating systems used in Canada that you feel may be inappropriate due to its content (see pages 51-52).

If you forget your access code, use the factory code 7777 to erase your key number. This will reset the access code number back to the factory preset 0000.

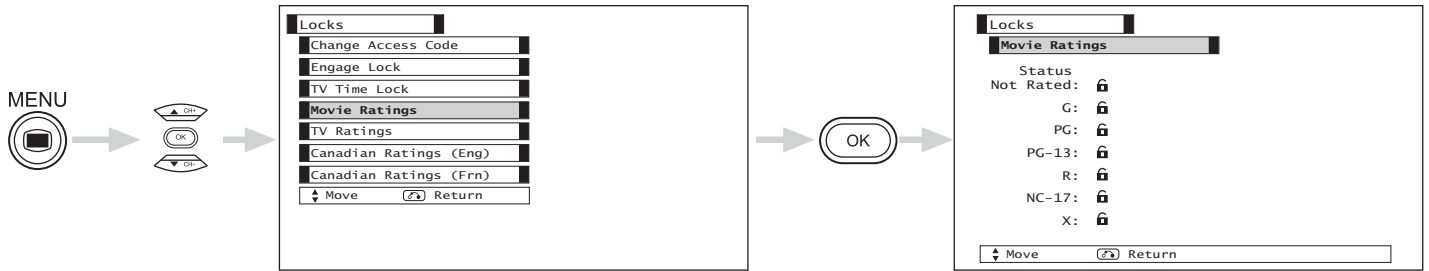
Press EXIT to quit the menu.

NOTE: If MOVIE/TV Ratings Lock function settings are ON, STROBE freeze and MULTI PICTURE (12 Pictures) will be deactivated.

LOCKS

Movie Ratings

Use MOVIE RATINGS to prevent viewing of any movie that you feel may be inappropriate due to its content.



Use the CURSOR buttons (▲, ▼) to select the MOVIE RATING category that you want to block. Press the OK button to block the MOVIE RATING that you have selected. Once rating is selected, for example PG-13, all movies rated PG-13 and higher (R, NC-17, and X) will be blocked. Press EXIT to quit the menu or select MOVIE RATING to return to the previous menu.

Motion Picture Ratings Chart

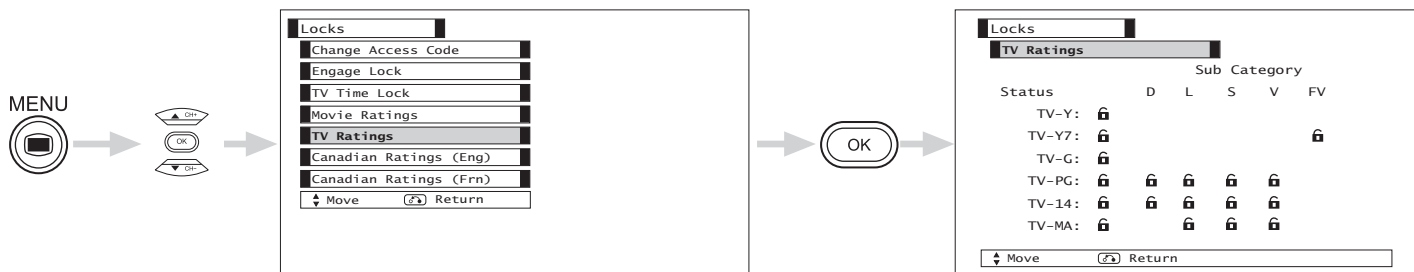
G	General audiences. All ages admitted.
PG	Parental guidance suggested. Some material may not be suitable for children.
PG-13	Parents strongly cautioned. Some material may be inappropriate for children under 13.
R	Restricted. Under 17 requires accompanying parent or adult guardian.
NC-17	No one 17 and under admitted.
X	Adults only
NOT RATED (NR)	Contains no rating. Not Rated (NR) and Not Applicable (NA) programs. Movie has not been rated or ratings do not apply.

- NOTES:**
1. A movie rating is dependent upon the movie that is viewed. If the movie does not carry a rating, the TV will not block it.
 2. Blocking "NOT RATED (NR)" programs may block emergency programming, sports, news, public service announcements, religious programs and weather.

ON-SCREEN DISPLAY

TV Ratings

Use TV RATINGS to prevent the viewing of any TV program that you feel may be inappropriate due to its content.



Use the CURSOR buttons (▲, ▼) to highlight the category that you want to block. Press the OK button to block the TV RATINGS that you have selected. Press the MENU button to quit the menu

TV Parental Guide Ratings Chart

N/A	None.
TV-Y	All children. The themes and elements in this program are specifically designed for a very young audience, including children from ages 2-6.
TV-Y7	Directed to older children. Themes and elements in this program may include mild physical or comedic violence, or may frighten children under the age of 7.
TV-G	General audience. It contains little or no violence, no strong language, and little or no sexual dialogue or situations.
TV-PG	Parental guidance suggested. The program may contain infrequent coarse language, limited violence, some suggestive sexual dialogue and situations.
TV-14	Parents strongly cautioned. This program may contain sophisticated themes, intense sexual situation, more intense violence and intensely suggestive dialogue.
TV-MA	Mature audiences only. This program may contain mature themes, indecent language, graphic violence, and explicit sexual content.
FV	Fantasy Violence
V	Violence
S	Sexual Situation
L	Adult Language
D	Sexually Suggestive Dialogue.

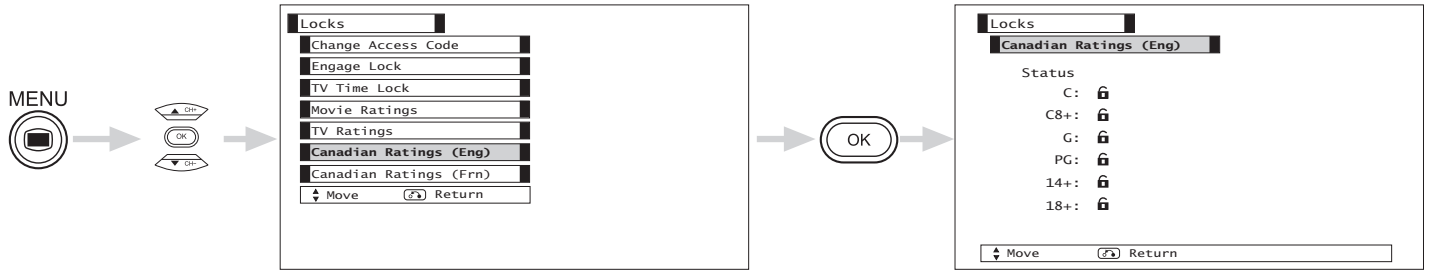
NOTES:

1. If you Block TV-14D, you will still permit TV MA programs; If you block TV-14DV, you will automatically block TV-MAV programs, but you will still permit TV-MALS programs. This means that the TV will block violence in TV-14 and higher (TV-MA), but not language and sex.
2. TV program ratings are dependent on the broadcaster. If the program is not rated, the TV will not block it.

LOCKS

Canadian Ratings (Eng)

Use Canadian Ratings (Eng) to block any type of movie and television program in Canada that you feel might be inappropriate in its content.



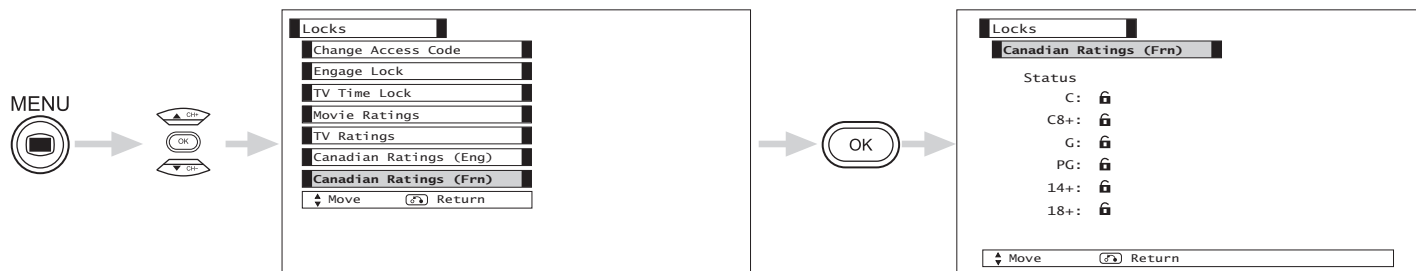
Use the CURSOR buttons (▲, ▼) to select the CANADIAN RATINGS (Eng) category that you want to block. Press the OK button to set the CANADIAN RATINGS (Eng) that you have selected. Once rating is selected, for example C8+, all movies and television programs rated C8+ and higher (G, PG, 14+ and 18+) will be blocked automatically. Press the MENU button to quit the menu

Canadian Ratings English Chart

C	Programming intended for children under age 8 - Violence Guidelines: Careful attention is paid to themes, which could threaten children's sense of security and well-being. There will be no realistic scenes of violence. Depictions of aggressive behaviour will be infrequent and limited to portrayals that are clearly imaginary, comedic or unrealistic in nature. Other Content Guidelines: There will be no offensive language, nudity or sexual content.
C8+	Programming generally considered acceptable for children 8 years and over to watch on their own - Violence Guidelines: Violence will not be portrayed as the preferred, acceptable, or only way to resolve conflict; or encourage children to imitate dangerous acts which they may see on television. Any realistic depictions of violence will be infrequent, discreet, of low intensity and will show the consequences of the acts. Other Content Guidelines: There will be no profanity, nudity or sexual content.
G	General Audience - Violence Guidelines: Will contain very little violence, either physical or verbal or emotional. Will be sensitive to themes which could frighten a younger child, will not depict realistic scenes of violence which minimize or gloss over the effects of violent acts. Other Content Guidelines: There may be some inoffensive slang, no profanity and no nudity.
PG	Parental Guidance - Programming intended for a general audience but which may not be suitable for younger children. Parents may consider some content inappropriate for unsupervised viewing by children ages 8-13. Violence Guidelines: Depictions of conflict and/or aggression will be limited and moderate; may include physical, fantasy, or supernatural violence. Other Content Guidelines: May contain infrequent mild profanity, or mildly suggestive language. Could also contain brief scenes of nudity.
14+	Programming contains themes or content which may not be suitable for viewers under the age of 14 - Parents are strongly cautioned to exercise discretion in permitting viewing by pre-teens and early teens. Violence Guidelines: May contain intense scenes of violence. Could deal with mature themes and societal issues in a realistic fashion. Other Content Guidelines: May contain scenes of nudity and/or sexual activity. There could be frequent use of profanity.
18+	Adult - Violence Guidelines: May contain violence integral to the development of the plot, character or theme, intended for adult audiences. Other Content Guidelines: May contain graphic language and explicit portrayals of nudity and/or sex.

Canadian Ratings (Frn)

Use CANADIAN RATINGS (FRN) to block Canadian French programs according to various program ratings that you feel might be inappropriate in its content.



Use the CURSOR buttons (▲, ▼) to highlight the category that you want to block. Press the OK button to set the CANADIAN RATINGS (FRN) that you have selected. Once rating is selected, for example 8 ans+, all movies and television programs rated 8 ans+ and higher will be automatically blocked. Press the MENU button to quit the menu

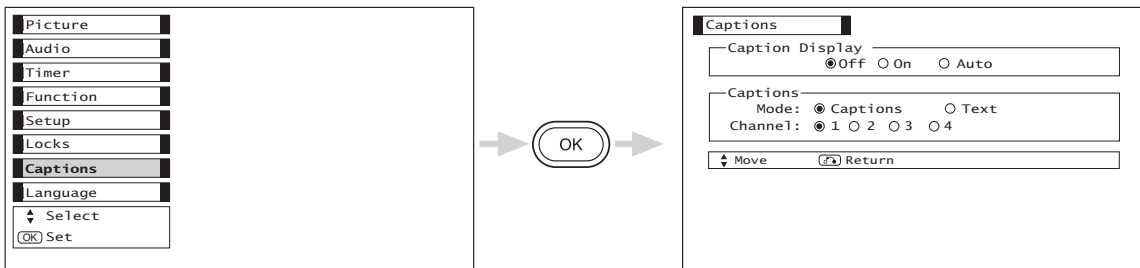
Canadian Ratings French Chart

G	General - Programming intended for audiences of all ages. Contains no violence, or the violence content is minimal or is depicted appropriately with humor or caricature or in an unrealistic manner.
8 ans +	8 + General - Not recommended for young children - Programming intended for a broad audience but contains light or occasional violence that could disturb young children. Viewing with an adult is therefore recommended for young children (under the age of 8) who cannot differentiate between real and imaginary portrayals.
13 ans +	Programming may not be suitable for children under the age of 13 - Contains either a few violent scenes or one or more sufficiently violent scenes to affect them. Viewing with an adult is therefore strongly recommended for children under 13.
16 ans +	Programming is not suitable for children under the age of 16 - Contains frequent scenes of violence or intense violence.
18 ans +	Programming restricted to adults - Contains constant violence or scenes of extreme violence.

CAPTIONS

Captions

Closed Captions are the dialogue, narration, and/or sound effects of a television program or home video which are displayed on the TV screen. Your local TV program guide denotes these programs as **CC** or



Caption Display: **On/Off** will turn the **CC** display on or off.

Auto will turn the **CC** display on when Mute is on.

Caption Mode: **Captions** is for the program you are viewing.

Text is for additional information such as news reports or a TV program guide. This information covers the entire screen and viewing the TV program is not possible. Text may not be available with every **CC** program.

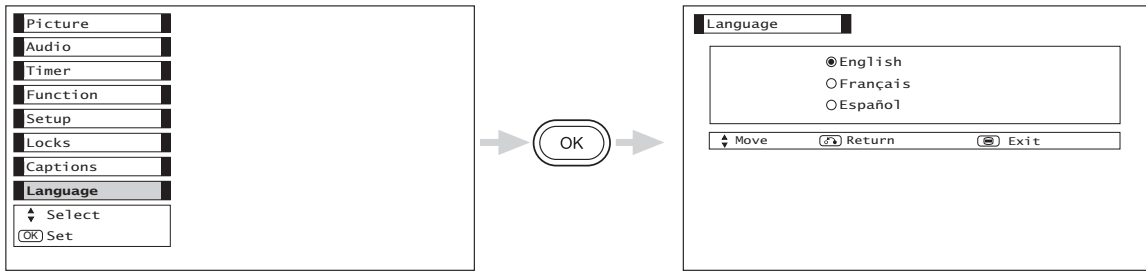
- CHANNEL:**
- 1 is used for the primary language (usually English).
 - 2 is sometimes used for a second language (may vary by region).
 - 3 is sometimes used for a third language (may vary by region).
 - 4 is sometimes used for a fourth language (may vary by region).

Use the CURSOR buttons ▲, ▼, ◀, ▶ to highlight the function to change then press the OK button to select the function. Press the MENU button to exit or the RETURN button to return to previous menu.

- NOTES:**
1. CAPTION DISPLAY will not work when viewing a 480p, 720p, or 1080i input via the COMPONENT: Y-P_BP_R inputs.
 2. When the MULTI PICTURE (12 picture) Mode is on, Closed Caption will not work.
 3. Closed Caption availability and content depends on the broadcaster. Closed Caption is available when Closed Caption icon is displayed on screen.

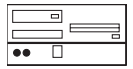
Language

This feature will select the language options of the OSD.

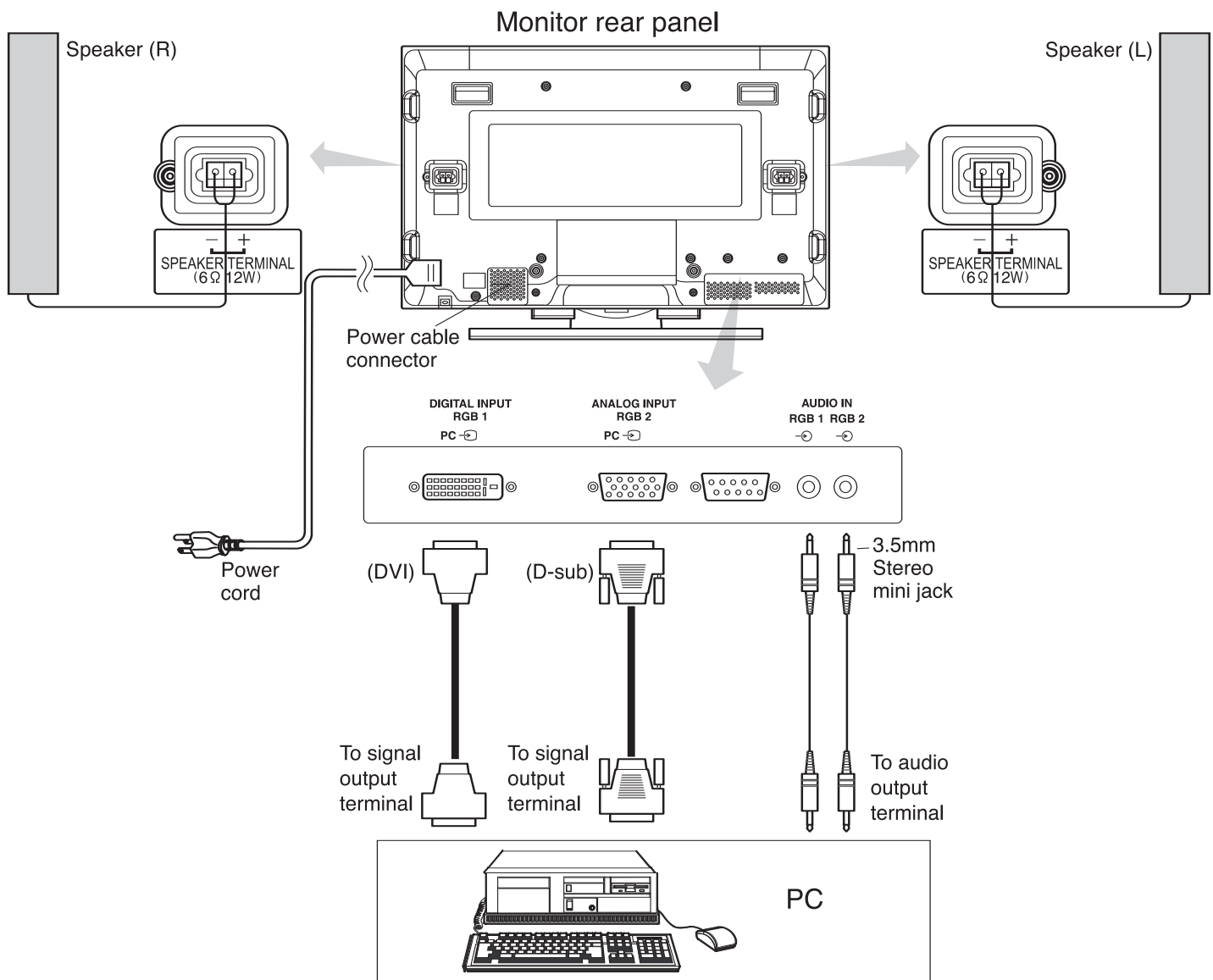


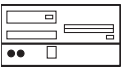
Use CURSOR buttons ▲, ▼ to highlight the function to change then press the OK button to select the function. Press the MENU button to quit menu.

CONNECTING TO A PC (RGB1 or RGB2)



1. Make sure that the display signal of the personal computer to be used is compatible with the specifications of this device.
See "Product Specifications" concerning the specifications of this device.
2. Make sure that the power switch of the personal computer is turned off.
3. Connect the signal input terminal (RGB 1 or RGB 2) on the rear panel of this device to the display signal output terminal of the personal computer.
 - Use a cable that fits the input terminal of this device and the output terminal of the personal computer.
 - Depending on the type of personal computer being connected, the use of an optional conversion adapter or the adapter provided with the personal computer may be necessary in some cases. For details, refer to the instruction manual of the personal computer or ask the personal computer manufacturer or your local retail dealer.





CONNECTING TO A PC (RGB1 or RGB2)

1. Other signal formats may not be displayed correctly. Use AUTO ADJUST to automatically adjust the horizontal position, vertical position, clock, and phase. We recommend you use a signal, which has more than 50% of amplitude of white area at each corner of the picture, when performing Auto Adjustment. It may not work correctly with dark picture (see page 63).
2. Input signal level.

SYNC	TTL level H/V separate signal
RGB INPUT	0.7Vpp/1.0Vpp

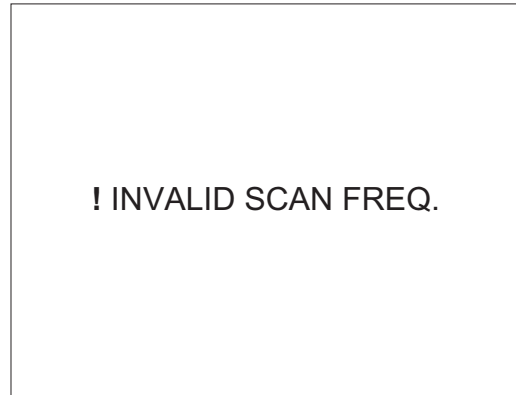
NOTE: Interlaced signal is not available.

3. RGB input signal will not appear at all when receiving a signal which is not supported by this product. If the setting is wrong, the Display Monitor will display:



Without sync

POWER SAVING mode will come on after 10 seconds.

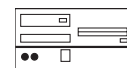


Either horizontal or vertical frequency is inappropriate or out of range.

INVALID SCAN FREQ. will disappear after 60 seconds.

- NOTES:**
1. If the Display Monitor cannot display a signal, please try AUTO ADJUST to display the signal. This is used to initialize the MultiScan Converter.
 2. Not all signals have AUTO ADJUST feature (see page 63).
 3. Set-Top-Box and DVD player input signal does not have AUTO ADJUST feature.

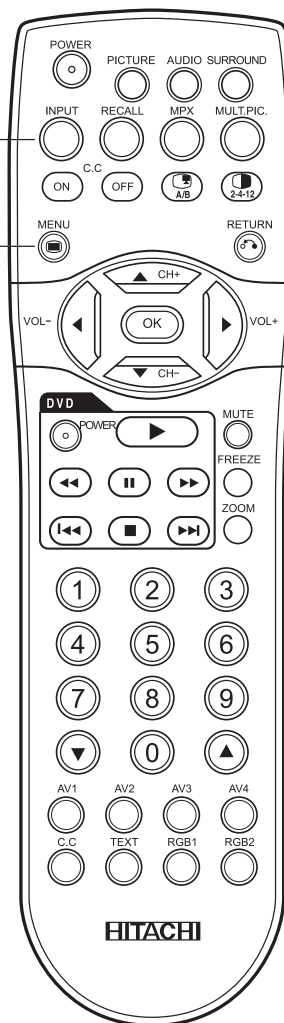
RGB ON SCREEN DISPLAY



1. Press the INPUT and MENU button, then use the CURSOR buttons and the OK button on the remote control to display the different features in RGB MODE.
2. Press the MENU button on the remote control to quickly exit from a menu.

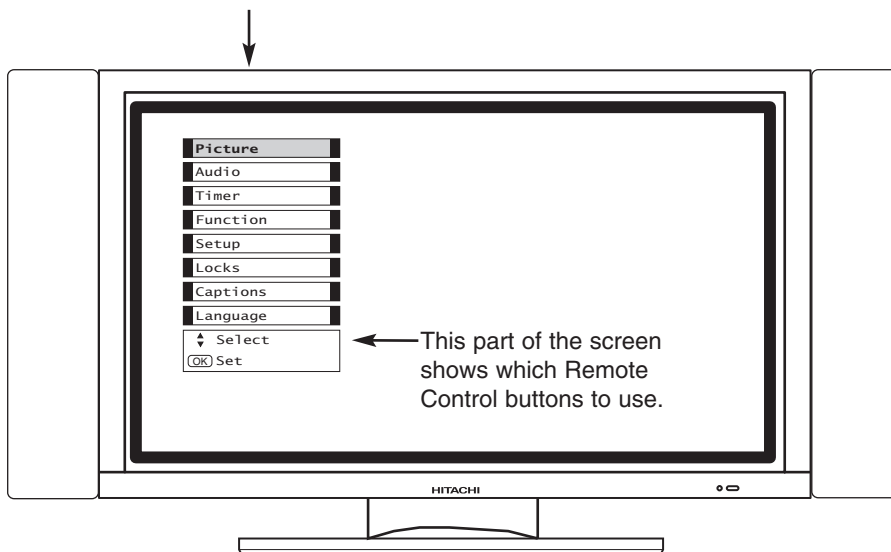
INPUT button

MENU button

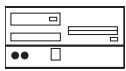


USING THE RGB INPUT

This part of the screen shows which selections are available.



This part of the screen shows which Remote Control buttons to use.

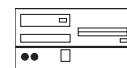


RGB ON SCREEN DISPLAY

Picture	Contrast	Change the contrast between black and white levels in the picture.
	Brightness	Adjust overall picture brightness.
	Color	Adjust color.
	Sharpness	Adjust sharpness.
	Tint	Adjust tint.
	Color Temperature	Select between COOL (12,000K), NORMAL (9,300K), WARM (6,500K), or Black/White (5,400K).
	Color Temp. Adjust	Enhance picture details (Off, Low, Medium or High).
	Reset	Recall the factory preset data of the RGB Video Settings.
Audio	Audio Mode	Select preset Audio Modes.
	Treble	Adjust the treble.
	Bass	Adjust the bass.
	Balance	Adjust the balance.
	SRS TruBass	Select SRS settings (Off, Wide, Normal).
	Matrix Surround	Select Matrix Surround (On, Off).
	Perfect Volume	Adjust volume in fixed setting.
Timers	Off Timer	This function automatically sets the power to standby status when the indicated time period has elapsed.
	On Timer	This automatically sets the power from standby to ON when the indicated time period has elapsed.
Function	Screen Saver	Set Screen Saver to prevent screen burn.
	Screen Wipe	Select Screen Wipe function.
	Set Black Side Panel	Set the gray side bars on/off when watching 4:3 signals in 4:3 mode.
	Video Power Save	Set to reduce power consumption for video input when there is no video input.
	Freeze Mode	Select freeze between split (2 pictures) and strobe (12 pictures).
	Default Zoom	Select the screen display size (default).
	Reset	Reset/Restore to original factory settings.
Setup	Auto Adjust	Automatically adjust the geometry to fit the screen.
	Horizontal Position	Adjust horizontal position.
	Vertical Position	Adjust vertical position.
	Horizontal Clock	Adjusts the dot clock frequency to reduce the vertical stripe.
	Clock Phase	Adjusts the phase to correct blurred or unstable images.
	Reset	Recall the factory preset data of the RGB setup settings.
	Input Level	Set the preferred input signal level.
	Frequency Display	Set to OFF is the frequency information of the Input signal screen display is not required.
	WVGA Type	Only available for W-VGA signal. When it is set to On, the display area mode can be selected Full or Real.
	WXGA Mode	Only available for (PC) WXGA signal. The display area mode is selected [1280x768] or [1366x768].
	Vertical Filter	Set to Control Screen flicker.
	Frequency Mode	Set to PC or Movie.
	RGB1	Set to DVI-PC or DVI-STB (Set-Top-Box).
RGB2	Set to RGB or component.	

NOTE: When RGB1 is selected, Horizontal position, Vertical position, Horizontal clock, Reset, WVGA Type and WXGA Mode will not be available (grayed out).

RGB ON SCREEN DISPLAY



Locks



Change Access Code
Engage Lock
Movie Ratings
TV Ratings
Canadian Ratings (ENG)
Canadian Ratings (FRN)

Change Lock access code.
Choose to lock channel, video input, and/or front panel.
Block various types of movies and video types based on motion picture ratings.
Block various types of movies and television programming based on a parental guide ratings.
Block various types of movies and television programming based on the Canadian ratings system.
Block various types of movies and television programming based on the Canadian French ratings system.

Captions



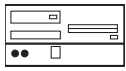
Caption Display
Caption Mode

Set to OFF/ON/AUTO
Set to display dialogue/text.

Language



Set Menu options to English, French or Spanish.



RGB ON SCREEN DISPLAY

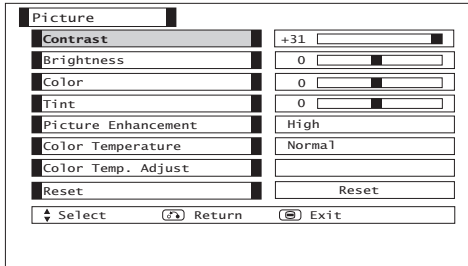
VIDEO ADJUSTMENTS

The following adjustments are independent of the TV mode:

- Press MENU in RGB mode for on screen display.
- Press CURSOR buttons ▲ or ▼ to highlight the item to be adjusted.
- Press the OK button to select the highlighted item.

CONTRAST

This feature allows you to adjust the contrast in RGB mode.

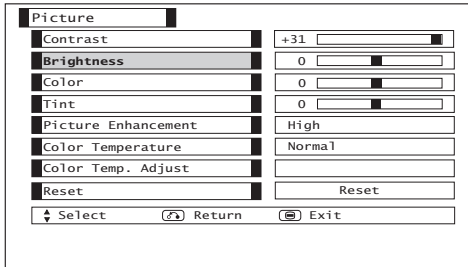


Use CURSOR buttons ◀ or ▶ to adjust contrast. Press the RETURN button to return to RGB MODE MENU and Press MENU to exit.

NOTE: See TV contrast feature for additional information regarding contrast.

BRIGHTNESS

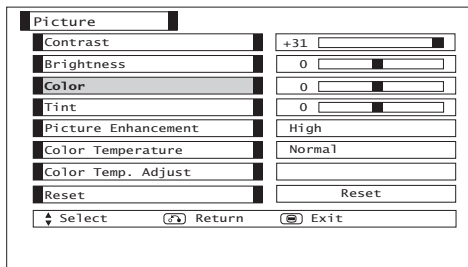
This feature allows you to adjust brightness in RGB Mode.



Use CURSOR buttons ◀ or ▶ to adjust brightness. Press the RETURN button to return to RGB MODE MENU and Press MENU to exit.

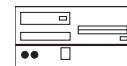
COLOR

This feature allows you to adjust Color in RGB Mode.



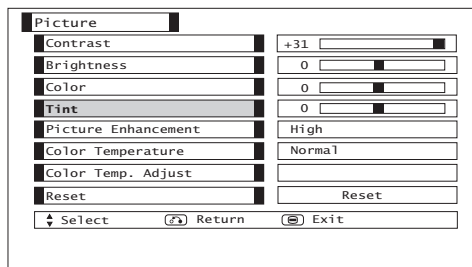
Use CURSOR buttons ◀ or ▶ to adjust brightness. Press the RETURN button to return to RGB MODE MENU and Press MENU to exit.

RGB ON SCREEN DISPLAY



TINT

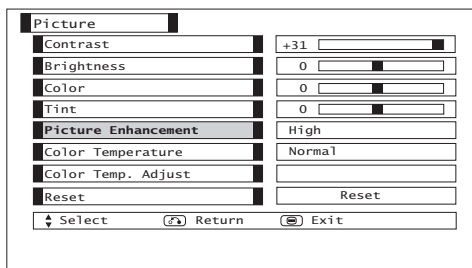
This feature allows you to adjust Tint in RGB Mode.



Use CURSOR buttons ◀ or ▶ to adjust tint. Press the RETURN button to return to RGB MODE MENU and Press MENU to exit.

PICTURE ENHANCEMENT

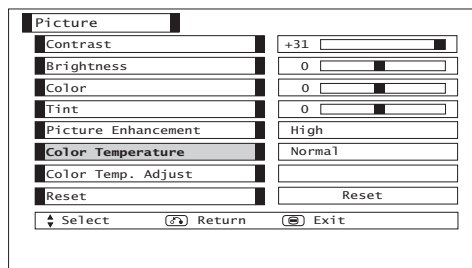
This feature sets the clarity of small details to desired level in RGB Mode.

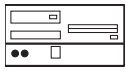


Use CURSOR buttons ◀ or ▶ to set.

COLOR TEMPERATURE

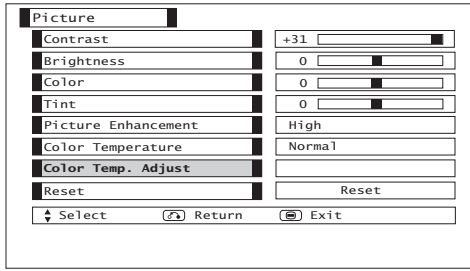
Use the CURSOR buttons ◀ or ▶ to change the COLOR TEMPERATURE. Set to COOL for a cooler picture with more blue (12,000K), set to NORMAL for more natural color (9,300K), or set to WARM for accurate color (6,500K), or Black/White (5,400K).





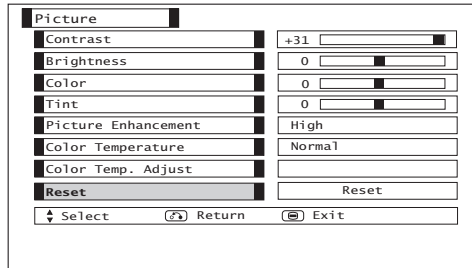
COLOR TEMP. ADJUST

Set to ON when you wish to change color temperature depending on the user's preference.



RESET

Set Menu Items to factory preset condition.



Use CURSOR buttons ◀ or ▶ to highlight Reset. Press the OK button to RESET to factory preset settings.

AUDIO

See page 40.

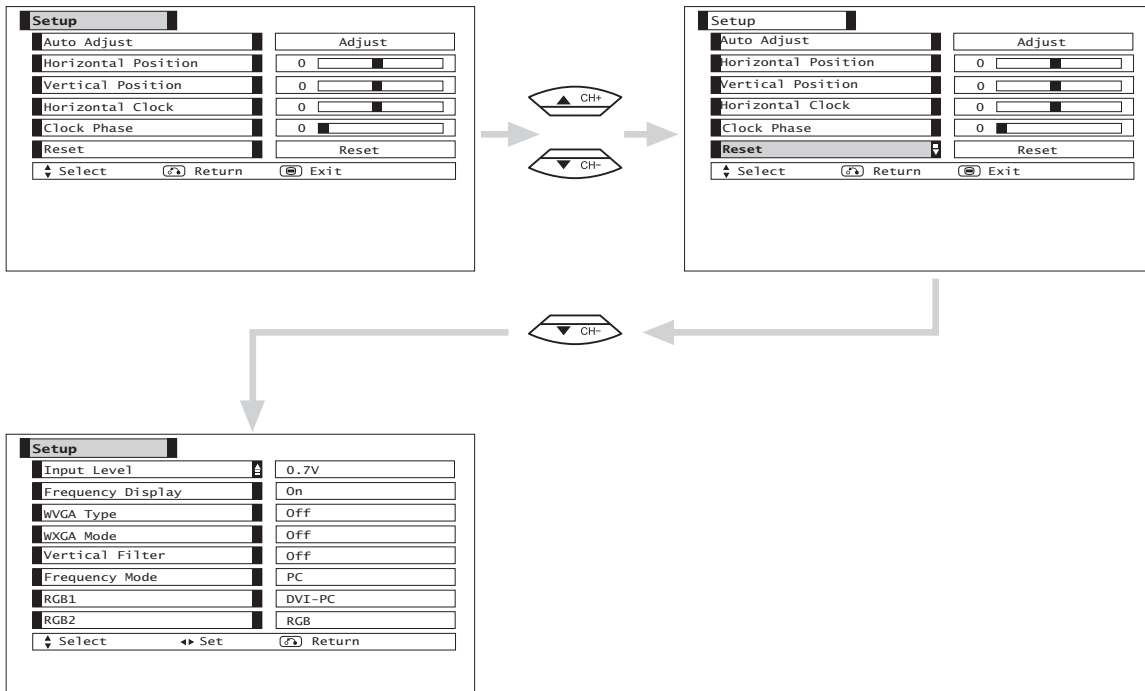
TIMERS

See page 41.

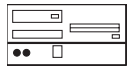
FUNCTION

See page 42-43.

SETUP

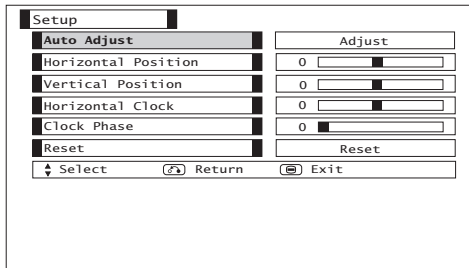


RGB ON SCREEN DISPLAY



AUTO ADJUST

HORIZONTAL POSITION, VERTICAL POSITION, HORIZONTAL CLOCK and CLOCK PHASE for current RGB format are adjusted automatically.

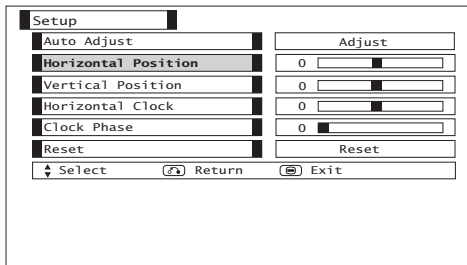


Use CURSOR buttons ◀, ▶ cursors to highlight adjust. Press the OK button to select AUTO ADJUST.

- NOTES:**
- The other functions do not operate while AUTO ADJUST is in progress.
 - Allow the Plasma TV to warm up for 20 minutes before performing AUTO ADJUST.
 - Select a bright image for display while AUTO ADJUST takes place.
 - If AUTO ADJUST terminates unsuccessfully, try AUTO ADJUST again. If AUTO ADJUST fails several times in succession, try using manual adjustment to adjust Vertical Frequency, Aspect Ratio, Timing Frequency and Picture.
 - Always reset AUTO ADJUST when setting new display setting or when changing to a new external component.

H POSITION

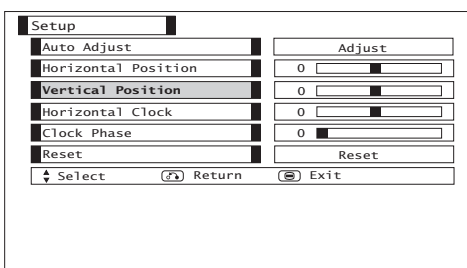
This feature allows you to adjust the horizontal position of the display.



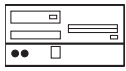
Use CURSOR buttons ◀, ▶ to adjust the horizontal position. Press the RETURN button to return to previous menu item. Press MENU to quit.

V POSITION

This feature allows you to adjust the vertical position in RGB mode.

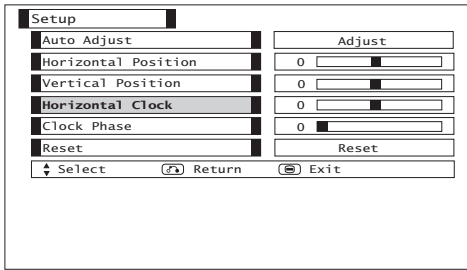


Use CURSOR buttons ◀, ▶ to adjust the vertical position. Press RETURN button to return to previous menu item. Press MENU to quit.



HORIZONTAL CLOCK

Adjusts the pixel clock frequency to reduce the vertical stripe.

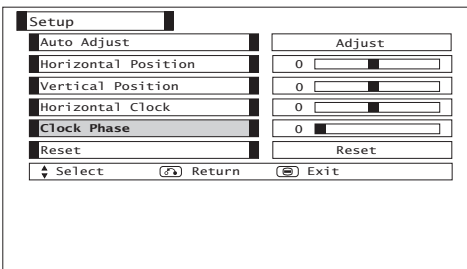


Use CURSOR buttons ◀, ▶ to adjust the horizontal clock. Press the RETURN button to return to previous menu. Press MENU to quit.

NOTE: Due to varying signal content, you may see vertical or horizontal lines bend occasionally in RGB mode. However, this phenomenon is not a defect. It's caused by a lack of picture content due to under-scanning in RGB mode.

CLOCK PHASE

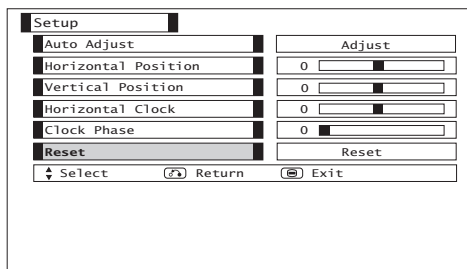
Adjusts the phase to correct blurred or unstable images.



Use CURSOR buttons ◀, ▶ to adjust the clock phase. Press the RETURN button to return to previous menu item. Press MENU to quit.

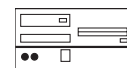
RESET

Set HORIZONTAL POSITION, VERTICAL POSITION, HORIZONTAL CLOCK and CLOCK PHASE to factory preset, for current RGB format.



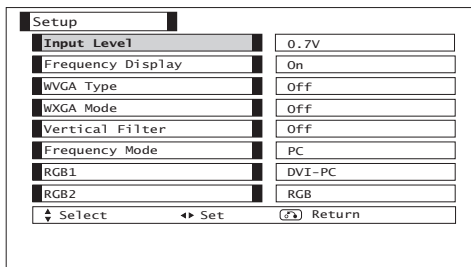
Use CURSOR buttons ◀, ▶ to highlight Reset. Press the the OK button to RESET to factory preset settings.

RGB ON SCREEN DISPLAY



INPUT LEVEL

Select the Input Level voltage between 0.7V and 1.0V.

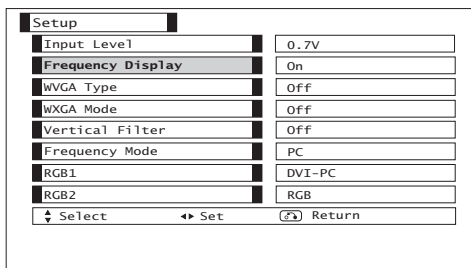


Use CURSOR buttons ◀, ▶ to select between 0.7V and 1.0V depending on the amount of brightness in the picture.

NOTE: When RGB1 is selected, this function will be deactivated.

FREQUENCY DISPLAY

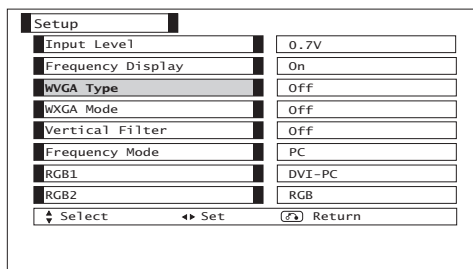
Set this to Off if the frequency information of the Input Signal Screen Display is not required.



Use CURSOR buttons ◀ or ▶ to set.

WVGA MODE

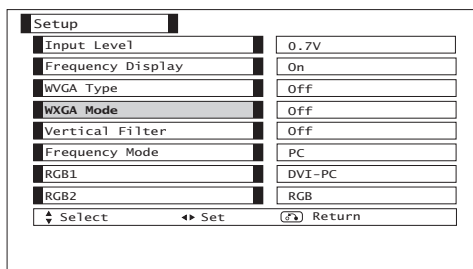
This is only available for W-VGA signal. When it is set to On, the display area mode can be selected Full or Real.



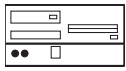
Use CURSOR buttons ◀ or ▶ to set.

WXGA MODE

This is only available for (PC) WXGA signal. The display area mode is selected [1280x768] or [1366x768].



Use CURSOR buttons ◀ or ▶ to set.



VERTICAL FILTER

Turn On when concerned about screen flicker.

Setup	
Input Level	0.7V
Frequency Display	On
WVGA Type	Off
WXGA Mode	Off
Vertical Filter	Off
Frequency Mode	PC
RGB1	DVI-PC
RGB2	RGB
↓ Select	↔ Set (F2) Return

Use CURSOR buttons ◀ or ▶ to set.

FREQUENCY MODE

Set to Movie when viewing moving images on a personal computer.

Setup	
Input Level	0.7V
Frequency Display	On
WVGA Type	Off
WXGA Mode	Off
Vertical Filter	Off
Frequency Mode	PC
RGB1	DVI-PC
RGB2	RGB
↓ Select	↔ Set (F2) Return

Use CURSOR buttons ◀ or ▶ to set.

RGB1

This should correspond to the signal mode of the signal from the equipment that is connected to RGB1 DVI terminal.

Setup	
Input Level	0.7V
Frequency Display	On
WVGA Type	Off
WXGA Mode	Off
Vertical Filter	Off
Frequency Mode	PC
RGB1	DVI-PC
RGB2	RGB
↓ Select	↔ Set (F2) Return

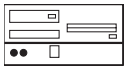
Use CURSOR buttons ◀ or ▶ to set.

RGB2

This should correspond to the signal mode of the signal from the equipment that is connected to RGB2 D-sub terminal.

Setup	
Input Level	0.7V
Frequency Display	On
WVGA Type	Off
WXGA Mode	Off
Vertical Filter	Off
Frequency Mode	PC
RGB1	DVI-PC
RGB2	RGB
↓ Select	↔ Set (F2) Return

Use CURSOR buttons ◀ or ▶ to set.



LOCKS

See pages 48-52.

CAPTIONS

See pages 53.

LANGUAGE

See pages 54.



CARE OF YOUR HITACHI PLASMA DISPLAY AND YOUR REMOTE CONTROL

DO

Dust the screen and frame with a cleaning cloth from the accessories pack.

Clean the screen and frame with a soft cloth moistened in warm water and dry with a soft cloth. A mild soap may be used if the screen is extremely dirty.

Place your Plasma Television away from extreme heat, humidity, and extremely dusty places.

Remove the plug from the wall outlet if your Plasma Television will not be used for a long period of time, for instance, when you go on vacation.

DO NOT

Do not clean your screen with strong cleaners, polishes or a chemically treated cloth.

Do not place rubber or vinyl products or cellophane tape on your Plasma Television.

Avoid repeatedly touching the screen.

Do not subject the remote control to shocks such as dropping it on the floor, etc. This may cause physical damage to the precision parts.





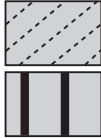

Avoid placing the remote control in a high humidity place or getting it wet. Do not leave it on or near a heater. Excessive heat or moisture may cause the remote control unit to fail.

When the batteries run down, remote control operation will become erratic or become unresponsive. Replace the old batteries with two new "AA" size batteries. Do not use an old battery with a new battery.

Exposing the screen to direct sunlight for a long period of time or heat may cause damage to the plasma screen.

RECEPTION PROBLEMS



	<ul style="list-style-type: none"> • IGNITION NOISE: Black spots or horizontal streaks may appear, picture may flutter or drift. Usually caused by interference from automobile ignition systems, neon lamps, electrical drills, and other electrical appliances.
	<ul style="list-style-type: none"> • GHOSTS: Ghosts are caused by the television signal following two paths. One is the direct path and the other is reflected from tall buildings, hills or some other objects. Changing the direction or position of the antenna may improve reception. Ghosting may also be caused by defects in the antenna system such as unshielded leads or connecting several sets to the same antenna without using multiple antenna couplers.
	<ul style="list-style-type: none"> • SNOW: If your receiver is located in the fringe area of a television station where the signal is weak, your picture may be marred by the appearance of small dots. When the signal is extremely weak, it may be necessary to install a special antenna to improve the picture.
	<ul style="list-style-type: none"> • RADIO FREQUENCY INTERFERENCE: The interference produces moving ripples or diagonal streaks, and in some cases, causes loss of contrast in the picture. • PREVENTION OF AN OBSTACLE TO RADIO RECEIVERS This monitor has been designed pursuant to the FCC class B Rules. This is to prevent a problem to Radio receivers. If this monitor causes a problem to Radio receivers, then take the following steps: <ul style="list-style-type: none"> - Keep the monitor away from Radio. - Adjust Radio antennas in order for the monitor not to receive interference. - The antenna cable of Radio should be kept away from the monitor. - Use a coaxial cable for antenna. <p>You can check if this monitor influences Radio receivers by turning off all other equipment other than the monitor.</p> <p>If you find a problem receiving Radio when using the monitor, check the instructions mentioned above.</p>
<ul style="list-style-type: none"> • The display image appears scrolling diagonal. • Text displayed across the screen appears vertically streaked, with the characters in vertical columns blurred. 	<ul style="list-style-type: none"> • Adjust the horizontal clock and clock phase. (Adjust the horizontal clock first, the clock phase next.) (RGB input)
<ul style="list-style-type: none"> • Text displayed across the screen appears blurred. • A fine pattern flickers when displayed on the screen. 	<ul style="list-style-type: none"> • Adjust the clock phase for the clearest viewing. (RGB input)
<ul style="list-style-type: none"> • Vertical stripes appear, depending on the screen contents. 	<ul style="list-style-type: none"> • The plasma display panel is lighting the phosphors by the discharge of internal radiation. Depending on the screen contents, in rare cases this may cause vertical stripes to appear because of failure to light. Please note that this is not a malfunction.
<ul style="list-style-type: none"> • Coarse horizontal stripes appear in FULL display. 	<ul style="list-style-type: none"> • Adjusting the clock phase will reduce the horizontal stripes. (RGB input)
<ul style="list-style-type: none"> • The display dims to make the picture invisible during special playback of a VCR (FF, REW). 	<ul style="list-style-type: none"> • This condition may occur when the unit is connected to a VCR with component output, such as 480i, but it is not a failure. But when it occurs, switch to composite output or S1 (S2) output).



SYMPTOMS	CHECK THESE ITEMS AND TRY THESE ADJUSTMENTS												
	Be sure external connection is correct	Be sure power cord is plugged in	Be sure TV is switched "ON"	Try another channel (station trouble)	Check antenna connections (station trouble)	Check antenna connections (back of TV)	Check outside antenna	Check for local interference	Adjust Contrast control	Adjust Brightness control	Adjust Color control	Adjust Tint control	Adjust Volume control
No Picture, no sound	●	●	●	●	●	●	●						
Sound OK, picture poor	●			●	●	●	●	●	●				
Picture OK, sound poor	●			●	●	●	●	●					●
Picture blurred	●			●	●	●	●	●					
Lines or streaks in picture				●	●	●	●	●					
Poor reception on some channels				●	●	●	●	●					
Picture rolls vertically				●				●					
No color	●			●	●	●	●			●			
Poor color	●			●	●	●	●			●	●		

PLUG and PLAY



This Plasma Television complies with VESA DDC2B specifications, Plug & Play is a system with computer, peripherals (including monitors) and operating system. It works when the monitor is connected to a DDC ready computer that is running an operating system software that is capable for the plug & play.

When a Plug and Play PC is powered on, it sends a command to the Monitor requesting identification. The Monitor sends back a string of data including its characteristics.



TRADEMARK ACKNOWLEDGMENT

DDC™ is a trademark of Video Electronics Standard Association.

IBM PC/AT and VGA are registered trademarks of International Business Machines Corporation of the U.S.A.

Apple and Macintosh are registered trademarks of Apple Computer, Inc.

VESA is a trademark of a nonprofit organization, Video Electronics Standard Association.



This Class B digital apparatus meets all requirements of the Canadian Interference-Causing Equipment Regulations.

This Class B digital apparatus complies with Canadian ICES-003.

Cet appareil numérique de la classe B est conforme à la norme NMB-003 du Canada.

Cable Compatible Television Apparatus- Télévision câblocompatible, Canada.

Notes on Closed Caption:

This Plasma Television receiver will display television closed captioning, ( or ), in accordance with paragraph 15.119 of the FCC rules.



AGENCY REGULATORY INFORMATION

Federal Communications Commission Notice

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

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and the receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/television technician for help.

Modifications

The FCC requires the user to be notified that any changes or modifications made to this device that are not expressly approved by Hitachi Home Electronics (America), Inc. may void the user's warranty.

Cables

Connections to this device must be made with shielded cables with metallic RFI/EMI connector hoods to maintain compliance with FCC Rules and Regulations.

Any cables that are supplied with the system must be replaced with identical cables in order to assure compliance with FCC rules. Order Hitachi spares as replacement cables.

Declaration of Conformity

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

For questions regarding this declaration, contact:

Hitachi America, LTD.
Home Electronics Division
900 Hitachi Way
Chula Vista, CA 91914-3556
Tel. 1-800-448-2244 (1-800-HITACHI)
ATTN: CUSTOMER RELATIONS

USEFUL INFO



Features:

- New Easy-to-Use On-Screen Menu Control (3 Language)
- Preprogrammed Remote Control
- Power Management: ON/OFF via signal detection
- Picture Enhancement

Video:

- 852 x 480 Display Resolution
- High-Contrast Pure-Color Glass Shield
- Wide Viewing Angle: More than 160°
- 4 Color Temperature Presets: Black/White-5400K, Normal-9300K, Warm-6500K, Cool-12000K.
- Multiple Screen Fill Modes (4x3/Panoramic/Zoom/Full/Cinema)¹
- 4MB 10-bit 3D Y/C Comb Filter
- Picture Modes (Day and Night)
- Computer Display: VGA, (SVGA, XGA, SXGA-scaled)

Inputs:

- Power InputAC 120V, 60Hz
- Power Consumption
- Refer to rear panel at the back of the Plasma Monitor
- Antenna input impedance75 Ohm
- Channel coverage181ch.
VHF-Band2 ~ 13
UHF-Band14 ~ 69
CATV Mid BandA-5 ~ A-1
.A~I
Super BandJ~W
Hyper BandW+1 ~ W+28
Ultra BandW+29 ~ W+84
- Video1.0Vp-p, 75 Ohm
- S-Video
Luminance (Y)1.0Vp-p, 75 Ohm
Chrominance (C)0.286Vp-p, 75 Ohm
- Component Video
Luminance (Y)1.0Vp-p, 75 Ohm
Chrominance (P_B/P_R)0.7Vp-p, 75 Ohm
- Audio input Impedance47k Ohm
- Average input level470mVrms
- RGB0.7Vp-p, 75 Ohm

Outputs:

- Video1.0Vp-p, 75 Ohm
- Audio470mVrms, 1k Ohm

Audio:

- MTS Stereo/SAP
- TruBass and Matrix Surround
- 12W + 12W

Supplied Accessories:

- Remote Control
- Batteries
- AC Cable
- Speakers (x2)
- Cleaning Cloth
- Speaker Wires
- Speaker Holder (x4)
- Cushion (x2)
- Mounting Screws (x8)

INPUTS/OUTPUTS

- Inputs:RGB1, RGB2, AV1-AV3
Component Y, Pb,Pr3
RGB (Analog)1
RGB (Digital)1
Composite Video3
S-Video1
Antenna (RF)1
Audio L/R5
- Inputs:AV4 (SCART)
RGB (Analog)1
Composite Video1
S-Video1
Composite Video1
Audio L/R1
- Outputs:Monitor
Composite Video1
Audio L/R1
- Outputs:AV4 (SCART)
Composite Video1
Audio L/R1


SPECIFICATIONS

- Multi-Scanning:15.73 KHz/24-107KHz (h), 50-85Hz (v)
- Pixel Pitch1.08(H) x 1.08(V) mm
- FCC class:B for Consumer Use
- Power Requirements:108-132V, 60Hz

¹ Screen mode availability varies by input format

HDTV Monitors display HDTV when combined with an HDTV Tuner and Source. All specifications, weights, and dimensions are subject to change without prior notice. Please access www.hitachi.us/tv for detailed specifications and dimensions for custom installations.

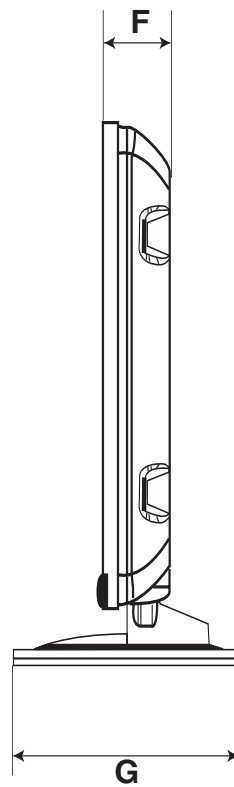
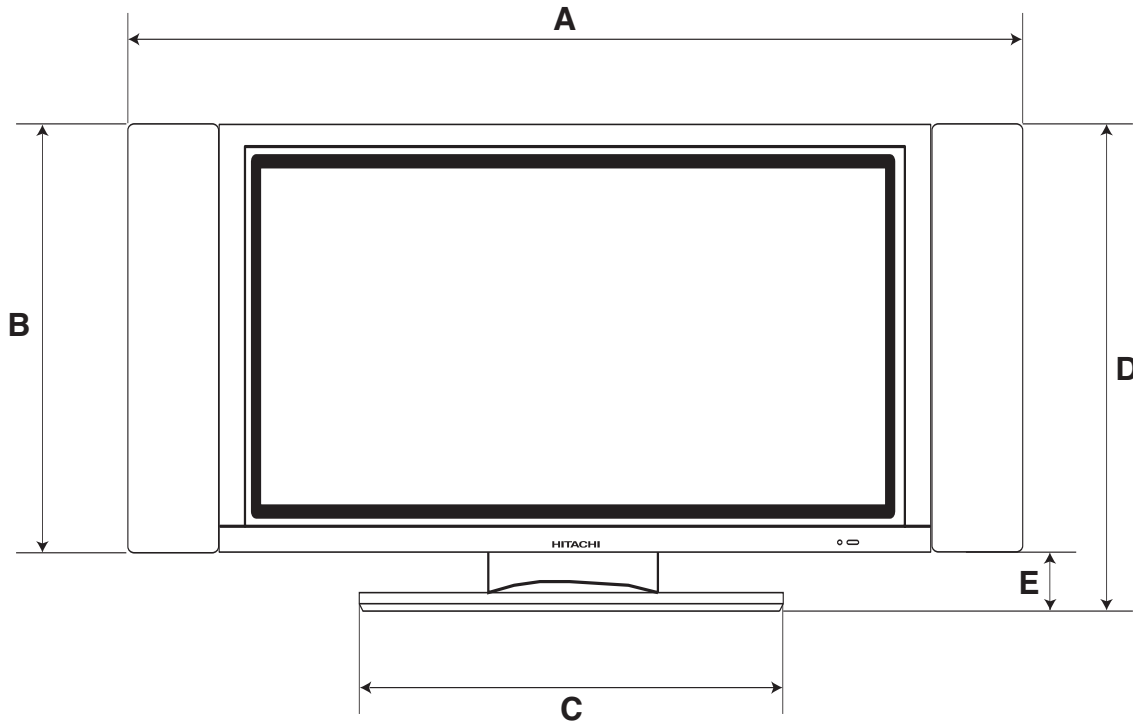
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TruBass, SRS and the  symbol are trademarks of SRS Labs, Inc. TruBass technology is incorporated under license from SRS Labs, Inc.



Plasma Television with Speakers and Table Top Stand (SET DIMENSIONS)

	A	B	C	D	E	F	G
INCHES	48 1/2	25 1/32	27 1/2	28 1/32	3	3 1/2	11 13/16
MM	1233	636	700	712	76.2	89.5	300





HITACHI

*Service
hotline*

To locate an authorized
HITACHI service facility
in the continental U.S.A.
and Canada,

DIAL TOLL FREE

7 days a week, 24 hours a day

800 HITACHI

(1-800-448-2244)

Hitachi America, LTD. Home Electronics Division

Hitachi has made every effort to assure you hours of trouble free operation from your unit. However, should you require service, a network of Hitachi Authorized Service Facilities has been established in all 50 states and Puerto Rico. Each facility will provide you with convenient and expedient assistance. Our service hotline operator will direct you to the Hitachi Authorized Service Facility nearest you. Just present proof of purchase and/or delivery receipts to the Hitachi Authorized Service Facility, and service will be rendered in accordance with the terms of the limited warranty as stated on your warranty card or operating guide.

Should you have any questions regarding warranty, service, operation, or technical assistance, please contact:

**Hitachi America, LTD.
Home Electronics Division
900 Hitachi Way
Chula Vista, CA 91914-3556**



**Hitachi Canada, LTD.
Digital Media Division**

Should you have any questions regarding warranty, service, operation, or technical assistance, please contact:

**In Canada:
1-800-HITACHI
(1-800-448-2244)**

**Monday - Friday EST 9:00am - 7:00pm
Saturday EST 9:00am - 5:00pm**

*Look for your French Manual on the outside of the box.
If the manual is missing, call*

**1-800-HITACHI
(1-800-448-2244)**

for a copy.

Pour de plus amples renseignements sur le service durant la période couverte par la garantie, sur le fonctionnement ou pour de l'assistance technique communiquez avec:

**Au Canada:
1-800-HITACHI
(1-800-448-2244)**

**Lundi - Vendredi L'EST 9:00am - 7:00pm
Samedi L'EST 9:00am - 5:00pm**

*La version française de votre manuel se trouve à l'extérieur de la boîte.
Si le manuel est manquant, coposez le*

**1-800-HITACHI
(1-800-448-2244)**

pour obtenir votre copie.

**HITACHI CANADA, LTD.
2495 Meadowpine Blvd.
Mississauga, ON L5N 6C3**

PRODUCT SPECIFICATIONS



Panel	Display dimensions	Approx. 42 inches (920 (H) x 518 (V) mm, diagonal 1059mm)
	Resolution	852 (H) x 480 (V) pixels
Net dimensions (excluding Speakers/Stand)		1030 (W) x 636 (H) x 91 (D) mm
Net weight (including Speakers/Stand)		42.8 Kg/ 114.7 lbs.
Ambient conditions	Temperature	Operating : 5°C to 35°C, Storage : -15°C to 60°C
	Relative humidity	Operating : 20% to 80%, Storage : 20% to 90% (non-condensing)
Power supply		AC 120V, 60Hz
Power consumption/at standby		310W / <3W
Audio output		12W + 12W (6Ω)
(RGB input)		
Input signals	Input terminals	RGB1 DVI input terminal (DVI-D) RGB1 audio input terminal (3.5mm Stereo Mini Jack) RGB2 analog RGB input terminal (D-sub 15-pin) RGB2 audio input terminal (3.5mm Stereo Mini Jack)
	Video signals	0.7 V/1.0 Vp-p, analog RGB (Recommended Signal) 480i, 576i, 480p, 576p, 1080i/50, 1080i/60, 720p/60
	Sync signals	H/V separate, TTL level [2KΩ] H/V composite, TTL level [2KΩ] Sync on green, 0.3 Vp-p [75Ω]
Recommended signal		47 modes
(Video input)		
Input signals	Input terminals	AV1: composite video input terminal (RCA) AV1: Y PB PR video input terminal (RCA) AV1: L/R audio input terminal (RCA) AV2: composite video input terminal (RCA) AV2: Y/G PB/B PR/R video input terminal (RCA) AV2: L/R audio input terminal (RCA) AV3: composite video input terminal (RCA) AV3: S video input terminal (RCA) AV3: L/R audio input terminal (RCA) AV4: composite video / S video / RGB / L/R audio input terminal (Scart)
	Video signals	AV1: NTSC-M AV1: 480i, 576i, 480p, 576p, 1080i/50, 1080i/60, 720p/60 AV2: NTSC-M AV2: 480i, 576i, 480p, 576p, 1080i/50, 1080i/60, 720p/60, RGB AV3: NTSC-M AV4: NTSC-M AV4: RGB
Video output Signal		OUTPUT (MONITOR): composite video monitor-output terminal (RCA) OUTPUT (MONITOR): L/R audio monitor- output terminal (RCA) AV4: composite video / L/R audio output terminal (SCART)
Recommended signal		15 modes
(RF input)		
Input signals	Input terminals	ANT : 75Ω Unbalanced
	RF Video System	NTSC-M

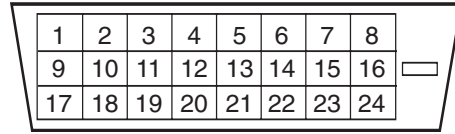
- The monitor takes at least 30 minutes to attain the status of optimal picture quality.



Signal Input

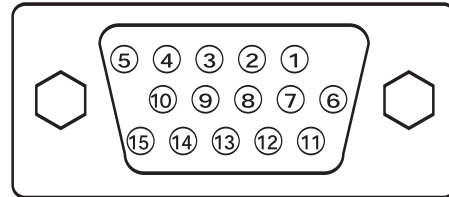
DVI terminal (DVI-D)

Pin	Input signal	Pin	Input signal
1	T.M.D.S. Data2-	14	+5V Power
2	T.M.D.S. Data2+	15	Ground (for+5V)
3	T.M.D.S. Data2/4 Shield	16	Hot Plug Detect
4	T.M.D.S. Data4-	17	T.M.D.S. Data0-
5	T.M.D.S. Data4+	18	T.M.D.S. Data0+
6	DDC Clock	19	T.M.D.S. Data0/5 Shield
7	DDC Data	20	T.M.D.S. Data5-
8	No Connect	21	T.M.D.S. Data5+
9	T.M.D.S. Data1-	22	T.M.D.S. Clock Shield
10	T.M.D.S. Data1+	23	T.M.D.S. Clock+
11	T.M.D.S. Data1/3 Shield	24	T.M.D.S. Clock-
12	T.M.D.S. Data3-	Frame	GND
13	T.M.D.S. Data3+		



RGB terminal (D-sub 15-pin connector)

Pin	Input signal
1	R (Pr/Cr)
2	G or sync on green (Y)
3	B (Pb/Cb)
4	No connection
5	No connection
6	R.GND (Pr/Cr, GND)
7	G.GND (Y, GND)
8	B.GND (Pb/Cb, GND)
9	No connection
10	GND
11	No connection
12	[SDA]
13	H. sync or H/V composite sync
14	V.sync. [V.CLK]
15	[SCL]



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

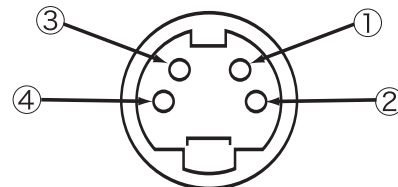
Sync signal type	Priority
H/V separate sync.	1
H/V composite sync.	2
sync.on Green *	3

*Even in the case of the recommended signals shown on the following page, there may be instances when correct display is not possible. In this case, use H/V separate sync, H/V composite sync.

() : With component input

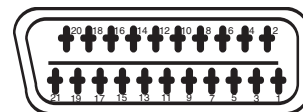
S-input connector pin specifications

Pin	Input signal
1	Y
2	Y-GND
3	C
4	C-GND
Frame	GND



Scart connector pin specifications

Pin	Signal	Pin	Signal
1	AUDIO OUT (RIGHT)	12	Not Used
2	AUDIO IN (RIGHT)	13	RGB-R GND
3	AUDIO OUT (LEFT/MONO)	14	GND
4	AUDIO GND	15	RGB-R / S.VHS CHROMINANCE IN
5	RGB-B GND	16	BLANKING SIGNAL
6	AUDIO IN (LEFT/MONO)	17	COMPOSITE VIDEO GND
7	RGB-B IN	18	BLANKING SIGNAL GND
8	AUDIO/RGB SWITCH / 16:9	19	COMPOSITE VIDEO OUT
9	RGB-G GND	20	COMPOSITE VIDEO / S.VHS LUMINANCE IN
10	Not Used	21	GND / SHIELD (CHASSIS)
11	RGB-G IN		



PRODUCT SPECIFICATIONS



Recommended Signal List

With Digital RGB signal input (RGB1 input)

No.	Signal mode			Horizontal frequency (kHz)	Dot clock frequency (MHz)	Setup Menu Condition		Remarks
	Signal Name	Resolution	Vertical frequency (Hz)			DVI-PC	DVI-STB	
1	VGA	640 X 400	70.08	31.47	25.18	<input type="radio"/>		
2		640 X 480	59.94	31.47	25.18	<input type="radio"/>	<input type="radio"/>	
3	W-VGA	864 X 480	59.94	31.47	34.24	<input type="radio"/>		
4	VESA	640 X 480	72.81	37.86	31.50	<input type="radio"/>		
5		640 X 480	75.00	37.50	31.50	<input type="radio"/>		
6		640 X 480	85.01	43.27	36.00	<input type="radio"/>		
7		800 X 600	56.25	35.16	36.00	<input type="radio"/>		
8		800 X 600	60.32	37.88	40.00	<input type="radio"/>		
9		800 X 600	72.19	48.08	50.00	<input type="radio"/>		
10		800 X 600	75.00	46.88	49.50	<input type="radio"/>		
11		800 X 600	85.06	53.67	56.25	<input type="radio"/>		
12		1024 X 768	60.00	48.36	65.00	<input type="radio"/>		
13		1024 X 768	70.07	56.48	75.00	<input type="radio"/>		
14	1024 X 768	75.03	60.02	78.75	<input type="radio"/>			
15	480p	720 X 480	59.94	31.47	27.00		<input type="radio"/>	EIA-861
16	720p/60	1280 X 720	60.00	45.00	74.25		<input type="radio"/>	EIA-861
17	1080i/60	1920 X 1080	60.00	33.75	74.25		<input type="radio"/>	EIA-861

• Make sure that the signal of the equipment to be connected is compatible with the specifications of this list. (○ : acceptable)

With Analog RGB signal input (RGB2 input)

No.	Signal mode			Horizontal frequency (kHz)	Dot clock frequency (MHz)	Remarks
	Signal Name	Resolution	Vertical frequency (Hz)			
1	VGA	640 X 400	70.08	31.47	25.18	
2		640 X 480	59.94	31.47	25.18	
3	W-VGA	864 X 480	59.94	31.47	34.24	WVGA type : On
4	VESA	640 X 480	72.81	37.86	31.50	
5		640 X 480	75.00	37.50	31.50	
6		640 X 480	85.01	43.27	36.00	
7		800 X 600	56.25	35.16	36.00	
8		800 X 600	60.32	37.88	40.00	
9		800 X 600	72.19	48.08	50.00	
10		800 X 600	75.00	46.88	49.50	
11		800 X 600	85.06	53.67	56.25	
12		1024 X 768	60.00	48.36	65.00	
13		1024 X 768	70.07	56.48	75.00	
14		1024 X 768	75.03	60.02	78.75	
15		1024 X 768	85.00	68.68	94.50	
16		1152 X 864	75.00	67.50	108.00	
17		1280 X 1024	60.02	63.98	108.00	
18		1280 X 1024	75.03	79.98	135.00	
19		1280 X 1024	85.02	91.15	157.50	
20	1600 X 1200	60.00	75.00	162.00		
21	1600 X 1200	75.00	93.75	202.50		
22	1600 X 1200	85.00	106.25	229.50		
23	Macintosh	640 X 480	66.67	35.00	30.24	
24		832 X 624	74.55	49.72	57.28	
25		1024 X 768	74.93	60.24	80.00	
26		1152 X 870	75.06	68.68	100.00	



PRODUCT SPECIFICATIONS

27	W-XGA	1280 X 768	59.833	47.986	81.00	
28		1280 X 768	69.997	56.137	94.760	
29		1280 X 768	59.876	47.776	79.50	WXGA Mode:(1280x768)
30		1366 X 768	60.015	47.712	89.50	WXGA Mode:(1366x768)

- The type of video board or connecting cable used may not allow for correct displays adjustment of Horizontal Position, Vertical Position, Horizontal Clock and Clock Phase.
- The monitor may fail to display an animation image correctly when a signal having a vertical frequency of 85Hz or higher is input to it.
- The monitor differentiates the signal modes according to the horizontal and vertical frequencies and the horizontal and vertical sync signal polarities. Note that different signals having all these elements alike may be handled as the same signal.
- Displaying images with more than 480 lines of vertical resolution at Full diplay (compressed display) can result in the interpolation of stripes.

With Composite Input(AV1~AV4 input) and S-video Input (AV3 and AV4 input).

No.	Signal mode			Horizontal frequency (kHz)	Dot clock frequency (MHz)	Remarks
	Signal Name	Resolution	Vertical frequency (Hz)			
1	NTSC-M	525	59.94	15.73	—	

With R, G, B Video input (AV2 and AV4 input).

No.	Signal mode			Horizontal frequency (kHz)	Dot clock frequency (MHz)	Remarks
	Signal Name	Resolution	Vertical frequency (Hz)			
1	(NTSC-M)	525	59.94	15.73	—	

With component input (AV1, AV2 and RGB2-component input).

No.	Signal mode			Horizontal frequency (kHz)	Dot clock frequency (MHz)	Remarks
	Signal Name	Resolution	Vertical frequency (Hz)			
1	576i	576	50.00	15.63	—	
2	480i	480	59.94	15.73	—	
3	576p	576	50.00	31.26	—	
4	480p	480	59.94	31.47	—	
5	1080i/50	1080	50.00	28.13	—	
6	1080i/60	1080	60.00	33.75	—	
7	720p/60	720	59.94	44.96	—	

- The monitor differentiates the signal modes according to the horizontal and vertical frequencies and the horizontal and vertical sync signal polarities. Note that different signals having all these elements alike may be handled as the same signal.
- Displaying images with more than 480 lines of vertical resolution at Full diplay (compressed display) can result in the interpolation of stripes.



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