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HITACHI

Inspire the Next



PLASMA TELEVISION

Operating Guide for P50S602

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ULTRAVISION



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. Model and serial numbers are indicated on back side and right side of the plasma television.



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 a person.



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.

READ BEFORE OPERATING EQUIPMENT

Follow all warnings and instructions marked on this plasma television.

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

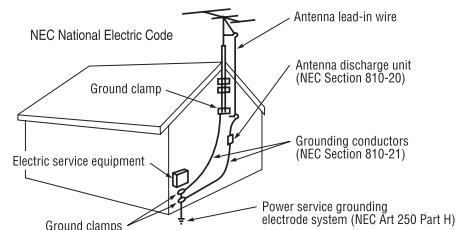


has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.

15. Televisions 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 820-44 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.



Power source

This plasma television is designed to operate on 120 volts 60 Hz, AC current. Insert the power cord into a 120 volt 60 Hz outlet. The mains plug is used as the disconnect device and shall remain readily operable.

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 50 Hz, direct current, or anything other than the specified voltage.



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.

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 warranty.

Important Safety Instructions



Warning



- To reduce the risk of fire or electric shock, do not expose this apparatus 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.
- This apparatus shall be connected to a mains socket outlet with a protective earthing connection.

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, and is intended for home and other limited payper-view uses only unless otherwise authorized. Reverse engineering or disassembly is prohibited.

About your Plasma TV

This digital television is capable of receiving analog basic, digital basic and digital premium cable television programming by direct connection to a cable system providing such programming. Certain advanced and interactive digital cable services such as video-on-demand, a cable operator's enhanced program guide and data-enhanced television services may require the use of a set-top box. For more information call your local cable company.

Prevention of screen damages (Image Retention)

Continuous on-screen displays such as video games, stock market quotations, computer generated graphics, and other fixed (non-moving) patterns can be permanently imprinted onto your TV screen. Such "**SCREEN DAMAGES**" constitute misuse and are **NOT COVERED** by your **Hitachi Factory Warranty**. For more information about how to prevent screen damages please refer to page 39.

If still images are left on the screen for more than 2.5 minutes, protection function will work automatically so that contrast reduces to minimize image retention on the plasma display panel.

Please note that this is not a malfunction but it helps to minimize image retention.

The original contrast will restore after moving images are displayed for about 6 minutes. Original contrast can be restored quickly by turning power On/Off with remote control or power switch on unit.

Lead Notice

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 www.eRecycle.org (in California), 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 800-HITACHI.

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.

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.

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 authority to operate the equipment.

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.

NOTE

This Plasma Television receiver will display television closed captioning, ( or ), in accordance with paragraph 15.119 and 15.122 of the FCC rules.

INDUSTRY CANADA AGENCY REGULATORY INFORMATION

Cable Compatible Television Apparatus- Télévision câblocompatible, Canada.

CHILD SAFETY:

It Makes A Difference How and Where
You Use Your Flat Panel Display

Congratulations on your purchase! As you enjoy your new product, please keep these safety tips on mind:



THE ISSUE

- The home theater entertainment experience is a growing trend and larger flat displays are popular purchases. However, flat panel displays are not always supported on the proper stands or installed according to the manufacturer's recommendations.
- Flat Panel displays that are inappropriately situated on dresser, bookcases, shelves, desks, speakers, chest or carts may fall over and cause injury.

HITACHI CARES!

- The consumer electronics industry is committed to making home entertainment enjoyable and safe.

TUNE INTO SAFETY

- One size does NOT fit all. Follow the manufacturer's recommendations for the safe installation and use of your flat panel display.
- Carefully read and understand all enclosed instructions for proper use of this product.
- Don't allow children to climb on or play with furniture and television sets.
- Don't place flat panel displays on furniture that can easily be used as steps, such as a chest of drawers.
- Remember that children can become excited while watching a program, especially on a "larger than life" flat panel display. Care should be taken to place or install the display where it cannot be pushed, pulled over, or knocked down.
- Care should be taken to route all cords and cables connected to the flat panel display so that they cannot be pulled or grabbed by curious children.

WALL MOUNTING: IF YOU DECIDE TO WALL MOUNT YOUR FLAT PANEL DISPLAY, ALWAYS:

- Use a mount that has been recommended by the display manufacturer and/or listed by an independent laboratory (such as UL, CSA, ETL).
- Follow all instructions supplied by the display and wall mount manufacturers.
- If you have any doubts about your ability to safely install your flat panel display, contact your retailer about professional installation.
- Make sure that the wall where you are mounting the display is appropriate. Some wall mounts are not designed to be mounted to walls with steel studs or old cinder block construction. If you are unsure, contact a professional installer.
- A minimum of two people are required for installation. Flat panel displays can be heavy.



Energy Saving Features

Congratulations on purchasing a ENERGY STAR® qualifying product.

This Hitachi product as shipped from the factory meets the United States Environmental Protection Agency (EPA) requirements established for both “On” and “Standby” Operation.

Certain features and functionality provided in this product may result in increased energy use beyond that intended by the ENERGY STAR program.

Those features and functions which, when adjusted away from factory settings may cause increased or decrease energy use, are described below:

Energy Savings Initial Settings: HOME mode will meet ENERGY STAR requirements, RETAIL mode will increase energy consumption.

Picture Mode: Day setting will decrease energy consumption. Dynamic setting will increase energy consumption.

Contrast: Decreasing this setting will lower energy consumption.

Brightness: Decreasing this setting will lower energy consumption. Increasing this setting will increase energy consumption.

Color Temperature: Set to High will increase energy consumption. Set to other modes will decrease energy consumption.

Light Sensor: Set to On will increase or decrease energy consumption depending on the room brightness. For Low room brightness it will decrease energy consumption and for High room brightness it will increase energy consumption. Set to Off, energy consumption will depend on contrast mode setting.

Contrast Mode: Dynamic setting will increase energy consumption, Normal mode will decrease energy consumption.

Black Side Panel: Set to ON it will decrease energy consumption.

Reset Video Settings: When in HOME mode if this option is selected, energy consumption will remain within ENERGY STAR requirements, if in RETAIL mode this setting will increase energy consumption.

TV Guide On Screen™ System. When this feature is setup it will operate under standby conditions to continuously update channel and program listing which will increase the energy consumption of your TV. Desactivated this feature will help you reduce energy consumption.

Picture Energy Saving: All 3 level settings (Min, Medium, Max) will help reduce energy consumption, being Max setting the best saving energy level.

Auto Sync. Saving: Activating this feature will decrease energy consumption.

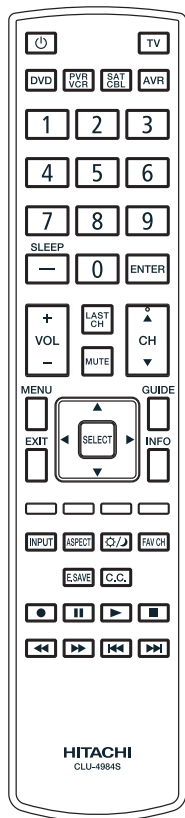
Auto TV Off: Activating this feature will decrease energy consumption.

Switch between Home and Retail Mode Energy Saving Settings: Selecting HOME will help reduce energy consumption to meet ENERGY STAR requirement. Selecting RETAIL will increase energy consumption.

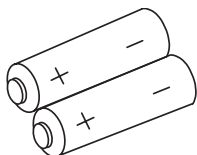
Accessories

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

- ① Remote Control Unit
CLU-4984S
(Part No. HL02564)



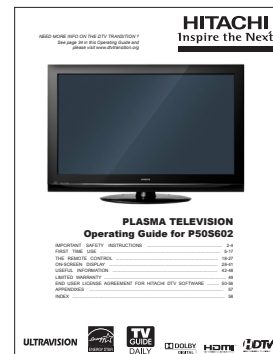
- ② “AAA” Size
Batteries (2)



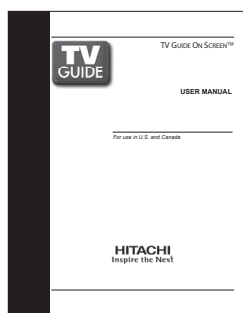
- ③ Power Cord
(Part No. EV01841
or EV02351)



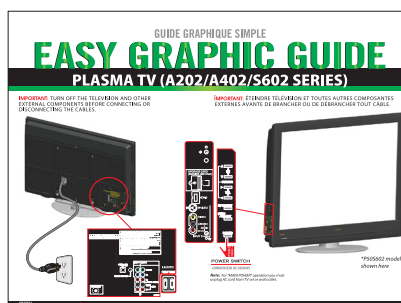
- ④ Operating
Guide



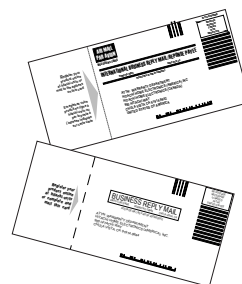
- ⑤ TV Guide Daily
User Manual



- ⑥ Easy Graphic Guide



- ⑦ Warranty cards



For optional accessories, please access our web site at: www.hitachi.us/tv

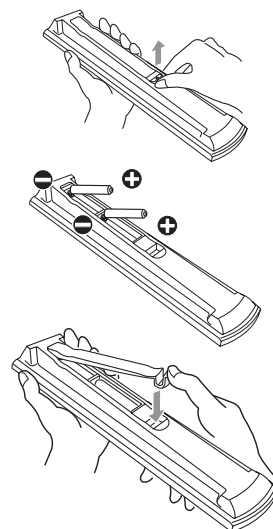


- Ceiling mounting is not recommended. Mounting the panel on the ceiling does not provide adequate ventilation for the electronics or proper support for the front glass panel. This plasma television product is designed for a maximum tilting angle of 45 degrees from vertical.
- Please see page 8 for important information related to wall mounting.

REMOTE CONTROL BATTERY INSTALLATION AND REPLACEMENT

The remote control operates on 2 “AAA” batteries.

1. Open the battery cover of the remote control by pushing and pulling it in the direction of the arrow.
2. Insert two new “AAA” size batteries for the Remote Control. When replacing old batteries, push them towards the springs and lift them out.
3. Match the batteries to the (+) and (-) marks in the battery compartment.
4. Insert the bottom of the battery, the (-) side, into the battery compartment first, push towards the springs and insert the top of the battery, the (+) side, into place. Do not force the battery into the battery compartment.
5. Close the battery cover making sure the tabs rest in the corresponding holes and push down the cover until it clicks shut.



- Do not insert batteries with ‘+’ and ‘-’ polarities reversed as this may cause the batteries to swell or rupture resulting in leakage.
- Never mix used and new batteries in the device.
- Replace all the batteries in the device at the same time.
- Remove the batteries if the remote control is not going to be used for an extended period of time.

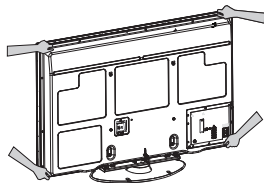
How To Install Your New Hitachi Plasma Television

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 and flat surface.

Caution when moving the main unit

As this product is heavy, whenever it is moved, at least two people are required to transport it safely. Whenever the unit is moved it should be lifted forward using the top and base on both sides of the Television for stability.

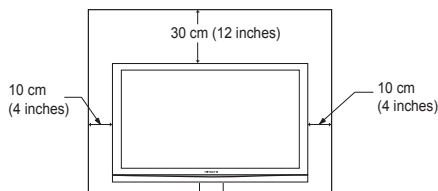
When moving the Television, lift from the corners, then support the top frame as shown below.



Location

Select an area where sunlight or bright indoor illumination will not fall directly on the picture screen. If so, drapes or screens can be used to reduce the reflection.

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 Television, and 30 cm (12 inches) from the top of the television to the ceiling. 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.

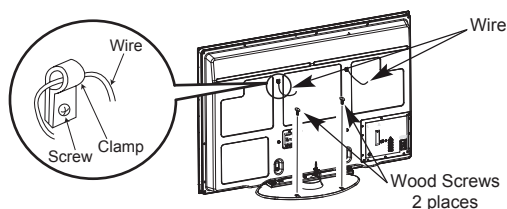


Securing to a Table-Top

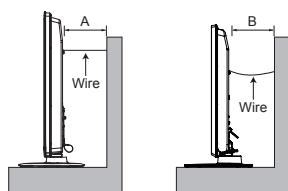
- Using 2 commercially available wood screws fasten the set through the clamping screw holes on the rear of the Plasma Table Top Stand as shown below.

Securing to a Wall

- Using metallic wire (two places) fasten the set to the clamping screw on the rear of the Plasma TV as shown below.



- Keep the Plasma television 4 inches away from the wall except when mounted using the wall mount bracket and secure to the wall as shown below:



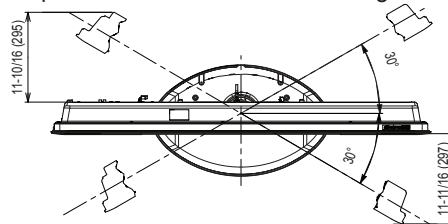
	A	B
50"	4 in. 10 cm.	12 in. 30 cm.

NOTE

Please adjust the wire length to avoid touching the wall when turning the TV.

Turning Angle

The maximum turning angle is 30° (left and right). Do not place any objects in the path of the television when using the swivel feature.



NOTES

- Do not block the ventilation holes of the Plasma Television. Blocking the ventilation holes might cause fire or defect.
- In case of an abnormal symptom, unplug the AC cord and contact 800-HITACHI.
- If you purchased a wall mount bracket, please ask for professional installer. Do not try to install by yourself.
- Install the unit at a proper area where it does not expose anyone to any danger of hitting themselves (for example their hands, head or face, etc.) against the edge of the unit that could cause personal injury.

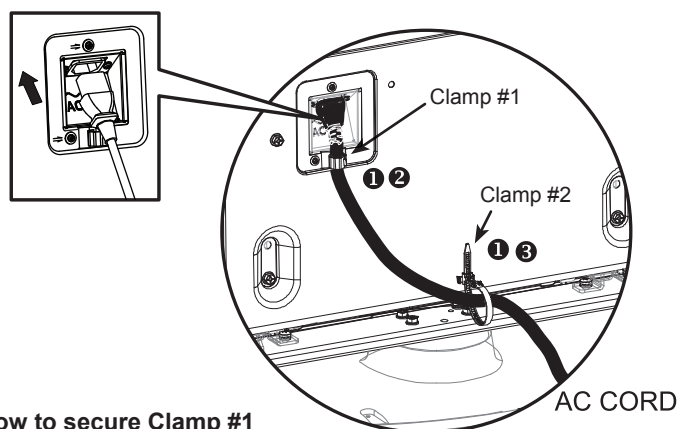


AC Cord Installation

The AC cord provided with your new Plasma Television needs to be installed correctly to avoid its disconnection when rotating the TV on its Table Top Stand.

Located on the back of the TV there are 2 plastic clamps to hold the AC cord. Please follow the instructions below.

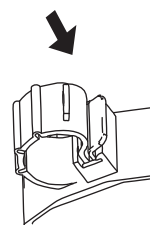
- Pass the AC cord through Clamp #2 and then Clamp #1 and connect it to the TV.
- Close clamp #1 to fix the AC cord to the TV.
- Pull on clamp #2 to tighten the AC cord to the TV.



How to secure Clamp #1

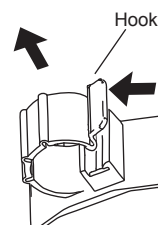
• To SET

Set the clamp in the direction of the arrow



• To UNFASTEN

Loosen the hook and pull in the direction of the arrow

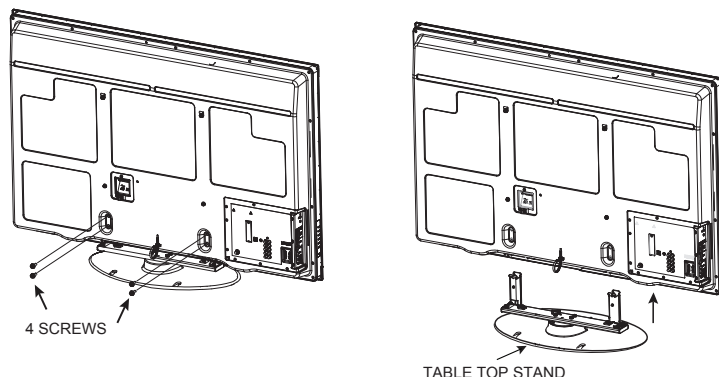


How To Install Your New Hitachi Plasma Television

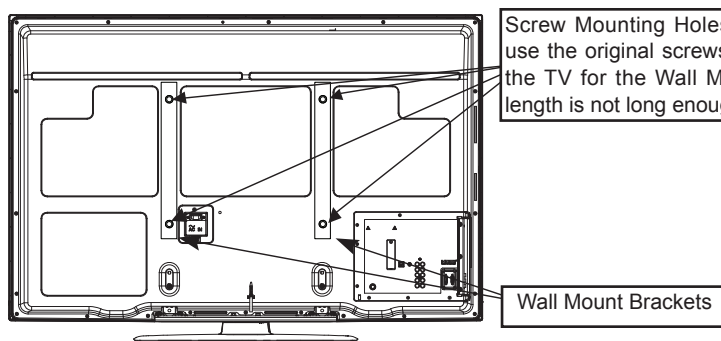
WALL MOUNTING SETUP

STEP (1) : REMOVE THE TABLE TOP STAND FROM THE PLASMA TELEVISION

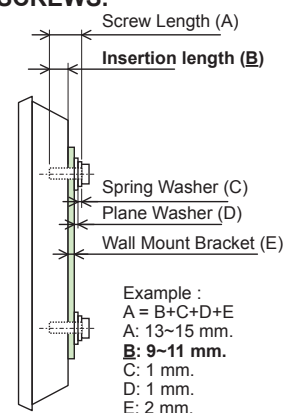
Please remove the 4 screws shown below in order to separate the TV from the Table Top Stand. Now the Table Top Stand can be separated from the TV. Useful dimensions for the WALL MOUNT assembly are in page 47.



STEP (2) : INSTALL THE WALL MOUNT BRACKETS ON THE PLASMA TELEVISION USING 4 SCREWS.



- For Wall Mount assembly; please refer to the Installation Manual of the Wall Mount Unit.



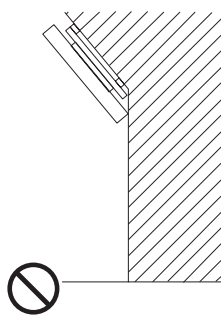
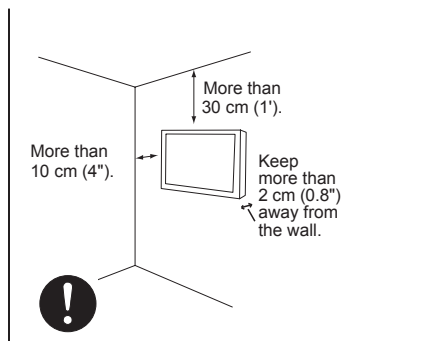
- The screw type : Thread ISO M6 (Metric type, do not use Standard type).



CAUTION

Insertion length (B) of the screws must be within 9~11 mm. If the length is less than 9 mm, the weight can not be maintained. If the length is more than 11 mm, a space is created between the Wall Mount Bracket and the Plasma Television. This length is **very important**.

STEP (3) : TIPS TO CONSIDER FOR THE LOCATION OF THE PLASMA TELEVISION.



CAUTION

- Do not block the ventilation holes. In addition please keep a certain distance around and make sure not to obstruct ventilation. Blocking the ventilation holes might cause fire or defect.
- If you purchased the Wall Mount unit, please ask for a professional installer. Do not install by yourself.
- This plasma unit features an advanced ventilation system configured for vertical installation. A knowledgeable and experienced professional technician can perform other mounting or installation orientations (e.g., horizontal, tilted) provided that you specifically inform the technician of the unit's specialized ventilation needs. Call 800-HITACHI for additional info and guidance.

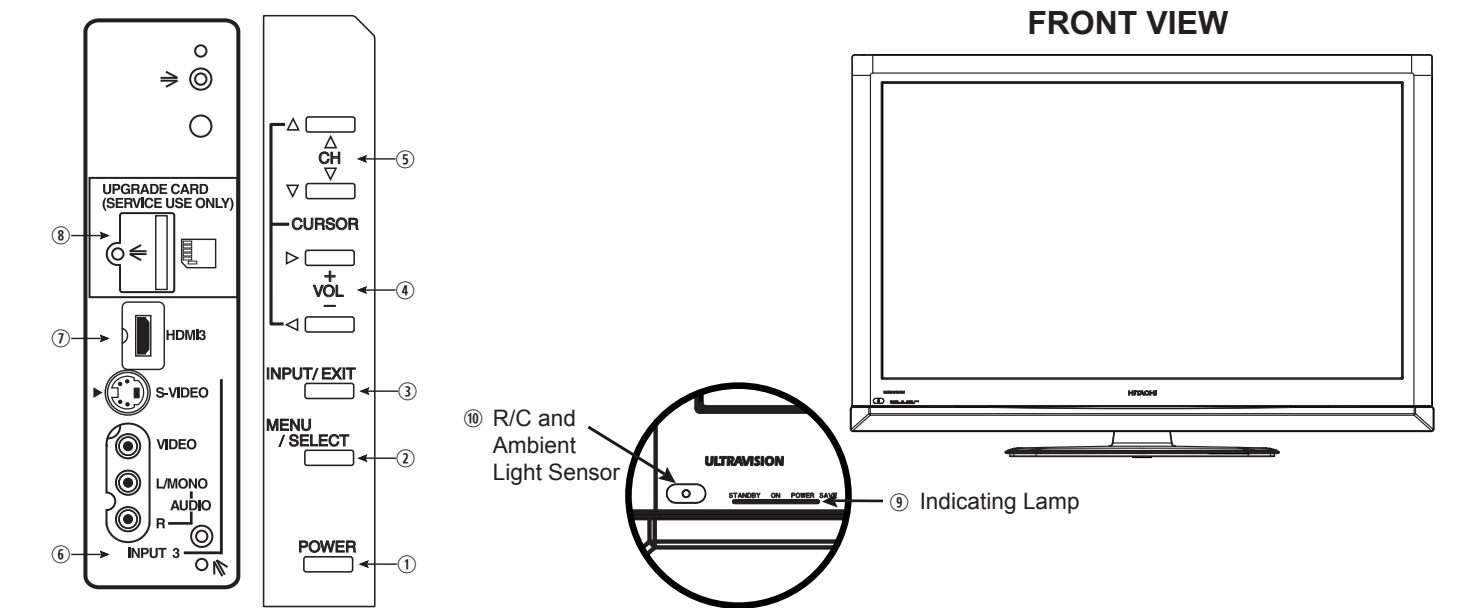


CAUTION

- Although this Plasma Display Panel can be installed using a variety of third party wall mounting brackets/devices, such third party brackets/devices have not been tested or approved by Hitachi for use or compatibility with this Plasma Display Panel. Accordingly, Hitachi accepts no responsibility or liability for any injuries or property damage resulting from the use of such third party brackets/devices. Hitachi strongly

advices that any installation of this Plasma Display Panel using wall mounting brackets/devices be performed only by a qualified and experienced television installation technician who has completed a thorough evaluation of:

- a) the weight-bearing strength and stability of the intended wall mount surface; and
- b) the weight-bearing strength and compatibility of the intended wall mount brackets/device.



- ① **POWER switch**
This power switch is for the complete system. It is recommended to leave this POWER switch to ON condition (lights red) for stand-by mode.
- ② **MENU/SELECT 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 SELECT button when in MENU mode.
- ③ **INPUT/EXIT button**
Press this button to access the INPUT menu. This button also serves as EXIT button 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 **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.
- ⑥ **INPUT-3 (SIDE) JACKS**
INPUT-3 provide composite Video and S-Video jacks for connecting equipment with this capability, such as a DVD player, Game Console or Camcorders.
- ⑦ **HDMI-3**
Use this side HDMI input for AV Equipment such as Set-Top-Boxes or DVD players equipped with an HDMI output connection (see page 14 for reference).
- ⑧ **UPGRADE CARD**
This card slot is for future software upgrades. Hitachi will notify you if a software upgrade is required for your TV.

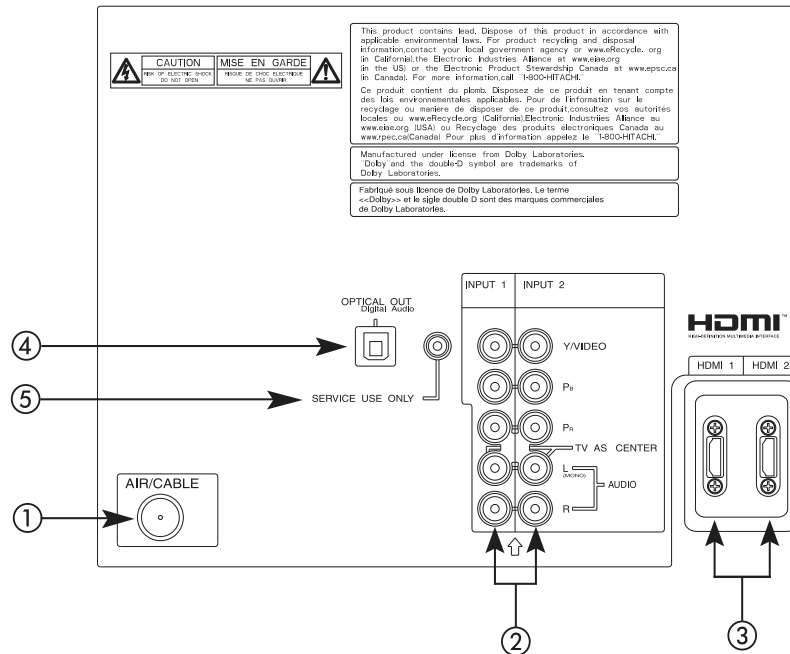
- In order to receive written notification, please complete and return your warranty card.
- ⑨ **POWER light indicator**
To turn the TV ON, press the Power switch (①). A red stand-by indicator lamp located on the lower left corner of the front bezel will illuminate. The Plasma TV is now ready for remote ON/OFF operation.

Indicating Lamp	Power Status	Operating
Off	OFF	When the POWER switch is set to OFF.
Lights Red	OFF (Stand-by)	When the POWER switch is set to ON.
Lights Blue	ON	TV Power is ON; picture is shown.
Lights Orange	OFF (Power Saving)	TV Power is ON with no signal input except antenna (no sync. signal)
Blinking Blue	ON	When TV receives the IR signal from the RC.

- ⑩ **REMOTE CONTROL and AMBIENT LIGHT sensor**
Point your remote at this area when selecting channels, adjusting volume, etc. This area also detects ambient light level for automatically brightness control of the screen.

- NOTES**
- Your HITACHI Plasma TV will appear to be turned OFF (lights orange) if there is no video input when INPUT 1, 2, 3, or HDMI 1, 2, 3 is selected. Check the Power Light to make sure the TV is turned off or in Stand-by mode (lights red) when not in use.
 - Remote Control cannot turn ON/OFF the TV when Power Switch is set to OFF.
 - If Power Light Indicator Brightness is set to OFF, the indicating lamp will not light when the TV turns ON. Please refer to page 41.
 - Please do not put anything around R/C and Ambient light sensor, as its function will be affected.

Rear Panel Jacks



① Antenna Input

To switch between Cable and Air input, go to the Channel Manager option to change the signal source CABLE or AIR (see page 34).

② Component: Y-PBPR and Audio Inputs

INPUTS 1 and 2 provide Y-PBPR and Audio jacks for connecting equipment with this capability, such as a DVD player or Set Top Box. You may use COMPOSITE video signal for both inputs.

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

NOTES

- The HDMI input is not intended for use with personal computers.
- Only DTV formats such as 1080p, 1080i, 720p, 480i and 480p are available for HDMI input.

NOTES

- Your component outputs may be labeled Y, B-Y, and R-Y. In this case, connect the components B-Y output to the TV's P_B input and the components R-Y output to the TV's P_R input.
- Your component outputs may be labeled Y-CbCr. In this case, connect the component C_B output to the TV's P_B input and the component 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-PbPr inputs (see page 30).
- INPUT 1 and 2 (Y/VIDEO) can be used for composite video and component video input.

④ Optical Out (Digital Audio)

This jack provides Digital Audio Output from a HDMI source or digital program channel to your audio device that is Dolby® Digital and PCM compatible, such as an audio amplifier.

NOTE

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

⑤ For Factory and Service Use Only

③ HDMI 1, 2 (High Definition Multimedia Interface)

ABOUT HDMI – HDMI is the next-generation all digital interface for consumer electronics. HDMI enables the secure distribution of uncompressed high-definition video and multichannel audio in a single cable. Because digital television (DTV) signals remain in digital format, HDMI assures that pristine high-definition images retain the highest video quality from the source all the way to your television screen. Use the HDMI input for your AV Equipment such as Set-Top-Boxes or DVD players equipped with an HDMI output connection.



Quick Reference Remote Control Buttons and Functions

In addition to controlling all of the functions on your Hitachi Plasma TV, the new remote control is designed to operate different types of devices, such as, DVD Players, CBL (Cable Boxes), set-top-boxes, satellite receivers, and VCRs. The remote control must be programmed to control the chosen device. Please see pages 22~27 for a complete description of all features and programming of the Remote Control.

Power On/Off (TV, DVD, PVR/VCR, SAT/CBL, AVR)

Press this button to switch the selected device On or Off standby.

(-) Dash/Sleep Button (TV, SAT/CBL, PVR/VCR, DVD)

Press this button when the remote is in Set-Top-Box mode (SAT) or when the TV uses a digital input. In TV mode press to set your Sleep Timer from 30 minutes to 3 hours.

Last Channel Button (TV, SAT/CBL, PVR/VCR, DVD)

Press this button to switch between the current and the last channel viewed.

Volume Buttons (TV, AVR)

Press up (+) to increase or down (-) to decrease the audio level of your TV.

Menu Button (TV, DVD, PVR/VCR, SAT/CBL, AVR)

Accesses the OSD menu system.

EXIT Button (TV, DVD, PVR/VCR, SAT/CBL, AVR)

Press this button to exit the OSD menu.

Cursor PAD/Select Buttons (TV, DVD, PVR/VCR, SAT/CBL, AVR)

The Cursor PAD is used to navigate through the OSD and INPUT menu system. The Select button is used to Set/Activate highlighted menu items.

Input Select (TV, AVR)

Press this button to change input mode.

Energy Save Button (TV)

Press this button to set Power Consumption reduction based on three levels (Min, Med, Max).

DVD/VCR CONTROL BUTTONS (SAT/CBL, DVD, PVR/VCR, AVR)

Control the functions of your Satellite Receiver, Set-Top Box, Cable Box, DVD, VCR, PVR and AVR.

Device Buttons (TV, DVD, PVR/VCR, SAT/CBL, AVR)

Press these buttons to switch between your devices.

Numeric Buttons (TV, DVD, PVR/VCR, SAT/CBL, AVR)

Press these buttons to manually enter the channel and for numeric entry when navigating through the OSD menu system.

Enter Button (TV, DVD, PVR/VCR, SAT/CBL, AVR)

Press this button to use as a SELECT feature.

Channel Up/Down Buttons (TV, PVR/VCR, SAT/CBL, DVD, AVR)

Changes up or down the channel.

Mute (TV, AVR)

Reduces the audio level to 50% if pressed once, and to complete mute if pressed twice. Press it a third time to restore audio level.

Guide Button (TV, SAT/CBL, PVR/VCR, DVD)

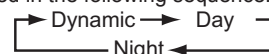
Press this button to access the program guide of TV and other devices.

Info Button (TV, DVD, SAT/CBL, PVR/VCR)

Shows the input signal status and other information.

Picture Mode (TV)

Picture mode can be changed each time pressed in the following sequence.



Favorite Channel Button (TV, SAT/CBL)

Press to enter/access Favorite Channel mode.

Aspect (TV)

Press this button to change picture size.

Closed Caption (CC) Button (TV)

Press to show and change the closed caption mode.

LEGENDS

TV - Television

DVD- Digital Video Disc Player

AVR - Audio/Video Receiver

VCR - Video Cassette Recorder

SAT - Satellite Receiver

PVR - Personal Video Recorder

CBL - Cable Box

NOTE

The TV's remote control sensor is located on the left bottom portion of the TV screen. To control TV functions, please point the remote control directly at the sensor for best results.

Quick Setup Guide

Perform the following steps to quickly setup your new Hitachi Plasma Television Set.

1. ANTENNA CONNECTION

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.

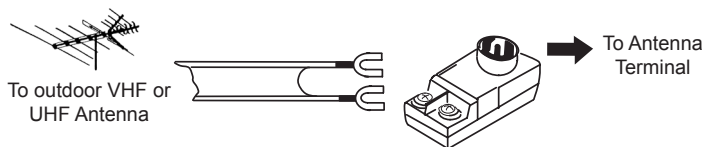
a). VHF (75-Ohm) antenna/CATV (Cable TV)

When using a 75-Ohm coaxial cable system, connect CATV coaxial cable to the AIR/CABLE (75-Ohm) terminal. Or if you have an antenna, connect the coaxial cable to the same AIR/CABLE terminal.



b). 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.

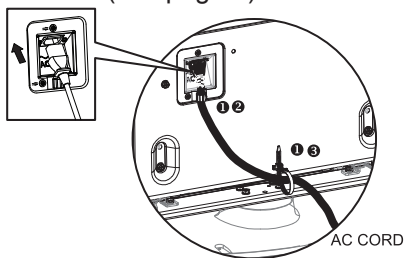


NOTE

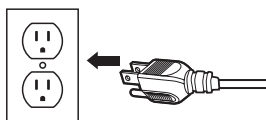
Connecting a 300-Ohm twin lead connector may cause interference. Using a 75-Ohm coaxial cable is recommended.

2. CONNECT YOUR NEW HITACHI PLASMA TV TO THE POWER SOURCE

a). Connect the power cord to your TV set and secure it with the cable tie (see page 7).



b). Connect the power cord to the AC Wall outlet.

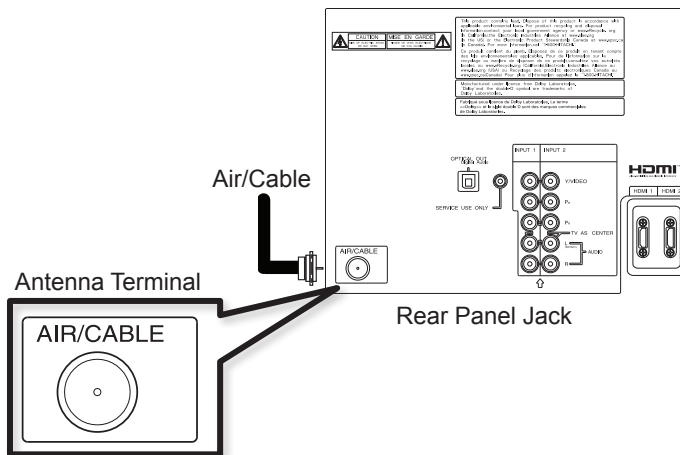


3. POWER ON/OFF YOUR NEW HITACHI PLASMA TV.

Press the POWER button on the Remote Control or the POWER switch on the Side Control Panel for power on/off (Stand-By mode).

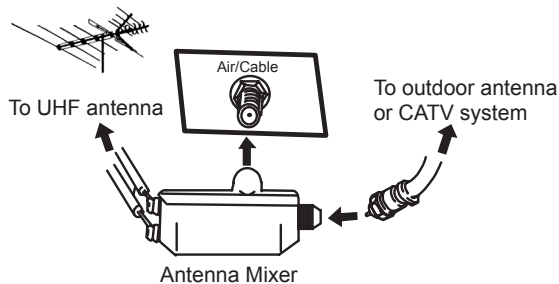
NOTE

If the Power Switch is set to OFF, the Power Button on the Remote Control will not operate.

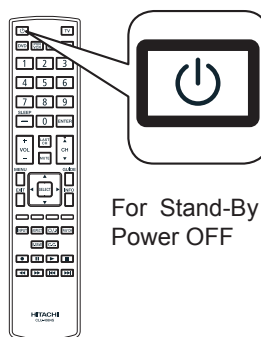
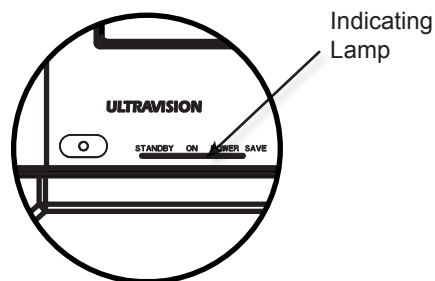


c). When both VHF and UHF antennas are connected

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.

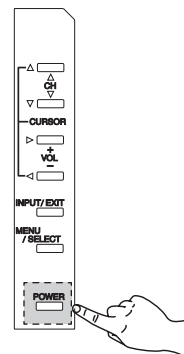


c). The Indicating Lamp will light Red (Standby mode) and then light blue (image displays).



For Stand-By
Power OFF

or



4. FOLLOW THE TV SETUP WIZARD INSTRUCTIONS ON NEXT PAGE.

TV Setup Wizard

This television has a TV Guide On Screen™ feature which has the ability to show you a customized list of the programs on a daily basis and channels available in your area. The information for the guide is broadcast on different channels in different areas. Please use this TV Setup Wizard to help TV Guide On Screen™ find the channels available in your area.

The First time you turn on your Hitachi Plasma TV the Energy Savings Initial Settings screen will appear. Please select either HOME or RETAIL mode settings to advance to the TV Setup Wizard screen. If you select HOME mode this will save energy and is intended for home use. RETAIL mode will set the Picture to Dynamic default Settings and the picture will be brighter. This setting is intended for showroom and shop use. If later you want to change the Energy Savings Initial Settings you can using the Setup Menu (refer to page 41).

Energy Savings Initial Settings

Please Select HOME or RETAIL

☐ HOME ☐ RETAIL

HOME mode meets Energy Star™ guidelines and is best for home use.

RETAIL mode uses more energy and is intended for in-store display.

◀ Move **SEL** Select

NOTE RETAIL Mode is intended for showroom or shop use only, if you make adjustment changes in this mode they will not be saved when the TV is turned Off.

The TV Setup Wizard screen automatically starts after the Energy Savings Initial Settings Screen the first time the TV is turned on.

- NOTES**
- If you see the screen above when you turn on your TV for the first time and did not yet connect your external devices and cables to your TV, turn off your TV, unplug the power cord and connect your devices and cables according to the applicable connections in the "First Time Use" section of this Operating Guide.
 - After completing the TV Setup Wizard, these screens will not appear again. For updating and adding the channels available in your area refer to the Auto Channel Scan feature on page 34.

When the TV Setup Wizard appears on-screen, start by selecting Yes or No in the top portion of the TV Setup Wizard.

1. Use the ◀ and ▶ CURSOR to select Yes or No and press the SELECT button on the remote control.

Do you want the TV to find all of the channels for the TV Guide On Screen™?

☒ Yes ☐ No

If **Yes** is selected proceed to step 2.

If **No** is selected, press the EXIT button on the remote control and

the TV Guide On Screen™ Setup screen will appear (refer to page 33).

2. Press the ▼ CURSOR to move to the next window to select the source.

Source: ◀ Air ▶
Please connect the antenna or cable to the input labeled "Air/Cable".

3. Press the ▶ CURSOR to select Air, Cable(1) or Cable(2).

4. Press the ▼ CURSOR to move to the next window to start the Auto Channel Scan.

Auto Channel Scan : **Start**

5. Press the SELECT button on the remote control to begin scanning.

Air
Scanning Channel Number : 12
☐ Analog ☒ Digital 12-123
Scan time may take 10 to 20 minutes

Cancel

When Auto Channel Scan is done the TV Guide On Screen™ Setup screen as shown below will appear (refer to page 33).

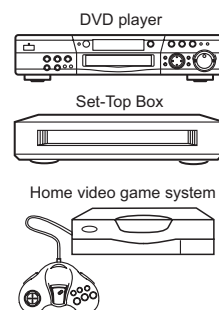


Side Panel Connections

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. The SIDE panel HDMI jack is provided as a convenience to allow you to easily connect HDMI or DVI signals from a DVD, Set-Top-Box, Video Game as shown in the following examples (When a DVI product is connected, a separate audio connection is necessary for audio. Use the side Audio input jacks for the audio connection).

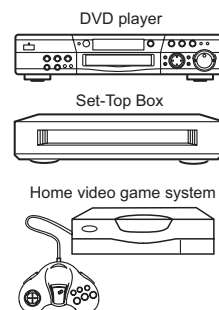
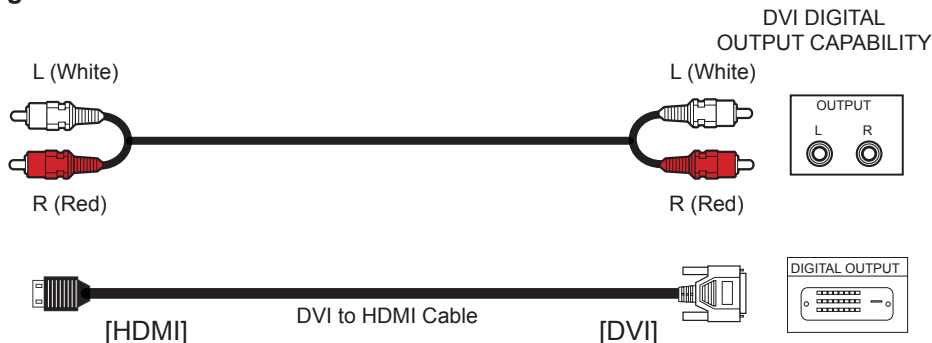
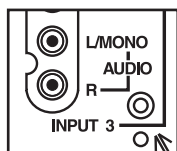
A) Connecting HDMI signal

SIDE INPUT PANEL



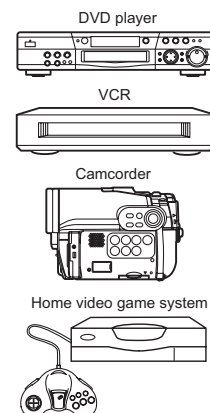
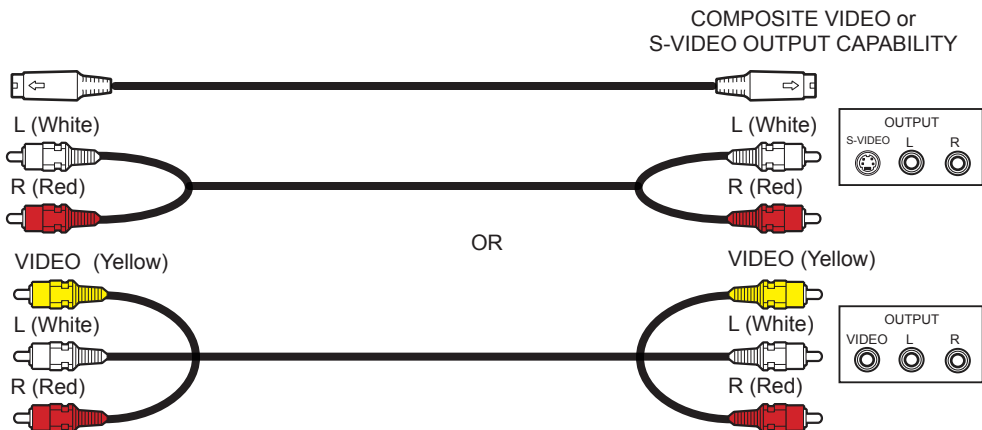
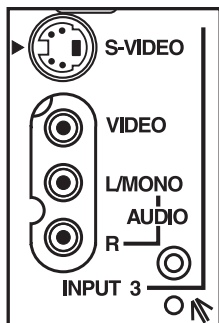
B) Connecting DVI signal

SIDE INPUT PANEL



The SIDE panel VIDEO and S-VIDEO jacks are provided as a convenience to allow you to easily connect a camcorder, DVD, Video Game and a VCR as shown in the following examples. (When connecting S-VIDEO signal it will need to connect the audio output into the Side Audio Input jacks):.

SIDE INPUT PANEL



For Monaural devices, please connect Audio signal cable into L/Mono input jack .

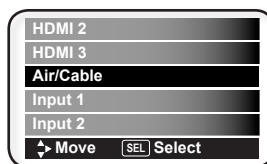
NOTES

- Completely insert connection cord plugs when connecting to side panel jacks. If you do not, the played back picture may be abnormal.
- Cable plugs are often color-coded. Match colors of plugs and terminals, i.e. connect red to red, white to white, etc.
- When making video connections, connect S-Video only or Video only. If both are connected, S-Video takes priority.

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

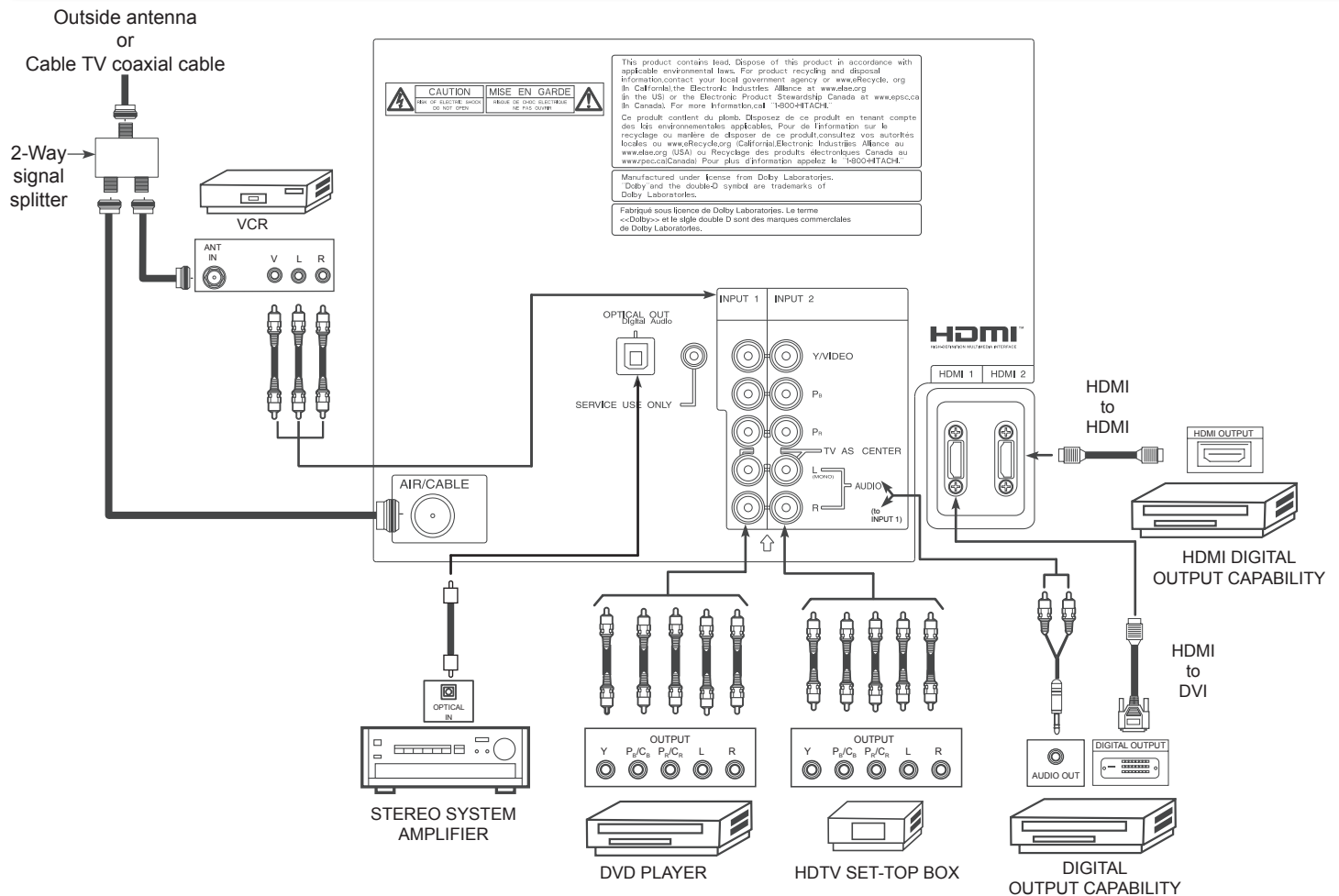
Before Operating External Video Sources

Connect an external source to one of the INPUT terminals, then press the INPUT button to show the INPUTS menu. Use the CURSORS (▲ and ▼) to select the Input of your choice. Then press the SELECT button or the CURSOR ► to confirm your choice (see page 21).



Example: Selecting the Air/Cable (Antenna) Input

Rear Panel Connections



NOTE Cables are optional, except when specified.

TIPS ON REAR PANEL CONNECTIONS

- ◆ COMPONENT Y-PBPR (Input 1 & 2) or HDMI (1 & 2) connections are provided for high performance DVD 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 (L/(MONO)) the Rear Panel.
- ◆ Refer to the operating guide of your other electronic equipment for additional information on connecting your hook-up cables.
- ◆ Connect only 1 component (VCR, DVD player, camcorder, etc.) to each input jack.
- ◆ Your component outputs may be labeled Y, B-Y, and R-Y. In this case, connect the components B-Y output to the TV's PB input and the components R-Y output to the TV's PR input.
- ◆ Your component outputs may be labeled Y-CBCR. In this case, connect the components CB output to the TV's PB input and the components CR output to the TV's PR input.
- ◆ It may be necessary to adjust TINT to obtain optimum picture quality when using the Y-PBPR inputs. (See page 30).
- ◆ When using a HDMI input from a Set-Top-Box, it is recommended to use a 1080p, 1080i or 720p input signal.
- ◆ When HDMI input a 1080p signal, it is recommended that the length of the cable should be less than 5 meters.

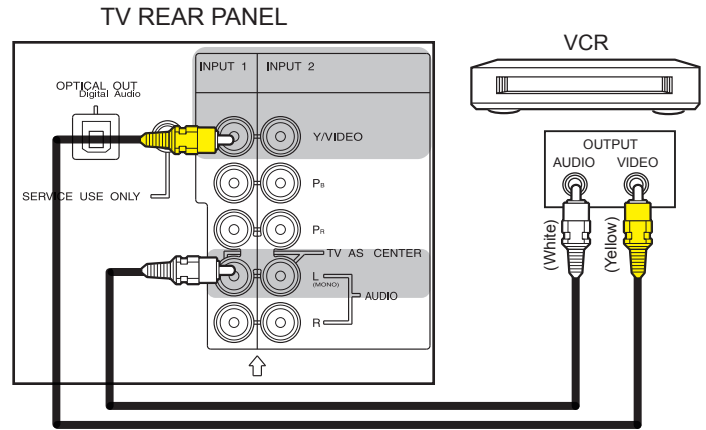
NOTES

- Completely insert all 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.
- Cable plugs are often color-coded. Match colors of plugs and terminals, i.e. connect red to red, white to white, etc.

Rear Panel Connections

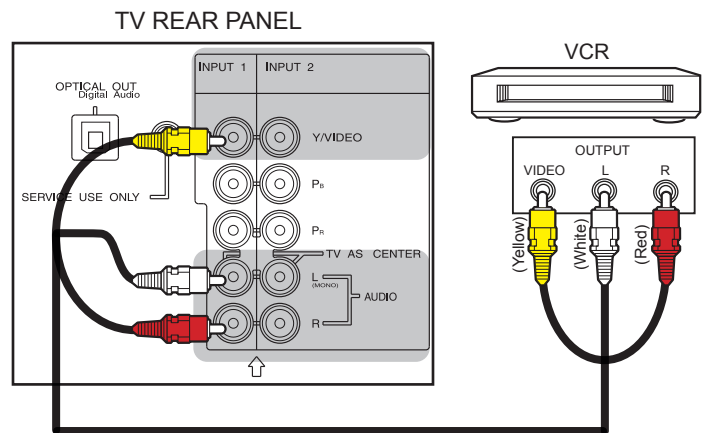
CONNECTING A VIDEO AND MONAURAL AUDIO SOURCE TO INPUT 1 or 2

1. Connect the VIDEO and AUDIO cable from the VIDEO and AUDIO OUT jack of the VCR to the INPUT 1 or 2 (VIDEO) and (MONO)/L(AUDIO) jack, as shown on the Rear Panel on the right.
2. Press the INPUT button, then select INPUT 1 or 2 from the INPUTS menu to view the program from the VCR.



CONNECTING A VIDEO AND STEREO AUDIO SOURCE TO INPUT 1 or 2

1. Connect the VIDEO and AUDIO cables from the VIDEO OUT and AUDIO OUT jacks of the VCR to the INPUT 1 or 2 (VIDEO) jacks. A VCR connection to Rear Panel Input 1 example is shown on the right.
2. Press the INPUT button, then select INPUT 1 or 2 from the INPUTS menu to view the program from the VCR.

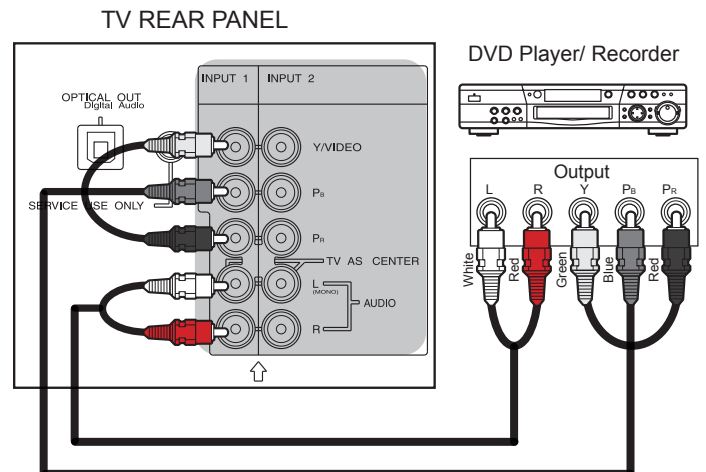


NOTE

When INPUT 1 or 2 are used, it is necessary to connect the composite video output of the device to the Y/VIDEO input jack of the TV.

CONNECTING A COMPONENT AND STEREO AUDIO SOURCE TO INPUT 1 or 2: YPBPR

1. Connect the Y, PB/CB, PR/CR and AUDIO cables from the Y, PB/CB, PR/CR OUT and AUDIO OUT jacks of the DVD PLAYER or HDTV Set-Top-Box to the INPUT 1 or 2 YPBPR and AUDIO jacks. A DVD connection to Rear Panel Input 2 example is shown on the right.
2. Press the INPUT button, then select INPUT 1 or 2 from the INPUTS menu to view the program from the DVD player or HDTV Set-Top Box.



NOTES

- 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.
- Cable plugs are often color-coded. Match colors of plugs and terminals, i.e. connect red to red, white to white, etc.
- To return to the last channel viewed, select CABLE or AIR from the INPUTS menu.

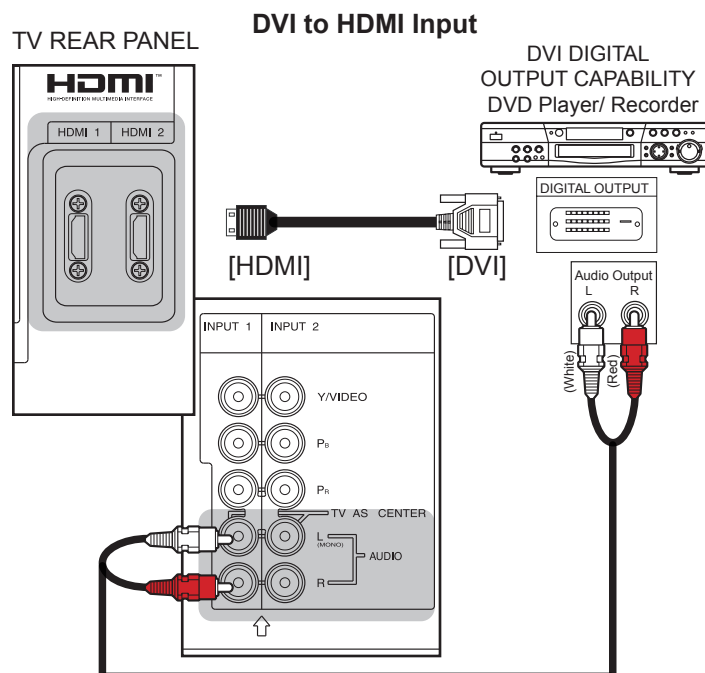
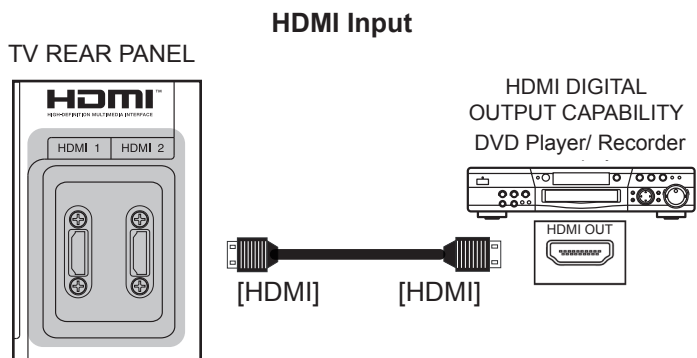
Rear Panel Connections

CONNECTING AN EQUIPMENT SOURCE WITH HDMI OR DVI CAPABILITY TO HDMI 1, HDMI 2

1. Connect the HDMI or DVI to HDMI connection cable from the output of the HDTV set top box or DVD player to the HDMI input as shown on the Rear panel right below figure.
2. With DVI output, connect the audio cables from the AUDIO OUT jack of the HDTV set top box or DVD player to the Rear Panel INPUT 1 or 2 AUDIO jacks as shown on the right.
3. Press the INPUT button, then select HDMI 1 or 2 to view the program from the HDTV SET-TOP BOX or DVD player.

NOTES

- 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.
- When using a DVI to HDMI cable, connect the Audio Out L and R cables at the same input (1, 2) as your HDMI input (1, 2).
- The HDMI input on HDMI 1, 2 and 3 contains the copy protection system called High-bandwidth Digital Content Protection (HDCP). HDCP is a cryptographic system that encrypts video signals when using HDMI connections to prevent illegal copying of video contents.
- HDMI is not a "NETWORK" technology. It establishes a one-way point-to-point connection for delivery of uncompressed video to a display.
- The connected digital output device controls the HDMI interface so proper set-up of device user settings determines final video appearance.

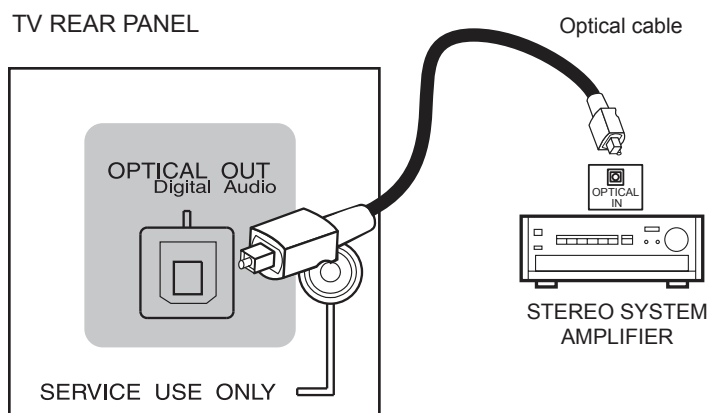


CONNECTING AN EXTERNAL AUDIO AMPLIFIER

To monitor the audio level of the Plasma TV to an external audio amplifier, connect the system as shown on the right. The "OPTICAL OUT" from the Rear Panel is a fixed output. The Volume of the amplifier is controlled by the amplifier, not by the Plasma Television.

The OPTICAL OUT terminal outputs all audio sources to equipment with Optical IN capability.

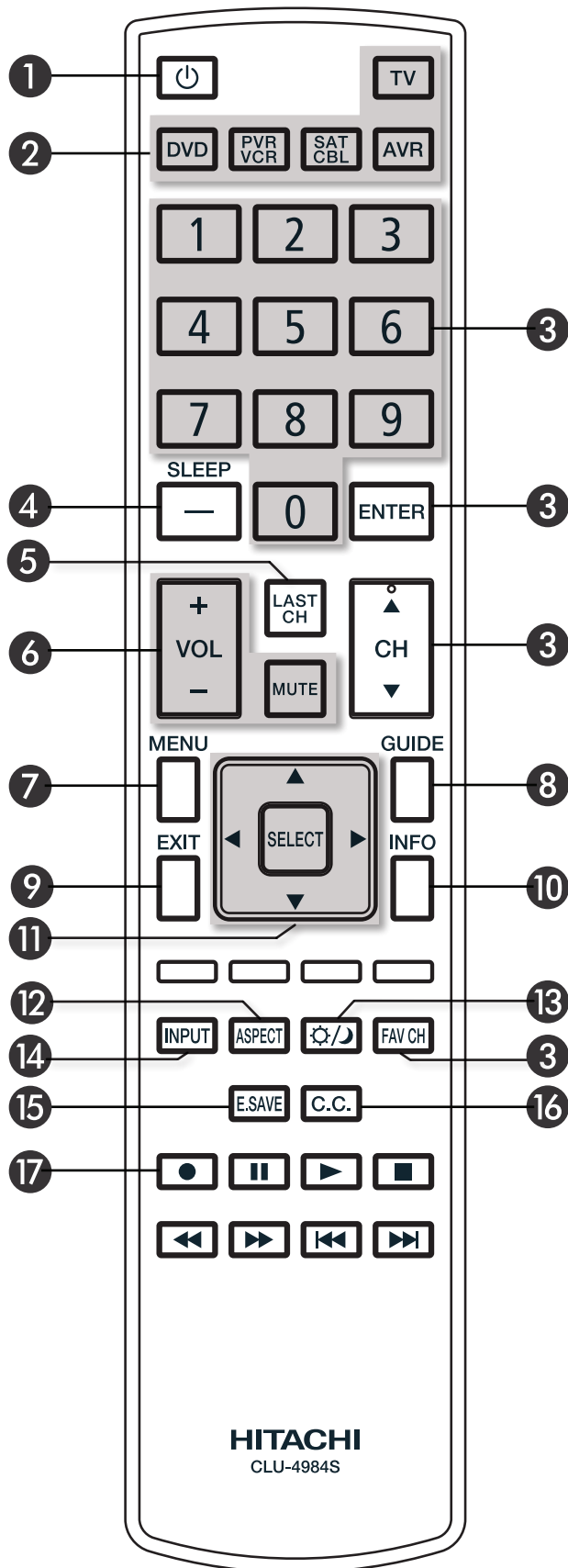
1. Connect an optical cable from the Optical out to the Optical input of a separate Stereo System Amplifier as shown on the Rear Panel on the right.



NOTES

- 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.
- Cable plugs are often color-coded. Match colors of plugs and terminals, i.e. connect red to red, white to white, etc.
- To return to the last channel viewed, select CABLE or AIR from the INPUTS menu.

The Remote Control



1 POWER button

Press this button to turn the TV set on or off when the remote is in TV mode.

2 DEVICE buttons

In addition to controlling all the functions on your HITACHI Plasma TV, the new remote control is designed to operate different types of VCRs, cable boxes, set-top-boxes, satellite receivers, DVD players, and other audio/video equipment with one touch. Basic operation keys are grouped together in one area.

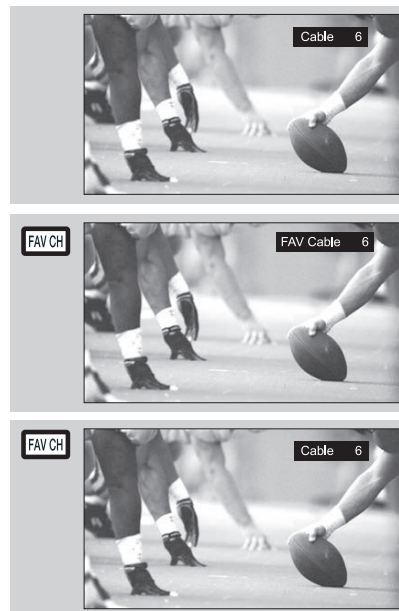
To operate your Plasma TV, select TV by pressing the TV button on the remote control. The TV mode indicator will blink, indicating that the remote will now control your television.

Repeat the same procedure for your DVD (press the DVD button), for your VCR/PVR (Personal Video Recorder) press the PVR/VCR button on the remote. For your cable box, set-top-box or satellite receiver (press the SAT/CBL button), for your Audio/Video System (press the AVR button). See pages 22~27 for instructions on how to program the remote to control your device.

3 CHANNEL SELECTOR / FAVORITE CHANNEL (FAV CH) / ENTER 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 press the ENTER button for the TV to tune. Channel selection may also be performed by CHANNEL (CH) UP (▲) or CHANNEL (CH) DOWN (▼).

Press the FAV CH button to switch to Favorite(FAV) channel mode. You will know you are in Favorite Channel mode when (FAV) is displayed and the displayed channel is GREEN. Press it again to return to your regular tuned channels. You can add any channel to your Favorite channel list by pressing and holding down the FAV CH button until the displayed channel turns from WHITE to highlighted GREEN. You can also delete a channel from your favorite channel list by pressing and holding down the FAV CH button until the displayed channel turns highlighted GREEN to WHITE.



How to Use the Remote to Control your TV

4 (-) DASH /Sleep Button

Use the (-) DASH button with the CHANNEL SELECTOR buttons to enter Digital Channels that have subchannel numbers indicated by (-) DASH (example 15-1). For TV mode only, press to Set the Sleep Timer from 30 minutes to 3 hours in 30 minutes increments.

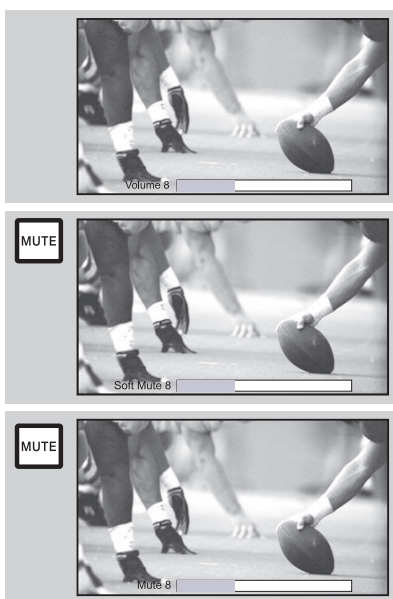
5 LAST CHANNEL button

Press this button to toggle between the current and last channel viewed.

6 VOLUME (VOL), MUTE button

Press the VOLUME button (+ or -) until you obtain the desired sound level.

To reduce the sound to one half of normal volume (SOFT MUTE) to answer the telephone, etc., press the MUTE button. Press the MUTE button again to turn the sound off completely (MUTE). To restore the sound, press the MUTE button one more time, or VOL UP (+).



Closed Captioning will display automatically when MUTE/SOFT MUTE is on and Closed Caption is set to AUTO (see page 40).

When the TV power is turned off at a volume level 31 or greater, the volume level will default to 30 when the TV is turned on. However, if it is set to a level 30 or less, the volume level will be at the level it was set when the TV is turned off.

7 MENU button

The MENU button will start the On-Screen Display.

8 GUIDE button

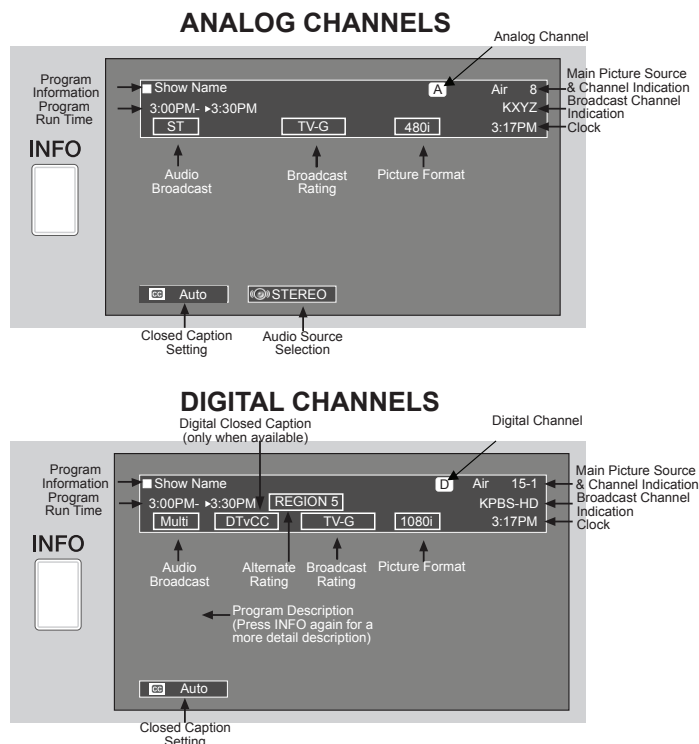
Press this button to access the TV Guide On Screen™ interactive display (see page 33). Press this button to access the Channel Guide of your Satellite receiver, Set Top Box or Cable Box while in SAT/CBL mode.

9 EXIT button

This button will exit all On-Screen Displays.

10 INFO button

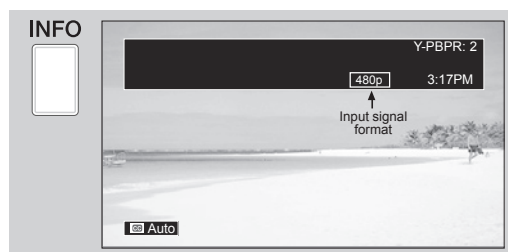
Press this button when you want to check the channel being received, the picture source, if the channel has stereo (ST) or second audio program (SAP), the time, CHANNEL ID and if the TIMER is set.



When an S-VIDEO Input is connected to INPUT 3



When a Component Video: Y-PbPr Input is connected to INPUT 2



NOTES

- Press the INFO button again or the EXIT button to return to normal viewing.
- The Aspect setting will not be shown if the channel is locked.
- Program Information and Program Run Time information can be displayed by Guide Listing data even if receiving analog channels.

11 CURSOR buttons/SELECT button

All the On-Screen Display features can be set or adjusted by using the CURSOR buttons and the SELECT button, except for numeric entries. Press the CURSOR buttons toward desired direction and press the SELECT button to select.

How to Use the Remote to Control your TV

12 ASPECT button

Press this button to quickly change the picture format ASPECT ratio. Depending on the input signal format received, the picture format ratio allows you to adjust the images through the following options. For Automatic aspect ratio adjustment depending on the input signal to fill the screen please refer to Auto Aspect function on page 31.

4:3 STANDARD

Use this aspect mode to display conventional (4:3) images. Side panels (gray areas) are placed to the left and right of the image to preserve the original aspect ratio of the source. Note: Use this mode for only 15% of your total viewing time to prevent uneven aging of the phosphors. Phosphors in the lighted area of the picture will age more rapidly than the gray areas.

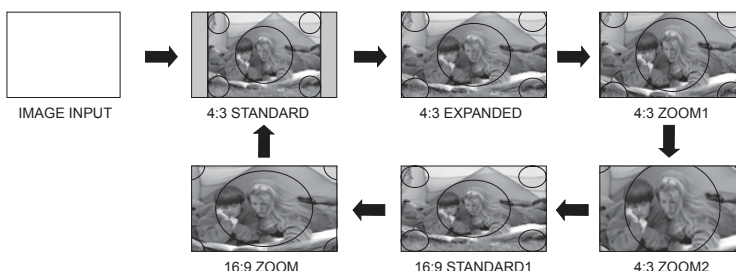
4:3 EXPANDED

Use this aspect mode to display conventional (4:3) sources by linearly increasing image expansion from the center towards the edges of the display area in order to fill it.

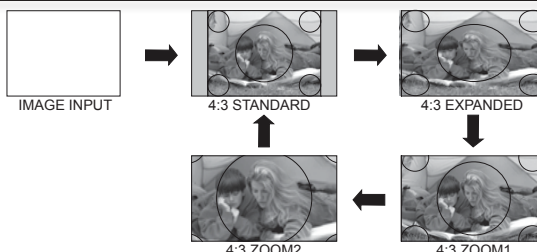
4:3 ZOOM1/ZOOM2

Use these aspect modes to zoom in on conventional (4:3) sources.

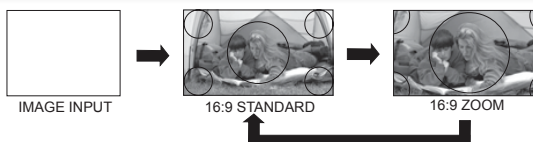
- Antenna-Analog Channel
- S-Video/Video Input (Auto Aspect: Off)
- HDMI-480i/480p Input (Auto Aspect: Off)
- Component-480i/480p Input (Auto Aspect: Off)



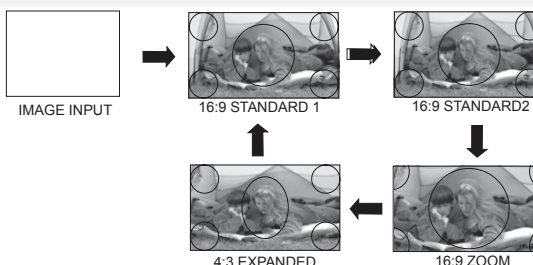
- Antenna-Digital Channel (4:3)
- S-Video/Video 4:3/Letter Input (Auto Aspect: On)
- HDMI-480i/480p 4:3/Letter Input (Auto Aspect: On)
- Component-480i/480p 4:3/Letter Input (Auto Aspect: On)



- S-Video/Video 16:9 Input (Auto Aspect: On)
- HDMI-480i/480p 16:9 Input (Auto Aspect: On)
- Component-480i/480p 16:9 Input (Auto Aspect: On)



- Antenna-Digital Channel (16:9)
- HDMI-720p/1080i/1080p Input
- Component-720p/1080i Input



NOTES

- Each input has a memory for the Aspect setting. Changing the aspect on one input will not affect the aspect settings on other inputs.
- Vertical position adjustments are directly available when you choose 4:3 EXPANDED/ZOOM1/ZOOM2 or 16:9 ZOOM aspect style (see also page 31).
- When displaying 16:9 STANDARD 2 it may appear lines at the edge of the picture this is normal operation of the TV.
- See page 57 for Aspect availability according to signal format in use.

How to Use the Remote to Control your TV

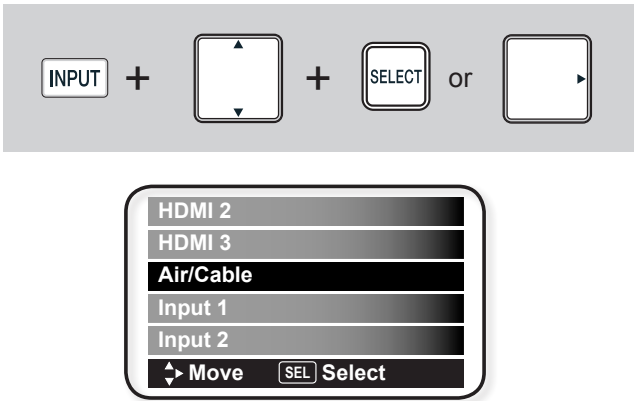
13 DAY/NIGHT button

Press this button to toggle between Dynamic, Day and Night picture mode settings. Select DYNAMIC for day time viewing with more brightness and contrast to compete with room light. Select DAY for automatic brightness and contrast adjustment. Select NIGHT for night time viewing with less brightness and contrast for a more detailed picture (see page 30 for settings changes).

NOTE For automatic DAY/NIGHT picture mode settings, see page 38.

14 INPUT button

When the remote control is in TV mode, press this button to access the INPUTS menu. Use the CURSOR and SELECT buttons to scroll and select the inputs that are being used. Pressing the INPUT button repeatedly will also cycle through the Inputs menu items. Then press the SELECT button or the CURSOR ► to select.



- AIR/CABLE** Select between Air or Cable signal.
- INPUT 1** Select to choose Input 1.
- INPUT 2** Select to choose Input 2.
- INPUT 3** Select to choose Side Input.
- HDMI 1** Select to choose HDMI 1 Input.
- HDMI 2** Select to choose HDMI 2 Input.
- HDMI 3** Select to choose Side HDMI Input.

15 E.SAVE (ENERGY SAVE) button

Use this button to choose power consumption reduction settings based on 3 levels (MIN, MEDIUM, MAX).

16 CLOSED CAPTIONS (CC) button

Use this button to display the dialogue, narration, and/or sound effects of a television program or home video which are displayed on the TV screen when available. Your local TV program guide denotes these programs as or .

17 RECORD button

Press to record programs when the remote is in PVR/VCR mode.

NOTE For the Record button there is a feature for safety; so this key has to be pressed twice in order to start recording.

REMOTE CONTROL

How to Use the Remote to Control your AV Equipment

OPERATING THE PRECODED FUNCTIONS FOR YOUR AV EQUIPMENT.

The new remote control is designed to operate different types of VCRs, cable boxes, set-top-boxes, satellite receivers, DVD players, and other audio/video equipment. You must first program the remote to match the remote system of your AV equipment (refer to pages 26~27 for a preprogrammed code number).

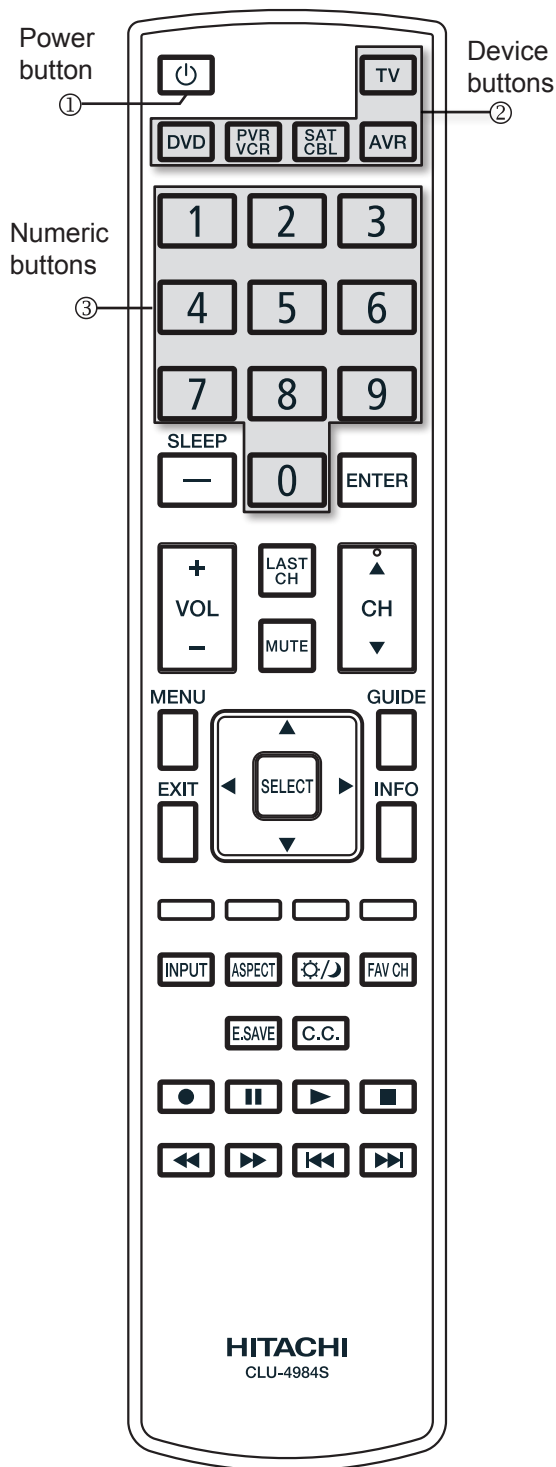
AV COMPONENT CONTROL SETUP PROCEDURE

1. Turn on your AV Component.
2. Select the desired mode: DVD, PVR/VCR, SAT/CBL or AVR by pressing the corresponding button.
3. Hold down the device button (DVD, PVR/VCR, SAT/CBL or AVR) on the remote and enter the four digit preset code that matches your device as shown on pages 26~27.
4. Release the device button.
5. If done correctly, the device LED indicator will blink 3 times to confirm proper setup.
6. The remote will now control the desired device.

SETUP EXAMPLE (Hitachi Cable Box with precode 0003)

1. Turn ON your Cable box.
2. Select Cable mode by using your SAT/CBL button to position the LED indicator on SAT/CBL.
3. Hold down the SAT/CBL button on the remote and press the numbers 0, 0, 0 and 3.
4. Release the SAT/CBL button.
5. The indicator light will flash 3 times if the code was accepted.
6. Aim the remote at the cable box and press the POWER button. The remote will turn off your cable box when the correct four digit preset code is entered. When this occurs, the remote control is programmed for your cable box. If the cable box does not turn off, try a different four digit preset code.
7. The remote will now control your Cable box.

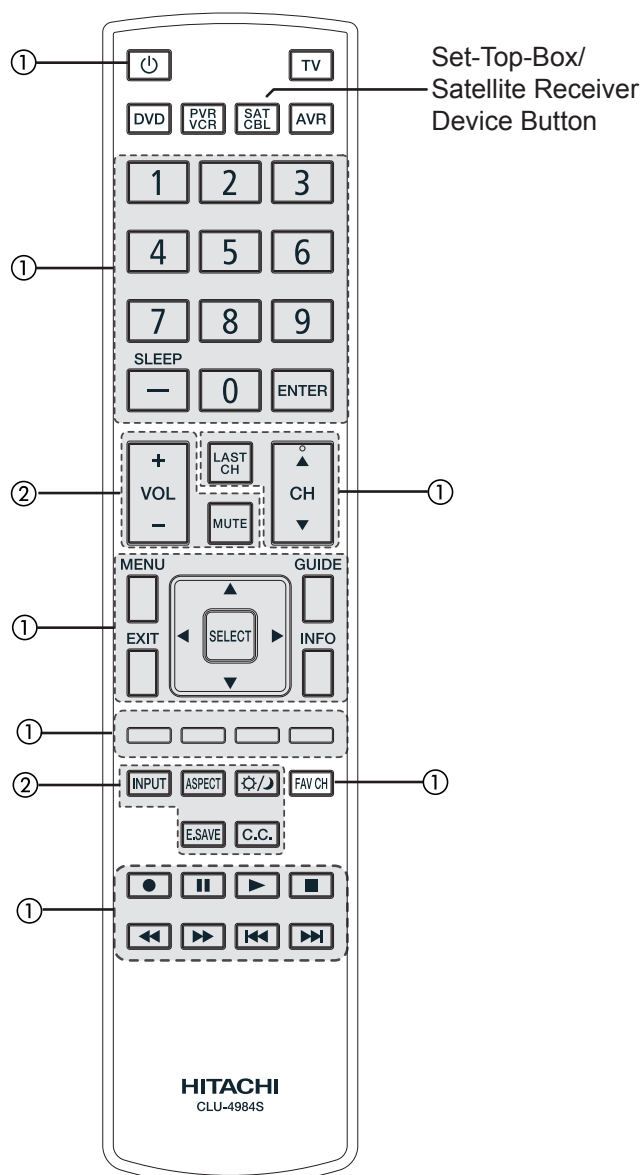
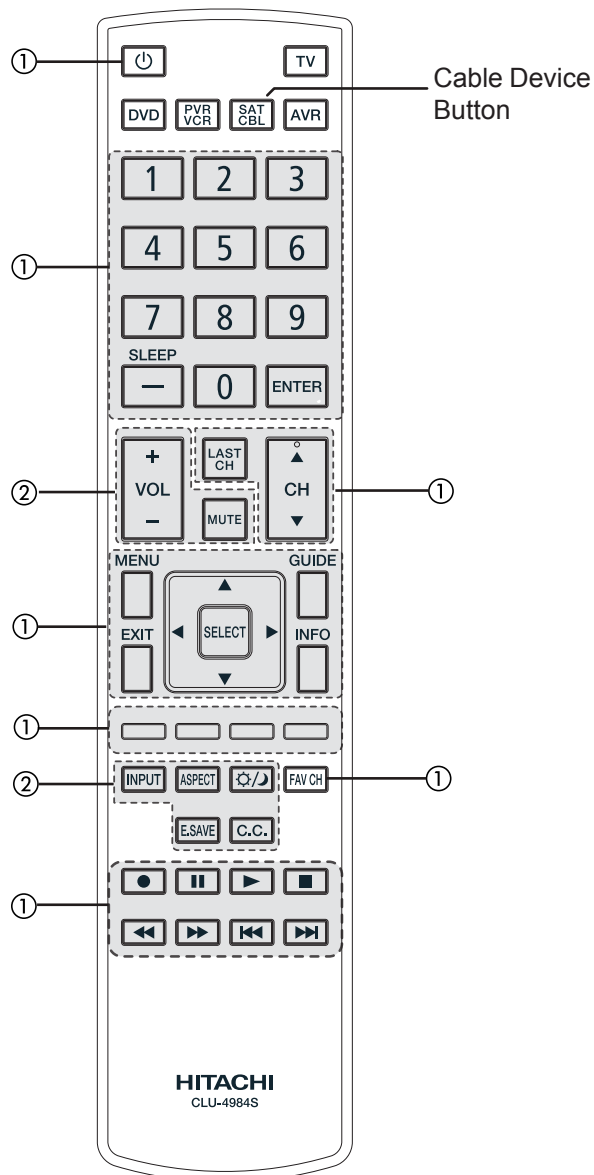
Repeat the same procedure for your set-top-box or satellite receiver (select SAT/CBL), your DVD (select DVD), your VCR/PVR(select VCR/PVR), or your AVR (select AVR).



NOTES

- If your AV component cannot be operated after performing the above procedures, your AV component code has not been preprogrammed into the remote.
- In the unlikely event that your AV component cannot be operated after performing the above procedures, please consult your AV component operating guide.
- The remote control will remember the codes you have programmed even after the batteries are removed from the remote control. To reset all programmed codes to factory default place remote control in TV mode, then press and hold TV mode key and enter "9", "8", "1" in sequence.

How to Use the Remote to Control your AV Equipment



MY CABLE BOX CODE IS: _____

NOTE

Refer to instruction manual of the Cable Box for operation of the buttons exclusively for the Cable Box.

① PRECODED CABLE BOX buttons

These buttons transmit the chosen precoded cable codes :

- Power
- Cursor & Select
- Number PAD
- Menu
- Info
- Enter
- Exit
- Channel Up & Down
- Dash (-)
- Guide
- Last CH
- Fav CH
- Play, Stop, Pause, RWD, FWD, Skip FWD, Skip RWD, Record.
- Color Buttons

② EXCLUSIVE TV buttons

These buttons are for operating the TV :

- Day/Night
- CC
- Input
- Aspect
- Vol Up & Down
- Mute
- E. Save

MY SET-TOP-BOX/SATELLITE RECEIVER CODE IS: _____

NOTE

Refer to instruction manual of the Set-Top-Box/Satellite Receiver for operation of the buttons exclusively for the Set-Top-Box/Satellite Receiver.

① PRECODED SET-TOP BOX/SATELLITE buttons

These buttons transmit the chosen precoded Set-Top-Box/Satellite Receiver codes :

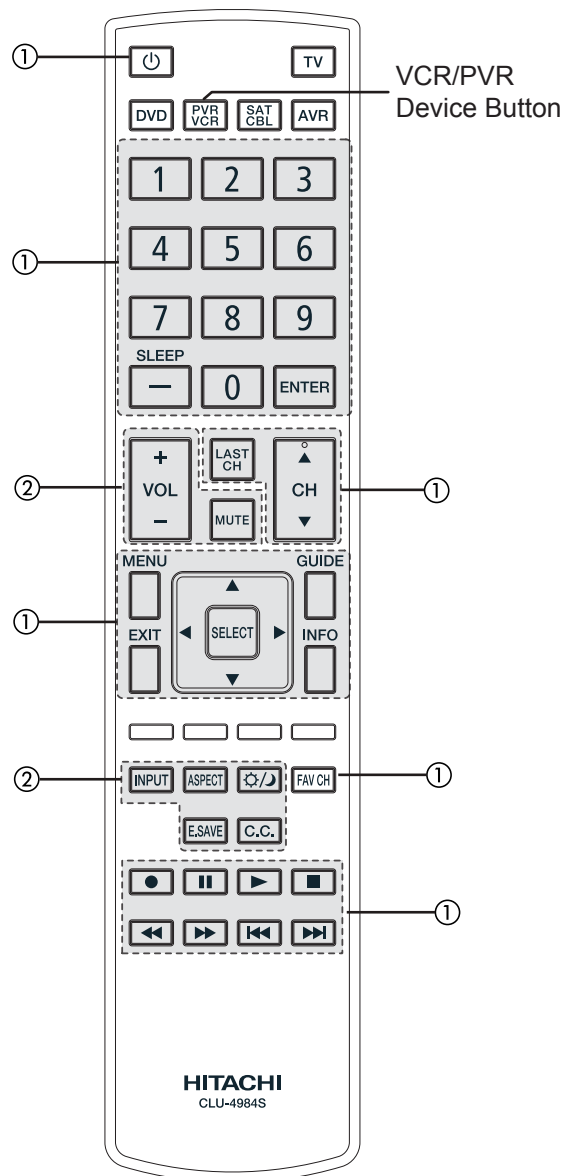
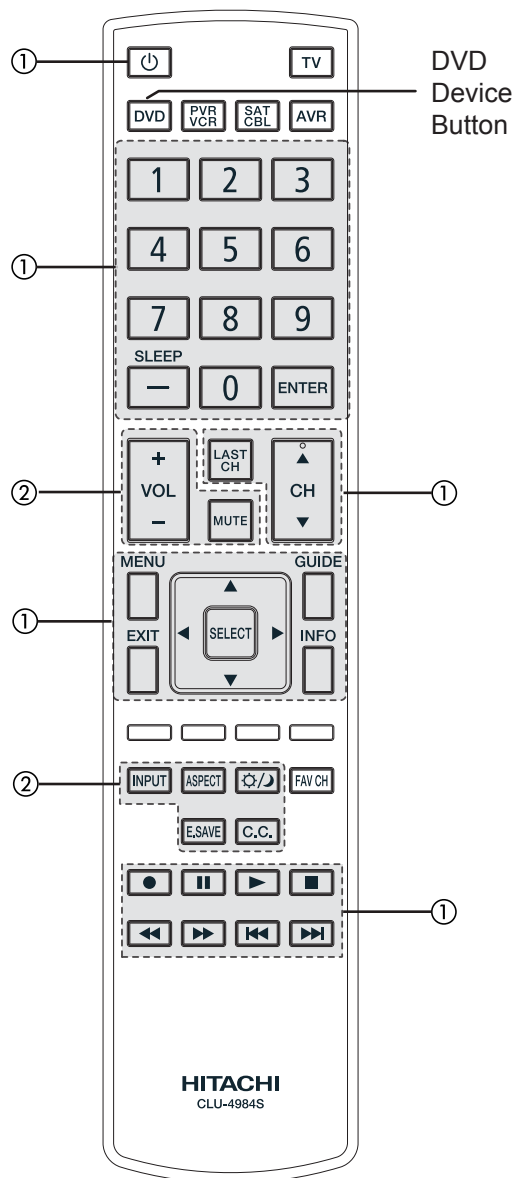
- Power
- Cursor & Select
- Number PAD
- Menu
- Info
- Enter
- Exit
- Channel Up & Down
- Dash (-)
- Guide
- Last CH
- Fav CH
- Play, Stop, Pause, RWD, FWD, Skip FWD, Skip RWD, Record.
- Color Buttons

② EXCLUSIVE TV buttons

These buttons are for operating the TV :

- Day/Night
- CC
- Input
- Aspect
- Vol Up & Down
- Mute
- E. Save

How to Use the Remote to Control your AV Equipment



MY DVD PLAYER CODE IS: _____

MY VCR/PVR CODE IS: _____

NOTE

Refer to instruction manual of the DVD Player for operation of the buttons exclusively for the DVD Player.

NOTE

Refer to instruction manual of the VCR/PVR for operation of the buttons exclusively for the VCR/PVR.

① PRECODED DVD buttons

These buttons transmit the chosen precoded DVD codes :

-Power	-Number PAD	-Play, Stop, Pause, RWD, FWD, Skip FWD, Skip FWD
-Menu	-Info	
-Cursor & Select	-Channel Up & Down	
-Exit		-Record
-Dash	-Enter	Guide

② EXCLUSIVE TV buttons

These buttons are for operating the TV :

-Day/Night	-CC	-Input
-Aspect	-Vol Up & Down	-Mute
-E. Save		

① PRECODED VCR/PVR buttons

These buttons transmit the chosen precoded VCR/PVR codes :

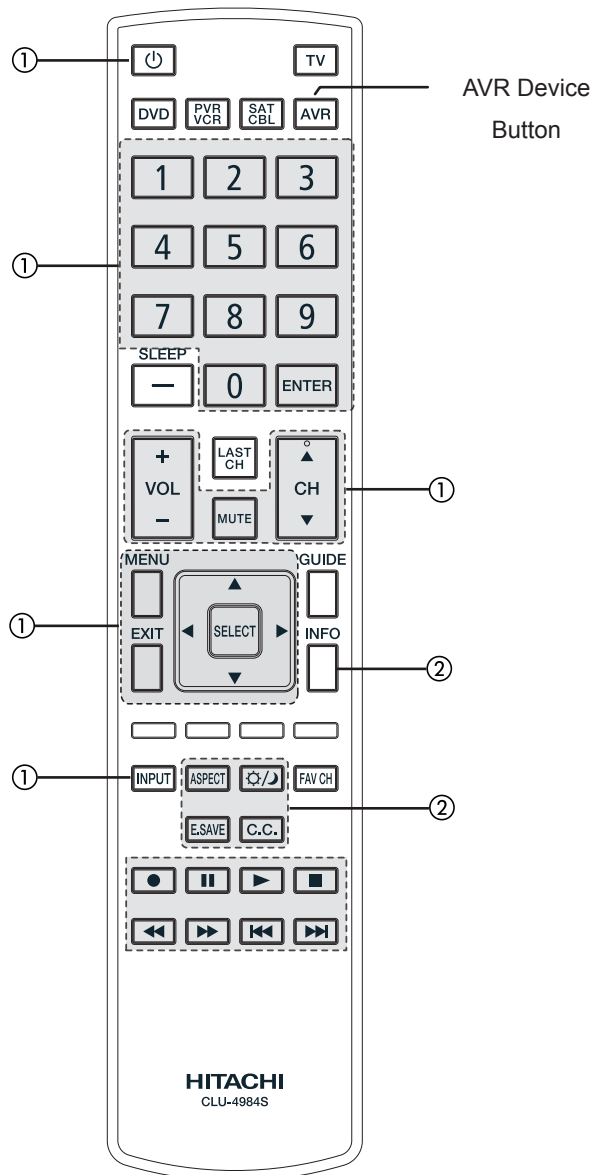
-Power	-Cursor & Select	-Enter
-Menu	-Channel Up & Down	-Dash(-)
-Exit	-Number PAD	-Play, Pause, Stop, FWD, Skip FWD
-Info	-Last CH	
-Record	-RWD, Skip RWD	
-FAV CH (Only for VCR)		

② EXCLUSIVE TV buttons

These buttons are for operating the TV :

-Day/Night	-CC	-Input
-Aspect	-Vol Up & Down	-Mute
-E.Save		

How to Use the Remote to Control your AV Equipment



MY AUDIO/VIDEO RECEIVER (AVR)

CODE IS: _____

NOTE

Refer to the instruction manual of the AVR for operation of the buttons exclusively for the AVR.

① PRECODED AVR buttons

These buttons transmit the chosen precoded AVR codes :

- Power
- Cursor & Select
- Vol Up & Down
- Menu
- Channel Up & Down
- Mute
- Exit
- Number PAD
- Play, Pause, Stop, RWD, Skip RWD, FWD, Skip FWD, -Enter
- Input
- Record

② EXCLUSIVE TV buttons

These buttons are for operating the TV :

- Day/Night
- CC
- Aspect
- E.Save
- Info

Remote Control Codes

CABLE Brand	CODES	CROSSDIGITAL	1109	ADVENTURA	0037,0240,0000	INSTANT	0035	QUARTZ	0035,0047,0046
A-MARK	0008,0144	DIRECTV	1377,0392,0566	ADYSON	0072	REPLAY		QUASAR	0035,0162,0002
ABC	0237,0003,0008		0639,1639,1142	AIKO	0278	ITT NOKIA	0240,0041		1162
ACCUPHASE	0003		0247,0749,1749	AIWA	0037,0000,0124	JANEIL	0240	RADIO SHACK	0035,0162,0037
ACORN	0237		0819,1856,1076	AKAI	0041,0175	JENSEN	0067,0041		0048,0047,0240
ACTION	0237		1108,0099,1109	ALBA	0209,0072,0278	JVC	0067,0041,1162		0000,0104,0046
			1392,1414,1442	ALIENWARE	1972	KEC	0037,0278	RADIX	1037,1162
			1443,1609,1640	ALLEGRO	0039	KENWOOD	0067,0041,0038	RANDEX	0037
ACTIVE	0237			AMERICA ACTION	0278		0046	RCA	0037
ADB	2092,2586	DISH	1505,1005,0775	AMERICAN HIGH	0035,0081	KLH	0072		0060,0035,0048
ARCHER	0237	NETWORK	1170,1775	AMSTRAD	0000	KODAK	0035,0037		0240,0045,0000
BCC	0276	SYSTEM		ASHA	0240	KTV	0000		0042,0065,0105
BRITISH	0003	DISHPRO	1505,1005,0775	ASTRA	0035,0081	LG	0037,0240,0038		0880
TELECOM			1775	AUDIOVOX	0000		1037	REALISTIC	0035,0162,0037
CENTURY	0008	ECHOSTAR	1505,1005,0775	AVIS	0000,0072	LINKSYS	1972		0048,0047,0240
CLIFF	1187,2187		1170,1775	BEAUMARK	0240	LLOYD'S	0240,0000,0072		0000,0104,0121
DIGEO	0637	EXPRESSVU	0775,1775	BELL & HOWELL	0035,0048,0039		0038		0278,0046,0065
DIGI	0476	FORTEC STAR	1821		0000,0104,0046	LOEWE	0081		1162
DIRECTOR	0637	FUNAI	1377	BROKSONIC	0479	LOGIK	0240,0000,0072	REPLAY TV	0614,0616
DUMONT	0276	GE	0392,0566		0184,0121,0209	LUMATRON	0278	RICAVISION	1972
FOSGATE	0144	GENERAL	0869	CALIX	0002,0479	LUXOR	0046	RUNCO	0039
GE	0476,0810,0276	INSTRUMENTS		CANDLE	0037,0038		0067	SAMSUNG	0060,0240,0045
GENERAL	0003	GOI	0775,1775	CANON	0035	M ELECTRONIC	0240		0000,0038,0432
INSTRUMENT	0003	HITACHI	0749,0819,1250	CAPEHART	0002	MAGNASONIC	0037,0240,0000	SAMTRON	0739
GIBRALTER	0144	HOUSTON	0775	CARRERA	0240		0072,0278	SANKY	0240
GOLDSTAR	0003,0008	HTS	0775,1775	CARVER	0035,0081	MAGNAVOX	0035,0037,0048	SANSUI	0048,0039
HITACHI	0476,0810	HUGHES	1142,0749,1749	CCE	0072,0278		0039,0081,0240		0240,0000,0067
INSIGHT	0476,0810,0276	NETWORK	1442,1443	CINERAL	0278		0000,0563,0618		0209,0041,0072
JERROLD	0003	SYSTEMS		CITIZEN	0035,0037,0240	MAGNIN	1593	SANYO	0002,0479
	0003	INNOVA	0099		0000,0209,0278	MARANTZ	0240		0047,0240,0000
MEMOREX	0000	JERROLD	0869	CLASSIC	0479	MARTA	0035,0081,0038	SCOTT	0104,0046,0159
DAIWA	0003	LG	0775,1170,1775	COLORTYME	0037	MATSUI	0037		0184,0045,0121
MITSUBISHI	1376,0476,0810	MAGNAVOX	0722	COLT	0060,0035,0045	MATSUSHITA	0037,0209	SEARS	0043
MOTOROLA	0276,1187,1254	MCINTOSH	0869	CRAIG	0278		0035,0162,0081		0060,0035,0162
	1106	MITSUBISHI	0749		0000,0072	MEDIA CENTER	1162		0037,0048,0039
NOVA VISION	0008	MOTOROLA	0869,0856	CRITERION	0072	MEI	0035		0047,0033,0045
NOVAPLEX	0008	NETSAT	0099	CROSLEY	0000,0072	MEMOREX	0035,0162,0037		0000,0042,0104
NSC	1877,0877,0237	NEXT LEVEL	0869	CROWN	0035,0081,0000		0048,0039,0047	SHARP	0067,0043,0209
PACE	0008	PANASONIC	0247,0701	CURTIS MATHES	0072,0278		0240,0000,0104		0041,0072,0046
PANASONIC	0000,0008,0144	PANSAT	1807		0278,0432		0046,0479,1037	SHINTOM	0000,0065,0848
PANTHER	0637	PHILIPS	1142,0749,1749	CYBERNEX	0240	METZ	0037		0039,0240,0000
PARAGON	0000,0008,0525		0775,0819,1076	CYBERPOWER	1972	MGA	0060,0240,0043	SHOGUN	0072
PENNEY	0000,0637		0722,0099,1442	DAEWOO	0037,0045,0278	MGN	0240	SIEMENS	0037,0104
PHILIPS	1305,0317	PIONEER	1142,1442	DAYTRON	0046	TECHNOLOGY		SIGNATURE	0060,0035,0037
PIONEER	1877,0877,0144	PRIMESTAR	0869	DELL	0037,0278	MICROSOFT	1972		0048,0000,0046
	0533	PROSCAN	0392,0566	DENON	1972	MIND	0240	SINGER	0065,0479
PULSAR	0000	RADIO SHACK	0566,0775,0869	DERWENT	0081,0042	MINOLTA	0042,0105	SONIC BLUE	0037,0240,0072
QUASAR	0000	RCA	0392,0566,1142	DIRECTV	0041	MITSUBISHI	0060,0048,0047	SONOGRAPHIE	0046
REGAL	0276		0775,0855,0143	DUAL	0739		0000,0042,0067	SONY	0033,0000,0067
RUNCO	0000	SAMSUNG	1392,1442	DURABRAND	0000		0043,0041		0046,0636,1032
SAMSUNG	0003,0144		1377,1142,1276	DYNATECH	0240,0000	MOTOROLA	0035,0048		1972
SASKTEL	1737		1108,1109,1442	ELECTROHOME	0000,0043,0209	MOVIE WALKER	0072	SOUNDMASTER	0000
SCIENTIFIC	1877,0877,0477	SKY	0856,0099	EMERALD	0037	MTC	0240,0000,0072	STACK 9	1972
ATLANTA	0237,0003,0000	SONY	0639,1639,1640	EMEREX	0184,0121	MTX	0000	STS	0042,0105
	0008	STAR CHOICE	0869	EMERSON	0032	MULTITECH	0039,0000,0072	SV2000	0000,0072
SONY	1006	STAR TRAK	0869		0209,0002,0278	NAD	0240,0104	SYVA	0000
SPRUCER	0144	THOMSON	0392,0566	FISHER	0479,1593	NEC	0104,0067,0041	SYLVANIA	0035,0081,0000
STARCOM	0003	TIVO	1142,1442,1443	FUJI	0039,0047,0000	NEW TECH	0072	SYMPHONIC	0240,0000,0002
STARCOM	0003	TOSHIBA	0749,1749,0790	FUJITSU	0104,0046	NIKKO	0037,0278		1593
STORM	0637	ULTIMATE TV	1392,1640	FUNAI	0035,0033	NIKKODO	0037,0278	SYSTEMAX	1972
SUPERCABLE	0276	ULTRASAT	1806		0000	NISHI	0240	TAGAR SYSTEMS	0000,0104
TORX	0003	UNIDEN	0722	GARRARD	0037,0000,0072	NIVEUS MEDIA	1972	TANDY	0037
TOSHIBA	0000	VOOM	0869	GATEWAY	0278,1593	NOBLEX	0240	TASHIKO	0048,0081,0000
UNITED CABLE	0276,0003	ZENITH	0856,1856,1810	GE	0000	NORTHGATE	1972	TATUNG	0067,0041
US	0276,0003,0008				0060,0035,0048	OLYMPUS	0035,0162,0104	TEAC	0000,0067,0041
ELECTRONICS	0000	SAT/TVR		GEMINI	0240,0000,0065	ONKYO	0222	TECHNICS	0035,0162,0037
VIDEOWAY	0000	COMBO		GENEXXA	0060	OPTIMUS	1062,0035,0162		0000
ZENITH	0000,0525	BELL	0775,1170	GO VIDEO	0037,0000,0278		0037,0048,0047	TEKNIKA	0035,0037,0000
		EXPRESSVU	1377,0392,0639		0240,0432,0526	ORION	0432,1048,1162	TELECODER	0240
		DIRECT TV	1392,1442,1443	GOLDSTAR	0614		0184,0240,0000	TELEFUNKEN	0041
							0104,0121,0209	TEVION	0479
				GOODMANS	0000,0278,0038	PANAMA	0002,0278,0479	THOMAS	0000,0002
					0037,0081,0000	PANASONIC	0035	THOMSON	0060,0041
					0722,0278		1062,0035,0162	TISONIC	0278
					0000		0000,0225,0614	TIVO	0618,0636,0739
				GRADIENTE	0081,0042	PENNEY	0035,0162,0037		1337
				GRUNDIG	0081		0047,0081,0240	TMK	0240,0000
				HARLEY DAVISON	0000		0000,0042,0067	TNIX	0037
				HARMAN/	0081,0038		0038	TOCOM	0240
				KARDON		PENTAX	0042,0065,0105	TOSHIBA	0240,0045,0000
				HARVARD	0072	PHILCO	0035,0081,0000		0043,0209,0041
				HARWOOD	0072		0209,0479		1008,1972,1988
				HEADQUARTER	0046	PHILIPS	0035,0162,0048	TOSONIC	0037,0240
				HEWLETT	1972		0081,0045,0000	TOTEVISION	0278
				PACKARD			0209,0616,0618	TOUCH	0037
				HI-Q	0035,0047,0000	PILOT	0739,1081,1181	TRIX	0045,0278
				HITACHI	0035,0037,0045	PIONEER	0037	UNITECH	0240
					0000,0042,0041		0162,0081,0042	VECTOR	0045
				HOWARD	0065,0105		0067,1337	VECTOR	0184,0038
				COMPUTERS	1972	POLK AUDIO	0081	RESEARCH	
				HP	0042,0739	PORTLAND	0278	VEXTRA	0072
				HUGHES		PRESDIAN	1593	VICTOR	0067,0041
				NETWORK		PROFITRONIC	0240	VIDEO	0045
				SYSTEMS		PROSCAN	0060	CONCEPTS	
				HUMAX	0739,1797,1988	PROTEC	0000,0072	VIDEOMAGIC	0037
				HUSH	1972	PROTECH	0072	VIDEOSONIC	0240,0000,0072
				HYTEK	0047,0000,0072	PULSAR	0039,0240,0278	VIEWSONIC	1972
				IBUYPOWER	1972	PULSER	0240	VILLAIN	0000
						QUARTER	0046	VOODOO	1972

Remote Control Codes

WARDS	0060,0035,0037 0048,0047,0081 0033,0240,0045 0000,0042,0043 0041,0072,0038 0479,0065,0046 0000,0209,0072 0278,0479
WHITE	0209,0002,0479
WESTINGHOUSE	0035,0240,0000 0072
WORLD	0041,0038
XR-100	0037,0039,0033 0000,0209,0041 0278,0479,1139 1972
YAMAHA	
ZENITH	
ZT GROUP	

PVR Brand	CODES
ABS	1972
ALIENWARE	1972
CYBERPOWER	1972
DELL	1972
DIRECTV	0739
GATEWAY	1972
GO VIDEO	0614
HEWLETT PACKARD	1972
HOWARD COMPUTERS	1972
HP	1972
HUGHES NETWORK SYSTEMS	0739
HUMAX	0739,1797,1988
HUSH	1972
IBUYPOWER	192
LINKSYS	1972
MEDIA CENTER PC	1972
MICROSOFT	1972
MIND	1972
NIVEUS MEDIA	1972
NORTHGATE	1972
PANASONIC	0614,0616
PHILIPS	0618,0739
PIONEER	1337
RCA	0880
REPLAY TV	0614,0616
SAMSUNG	0739
SONIC BLUE	0614,0616
SONY	0636,1972
STACK 9	1972
SYSTEMAX	1972
TAGAR	1972
SYSTEMS	
TIVO	0618,0636,0739 1337
TOSHIBA	1008,1972,1988
TOUCH	1972
VIEWSONIC	1972
VOODOO	1972
ZT GROUP	1972

DBS/PVR COMBO	CODES
DIRECTV	0739
HUGHES	0739
NETWORK SYSTEMS	
PHILIPS	0739
SAMSUNG	0739
TIVO	0739

DVD/PVR COMBO	CODES
HUMAX	1797,1988
PIONEER	1337
RCA	0880
SYLVANIA	0000
TIVO	1337
TOSHIBA	1008,1988

DVD Brand	CODES
3D LAB	0503,0539
ACCURIAN	0675,1416
ACOUSTIC SOLUTIONS	0730
ADCOM	1094
AFREEY	0698
AIWA	0641
AKAI	0695,0705,0770 1089
ALBA	0672
ALCO	0790
ALLEGRO	0869

AMPHION	0872
MEDIA WORKS	
AMW	0872
APEX DIGITAL	0533,0672,1020 1056,1061
ARRGO	1023
ASPIRE	1168
DIGITAL	
AUDIOVOX	0790
AWA	0730
B & K	0655,0662
BBK	1224
BEL CANTO	1571
DESIGN	
BLUE PARADE	0571
BLUE SKY	0695
BROKSONIC	0695
CALIFORNIA	0490
AUDIO LABS	
CELESTIAL	1020
CENTREX	0672
CINEA	0831
CINEVISION	0876,0833,0869 1003,0695,1277 1587,2116
CITIZEN	
CLAIRTONE	0571
COBY	0778,0852,1077 1086,1107,1165 1177,1351
CRAIG	0831
CREATIVE	0503,0539
CURTIS	1087
MATHES	
CYBERHOME	0816,0874,1023 1024,1129,1502 1537
CYTRON	0705
DAEWOO	0784,0705,0770 0833,0869,1169 1172,1234,1242
DANSAL	0770
DAYTEK	0872
DECCA	0770
DENON	0490,0634
DENVER	0778
DIGITREX	0672
DISNEY	0675,1270
DI VIDO	0705
DUAL	0675
DURABRAND	1127
DVD2000	0521
EMERSON	1003,2116
ENTERPRISE	0591,0675
ENTIVO	0503,0539
ENZER	0770
FISHER	1919
FUNAI	0675
GATEWAY	1073,1077,1158
GE	0522,0815
GO VIDEO	0573,0744,0715 0741,0783,0833 0869,1044,1075 1099,1144,1158 1304,1730 0741,0869
GOLDSTAR	0790
GOODMANS	0769
GPX	0490
GRADIENTE	0539,0705
GRUNDIG	0582,0702
HARMAN/ KARDON	0831
HELLO KITTY	0573,0664,1919
HITACHI	0672
HITEKER	2095
INSIGNIA	0571,0627
INTEGRA	0783
IRT	0702
JBL	0695
JMB	1423
JSI	0558,0623,0867 1164
JVC	1049,1051
JWIN	0790
KAWASAKI	0490,0534
KENWOOD	0790,1020,1149 0533
KLH	0711,0721
KLOSS	0769,1061,1423 0627
KONKA	1533
LAISONIC	1127
LECSON	0591,0741,0869
LENOXX	
LG	

LITEON	1058,1158,1416 1440
LOEWE	0741
LOGIX	0783
MAGNASONIC	0675
MAGNAVOX	0503,0539,0646 0675,1354,1506 1159
MALATA	0503,0539,0646 0675,1354,1506 1533,1273
MARANTZ	0695,0831,1270 2213
MCINTOSH	0522,2083
MEMOREX	0752
MICROSOFT	1521,0521
MINATO	0730
MITSUBISHI	0894
MUSTEK	0741
MYRAD	0770
NAD	0785,0869
NAIKO	1402
NEC	1051
NEXXTECH	1003,0872,1107 1265
NINTAUS	0503,0627,1769 0575,1224,1525 2185
NORCENT	0571
ONKYO	0672,0852 0503,0490,0571 0703,1641,1762 0675
OPPO	0503,0539,0646 0675,1267,1340 1354,2056,2084 1024
OPTIMUS	0525,0571,0142 0631,1571
PALSONIC	1020,1061,1086 0539
PANASONIC	0770
PHILCO	0675
PHILIPS	0503,0539,0646 0675,1267,1340 1354,2056,2084 1024
PIANODISC	0525,0571,0142 0631,1571
PIONEER	1020,1061,1086 0539
POLAROID	0770
POLK AUDIO	0675
PORTLAND	2126,2127
PRESIDIAN	0672
PRIMA	0522
PROCEED	0778
PROSCAN	0741
PROVISION	0571
RADIONETTE	0522,0571,0790 0822,1769
RADIO SHACK	0571
RCA	0752
REALISTIC	0869
REOC	1360
RIO	0623,1178
RJTECH	0698,0752
ROTEL	0490,0573,0744 0199,0820,1044 1075,2069
SAMPO	0695
SAMSUNG	0675,0695,0873 1919
SANSUI	0783
SANYO	0752
SCHNEIDER	1158
SCHWAIGER	0630,0675,0752 1256
SENSORY SCIENCE	0633,0770,1043 1077
SHARP	0533
SHERWOOD	0784
SHINSONIC	0730
SLIM ART	0573,0715,0783 0869,1099
SM ELECTRONIC	0533,1533,0864 1033,1070,1431 1516,1536
SONIC BLUE	0675
SONY	0675
SYLVANIA	0894
SYMPHONIC	0770
TAG MCLAREN	0571,0790 0490,0703
TATUNG	0770
TEAC	0770
TECHNICS	0730
TECHNIKA	0571
TECHSONIC	0522
THETA DIGITAL	1503
THOMSON	0503,0573,0539 0695,1154,1503 1608,1769 0800,0803
TIVO	0770
TOSHIBA	0730
TREDEX	0591
UNIMAX	0503,0539
UNITED	1064,1226
UNIVERSUM	0790
URBAN CONCEPTS	1064,1226
V	
VENTURER	
VIZIO	

VOCOPRO	1360
XBOX	0522,2083
YAMAHA	0490,0539,0545 0497
YAMAKAWA	0872
ZENITH	0503,0591,0741 0869
ZEUS	0784
ZOECE	1265

BLU-RAY DISC	CODES
LG	0741
PANASONIC	1641
PHILIPS	2084
PIONEER	0142
SAMSUNG	0199
SONY	1516

DVD/PVR COMBO	CODES
GO VIDEO	1730
PANASONIC	0490
PHILIPS	1340
PIONEER	0631
RCA	0522
SHARP	1256
SONY	1033,1070,1536
SYLVANIA	0675
TOSHIBA	1503

HD-DVD	CODES
LG	0741
MICROSOFT	2083
ONKYO	1769
RCA	1769
TOSHIBA	1769
XBOX	2083

AUDIO RECEIVER Brand	CODES
AIWA	1405,0189,0121 1243,1388,1641
ALCO	1390
ANAM	1609
APEX DIGITAL	1774
ARCAM	1189
AUDIOTRONIC	1189
AUDIOVOX	1390
B & K	0820,0840
BOSE	0639,1253,1933 1602
BRIX	0189
CAIRN	1189,0189,0121 0014
CARVER	1414
CURTIS MATHES	1360,0121,1142 1306
DELPHI	2026
DENON	0189

ELECTROHOME	0189,0891,1304
GRUNDIG	1306
HARMAN/ KARDON	0228
HITACHI	1030,2169
INSIGNIA	0842,1298,1320 1805
INTEGRA	1306
JBL	1058,1374,1495 1811
JVC	1390

KAWASAKI	1570,1569
KENWOOD	1390,1428
KLH	1497
KOSS	2197
LG	0189
LINN	1497
LIQUID VIDEO	1189,1269,0189 1266,1514
MAGNAVOX	1189,1269,0189 0891
MARANTZ	1189,0189

MICROMEGA	1393
MITSUBISHI	1189
MYRAD	0097,1555
NAKAMICHI	0842,1298,1320 1805
ONKYO	1023,0014,0121 0670
OPTIMUS	1497

ORITRON	1308,1518,1288
PANASONIC	1316,1548,1633 1763,1764,2967 1189,1269,0189

PHILIPS	0891,1266 1023,0014,0630 1384,1935
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PIONEER	0189,1414 1609
POLK AUDIO	
RADIO SHACK	

RCA	1023,1609,1390
REALISTIC	1609,0121
REVOK	0189
SAMSUNG	1304,1500,1868
SANGEAN	2165
SANSUI	1189,0189
SHERWOOD	1913
SIRIUS	1602,1811
SONY	1058,1441,1258 1759,1622,1406 1558,1658,1758 1858
SOUNDESIGN	0670
STEREOPHONICS	1023
TEAC	1390
TECHNICS	1308,1518,1633
THORENS	1189
TOSHIBA	0842,1788
VENTURER	1390
WARDS	0189,0014
XM	1406,1414
YAMAHA	1023,0176,1176 1276,1331,1815 2061

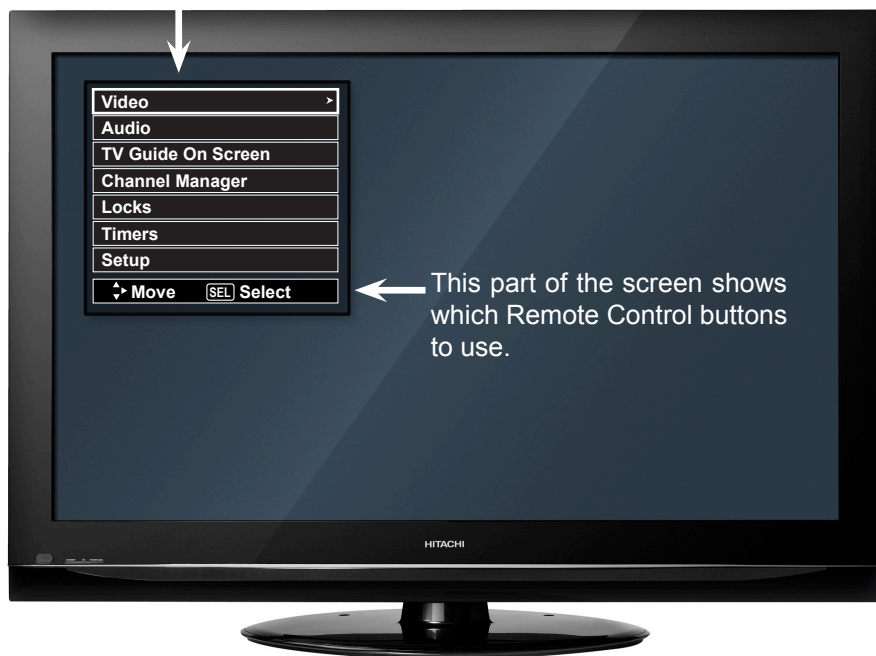
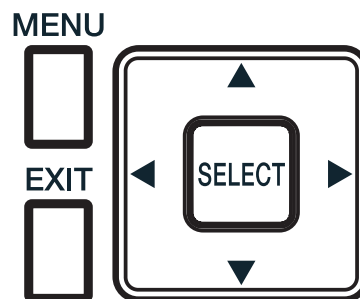
AUDIO AMPLIFIER Brand	CODES
ADCOM	0577,1100
BOSE	0674
CARVER	0892
CARY AUDIO	1879
DESIGN	
CLASSE	1461
FLEXTRONICS	1879
HALCRO	1934
HARMAN/ KARDON	0892
KRELL	1837
LEFT COAST	0892
LEXICON	1145,1802
MARANTZ	0892
MARK LEVINSON	1483
PARASOUND	1934
PHILIPS	0892
POLK AUDIO	0892
PRIMARE	1395
YAMAHA	0354

TELEVISION	CODES
HITACHI	1445,1643,2143 2243

On-Screen Display

1. Press MENU on the remote control to display the different features on your Hitachi Plasma TV.
2. Use the CURSOR PAD (buttons, ▲, ▼, ◀ and ▶) and highlight a different feature of the On-Screen Display menu. Press the SELECT button to select.
3. Press EXIT on the remote control to quickly exit from a menu.

This part of the screen shows which selections are available.



NOTE The On Screen Display (OSD) for the different submenus shown in next pages are for illustration purposes only, therefore; doesn't reflect the actual appearance of the OSD of your Hitachi Plasma TV.

Video

Picture Mode

Select between 3 pictures modes; Dynamic, Day and Night.

Contrast

Adjust picture contrast.

Brightness

Adjust picture brightness.

Color

Adjust color.

Tint

Adjust tint.

Sharpness

Adjust sharpness.

ColorTemperature

Set this to High for less intense color with more blue, set to Medium for natural color, set to Standard for standard colors or D.Cinema for more cinema accurate colors.

Light Sensor

Adjust screen contrast setting automatically accordingly to the brightness of the room.

Black Enhancement

Enhances shadow detail in dark scenes.

Contrast Mode

Use this function to choose between two Contrast Mode settings: Normal and Dynamic.

Noise Reduction

Reduces conspicuous noise in the picture.

MPEG NR

Reduces mosquito noise in the picture.

Auto Movie Mode

Turn On/Off the 3:2 Pulldown detection feature.

Color Space

Choose VIBRANT to select highly saturated colors, or AUTO STD/xvColor™ for more natural colors.

Cinema48™

Faithfully reproduces the movie theater effect of 24 frames per second with a 48 fps presentation.

Lip Sync

Synchronizes audio with video signal on digital and analog sources.

Black Side Panel

Set the gray side bars On/Off when watching 4:3 signals in standard mode.

Aspect

Choose the picture format aspect ratio.

Reset Video Settings

Choose to Reset Video Settings to factory settings.

On-Screen Display

Audio

Treble	Adjust the intensity of high frequencies.
Bass	Adjust the intensity of low frequencies.
Balance	Adjust the balance.
Surround	Select Surround settings (Off, Normal, Wide)
Bass Boost	Select Bass Boost option ON or OFF.
Audio Source	Select between three Audio Sources (ST, Mono, SAP).
Internal Speakers	Select internal or external speakers.
Auto Noise Cancel	Eliminates the noise between stations.
Perfect Volume	Adjust volume to be closer in level between channels.
Loudness	Adjust Loudness.
Language	Select Language options if available.
Digital Output	Select Optical Output options.
DRC	Select Dynamic Range Compression to ON or OFF.

NOTE

The Language, Digital Output, and the Dynamic Range Compression feature of the Audio OSD are only available for Digital channels.

TV Guide On Screen

TV Guide On Screen	Set, Control and navigate the system
--------------------	--------------------------------------

Channel Manager

Signal Meter	Access Signal Meter.
Auto Channel Scan	Set Auto Channel Scan.
Channel List	Set Channel List.

NOTE

The Signal Meter feature of the Channel Manager OSD is only available for Digital channels.

Locks

Change Access Code	Change Lock access code.
Engage Lock	Choose to lock channel, and/or panel control keys.
Movie Ratings	Block various types of movies and video types based on motion picture ratings.
TV Ratings	Block various types of movies and television programming based on a parental guide ratings.
Canadian Ratings (ENG)	Block various types of movies and television programming based on the Canadian ratings system.
Canadian Ratings(FRN)	Block various types of movies and television programming based on the Canadian French ratings system.
Region 5	Ratings system for DTV Signal to block various types of programs.

Timers

Set The Clock	Set Clock Settings.
Set Sleep Timer	Set Sleep Timer intervals (30 min. intervals, 00:30-3:00).
Set Day/Night Timer	Set Day/Night picture mode to start at preset times.

NOTE

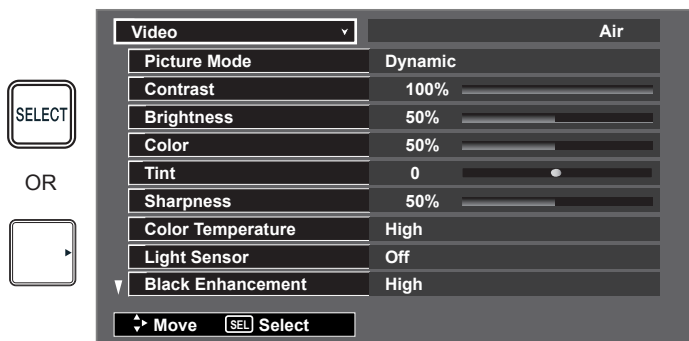
The clock settings will be "unavailable:" (grayed out) when TV Guide On Screen™ is set up.

Setup

Set The Menu Options	Choose English, French or Spanish OSD Language and OSD Contrast.
Set The Screen Saver	Select Screen Saver options to prevent uneven screen aging.
Set The Energy Options	Select Power Consumption Savings options.
Set The Inputs	Label Video Inputs, VCR, DVD, etc and select Game Mode.
Set The Closed Captions	Feature to display dialogue/text and change its appearance.
Set The Power Indicator	Adjust the brightness intensity of the LED indicating light.
Set HDMI-CEC Options	Set to ON, this feature will enable simplified operation of compatible components.
Reset The Software	Select to upgrade TV software and to switch between HOME and RETAIL mode Energy Savings Settings.

Video

Select VIDEO 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.

1. Use the CURSOR buttons ◀ or ▶ to highlight and select PICTURE MODE settings (Dynamic, Day or Night).
2. Then press the SELECT button to set the mode and return to the Video menu or press EXIT to quit menu.
3. There are 3 Picture Modes available : Dynamic, Day and Night mode. Dynamic is the factory preset mode for RETAIL Energy Saving Mode and Day is the factory preset when HOME Energy Saving Mode is used (refer to page 41). This can be changed by adjusting any video setting to your desire conditions. Day can be used as a second video setting for daytime viewing. Night is set to optimize programing during nighttime.

Other Video Menu Settings Adjustment

Use the CURSOR PAD ▲ or ▼ to highlight the function to be adjusted.

1. Press the SELECT button or the CURSOR PAD ▶ to select the function settings.
2. Press the CURSOR PAD ◀ or ▶ to adjust the function.
3. Press MENU to return to main menu.
4. Press EXIT to quit menu.

Contrast

Use this function to change the contrast between black and white levels in the picture.

Brightness

Use this function to change the overall brightness in the picture.

Color

Use this function to adjust the level of color in the picture.

Tint

Use this function to adjust flesh tones so they appear natural.

Sharpness

Use this function to adjust the amount of fine detail in the picture.

Color Temperature

Set this to High for cooler color with more blue, set to Medium for more natural color, set to Standard for accurate color or set to D. Cinema for color to match the cinema accurately.

Light Sensor

When on, the light sensor will automatically adjust the contrast setting according to brightness of the room. Select off to manually adjust the contrast setting.

NOTE

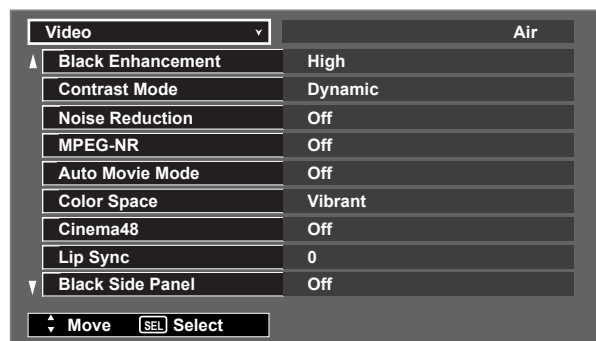
When the Light sensor function is set to ON, Contrast Mode (see below) will be disabled (grayed out).

Black Enhancement

Use this function to enhance the shadow detail in dark scenes using the settings off, low, middle and high.

NOTES

- 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.
- It may be necessary to adjust TINT to obtain optimum picture quality when using the COMPONENT VIDEO Y-PbPr input jacks.
- CABLE and AIR share a Video setting. Also, each of the video inputs have their own independent settings.



Contrast Mode

Use this function to choose between two Contrast Mode settings. Set to DYNAMIC for more contrast and set to NORMAL for a more cinematic film like image.

Noise Reduction

The NOISE REDUCTION function automatically reduces conspicuous noise in the picture without degrading picture quality. Set NOISE REDUCTION to OFF if you see individual block in the picture.

MPEG NR

The MPEG NR (Noise Reduction) function automatically reduces mosquito noise in the picture without degrading picture quality. Set MPEG NR to OFF if the TV experiences picture block noise.

Video

Auto Movie Mode

The AUTO MOVIE MODE function turns ON or OFF the 3:2 pulldown detection 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 AUTO MOVIE MODE is set to ON your Hitachi Plasma Television will activate the circuitry for this special feature to improve video performance when watching interlace format film based sources. Set to OFF to deactivate this feature.

Color Space

The COLOR SPACE function allows you to select between two color modes. Select VIBRANT for highly saturated (brighter) colors or Auto STD/x.v.Color™ for more natural colors.

NOTE

x.v.Color™ is only available for HDMI/Component Input and will provide a wide color range.

Cinema48™

This menu is active for HDMI with 24p or 24 frame per second inputs only. When the input signal is 24fps (Movies), a process called 2-2 pulldown operates and the signal will be converted to 48fps creating a beautiful and smooth picture that is very cinema like.

Lip Sync

Selecting this feature will allow you to synchronize the audio with the picture signal on a digital or analog source. Use the CURSOR PAD ◀ or ▶ to synchronize the picture and the audio signal. The default value is set to 0.

Black Side Panel

The BLACK SIDE PANEL function turns the gray side bars from gray to black when watching 4:3 signals in Standard mode.

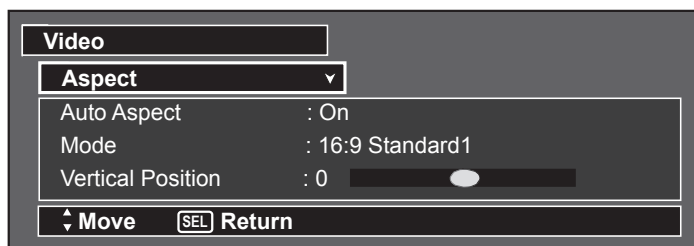
1. Press the CURSOR PAD ◀ or ▶ to set to ON or OFF.
2. Press EXIT to quit menu or select SET BLACK SIDE PANEL to return to the previous menu.

NOTES

- Using the BLACK SIDE PANEL feature stops the aging of the screen in the black panel area. If used for extended periods of time, the center of the screen will become darker and the black side panel area will be brighter when a full screen video is viewed.
- The Side Panel setting will default to grey when the TV is turned off to minimize uneven aging.

Aspect

Use this function to select the Picture Format Aspect Ratio.



Auto Aspect

Automatically adjust the Aspect Ratio depending on the input signal to fill the screen.

Mode

Manually select the Aspect Ratio. There are different aspect ratio available according with the signal in use. See page 57.

Vertical Position

This function allows you to move the picture up and down when the aspect mode is 4:3 EXPANDED/ZOOM1/ZOOM2 or 16:9 ZOOM. For example, it will be useful for centering the picture if you want to see sports scores or news tickers. Adjustable range is -10 (video center is toward bottom of screen) to +10 (video is toward top of screen).

1. Use the CURSOR PAD ▲ or ▼ to select menu item.
2. Press the CURSOR PAD ◀ or ▶ to adjust the function.
3. Press the EXIT button to quit the MENU, or select ASPECT to return to the previous menu.

NOTES

- Vertical Position will not be available in 4:3 Standard and 16:9 Standard modes.
- Vertical Position setting returns to "0" automatically after the TV is turned off.

Reset Video Settings

This function allows you to Reset the Video Menu Settings of the present input and return it to the Dynamic video mode if set to RETAIL Energy Saving Mode and to Day video mode when HOME Energy Saving Mode is used (refer to page 41).



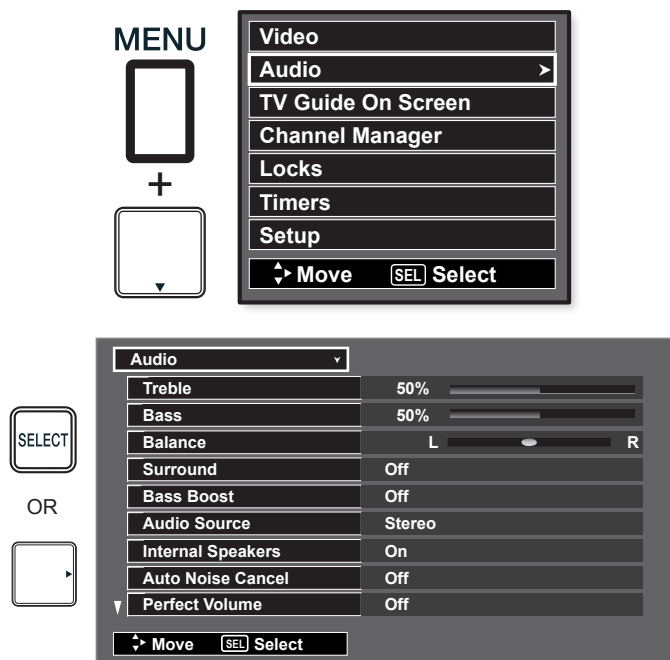
1. Use CURSOR PAD ▲, ▼ to highlight functions.
2. Press the SELECT button or CURSOR PAD ▶ to select Reset Video Settings.
3. Use the CURSOR PAD ▼ to access the Reset softkey.
4. Press the SELECT button to Reset the Video Settings.

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 Input 1, only Input 1 will return to factory conditions.

Audio

Select AUDIO to adjust the sound to your preference.



Audio Menu Settings Adjustment

1. Press CURSOR PAD ▲ or ▼ to select menu item.
2. Press CURSOR PAD ◀ or ▶ to adjust the function.
3. Press EXIT to quit the MENU, or select AUDIO to return to the main menu.

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.

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.

Surround

Surround sound is the concept of expanding the spatial imaging of audio from one dimension (Mono/Left-Right) to two or three dimensions. This is often done to create a more realistic audio environment.

1. Use CURSOR PAD to highlight surround option.
2. Use CURSOR PAD to select Off, Normal or Wide.

Off : Turns off the surround sound effect.

Normal Surround : Provides the surround effect by simulating two or more speakers to the rear of the listener.

Wide Surround : This mode simulates an even wider surround sound field.

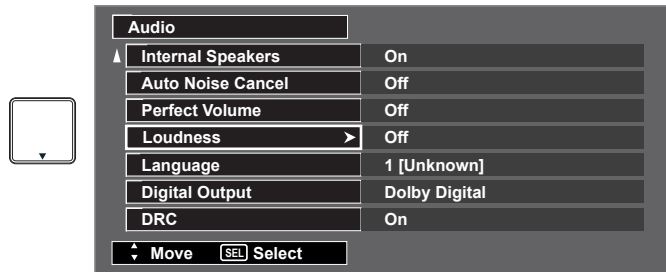
Bass Boost

This function enhances the low frequencies for more dramatic sound.

Audio Source

Multi-Channel Television Sound will allow you to select STEREO (a

stereo broadcast), MONO (monaural sound) used when receiving a weak stereo broadcast or SECOND AUDIO PROG (SAP) which may be a secondary language, weather report, etc.



Internal Speakers

This function is useful when using external speakers. Select ON if using the internal speakers only. Select TV as Center when using the TV as the center speaker. Select OFF if you prefer to use the speakers from a separate stereo system.

Auto Noise Cancel

This function eliminates the noise between stations. If a channel is tuned and is noisy, it will eliminate the audio for that channel.

Perfect Volume

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

Loudness

Set this function to ON to emphasize bass and treble at low volume levels.

Language

Some programs transmit more than one DTV language option. Most will have English as a default language. The language function will allow you to select up to 4 language options (if available). Please try all available options.

Digital Output

This function allows you to select between Dolby®Digital and PCM. This setting changes the format of the Digital Optical Output.

DOLBY DIGITAL Select this feature if the Digital Audio Output is connected to an amplifier/receiver with a Dolby®Digital only decoder.

NOTE

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

PCM.- Select this feature if the TV is connected to an amplifier/receiver with a PCM only decoder; it will provide two independent soundtrack channels through the optical audio output jack (Digital Audio).

DRC

Dynamic Range Compression.- This feature is useful for leveling the volume of programs. The loudest sounds are lowered and the quietest sounds are boosted so they are easier to hear. The default setting is ON.

NOTES

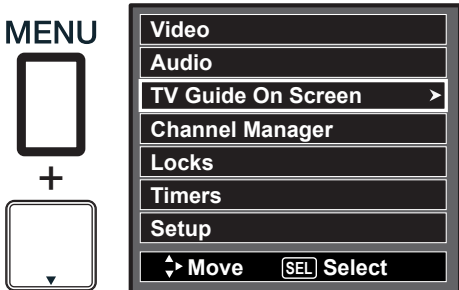
- The functions Language, Digital Output and DRC are only available when viewing digital programs.
- The DRC control affects only Dolby®Digital signals decoded internally by the TV.
- DRC does not affect the Dolby®Digital bitstream available at the digital audio output.

TV Guide On Screen

The TV Guide On Screen™ system is a built-in feature that provides a 24 hrs channel lineup and program listings in your area. Once the setup process is complete, the program listings are automatically updated several times a day.

To Setup the TV Guide On Screen™ System:

1. Press the MENU button. Use the CURSOR PAD ▼ to highlight TV Guide On Screen™, then press the SELECT button.



NOTE Pressing the GUIDE button also allows you immediate access to this feature.

2. Press the SELECT button to continue.

Setup Procedure:

Screen 1:

Select which country is your TV located in:

Use the CURSOR PAD ▲ and ▼ to highlight your TV location (USA or CANADA), then press the SELECT button to continue.

Which country is your TV located in?

USA

Canada

Next

Screen 2:

Enter the zip code (USA) or postal code (Canada):

Use the Numeric buttons and the CURSOR PAD and for letter entries to enter the ZIP code (USA) or postal code (CANADA) of your location.

Please enter the 5-digit ZIP Code where your TV is located:

= = = = =

Next

Back

Please enter the 6-character Postal Code where your TV is located:

= = = = =

Next

Back

*For USA is a 5 digit ZIP CODE

**For CANADA is a 6 digit ZIP CODE

Screen 3:

Please select which service(s) you would like your TV Guide On Screen™ to support (Check all that apply)

Use the CURSOR PAD ▲ and ▼ to highlight your choice, then press the SELECT button then select Next:

Please select which service you would like your TV Guide On Screen™ to support:

✓ Antenna

Cable without a Cable Box

Next

Back

Screen 4:

Are the above settings correct ?

Use the CURSOR PAD ▲ and ▼ to highlight your choice, then press the SELECT button then select Next :

*If all settings are correct please select Yes to continue.

*If a setting is wrong please select No to modify.

You have entered the following TV Guide On Screen system settings.

If any setting is marked INCOMPLETE, you will not be able to use that feature until you complete that portion of TV Guide On Screen system setup.

ZIP Code — 79789 (USA)
Antenna on "RF"

Are the above settings correct?

Yes, continue setup process

No, repeat setup process

Next

Back

Screen 5:

This shows that the setup procedure is complete.

Use the CURSOR PAD ▲ and ▼ to highlight your choice, then press the SELECT button :

*If all settings are correct please select Next to finish.

*If a setting is wrong please select Back to modify.

TV GUIDE Helpful Information

Congratulations on your TV Guide On Screen setup!
Within 24 hours after your TV is powered OFF, you should begin to get listings.
Press TV GUIDE on your remote:
• If listings are not yet available, you'll see a TV Guide Setup Progress Screen.
• If listings are available, you'll see a listings grid.
(Note: It may take several days to get the full 24 hours of listings.)

To make sure you get the latest daily listings updates, remember:

- TV — OFF
- And don't forget to update your TV Guide On Screen Setup if you:
- move to a new ZIP Code
- change a service

Just press TV GUIDE and choose the "Change system settings" option.
More information is available at www.tvgos.com.

Next

Back

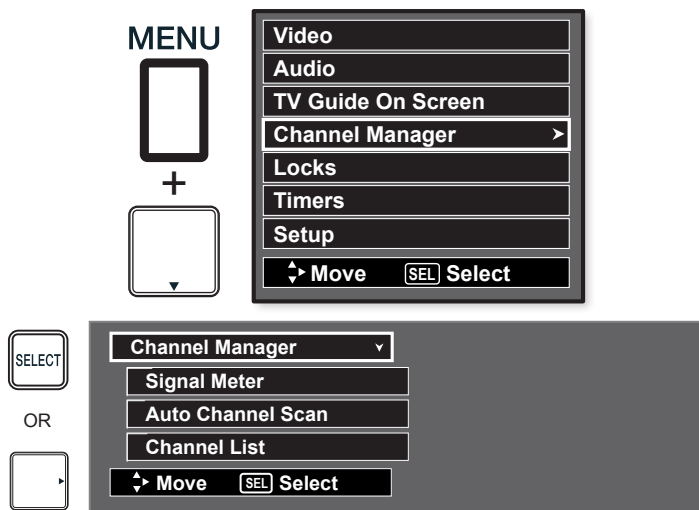
NOTES

- The Plasma TV should be in standby mode in order to continually receive updated program listings.
- For using and navigating the TV Guide On Screen™ System please refer to the included TV Guide On Screen User's Manual.

Channel Manager

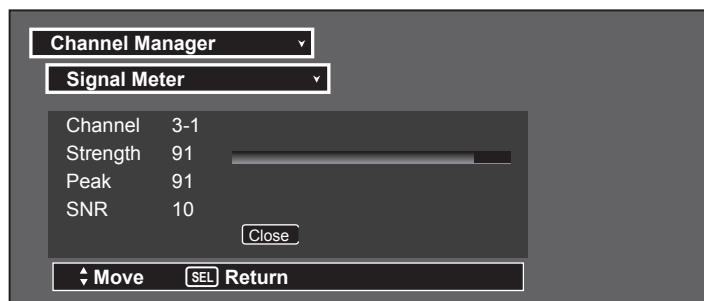
Select CHANNEL MANAGER to set your Antenna options, run Auto Channel Scan, Check Signal Meter and Set Channel List.

1. Press CURSOR PAD ▲, ▼ to highlight functions.
2. Press the SELECT button or CURSOR PAD ► to select.



Signal Meter

Select SIGNAL METER when using an indoor or outdoor antenna. This feature will show the signal strength and peak values of the Antenna signal to help you adjust your antenna to optimize signal reception.

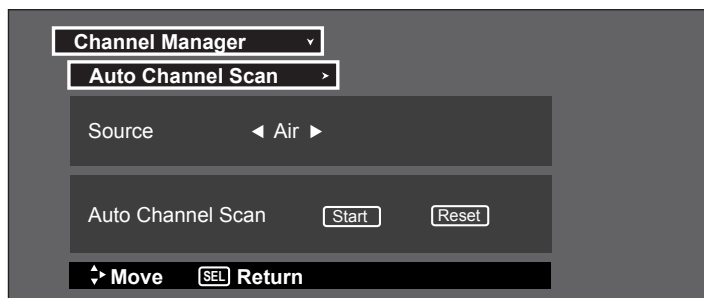


Use the CURSOR PADS buttons ▲, ▼ and the SELECT button to highlight and select CLOSE to exit.

NOTE The Signal Meter will not be available (grayed out) when watching analog channels.

Auto Channel Scan

This feature will automatically store active Analog and Digital channels in Auto Channel Scan memory.



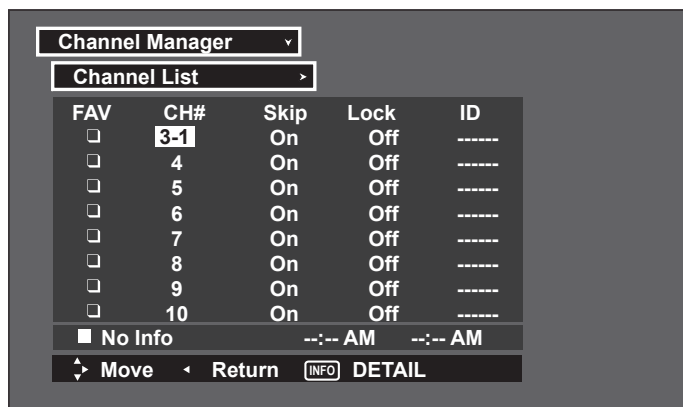
1. Use the CURSOR buttons ◀ or ▶ to highlight AIR, CABLE (1) or CABLE(2) source.

2. Press the CURSOR buttons ◀ or ▶ to highlight the START or RESET option.
3. Press the SELECT button to select.

NOTE If certain channels are poor or not possible in cable(1) mode, set cable source to cable(2) by using the CURSOR buttons ◀ or ▶.

Channel List

This function allows you to review which channels are labeled (ID), which have been added to CHANNEL MEMORY (SKIP), which are protected by LOCK and which are your FAVORITE (FAV) CHANNELS.



1. Use the CURSOR PAD to navigate the Channel List.
2. Press the SELECT button to select ON or OFF on the SKIP and LOCK columns.
3. To select LOCK column, input the access code.(Default access code: 0000)
4. Press the FAV button to set or remove the FAVORITE settings.
5. Press the EXIT button to return to normal viewing.

NOTE The Channel List cannot be updated by only changing the cable source. Auto Channel Scan must be performed for the Channel List to be updated.

IMPORTANT NOTICE

United States federal law requires broadcasters to stop transmitting analog (non-digital) television signals after February 17, 2009. Accordingly, this TV's analog tuner will not be capable of receiving over-the-air analog television broadcasts after such analog broadcasts are no longer available.

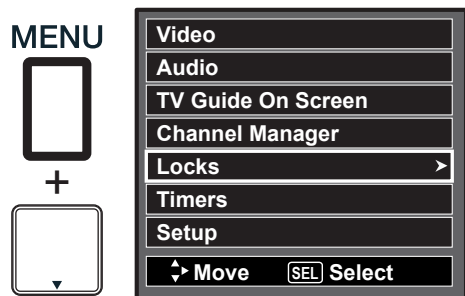
After February 17, 2009, this TV's analog tuner will continue to work with compatible cable and satellite TV systems, gaming consoles, VCRs, DVD players and other similar products. Both before and after February 17, 2009, this TV's digital tuner will receive available over-the-air digital television broadcasts using an antenna and other digital television broadcasts using compatible cable, satellite or other digital television system connections. Please review this Operating Guide for further information regarding such connections.

Hitachi supports the DTV transition and as a member of the DTV Transition Coalition urges consumers to visit these web sites for interactive guides and further detailed information:

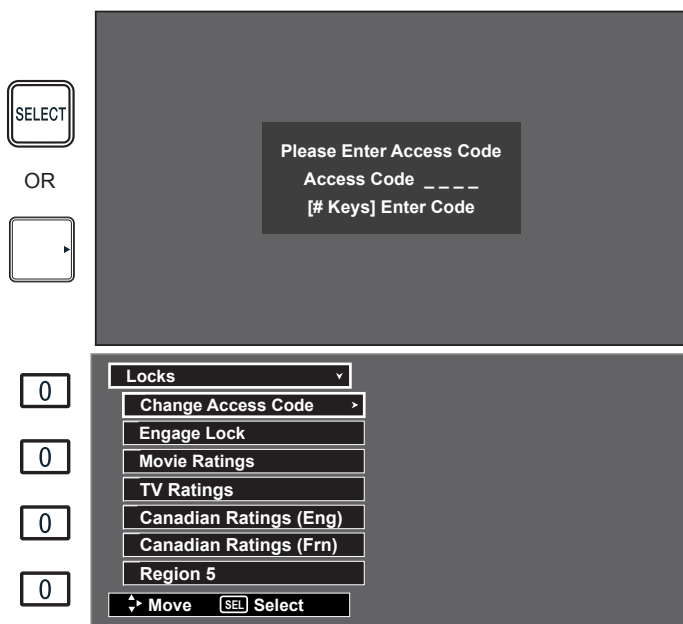
- www.dtvtransition.org
- www.myceknowhow.com
- www.dtv2009.gov
- www.youtube.com

Locks

This function will block out the picture and sound of the selected channel or video input.



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.



1. Use the CURSOR PAD ▲, ▼ to highlight the desired function in the LOCKS menu.
2. Press the SELECT button to select.

Change Access Code

1. To change the ACCESS CODE NUMBER, select CHANGE ACCESS CODE to change the factory preset code (0000) to your preference.

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

2. Enter a new four digit number.
3. Press EXIT to quit the menu.

Engage Lock

When ENGAGE LOCK is selected, SET CHANNEL LOCK and LOCK PANEL CONTROL KEYS can be set individually.

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

When LOCK PANEL CONTROL KEYS is turned on, all buttons on the Side Panel will be deactivated, except the POWER Switch.

Movie Ratings

Use Movie Ratings to prevent viewing of any movie that you feel may be inappropriate due to its content (see page 36).

TV Ratings

Use TV Ratings to prevent viewing of any TV program that you feel may be inappropriate due to its content(see page 36).

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 (see page 36).

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 (see page 37).

Region 5

Use REGION 5 to block various types of movies and television programs based on ratings systems used in U.S. that you feel may be inappropriate due to its content (see page 37). The REGION 5 option will operate for Digital Channels (ATSC) only.

Ratings Procedure

1. Use the CURSOR PAD ▲, ▼ to select the RATING CATEGORY (MOVIE, TV, etc.) that you want to block.
2. Press SELECT to block the RATING that you have selected.
3. Press EXIT to quit the menu.

Locks

Motion Picture Ratings Table

NOT RATED	Contains no rating. Not Rated (NR) and Not Applicable (NA) programs. Movie has not been rated or ratings do not apply.
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

NOTES

- 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.
- Blocking NOT RATED programs may block emergency programming, sports, news, public service announcements, religious programs and weather.

TV Parental Guide Ratings Table

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/Cartoon Violence V: Violence S: Sexual Situation L: Adult Language D: Sexually Suggestive Dialogue	

NOTES

- If you Block TV-14D, you will still permit TV-MA programs; If you block TV-14V, 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.
- TV program ratings are dependent on the broadcaster. If the program is not rated, the TV will not block it.

Canadian Ratings English Table

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 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.

Region 5 Alternate Ratings (Example Only)

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.
Y	Adults only.

- NOTES
- In order to set the Region 5 Ratings the ATSC Digital channel received must include Region 5 Ratings data. To see if the channel has Region 5 Ratings, press the INFO key on the R/C. See fig. (1) below for reference.
 - Once the TV has received Region 5 Ratings data, the Region 5 option in the lock menu will display the data.

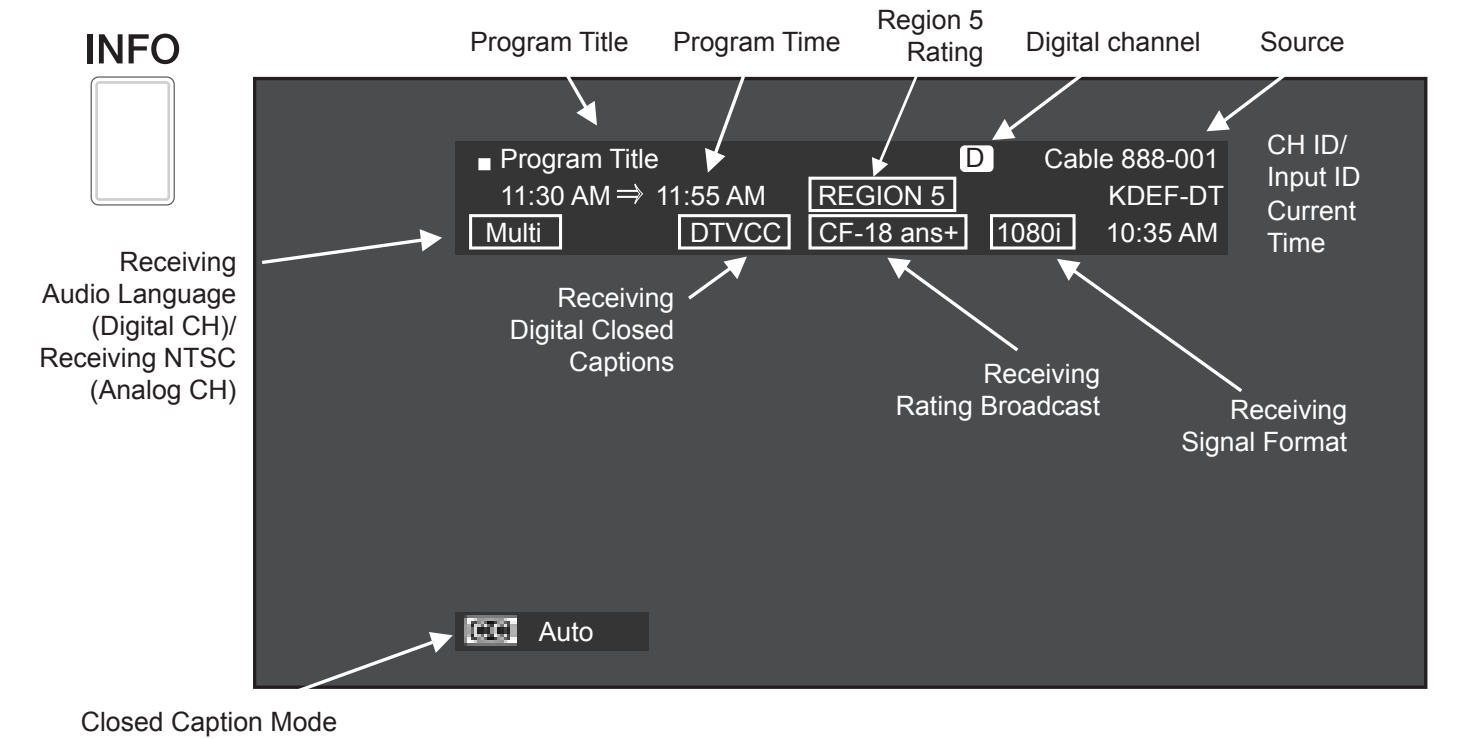
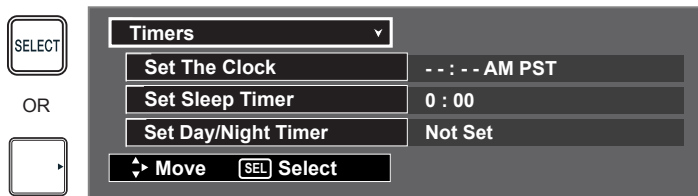
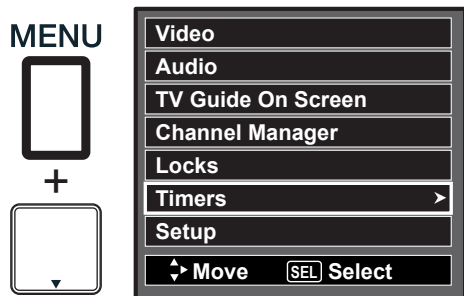


Fig. (1) Channel Information

Timers

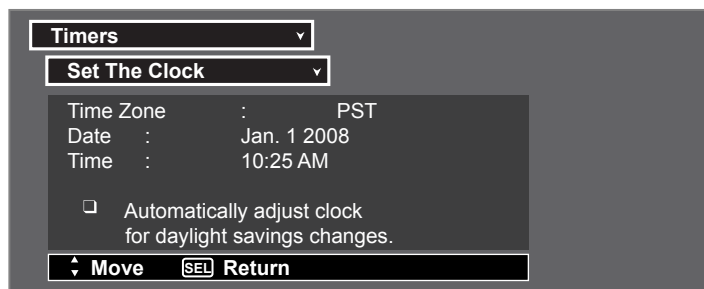
Select TIMERS to set your Clock, Sleep Timer and Day/Night Timer.



1. Use the CURSOR buttons ▲ or ▼ to highlight the function to be adjusted.
2. Press the SELECT button to select.

Set The Clock

The Clock must be adjusted before you can use the DAY/NIGHT TIMER feature.



1. Use the CURSOR PAD ▲, ▼, ◀, ▶ to highlight and setup the TIME ZONE settings.
2. If you observe daylight savings, use the CURSOR PAD to highlight the DAYLIGHT SAVING CORRECTION checkbox and press the SELECT button to activate it.
3. Use the CURSOR PAD ▲, ▼, ◀, ▶ to highlight and setup the CURRENT TIME (hour and minute), AM or PM, MONTH, DAY, and YEAR.
4. Use the CURSOR PAD ▲, ▼ to adjust settings.
5. Press the SELECT button to set the TIME AND DATE.
6. Press EXIT to quit the menu or select SET THE CLOCK to return to the previous menu.

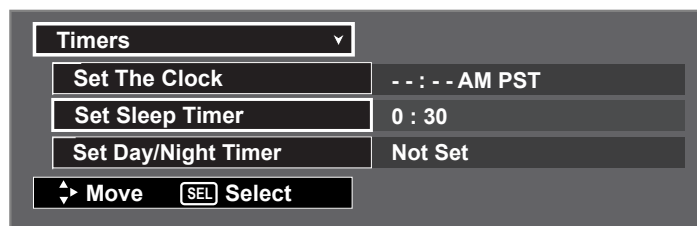
NOTES

- When AUTOMATICALLY ADJUST CLOCK FOR DAYLIGHT SAVING CHANGES is checked ✓, the TV will automatically calculate the clock adjustment for Daylight Saving.
- The TV counts electrical pulses for regulating the TIMERS. When the power cord is unplugged in quickly, the clock is stopped momentarily and the TIME indication will become slow.

- The Set The Clock submenu will be unavailable (grayed out) when TV Guide On Screen™ is set up (refer to page 33).

Set Sleep Timer

Select this feature to set your SLEEP TIMER from 30 minutes to 3 hours (30 minute increments).



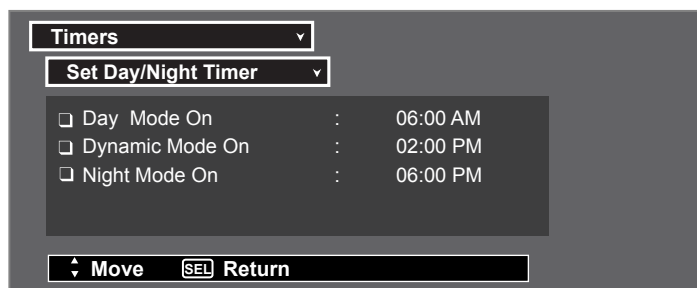
7. Press the CURSOR PAD ► repeatedly to set your Timer from 0:00, 0:30, 1:00, 1:30, 2:00, 2:30 and 3:00.

NOTE

The Sleep Timer info will show for 1 minute before the TV turns off.

Set Day/Night Timer

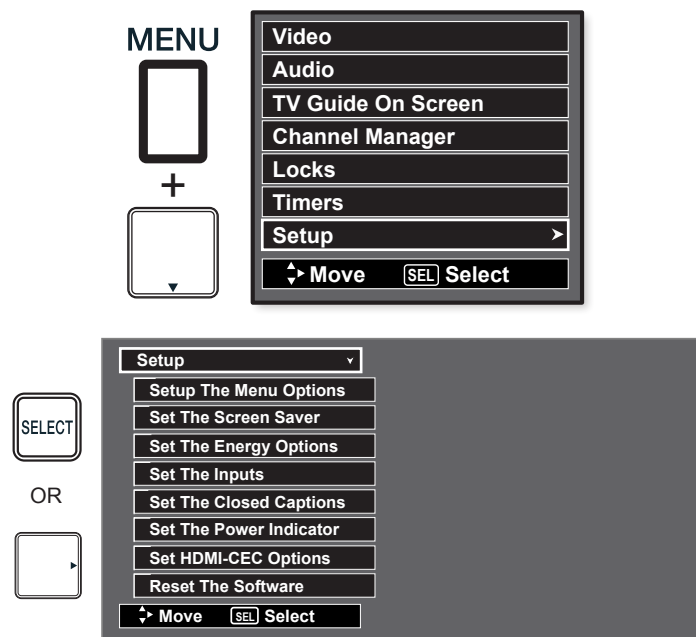
Select this feature to activate and set your TV's DAY/NIGHT PICTURE MODE automatically. This feature is not available until the clock is set.



1. Use the CURSOR PAD to highlight SET DAY/NIGHT TIMER settings and press the SELECT button to select the option.
2. Use the CURSOR PAD ►, ▲ or ▼ to select DAY MODE ON and set it's TIMER.
3. Use the CURSOR PAD ►, ▲ or ▼ to select DYNAMIC MODE ON and set it's TIMER.
4. Use the CURSOR PAD ►, ▲ or ▼ to select NIGHT MODE ON and set it's TIMER.
5. Press EXIT to quit the menu or select SET DAY/ NIGHT TIMER to return to the previous menu.

Setup

Select **SETUP** when setting your TV up for the first time.



1. Use the **CURSOR PAD** ▲ or ▼ to select the submenu of your choice.
2. Press the **SELECT** button to select.

Set The Menu Options

Setup the Language and Contrast of the Menu OSD.



Set The Language

This feature will allow you to select any one of three different languages for all on-screen displays.

1. Use the **CURSOR PAD** ◀ or ▶ to select the language of your choice.
2. Press **EXIT** to quit menu or select **SET THE MENU OPTIONS** to return to previous menu

Set The OSD Contrast

This function allows you to change the contrast of OSD based on 4 levels (min, low, medium and max).

1. Use the **CURSOR PAD** ▲ or ▼ to highlight **SET THE OSD CONTRAST (MAX, MEDIUM, LOW, MIN)** of your choice. Use the **CURSOR PAD** ◀ or ▶ to select one option.
2. Select **MAX** for a lighter OSD, select **MEDIUM, LOW** for darker OSD and **MIN** for the darkest OSD.
3. Press the **SELECT** button to set the option.
4. Press **EXIT** to quit menu or select **SET THE MENU OPTIONS** to return to the previous menu.

Set The 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 the **SCREEN SAVER** feature to minimize uneven aging of the screen.



1. Use the **CURSOR PAD** ▲ or ▼ to highlight Screen Saver's Picture Orbiting and Screen Wipe options.
2. Use the **CURSOR PAD** ◀ or ▶ to select your choices.

Option 1

The whole picture will shift every 2 minutes by one pixel.

Option 2

The whole picture will shift every 10 minutes by one pixel.

Option 3

The whole picture will shift every 20 minutes by one pixel.

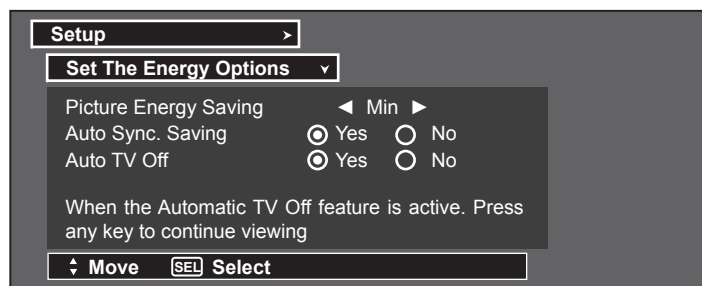
Screen Wipe

If uneven aging occurs, use the Screen Wipe (White Field Signal) for at least 10 minutes to refresh any damage that may have occurred from an uneven aging. Screen Wipe can resolve some temporary image retention issues. It is recommended to use caution and not to display still images for extended periods of time. If caution is not used, permanent damage may occur.

1. Use the **CURSOR PAD** ▲ or ▼ to highlight Screen Wipe.
2. Press the **SELECT** button to start.
3. Press the **EXIT** button to return to normal viewing.

Set The Energy Options

Use this feature to enable power consumption saving settings on your Hitachi Plasma TV.



1. Press the **CURSOR PAD** ▲ or ▼ to highlight Energy Options.
2. Press the **CURSOR PAD** ◀ or ▶ to select your choices.

Picture Energy Saving

This function allows you to choose power consumption reduction based on 3 levels (Min., Medium and Max).

Setup

Auto Sync. Saving

Use this feature to turn power off automatically when a video input signal is not detected for 30 seconds.

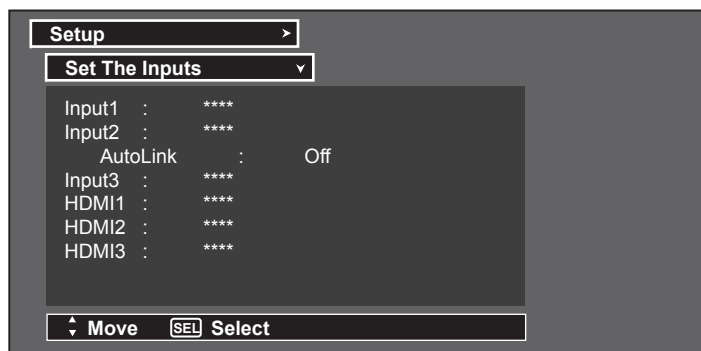
NOTE This feature works only for INPUT 1, 2, 3 and HDMI 1, 2, 3.

Auto TV Off

Use this feature to turn power off automatically when no operation of TV is detected for more than 3 hrs. When the Automatic TV Off feature is active. Press any key to continue viewing.

Set The Inputs

Use this feature to give a name to any of the six video inputs. Select Game Name when playing with a Video game system to avoid delay between picture and user control of the game machine.



1. Press the **CURSOR PAD** ▲ or ▼ to highlight the video inputs.
2. Press the **CURSOR PAD** ◀ or ▶ to select your choices.

NOTE The inputs labeled Gray out (Skip) or Hide (Skip) are disabled in the INPUTS selection.

INPUT 2 Auto Link


Use this function to automatically turn the TV on and tune to INPUT 2 when it detects a video signal to INPUT 2.

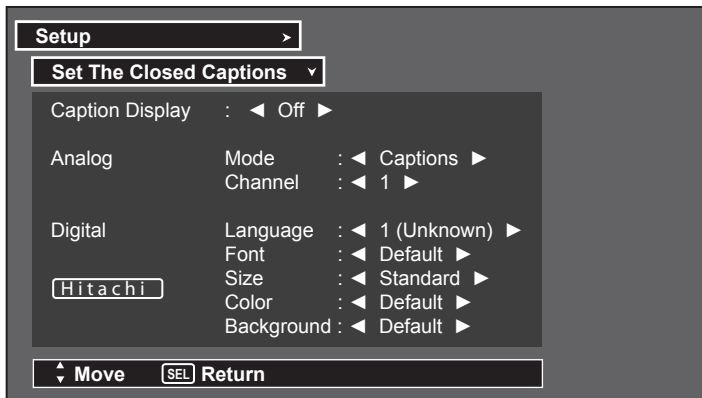
1. Use the **CURSOR PAD** ▲ or ▼ to highlight the **AUTO LINK** option and ◀ or ▶ to select between the Off and Auto settings.
 - **Auto**
When **AUTO** is selected, the TV will turn on and switch to INPUT 2 automatically, when the INPUT 2 input device is turned on. This is convenient when you want to watch a movie with your VCR or DVD player.
 - **Off**
Select **OFF** to disable this function.
2. Press **EXIT** to quit menu or select **SET THE INPUTS** to return to previous menu.

NOTES

- Once the TV has been turned on using the **AUTO LINK** feature, it must be reset before **AUTO LINK** is used again. To do this, turn your VCR or DVD player OFF. This feature is now reset and will turn on your TV as described above.
- If no remote control button is pressed after the TV is turned on by **AUTO LINK**, the TV will automatically turn off after three hours.

Set The Closed 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 .



1. Use the **CURSOR PAD** ◀, ▶, ▲ and ▼ to highlight and select the function to change.
2. Press **EXIT** to quit menu or select **SET THE CLOSED CAPTIONS** to return to the previous menu.

Caption Display:

ON/OFF will turn the display **CC** on or off.

AUTO will turn the display **CC** on when Mute/Soft Mute is on.

Analog Captions:

Set **CAPTIONS** for Analog programs. This function will help choose and set available mode and channel.

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).

Digital Captions

Set captions for digital programs. This function will help choose and set available language, font, size, color and background style of digital captions.

NOTES

- Some types of digital closed captions will not work with this TV.
- Caption Display will not work when viewing a 480i, 480p, 720p, 1080i or 1080p input via the COMPONENT: Y-PBPR or HDMI inputs.
- Closed Caption and Digital Captions availability and content depends on the broadcaster. Closed Caption is available when Closed Caption icon is displayed on screen.
- Digital Captions language will not be available (grayed out) when using analog channels.

Setup

Set The Power Indicator

This feature allows you to adjust the brightness intensity of the LED indicating light in the Front of your Hitachi Plasma TV. Select MAX or LOW for maximum brightness or lowest brightness. Select OFF to turn off the indicating light.



Set HDMI-CEC Options

Set to ON this feature will enable HDMI-CEC signal bus to allow your Hitachi Plasma TV to discover and communicate automatically with other compatible HDMI-interfaced Audio/Video equipment. CEC signal bus makes possible global controls based on “plug & play” automation to minimize the number of IR remotes and key-presses required for basic operation of your AV system. Select OFF to disable this option.

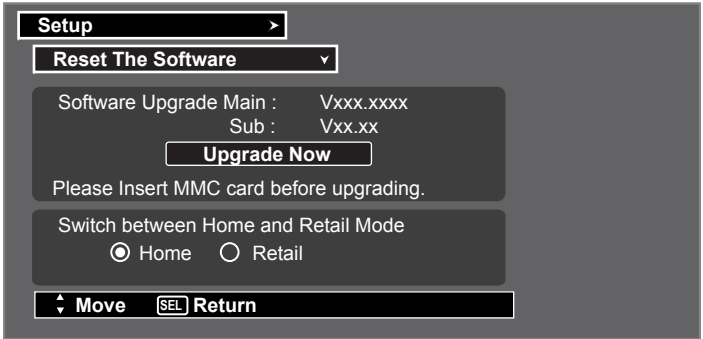


With “HDMI-CEC” feature, you can interface the connected equipment through the HDMI terminal automatically if the connected equipment meets an industry standard “HDMI CEC (Consumer Electronics Control)”. Please check if the connected equipment supports HDMI CEC before using this feature. For example, here are two common functions operating when HDMI CEC is set to ON.

Auto Input change and Auto Play	Condition : While the Plasma TV is in Standby mode. When the connected equipment starts (such as DVD playback and Disc insertion), the Plasma TV is automatically turned On and switches the picture and audio to HDMI input.
System Standby	Condition : While the Plasma TV is On. When the Plasma TV is switched off or set to Standby mode, the connected equipment is also turned off or in Standby mode.

Reset The Software

This feature shows software information and easy upgrade procedure. This function allows the TV software to be upgraded by using a flash card (**MMC/SD CARD**). If a future software upgrade is required for your TV, **HITACHI** will notify and provide you with a flash card. In order to receive written notification and the flash card, please complete and return the warranty card.



1. Insert **MMC/SD CARD**.
2. Press the **CURSOR PAD ▲** or **▼** to highlight **UPGRADE NOW**.
3. Press the **SELECT** button to select and start upgrading.
4. Unplug the AC power cord or press the **POWER SWITCH** when the **UPGRADE** is complete.

NOTE Any power interruption during the upgrade process will cancel the upgrade. When this happens, repeat the upgrade procedure.

Switch between Home and Retail Mode

This function allows you to return to the Energy Savings Initial Setting screen (see page 13).

1. Use **CURSOR PAD ▲, ▼** to highlight functions.
2. Use **CURSOR PAD ►** to select Home or Retail mode.
3. Press the **SELECT** button.

NOTE *RETAIL Mode is intended for showroom or shop use only, if you make any video or audio adjustment changes in this mode they will not be saved when the TV is turned Off .*

Equipment Care and Troubleshooting

DO

Dust the screen and cabinet with a soft cloth.

Clean the screen 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 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 unit to fail.

When the batteries run down, remote control operation will become erratic or become unresponsive. Replace the old batteries with two new "AAA" 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.

TROUBLESHOOTING

Your HITACHI Plasma Television incorporates advanced power surge protection technology designed to protect against component or circuit damage due to external or internal voltage power surges.

IF YOUR TELEVISION SHOULD APPEAR TO HAVE A LOSS OF POWER, PLEASE FOLLOW THIS PROCEDURE:

1. Press the POWER SWITCH (ON/OFF SWITCH) once.
2. If there is still no power, wait 30 seconds and press the POWER SWITCH again.
3. If there is still no power, unplug the power cord from the wall. Wait 30 seconds and plug the power cord back in. Press the POWER SWITCH again.

This protective technology should provide or years of lasting entertainment from your HITACHI Plasma Television.

If there is a problem with your TV, before calling a service technician, check the following tables first. If the problem cannot be solved with the suggested procedures, contact 800-HITACHI. For your safety, NEVER try to repair the product yourself.

When the Following Messages Appear on the Screen

Message	Condition / Action	Pages
Power Saving	This indicates it is in Power Save mode. This message appears 5 seconds before Power Save mode starts. The indicating lamp lights in orange. <ul style="list-style-type: none">• Check if the input selection matches the connection terminal.• Check if the cable is connected correctly and firmly.• Check if the power of any external equipment is ON.	9, 14~17
No Sync. Signal	The unit cannot detect any signals from any input terminals. <ul style="list-style-type: none">• Check if the cable is connected correctly and firmly.• Check if the power of any external equipment is ON.• Check if the input selection matches the connection terminal.• This message will be displayed for 25 seconds then the TV will go to Power Save mode and the screen will go black. The TV screen can be restored by changing Inputs.	14~17 44
Channel Not Available	This shows the selected channel is not available. <ul style="list-style-type: none">• Check the signal meter.• Check if the source of interference is shielded correctly.• Move these kinds of electrical devices away from the unit.	34, 44

Troubleshooting

Symptom and Checklist

SYMPTOM	CHECKLIST	PAGES
No picture - no sound	<ul style="list-style-type: none"> Check the Indicating lamp status (Off, Red, Blue or Orange). Check the connection of the power cord and/or other cables. Check if the power of the unit or external equipment is ON. Check if the correct mode is selected. Check if the unit is in "Standby mode" or "Power Save mode". Adjust the values in "Video menu" and "Audio menu". 	9, 12, 14~17
Multiple images-normal sound	<ul style="list-style-type: none"> Check the connections to external equipment. 	14~17
Intermittent interference	<ul style="list-style-type: none"> Check if the source of interference is shielded correctly. Move these kinds of electrical devices away from the unit. 	44
Normal picture, but no sound	<ul style="list-style-type: none"> Check the volume level. Check if the MUTE button has been pressed or not. Check the connections to external equipment. Try next/other Audio Language. 	11, 14~17, 19, 32
No picture - normal sound	<ul style="list-style-type: none"> Check the value level of "Brightness" and "Contrast" in "Video Menu". 	28, 30
The remote control does not work.	<ul style="list-style-type: none"> Check if the batteries are installed correctly. The batteries might be exhausted. Replace them with new ones. Remove all obstructions from in front of the sensor window on the unit. Check if the buttons on the control panel are working. 	6, 9
The buttons on both the remote control and control panel do not work.	<ul style="list-style-type: none"> Unplug and connect the power cord again. 	7, 42
Normal picture but no color-normal sound	<ul style="list-style-type: none"> Check the connections to external equipment. 	14~17
No picture The Indicating lamp → Off	<ul style="list-style-type: none"> Check if the power cord is plugged into the socket securely. Check if the main power is on. 	7, 9
No picture The Indicating lamp → Orange It means that the unit is in "Power Save mode".	<ul style="list-style-type: none"> Check if all the cables to external equipment are connected correctly and securely. Check if the power to the external equipment is ON. Refer to "Power Save Mode" and "When the Following Messages Appears on the Screen". 	9, 14~17, 42
No picture The indicating lamp → Blue	<ul style="list-style-type: none"> Check if the signal cable is connected correctly and securely. Adjust the level of Brightness and Contrast lower. 	12, 14~17, 28, 30
Some screen display aspects cannot be switched in.	<ul style="list-style-type: none"> Check the signal status by pressing the INFO button on the remote control. The available screen display aspect is different depending on the current signal status. 	11, 19, 57
No power	<ul style="list-style-type: none"> Check or ensure Power switch is on. Normally, if Power switch is On, the Stand By LED will be lit. 	9, 12
Turns Off by itself	<ul style="list-style-type: none"> Check or ensure Timer settings are not activated. 	11, 19, 38
Turns On by itself	<ul style="list-style-type: none"> Check or ensure Timer settings are not activated. Check if either HDMI-CEC or Auto-Link features are not activated. 	11, 19, 38, 40, 41
Picture may "block" or freeze when watching a digital channel.	<ul style="list-style-type: none"> Check signal strength and noise levels under "Signal Strength Meter". 	34
Only some buttons work on remote control	<ul style="list-style-type: none"> Try pressing the TV button to ensure the remote is in TV mode before pressing commands. Remember, your remote control can control other devices, besides your TV, it is a universal remote control. If problem remains, please try a new set of batteries. 	6, 11, 18

HDMI Issues

SYMPTOM	CHECKLIST	PAGES
No picture - no sound	<ul style="list-style-type: none"> Make sure you have selected the correct HDMI input. Toggle through them while HDMI device is ON or during playback. Unplug and re-plug HDMI connection while TV and HDMI source device are powered on. Turn TV and HDMI device off. Turn TV on first and then HDMI device second. 	14, 15, 17, 21
Error notice comes to screen	<ul style="list-style-type: none"> Try pressing "exit" on HDMI device remote control and then on TV remote to find source of the error OSD. If error persist or comes back even after pressing exit, try alternate HDMI input on TV. Unplug and re-plug HDMI connection while TV and HDMI source device are powered on. Turn TV and HDMI device off. Turn TV on first and then HDMI device second. 	9, 11, 14, 17
Normal picture, but no sound	<ul style="list-style-type: none"> Check HDMI Audio settings under the HDMI device menu (of the HDMI source device). In order to get sound on TV, HDMI output must be set to PCM option. 	
No sound from TV Optical Out when using HDMI devices	<ul style="list-style-type: none"> Change Digital Output selection. As an option, use audio optical output from HDMI source device directly to separate Audio Amplifier. 	32
Picture flickers during channel change w/ using HDMI Set Top Boxes	<ul style="list-style-type: none"> This is normal operation from the source switching delay itself. It's not an indicator of a TV malfunction. 	
Picture is blurry or fuzzy	<ul style="list-style-type: none"> If HDMI source is HD capable, ensure it's output is set to 1080i or 720p under HDMI device menu (of the HDMI source device). 	

Reception Problems



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.



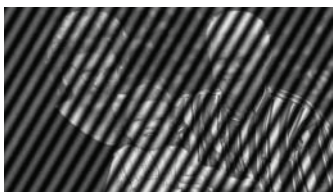
GHOSTS:

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.



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.



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 television has been designed pursuant to the FCC class B Rules. This is to prevent a problem to Radio receivers. If this television causes a problem to Radio receivers, then take the following steps:

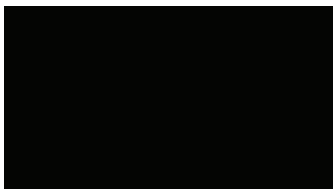
- Keep the television away from Radio.
- Adjust Radio antennas in order for the television not to receive interference.
- The antenna cable of Radio should be kept away from the television.
- Use a coaxial cable for antenna.

You can check if this television influences Radio receivers by turning off all other equipment other than the television. If you find a problem receiving Radio when using the television, check the instructions mentioned above.



BLOCK NOISE or FREEZE (DIGITAL INPUT):

Fuzzy blocks may appear in some area or the whole area of the screen. This is usually caused by interference from automobile ignition systems, neon lamps, electrical drills, ghosting of the image and lost or weak receiving signals.



BLACK SCREEN:

When using an antenna, weak signals will display a black screen. It may be necessary to upgrade your antenna.

NOTE

The TV set can generate sound distortion in external devices such as a radio. Please separate radio equipment from the TV set to a considerable distance.

Notes about Plasma Television

No.	ITEM	NOTES
1	Buzzing sound from Plasma display panel.	A buzzing sound may 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. The buzzing sound is normal and is not a malfunction.
2	Infrared interference	Some infrared rays are emitted from the plasma television panel that might affect the operation of other infrared controlling equipment.
3	Bright and dark spots	High precision technology is used to manufacture the plasma television. But there maybe points that do not illuminate, points that are too bright, and points with color different from that of the periphery. Please note that this is not a malfunction.
4	Residual Image	In some cases, residual images may remain after the short term display of still images when the picture changes.
5	Display panel surface temperature is too high.	The plasma display panel display images by means of electrical discharges inside the panel. This may cause the temperature of the panel surface to increase. Please note that this is not a malfunction.
6	Plasma Surface	A reinforced glass filter is installed over the plasma panel surface. A strong impact to the front panel risk a danger of glass breakage.
7	Transportation	Please transport the plasma television in it's packing box and placed in an upright position. Do not transport the plasma television in a horizontal position. This increases the possibility of panel breakage and pixel failure.
8	Granular spots	When a screen is seen at point-blank range, a random fine grain may be visible in the dark areas of the picture.
9	High temperature environment	High temperature affect the electric discharge/luminescence characteristic of the PDP panel. Do not place the plasma television in high temperature environments.
10	Operation	Operating altitude: 720 to 1,114hPa (6,194ft to -2,484ft). Operating temperature: 41°F to 95°F.
11	Storage	Storage altitude: 720 to 1,114hPa (6,194ft to -2,484ft). Storage temperature: 5°F to 140°F

Features and Specifications

Features:

- **New** Full HD1080p High-Definition Display (1920x1080p)
- **New** High Gloss Japan Black Frame
- **New** High Aperture Ultra-Black Panel
- **New** Energy Saving Light Sensor
- **New** PictureMaster™ HD VI Video Processor
 - **New** MPEG Noise Reduction
 - **New** Game Mode
 - **New** Cinema48™ for 24p HDMI™ Inputs
- **New** Deep Color
- **New** x.v.Color™
- **New** Vibrant/Standard Color Space
- **New** 4 Preset Color Temperatures with D.Cinema
- **New** Anti-Reflective Screen
 - High Contrast Black Stripe Filter
- **New** Swivel Stand (Manual)
- **New** TV Guide On Screen™ Interactive Program Guide (Daily)
- (3) HDMI™ (V.1.3 with x.v.Color™, CEC)
 - 1080p60, 1080p24 Input Compatible
- **New** Dynamic/Day/Night Picture Memories
- **New** Multi-Function Remote Control
 - Preprogrammed
- **New** Adjustable Power Indicator Light
- **New** Adjustable Audio Delay (Lip Sync)
- **New** Showroom Retail/Home Display Modes

Video:

- 1920 x 1080 Display Resolution
- High Contrast Black Stripe Filter
- Wide Viewing Angle
- Color Temperature Presets: High, Standard, Medium and D. Cinema.
- Multiple Screen Fill Modes: (4:3 Standard/4:3 Expanded/4:3 Zoom 1/ 4:3 Zoom 2/16:9 Standard1/Standard2/16:9 Zoom)¹
- 4MB 10-bit 3D Y/C Comb Filter
- Picture Modes : Dynamic, Day and Night

Audio:

- MTS Stereo/SAP
- Bass Boost
- Surround Sound
- 20W
- Soft Mute (50%)

Inputs:

- Power Input AC 120V, 60Hz
- Power Consumption 388 W
- Average Power: 571 W, 4.80 A
- Maximum Power: 75 Ohm
- Antenna Input Impedance 191ch.
- Channel Coverage
 - VHF-Band 2~13
 - UHF-Band 14~69
 - CATV Mid Band A5~A1
 - AI
 - Super Band J-W
 - Hyper Band W+1 - W+28
 - Ultra Band W+29 - W+94
- Television System NTSC Standard
- ATSC Standard (8 VSB, 64-QAM, 256-QAM)
- Video 1.0Vp-p, 75 Ohm
- S-Video
 - Luminance(Y): 1.0Vp-p, 75 Ohm
 - Chrominance(C): 0.286Vp-p, 75 Ohm

- Component Video 1.0Vp-p, 75 Ohm
 - Luminance(Y): 0.7Vp-p, 75 Ohm
 - Chrominance(PB/PR): more than 20k Ohm
- Audio Input Impedance 470mVrms
- Average Input Level. (19 PIN)
- HDMI

Outputs:

- Optical Out (Digital Audio) 1 Optical Connector

Supplied Accessories:

- Remote Control
- Batteries (AAA)
- 6' AC Power cord cable
- Operating Guide
- TV Guide Daily User Manual
- Easy Graphic Guide
- Warranty Cards

Optional Accessories:

- For U.S. and Canada Models:
Please access our website: www.hitachi.us/tv

Inputs/Outputs:

- Wideband Component Y, PB,PR. 2
- Composite Video 3
- S-Video 1
- Antenna (RF)Inputs. 1
- Optical Output 1
- HDMI 3
- Upgrade Card Slot. 1
- Phono Jack for Service. 1

Specifications:

- Pixel Pitch (50"). 0.576(horiz.) x 0.580(vert.) mm.
- FCC class: B for Consumer Use
- Power Requirements 108-132VAC, 60Hz

¹ Screen mode availability varies by input format

HDTV Televisions display HDTV only when an HDTV source is available

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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 **HDMI™**
HIGH-DEFINITION MULTIMEDIA INTERFACE

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

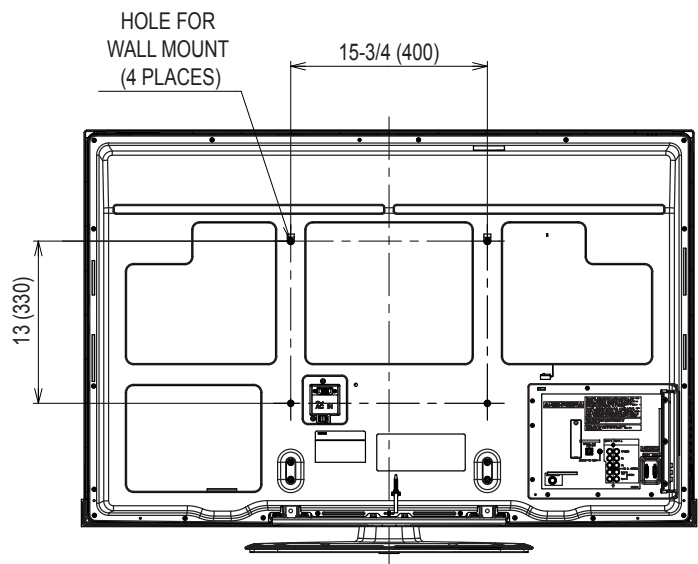
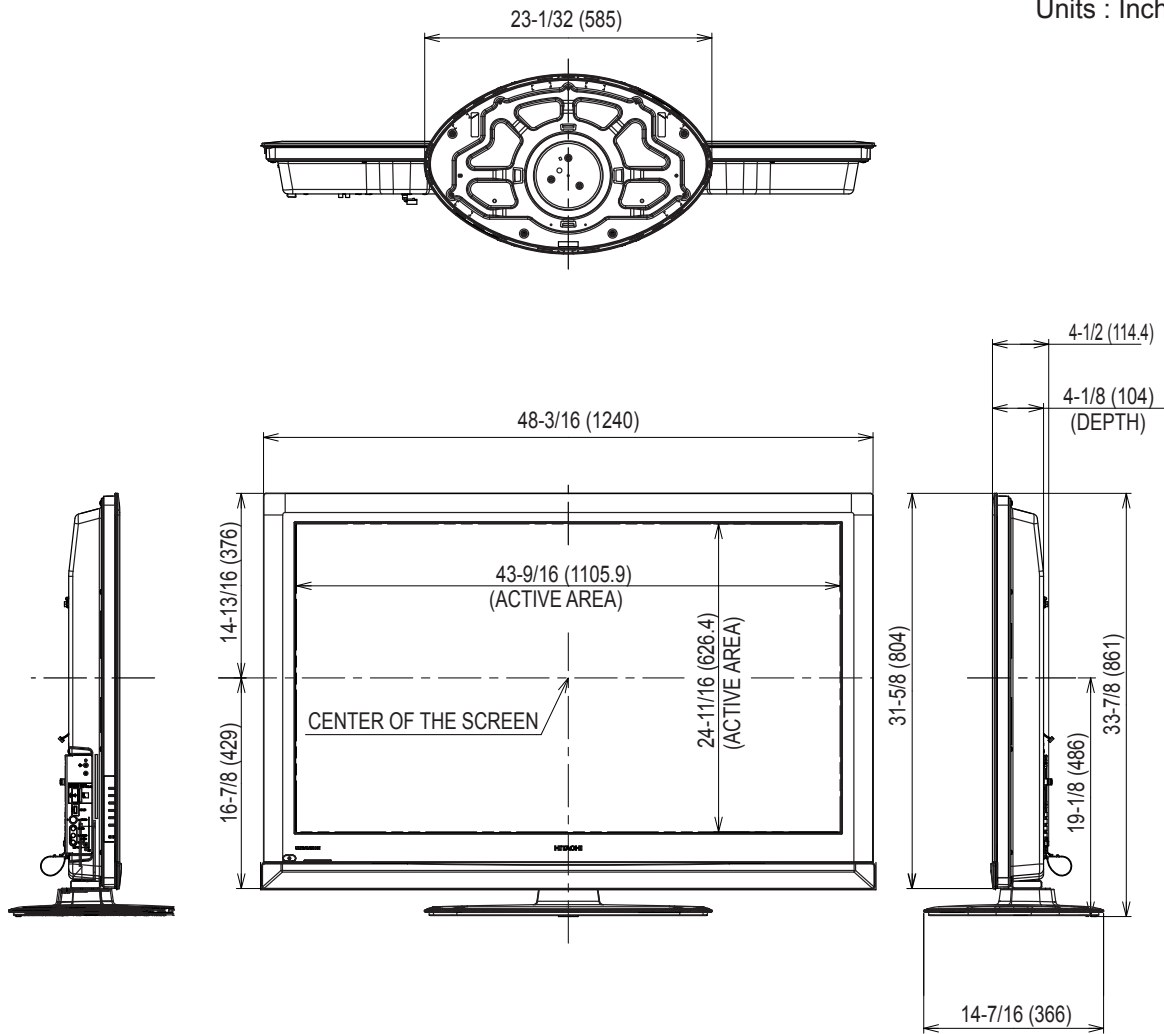
 **DOLBY**
DIGITAL

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

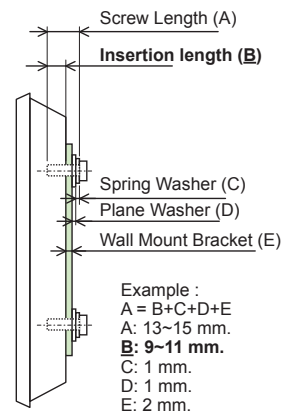
Set Dimensions

P50S602 model (Includes Table Top Stand) Weight (lbs./kg): 103.9/47.2

Units : Inches (mm)



Rear View
Use as Reference for Wall Mount Bracket



• The screw type :Thread ISO M6 (Metric type, do not use Standard type).

Side View
Wall Mount Screw specification

Service Information

800.HITACHI
(800.448.2244)

**Operational, hook up and
warranty questions for your product.**

**Monday ~ Sunday
8:00 am - 8:30 pm CST**

www.hitachi.us/tv



Sincere - Prompt - Efficient

HITACHI
Inspire the Next

HITACHI HOME ELECTRONICS (AMERICA), INC.

HITACHI has made every effort to assure you hours of trouble free operation from your Hitachi product.

Should you require service assistance with **OPERATIONAL, HOOK UP, TECHNICAL ASSISTANCE OR WARRANTY SUPPORT**, please contact our Support Hotline at **800.HITACHI (800.448.2244)**.

Our Support Hotline will provide you with the assistance you need and if necessary the location of the nearest Authorized Service Facility in your area. Please 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.

**Hitachi Home Electronics
(America), Inc.
Customer Service Support
PO Box 3900
Peoria, IL 61612
customerservice.ce@hhea.hitachi.com**

HITACHI HOME ELECTRONICS (CANADA)

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

In Canada: 800.HITACHI (800.448.2244)

Monday~ Friday	9:00 am – 7:00 pm EST
Saturday	9:00 am – 5:00 pm EST

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: 800.HITACHI (800.448.2244)

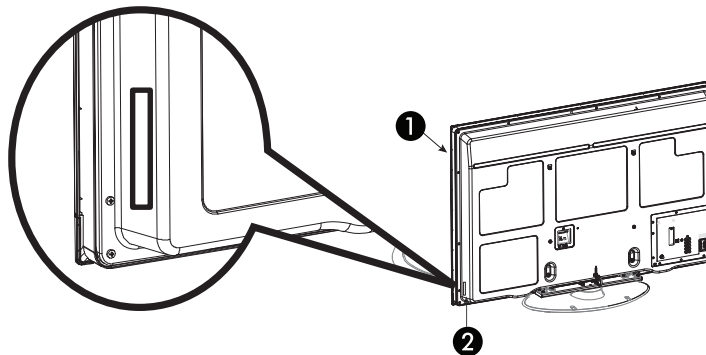
Lundi~ Vendredi	9:00 am – 7:00 pm L'EST
Samedi	9:00 am – 5:00 pm L'EST

**Hitachi Home Electronics (Canada)
Customer Service Support
PO Box 3900
Peoria, IL 61612**

Customer Record

The MODEL NAME and SERIAL NUMBER of this product is located on the backcover and also on the RIGHT SIDE of the set. Please follow the next steps to find this information and then record it in the space provided below for use in case you call 800.HITACHI, they will require this information in order to give you the proper support.

- 1 Look on the right side of the set
- 2 Locate the label where it shows the information related to MODEL NAME and SERIAL #.
- 3 800.HITACHI will require this information in order to give you the proper support regarding your questions.



Model Name _____

Serial Number _____

Limited Warranty

Congratulations on your purchase of a new Hitachi display product.

Register your product online at www.hitachi.us/tv or mail the included warranty registration card:

LIMITED WARRANTY

Hitachi Home Electronics (America), Inc. warrants this product in accordance with the terms and conditions applicable to the products identified below:

Conditions of Hitachi Limited Warranty

This Hitachi display product (the "Product") is warranted to be free from defects in materials and workmanship beginning on the date of purchase by the original owner and continuing for the duration of the applicable time periods specified below. If the Product is found to be defective, Hitachi will repair or replace (at Hitachi's option) defective parts at no charge, subject to the conditions of this Limited Warranty. If the original owner rejects, refuses or otherwise does not accept Hitachi's offer to repair or replace such defective parts under this Limited Warranty, this Limited Warranty shall be void and of no further force or effect. This Limited Warranty extends to the original owner only and is not transferable, and such owner must provide a dated sales receipt for the Product to qualify for parts or service under this Limited Warranty. The original owner must notify Hitachi of a defect claim during the applicable Limited Warranty period for this Limited Warranty to be effective. This Limited Warranty is valid only in the U.S.A. and Puerto Rico.

LCD Flat Panel Televisions
LCD Flat Panel Monitors
Plasma Televisions
Plasma Monitors

PARTS: The Limited Warranty period for parts is 1 year from the date of original purchase. During the Limited Warranty period for parts, Hitachi will replace defective parts with new or rebuilt parts (at Hitachi's option) at no charge for such parts. Any replacement part will be warranted for the remainder of the original warranty period applicable to the part replaced.

LABOR: The Limited Warranty period for labor is 1 year from the date of original purchase. During the Limited Warranty period for labor, Hitachi will repair or replace (at Hitachi's option) defective parts without charge for labor.

SERVICE LOCATION: In-home warranty service, which includes either in-home repair or free pick-up and delivery (at Hitachi's option), applies to all Hitachi products except: (i) 26-inch and smaller LCD Flat Panel Televisions or LCD Flat Panel Monitors; (ii) Products located outside the U.S.A. or Puerto Rico; (iii) Products located more than seventy-five (75) driving miles from Hitachi's nearest Authorized Service Facility. If the foregoing clauses (i), (ii), (iii) apply, then the Product owner will be responsible for bringing/delivering the Product to a Hitachi Authorized Service Facility and, following warranty service, retrieving the Product from such Authorized Service Facility.



CERTIFIED
SERVICE
CENTER

Hitachi is a proud supporter of the Certified Service Center program. Businesses who display the CSC certification mark have demonstrated that they operate in accordance with the high standards of professionalism prescribed by the Consortium for Certified Service Centers.

800-HITACHI (800-448-2244)

Please call 800-HITACHI (800-448-2244) for operational, hook up, warranty questions or the location of your nearest Hitachi Authorized Service Facility or Parts Distributor.

Visit our website and register your product online:

Hitachi's website features a wealth of information on Hitachi products and technologies, as well as downloadable operating guides and other useful information.

To register your new Hitachi display product online, go to:

www.hitachi.us/tv

Support and Contact/Warranty Registration

IMPORTANT:

Before using or installing your Product, please complete this form and attach your sales receipt and retain them for your records. This will help facilitate proper warranty coverage.

MODEL NO.	SERIAL NO.
DEALER NAME	DATE OF PURCHASE
DEALER ADDRESS	
CITY	STATE

Warranty Limitations

This Hitachi Limited Warranty does not cover:

- Any Product that has been modified or repaired in a manner not previously authorized by Hitachi in writing.
- Any Product whose serial number has been removed, altered, replaced, defaced or rendered illegible.
- Any defect, malfunction, or failure caused by or resulting from improper or unauthorized service, maintenance or repair.
- Damage resulting from abuse, misuse, mishandling, neglect or damage caused by exposure to hostile operating environments such as areas containing dust and/or smoke.
- Damage caused by power surges, accidents, natural disasters or any other events or circumstances outside Hitachi's control.
- Any Product used in any manner inconsistent with the acceptable set-up, usage, safety or installation configurations identified in the Product's Operating Guide.
- Any Product used for purposes or applications, or subjected to operating conditions, other than those identified as acceptable in the Product's Operating Guide.
- Product repairs (including any product whose case has been opened), or part replacements provided or installed, by any person other than an Authorized Hitachi Service Facility Representative.
- Improper uncrating, set-up or installation or any misadjustments caused by user-operated controls.
- Any labor or costs associated with removing the Product from a custom cabinet or other specialized product installation that impedes direct and immediate removal of the Product from the owner's premises (must be arranged and paid by the owner).
- Product cabinets, cabinet parts, knobs, batteries or accessories.
- Product screens that have been cleaned by any method other than as specified in the Product's Operating Guide.
- Normal usage, degraded brightness caused by backlight aging and/or cell defects or ordinary wear and tear, including, without limitation, scratches or marks on the Product's screen, cabinet or the appearance of bright or dark screen pixels.
- Any Product returned for service that is damaged due to improper packaging, mishandling or shipping. (IMPORTANT: When shipping any Product to a Hitachi Authorized Service Centers, Product owner must package it securely in the original shipping container or its equivalent to prevent damage. The Product must be returned with the shipping charges prepaid and proof of purchases included in the shipping container. Failure to properly package such product during such shipment will void all warranties.)
- Any Product purchased or serviced outside the United States of America and Puerto Rico.
- Any Product that has been used for commercial purposes.

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End User License Agreement for HITACHI DTV Software

END USER LICENSE AGREEMENT FOR HITACHI DTV SOFTWARE

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1. **LICENSE GRANT.** **HITACHI** grants to you, for the life of the DTV, a non-exclusive, non-transferable, revocable license to install and use one copy of the Software on the DTV, subject to the following limitations and restrictions:
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 - b. You may not resell, rent, lease, sublicense, gift, loan, as sign or otherwise transfer the Software or any of your rights under this Agreement;
 - c. You may not modify, adapt, translate, reverse engineer, decompile, disassemble or make derivative works from the Software or use the Software in combination with any non-Hitachi software; and
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That's all there is to it!

Appendixes

Appendix A: Picture Format for Each Input Source

Aspect Specifications

Yes: Selectable --: No Selectable

Input Signal			Auto Aspect	Aspect Video ID	Aspect						
					16:9 Standard 1	16:9 Standard 2	16:9 Zoom	4:3 Standard	4:3 Expanded	4:3 Zoom 1	4:3 Zoom 2
ANT Analog	Video	NTSC	--	4x3	Yes	--	Yes	Yes	Yes	Yes	Yes
ANT Digital	YCbCr	480p 480i	--	16x9	Yes	--	Yes	--	Yes	--	--
			--	4x3	--	--	--	Yes	Yes	Yes	Yes
	YPbPr	1080i/720p	--	16x9	Yes	Yes	Yes	--	Yes	--	--
Input 1	YPbPr	1080i/720p	Auto ON	16x9	Yes Initial	--	Yes	--	--	--	--
				Letter	--	--	--	Yes	Yes	Yes Initial	Yes
				4x3	--	--	--	Yes	Yes Initial	Yes	Yes
				No ID	Yes	--	Yes	Yes	Yes	Yes	Yes
		Auto OFF	--								
		No Signal	--								
	Video	NTSC	Auto ON	16x9	Yes Initial	--	Yes	--	--	--	--
				Letter	--	--	--	Yes	Yes	Yes Initial	Yes
				4x3	--	--	--	Yes	Yes Initial	Yes	Yes
				No ID	Yes	--	Yes	Yes	Yes	Yes	Yes
		Auto OFF	--	Yes	--	Yes	Yes	Yes	Yes		
Input 2	YPbPr	1080i/720p	Auto ON	16x9	Yes	Yes	Yes	--	Yes	--	--
				Letter	Yes Initial	--	Yes	--	--	--	--
				4x3	--	--	--	Yes	Yes Initial	Yes	Yes
				No ID	Yes	--	Yes	Yes	Yes	Yes	Yes
		Auto OFF	--								
		No Signal	--								
	Video	NTSC	Auto ON	16x9	Yes Initial	--	Yes	--	--	--	--
				Letter	--	--	--	Yes	Yes	Yes Initial	Yes
				4x3	--	--	--	Yes	Yes Initial	Yes	Yes
				No ID	Yes	--	Yes	Yes	Yes	Yes	Yes
		Auto OFF	--	Yes	--	Yes	Yes	Yes	Yes		
Input 3	Video S-Video	NTSC	Auto ON	16x9	Yes Initial	--	Yes	--	--	--	--
				Letter	--	--	--	Yes	Yes	Yes Initial	Yes
				4x3	--	--	--	Yes	Yes Initial	Yes	Yes
				No ID	Yes	--	Yes	Yes	Yes	Yes	Yes
				Auto OFF	--	Yes	--	Yes	Yes	Yes	Yes
HDMI 1 (Input1-DVI)	HDMI (DVI)	1080p/ 1080i/720p	Auto ON	16x9	Yes	Yes	Yes	--	Yes	--	--
				Letter	Yes Initial	--	Yes	--	--	--	--
				4x3	--	--	--	Yes	Yes	Yes Initial	Yes
				No ID	Yes	--	Yes	Yes	Yes	Yes	Yes
				Auto OFF	--	--	--	Yes	Yes	Yes	Yes
HDMI 2 (Input2-DVI)	HDMI (DVI)	1080p/ 1080i/720p	Auto ON	16x9	Yes	Yes	Yes	--	Yes	--	--
				Letter	Yes Initial	--	Yes	--	--	--	--
				4x3	--	--	--	Yes	Yes	Yes Initial	Yes
				No ID	Yes	--	Yes	Yes	Yes	Yes	Yes
				Auto OFF	--	--	--	Yes	Yes	Yes	Yes
HDMI 3 (Input3-DVI)	HDMI (DVI)	1080p/ 1080i/720p	Auto ON	16x9	Yes	Yes	Yes	--	Yes	--	--
				Letter	Yes Initial	--	Yes	--	--	--	--
				4x3	--	--	--	Yes	Yes	Yes Initial	Yes
				No ID	Yes	--	Yes	Yes	Yes	Yes	Yes
				Auto OFF	--	--	--	Yes	Yes	Yes	Yes
Horizontal Expansion		16x9	105%	100%	133%	--	133%	--	--		
		4x3	105%	100%	133%	75%	100%	100%	133%		
Vertical Expansion			105%	100%	133%	Yes	110%	133%	176%		

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