

HITACHI

Inspire the Next

PLASMA TELEVISION

Operating Guide for P50S601

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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.

Follow all warnings and instructions marked on this 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.

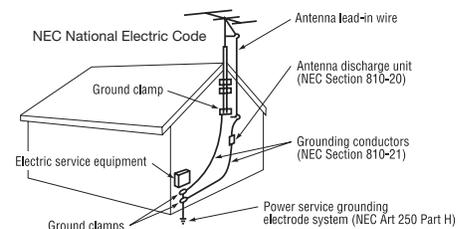
READ BEFORE OPERATING EQUIPMENT

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 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.

Important Safety Instructions



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.

Caution

Adjust only those controls that are covered in the instructions, as improper changes or modifications not expressly approved by **HITACHI** could void the user's warranty.

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 consumer uses only unless otherwise authorized. Reverse engineering or disassembly is prohibited.

Note

This digital television is capable of receiving analog basic, digital basic 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.

Note

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

Prevention of screen damages

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**.

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 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.

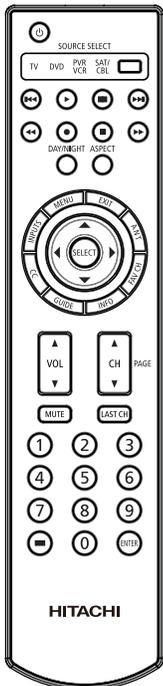
Lead Notice

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 1-800-HITACHI.**

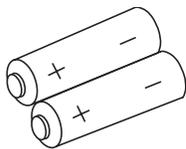
Accessories

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

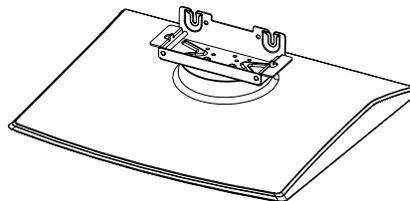
1 Remote Control



2 Two "AA" size, 1.5V batteries



3 Power Swivel Table Top Stand (included)



4 Power Cord



5 Power Swivel Cable



6 Wire clamp



For U.S. models: For optional accessories, please access our web site at: www.hitachi.us/tv
 CANADA only: For optional accessories, please access our web site at: www.hitachi.ca/tv



CAUTION:

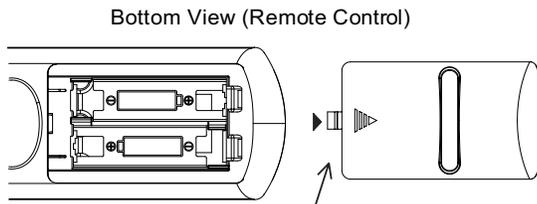
1. Ceiling mounting is not recommended. Mounting the panel on the ceiling does not provide adequate ventilation for the electronics or proper support for the front glass panel. This plasma television product is designed for a maximum tilting angle of 45 degrees from vertical.
2. This stand for use only with Hitachi P50S601. Use with other apparatus is capable of resulting in instability causing possible injury.
3. The wall mount unit for the 50" models is WM07S. Please see page 7 for important information related to the wall mount. Wall Mount unit is an optional accessory (Not Included).

- 1 Remote Control Unit CLU-4373A (Part No. HL02403).
- 2 Two "AA" size, 1.5V batteries.
- 3 Power Swivel Table Top Stand (Part No. QJ03754)
- 4 Power Cord (Part No. EV01841).

- 5 Power Swivel Cable (Part No. EW08433).
- 6 Wire clamp

REMOTE CONTROL BATTERY INSTALLATION AND REPLACEMENT

1. Open the battery cover of the remote control by pushing down and sliding the back cover off.
2. Insert two new "AA" 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. Replace the cover.



CAUTION: Do not insert batteries with '+' and '-' polarities reversed as this may cause the batteries to swell or rupture resulting in leakage.

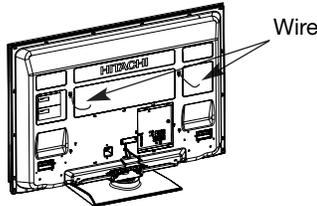
First time use

How To Set Up Your New Hitachi Plasma Television

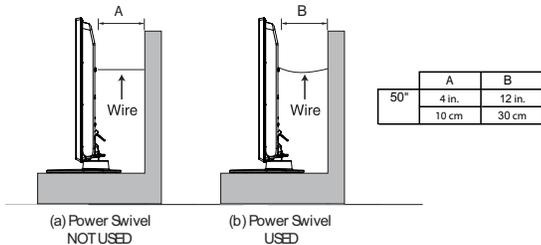
To take measures to prevent the Plasma Television from tipping over and prevent possible injury it is important to mount the unit in a stable and flat surface.

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.
- Secure the television to the wall as shown.



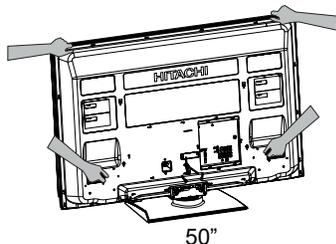
* Please adjust the wire length to avoid touching the wall when turning the TV.

- 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.
 - If you purchased the wall mount bracket option, please ask for professional installer. Do not 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 and cause personal injury.
 - If the Power Swivel feature will not be used, the Plasma television should be secured to the wall as shown in fig. (a).
 - If the Power Swivel feature will be used, the Plasma television should be secured to the wall as shown in fig. (b).



Caution when moving the main unit

As this product is heavy, whenever it is moved, two people are required to transport it safely. Whenever the unit is moved it should be lifted forward using the top and base on both sides of the Television for stability. When moving the Television, lift the handles, then support the top frame as shown below.

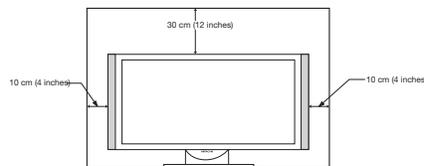


ANTENNA

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

LOCATION

Select an area where sunlight or bright indoor illumination will not fall directly on the picture screen. Also, be sure that the location selected allows a free flow of air to and from the perforated back cover of the set. In order to prevent an internal temperature increase, maintain a space of 10 cm (4 inches) from the sides/back of the 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.

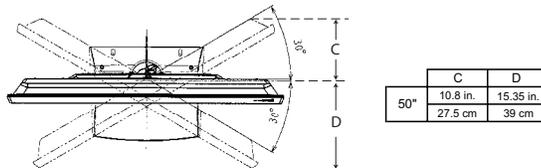


CONNECT POWER SWIVEL CABLE

Connect one end of cable to the swivel slot of the Plasma Rear Panel. Connect the other end to swivel slot of the Table Top Stand. For more detail information, please refer to next page installation instruction.

TURNING ANGLE

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



How to set up your new HITACHI Plasma Television

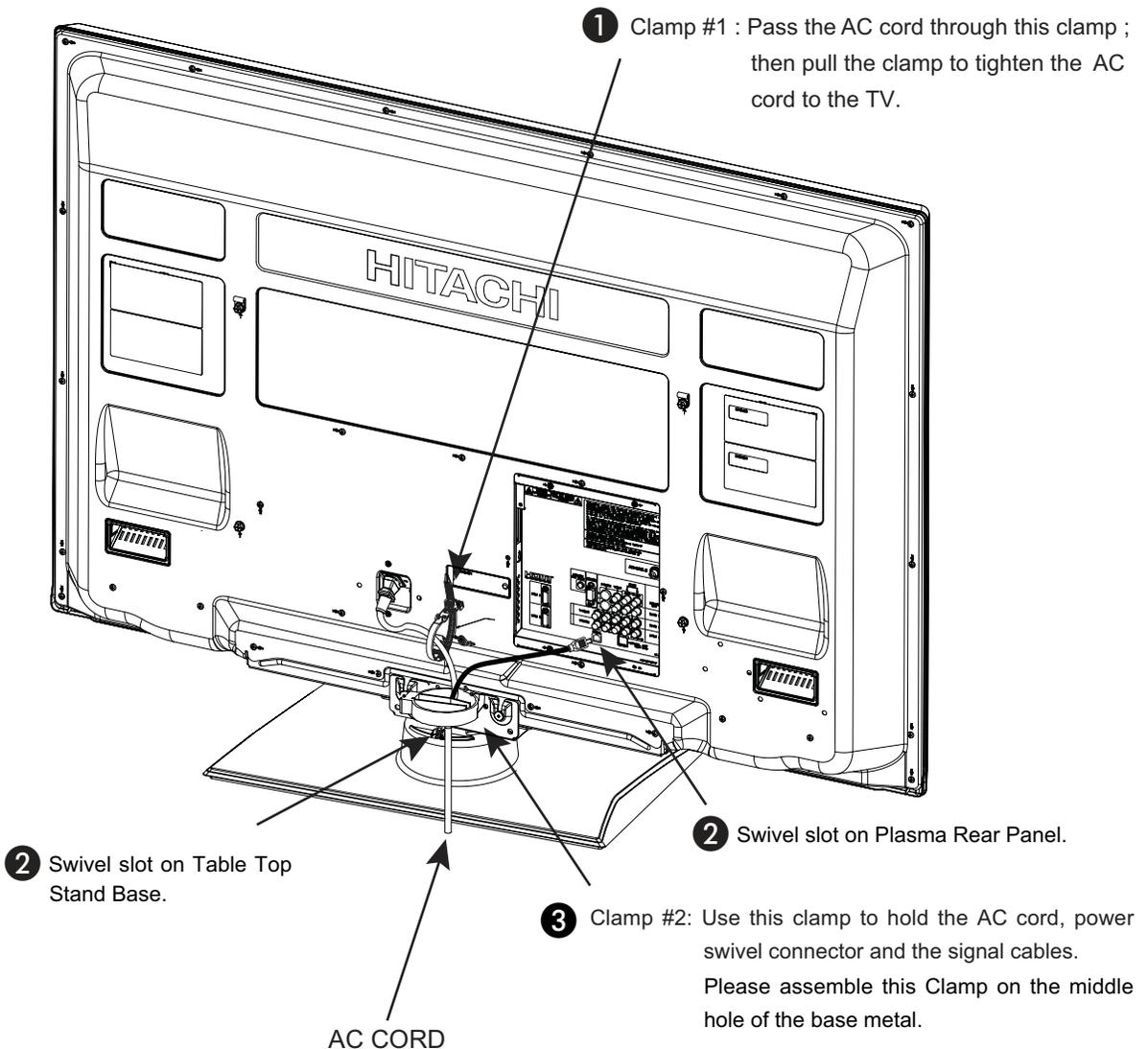
First time use

AC CORD AND POWER SWIVEL CABLE INSTALLATION INSTRUCTION

The AC cord and power swivel cable provided with your new Plasma Television need to be installed correctly to avoid their disconnection when rotating the TV on its Table top stand.

Located on the back of the TV are 2 plastic clamps to hold the AC cord and power swivel cable. Please follow the instructions below.

- 1 Pass the AC cord through Clamp #1 and connect it to the TV. Pull on the clamp to tighten the AC cord to the TV.
- 2 Connect power swivel cable on one end to the swivel slot of the Plasma Rear Panel. Connect the other end to the swivel slot of the Table Top Stand Base.
- 3 The AC cord, power swivel cable and the signal cables can all be held together with Clamp #2 (included on the accessories bag).

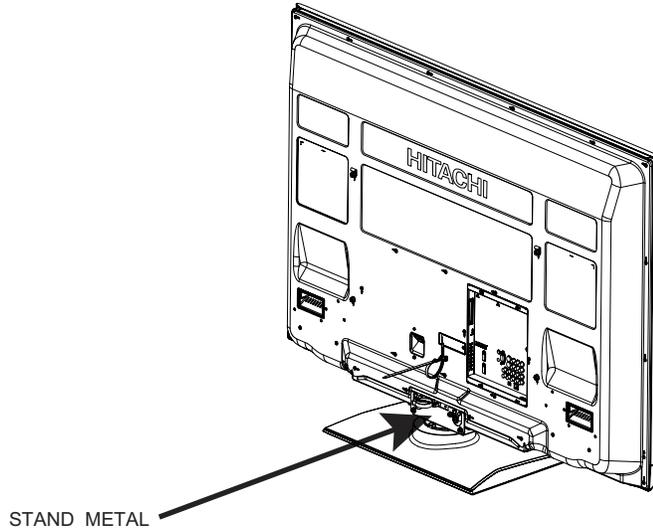


How to set up your new HITACHI Plasma Television

SETTING FOR WALL MOUNTING

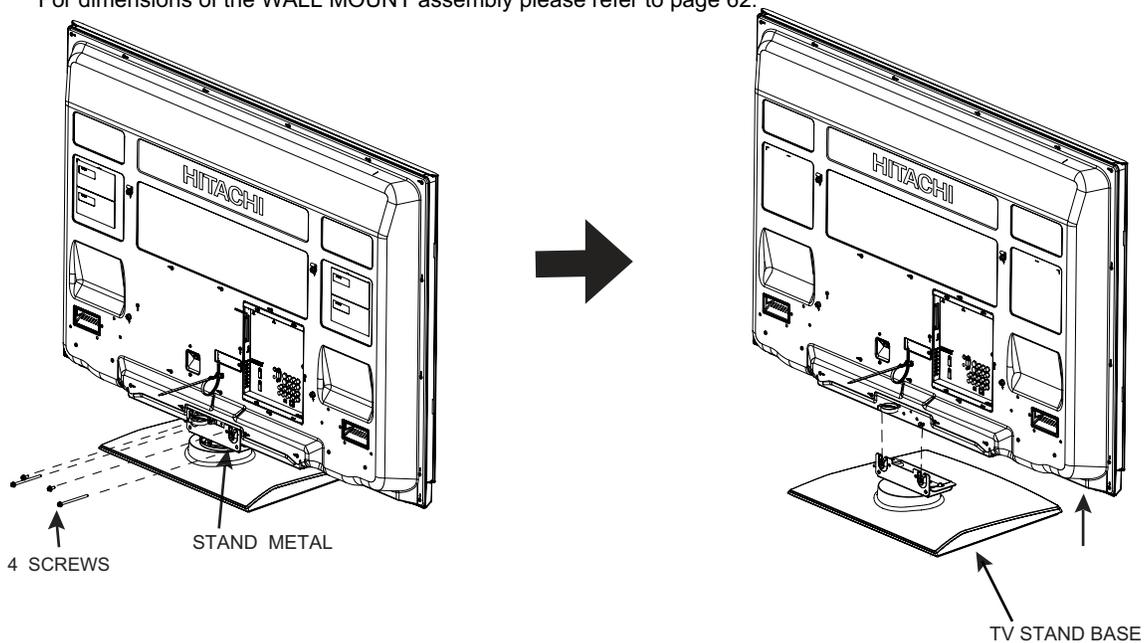
STEP (1) :

Please locate the STAND METAL on the back of the TV . This metal is use to hold the TV and the Base ; so it needs to remove 4 screws from the STAND base in order to separate the TV from the Base.



STEP (2):

Please remove the 4 screws of the STAND metal from the TV, now the TV STAND can be separated from the TV. For dimensions of the WALL MOUNT assembly please refer to page 62.



For Model P50S601

CAUTION- This Plasma Display Panel for use only with Hitachi **WM07S** Wall Mount. Use with other Wall Mount is capable of resulting in instability causing possible injury.

NOTE: Use the specified WALL MOUNT unit for the Plasma TV depending on the size of your TV. Please access our web site at: www.hitachi.us/tv for recommended accessories for your TV.

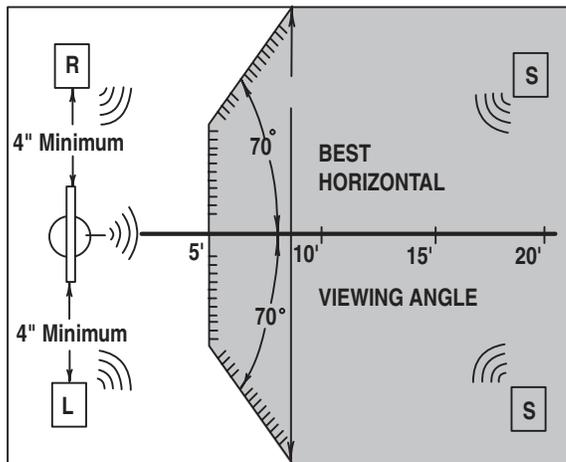
How to set up your new HITACHI Plasma Television

VIEWING

The best picture is seen by sitting directly in front of the TV and about 10 to 18 feet from the screen.

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

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



ANTENNA CONNECTIONS TO REAR JACK PANEL

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

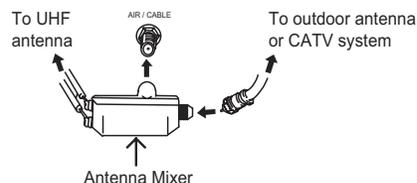
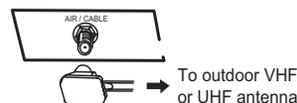
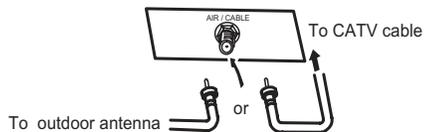
When using a 75-Ohm coaxial cable system, connect **CATV** coaxial cable to the AIR/CABLE (75-Ohm) terminal. Or if you have an antenna, connect the coaxial cable to the same AIR/CABLE terminal.

VHF (300-Ohm) antenna/UHF antenna

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

When both VHF and UHF antennas are connected

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



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

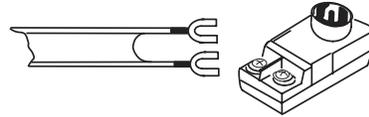
Hook-up Cables and Connectors

First time use

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

300-Ohm Twin Lead Cable

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



Phono or RCA Cable

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



"F" Type 75-Ohm Coaxial Antenna

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



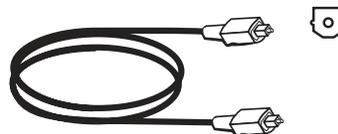
S-Video (Super Video) Cable

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



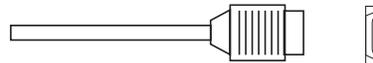
Optical Cable

This cable is used to connect to an audio amplifier with an Optical Audio In jack. Use this cable for the best sound quality.



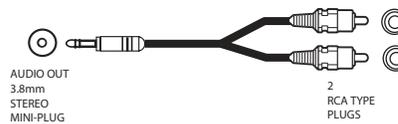
HDMI Cable

This cable is used to connect your external devices such as Set-Top-Boxes or DVD players equipped with an HDMI output connection to the TV's HDMI input.



Stereo Cable (3.8mm plug to 3.5mm plug)

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



Power Swivel Cable (Provided)

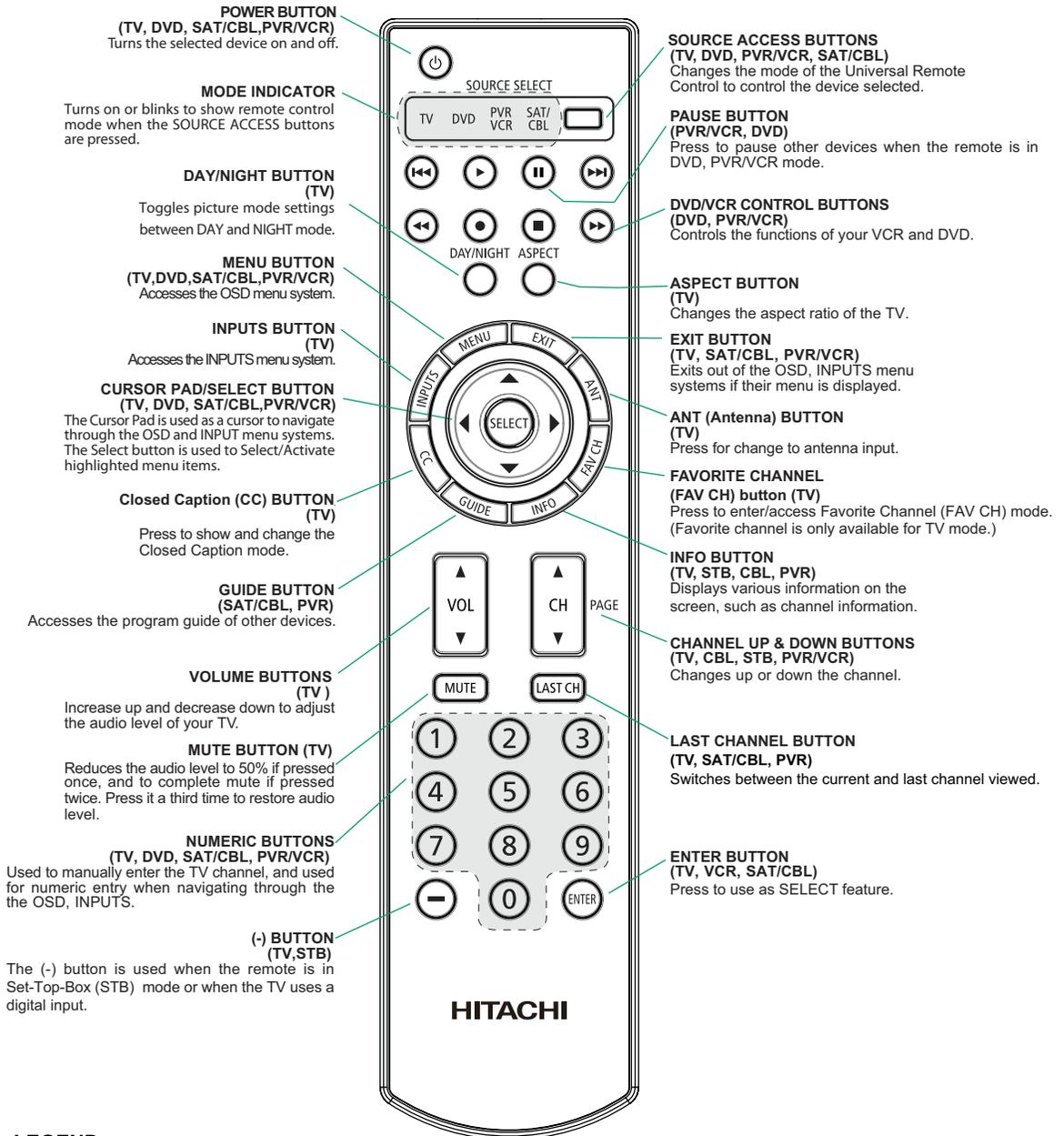
This cable is used to connect the swivel stand to the rear panel of the Plasma Television.



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 22-33 for a complete description of all features and programming of the Remote Control.

First time use



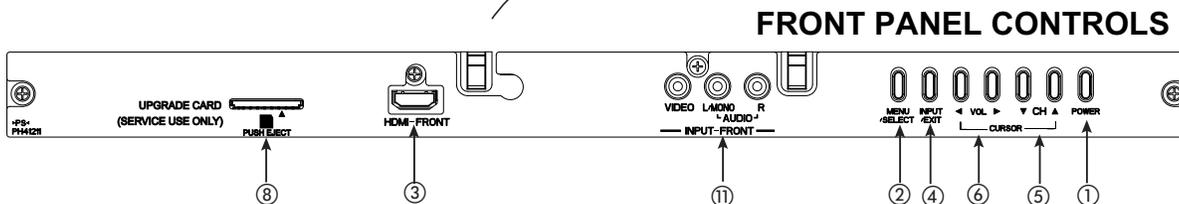
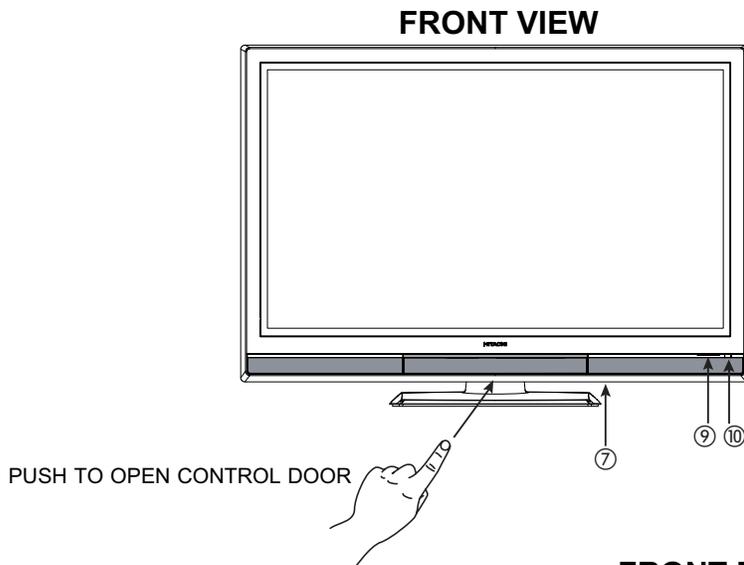
LEGEND

- | | |
|------------------------|--|
| TV – Television | PVR – Video Recorder/Player |
| CBL – Cable Box | DVD – Digital Video Disc Player |
| SAT – Satellite | VCR – Videocassette Recorder |

- NOTES:** 1. The TV's remote control sensor is located on the right bottom portion of the TV screen. To control TV functions, please point the remote control directly at the remote control sensor for best results.
2. VCR precode is included in the PVR mode.

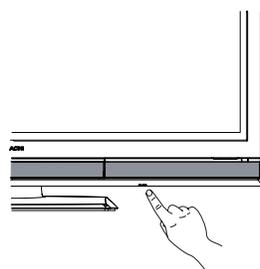
Front Panel Controls

First time use



- ① **FRONT POWER button**
Press this button to turn the Plasma Television ON/OFF. It can also be turned ON/OFF by remote control. The "MAIN POWER" button must be at 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 **HDMI-FRONT**
Use the front HDMI input for external devices such as Set-Top-Boxes or DVD players equipped with an HDMI output connection (see page 14 for reference).
- ④ **INPUT/EXIT button**
Press this button to access the INPUT menu. Press again to exit the 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 **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.

- ⑦ **POWER button**
Television MAIN POWER button
This power button is for the complete system, and must be turned ON/OFF manually. It is recommended to leave the "MAIN POWER" to ON condition (lights red) for stand-by mode.



The Main Power button is located on the broadside bottom, under the mark "①".

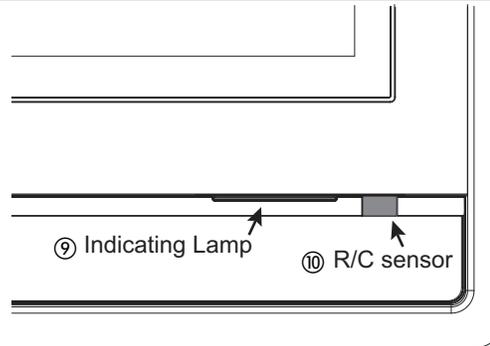
NOTE: When the "MAIN POWER" button is set to OFF or the TV is unplugged, the clock will stop and may eventually reset itself.

- 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.

Front Panel Controls

⑨ POWER light indicator

To turn the TV ON, press the main power switch located on the lower right side of the TV. A red stand-by indicator lamp located on the lower right 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 main power switch is set to Off.
Lights Red	OFF. (Stand-by)	When the main power switch on the TV is ON.
Lights Blue	On	TV MAIN POWER is ON ; picture is shown.
Lights Orange	Off (Power Saving)	TV MAIN POWER is ON with no signal input except antenna (no sync. signal).
Blinking Blue	On	When TV receives the IR signal from R/C.

⑩ REMOTE CONTROL sensor

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

⑪ INPUT- FRONT JACKS

INPUT- FRONT provide composite Video jacks for connecting equipment with this capability, such as a DVD player or Camcorders.

- NOTES:**
1. Your HITACHI Plasma TV will appear to be turned OFF (lights orange) if there is no video input when INPUT : 1, 2, 3, Front and HDMI 1, 2, Front. Check the Power Light to make sure the TV is turned off or in Stand-by mode (lights red) when not in use.
 2. Remote Control can not turn ON/OFF the "MAIN POWER" of the TV.

Rear Panel Connections

① Antenna Input

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

② Audio/Video Inputs 1, 2 and 3

By using the INPUTS button, the CURSOR PAD (▲ and ▼), and the SELECT button or CURSOR PAD ► of the remote control, you can select each video source. Use the audio and video inputs to connect external devices, such as VCRs, camcorders, laserdisc players, DVD players etc. (if you have mono sound, insert the audio cable into the left audio jack).

③ MONITOR OUT & AUDIO OUT

These jacks provide fixed audio and video signals (CABLE/AIR or INPUTS) which are used for recording. Use the S-VIDEO output for high quality video output. Component signal to Input 2 and 3, and HDMI inputs will not have monitor output.

④ Optical Out (Digital Audio)

This jack provides Digital Audio Output for 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 S-VIDEO Input 1

Input 1 provide S-VIDEO (Super Video) jacks for connecting equipment with S-VIDEO output capability.

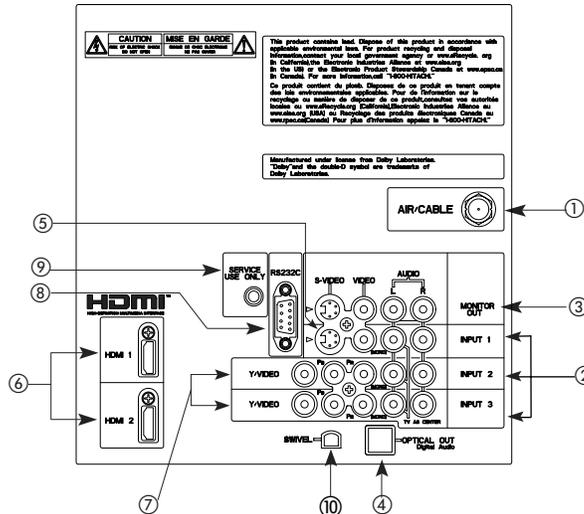
NOTE: 1. You may use VIDEO or S-VIDEO inputs to connect to INPUT 1 , but only one of these inputs may be used at a time.
2. S-VIDEO output may be used for recording, only when the input is of S-VIDEO type.

⑥ 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 multi-channel 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 external devices such as Set-Top-Boxes or DVD players equipped with an **HDMI** output connection.

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



NOTE: 1. The HDMI input is not intended for use with personal computers.

2. Only DTV formats such as 1080p, 1080i, 720p, 480i and 480p are available for HDMI input.

⑦ Component: Y-PBPR Inputs

INPUTS 2 and 3 provide Y-PBPR 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.

NOTE: 1. Do not connect composite VIDEO and S-VIDEO to INPUT 1 at the same time. S-VIDEO has priority over VIDEO input.

2. Your component outputs may be labeled Y, B-Y, and R-Y. In this case, connect the components B-Y output to the TV's P_B input and the components R-Y output to the TV's P_R input.

3. Your component outputs may be labeled Y-CBCR. In this case, connect the component CB output to the TV's P_B input and the component CR output to the TV's P_R input.

4. It may be necessary to adjust TINT to obtain optimum picture quality when using the Y-P_BPR inputs (see page 36).

5. To ensure no copyright infringement, the MONITOR OUT output will be abnormal, when using the Y-P_BPR jacks and HDMI Input.

6. INPUT 2 , and 3 (Y/VIDEO) can be used for composite video and component video input.

⑧ For Special AV control use only.

⑨ For Factory use only.

⑩ Power Swivel Connector

Connect from here the Power Swivel cable (provided) to the Table Top Stand Base swivel slot.

Connecting External Video Sources

The FRONT panel jacks are 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 connecting DVI signal it will need to connect the audio output into the Front Audio Input jacks) :

A) Connecting HDMI signal.

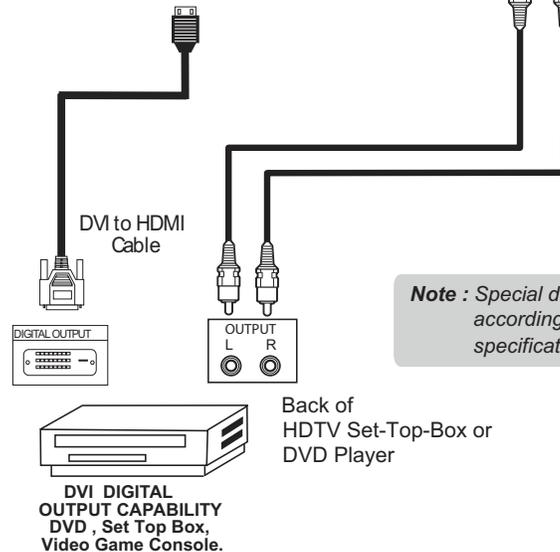
FRONT INPUT PANEL



Note : Special device cables will be according to the own device specifications.

B) Connecting DVI signal.

FRONT INPUT PANEL

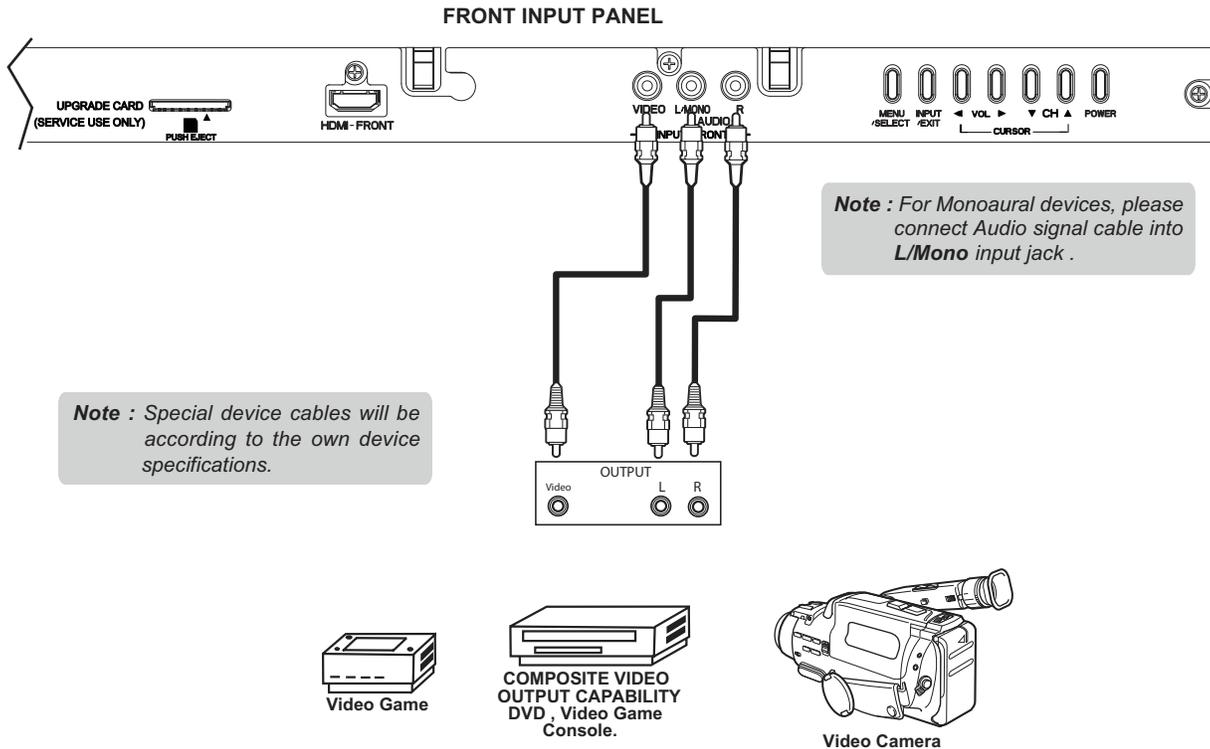


Note : Special device cables will be according to the own device specifications.

NOTE: 1. Completely insert connection cord plugs when connecting to front panel jacks. If you do not, the played back picture may be abnormal.

Connecting External Video Sources

The FRONT panel 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:



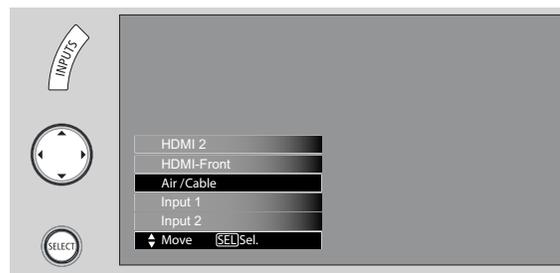
NOTE:1. Completely insert connection cord plugs when connecting to front panel jacks. If you do not, the played back picture may be abnormal.

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

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

Before Operating External Video Source

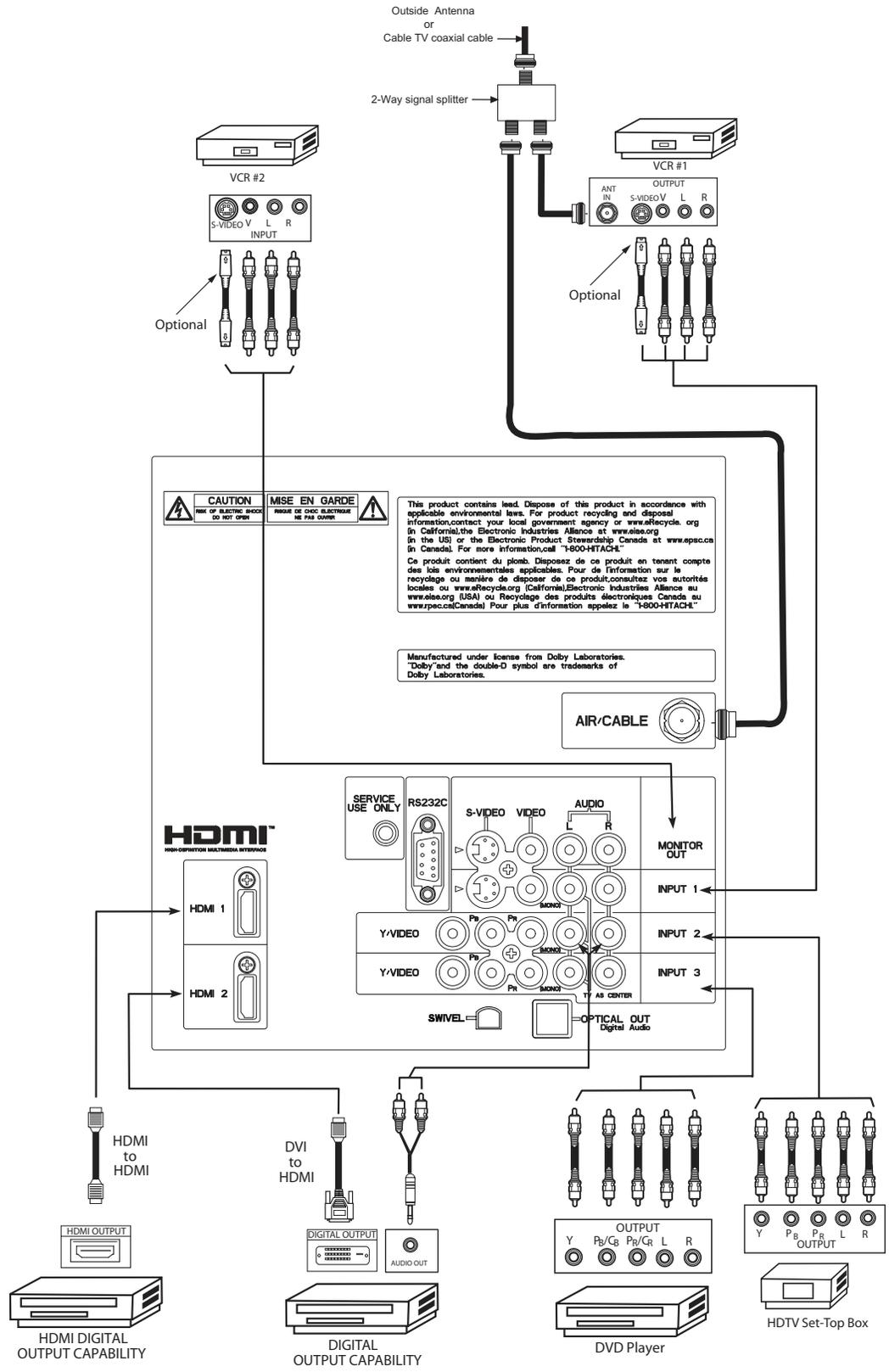
Connect an external source to one of the INPUT terminals, then press the INPUTS button to show the INPUTS menu. Use the CURSOR PAD (▲ and ▼) to select the Input of your choice. Then press the SELECT button or the CURSOR PAD ► to confirm your choice (see page 25).



First time use

Rear Panel Connections

First time use



NOTE: Cables are optional, except when specified.

Tips on Rear Panel Connections

- S-VIDEO, Y-PbPr, or HDMI connections are provided for high performance laserdisc players, VCRs etc. that have this feature. Use these connections in place of the standard video connection if your device has this feature.
- If your device has only one audio output (mono sound), connect it to the left audio jack on (L/(MONO)) the Rear Panel.
- Refer to the operating guide of your other electronic equipment for additional information on connecting your hook-up cables.
- A single VCR can be used for VCR #1 and VCR #2, but note that a VCR cannot record its own video or line output (INPUT: 1 in the example on page 16). Refer to your VCR operating guide for more information on line input-output connections.
- Connect only 1 component (VCR, DVD player, camcorder, etc.) to each input jack.
- COMPONENT: Y-P_BP_R (Input 2 & 3) connections are provided for high performance components, such as DVD players and set-top-boxes. Use these connections in place of the standard video connection if your device has this feature.
- Your component outputs may be labeled Y, B-Y, and R-Y. In this case, connect the components B-Y output to the 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-C_BC_R. In this case, connect the components C_B output to the TV's P_B input and the components C_R output to the TV's P_R input.
- It may be necessary to adjust TINT to obtain optimum picture quality when using the Y-P_BP_R inputs. (See page 36).
- To ensure no copyright infringement, the MONITOR OUT output will be abnormal, when using the Y-PbPr and HDMI input jacks.
- Input HDMI 1, HDMI 2 or HDMI FRONT can accept HDMI signal.
- S-VIDEO monitor output may be used for recording only when the input is of S-VIDEO type.
- 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 be less than 5 meters.

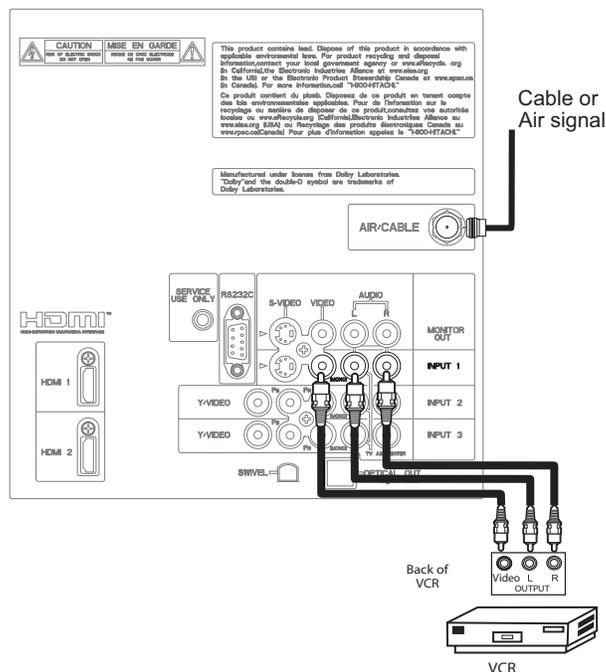
INSTALLATION RECOMMENDATION:

- 1. Video signals fed through a VCR may be affected by copyright protection systems and the picture will be distorted on the television.**
- 2. Connecting the television directly to the Audio /Video output of a Set-Top-Box will assure a more normal picture.**

Connecting External Video Sources

CONNECTING A VIDEO AND STEREO AUDIO SOURCE TO INPUT1 ~ INPUT-FRONT

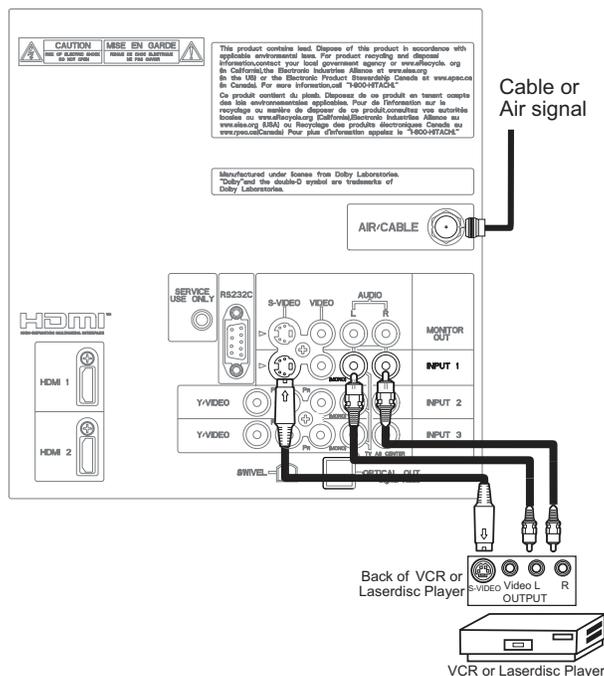
1. Connect the cable from the VIDEO OUT of the VCR or the laserdisc player to the INPUT (VIDEO) jack, as shown on the Rear Panel to the right.
2. Connect the cable from the AUDIO OUT R of the VCR or the laserdisc player to the INPUT (AUDIO/R) jack.
3. Connect the cable from the AUDIO OUT L of the VCR or the laserdisc player to the INPUT (AUDIO/L) jack.
4. Press the INPUTS button, then select INPUT 1 2,3 or Front from the INPUTS menu to view the program from the VCR or laserdisc player.
5. Select CABLE or AIR from the INPUTS menu or ANT key from the R/C to return to the last channel tuned.



- NOTE:**
1. Completely insert the connection cord plugs when connecting to rear panel jacks. The picture and sound that is played back will be abnormal if the connection is loose.
 2. A single VCR can be used for VCR #1 and VCR #2 (see page 16) but note that a VCR cannot record its own video or line output. Refer to your VCR operating guide for more information on line input-output connections.
 3. When INPUT 2 or 3 are used, it is necessary to connect the video output of the device to the Y/VIDEO input jack of the TV.

CONNECTING AN S-VIDEO AND STEREO AUDIO SOURCE TO INPUT 1

1. Connect the cable from the S-VIDEO OUT of the S-VHS VCR or the laserdisc player to the INPUT (S-VIDEO) jack, as shown on the Rear Panel to the right.
2. Connect the cable from the AUDIO OUT R of the VCR or the laserdisc player to the INPUT (AUDIO/R) jack.
3. Connect the cable from the AUDIO OUT L of the VCR or the laserdisc player to the INPUT (AUDIO/L) jack.
4. Press the INPUTS button, then select INPUT 1 from the INPUTS menu to view the program from the VCR or laserdisc player.
5. Select CABLE or AIR from the INPUTS menu or ANT key from the R/C to return to the last channel tuned.



- NOTE:**
1. Completely insert the connection cord plugs when connecting to rear panel jacks. The picture and sound that is played back will be abnormal if the connection is loose.
 2. A single VCR can be used for VCR #1 and VCR #2 (see page 16), but note that a VCR cannot record its own video or line output. Refer to your VCR operating guide for more information on line input-output connections.

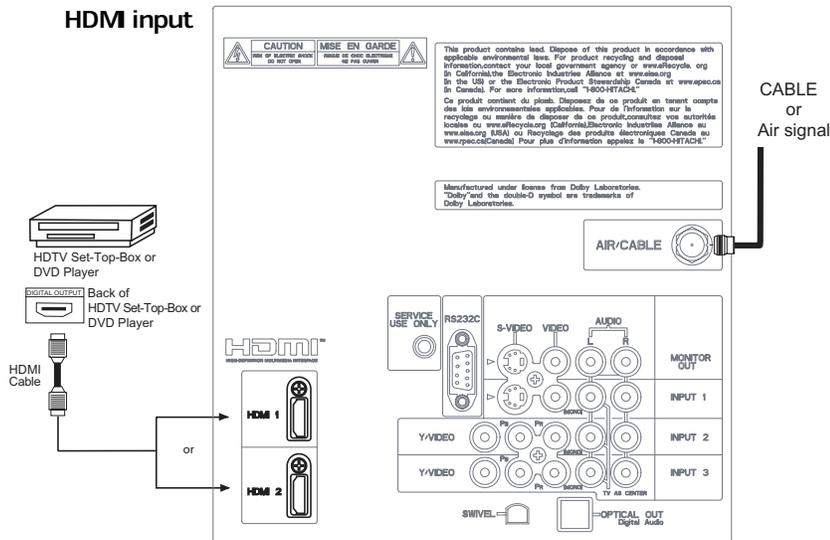
Connecting External Video Sources

CONNECTING A COMPONENT SOURCE WITH HDMI OR DVI CAPABILITY TO HDMI 1, HDMI 2 OR HDMI FRONT

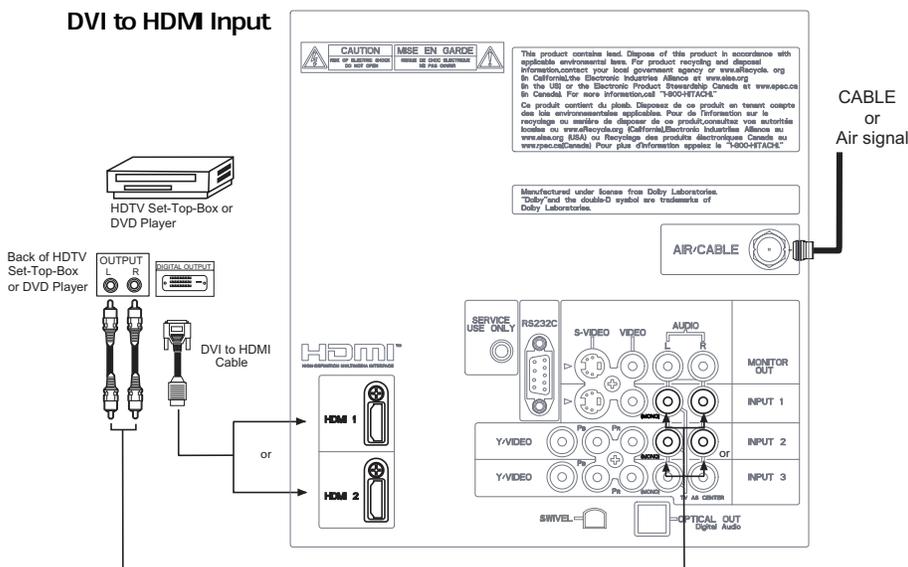
1. Connect the HDMI or DVI to HDMI connection cable from the output of the HDTV set top box or DVD player to the HDMI input as shown on the Rear panel below.
2. With DVI output, connect the cable from the AUDIO OUT R of the HDTV set top box or DVD player to the INPUT (AUDIO/R) jack as shown on the Rear Panel below.
3. With DVI output, connect the cable from the AUDIO OUT L of the HDTV set top box or DVD player to the INPUT (AUDIO/L) jack as shown on the Rear Panel below.
4. Press the INPUTS button, then select HDMI 1, 2 or FRONT to view the program from the HDTV SET TOP BOX or DVD player.
5. Select CABLE or AIR from the INPUTS menu or ANT key from the R/C to return to the last channel viewed.

- NOTE:**
1. Completely insert the connection cord plugs when connecting to rear panel jacks. The picture and sound that is played back will be abnormal if the connection is loose.
 2. The HDMI input on HDMI 1, 2 and FRONT 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.
 3. HDMI is not a "NETWORK" technology. It establishes a one-way point-to-point connection for delivery of uncompressed video to a display.
 4. The connected digital output device controls the HDMI interface so proper set-up of device user settings determines final video appearance.
 5. When using a DVI to HDMI cable, connect the Audio Out L and R cables at the same INPUT (1, 2 or Front) as your HDMI INPUT(1, 2 or Front). (For FRONT INPUT see page 14 for reference).

HDMI input



DVI to HDMI Input



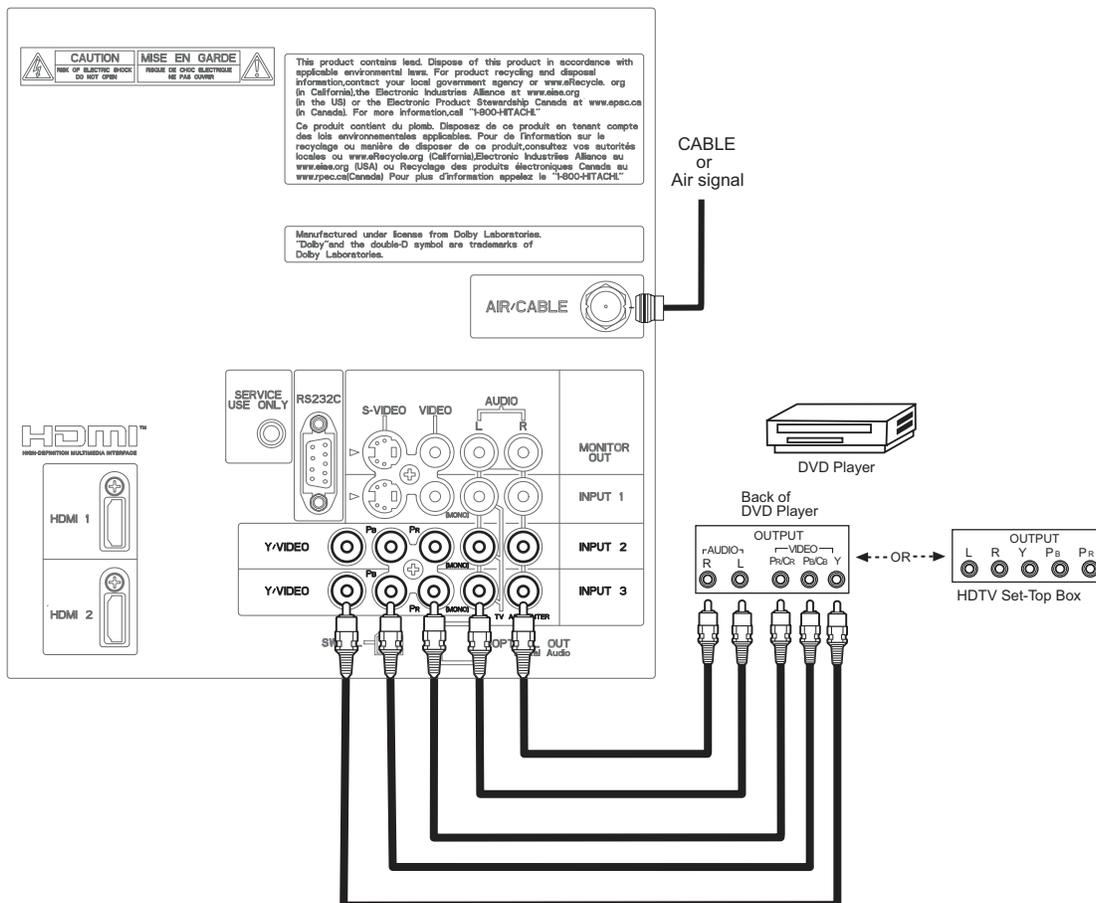
First time use

Connecting External Audio/Video Devices

CONNECTING A COMPONENT AND STEREO AUDIO SOURCE TO INPUT 2 or 3 :Y-PbPr.

1. Connect the cable from the Y OUT of the Laserdisc/DVD player or HDTV set top box to the INPUT (Y) jack, as shown on the Rear panel below.
2. Connect the cable from the P_B/C_B OUT or B-Y OUT of the Laserdisc/DVD player or HDTV set top box to the INPUT (P_B) jack.
3. Connect the cable from the P_R/C_R OUT or R-Y OUT of the Laserdisc/DVD player or HDTV set top box to the INPUT (P_R) jack.
4. Connect the cable from the AUDIO OUT R of the Laserdisc/DVD player or HDTV set top box to the INPUT (AUDIO/R) jack.
5. Connect the cable from the AUDIO OUT L of the Laserdisc/DVD player or HDTV set top box to the INPUT (AUDIO/L) jack.
6. Press the INPUTS button, then select INPUT 2 or 3 from the INPUTS menu to view the program from the Laserdisc/DVD player or HDTV set top box.
7. Select CABLE, AIR or ANT key from the R/C to return to the last channel tuned.

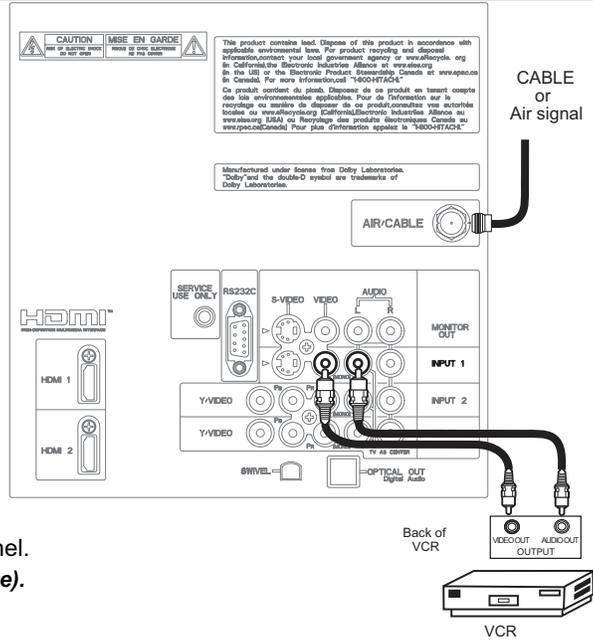
NOTE: 1. Completely insert the connection cord plugs when connecting to rear panel jacks. The picture and sound that is played back will be abnormal if the connection is loose.
2. See page 17 for tips on REAR PANEL CONNECTIONS.



Connecting External Audio/Video Devices

CONNECTING A VIDEO AND MONAURAL AUDIO SOURCE TO INPUT 1 ~ FRONT INPUT

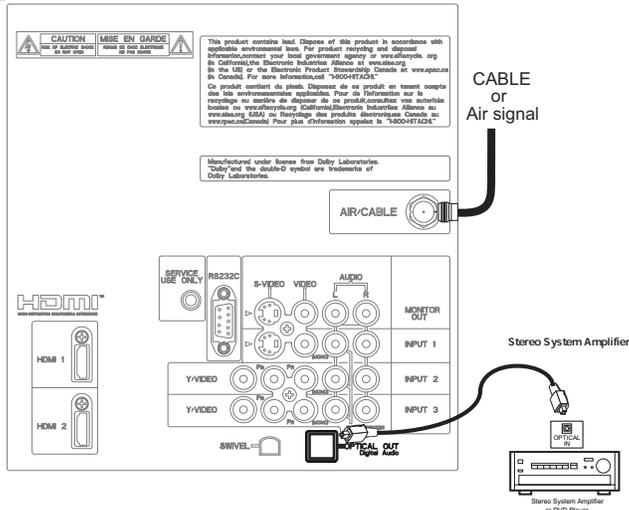
1. Connect the cable from the VIDEO OUT of the VCR or the laserdisc player to the INPUT (VIDEO) jack, as shown on the Rear Panel on the right.
2. Connect the cable from the AUDIO OUT of the VCR or the laserdisc player to the INPUT (MONO)/L(AUDIO) jack.
3. Press the INPUTS button, then select INPUT 1 2,3 or Front from the INPUTS menu to view the program from the VCR or the laserdisc player.
4. Select CABLE or AIR from the INPUTS menu or ANT key from the R/C to return to the previous channel. *(For INPUT FRONT please see page 15 for reference).*



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 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.



CONNECTING MONITOR OUT

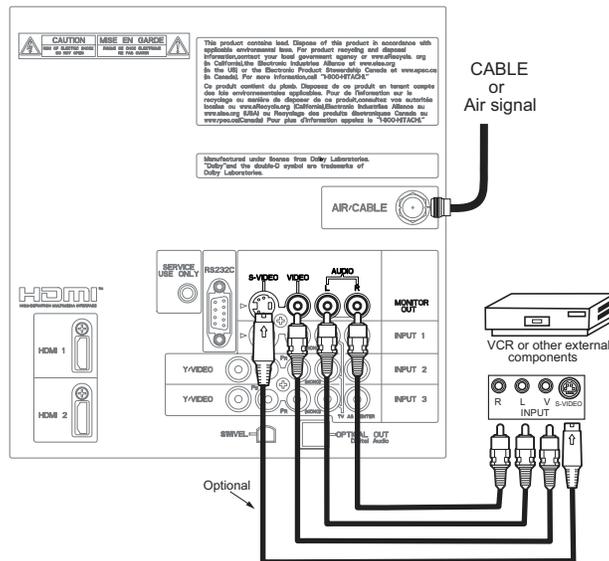
The MONITOR OUT terminal outputs video and audio of CABLE/AIR and INPUTS 1, 2, 3 and Front. It does not output component and HDMI video.

1. Connecting S-Video:
Connect the cable from the S-VIDEO OUT of the Rear Panel to the INPUT (S-VIDEO) jack, of the VCR or Laserdisk player.

Connecting Video:

Connect the cable from the VIDEO INPUT of the VCR or the laserdisc player to the VIDEO out jack on the TV Rear Panel.

2. Connect the cable from the AUDIO IN R of the VCR or the laserdisc player to the OUTPUT (AUDIO/R) jack on the TV Rear Panel.
3. Connect the cable from the AUDIO IN L of the VCR or the laserdisc player to the OUTPUT (AUDIO/L) jack on the TV Rear Panel.



NOTE: When making video connections, connect S-Video only or Video only. If both are connected, S-Video takes priority.

First time use

The Remote Control

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.

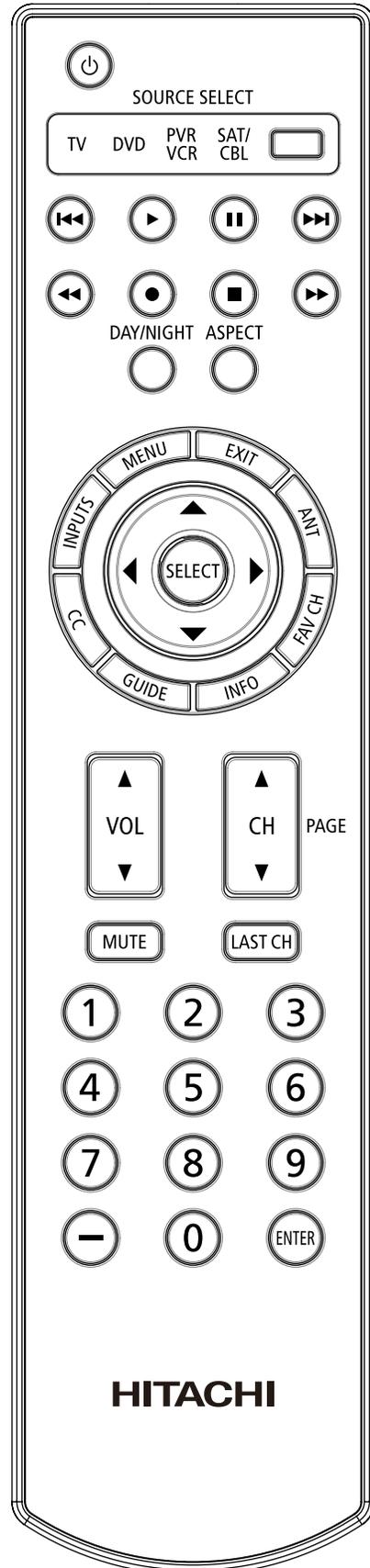
To operate your Plasma TV, select **TV** by pressing the Source button of the Source Select on the remote. The **TV** mode indicator will blink, indicating that the remote will now control your television.

To operate your VCR/PVR (Personal Video Recorder), select **PVR/VCR** by pressing the Source button of the Source Select on the remote. The **PVR/VCR** mode indicator will blink, indicating that the remote will now control your VCR/PVR (see page 30 for instructions on how to program the remote to control your VCR/PVR).

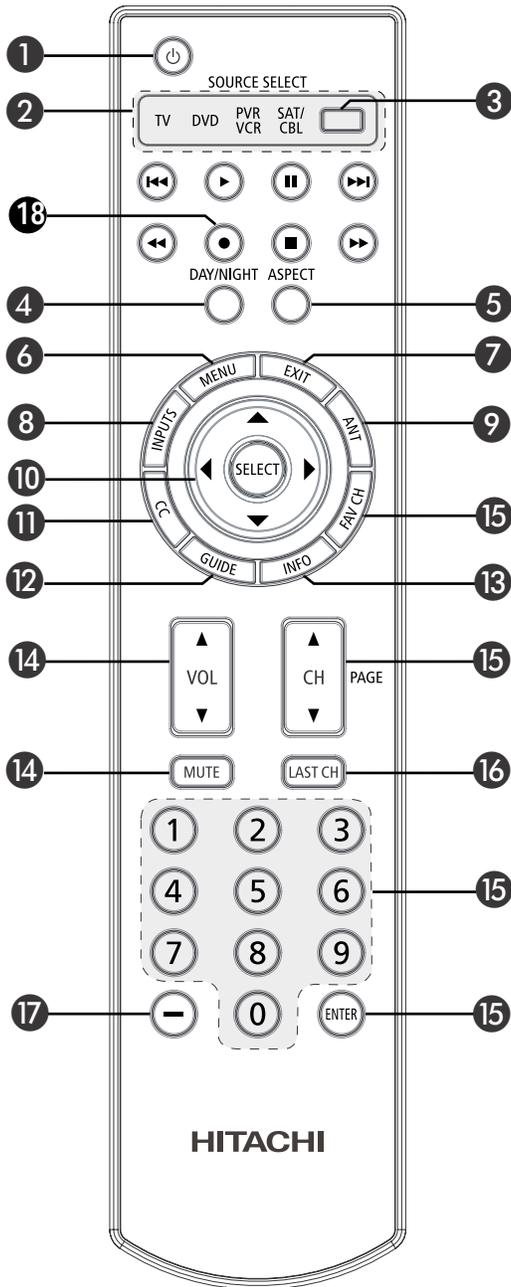
To operate your cable box, select **SAT/CBL** by pressing the Source button of the Source Select on the remote. The **SAT/CBL** mode indicator will blink, indicating that the remote will now control your cable box (see page 27 for instructions on how to program the remote to control your cable box).

To operate your set-top-box or satellite receiver select **SAT/CBL** by pressing the Source button of the Source Select on the remote. The **SAT/CBL** mode indicator will blink, indicating that the remote will now control your set-top-box or satellite receiver (see page 28 for instructions on how to program the remote to control your set-top-box or satellite receiver).

To operate your DVD player, select **DVD** by pressing the Source button of the Source Select on the remote. The **DVD** mode indicator will blink, indicating that the remote will now control your DVD Player (see page 29 for instructions on how to program the remote to control your DVD player).



How to Use the Remote to Control Your TV



❶ POWER button

Press this button to turn the TV set on or off when the remote is in TV mode. (See page 22 for instructions on how to set the remote control to TV mode).

❷ MODE Indicator

Turns on or blinks three times to show remote control mode.

❸ SOURCE SELECT button

Press this button to select remote control mode.

❹ DAY/NIGHT button

Press this button to toggle between Day (Normal), Day (Dynamic) and Night picture mode settings. Select **DAY** for day time viewing with more brightness and contrast to compete with room light. Select **NIGHT** for night time viewing with less brightness and contrast for a more detailed picture (see page 36 for settings changes).

NOTE: For automatic **DAY/NIGHT** picture mode settings, see page 50.

How to Use the Remote to Control Your TV

5 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.

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.

16:9 STANDARD 1

Use this aspect mode to display 16:9 sources like HDTV and DVD's preserving the original 16:9 aspect ratio showing 95% of the size.

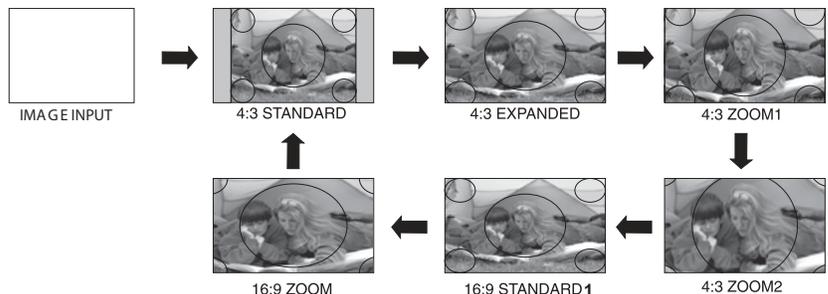
16:9 STANDARD 2

Use this aspect mode to display 16:9 sources like HDTV and DVD's preserving the original 16:9 aspect ratio showing 100% of the size.

16:9 ZOOM

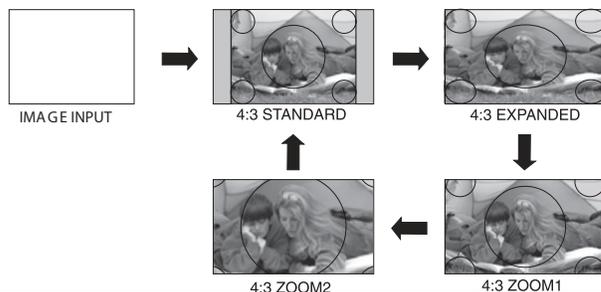
Use this aspect to Zoom-in once while in 16:9 aspect.

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



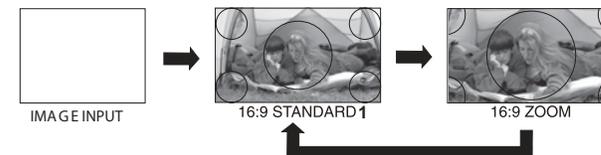
Note: Please see Appendix A on page 138-139.

- 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)



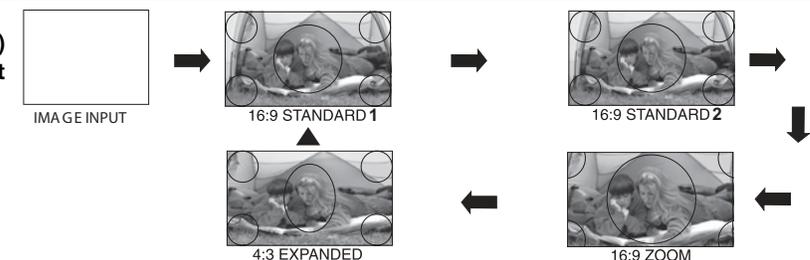
Note: Please see Appendix A on page 138-139.

- 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)



Note: Please see Appendix A on page 138-139.

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



Note: Please see Appendix A on page 138-139.

- NOTE:**
1. The Aspect Style in all video inputs have independent Aspect Style setting.
 2. Vertical position adjustments are directly available when you choose 4:3 EXPANDED/ZOOM1/ZOOM2 or 16:9 ZOOM aspect style (see also page 38).
 3. When displaying 16:9 STANDARD 2 it may appear lines at the edge of the picture this is normal operation of the TV.

How to Use the Remote to Control Your TV

6 MENU button

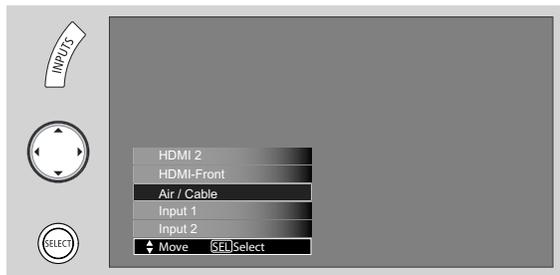
The **MENU** button will start the On-Screen Display.

7 EXIT button

This button will exit all On-Screen Displays.

8 INPUTS 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 **INPUTS** button repeatedly will also cycle through the Inputs menu items. Then press the **SELECT** button to select.



- INPUT 1** Select to choose INPUT 1.

- INPUT 2** Select to choose INPUT 2.

- INPUT 3** Select to choose INPUT 3.

- INPUT- FRONT** Select to choose FRONT INPUT .

- HDMI 1** Select to choose HDMI 1 INPUT.

- HDMI 2** Select to choose HDMI 2 INPUT.

- HDMI- FRONT** Select to choose FRONT HDMI INPUT.

- AIR/CABLE** Select between Air or Cable signal.

9 ANTENNA button (ANT)

Use this button to access AIR/CABLE signal input directly.

10 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.

11 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 **CC** or **□**.

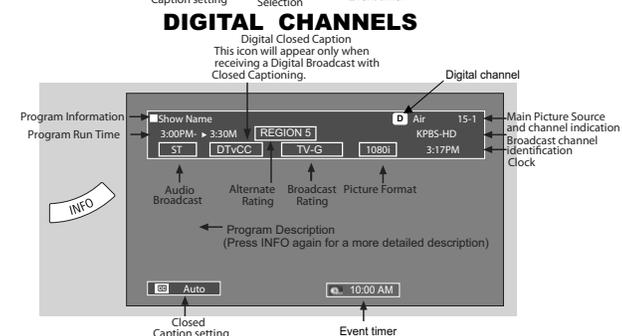
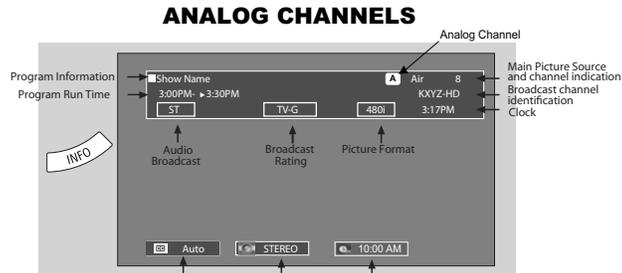
12 GUIDE button

[Cable Box (CBL), Satellite Receiver (SAT)/ Set-Top-Box (STB) mode only]

The use of this button is only applicable when the remote control is in (CBL) and (SAT/STB) mode. Press this button to access the Channel Guide of the (CBL), and (SAT/STB).

13 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 1



When a Component Video: Y-PbPr Input is connected to INPUT 3



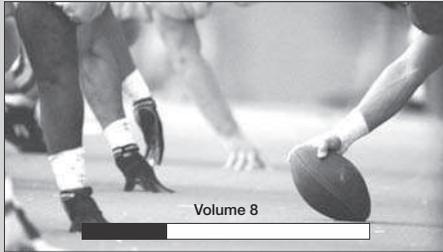
- NOTE:**
1. Press the **INFO** button again or the **EXIT** button to return to normal viewing.
 2. The **Aspect** setting will not be shown if the channel is locked.

How to Use the Remote to Control Your TV

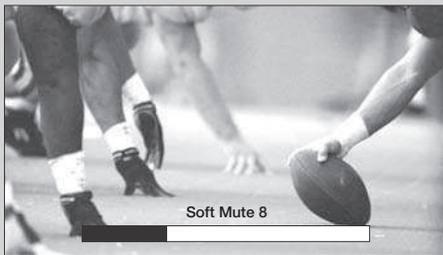
14 VOLUME (VOL), MUTE button

Press the **VOLUME** button (▲ or ▼) until you obtain the desired sound level.

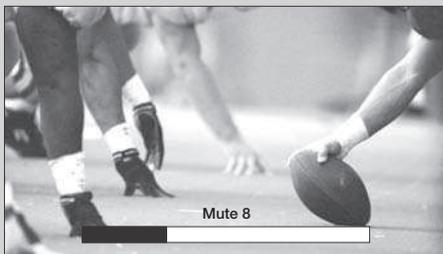
To reduce the sound to one half of normal volume (SOFT MUTE) to answer the telephone, etc., press the **MUTE** button. Press the **MUTE** button again to turn the sound off completely (MUTE). To restore the sound, press the **MUTE** button one more time, or **VOL UP** (▲).



MUTE



MUTE



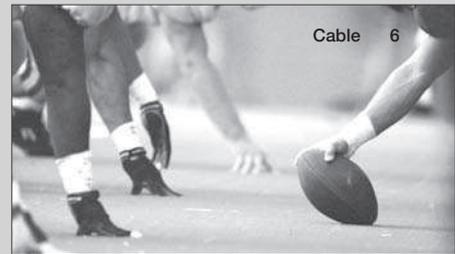
Closed Captioning will display automatically when MUTE/SOFT MUTE is on and Closed Caption is set to **AUTO** (see page 55).

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 on.

15 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** (▼).

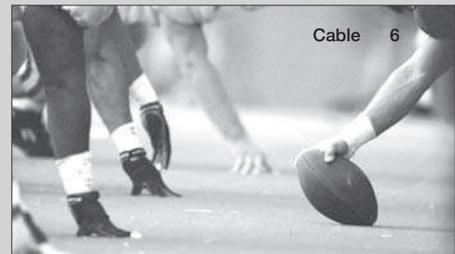
Press the **FAV CH** button to switch to Favorite (FAV) channel mode. You will know you are in Favorite Channel mode when (FAV) is displayed and the displayed channel is **GREEN**. Press it again to return to your regular tuned channels. You can add any channel to your Favorite channel list by pressing 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**.



FAV CH



FAV CH



16 LAST CHANNEL button

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

17 (-) DASH button

Use the (-) **DASH** button with the **CHANNEL SELECTOR** buttons to enter Digital Channels that have subchannel numbers indicated by (-) **DASH** (example 15-1).

18 RECORD button

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

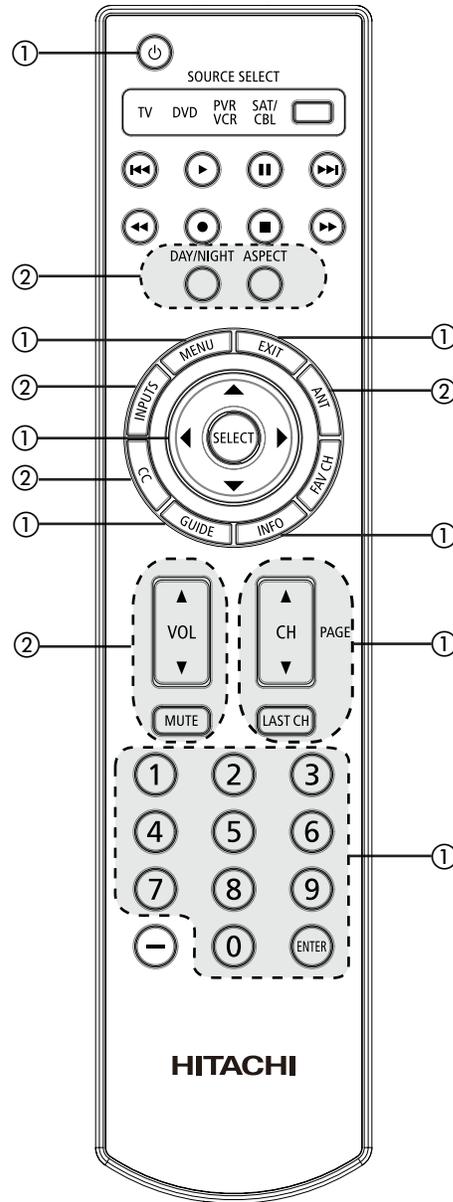
The Remote Control for Cable Box Functions

OPERATING THE PRECODED FUNCTION FOR YOUR CABLE BOX.

This remote is designed to operate different types of cable boxes. You must first program the remote to match the remote system of your cable box (refer to pages 32-33 for pre-codes).

1. Turn ON your cable box.
2. To switch to Cable (CBL) pre-coded mode, use the **SOURCE SELECT** button on the remote control to position the LED light to the corresponding selection **SAT/CBL**.
3. Hold down the **SOURCE SELECT** button on the remote and enter the four digit preset code that matches your cable box as shown on pages 32-33. Release the **SOURCE SELECT** button. The indicator light will flash 3 times if the code was accepted.
4. 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.
5. The remote will now control your Cable box.

NOTE: 1. If your cable box cannot be operated after performing the above procedures, your cable box code has not been precoded into the remote.
 2. In the unlikely event that your cable box cannot be operated after performing the above procedures, please consult your cable box operating guide.
 3. The remote control will remember the codes you have programmed until the batteries are removed from the remote control. After replacing the batteries repeat the entire programming procedure as stated above.



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
- Guide
- Last CH

② EXCLUSIVE TV buttons

These buttons are for operating the TV :

- Day/Night
- CC
- Inputs (only if programmed, refer to page 31)
- Aspect
- Vol Up & Down
- Mute
- ANT

MY CABLE BOX CODE IS: _____

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

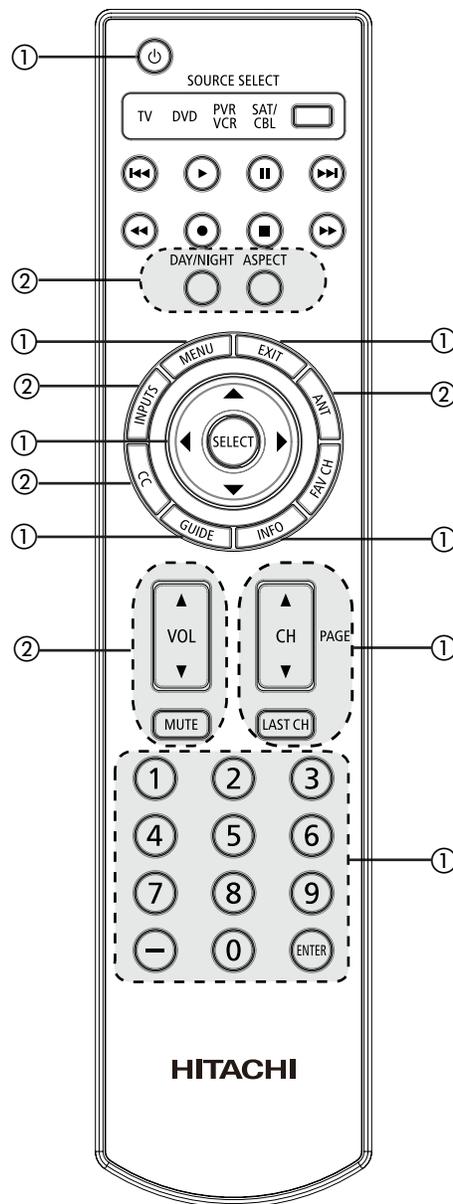
The Remote Control for Set-Top-Box/Satellite Receiver Functions

OPERATING THE PRECODED FUNCTION FOR YOUR SET-TOP-BOX/SATELLITE RECEIVER.

This remote is designed to operate different types of set-top-box/satellite systems. You must first program the remote to match the remote system of your set-top-box/satellite systems (refer to pages 32-33 for pre-codes).

1. Turn ON your set-top-box/satellite systems.
2. To switch to set-top-box/satellite (SAT) pre-coded mode, use the **SOURCE SELECT** button on the remote control to position the LED light to the corresponding selection **SAT/CBL**.
3. Hold down the **SOURCE SELECT** button on the remote and enter the four digit preset code that matches your set-top-box/satellite receiver as shown on page 32-33. Release the **SOURCE SELECT** button. The indicator light will flash 3 times if the code was accepted.
4. Aim the remote at the set-top-box/satellite receiver and press the **POWER** button. The remote will turn off your set-top-box/satellite receiver when the correct four digit preset code is entered. When this occurs, the remote control is programmed for your set-top-box/satellite receiver. If the set-top-box/satellite receiver does not turn off, try a different four digit preset code.
5. The remote will now control your set-top-box/satellite receiver.

- NOTE:**
1. If your set-top-box/satellite receiver cannot be operated after performing the above procedures, your set-top-box/satellite receiver code has not been pre-coded into the remote.
 2. In the unlikely event that your set-top-box/satellite receiver cannot be operated after performing the above procedures, please consult your set-top-box/satellite receiver operating guide.
 3. The remote control will remember the codes you have programmed until the batteries are removed from the remote control. After replacing the batteries repeat the entire programming procedure as stated above.



① PRECODED SET-TOP-BOX/SATELLITE RECEIVER buttons

These buttons transmit the chosen pre-coded set-top-box/satellite codes :

- Power
- Cursor & Select
- Number PAD
- Menu
- Info
- Enter, Dash
- Exit
- Channel Up & Down
- Guide
- Last CH

② EXCLUSIVE TV buttons

These buttons are for operating the TV :

- Day/Night
- CC
- Mute
- Aspect
- Vol Up & Down
- Inputs (Only if programmed, refer to page 31).
- ANT

MY Satellite RECEIVER/ SET-TOP-BOX 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.

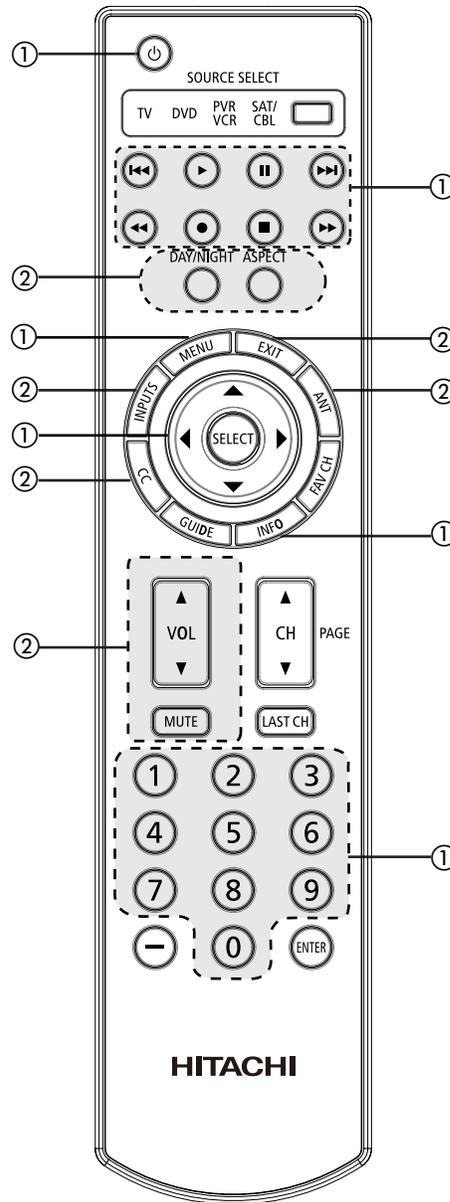
The Remote Control for DVD Functions

OPERATING THE PRECODED FUNCTION FOR YOUR DVD PLAYER.

This remote is designed to operate different types of DVD players. You must first program the remote to match the remote system of your DVD player (refer to pages 32-33 for pre-codes).

1. Turn ON your DVD player.
2. To switch to DVD pre-coded mode, use the **SOURCE SELECT** button on the remote control to position the LED light to the corresponding selection **DVD**.
3. Hold down the **SOURCE SELECT** button on the remote and enter the four digit preset code that matches your DVD player, as shown on pages 32-33. Release the **SOURCE SELECT** button. The indicator light will flash 3 times if the code was accepted.
4. Aim the remote at the DVD player and press the **POWER** button. The remote will turn off your DVD player when the correct four digit preset code is entered. When this occurs, the remote control is programmed for your DVD player. If the DVD player does not turn off, try a different four digit preset code.
5. The remote will now control your DVD player.

NOTE: 1. If your DVD player cannot be operated after performing the above procedures, your DVD player code has not been precoded into the remote.
 2. In the unlikely event that your DVD player cannot be operated after performing the above procedures, please consult your DVD player operating guide.
 3. The remote control will remember the codes you have programmed until the batteries are removed from the remote control. After replacing the batteries repeat the entire programming procedure as stated above.



① PRECODED DVD Buttons

These buttons transmit the chosen precoded DVD codes :

- Power
- Menu
- Info
- Cursor & Select
- Number PAD
- Play, Stop, Pause,
- RWD, FWD, Skip RWD,
- Skip FWD.

② EXCLUSIVE TV Buttons

These buttons are for operating the TV :

- Day/Night
- Aspect
- ANT
- Exit
- CC
- Vol Up & Down
- Mute
- Inputs (Only if programmed, refer to page 31)

MY DVD PLAYER CODE IS: _____

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

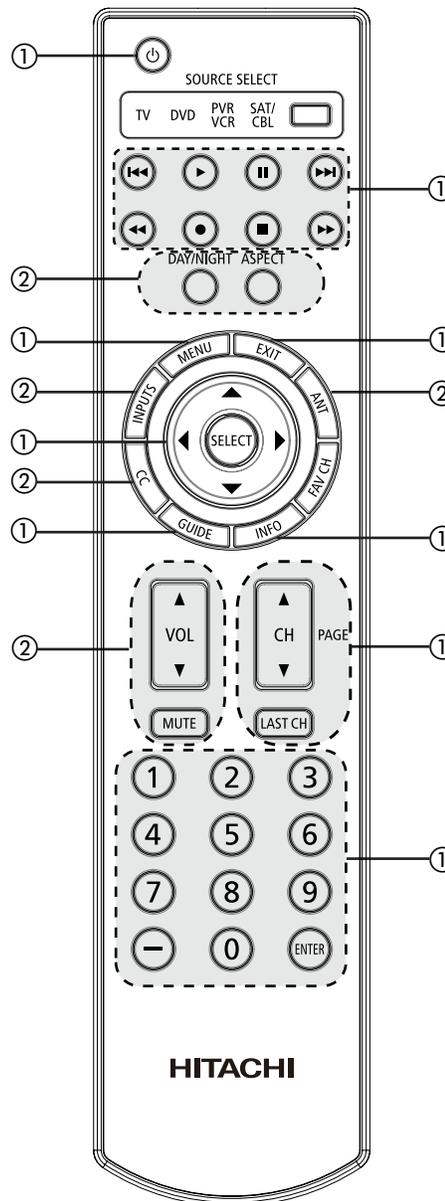
The Remote for VCR/PVR Functions

OPERATING THE PRECODED FUNCTION FOR YOUR VCR/PVR (Personal Video Recorder).

This remote is designed to operate different types of VCRs/PVRs. You must first program the remote to match the remote system of your VCR/PVR (refer to pages 32-33 for pre-codes).

1. Turn ON your VCR/PVR.
2. To switch to VCR/PVR pre-coded mode, use the **SOURCE SELECT** button on the remote control to position the LED light to the corresponding selection **PVR/VCR**.
3. Hold down the **SOURCE SELECT** button on the remote and enter the four digit preset code that matches your VCR/PVR, as shown on pages 32-33. Release the **SOURCE SELECT** button. The indicator light will flash 3 times if the code was accepted.
4. Aim the remote at the VCR/PVR and press the **POWER** button. The remote will turn off your PVR when the correct four digit preset code is entered. When this occurs, the remote control is programmed for your VCR/PVR. If the VCR/PVR does not turn off, try a different four digit preset code.
5. The remote will now control your VCR/PVR.

- NOTE:**
1. If your VCR/PVR cannot be operated after performing the above procedures, your VCR/PVR code has not been precoded into the remote.
 2. In the unlikely event that your VCR/PVR cannot be operated after performing the above procedures, please consult your VCR/PVR operating guide.
 3. The remote control will remember the codes you have programmed until the batteries are removed from the remote control. After replacing the batteries repeat the entire programming procedure as stated above.



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 |
| -Info | -Last CH | -FWD, Skip FWD |
| -Record | -RWD | |

② EXCLUSIVE TV Buttons

These buttons are for operating the TV :

- | | | |
|------------|----------------|--|
| -Day/Night | -CC | -Inputs (only if programmed, refer to page 31) |
| -Aspect | -Vol Up & Down | |
| -ANT | -Mute | |

MY VCR/PVR CODE IS: _____

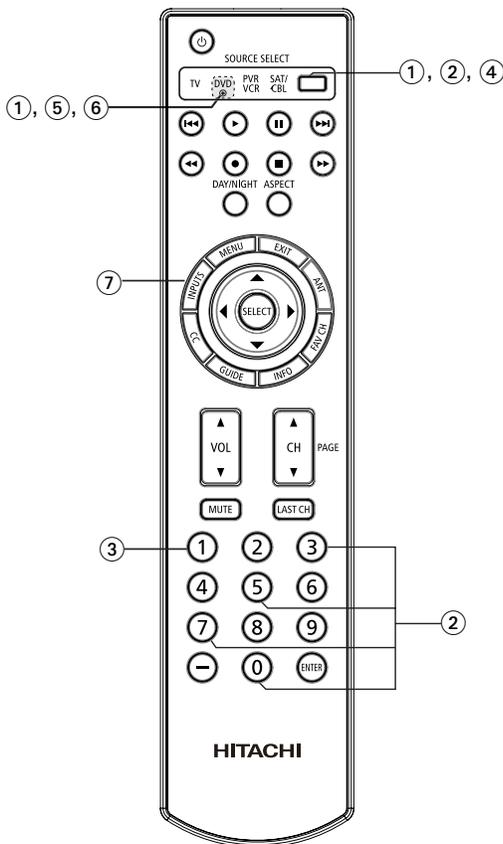
NOTE: Refer to instruction manual of the VCR/PVR for operation of the buttons exclusively for the VCR/PVR.

How to Use the SOURCE SELECT Button

INPUT ACCESS

This optional feature allows the user of the remote control to setup its SOURCE SELECT button to access the specified input of the TV. Setup for this feature is applicable to the remote control's normal mode only and only applies to the DVD, PVR/VCR and SAT/CBL modes.

1. Select the desired device mode (DVD, PVR/VCR, SAT/CBL) by using your SOURCE SELECT button to position the LED indicator to the corresponding selection.
2. Hold down the SOURCE SELECT button on the remote and enter the four digit preset code that matches your device as shown on pages 32-33.
3. Then enter the assigned input number (1-7) that the device is related to (refer below to Table 1).
4. Release the SOURCE SELECT 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.
7. Pressing the INPUTS button will now access the video input of the desired device.



SETUP EXAMPLE (Hitachi DVD with precode 0573 connected to INPUT 1 of the TV)

- ① Select DVD mode by using your SOURCE SELECT button to position the LED indicator to DVD.
- ② Hold down the SOURCE SELECT button and press the numbers 0, 5, 7 and 3.
- ③ Then press the number 1 for the assigned input number of the DVD player.
- ④ Release SOURCE SELECT button.
- ⑤ If done correctly, the device LED indicator will blink 3 times to confirm proper setup.
- ⑥ The remote will now control the DVD player.
- ⑦ Press the INPUTS button to instantly access the video input of your DVD on Input 1.

INPUT	ASSIGNMENT NUMBER
INPUT 1	1
INPUT 2	2
INPUT 3	3
INPUT- FRONT	4
HDMI 1	5
HDMI 2	6
HDMI- FRONT	7

NOTE: 1. This feature is optional
2. Assigned input numbers can be used more than once if applicable.

Remote Control Codes

Cable BRAND	Codes
ABC	0003,0008,0011
Americast	0899
Amino	1602
Bell South	0899
Clearmaster	0883
ClearMax	0883
Coolmax	0883
Digeo	1187
Director	0476
General Instrument	0476,0810,0276,0003,0011
GoldStar	0144
Hamlin	0009,0273
Hitachi	0011,1421
i3 Micro	1602
Jerrold	0476,0810,0276,0003,0012,0011
Memorex	0000
Motorola	1376,0476,0810,0276,1187,1254,1106
Multitech	0883
MultiVision	0012
Myrio	1602
Pace	1877,0237,0008
Panasonic	0000,0107
Paragon	0000
Philips	1305,0317
Pioneer	1877,0877,0144,0533
Pulsar	0000
Quasar	0000
RadioShack	0883
RCA	1256
Regal	0279,0273
Rembrandt	0011
Runco	0000
Samsung	0144
Scientific Atlanta	1877,0877,0477,0008
Sejin	1602
Signature	0011
Sony	1006
Starcom	0003
Supercable	0276
Supermax	0883
Thomson	1256
Tocom	0012
Torx	0003
Toshiba	0000
Tristar	0883
V2	0883
Viewmaster	0883
Vision	0883
Vortex View	0883
Zenith	0000,0525,0899

Cable/PVR Combo BRAND	Codes
Americast	0899
Digeo	1187
General Instrument	0810
Jerrold	0810
Motorola	1376,0810,1187,1106
Pace	1877,0237
Pioneer	1877,0877
RCA	1256
Scientific Atlanta	1877,0877
Sony	1006
Supercable	0276
Thomson	1256
Zenith	0899

SATELLITE BRAND (Set Top Box)	Codes
AlphaStar	0772
Chaparral	0216
Crossdigital	1109
DirecTV	1377,0392,0566,0639,1639,1142,0247,0749,1749,0724,0819,1856,1076,1108,0099,1109,1414,1442,1609,1392,1640
Dish Network System	1505,1005,0775,1775
Dishpro	1505,1005,0775,1775
Echostar	1505,1005,0775,1775
Expressvu	0775,1775
GE	0566

General Instrument	0869
GOI	0775,1775
Goodmans	1246
Hisense	1535
Hitachi	0819,1250
HTS	0775,1775
Hughes Network System	1142,0749,1749,1442
iLo	1535
JVC	0775,1775
LG	1226,1414
Magnavox	0724,0722
Memorex	0724
Mitsubishi	0749
Motorola	0869
NEC	1270
Next Level	0869
Pace	0887
Panasonic	0247,0701
Paysat	0724
Philips	1142,0749,1749,0724,1076,0722,0099,1442
Proscan	0392,0566
Proton	1535
RadioShack	0869
RCA	0566,0855,0143,1392
Samsung	1377,1276,1108,1109,1442,1609
Sanyo	1219
SKY	0856
Sony	0639,1639,1640
Star Choice	0869
Tivo	1142,1442
Toshiba	0749,1749,0790,1285
UltimateTV	1392,1640
Uniden	0724,0722
US Digital	1535
USDTV	1535
Voom	0869
Zenith	0856,1856

DBS/PVR Combo BRAND	Codes
DirecTV	1377,0392,0639,1142,1076,0099,1392,1442,1640
Dish Network System	1505,0775
Dishpro	1505,0775
Echostar	1505,0775
Expressvu	0775
Hughes Network System	1142,1442
Motorola	0869
Philips	1142,1442
Proscan	0392
RCA	1392
Samsung	1442
Sony	0639,1640
Star Choice	0869

VCR BRAND	Codes
ABS	1972
Admiral	0048,0209
Adventura	0000
Aiko	0278
Aiwa	0037,0000,0124,0307
Akai	0041,0061,0106,0175
Alienware	1972
America Action	0278
American High	0035
Asha	0240
Audiovox	0037,0278
Beaumarck	0240
Bell & Howell	0104
Broksonic	0184,0121,0209,0002,0479,1479
Calix	0037
Canon	0035
Capehart	0020
Carver	0081
CCE	0072,0278
Citizen	0037,0278,1278
Coft	0072
Craig	0037,0047,0240,0072,0271
Curtis Mathes	0060,0035,0162,0041,0760,1035
Cybernex	0240
CyberPower	1972

Daewoo	0045,0278,0020,0561,1278
Daytron	0020
Dell	1972
Denon	0042
DirecTV	0739
Durabrand	0039,0038
Dynatech	0000
Electrohome	0037
Electroponic	0037
Emerex	0032
Emerson	0037,0184,0000,0121,0043,0209,0002,0278,0061,0208,0479,0561,0593,1278,1479,1593,0047,0104
Fisher	0047,0104
Fuji	0035,0033
Funai	0000,0593,1593
Garrard	0000
Gateway	1972
GE	0060,0035,0240,0065,0202,0760,0761,0807,1035,1060
Go Video	0432,0526
GoldStar	0037,0038,1237
Gradiente	0000
Harley Davidson	0000
Harman/Kardon	0081,0038
Harwood	0072
Headquarter	0046
Hewlett Packard	1972
HI-Q	0047
Hitachi	0000,0042,0041,0065,0089,0105,0543,0544
Howard Computers	1972
HP	1972
Hughes Network System	0042,0739
Humax	0739
Hush	1972
iBUYPOWER	1972
Jensen	0041
JVC	0067,0041,0008
KEC	0037,0278
Kenwood	0067,0041,0038
KLH	0072
Kodak	0035,0037
LG	1037
Linksys	1972
Lloyd's	0000,0208
Logik	0072
LXI	0037
Magnasonic	0593,1278
Magnavox	0035,0039,0081,0000,0149,0563,0593,1593,1781
Magnin	0240
Marantz	0035,0081
Marta	0037
Matsushita	0035,0162,1162
Media Center PC	1972
MEI	0035
Memorex	0035,0162,0037,0048,0039,0047,0240,0000,0104,0209,0046,0307,0479,1037,1162,1237,1262
MGA	0240,0043,0061
MGN Technology	0240
Microsoft	1972
Mind	1972
Minolta	0042,0105
Mitsubishi	0067,0043,0061,0807
Motorola	0035,0048
MTC	0240,0000
Multitech	0000,0072
NEC	0104,0067,0041,0038
Nikko	0037
Niveus Media	1972
Noblex	0240
Northgate	1972
Olympus	0035
Onkyo	0222
Optimus	1062,0162,0037,0048,0104,0432,0593,1048,1162,1262
Optonica	0062
Orion	0184,0209,0002,0479

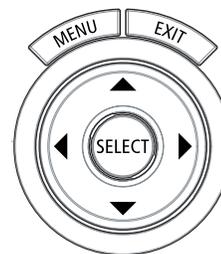
1479	
Panasonic	1062,0035,0162,0225,0616,1035,1162,1262
Penney	0035,0037,0240,0042,0038,1035,1237
Pentax	0042,0065,0105
Philco	0035,0479
Philips	0035,0081,0062,0618,0739,1081,1181
Pilot	0037
Pioneer	0067
Polk Audio	0081
Portland	0020
Presidian	1593
Profitronic	0240
Proscan	0060,0202,0760,0761,1060
Protec	0072
Pulsar	0039
Quarter	0046
Quartz	0046
Quasar	0035,0162,1035,1162
RadioShack	0000,1037
Radix	0037
Randex	0037
RCA	0060,0240,0042,0149,0065,0105,0106,0202,0760,0761,0807,0880,1035,1060
Realistic	0035,0037,0048,0047,0000,0104,0046,0062
ReplayTV	0614,0616
Ricavision	1972
Runco	0039
Samsung	0240,0045,0739,1014
Sanky	0048,0039
Sansui	0000,0067,0209,0041,0271,0479,1479
Sanyo	0047,0240,0104,0046,0159
Scott	0184,0045,0121,0043
Sears	0035,0037,0047,0000,0042,0104,0046,0105,1237
Sharp	0048,0062,0807,0848
Shintom	0072
Shogun	0240
Singer	0072
Sonic Blue	0614,0616
Sony	0035,0032,0033,0000,0636,1032,1232,1972
Stack	0009,1972
STS	0042
Sylvania	0035,0081,0000,0043,0593,1593,1781
Symphonic	0000,0593,1593
Systemax	1972
Tagar Systems	1972
Tatung	0041
Teac	0000,0041
Technics	0035,0162
Teknika	0035,0037,0000
Thomas	0000
Tivo	0618,0636,0739,1996
TMK	0240,0208
Toshiba	0045,0043,0845,1008,1145,1972,1996
Totevision	0037,0240
Touch	1972
Unitech	0240
Vector	0045
Vector Research	0038
Video Concepts	0045,0061
Videomagic	0037
Videosonic	0240
Viewsonic	1972
Villain	0000
Voodoo	1972
Wards	0060,0035,0048,0047,0081,0240,0000,0042,0072,0149,0062,0760
White Westinghouse	0209,0072
XR-1000	0035,0000,0072
Yamaha	0038
Zenith	0039,0033,0000,0209,0479,1139,1479
ZT Group	1972

Remote Control Codes

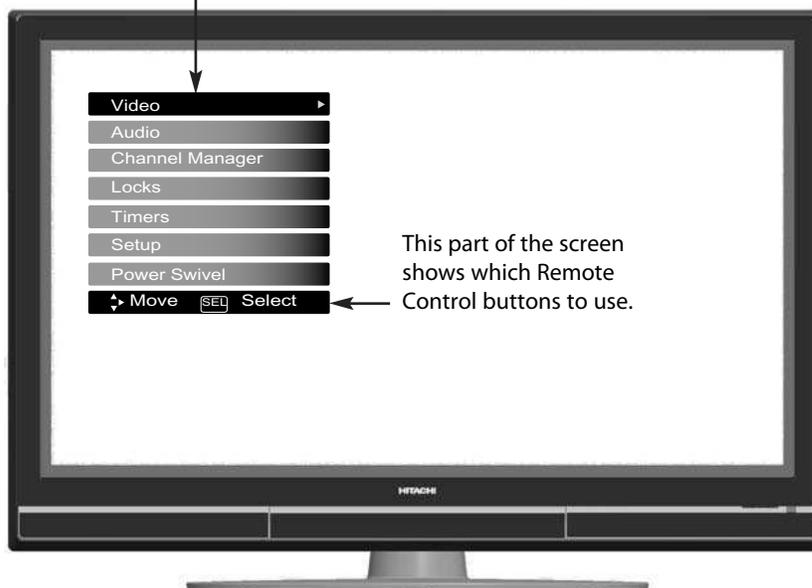
DBS/PVR Combo BRAND	Codes	Enterprise	0591	Sony	0533,1533,0864,1033,1431
Hughes Network Systems	0739	ESA	0821,1268	Sova	1122
Philips	0739	Fisher	0670,1919	Sungale	1074
Samsung	0739	Funai	0675,1268,1334	Superscan	0821
		Gateway	1073,1077,1158	SVA	0860,1105
		GE	0522,0815,0717	Sylvania	0675,0821,1268
PVR BRAND	Codes	Go Video	0744,0715,0741,0783,0833,0869,1044,1075,1099,1144,1158,1304,1730	Symphonic	0675,0821
ABS	1972			Teac	0758,0790,0809
Alienware	1972			Technics	0490,0703
CyberPower	1972			Technosonic	0730
Dell	1972	Go Vision	1071,1072	Techwood	0692
DirectTV	0739	GoldStar	0741	Terapin	1031
Gateway	1972	GPX	0699,0769	Theta Digital	0571
Hewlett Packard	1972	Greenhill	0717	Toshiba	0503,0695,1045,1154
Howard Computers	1972	Harman/Kardon	0582,0702	Tredex	0799,0800,0803,0804
HP	1972	Hitachi	0573,0664,1247,1919	TYT	0705
Hughes Network Systems	0739	Hiteker	0672	Urban Concepts	0503
Humax	0739	iLo	1348	US Logic	0839
Hush	1972	Initial	0717	Venturer	0790
iBUYPOWER	1972	Insignia	1268	Vizio	1064,1226
Linksys	1972	Integra	0627	Xbox	0522
Media Center PC	1972	JBL	0702	Yamaha	0490,0539,0545
Microsoft	1972	Jensen	1016	Zenith	0503,0591,0741,0869
Mind	1972	JSI	1423	Zoece	1265
Niveus Media	1972	JVC	0558,0623,0867,1164		
Northgate	1972	jWin	1049,1051		
Panasonic	0616	Kawasaki	0790	DVD-R Codes	
Philips	0618,0739	Kenwood	0490,0534,0682,0737	Accurian	1416
RCA	0880	KLH	0717,0790,1020,1149	Apex Digital	1056
ReplayTV	0614,0616		1261	Aspire Digital	1168
Samsung	0739	Konka	0711,0719,0720,0721	Coby	1086
Sonic Blue	0614,0616	Koss	0651,0896,1423	CyberHome	1129
Sony	0636,1972	Landel	0826	Funai	0675,1334
Stack	0009,1972	Lasonic	0798,1173	Gateway	1073,1158
Systemax	1972	Lenoxx	1127	Go Video	0741,1158,1304,1730
Tagar Systems	1972	LG	0591,0741,0801,0869	iLo	1348
Tivo	0618,0636,0739	LiteOn	1058,1158,1416,1440	JVC	1164
Toshiba	1008,1972,1996	Loewe	0511	LG	0741
Touch	1972	Magnavox	0503,0539,0646,0675,0821,1268	LiteOn	1158,1416,1440
Viewsonic	1972	Malata	0782,1159	Magnavox	0646,0675
Voodoo	1972	Marantz	0539	Panasonic	0490
ZT Group	1972	Memorex	0695,0831,1270	Philips	0646
		Microsoft	0522	Pioneer	0631
		Mintek	0839,0717	Polaroid	1086
DVD BRAND	Codes	Mitsubishi	1521,0521	RCA	0522
Accurian	1072,1416	Momitsu	1082	Samsung	0490
Advent	1016	NAD	0741	Sensory Science	1158
Aiwa	0641	NEC	0785	Sharp	0675
Akai	0695,0770,0899,1089	Nesa	0717	Sony	1033,1431
Alco	0790	Next Base	0826	Sylvania	0675
Allegro	0869	NexxTech	1402	Zenith	0741
Amphion Media Works	0872	Norcent	1003,0872,1107,1265		
AMW	0872	Onkyo	0503,0627,0792		
Apex Digital	0672,0717,0755,0794,0795,0796,0797,0830,1004,1020,1056,1061,1100	OptoMedia Electronics	0896		
Arrgo	1023	Oritron	0651		
Aspire Digital	1168,1407	Panasonic	0490,0632,0703,1362,1462,1490,1762		
Audiologic	0736,	Philco	0690,0733,0790,0862,1855,2000		
Audiovox	0790,1041,1071,1072,1121,1122	Philips	0503,0539,0646,0675,0854,1260,1267,1354		
Axion	1071,1072	Pioneer	0525,0571,0631,0632		
B & K	0655,0662	Polaroid	1020,1061,1086		
Blaupunkt	0717	Polk Audio	0539		
Blue Parade	0571	Portland	0770		
Broksonic	0695,0868	Presidian	0675,1072		
Cambridge Soundworks	0690	Prima	1016		
Cinea	0831	Proscan	0522		
CineVision	0876,0833,0869	ProVision	0778		
Citizen	1277	Qwestar	0651		
Coby	0778,0852,1086,1107,1165,1177,1351	RCA	0522,0571,0717,0790,0822,1022,1132,1193		
Craig	0831	Rio	0869		
Curtis Mathes	1087	Rotel	0623		
CyberHome	0816,0874,1023,1024,1117,1129,	Rowa	0823		
Daewoo	0784,0705,0833,0869,1169,1172,1234,1242	Sampo	0698,0752		
Denon	0490,0634	Samsung	0490,0573,0820,0899,1044,1075		
Desay	1407	Sansui	0695		
Disney	0675,1270	Sanyo	0670,0695,0873,1919		
Dual	1068,1085	Sensory Science	1158		
Durabrand	1127	Sharp	0630,0675,0752,1256		
DVD2000	0521	Sharper Image	1117		
Emerson	0591,0675,0821,1268	Sherwood	0633,0770,1043,1077		
		Shinsonic	0533,0839		
		Sonic Blue	0869,1099		

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; Day Dynamic, Day Normal and Night.
Contrast	Adjust contrast.
Brightness	Adjust 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 Black and White for more reddish color.
Black Enhancement	Enhance picture brightness in light scenes.
Contrast Mode	Use this function to choose between two Contrast Mode settings.
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 WIDE to select Hi-Fidelity color mode or STANDARD for Faithful color mode with HDTV standard.
Auto Color	The AUTO COLOR function automatically monitors and adjusts the color to maintain constant color levels even after a program or channel changes. It also maintains natural flesh tones while preserving fidelity of background colors.
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 treble.
Bass	Adjust the bass.
Balance	Adjust the balance.
Surround	Select Surround settings (Off, Wide, Normal)
Bass Boost	Select Bass Boost option ON or OFF.
Audio Source	Select between three Audio Sources.
Internal Speakers	Select internal or external speakers.
Auto Noise Cancel	Eliminates the noise between stations.
Perfect Volume	Adjust volume in fixed setting between stations.
Loudness	Adjust Loudness.
Language	Select Language options if available.
Digital Output	Select Optical Output options.
DRC	Select Dynamic Range Compression to ON or OFF.
Lip Sync	Synchronizes audio with video signal on digital and analog sources.

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

Channel Manager

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

Locks

Change Access Code	Change Lock access code.
Engage Lock	Choose to lock channel, and/or Front panel.
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 settings.
Set Event Timer	Set viewing reservation for TV programs.

Setup

Set The Menu Options	Choose English, French, or Spanish text and Background.
Set The Screen Saver	Select Screen Saver options to prevent screen burn.
Set The Inputs	Label Video Inputs, VCR, DVD, etc.
Set The Closed Captions	Feature to display dialogue/text.
Select The Quick Start Option	Select the TV Quick Start Up Option.
Reset The Software	Select to upgrade TV software and to Reset TV settings.

Power Swivel

Unlocked	Power Swivel enabled. Control the motorized Table Top Stand
Locked	Power Swivel disabled.

NOTE: 1. The Signal Meter feature of the Channel Manager OSD is only available for Digital channels.
2. Power Swivel feature is only available when Table Top Stand is connected.

Video

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 (Day-Normal, Day-Dynamic 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 for the customer Day (Dynamic) , Day (Normal) and Night mode. Day (Dynamic) is the original factory preset mode , this can be changed by adjusting any video setting to your desire conditions. Day (Normal) can be used as a second video setting for daytime viewing. Night is set to watch programing during nighthime.

1. Use the **CURSOR PAD** ▲ or ▼ to highlight the function to be adjusted.
2. Press the **SELECT** button or the **CURSOR PAD** ▶ to select the function settings.
3. Press the **CURSOR PAD** ◀ or ▶ to adjust the function.
4. Press **MENU** to return to main menu.
5. 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 adjust overall picture brightness.

Color

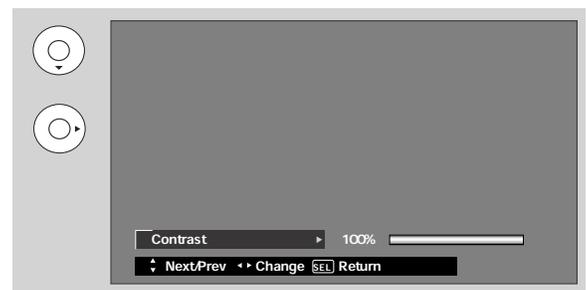
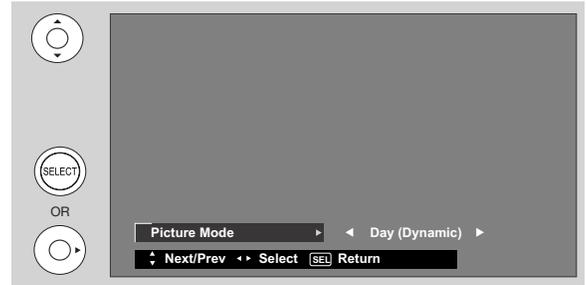
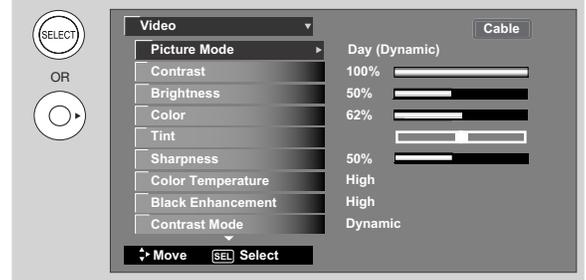
Use this function to adjust the level of color in the picture.

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.



Video

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 Black/White for more reddish color.

Black Enhancement

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

- NOTE:**
1. If **CONTRAST** is selected, you are adjusting **CONTRAST**. The additional menu items **BRIGHTNESS**, **COLOR**, **TINT**, and **SHARPNESS** can be selected and adjusted in the same manner.
 2. It may be necessary to adjust **TINT** to obtain optimum picture quality when using the **COMPONENT VIDEO Y-PbPr** input jacks.
 3. **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 2 Contrast Mode settings. Set to **DYNAMIC** for darker images more in the level of Black, set to **NORMAL** for a balanced White to Black level.

Noise Reduction

The **NOISE REDUCTION** function automatically reduces conspicuous noise in the picture without degrading picture quality. Set **NOISE REDUCTION** to **OFF** if the TV experiences picture blocking.

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.

Auto Movie Mode

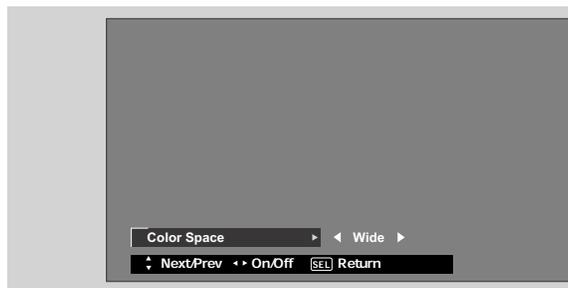
The **AUTO MOVIE MODE** function turn ON or OFF the 3:2 PULLDOWN DETECTION SPECIAL FEATURE. Theatrical movies are shot on film at 24 frames or still pictures per second, instead of 30 frames or 60 fields like video. When film is transferred to video for television viewing, the disparity between the two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

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

Color Space

The **COLOR SPACE** function allows you to set between two color modes for HDTV standard. Select **WIDE** for High Fidelity (brighter) colors or **STANDARD** for faithful (normal) colors to the signal standard.

1. Use **CURSOR PAD** ◀ or ▶ to select **WIDE** or **STANDARD** color option.
2. Press **EXIT** to quit menu or select **COLOR SPACE** to return to the previous menu.



Auto Color

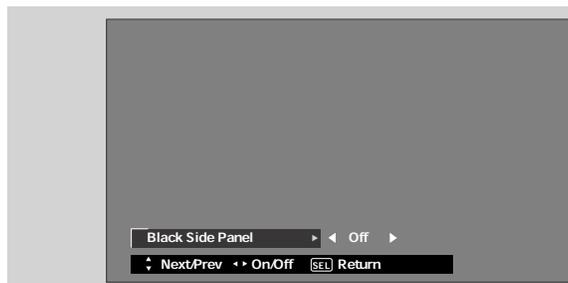
The **AUTO COLOR** function automatically monitors and adjusts the color to maintain constant color levels even after a program or channel changes. It also maintains natural flesh tones while preserving fidelity of background colors.

NOTE: When receiving Antenna Digital Channel, using Component or HDMI input, Auto Color will not be available (grayed out).

Black Side Panel

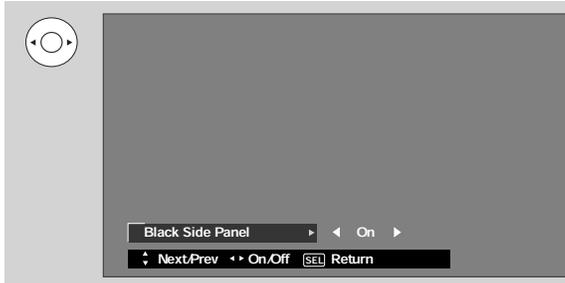
The **BLACK SIDE PANEL** function turns the gray side bars from gray to black when watching 4:3 signals in Standard mode.

1. Press the **CURSOR PAD** ◀ or ▶ to set to ON or OFF.



Video

2. Press **EXIT** to quit menu or select **SET BLACK SIDE PANEL** to return to the previous menu.



NOTE: 1. To prevent screen damage when watching 4:3 signal, turn off the **BLACK SIDE PANEL**. It is recommended to watch 4:3 signal with gray side bar.
2. This setting return to Off automatically after TV power On/Off.

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.

Vertical Position

This function allows you to select when aspect style is either 4:3 EXPANDED/ZOOM1/ZOOM2 or 16:9 ZOOM. Vertical position can be changed with these modes. For example, it will be useful for centering the picture area at both the top and bottom of the picture with 480i/480p signal. 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** to quit the **MENU**, or select **ASPECT** to return to the main menu.

NOTE: 1. *Vertical Position will not be available in 4:3 Standard and 16:9 Standard modes.*
2. *Vertical Position setting returns to "0" automatically after TV power On/Off.*

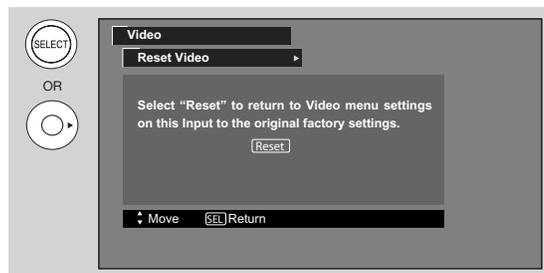
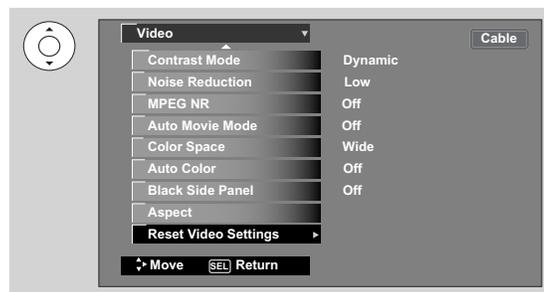
Reset Video Settings

This function allows you to Reset the Video Menu Settings of the present input and return it to the Day-Dynamic VIDEO mode.

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 at 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.



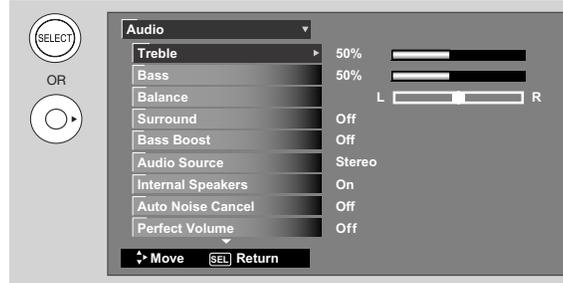
Audio

Audio

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

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 ▲** or **▼** to highlight surround option.
- 2.- Use **CURSOR PAD ◀** or **▶** to select Off, Normal or Wide.

Off : turns off the surround sound effect.

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

Wide Surround : Reproduce much better quality 5 channel sound signals from ordinary stereo contents comparing with normal surround technology. Wide surround enable users to enjoy sound playback in wide surround virtual area like 5 channel contents with ordinary stereo contents.

Bass Boost

This function allows to enhance the low frequency audio performance of your speaker system.

Audio

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 setting up the external speakers.

ON	Select this feature if using the internal speakers only.
TV as Center	Select this feature when setting up external speakers from a separate stereo system. The TV's speakers will work as the center speaker.
OFF	Select this feature if you prefer to use only speakers from a separate stereo system.

Auto Noise Cancel

This function eliminates the noise between stations. If a channel is tuned and is noisy, this function will automatically 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).

Digital Output

This function allows you to select between Dolby® Digital and PCM. This setting will be fed into optical output.



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

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 output jack (Digital Audio).

DRC

Dynamic Range Compression - Use this function to compress the range of sound volume. By compressing the range of sound volume, it is possible not only to suppress the output of loud sound at night but also to raise the volume of low sound. The default setting is ON.

Use the **CURSOR PAD** ◀ or ▶ to select the chosen options.

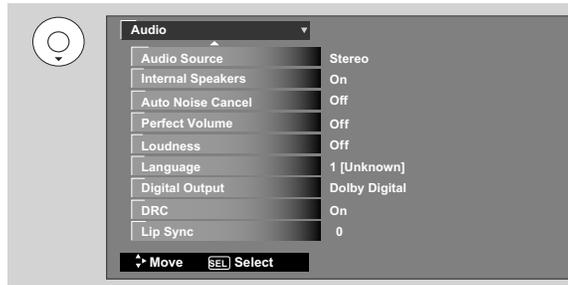
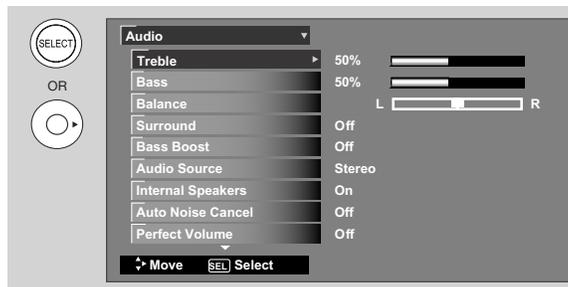
NOTE: The functions Language, Digital Output and DRC are only available when viewing digital programs.

Use the functions at right if your TV is connected to an amplifier/receiver with optical digital input with Dolby® Digital or PCM decoder capabilities.

NOTE: 1.- The DRC control affects only Dolby® Digital signals decoded internally by the TV.
2.- DRC does not affect the Dolby Digital bitstream available at the digital audio output.

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.



Channel Manager

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** and the **SELECT** button to highlight and select **CLOSE** to exit.

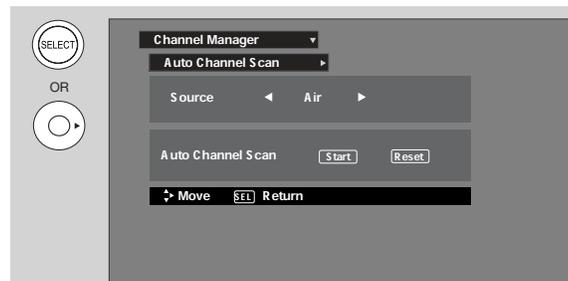
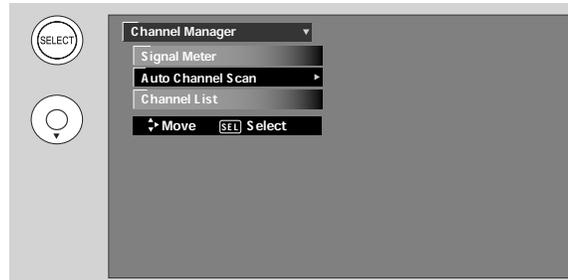
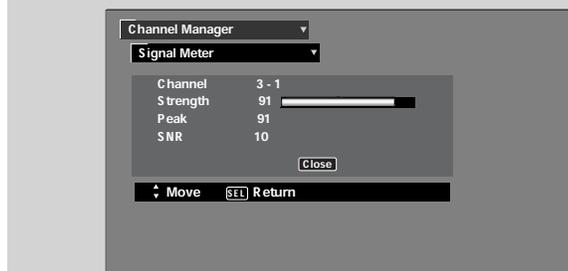
NOTE: The Signal Meter will not be available (grayed out) when watching analog channels.

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: 1. 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 Manager

Channel List

This function allows you to review which channels are labeled (**ID**), which have been added to **CHANNEL MEMORY (SCAN)**, 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 **SCAN** 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: 1. 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.

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.

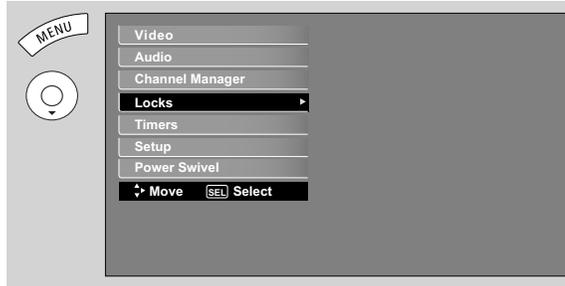
Please review this Owner's Guide for further information regarding such connections.

Locks

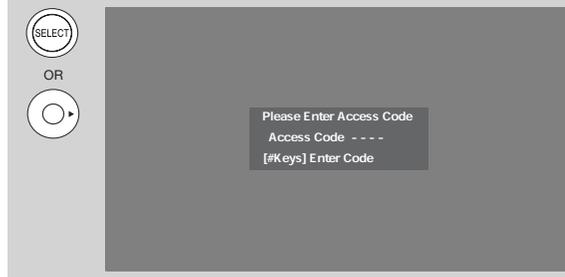
Locks

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.

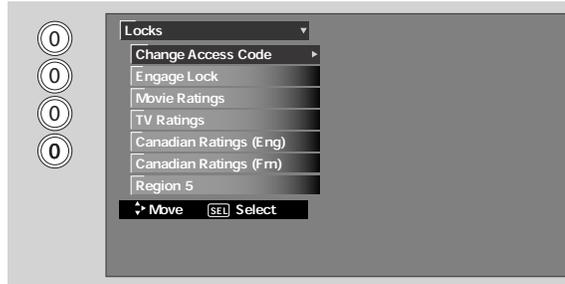


Change Access Code

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 **SET FRONT PANEL LOCK** can be set individually.

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

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

When **MOVIE RATINGS** is selected, you can block various types of movies and video tapes based on motion picture ratings (see page 44).

When **TV RATINGS** is selected, various types of television programming based on a parental guide ratings will be blocked (see page 45).

Use **CANADIAN RATINGS** to block various types of movies and television programs based on the two rating systems used in Canada that you feel may be inappropriate due to its content (see pages 46-47).

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 48).

NOTE:

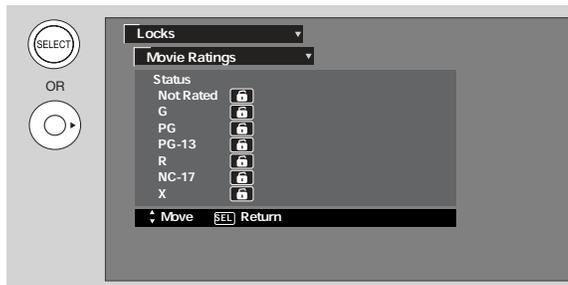
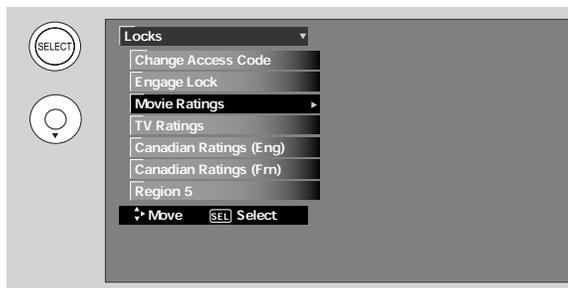
The **REGION 5** option will operate for Digital Channels only.

Locks

Movie Ratings

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

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



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

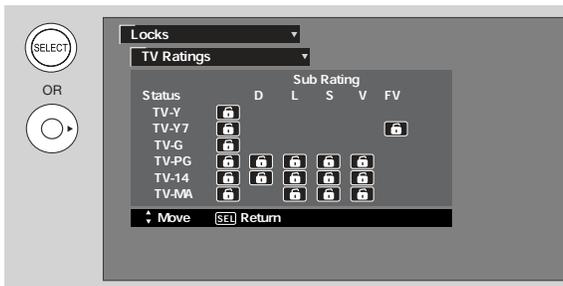
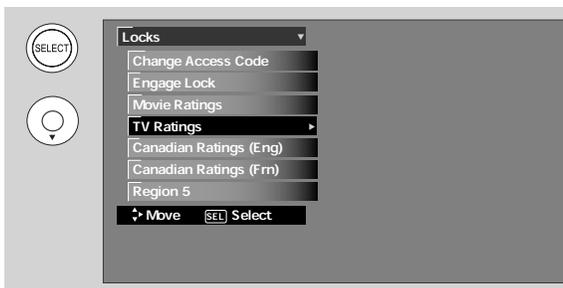
NOTE: 1. A movie rating is dependent upon the movie that is viewed. If the movie does not carry a rating, the TV will not block it.
 2. Blocking **NOT RATED** programs may block emergency programming, sports, news, public service announcements, religious programs and weather.

Locks

TV Ratings

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

1. Use the **CURSOR PAD** ▲, ▼ to select the **TV RATING** category that you want to block.
2. Press **SELECT** to block the **TV RATING** that you have selected.
3. Press **EXIT** to quit the menu or select **TV RATING** to return to the previous menu.



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

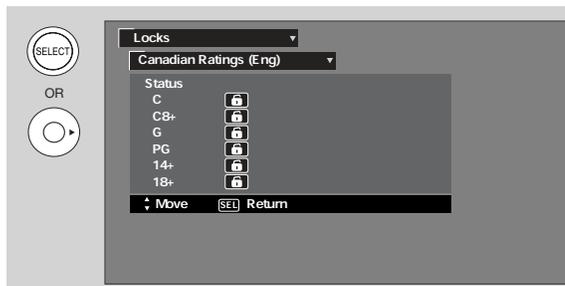
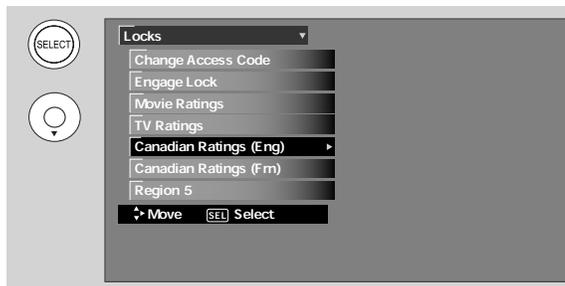
- NOTE:** 1. If you Block **TV-14D**, you will still permit **TV-MA** programs; If you block **TV-14V**, you will automatically block **TV-MAV** programs, but you will still permit **TV-MALS** programs. This means that the TV will block violence in **TV-14** and higher (**TV-MA**), but not language and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

Locks

Canadian Ratings (Eng)

Use **CANADIAN RATINGS (ENG)** to block any type of movie and television program in Canada that you feel might be inappropriate in its content.

1. Use the **CURSOR PAD ▲, ▼** to select the **CANADIAN RATINGS (ENG)** category that you want to block.
2. Press **SELECT** to block the **CANADIAN RATINGS (ENG)** that you have selected. Once rating is selected, for example **C8+**, all movies and television programs rated **C8+** and higher (**G,PG, 14+** and **18+**) will be blocked automatically.
3. Press **EXIT** to quit the menu or select **CANADIAN RATINGS (ENG)** to return to the previous menu.



Canadian Ratings English Table

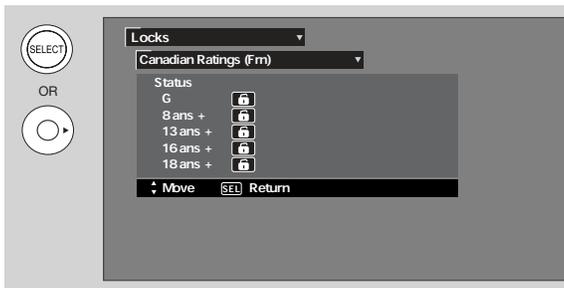
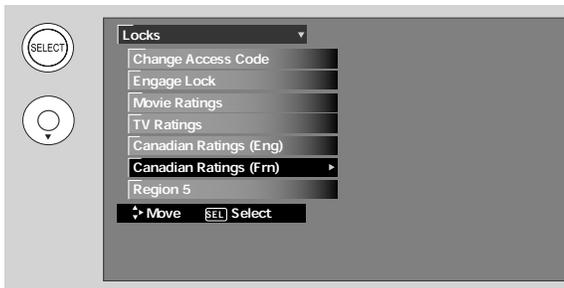
C	Programming intended for children under age 8 - Violence Guidelines; Careful attention is paid to themes, which could threaten children's sense of security and well-being. There will be no realistic scenes of violence. Depictions of aggressive behaviour will be infrequent and limited to portrayals 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.

Locks

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.

1. Use the **CURSOR PAD ▲, ▼** to select the **CANADIAN RATINGS (FRN)** category that you want to block.
2. Press **SELECT** to block the **CANADIAN RATINGS (FRN)** that you have selected. Once rating is selected, for example **8 ANS+**, all movies and television programs rated **8 ANS+** and higher will be blocked automatically.
3. Press **EXIT** to quit the menu or select **CANADIAN RATINGS (FRN)** to return to the previous menu.



Canadian Ratings French Chart

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

Locks

Region 5

Use **Region 5** Ratings to prevent viewing of any movie or program that you feel may be inappropriate due to its content. This feature will operate only for ATSC Digital signal.

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) for reference. Once the TV has received **Region 5** Ratings data, the **Region 5** option in the lock menu will display the data.

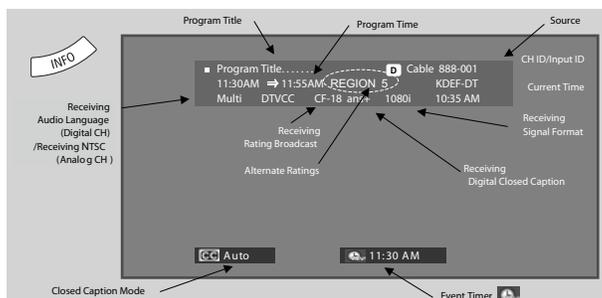
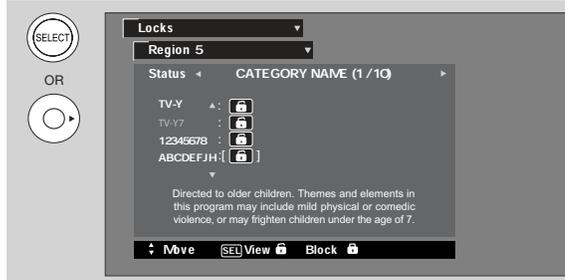
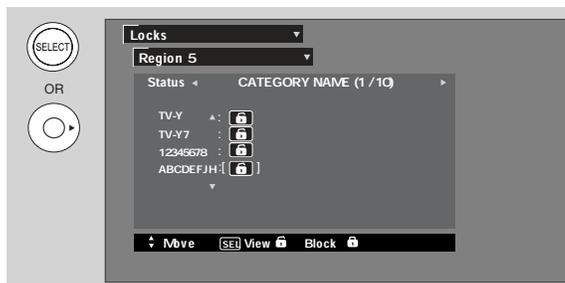
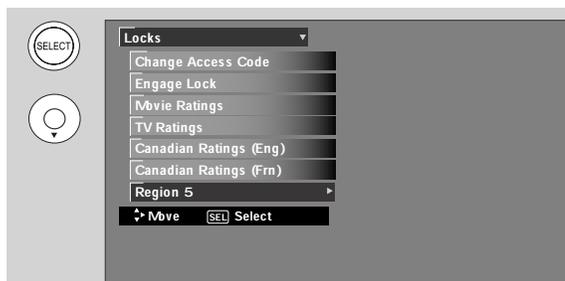


Fig. (1)

1. Use the **CURSOR** buttons ▼ or ▲ to select the **REGION 5** category that you want to block.
2. Press **SELECT** to block the **REGION 5** that you have selected. Once rating is selected, for example **PG-13**, all movies rated **PG-13** and higher (**R, NC-17 and X**) will be blocked.
3. Press **EXIT** to quit the menu or select **REGION 5** to return to the previous menu.



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

Timers

Timers

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

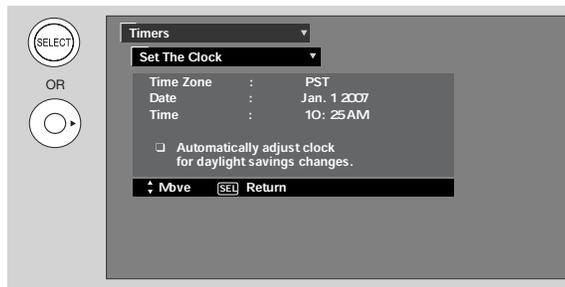
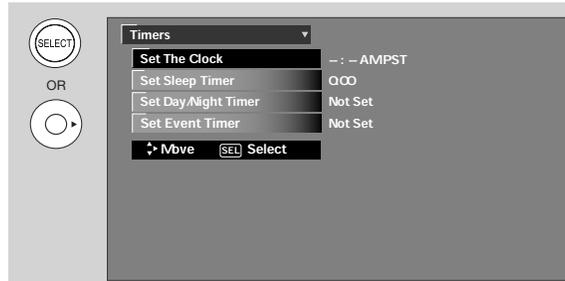
1. Use the **CURSOR** buttons ▲ or ▼ to highlight the function to be adjusted.
2. Press the **SELECT** button to select.



Set The Clock

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

1. Use the **CURSOR PAD** ◀, ▶, ▲, ▼ to highlight the chosen **TIME ZONE** settings.
2. Press the **SELECT** button to select. If you observe daylight savings, use **CURSOR PAD** to highlight **DAYLIGHT SAVING CORRECTION** and press the **SELECT** button to select.
3. Use the **CURSOR PAD** ◀, ▶, ▲, ▼ to highlight 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.



- NOTE:**
1. When **AUTOMATICALLY ADJUST CLOCK FOR DAYLIGHT SAVING CHANGES** is checked ✓, the TV will automatically calculate the clock adjustment for Daylight Saving.
 2. The TV counts electrical pulses for regulating the **TIMERS**. When the "Main Power button" is set to **OFF** and **ON** quickly, or the power cord is unplugged then plugged quickly the clock is stopped momentarily and the **TIME** indication will become slow.

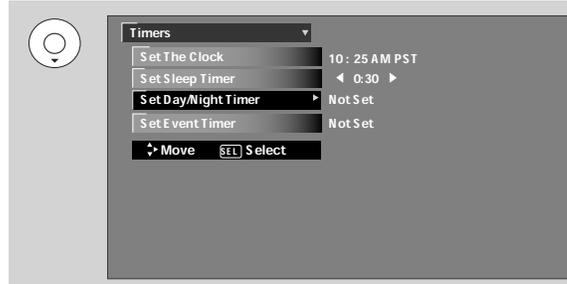
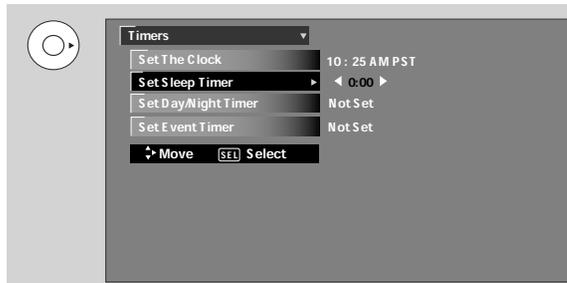
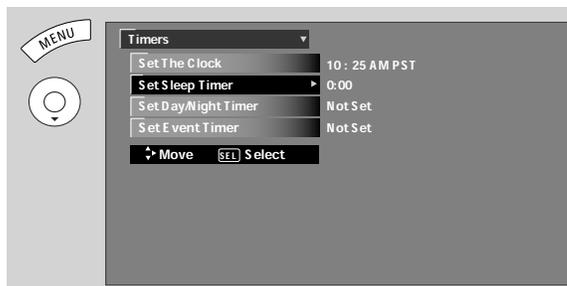
Timers

Set Sleep Timer

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

1. 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**.

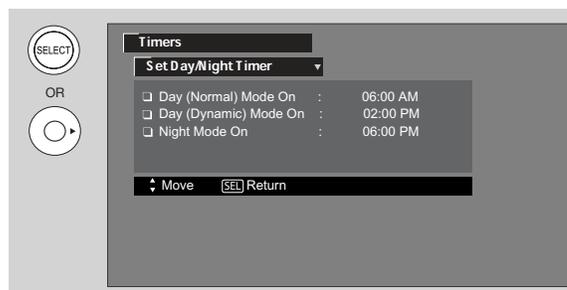
NOTE: The Sleep Timer info will show for 1 minute before the TV turns off.



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 PADS** to highlight **SET DAY/NIGHT TIMER** settings.
2. Press the **SELECT** button to select the option.
3. Use the **CURSOR PADS** to select **DAY NORMAL MODE ON** and to set its **TIMER**.
4. Use the **CURSOR PADS** to select **DAY DYNAMIC MODE ON** and to set its **TIMER**.
5. Use the **CURSOR PADS** to select **NIGHT MODE ON** and to set its **TIMER**.
6. Press **EXIT** to quit the menu or select **SET DAY/NIGHT TIMER** to return to the previous menu.

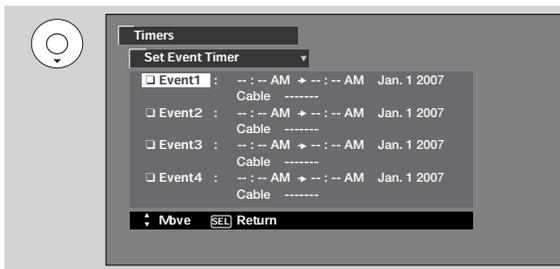
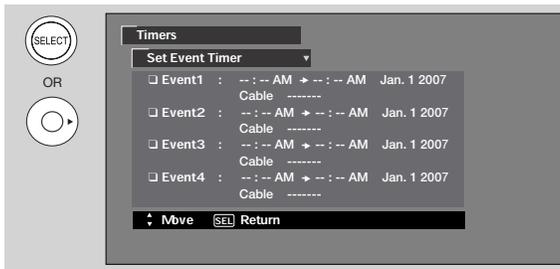
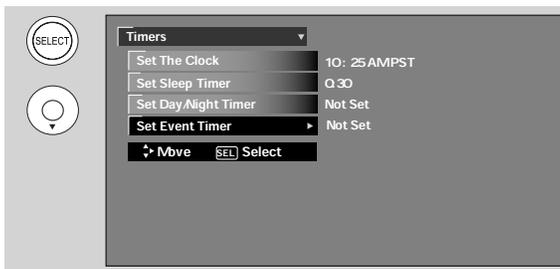


Timers

Set Event Timer

This function will automatically operate the Plasma TV viewing reservation of a program. If the clock is not set, you can not use this function and the screen at right will appear. The message on the screen will disappear after 3 seconds, then the screen automatically goes to the clock setup mode (see page 49).

1. Use the **CURSOR PAD ▲, ▼** to highlight **EVENT 1, EVENT 2, EVENT 3, EVENT 4** and then press the **SELECT** button to select.
2. Use the **CURSOR PAD ▲,▼** to highlight and select **START TIME HOUR/MINUTE**.
3. Use the **CURSOR PAD ▲,▼** to highlight and select **START TIME AM/PM**.
4. Use the **CURSOR PAD ►, ▲** or **▼** to highlight and select **FINISH TIME HOUR/MINUTE**.
5. Use the **CURSOR PAD ►, ▲** or **▼** to highlight and select **FINISH TIME AM/PM**.
6. Use the **CURSOR PAD ►** to highlight the **MONTH**.
7. Use the **CURSOR PAD ▲** to select a **MONTH** or **CURSOR PAD ▼** to select **DAILY, WEEKLY - SUNDAY TO MONDAY**. Use the **CURSOR PAD ◀** to return to **MONTH**.
8. Use the **CURSOR PAD ►, ▲** or **▼** to highlight and select the **DAY** of the **MONTH**.
9. Use the **CURSOR PAD ►, ▲** or **▼** to highlight and select the **YEAR**.
10. Use the **CURSOR PAD ►,▲** or **▼** or **NUMBER** buttons to set the channel the TV will tune into.
11. A in the box means the Event is enabled.



NOTE: 1. When the **INFO** button is pressed, the Event Timer Icon will only display the current date **ON/OFF** timer.
 2. The **OFF TIMER** will only activate if the TV was turned on by the **ON TIMER**, and any menu operations (includes channel selection) were not made after this time. If you change the channel or operate the menu after the **ON TIMER** has been activated, the **OFF TIMER** will deactivate.

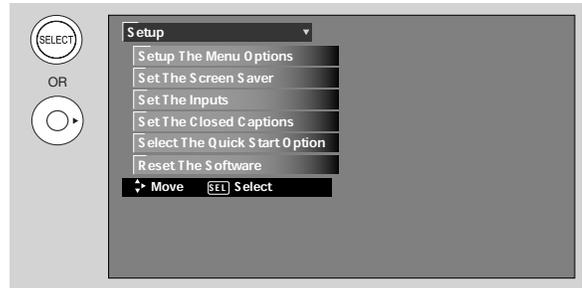
CAUTION: Do not use your TV as a deterrent when away from home by using the **ON** and **OFF TIMERS**. For safety, the TV should be turned off when you are away from home.

Setup

Setup

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

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



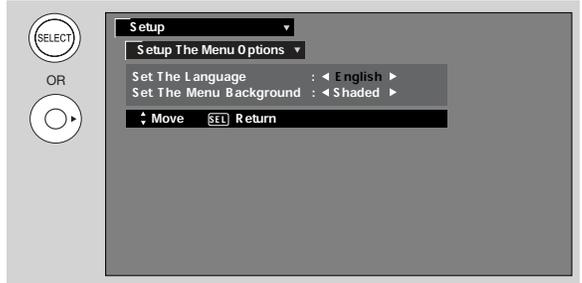
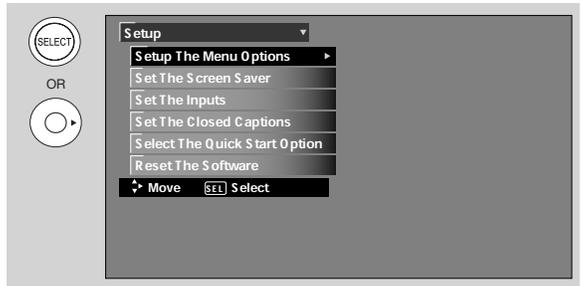
Set The Menu Options

Setup the Language and background 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.

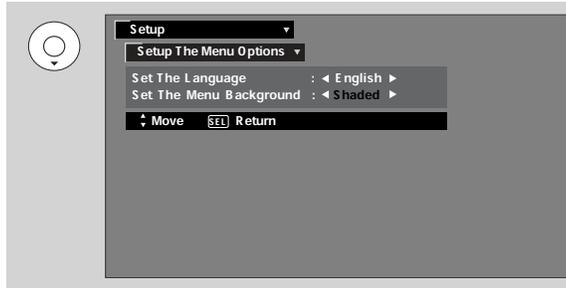


Setup

Set The Menu Background

This function allows you to choose from two menu backgrounds.

1. Use the **CURSOR PAD ▲** or **▼** to highlight **SET THE MENU BACKGROUND (SHADED OR SOLID)** of your choice. Use the **CURSOR PAD ◀** or **▶** to select shaded or solid.
2. Select **SOLID** for a black background (no picture can be seen behind menu screen), select **SHADED** and a light background is visible.
3. 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 hide screen burn.

1. Use **CURSOR PAD ▲** or **▼** to highlight Screen Saver's Picture Orbiting and Image Power 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.

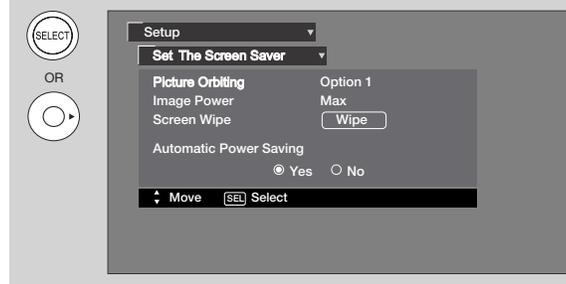
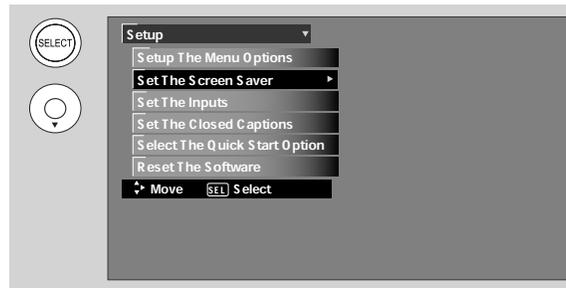


Image Power

This function allows you to choose power consumption reduction based on 3 levels (min., medium and max).

Screen Wipe

If pattern mark occurs, use Screen Wipe (White Field Signal) for at least 10 minutes to refresh any damage that may have occurred from a pattern mark. Screen Wipe can resolve pattern mark to a certain degree, 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.

Automatic Power Saving

Use this feature to turn power off automatically when a video input signal is not detected for 15 seconds.

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

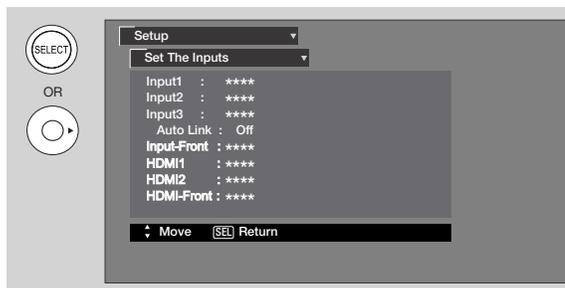
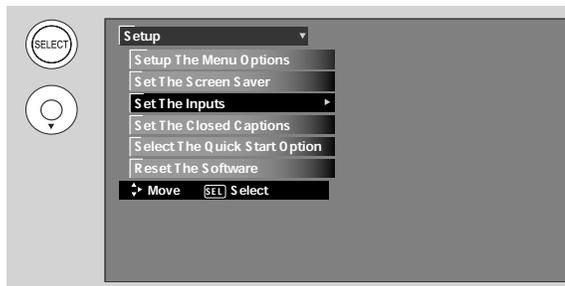
Setup

Set The Inputs

Use this feature to give a name to any of the video inputs.

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

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



INPUT 3 Auto Link

Use this function to automatically turn the TV on and tune to INPUT 3 when it detects a video signal to INPUT 3.

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 3 automatically, when the INPUT 3 input device is turned on. This is convenient when you want to watch a movie with your VCR, laserdisc player, 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.

NOTE: 1. 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, laserdisc, or DVD player OFF. This feature is now reset and will turn on your TV as described above.

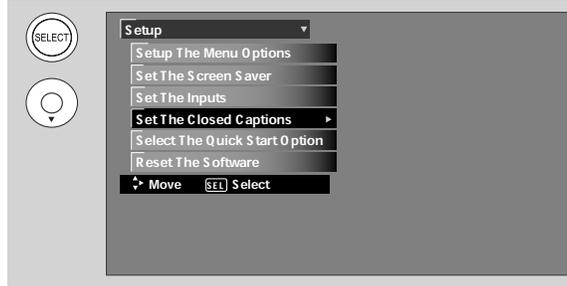
2. If no remote control button is pressed after the TV is turned on by **AUTO LINK**, the TV will automatically turn off after three hours.

Setup

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.



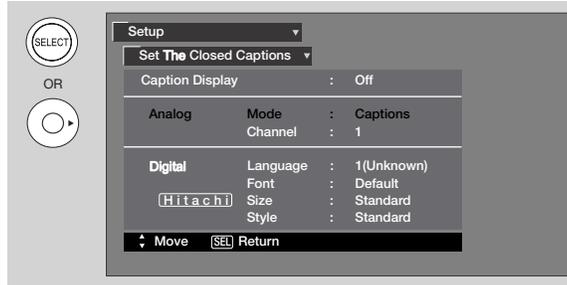
Caption Display:

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

AUTO will turn the **CC** display 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.

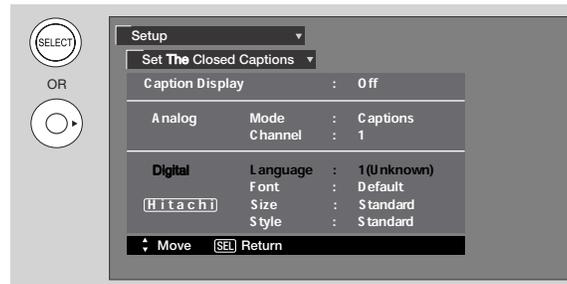
Channel:

- 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 and style of digital captions.

1. Use the **CURSOR PAD** **◀**, **▶**, **▲** or **▼** to highlight and select desired **DIGITAL CAPTIONS** feature.
2. Press **EXIT** to quit menu or select **SET CLOSED CAPTION** to return to the previous menu.



- NOTE:**
1. Some types of digital closed captions will not work with this TV.
 2. Caption Display will not work when viewing a 480p, 720p, or 1080i input via the **COMPONENT: Y-PbPr** inputs.
 3. Digital Captions Font Style are sometimes different from the Font Style of Analog Captions.
 4. Closed Caption and Digital Captions availability and content depends on the broadcaster. Closed Caption is available when Closed Caption icon is displayed on screen.
 5. Digital Captions language will not be available (grayed out) when using analog channels.

Setup

Select The Quick Start Option

This feature will select **QUICK START UP** options. Set this feature to **ON** to have the TV tune channels (both Analog and Digital) quickly when first turning the TV on. Set this feature to **OFF** to save electricity. Selecting **ON** for the **QUICK START UP** feature will activate the TV tuners circuits when the TV is in "standby mode" which is commonly referred to as "off". This will allow you to quickly tune to channels when first turning the TV on. Digital signals often change and this feature will monitor any changes and prepare the television to quickly present a picture. A small amount of electricity is used to continually monitor signals when this feature is selected.

NOTE: 1. When setting the Quick Start option to ON the option of Reset TV Settings will not operate unless you turn ON/OFF the main power button.

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 when the **UPGRADE** is complete.

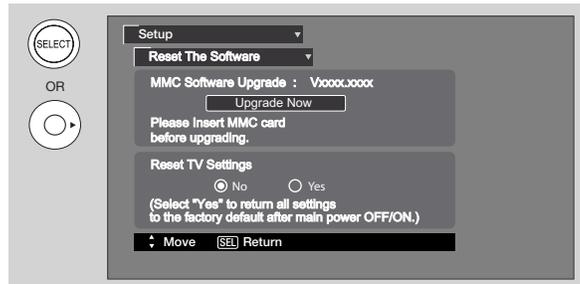
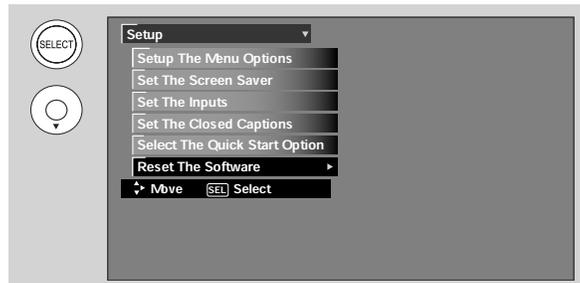
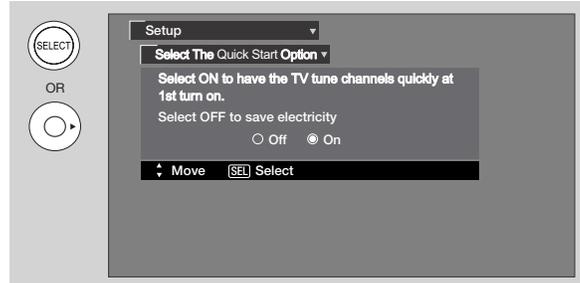
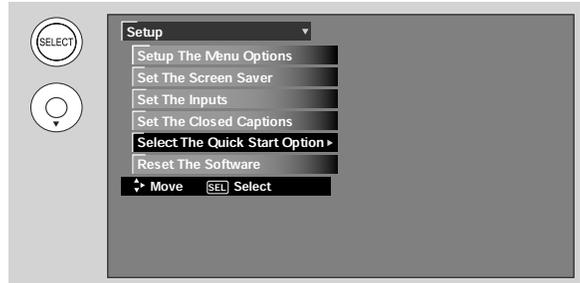
NOTE: Any power interruption during the upgrade process will cancel the upgrade. When this happens, repeat the upgrade procedure.

Reset TV Settings

This function allows you to Reset all TV Settings to the original factory settings on all modes during the next power off/on.

1. Use **CURSOR PAD ▲, ▼** to highlight functions.
2. Press the **SELECT** button or **CURSOR PAD ►** to select Reset the Software Menu.
3. Use the **CURSOR PAD ▼** to access the Reset TV settings option.
4. Select the **"YES"** option to Reset ALL the TV functions during the next main power off/on.

NOTE: 1. If **YES** is selected, **ALL TV MENU SETTINGS** will be reset to the original factory settings on all modes during the next power off/on.
2. When the Quick Start option has been set to **ON**, this option needs **POWER OFF/ON** operation by the Main Power SW.

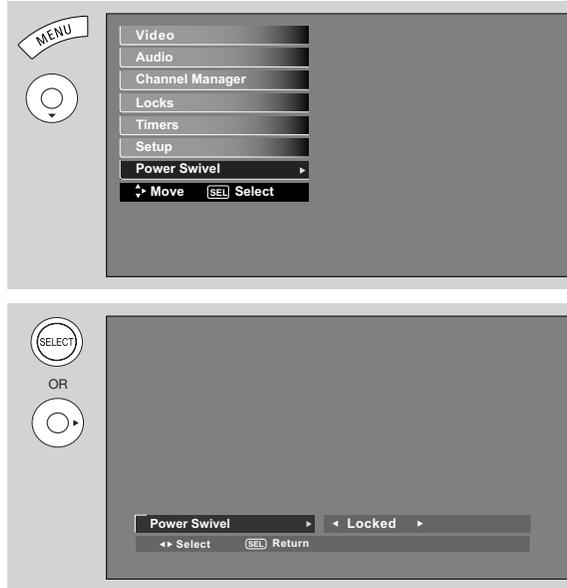


Power Swivel

Power Swivel

This feature controls the motorized stand. It allows the customer to turn the Plasma Television left or right using the remote control. This feature is only available when the Table Top Stand is connected (see page 6).

1. Use the **CURSOR PAD** ◀ or ▶ to unlock or lock the Power Swivel.
Exit the OSD menu system before controlling the motorized stand.
2. Press the **CURSOR PAD** ▶ to rotate the TV to the right.
3. Press the **CURSOR PAD** ◀ to rotate the TV to the left.
4. Release the **CURSOR PAD** to stop rotation.



- NOTE:**
1. The Power Swivel has a maximum turning angle of 30° (left and right).
 2. Do not place any objects in the path of the plasma television when using the power swivel feature.
 3. Before using the power swivel, please make sure that the path of the plasma television is clear of any fingers, hands or any other body parts to avoid causing injury.

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 "AA" size batteries. Do not use an old battery with a new battery.
- Exposing the screen to direct sunlight for a long period of time or heat may cause damage to the plasma screen.

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 for years of lasting entertainment from your **HITACHI** Plasma Television.

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

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.



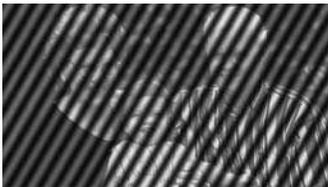
GHOSTS:

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:

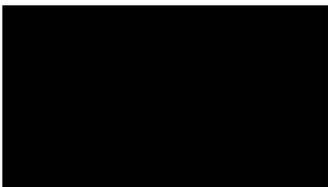
- Keep the television away from Radio.
- Adjust Radio antennas in order for the television not to receive interference.
- The antenna cable of Radio should be kept away from the television.
- Use a coaxial cable for antenna.

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 (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 weak 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.

AGENCY REGULATORY INFORMATION

Federal Communications Commission Notice

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

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

FCC Information

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 America, Ltd. Home Electronics Division 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.

Features and Specifications

Features:

- New 1080 Full HD Plasma Display Panel
- New Easy-to-Use On-Screen Menu Control (3 Language)
- Region 5 (Downloadable V-Chip)
- Preprogrammed Remote Control
- Power Management: ON/OFF via signal detection
- Picture Enhancement
- Input Signal Identification
- HDMI (High Definition Multimedia Interface)(High Bandwidth Digital Content Protection V1.1 Compatible)
- Closed Captions (Analog and Digital)
- Sleep and Event Timer
-  Technology
- Lip Sync control

Video:

- 1920 x 1080 Display Resolution
- ALiS (Alternate Lighting of Surfaces Technology)
- High-Contrast Pure-Color Glass Shield
- Wide Viewing Angle
- Color Temperature Presets: High, Standard, Medium and Black/White.
- 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 :Day(Normal), Day(Dynamic) and Night

Inputs:

- Power Input AC 120V, 60Hz
- Power Consumption
Average Power : 350 W
Maximum Power : 587 W, 5.3 A
- Antenna input impedance 75 Ohm
- Channel coverage 191ch.
VHF-Band 2 ~ 13
UHF-Band 14 ~ 69
CATV Mid Band A-5 ~ A-1
. A-I
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
Luminance (Y) 1.0Vp-p, 75 Ohm
Chrominance (P_B/P_R) 0.7Vp-p, 75 Ohm
- Audio input Impedance 270k Ohm
- Average input level 470mVrms
- HDMI (19 PIN)

Outputs:

- Video 1.0Vp-p, 75 Ohm
- Audio 470mVrms, 1k Ohm
- Optical Out (Digital Audio) 1 Optical Connector

Audio:

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

Supplied Accessories:

- Remote Control
- Batteries (AA)
- 6' AC Power cord cable
- Power Swivel Table Top Stand (included in a box)
- Power Swivel cable
- Wire clamp

Optional Accessories:

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

INPUTS/OUTPUTS

• Wideband Component Y, Pb,Pr	2
• Composite Video	4
• S-Video	1
• Antenna (RF)Inputs	1
• Audio Output	1
• Monitor Output	1
• Optical Output	1
• Upgrade Card Slot	1
• HDMI	3
• RS232C Interface	1

SPECIFICATIONS

- Pixel Pitch 0.576(horiz.) x 0.580(vert.) mm.
- FCC class: B for Consumer Use
- Power Requirements 108-132VAC, 60Hz
- Operating Temperature 41°F to 95°F.

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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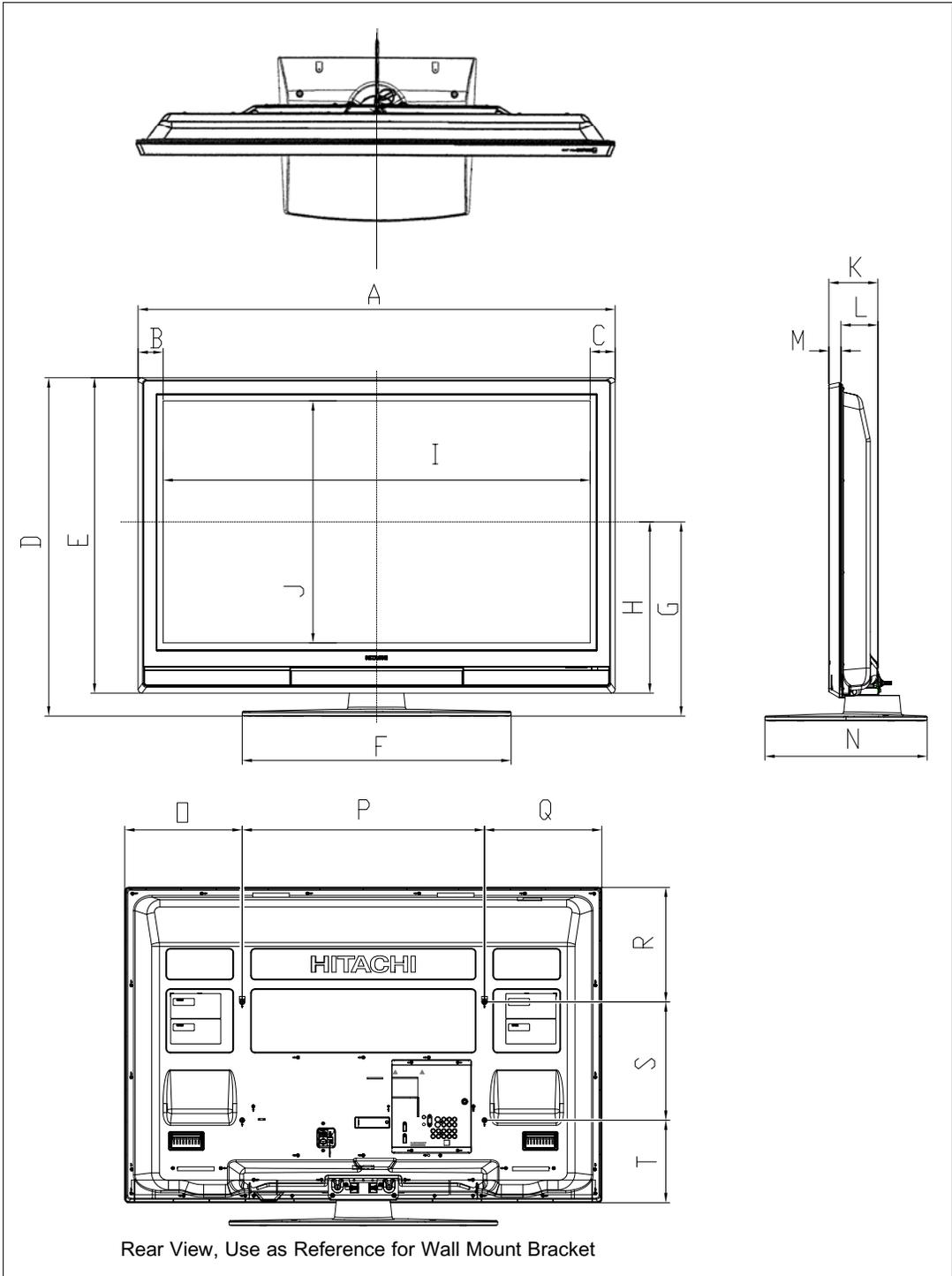
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Set Dimensions

50 Inch Models (Includes Table Top Stand) Weight (lbs./kg): 109.7/49.8



Units	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T
Inches	48-13/16	2- 9/16	2- 9/16	34-11/16	32- 5/16	20- 3/16	19-15/16	17- 9/16	43- 9/16	24-11/16	5- 1/16	3-10/16	1- 7/16	16-10/16	12	24-13/16	12	11-12/16	12- 2/16	8- 7/16
mm	1240.00	65.00	65.00	880.90	820.50	513.40	505.90	445.50	1105.92	626.40	128.50	92.50	36.00	422.60	305.00	630.00	305.00	298.00	308.00	214.50

HITACHI

Inspire the Next

Service Hotline

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

DIAL TOLL FREE

7 days a week, 24 hours a day

1-800-HITACHI

(1-800-448-2244)



HITACHI AMERICA, LTD.
HOME ELECTRONICS DIVISION

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

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

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

HITACHI CANADA, LTD.
DIGITAL MEDIA DIVISION

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

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

Monday – Friday (EST).....9:00am – 7:00pm
Saturday (EST)9:00am – 5:00pm

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

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

Lundi - Vendredi L'EST9:00am – 7:00pm
Samedi L'EST.....9:00am – 5:00pm

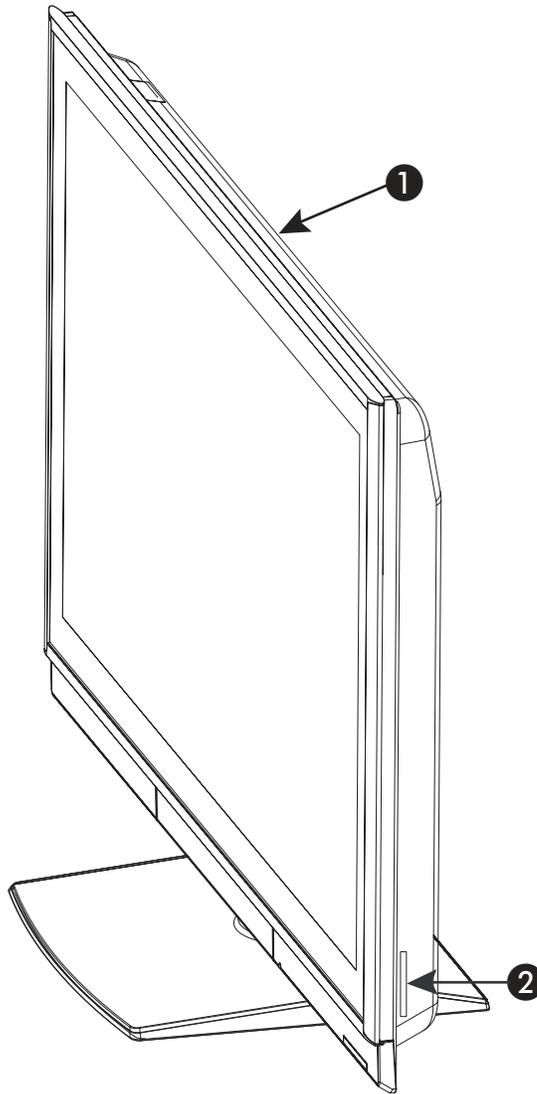
La version français de votre manuel se trouve a l'exterieur de la boîte. Si le manuel est manquant, coposez le **1-800-HITACHI (1-800-448-2244)** pour obenir votre copie.

HITACHI CANADA, LTD.
1-2495 Meadowpine Blvd.
Mississauga, Ontario L5N 6C3

Service Information

When you call HITACHI SERVICE HOTLINE they will require some information related to the TV MODEL NAME and SERIAL # in order to give you the proper support. This information is located on the back of the TV and also on the RIGHT SIDE of your TV set. Please follow the next steps to find this information and then provide to SERVICE.

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



End User License Agreement for HITACHI DTV Software

END USER LICENSE AGREEMENT FOR HITACHI DTV SOFTWARE

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8. **NO FAILURE OF ESSENTIAL PURPOSE.** You agree that neither **HITACHI'S** breach of this agreement nor its failure to repair a defect, error or bug in the software shall constitute a failure of the essential purpose of this agreement.
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10. **TERMINATION. HITACHI** may terminate this Agreement immediately at any time by providing notice to you.
11. **GOVERNING LAW; SEVERABILITY.** This Agreement will be governed by the laws of the State of New York, and you consent to the exclusive jurisdiction and venue in the federal courts sitting in the Southern District of New York, unless no federal subject matter jurisdiction exists, in which case you consent to the exclusive jurisdiction and venue in the Borough of Manhattan, New York, USA.

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The operating system software incorporated in this Hitachi TV is shown in the table below and the applicable license(s) are detailed on the following pages of this Owner's Guide.

Software Module	Applicable Software License
Linux Kernel busybox dhcpcd ifupdown net-tool iptables libstdc++5	GNU GENERAL PUBLIC LICENSE Version 2
glibc libposixtime	GNU LESSER GENERAL PUBLIC LICENSE Version 2.1

If you want to know more about the Software Module,
please E-mail us at : tvsoftwaresupport@hea.hitachi.com

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Appendixes

Appendix A:

Picture Format for Each Input Source

Aspect Specifications

Yes : Selectable - : Un-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	-	16x9	Yes	-	Yes	-	Yes	-	-	
		480i	-	4x3	-	-	-	Yes	Yes	Yes	Yes	
Input 1	Video S-Video	NTSC	Auto ON	16x9	Yes	Yes	Yes	-	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	-	16x9	Yes	Yes	Yes	-	Yes	-	-	
			Auto ON	480p	Yes Initial	-	Yes	-	-	-	-	
				480i	Letter	-	-	-	Yes	Yes	Yes Initial	Yes
				4x3	-	-	-	Yes	Yes Initial	Yes	Yes	
				No ID	Yes	-	Yes	Yes	Yes	Yes	Yes	
	Auto OFF	-	-	-	-	-	-	-				
	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	YPbPr	1080i/720p	-	16x9	Yes	Yes	Yes	-	Yes	-	-	
			Auto ON	480p	Yes Initial	-	Yes	-	-	-	-	
				480i	Letter	-	-	-	Yes	Yes	Yes Initial	Yes
				4x3	-	-	-	Yes	Yes Initial	Yes	Yes	
				No ID	Yes	-	Yes	Yes	Yes	Yes	Yes	
	Auto OFF	-	-	-	-	-	-	-				
	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				-	-	-	-	-	-	-		
Input Front	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	-	-	-	-	-	-	-	

Appendixes

Appendix A:

Picture Format for Each Input Source

Aspect Specifications

(Continuation)

Yes : Selectable

- : Un-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
HDMI 1 (Input1 -DVI)	HDMI (DVI)	1080p/ 1080i/720p	-	16x9	Yes	Yes	Yes	-	Yes	-	-
			Auto ON	16x9	Yes Initial	-	Yes	-	-	-	-
		480p 480i	Letter	-	-	-	Yes	Yes	Yes Initial	Yes	
		4x3	-	-	-	Yes	Yes Initial	Yes	Yes		
		No Info	Yes	-	Yes	Yes	Yes	Yes	Yes		
Auto OFF	-	-	-	-	-	-	-	-			
HDMI 2 (Input2 -DVI)	HDMI (DVI)	1080p/ 1080i/720p	-	16x9	Yes	Yes	Yes	-	Yes	-	-
			Auto ON	16x9	Yes Initial	-	Yes	-	-	-	-
		480p 480i	Letter	-	-	-	Yes	Yes	Yes Initial	Yes	
		4x3	-	-	-	Yes	Yes Initial	Yes	Yes		
		No Info	Yes	-	Yes	Yes	Yes	Yes	Yes		
Auto OFF	-	-	-	-	-	-	-	-			
HDMI Front (InputFront -DVI)	HDMI (DVI)	1080p/ 1080i/720p	-	16x9	Yes	Yes	Yes	-	Yes	-	-
			Auto ON	16x9	Yes Initial	-	Yes	-	-	-	-
		480p 480i	Letter	-	-	-	Yes	Yes	Yes Initial	Yes	
		4x3	-	-	-	Yes	Yes Initial	Yes	Yes		
		No Info	Yes	-	Yes	Yes	Yes	Yes	Yes		
Auto OFF	-	-	-	-	-	-	-	-			
Horizontal Expansion				16x9	105%	100%	133%	-	133%	-	-
				4x3	105%	100%	133%	75%	100%	100%	133%
Vertical Expansion					105%	100%	133%	110%	110%	133%	176%

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