

HITACHI

Inspire the Next

PLASMA TELEVISION

Operating Guide for P42H401, P42H401A P50H401, P50H401A, P55H401, P42H4011 P42H4011A, P50H4011, P50H4011A and P55H4011

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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.

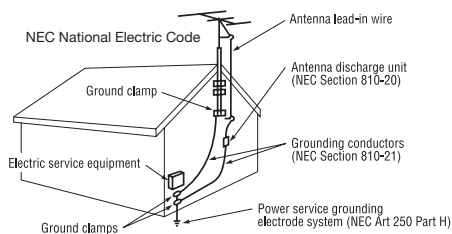
READ BEFORE OPERATING EQUIPMENT

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 Off/On with remote control or power switch on unit.

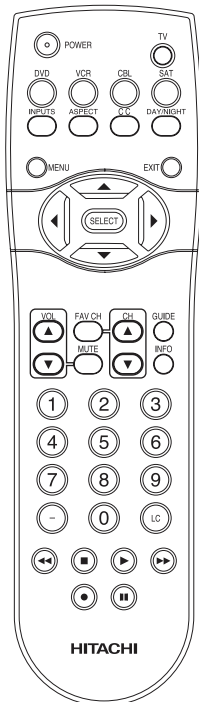
Lead Notice

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.**

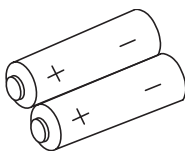
Accessories

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

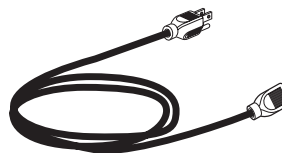
1 Remote Control



2 Two "AA" size, 1.5V batteries



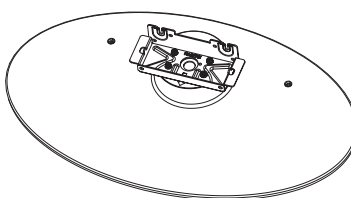
4 Power Cord



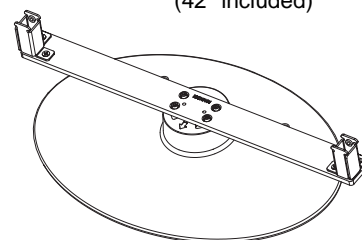
5 Wire Clamp (50" models only)



3 Table Top Stand (50" included)



3 Table Top Stand (42" included)



For U.S. models:

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

Note: Please visit our website for optional accessories.

Note : The accessories for models H4011, H4011A series are similar as the H401, H401A series.



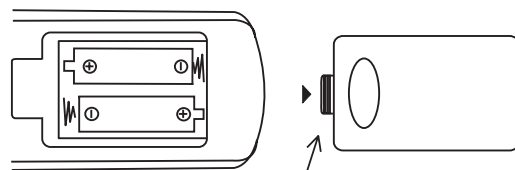
- CAUTION:**
1. Ceiling mounting is not recommended. Mounting the panel on the ceiling does not provide adequate ventilation for the electronics or proper support for the front glass panel. This plasma television product is designed for a maximum tilting angle of 45 degrees from vertical.
 2. This stand for use only with Hitachi **P42H401, P42H401A, P50H401 and P50H401A** models. The use of other apparatus is capable of resulting in instability causing possible injury.
 3. The wall mount unit for the 50" and 42" models is **WM07S** and for the 55" models is **WM07L**. 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-4371UG2 (Part No HL02075 only H401 series)
Remote Control Unit CLU-4372UG2 (Part No HL02076 only H4011 series)
- 2 Two "AA" size, 1.5V batteries .
- 3 Table Top Stand (UX27661 42" model)
(UX27281 50" models).
- 4 Power Cord (P# EV01841).
- 5 Wire Clamp (50" models only)

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.

Bottom View (Remote Control)



Lift up on tab to remove back cover.



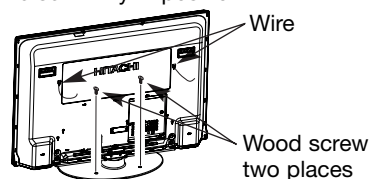
CAUTION: Do not insert batteries with '+' and '-' polarities reversed as this may cause the batteries to swell or rupture resulting in leakage.

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.

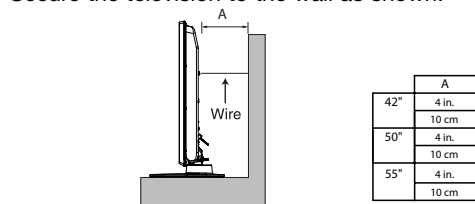
Securing to a table-top

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



Securing to a Wall

1. Keep the Plasma television 4 inches away from the wall except when mounted using the wall mount bracket.
2. Secure the television to the wall as shown.



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

NOTES: 1. Do not block the ventilation holes of the Plasma Television. Blocking the ventilation holes might cause fire or defect.

2. In case of an abnormal symptom, unplug the AC cord.

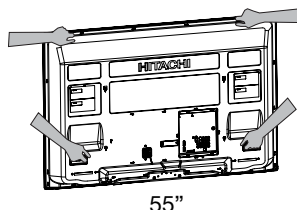
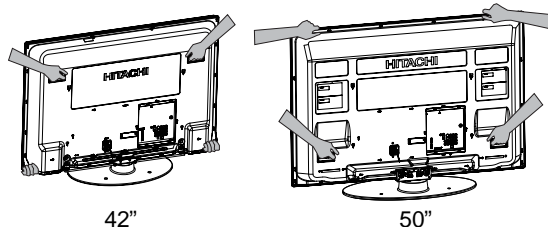
3. If you purchased the wall mount bracket option, please ask for professional installer. Do not install by yourself.

4. 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.



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.



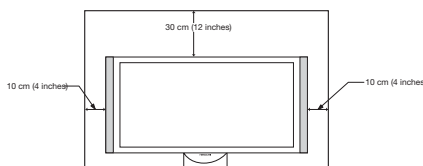
NOTE: The Table Top Stand for model P55H401 and P55H4011 is not included (Optional).

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 wall. To avoid cabinet warping, cabinet color changes, and increased chance of set failure, do not place the TV where temperatures can become excessively hot, for example, in direct sunlight or near a heating appliance, etc.

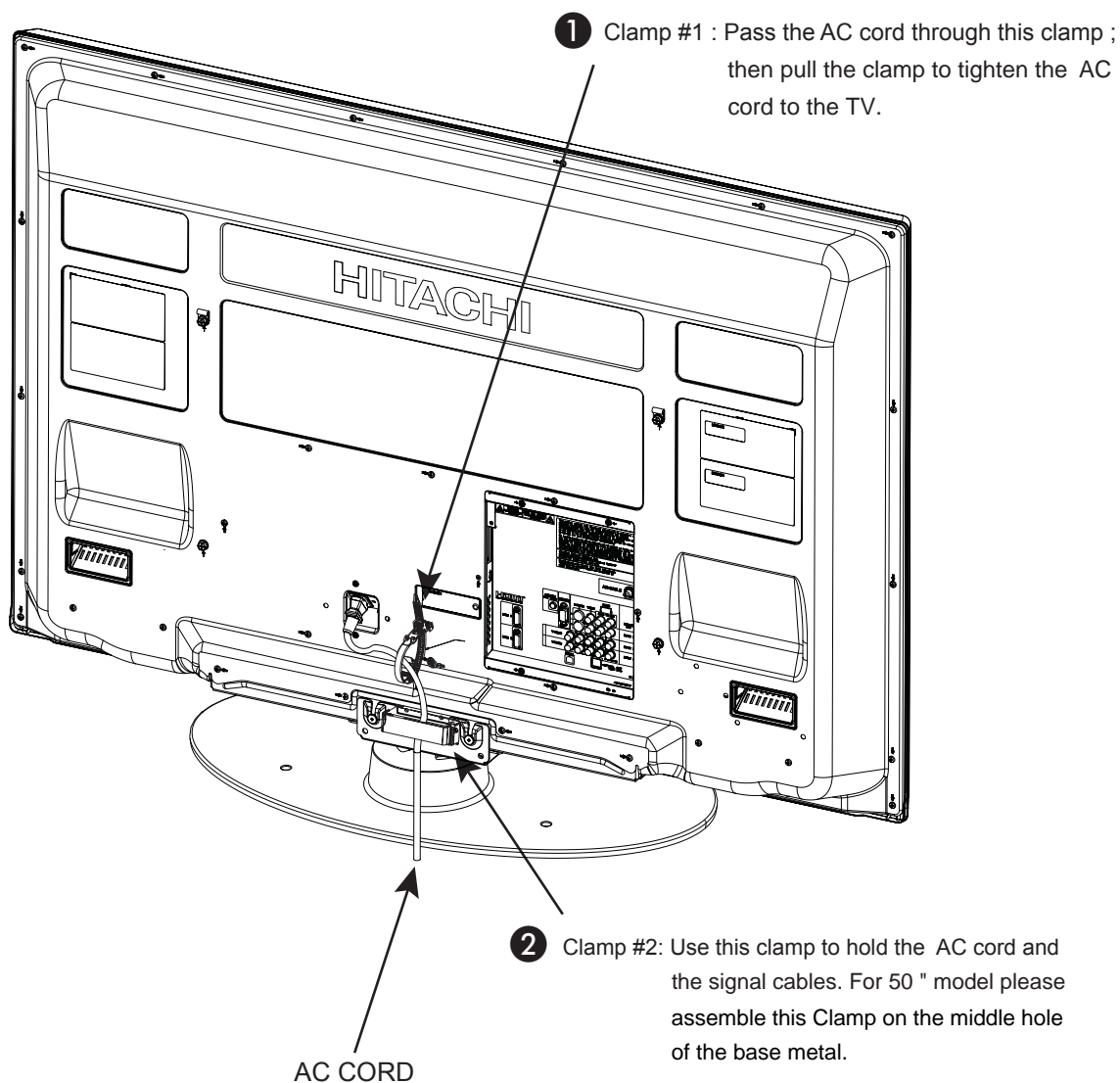


How to set up your new HITACHI Plasma Television

AC CORD INSTALLATION INSTRUCTION

The AC cord provided with your new Plasma Television needs to be installed correctly to avoid the AC cord from disconnecting 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. 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 The AC cord and the signal cables can all be held together with Clamp #2.
- 3 Depend on the model size 42", 50" or 55", the clamp may be different shapes. Only for 50" models the clamp #2 will be included on the accessories bag.



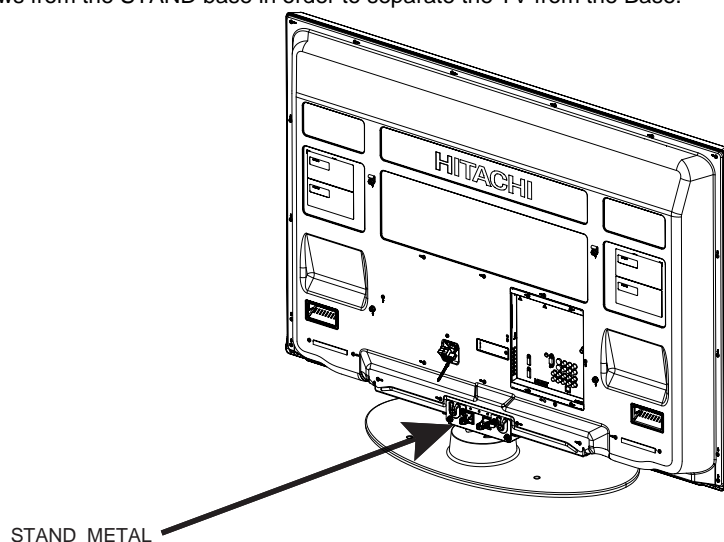
How to set up your new HITACHI Plasma Television

First time use

SETTING FOR WALL MOUNTING ON 50" & 55" MODELS

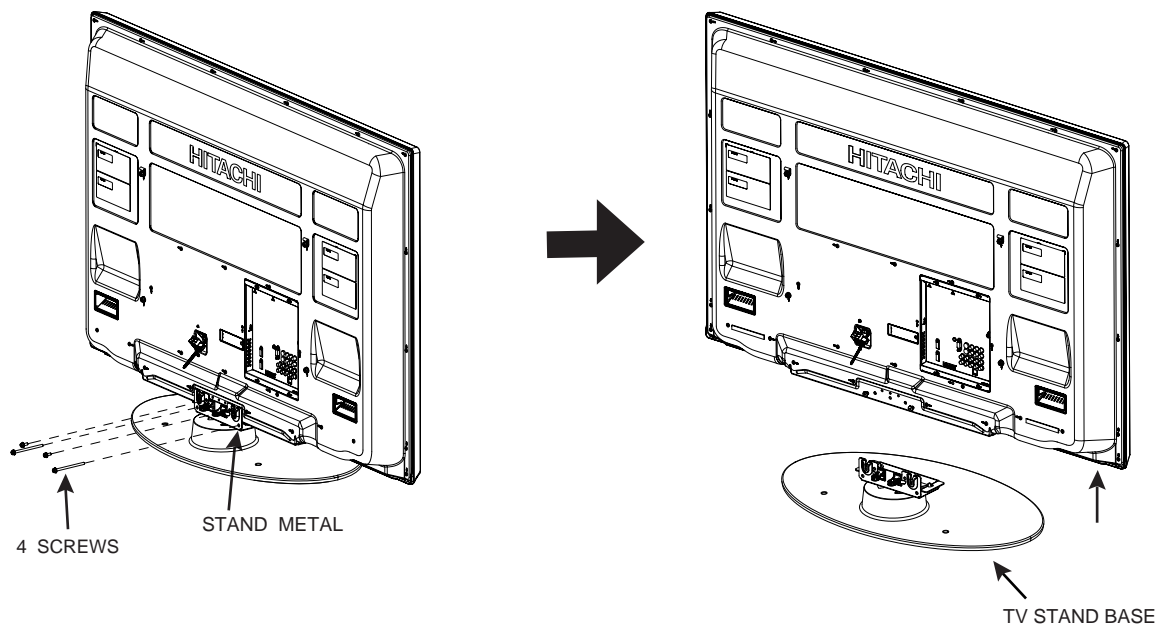
STEP (1) :

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 61 & 62.



For Model P50H401, P50H401A, P50H4011 and P50H4011A

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.

For Model P55H401 and P55H4011

CAUTION- This Plasma Display Panel for use only with Hitachi **WM07L** Wall Mount. Use with other Wall Mount is capable of resulting in instability causing possible injury.

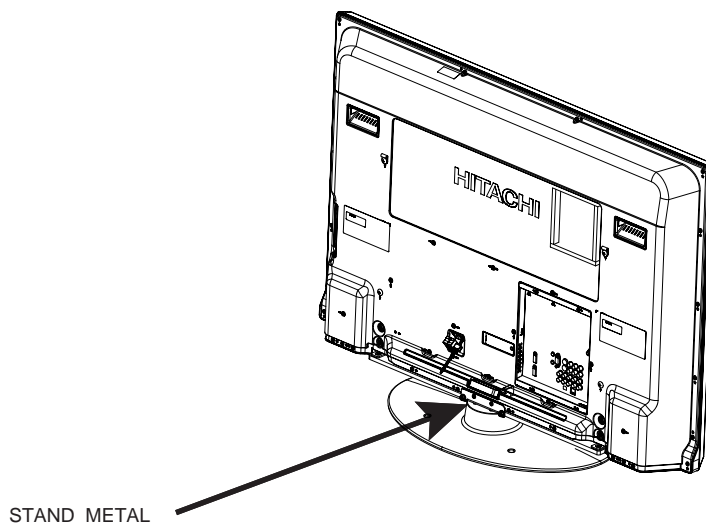
NOTE: Use the specified **WALL MOUNT** unit for the Plasma TV depending on the size of your TV. Please access our web site at: www.hitachi.us/tv for recommended accessories for your tv.

How to set up your new HITACHI Plasma Television

SETTING FOR WALL MOUNTING ON 42" MODELS

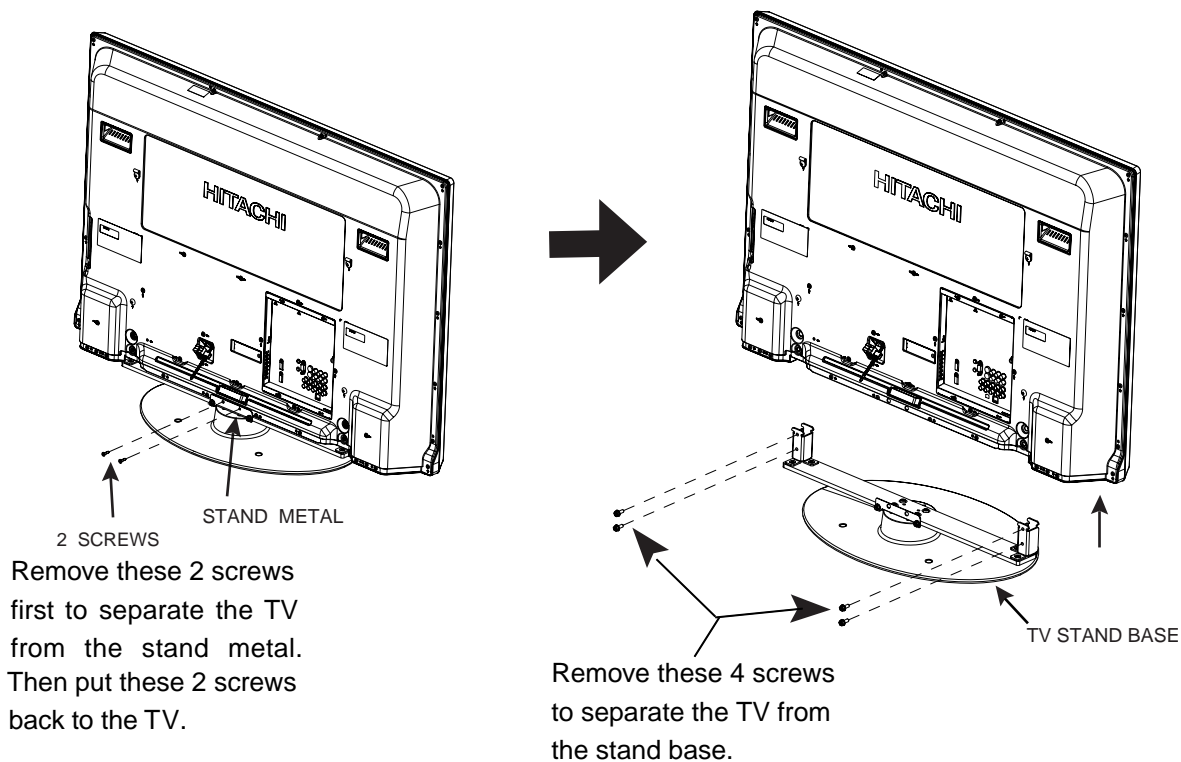
STEP (1) :

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 6 screws from the STAND base in order to separate the TV from the Base.



STEP (2):

Please remove the 2 screws of the STAND metal from the TV, then remove 4 screws that hold the TV STAND BASE; now the TV STAND can be separated from the TV. For dimensions of the WALL MOUNT assembly please refer to page 60.



For Model P42H401, P42H401A, P42H4011 and P42H4011A

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** base 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.

First time use

A diagram illustrating the horizontal viewing angle for a screen. A horizontal line represents the viewing axis, with tick marks at 5', 10', 15', and 20'. A vertical line represents the screen. The viewing angle is defined as the angle between the viewing axis and the lines of sight to the top and bottom edges of the screen. The angle to the top edge is 80°, and the angle to the bottom edge is 80°. The total viewing angle is 160°. The screen is labeled "BEST HORIZONTAL".

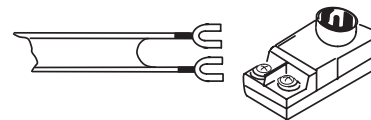
9

Hook-up Cables and Connectors

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.



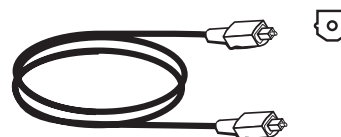
S-Video (Super Video) Cable

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.



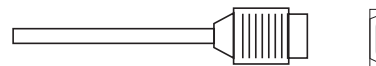
Optical Cable

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



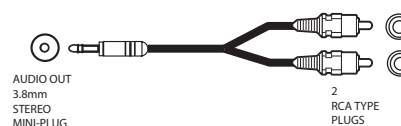
HDMI Cable

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)

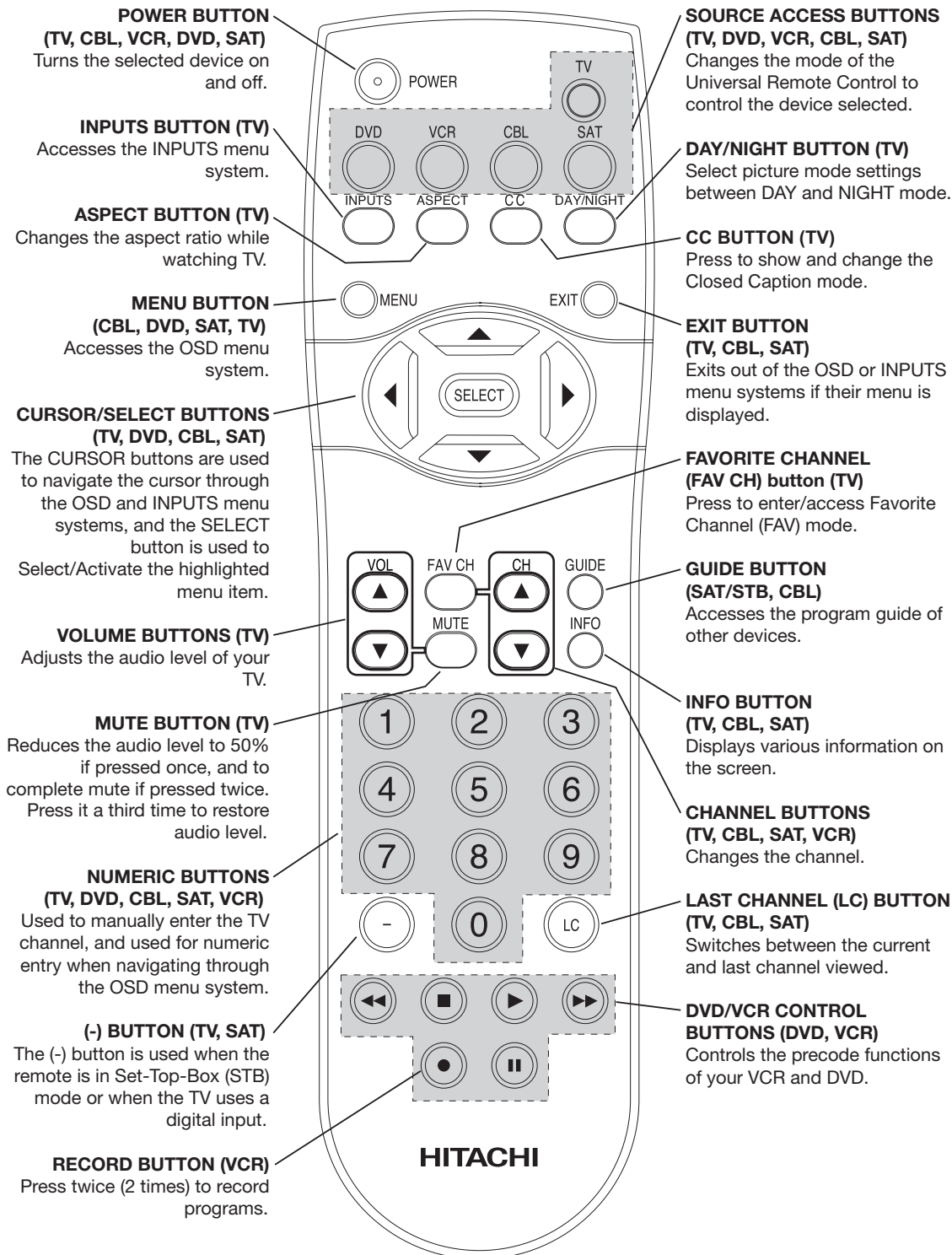
Used on all standard video and audio cable which connect to inputs and outputs located on the rear jack panel and front control panel.



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 23-31 for a complete description of all features and programming of the Remote Control.

First time use



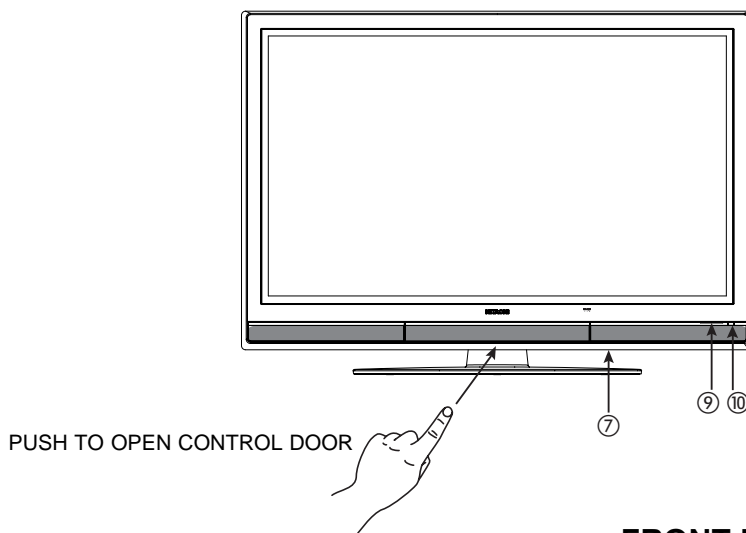
LEGEND

TV — Television **VCR** — Video Cassette Recorder/Player **SAT** — Satellite Receiver
CBL — Cable Box **DVD** — Digital Video Disc Player

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.

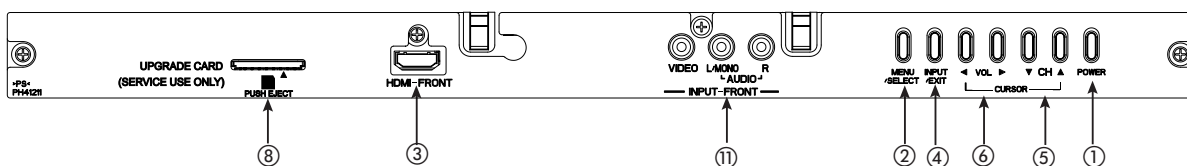
Front Panel Controls

FRONT VIEW



PUSH TO OPEN CONTROL DOOR

FRONT PANEL CONTROLS

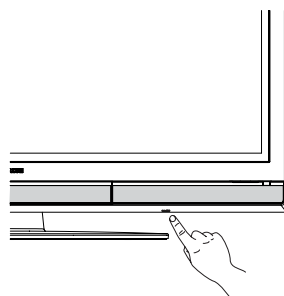


- ① **FRONT POWER button**
Press this button to turn the Plasma Television ON/OFF. It can also be turned ON/OFF by remote control. The "MAIN POWER" button must be at stand-by mode.
- ② **MENU/SELECT button**
This button allows you to enter the MENU, making it possible to set TV features to your preference 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 15 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.

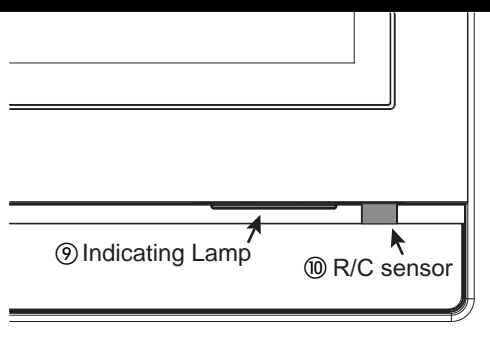
⑧ Upgrade Card

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** or HDMI : 1, 2, **Front** is selected. Check the Power Light to make sure the TV is turned off or in Stand-by mode (lights red) when not in use.
 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.

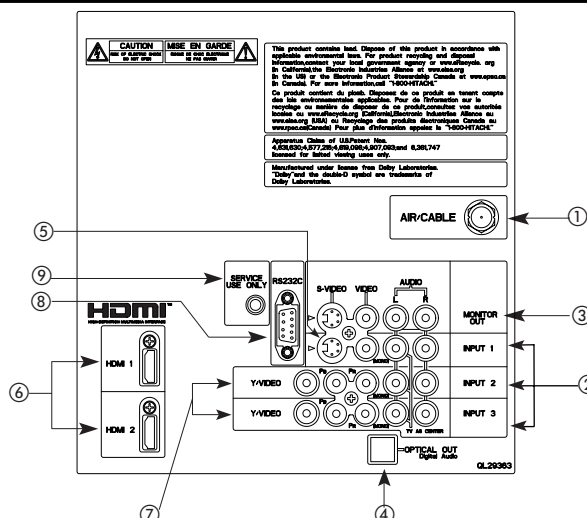
NOTE: 1. You may use VIDEO or S-VIDEO inputs to connect to INPUT 1 , but only one of these inputs may be used at a time.
2. S-VIDEO output may be used for recording, only when the input is of S-VIDEO type.

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-CB-CR. 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-PbPr inputs (see page 34).
5. To ensure no copyright infringement, the MONITOR OUT output will be abnormal, when using the Y-PbPr 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.

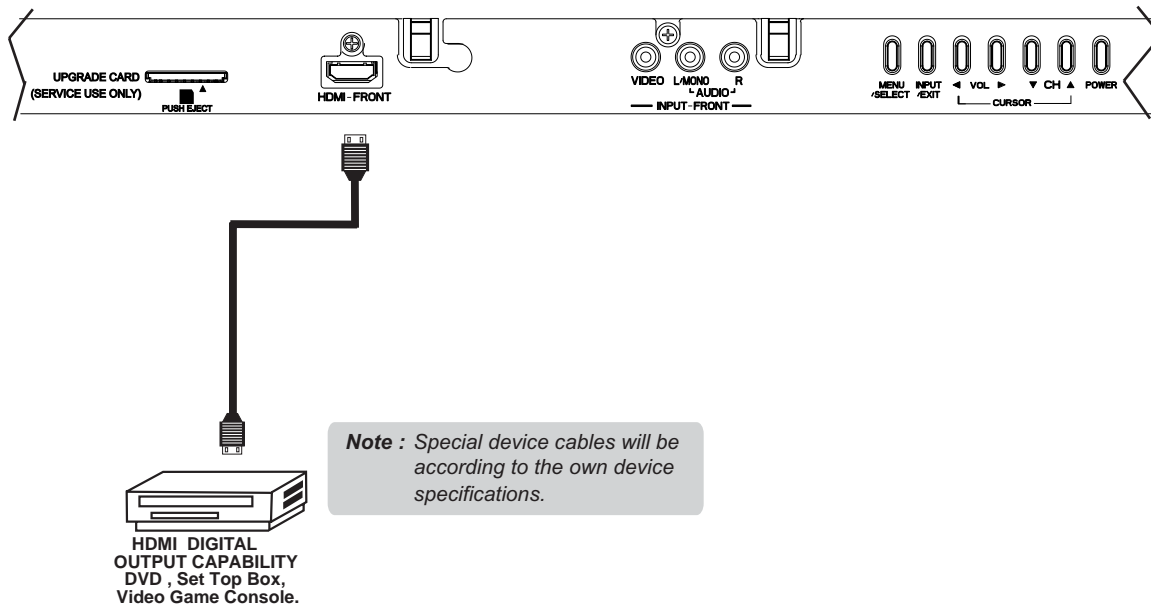
⑨ For Factory use only.

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) :

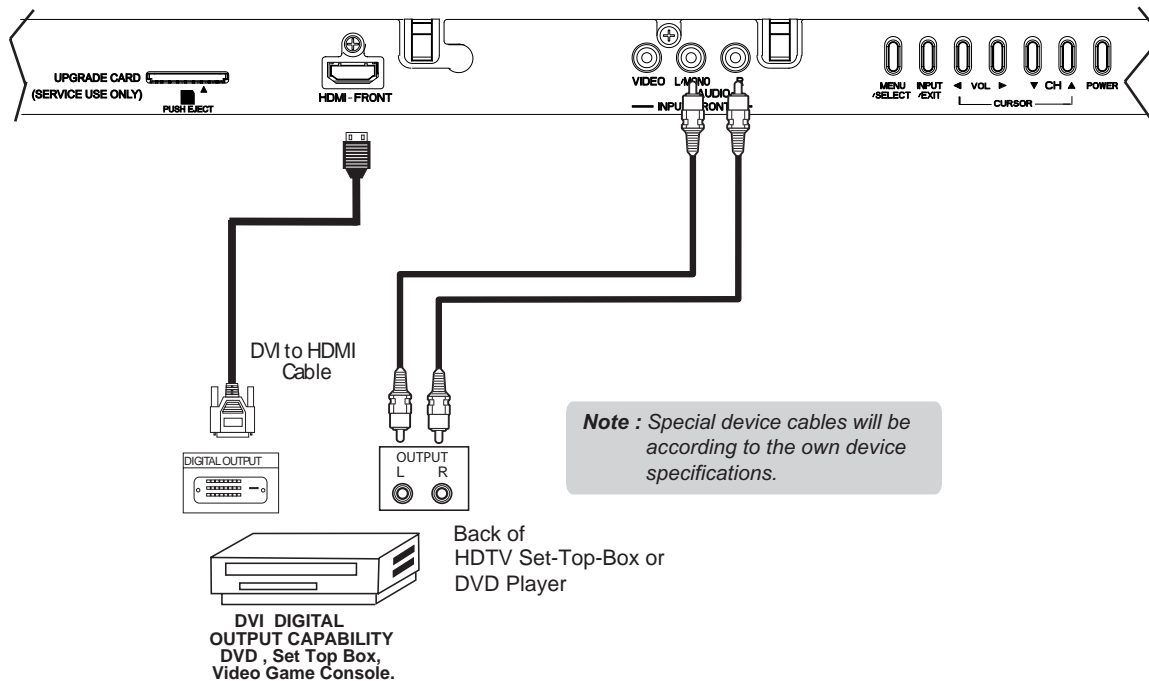
A) Connecting HDMI signal.

FRONT INPUT PANEL



B) Connecting DVI signal.

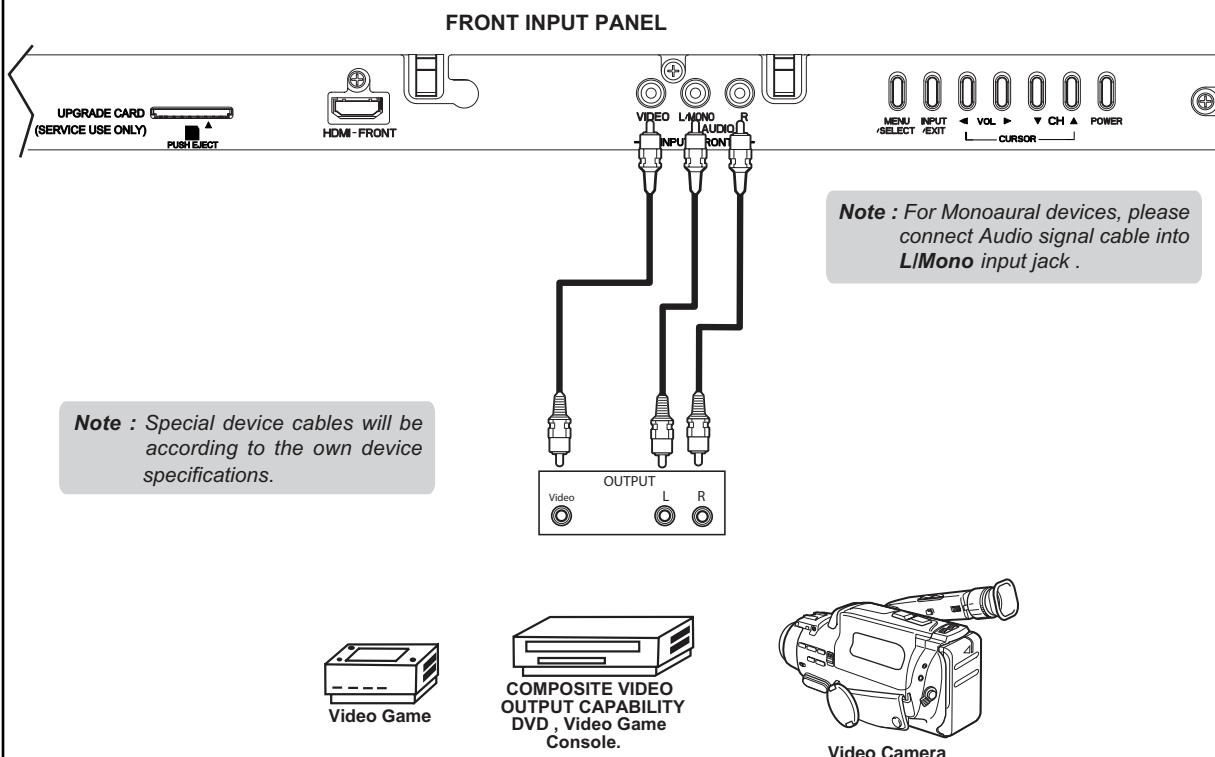
FRONT INPUT PANEL



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:



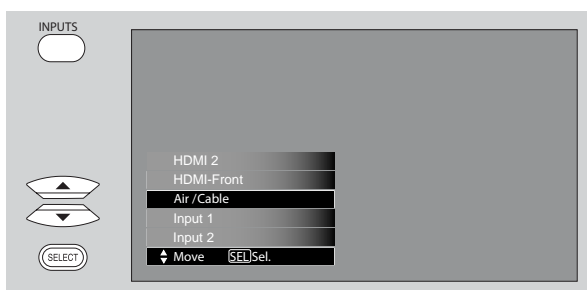
NOTE:1. Completely insert connection cord plugs when connecting to front panel jacks. If you do not, the played back picture may be abnormal.

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.

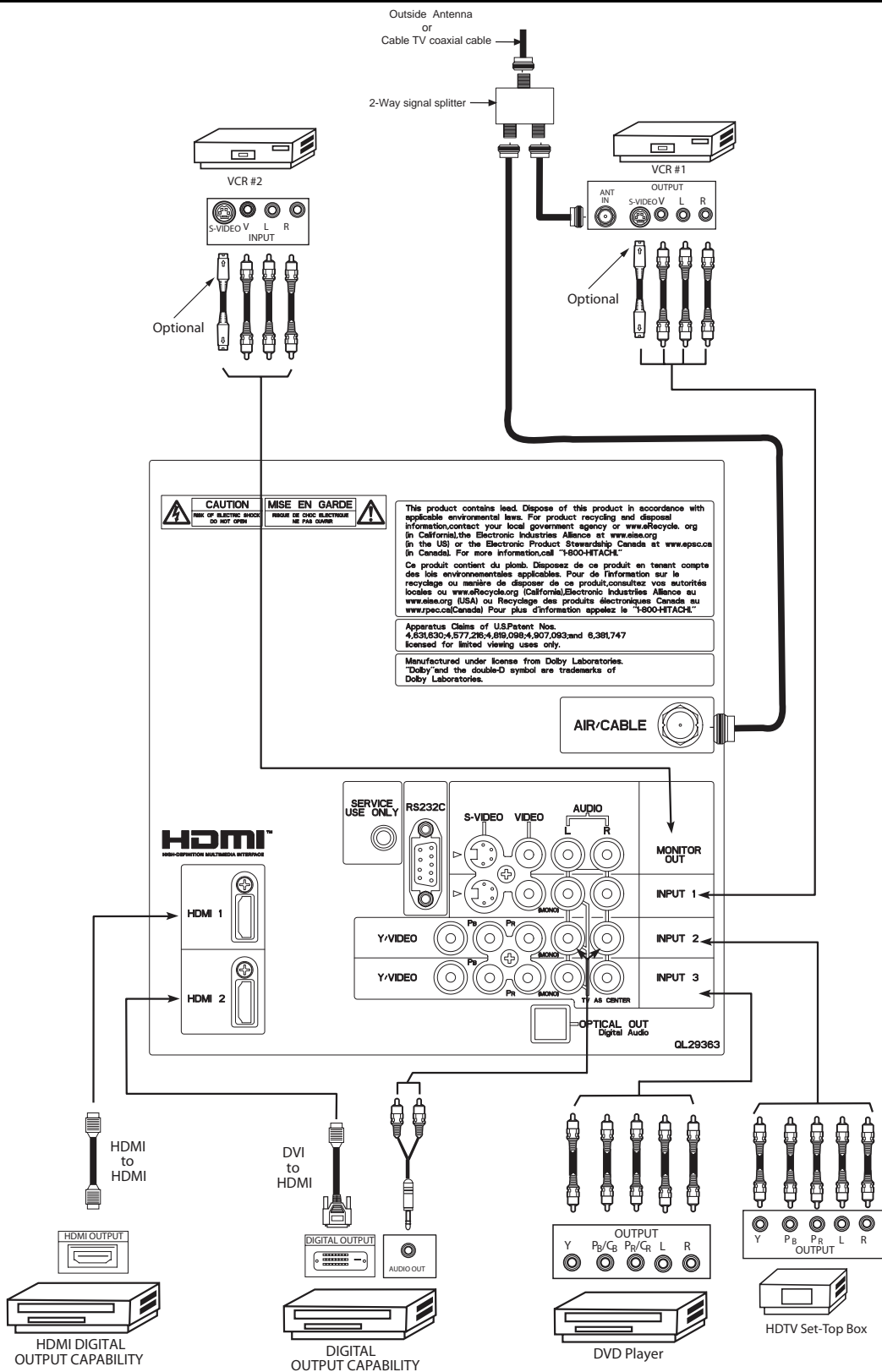
The following connection diagrams are offered as suggestions. However, you may need to modify them to accommodate your particular assortment of components and features. For best performance, video and audio cables should be made from coaxial shielded wire.

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 26).



Rear Panel Connections



NOTE: Cables are optional, except when specified.

First time use

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 17). 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-PBPR (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- $C_B C_R$. 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-PBPR inputs. (See page 34).
- 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 should be less than 5 meters.

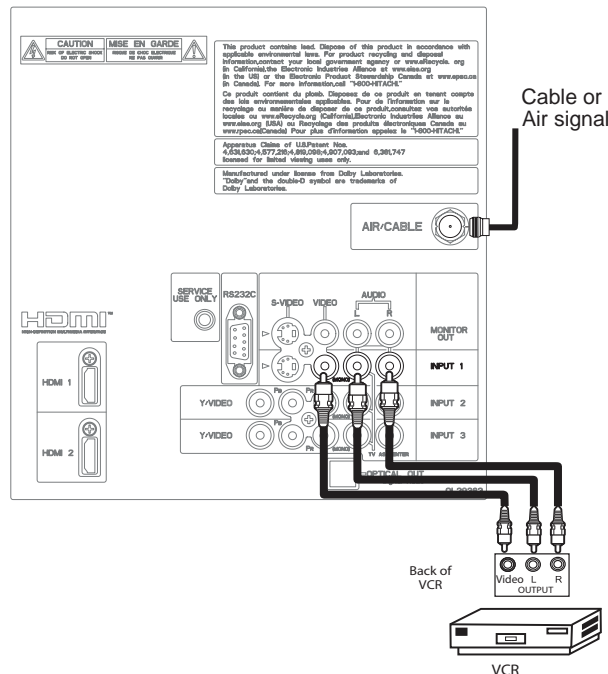
INSTALLATION RECOMMENDATION:

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 to return to the last channel tuned.



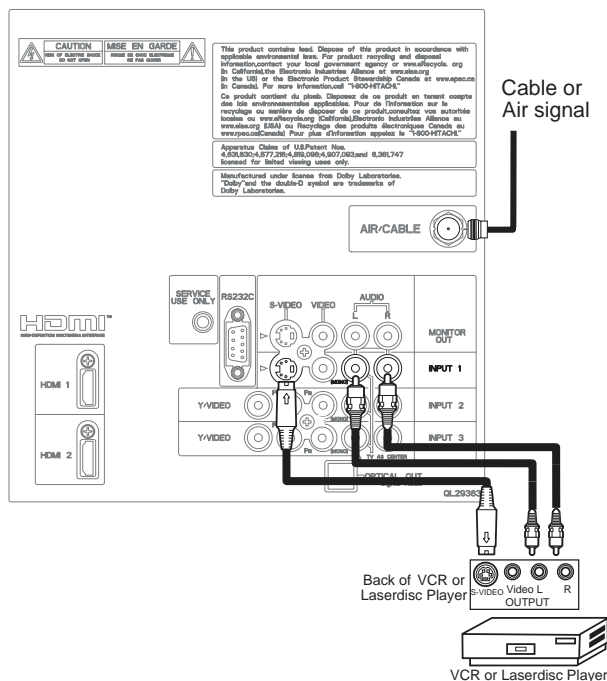
NOTE: 1. Completely insert the connection cord plugs when connecting to rear panel jacks. The picture and sound that is played back will be abnormal if the connection is loose.

2. A single VCR can be used for VCR #1 and VCR #2 (see page 17) 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 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 17), 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.

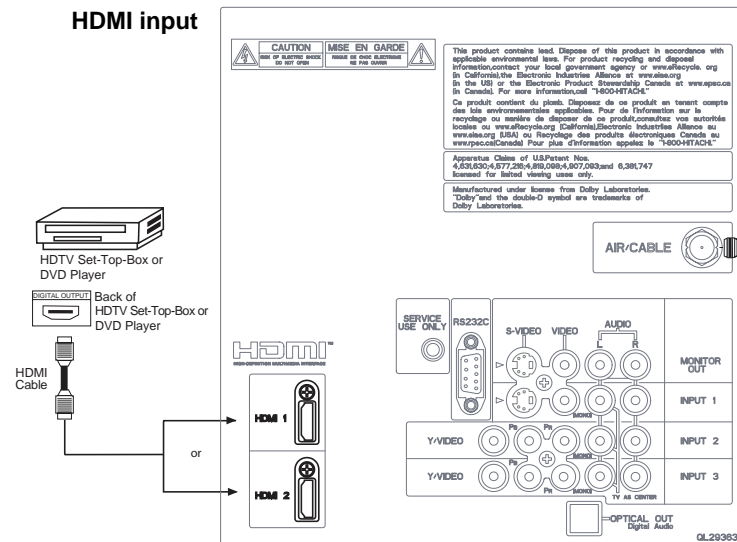
Connecting External Video Sources

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

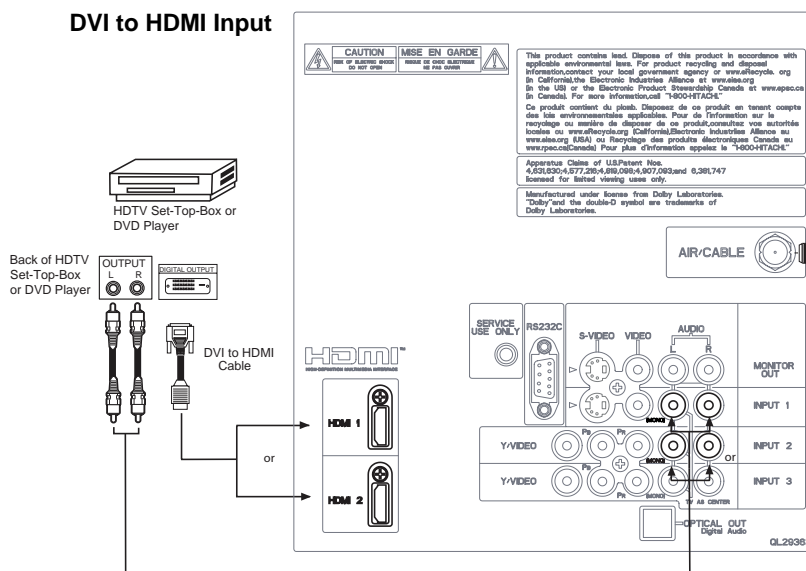
1. Connect the HDMI or DVI to HDMI connection cable from the output of the HDTV set top box or DVD player to the HDMI input as shown on the Rear panel below.
2. With DVI output, connect the cable from the AUDIO OUT R of the HDTV set top box or DVD player to the INPUT (AUDIO/R) jack as shown on the Rear 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 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 15 for reference).

HDMI input



DVI to HDMI Input



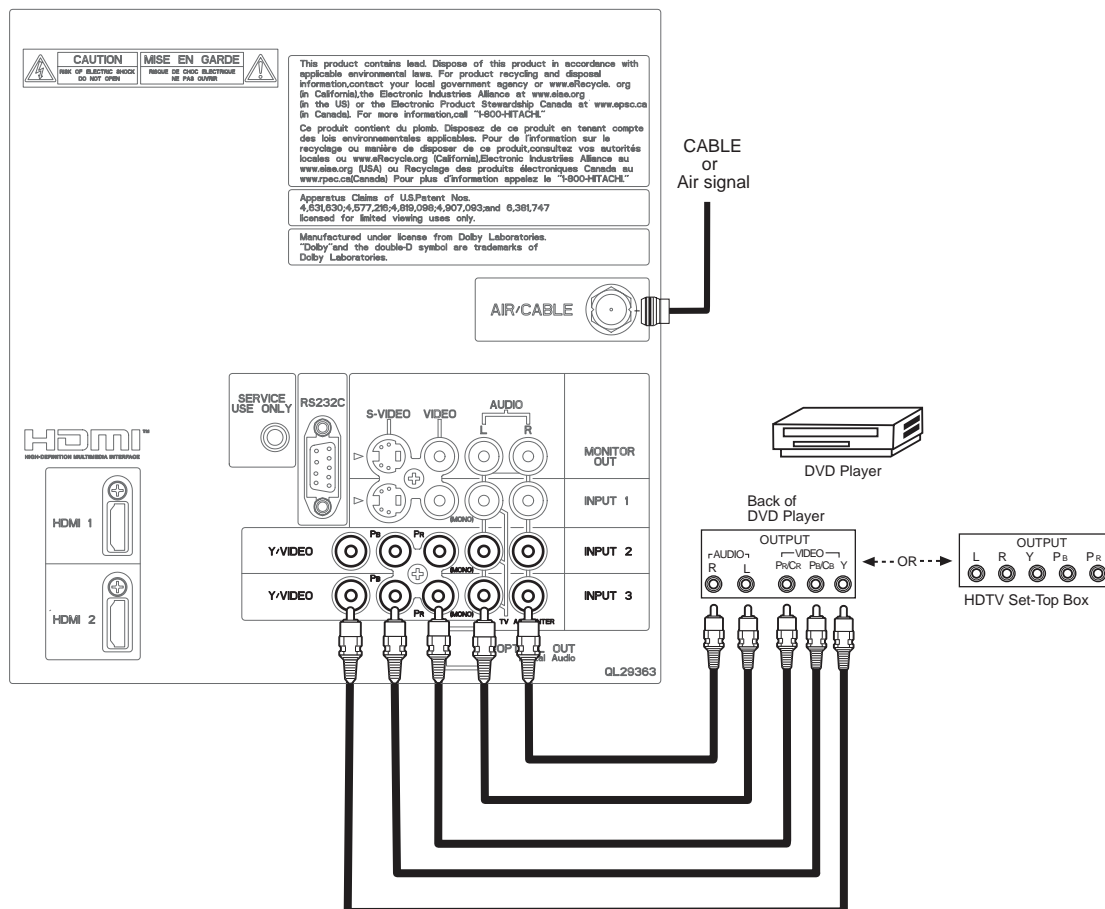
Connecting External Audio/Video Devices

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 or AIR 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.

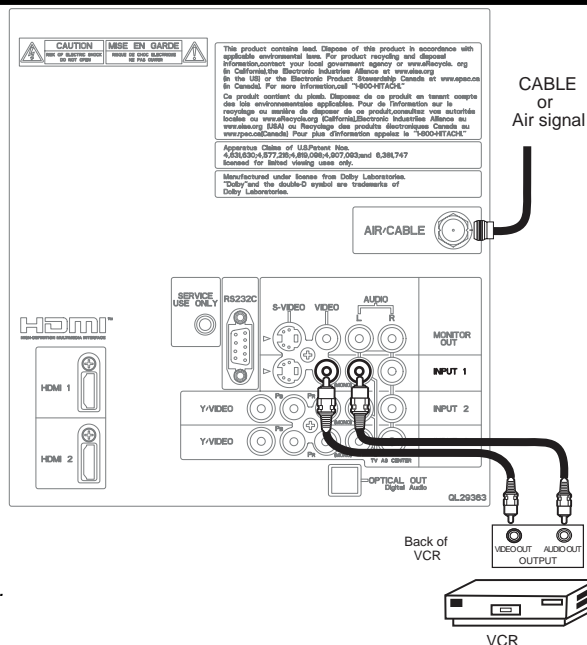
2. See page 18 for tips on REAR PANEL CONNECTIONS.



Connecting External Audio/Video Devices

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

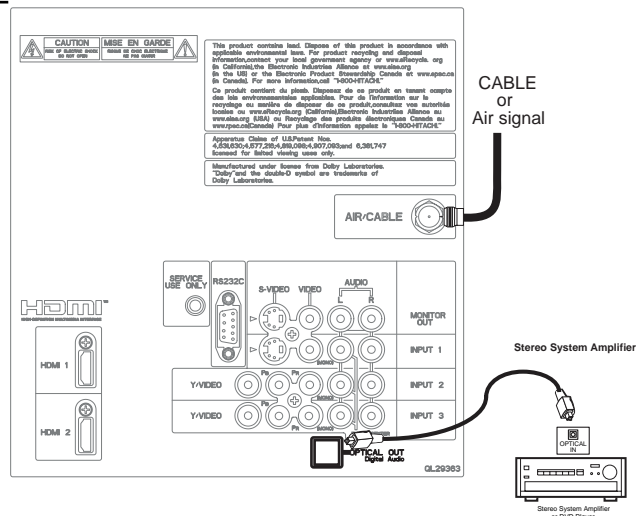
1. Connect the cable from the VIDEO OUT of the VCR or the laserdisc player to the INPUT (VIDEO) jack, as shown on the Rear Panel on the right.
2. Connect the cable from the AUDIO OUT of the VCR or the laserdisc player to the INPUT (MONO)/L(AUDIO) jack.
3. Press the INPUTS button, then select INPUT 1 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 to return to the previous channel.
(For INPUT FRONT please see page 16 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.

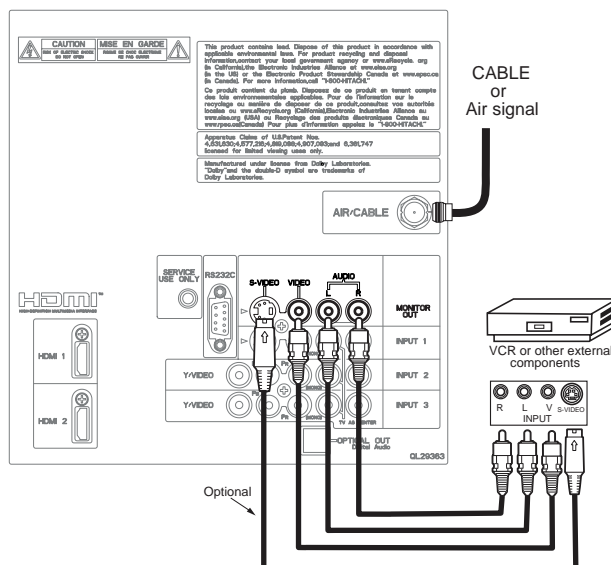
1. Connect an optical cable from the Optical out to the Optical input of a separate Stereo System Amplifier as shown on the Rear Panel on the right.



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 Laserdisc 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.

The Remote Control

In addition to controlling all the functions on your **HITACHI** Plasma Television, the new remote control is designed to operate different types of VCRs, CATV (Cable TV) converters, set-top-boxes, satellite receivers (SAT) and DVD players with one touch. Basic operation keys are grouped together in one area.

To operate your TV, press the **TV** button. The remote will now control your television.

To operate your VCR, press the **VCR** button. The remote will now control your VCR (see page 31 for instructions on how to program the remote to control your VCR).

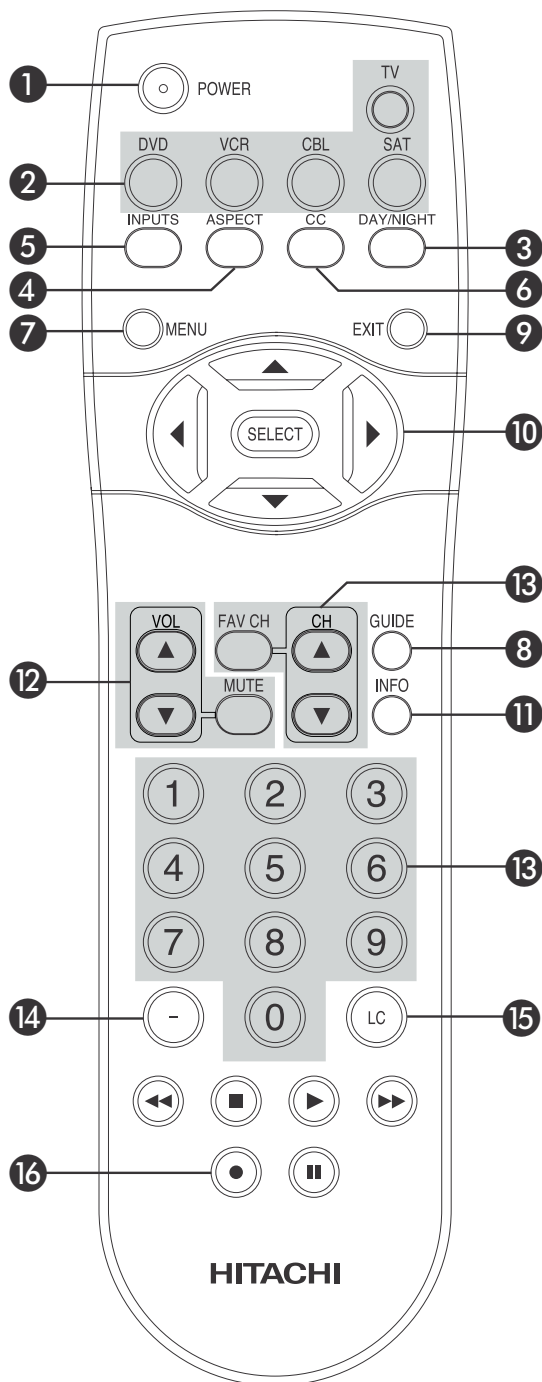
To operate your cable box, press the **CABLE (CBL)** button. The remote will now control your cable box (see page 28 for instructions on how to program the remote to control your cable box).

To operate your set-top-box or satellite receiver, press the **SAT** button. The remote will now control your set-top-box or satellite receiver. If you have a satellite receiver, use this button to program your satellite receiver (see page 29 for instructions on how to program the remote to control your SAT).

To operate your DVD player, press the **DVD** button. The remote will now control your DVD player (see page 30 for instructions on how to program the remote to control your DVD player).



How to Use the Remote to Control Your TV



1 POWER button

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

2 MODE buttons

These buttons allow the remote to control your TV, VCR, DVD, Cable box/Satellite box depending on which button is pressed. Refer to page 28-31 for how to change between each of these modes.

3 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 34 for settings changes).

NOTE: For automatic **DAY/NIGHT** picture mode settings, see page 48.

How to Use the Remote to Control Your TV

4 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.

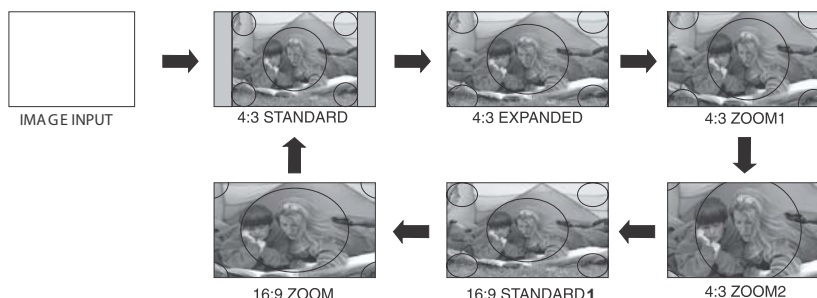
16:9 STANDARD 2

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

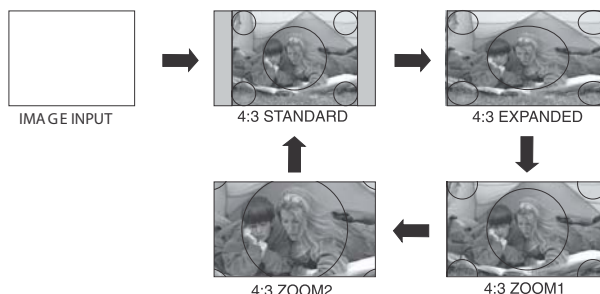
Use this aspect to Zoom-in once while in 16:9 aspect.

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



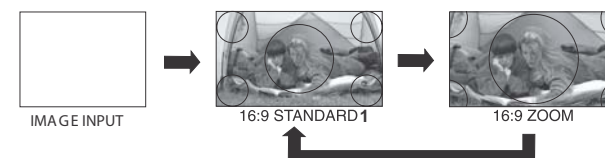
Note: Please see Appendix A on page 138-139.

- 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)



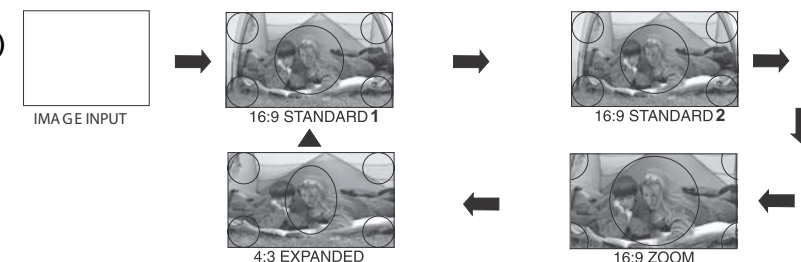
Note: Please see Appendix A on page 138-139.

- 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 36).

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

5 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.

6 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 **CC**.

7 MENU button

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

8 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).

9 EXIT button

This button will exit all On-Screen Displays.

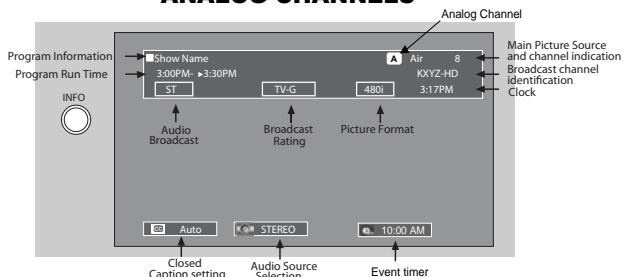
10 CURSOR buttons/SELECT button

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.

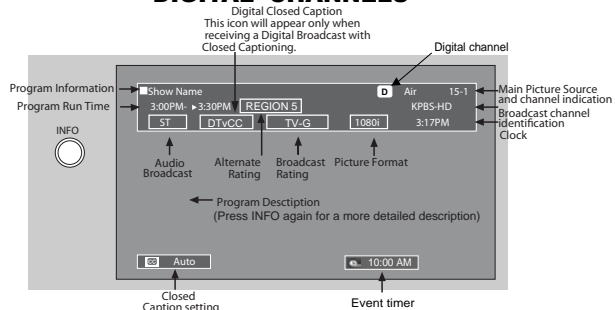
11 INFO button

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 (SA), the time, CHANNEL ID and if the TIMER is set.

ANALOG CHANNELS



DIGITAL CHANNELS



When an S-VIDEO Input is connected to INPUT 1



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



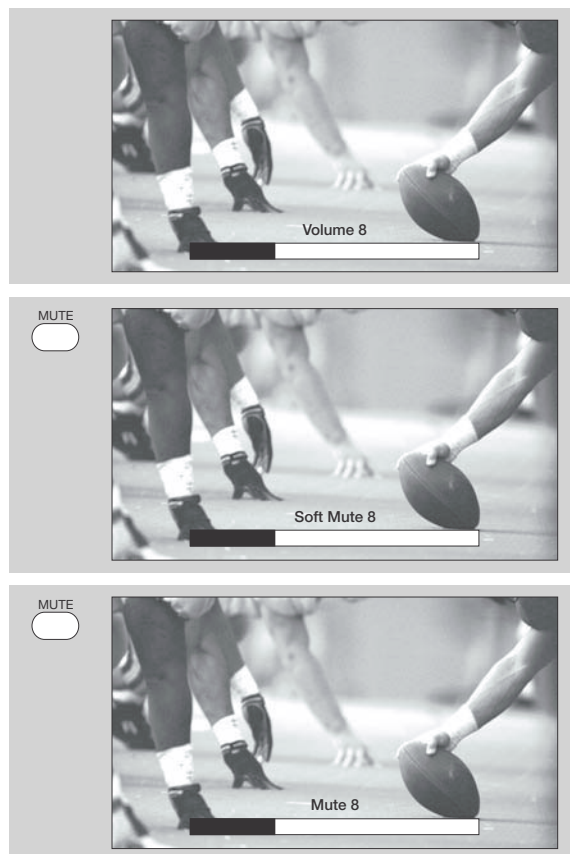
NOTE: 1. Press the **INFO** button again or the **EXIT** button to return to normal viewing.
2. The Aspect setting will not be shown if the channel is locked.

How to Use the Remote to Control Your TV

12 VOLUME (VOL), MUTE button

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

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



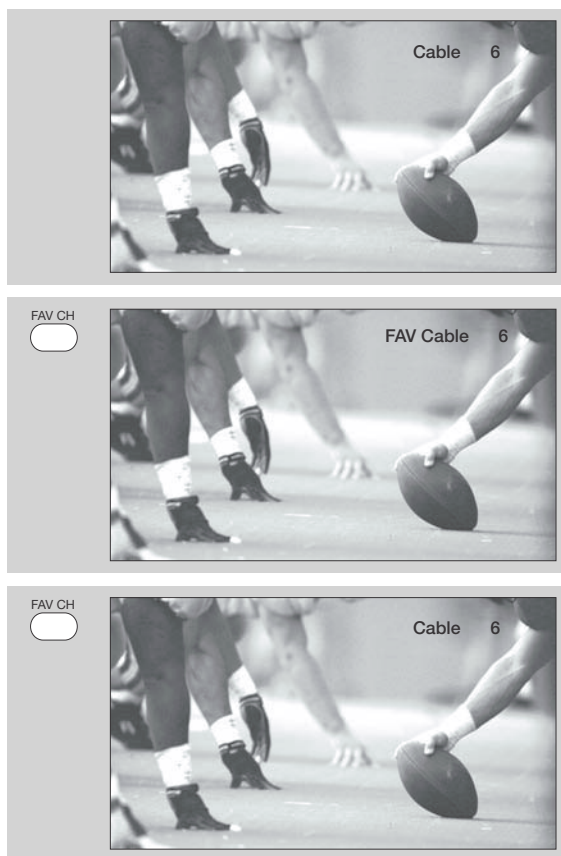
Closed Captioning will display automatically when MUTE/SOFT MUTE is on and Closed Caption is set to **AUTO** (see page 53).

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.

13 CHANNEL SELECTOR/FAVORITE CHANNEL (FAV CH) buttons

The **CHANNEL SELECTOR** buttons are used to select channels, lock access code, etc. Use the **CHANNEL SELECTOR** buttons to enter one, two, or three numbers to select channels. Enter **0** first for channels **1** to **9**, or simply press the single digit channel you wish to tune then wait a few seconds 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**.



14 (-) 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).

15 LAST CHANNEL (LC) button

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

16 RECORD button

Press twice (two times) to record programs when the remote is in 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 below for pre-codes).

1. Turn ON your cable box.
2. To switch to Cable (CBL) pre-coded mode, press and release the **CABLE (CBL)** button.
3. Hold down the **CBL** button on the remote and enter the two digit preset code that matches your cable box, as shown below. Release the **CBL** button.
4. Aim the remote at the cable box and press the **POWER** button. The remote will turn off your cable box when the correct two 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 two 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 CABLE (CBL) button

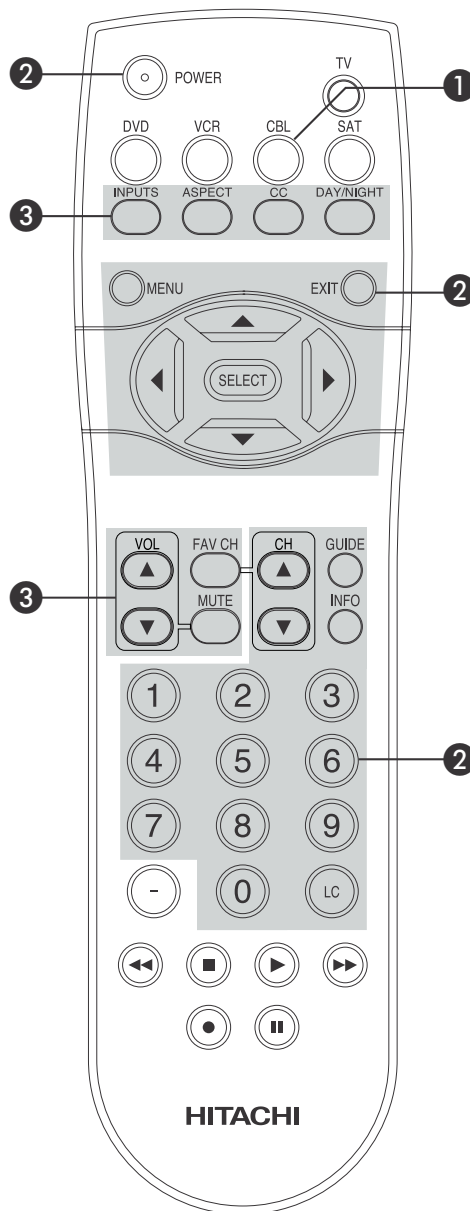
This button allows the remote to control your cable box by setting it to CABLE mode.

② PRECODED CABLE BOX buttons

These buttons transmit the chosen precoded cable codes.

③ EXCLUSIVE TV buttons

These buttons are for operating the TV.



CABLE BRAND ANALOG TYPE

CODES

HAMLIN.....	22, 23, 24, 25
JERROLD	00, 01, 02, 03, 04, 05, 06, 07, 21
OAK.....	26, 27, 28
PANASONIC.....	18, 19, 20
PIONEER.....	13, 14
SCIENTIFIC ATLANTA.....	08, 09, 10
TOCOM.....	15, 16
ZENITH.....	11, 12
G.I.	17

CABLE BRAND DIGITAL TYPE

CODES

PIONEER.....	29
SCIENTIFIC ATLANTA	30

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 below for pre-codes).

1. Turn **ON** your set-top-box/satellite systems.
2. To switch to set-top-box/satellite (STB) pre-coded mode, press and release the **SAT** button.
3. Hold down the **SAT** button on the remote and enter the two digit preset code that matches your set-top-box/satellite receiver, as shown below. Release the **SAT** button.
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 two 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 two 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 precoded 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 SAT (Set-Top-Box/Satellite) button

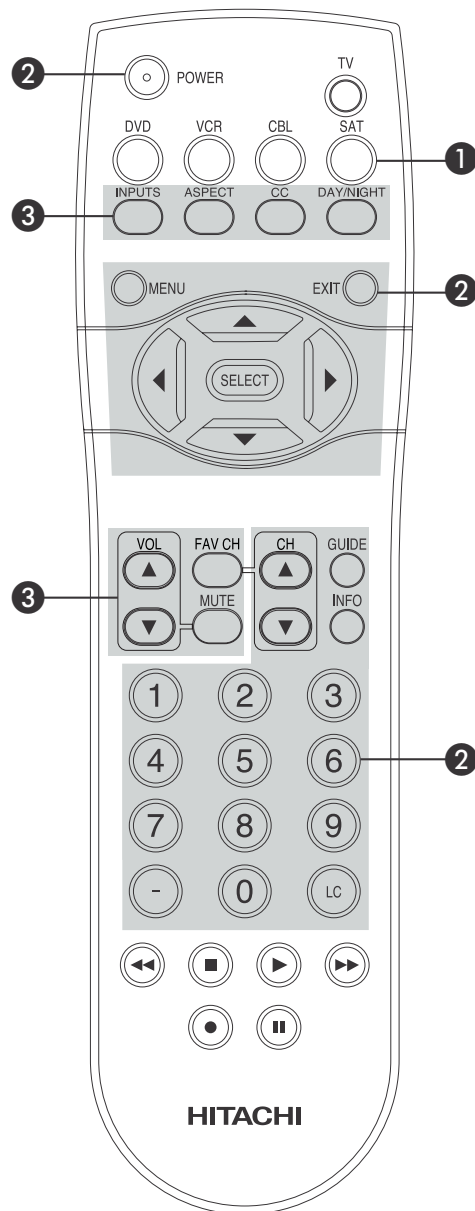
This button allows the remote to control your set-top-box/satellite receiver by setting it to SET-TOP-BOX/SATELLITE mode.

2 PRE-CODED SET-TOP-BOX/SATELLITE RECEIVER buttons

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

3 EXCLUSIVE TV buttons

These buttons are for operating the TV.



SATELLITE BRAND

CODES

2006 DIRECT TV	09
ECOSTAR	03
HITACHI.....	00
HUGHES	04
RCA	01
SONY	02

SET TOP BOX BRAND

CODES

PANASONIC	05
RCA	06
SAMSUNG	07
ZENITH	08

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

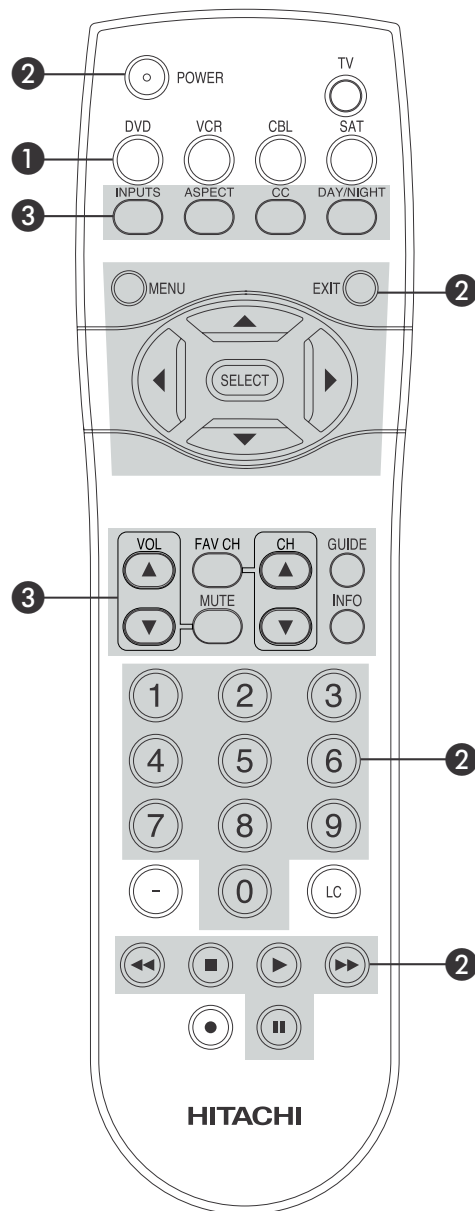
OPERATING THE PRECODED FUNCTION FOR YOUR DVD PLAYER.

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 below for pre-codes).

1. Turn **ON** your DVD player.
2. To switch to DVD pre-coded mode, press and release the **DVD** button.
3. Hold down the **DVD** button on the remote and enter the two digit preset code that matches your DVD player, as shown below. Release the **DVD** button.
4. Aim the remote at the DVD player and press the **POWER** button. The remote will turn off your DVD player when the correct two 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 two 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's 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 DVD button**
This button allows the remote to control your DVD player by setting it to DVD mode.
- ② PRECODED DVD Buttons**
These buttons transmit the chosen precoded DVD codes.
- ③ EXCLUSIVE TV Buttons**
These buttons are for operating the TV.



DVD BRAND	CODES
APEX	10
GO VIDEO	09
HITACHI.....	00
KENWOOD.....	11
PANASONIC.....	02
PIONEER.....	03
RCA.....	04
SAMSUNG	06
SANYO	07
SONY	01
TOSHIBA.....	05

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 Control for VCR Functions

OPERATING THE PRECODED FUNCTION FOR YOUR VCR.

This remote is designed to operate different types of VCRs. You must first program the remote to match the remote system of your VCR (refer below for pre-codes).

1. Turn **ON** your VCR.
2. To switch to VCR pre-coded mode, press and release the **VCR** button.
3. Hold down the **VCR** button on the remote and enter the two digit preset code that matches your VCR, as shown below. Release the **VCR** button.
4. Aim the remote at the VCR and press the **POWER** button. The remote will turn off your VCR when the correct two digit preset code is entered. When this occurs, the remote control is programmed for your VCR. If the VCR does not turn off, try a different two digit preset code.
5. The remote will now control your VCR.

NOTE: 1. If your VCR cannot be operated after performing the above procedures, your VCR's code has not been precoded into the remote.
 2. In the unlikely event that your VCR cannot be operated after performing the above procedures, please consult your VCR 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.
 4. Press the Record button twice to record.

1 VCR button

This button allows the remote to control your VCR player by setting it to VCR mode.

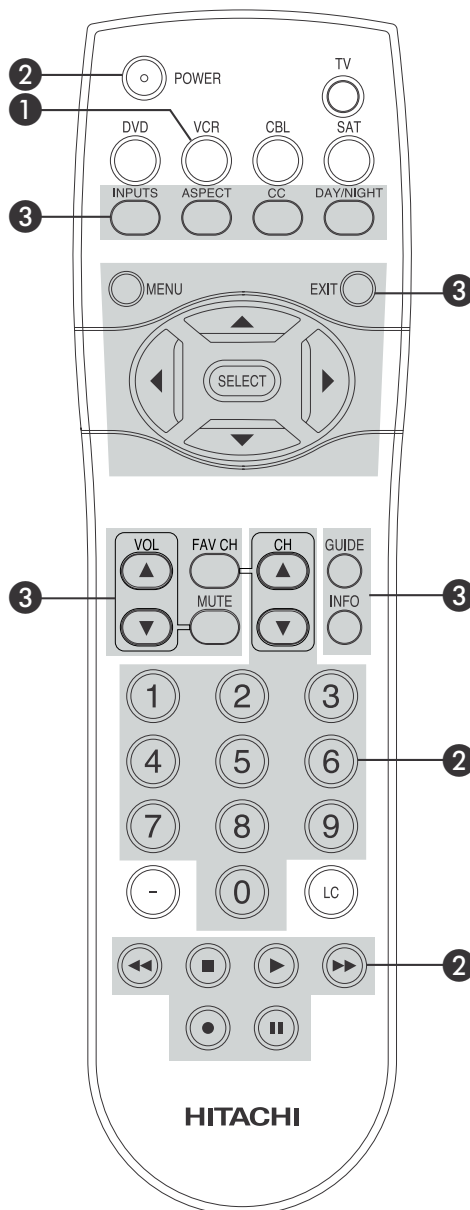
2 PRECODED VCR Buttons

These buttons transmit the chosen precoded VCR codes.

3 EXCLUSIVE TV Buttons

These buttons are for operating the TV.

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



VCR BRAND

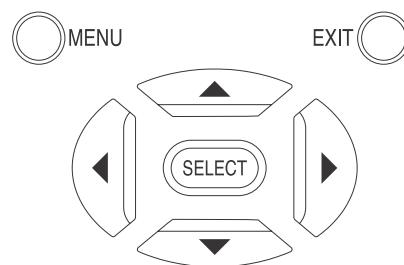
CODES

AIWA	48
DAEWOO	45
EMERSON.....	20, 21, 22, 23
FISHER	34, 37, 38, 39
FUNAI.....	52
GE	33
GOLD STAR	36
HITACHI	00, 01, 02, 03, 04, 05, 06
JVC.....	49, 50, 51, 18
MAGNAVOX	12, 13
mitsubishi.....	27, 28, 29, 30
NEC	40, 41
PANASONIC.....	10, 11
PHILIPS	14
SAMSUNG	25, 26, 17
SHARP	31, 32
SONY	07, 08, 09
TOSHIBA.....	15
ZENITH	35

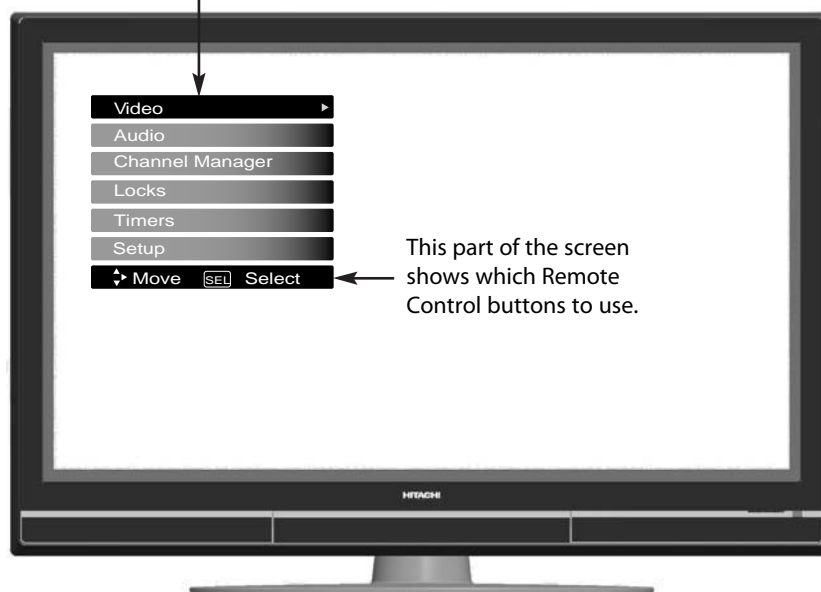
MY VCR PLAYER CODE IS: _____

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.

On-Screen Display

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.
Color Temperature	Set this to High for less intense color with more blue, set to Medium for natural color, set to Standard for standard colors.
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.
Black Side Panel	Set the gray side bars from gray to black 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.

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.

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.
Set The Quick Start Options	Select the TV Quick Start Up options.
Reset The Software	Select to upgrade TV software and to Reset TV settings.

NOTE: 1. The Signal Meter feature of the Channel Manager OSD is only available for Digital channels.

Video

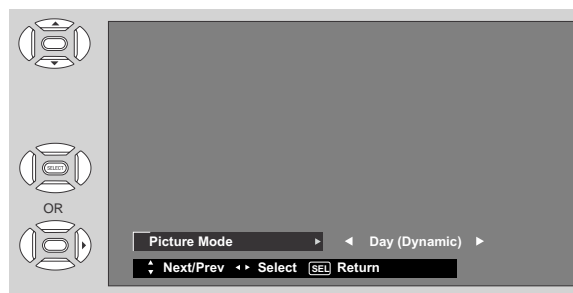
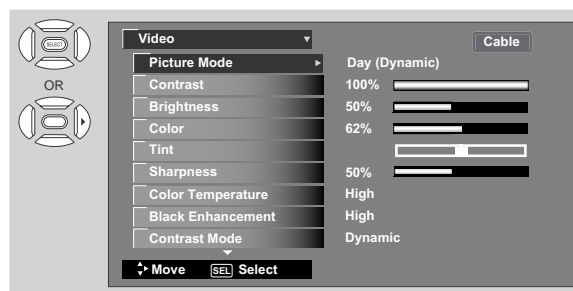
Video

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 programming during nighttime.



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

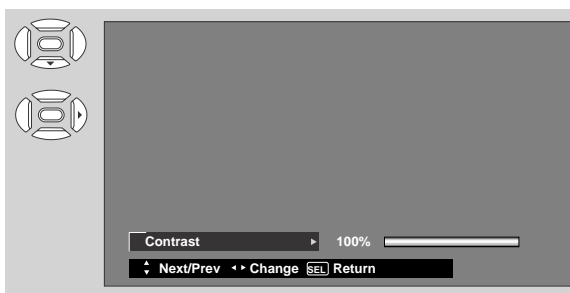
Use this function to adjust the level of color in the picture.

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 .

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 pull-down.

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. Set to **OFF** to deactivate this feature.

Black Side Panel

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

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



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 Off/On.

Video

Aspect

Use this function to select the Picture Format Aspect Ratio.

Auto Aspect

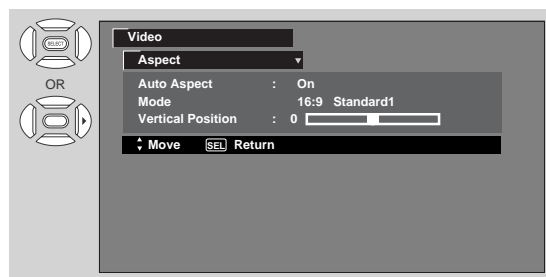
Automatically adjust the Aspect Ratio depending on the input signal to fill the screen.

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.

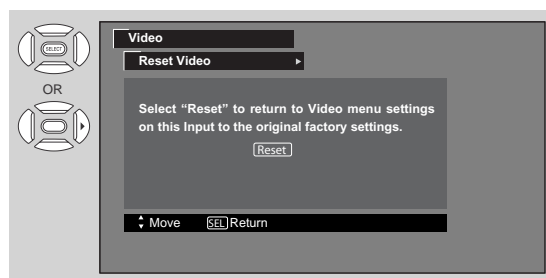
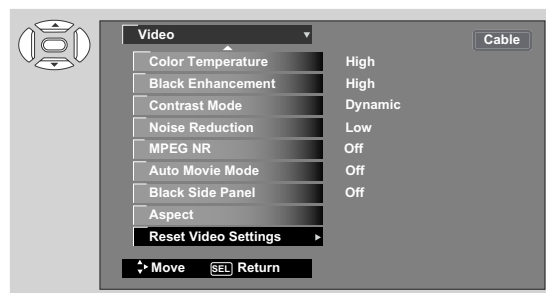
Reset Video Settings

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.



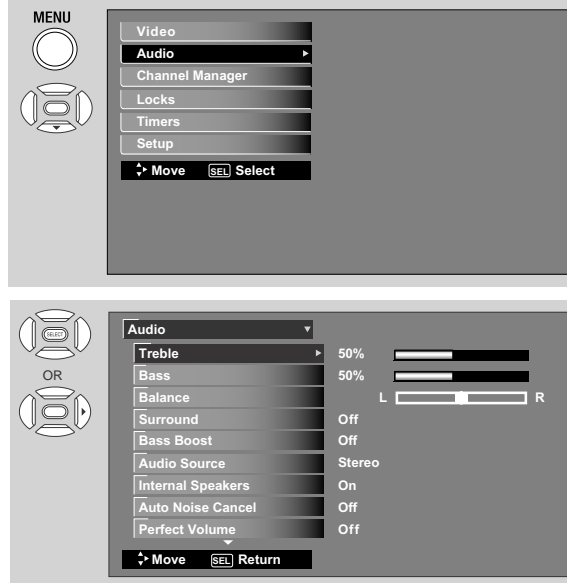
Audio

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

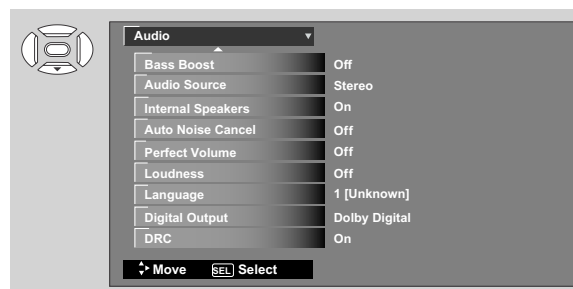
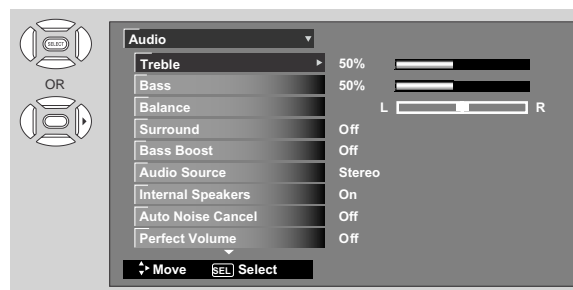
Dynamic Range Compression - Use this function to compress the range of sound volume. By compressing the range of sound volume, it is possible not only to suppress the output of loud sound at night but also to raise the volume of low sound. The default setting is ON.

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.



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.

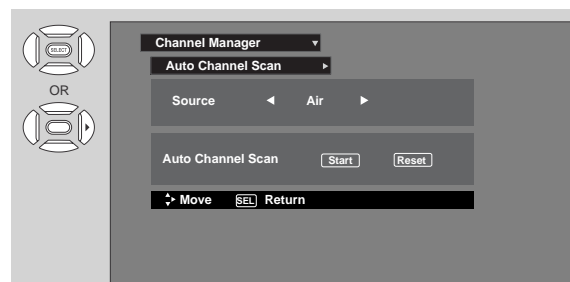
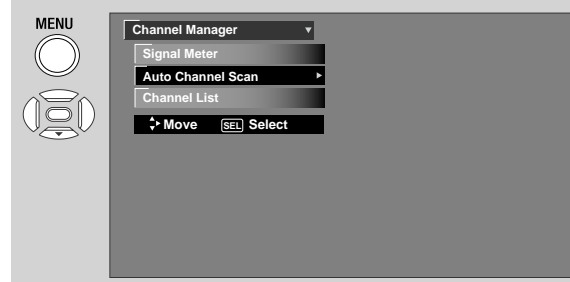
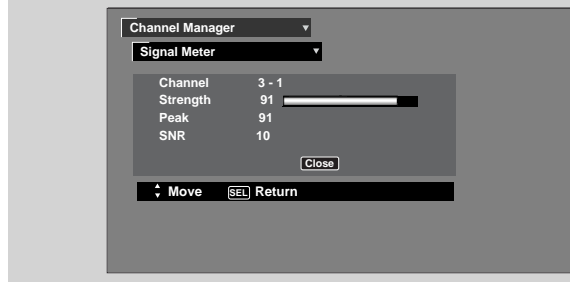
NOTE: The Signal Meter will not be available (grayed out) when watching analog channels.

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 **►**.

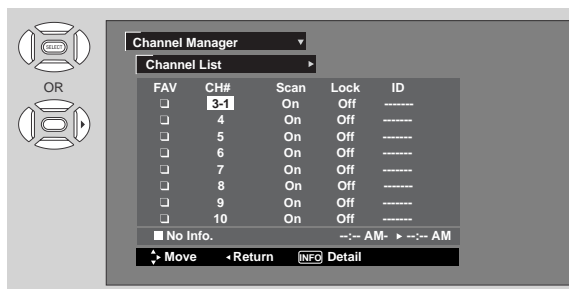
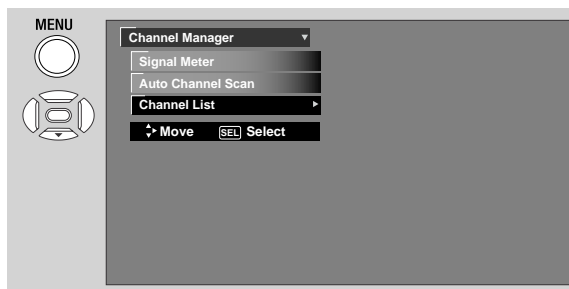


Channel Manager

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 Operating 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.

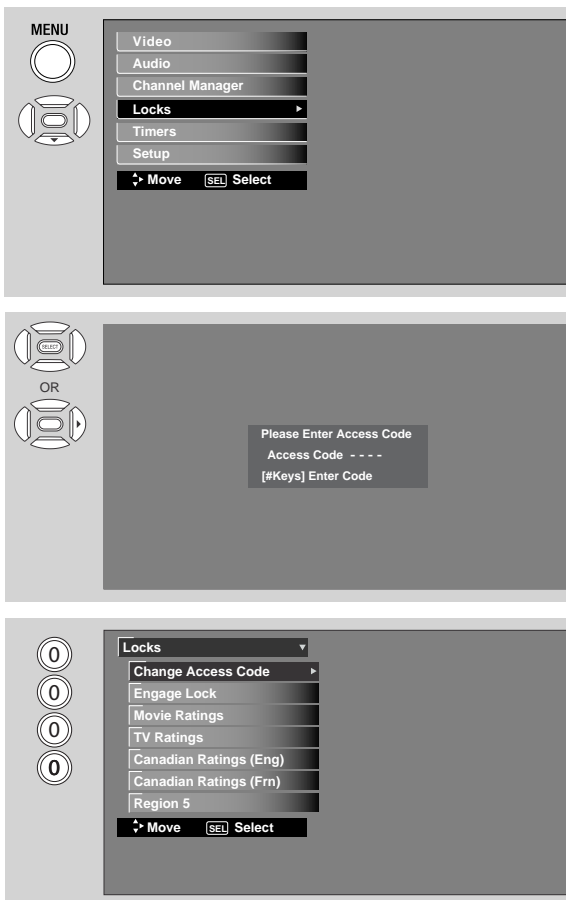
When **FRONT PANEL LOCK** is turned on, all buttons on the Front Panel will be deactivated, except the **POWER** button.

When **MOVIE RATINGS** is selected, you can block various types of movies and video tapes based on motion picture ratings (see page 42).

When **TV RATINGS** is selected, various types of television programming based on a parental guide ratings will be blocked (see page 43).

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 44-45).

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 46).



NOTE:

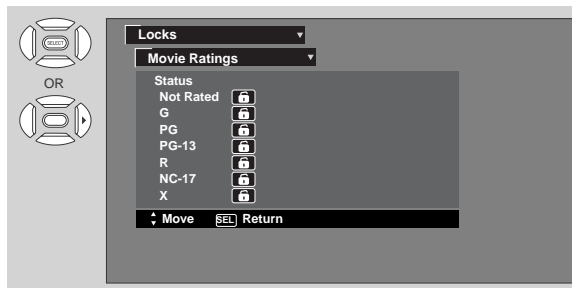
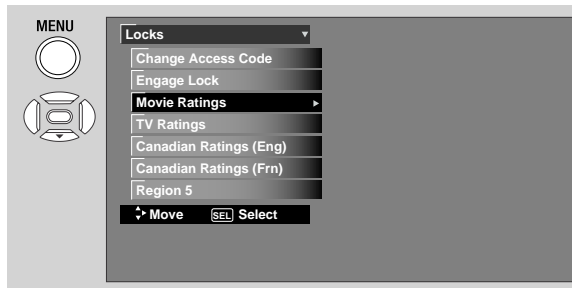
The **REGION 5** option will operate for Digital Channels only.

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

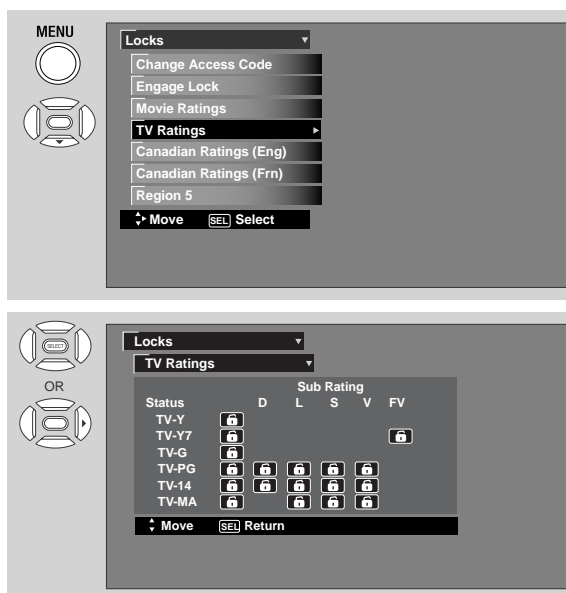
- NOTE:** 1. A movie rating is dependent upon the movie that is viewed. If the movie does not carry a rating, the TV will not block it.
2. Blocking **NOT RATED** programs may block emergency programming, sports, news, public service announcements, religious programs and weather.

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

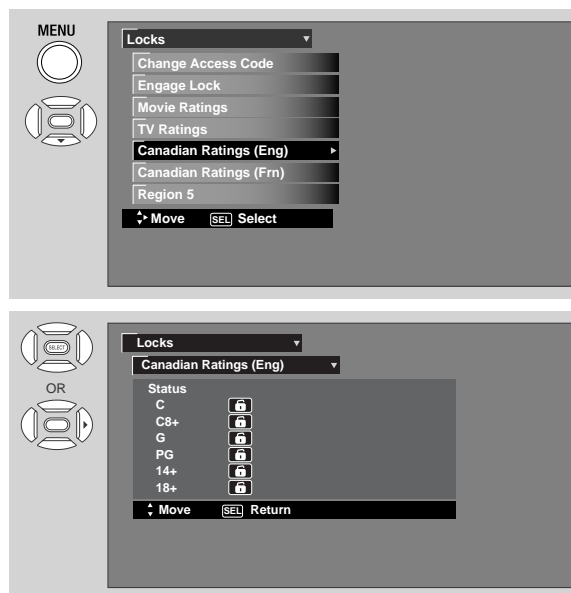
- NOTE:** 1. If you Block **TV-14D**, you will still permit **TV-MA** programs; If you block **TV-14V**, you will automatically block **TV-MAV** programs, but you will still permit **TV-MALS** programs. This means that the TV will block violence in **TV-14** and higher (**TV-MA**), but not language and 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.



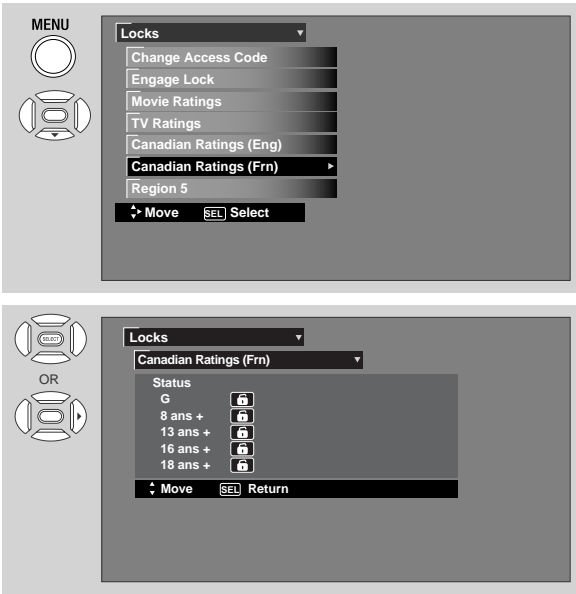
Canadian Ratings English Table

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.

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.

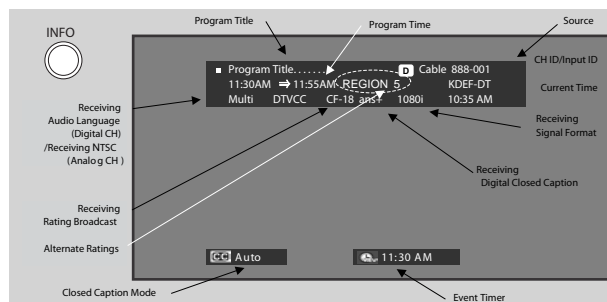
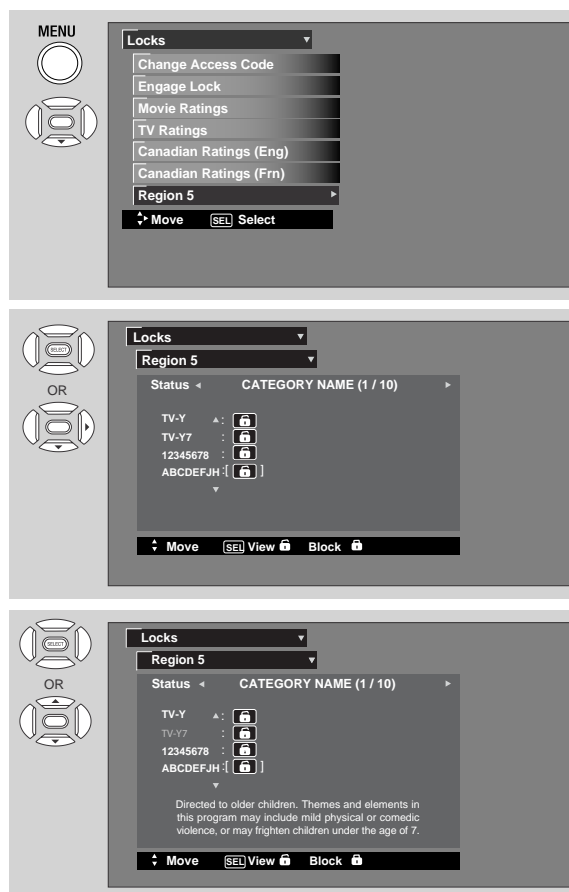


Fig. (1)

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.

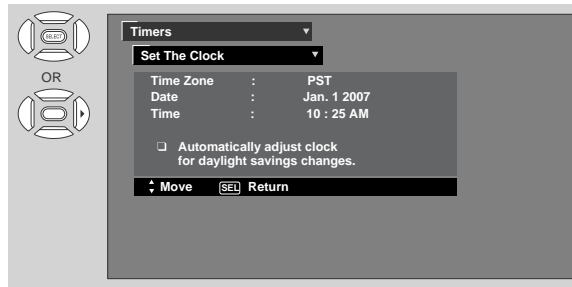
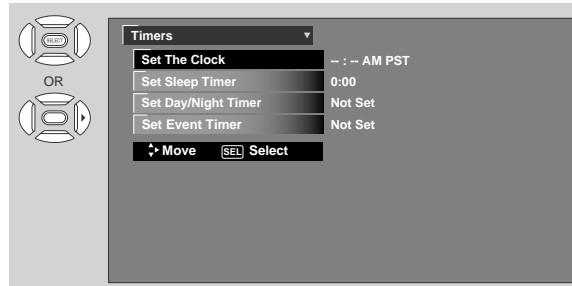
1. Use the **CURSOR** buttons ▲ or ▼ to highlight the function to be adjusted.
2. Press the **SELECT** button to select.



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.

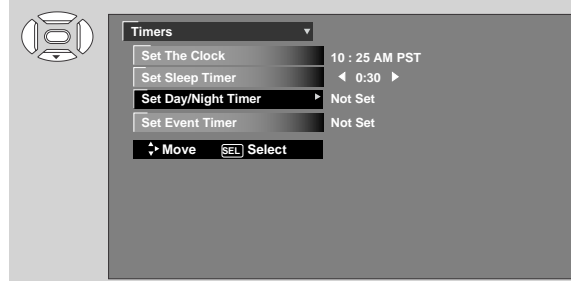
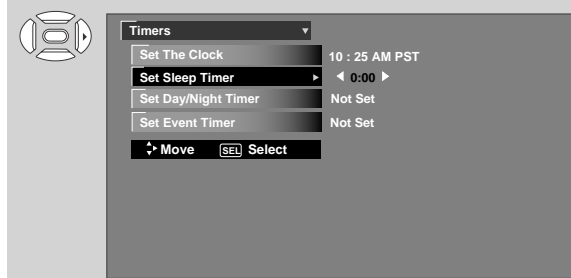
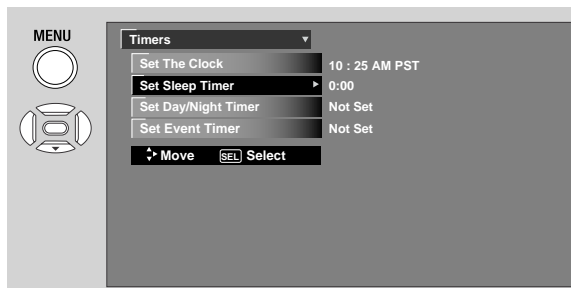
Timers

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**.

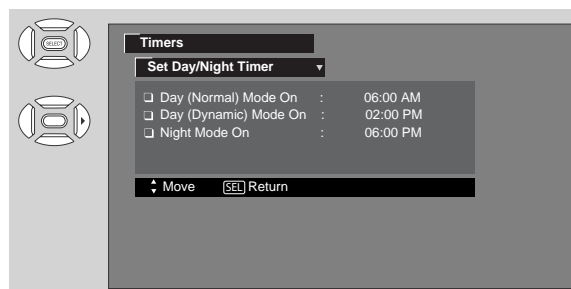
NOTE: The Sleep Timer info will show for 1 minute before the TV turns off.



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 it's **TIMER**.
4. Use the **CURSOR PADS** to select **DAY DYNAMIC MODE ON** and to set it's **TIMER**.
5. Use the **CURSOR PADS** to select **NIGHT MODE ON** and to set it's **TIMER**.
6. Press **EXIT** to quit the menu or select **SET DAY/NIGHT TIMER** to return to the previous menu.

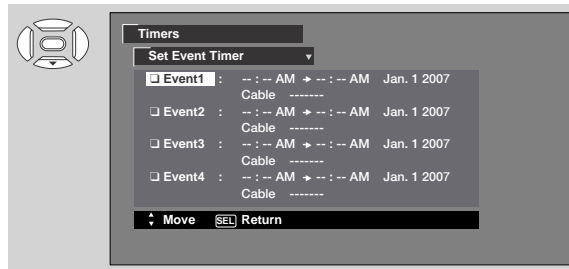
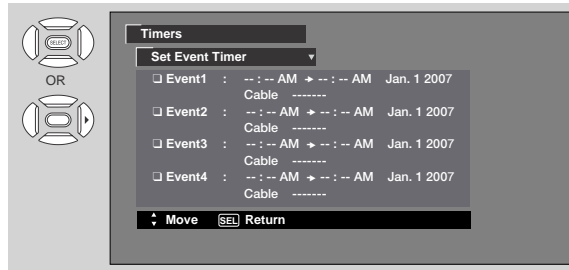
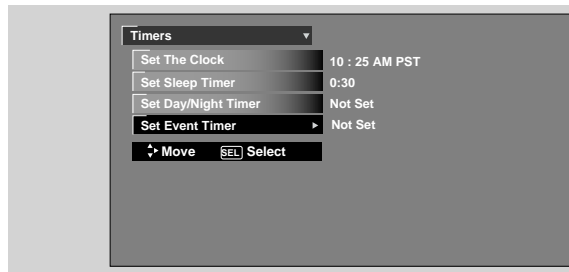


Timers

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 47).

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.



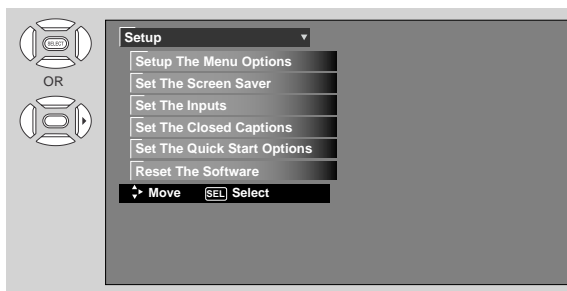
CAUTION: Do not use your TV as a deterrent when away from home by using the **ON** and **OFF TIMERS**. For safety, the TV should be turned off when you are away from home.

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.



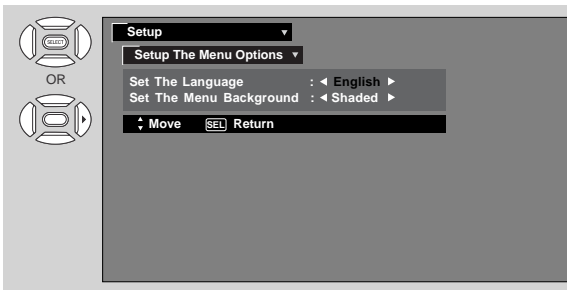
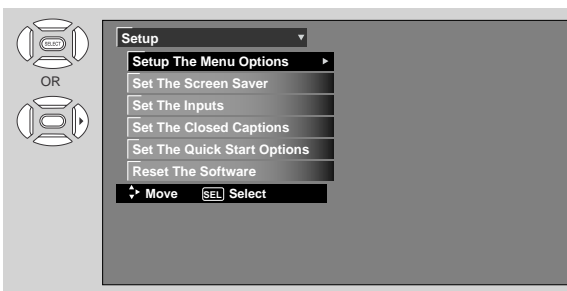
Set The Menu Options

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.

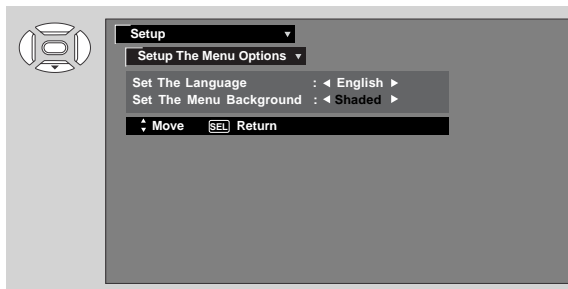


Setup

Set The Menu Background

This function allows you to choose from two menu backgrounds.

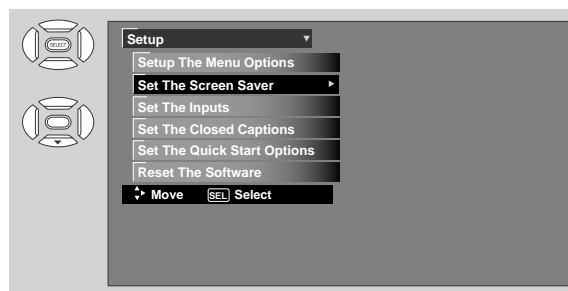
1. Use the **CURSOR PAD** ▲ or ▼ to highlight **SET THE MENU BACKGROUND (SHADED OR SOLID)** of your choice. Use the **CURSOR PAD** ◀ or ▶ to select shaded or solid.
2. Select **SOLID** for a black background (no picture can be seen behind menu screen), select **SHADED** and a light background is visible.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

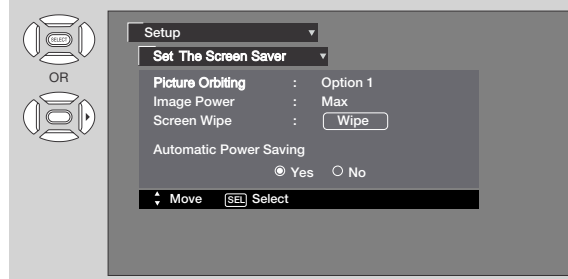


Image Power

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.

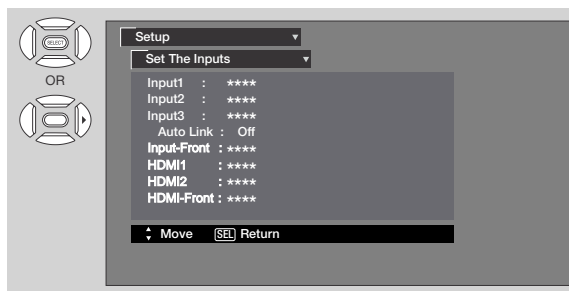
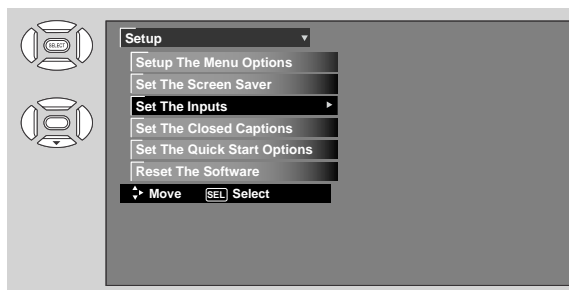
Setup

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.

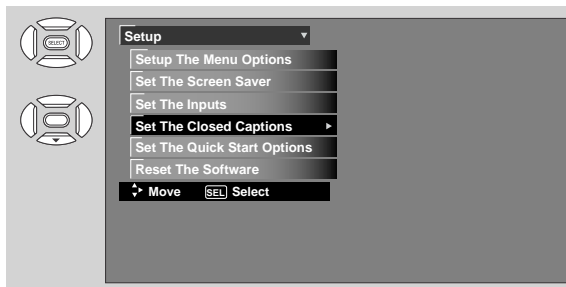
NOTE: 1. Once the TV has been turned on using the **AUTO LINK** feature, it must be reset before **AUTO LINK** is used again. To do this, turn your VCR, laserdisc, or DVD player OFF. This feature is now reset and will turn on your TV as described above.

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.

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 **CC**.

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.



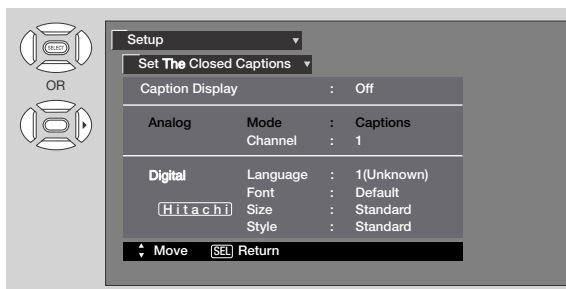
Caption Display:

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.

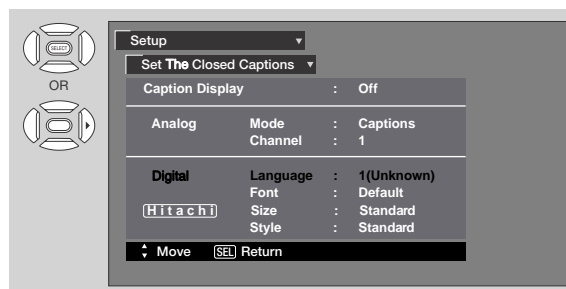
Channel:

- 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.



- NOTES:**
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** or **HDMI** 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

Set The Quick Start Options

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.

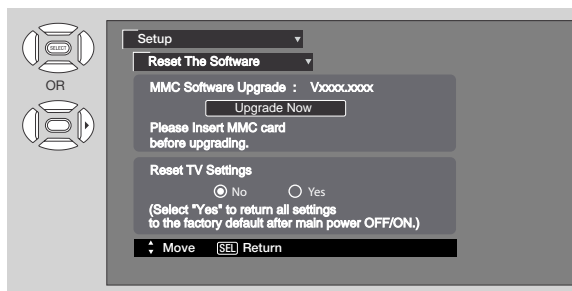
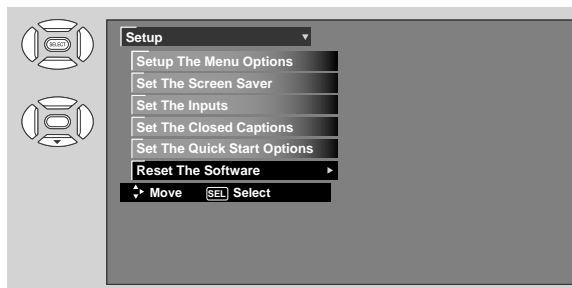
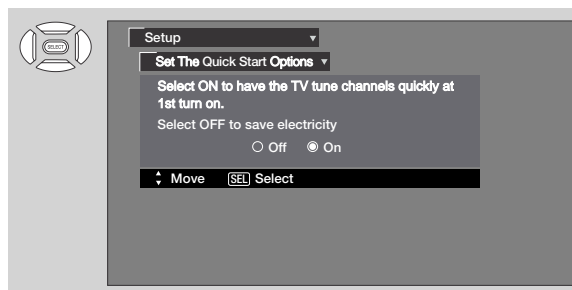
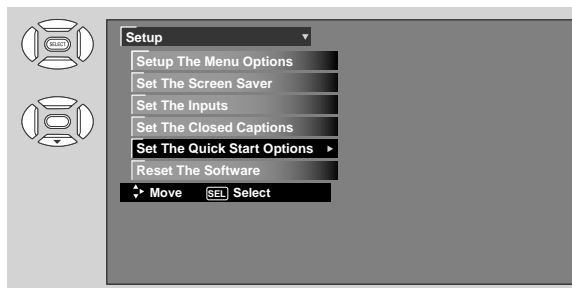
NOTE: Any power interruption during the upgrade process will cancel the upgrade. When this happens, repeat the upgrade procedure.

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 on/off.

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.



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	Be sure TV is switched "ON"	Try another channel (station trouble)	Check antenna connections (back of TV)	Check antenna for broken lead-in wire	Check for local interference	Adjust Contrast control	Adjust Brightness control	Adjust Color control	Adjust Tint 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.



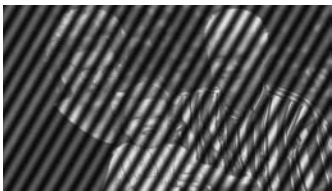
GHOSTS:

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:

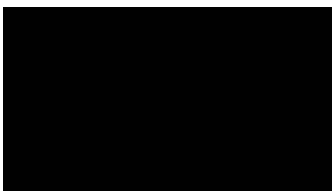
- Keep the television away from Radio.
- Adjust Radio antennas in order for the television not to receive interference.
- The antenna cable of Radio should be kept away from the television.
- Use a coaxial cable for antenna.

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.

Troubleshooting

1. Plasma Television Troubleshooting

No.	Items	Notes
1	Buzzing sound from Plasma display panel.	A buzzing sound may be heard when the plasma television is turned on in a very quiet room. This is due to the plasma panel drive circuit when it is functioning. The buzzing sound is normal and is not a malfunction.
2	Infrared interference	Some infrared rays are emitted from the plasma television panel that might affect the operation of other infrared controlling equipment.
3	Bright and dark spots	High precision technology is used to manufacture the plasma television. But there maybe points that do not illuminate, points that are too bright, and points with color different from that of the periphery. Please note that this is not a malfunction.
4	Picture Image	In some cases, residual images may remain after the short term display of still images when the picture changes.
5	Display panel surface temperature is too high.	The plasma display panel display images by means of electrical discharges inside the panel. This may cause the temperature of the panel surface to increase. Please note that this is not a malfunction.
6	Plasma Surface	A reinforced glass filter is installed over the plasma panel surface. A strong impact to the front panel risk a danger of glass breakage.
7	Transportation	Please transport the plasma television in it's packing box and placed in an upright position. Do not transport the plasma television in a horizontal position. This increases the possibility of panel breakage and pixel failure.
8	Granular spots	When a screen is seen at point-blank range, a random fine grain may be visible in the dark areas of the picture.
9	High temperature environment	High temperature affect the electric discharge/luminescence characteristic of the PDP panel. Do not place the plasma television in high temperature environments.
10	Operation	Operating altitude: 700 to 1,114hPa (9,676ft to -2,484ft). Operating temperature: 41°F to 95°F.
11	Storage	Storage altitude: 300 to 1,114hPa (31,912ft to -2,484ft). Storage temperature: 5°F to 140°F
12	Power ON or OFF	Repeatedly turning the plasma television Power ON and OFF at short intervals may result in failure of the television.
13	Lip sync	The on-screen motion of an actor's lips or other moving object may not be in sync with the associated audio heard from the TV's speakers. This is caused by timing differences in the broadcast signal or DVD content and is not caused by a defect in the television.
14	Control Buttons Response Delay	There's a few seconds response delay on the control buttons (Control panel or R/C) after the TV is turned ON; due to TV start-up routine. Please note that this is not a TV malfunction.

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 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

Video:

- 1024 x 1080 Display Resolution (42")
- 1280 x 1080 Display Resolution (50")
- 1280 x 1080 Display Resolution (55")
- ALiS (Alternate Lighting of Surfaces Technology)
- High-Contrast Pure-Color Glass Shield
- Wide Viewing Angle: More than 160°
- Color Temperature Presets: High, Standard, and Medium
- 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 InputAC 120V, 60Hz
- Power Consumption
- Average Power : (42") 220 W
 (50") 282 W
 (55") 362 W
- Maximum Power : (42") 356 W, 3.0 A
 (50") 460 W, 3.9 A
 (55") 560 W, 5.3 A
- Antenna input impedance75 Ohm
- Channel coverage203 ch.
 VHF-Band2 ~ 13
 UHF-Band14 ~ 69
 CATV Mid BandA-5 ~ A-1
 A-I
 Super BandJ-W
 Hyper BandW+1 - W+28
 Ultra BandW+29 - W+94
- Television System NTSC Standard
 ATSC Standard (8 VSB, 64-QAM, 256-QAM)
- Video1.0Vp-p, 75 Ohm
- S-Video
 Luminance (Y)1.0Vp-p, 75 Ohm
 Chrominance (C)0.286Vp-p, 75 Ohm
- Component Video
 Luminance (Y)1.0Vp-p, 75 Ohm
 Chrominance (P_B/P_R)0.7Vp-p, 75 Ohm
- Audio input Impedance270k Ohm
- Average input level470mVrms
- HDMI (19 PIN)

Outputs:

- Video 1.0Vp-p, 75 Ohm
- Audio470mVrms, 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
- Table Top Stand(42" and 50" only)
included in a box
- Wire Clamp (50" models only)

Optional Accessories:

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

INPUTS/OUTPUTS

- Wideband Component Y, P_B, P_R 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 0.900(horiz.) x 0.485(vert.) mm.(42")
 0.864(horiz.) x 0.580(vert.) mm.(50")
 0.960(horiz.) x 0.640(vert.) mm.(55")
- 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.

UltraVision Digital is a registered trademark of Hitachi Home Electronics (America), Inc.

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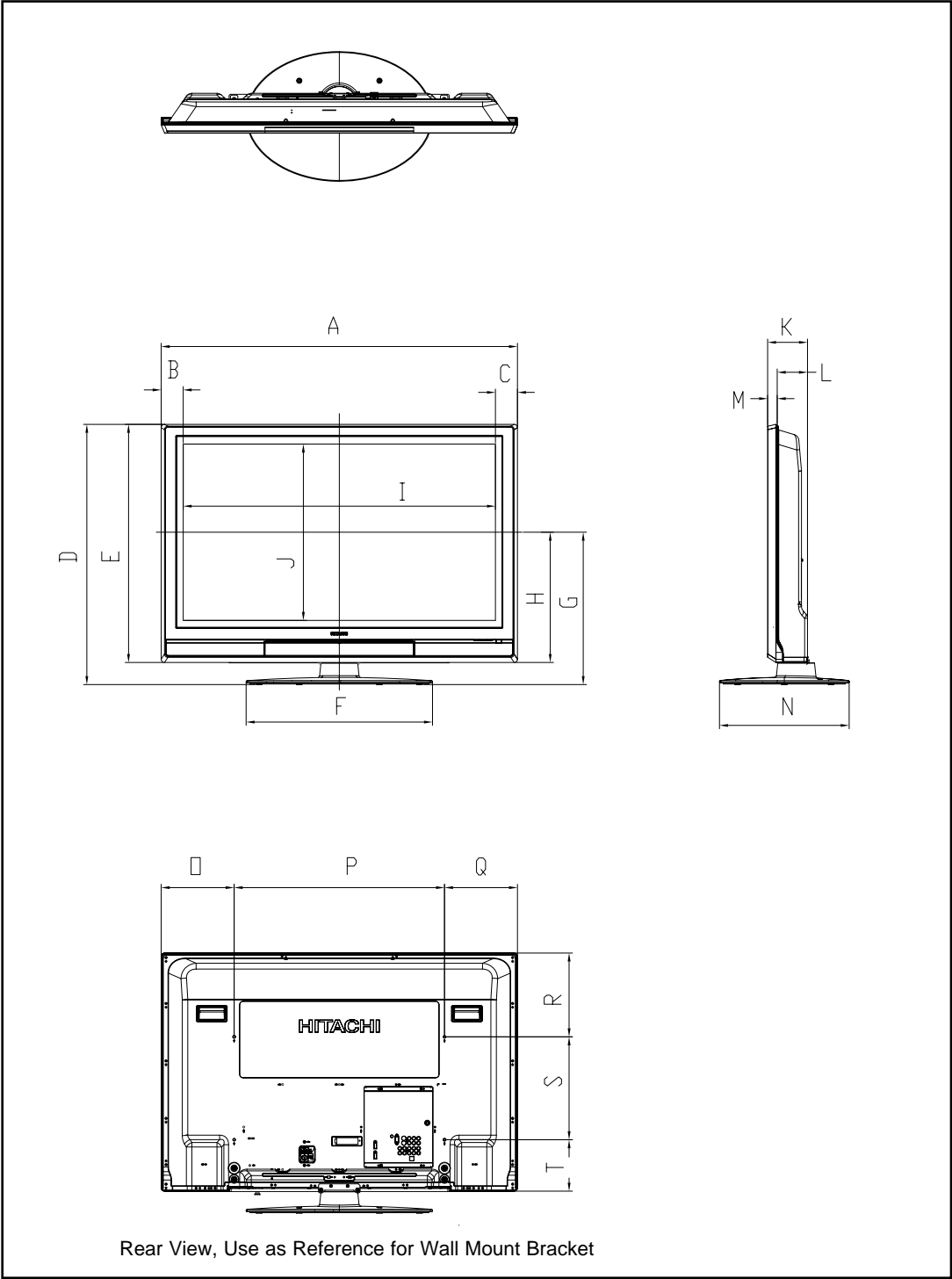
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HDMI™ HDMI, the HDMI logo and High-Definition Multimedia Interface are trademarks or registered trademarks of HDMI Licensing LLC

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

Set Dimensions

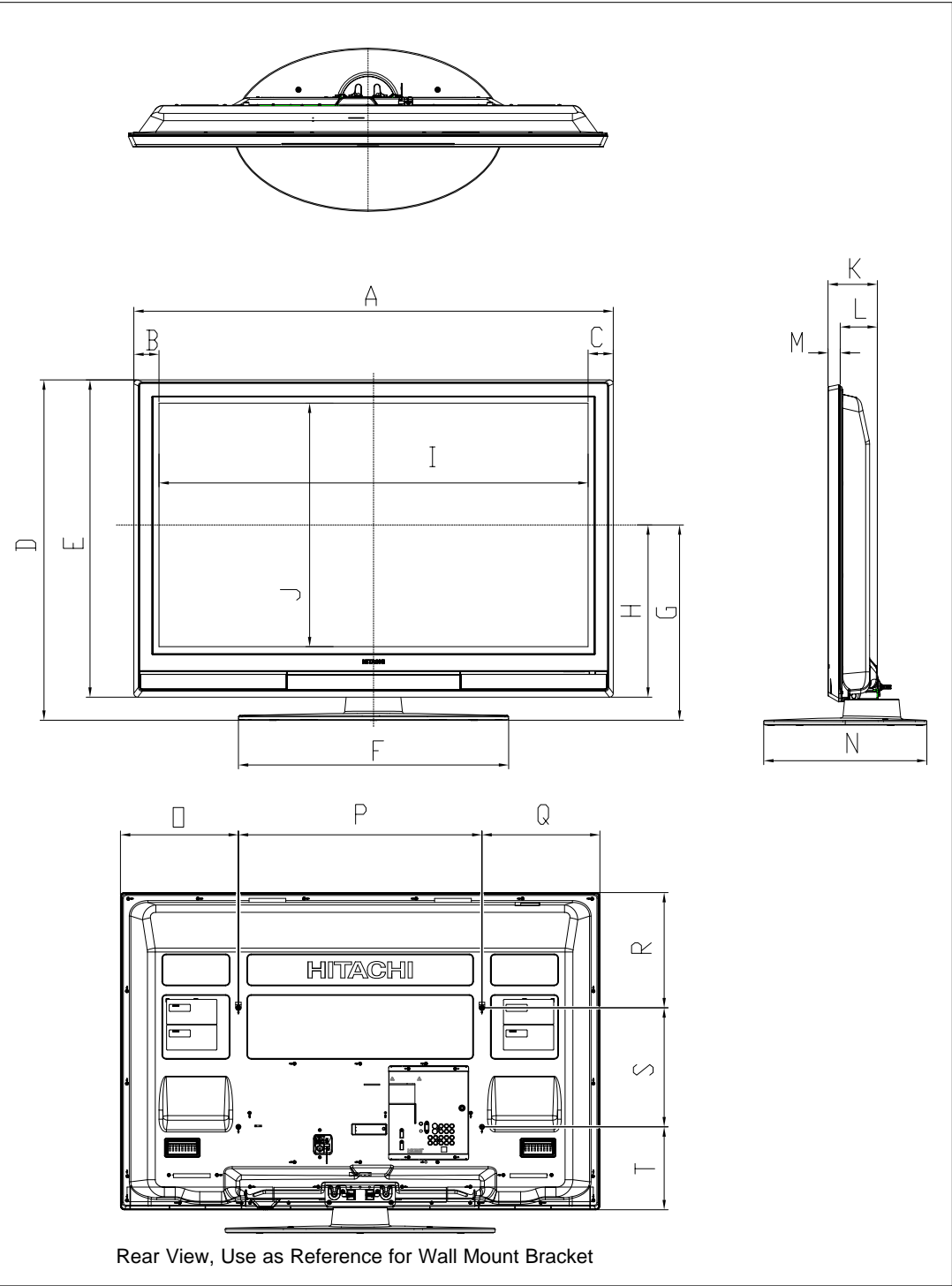
42 Inch Models (Includes Table Top Stand) Weight (lbs./kg): 80.4/36.5



Units	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T
Inches	42	2-3/4	2-3/4	30-21/32	28-1/16	21-31/32	17-31/32	15-11/32	36-7/16	20-23/32	4-23/32	3-9/16	1-1/8	15-9/32	8-19/32	24-13/16	8-19/32	9-7/8	12-1/8	6-1/16
mm	1067.00	70.5	70.5	779.15	713.00	558.32	456.15	390.00	926	526.60	119.50	90.80	28.70	388.38	218.50	630.00	218.50	251.00	308.00	154.00

Set Dimensions

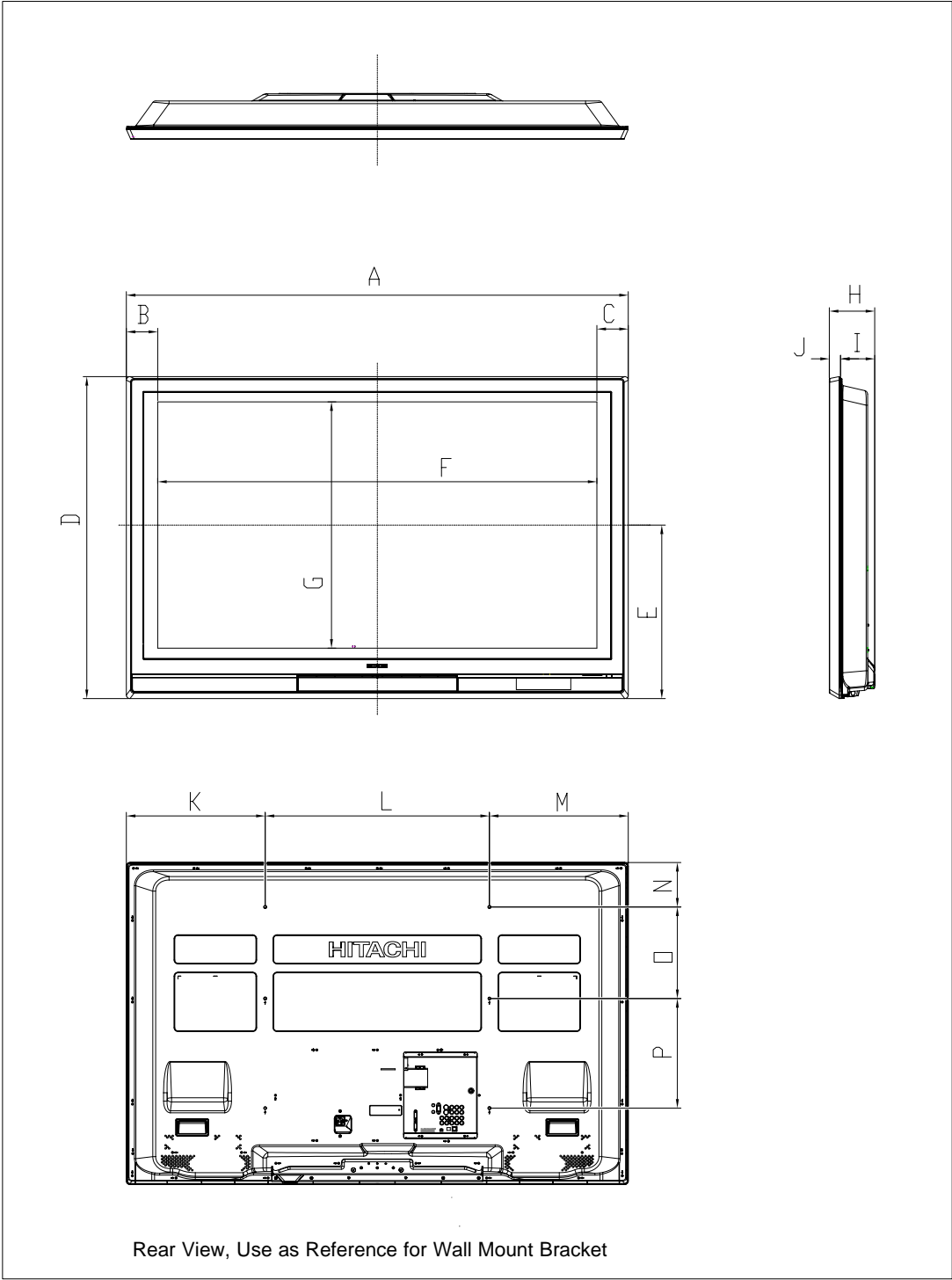
50 Inch Models (Includes Table Top Stand) Weight (lbs./kg): 116.7/53



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	27-17/32	19-29/32	17-17/32	43-23/32	24-13/16	5-1/2	3-25/32	1-1/4	16-5/8	12	24-13/16	12	11-3/4	12-1/8	8-7/16
mm	1240	65.00	65.00	880.85	820.50	699.12	505.85	445.5	1110.00	630.00	127.50	96.00	31.50	422.08	305.00	630.00	305.00	298.00	308.00	214.50

Set Dimensions

55 Inch Models (Not Includes Table Top Stand) Weight (lbs./kg): 133.3/60.5



Units	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P
Inches	55-1/2	3-15/32	3-15/32	35-5/8	19-3/16	48-19/32	27-1/4	5-1/32	3-25/32	1-1/4	15-11/32	24-13/16	15-11/32	4-15/16	10-1/8	12-1/8
mm	1410.00	88.00	88.00	904.50	485.50	1234.00	692.00	127.50	96.00	31.50	390.00	630.00	390.00	125.00	257	308

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

Look for your French Manual on the outside of the box. If the manual is missing, call **1-800-HITACHI (1-800-448-2244)** for a copy.

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

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

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

La version français de votre manual 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.

