

**HITACHI**  
Inspire the Next

55|46|42  
ULTRATHIN  
LED  
LCD HDTV

**Models**

**LE55S606 / LE55T506 / LE55U516**

55" Class (54.64" Diagonal)

**LE46S606 / LE46T506**

46" Class (45.99" Diagonal)

**LE42S606 / LE42T506**

42" Class (42.02" Diagonal)



**Owner's Guide**

Simulated image.  
Image may differ from actual product.

Thank you for purchasing this Hitachi product. Please read these instructions carefully.  
For additional assistance please call 800.HITACHI (800.448.2244) or visit our website at [www.hitachi.us/tv](http://www.hitachi.us/tv).  
Keep this owner's guide for future reference.

Record the model name and serial number of your LCD Television for future reference.  
This information is located on the back side of the television.

MODEL NAME. \_\_\_\_\_ SERIAL NO. \_\_\_\_\_

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# Important Safety Instructions



## SAFETY POINTS YOU SHOULD KNOW ABOUT YOUR HITACHI LCD TELEVISION

Our reputation has been built on the quality, performance, and ease of service of Hitachi LCD 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 LCD 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 LCD 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 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 attachments/accessories specified by the manufacturer.
12. Use only with the cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with the apparatus. When a cart is used, use

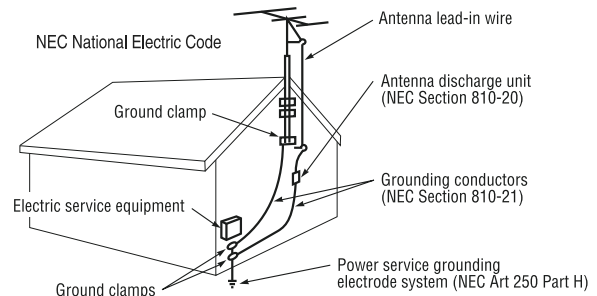


caution when moving the cart/apparatus combination to avoid injury from tip-over.

13. Unplug this apparatus during lightning storms or when unused for long periods of time.
14. Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.
15. Televisions are designed to comply with the recommended safety standards for tilt and stability. Do not apply excessive pulling force to the front, or top, of the cabinet which could cause the product to overturn resulting in product damage and/or personal injury.
16. Follow instructions for wall, shelf or ceiling mounting as recommended by the manufacturer.
17. An outdoor antenna should not be located in the vicinity of overhead power lines or other electrical circuits.
18. If an outside antenna is connected to the receiver be sure the antenna system is grounded so as to provide some protection against voltage surges and built up static charges. Section 810 of the National Electric Code, ANSI/NFPA No. 70-1984, provides information with respect to proper grounding for the mast and supporting structure, grounding of the lead-in wire to an antenna discharge unit, size of grounding connectors, location of antenna discharge unit, connection to grounding electrodes and requirements for the grounding electrode.
19. Wall Mount Bracket – For use only with UL Listed Wall Mount Bracket with minimum weight/load: Please see pages 8, 47 ~ 49 for further details.
20. The equipment shall be used at maximum ambient temperature of 95°F.

### NOTE

To the CATV system installer: This reminder is provided to call the CATV system installer's attention to Article 820-44 of the NEC that provides guidelines for proper grounding and, in particular, specifies that the cable ground shall be connected to the grounding system of the building, as close to the point of cable entry as practical.



### POWER SOURCE

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

# Important Safety Instructions



To prevent electric shock, do not use the LCD television's (polarized) plug with an extension cord, receptacle, or other outlet unless the blades can be fully inserted to prevent blade exposure.

Never connect the LCD television to 50 Hz, direct current, or anything other than the specified voltage.

This television's factory default settings as shipped meet ENERGY STAR requirements.

Please see the Energy Options section of this owner's guide for more energy saving tips.



- *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 LCD television should not be exposed to dripping or splashing and no objects filled with liquids, such as vases, should 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 paper-view uses only unless otherwise authorized. Reverse engineering or disassembly is prohibited.

## FEDERAL COMMUNICATIONS COMMISSION NOTICE

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

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

## MODIFICATIONS

The FCC requires the user to be notified that any changes or modifications made to this device that are not expressly approved by Hitachi America, Ltd. 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 or power code supplied with the system must be replaced with identical parts in order to assure compliance with FCC rules.

You may order those replacement parts from Hitachi.

*This television receiver provides display of television closed captioning (CC or C) in accordance with FCC rules.*

## DECLARATION OF CONFORMITY

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions :

- (1) This device may not cause harmful interference and
- (2) This device must accept any interference received, including interference that may cause undesired operation.

## For questions regarding this declaration, contact:

**Hitachi America, Ltd.**  
**900 Hitachi Way**  
**Chula Vista, CA 91914-3556**  
**Tel. 800.448.2244(800.HITACHI)**  
**ATTN: Customer Relations**

## 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](http://www.eRecycle.org) (in California), the Electronic Industries Alliance at [www.eiae.org](http://www.eiae.org) (in the U.S.) or the Electronic Product Stewardship Canada at [www.epsc.ca](http://www.epsc.ca) (in Canada). For more information, call **800.HITACHI**.

## CANADA STANDARD ICES-003

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

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

## CANADA STANDARD BETS-7

Standard Television Receiving Apparatus — Appareil de réception télévision ordinaire, Canada BETS-7 / NTMR-7.

## Important Safety Instructions

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# CHILD SAFETY:

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

Congratulations on your purchase!

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



### HITACHI CARES!

- The consumer electronics industry is committed to making home entertainment enjoyable and safe.
- Please note the American Academy of Pediatrics discourages television viewing for children younger than two years of age.
- The home theater entertainment experience is a growing trend and larger flat displays are popular purchases. However, flat panel displays are not always supported on the proper stands or installed according to the manufacturer's recommendations.
- Flat Panel displays that are inappropriately situated on dresser, bookcases, shelves, desks, speakers, chest or carts may fall over and cause injury.

### TUNE INTO SAFETY

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



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

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

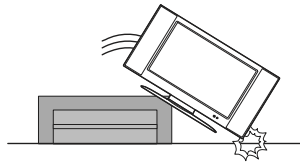


# Important Safety Instructions

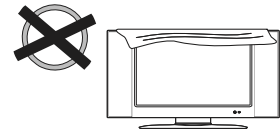
Do not place the unit on uneven surfaces, this may drop or damage the unit, it may also cause personal injury.



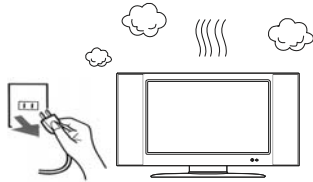
Unplug immediately if any foreign materials falls into the TV or if the TV fell down.



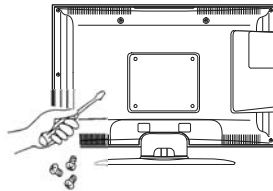
Do not cover or block any vents and openings of the TV. Inadequate ventilation may shorten the life of the display unit and cause overheating.



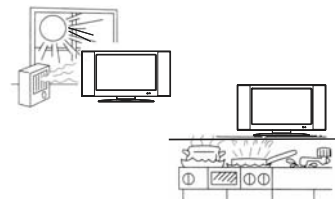
Unplug immediately if there is a malfunction on the TV like no picture, no video/audio or if there is smoke and bad odor coming from the TV.



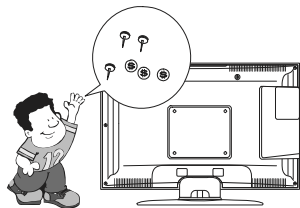
Do not open the TV cabinet.



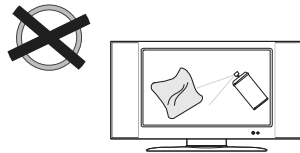
Avoid direct sunlight, dusty, high humidity and smokey locations.



Do not throw any objects inside the TV like metals, coins or any other flammable materials.



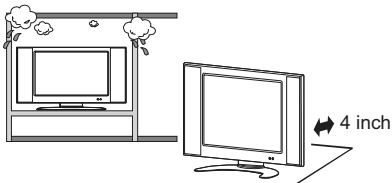
Remember to unplug the power cord from the AC outlet before cleaning. Do not use liquid cleaners or aerosol cleaners to clean the display.



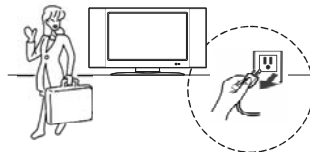
Do not place the TV near water, such as a bathtub, shower rooms, kitchen sink, laundry tub or swimming pool. Avoid liquid containers on top of the unit.



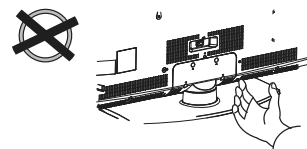
Do not place the TV in confined spaces or inside a box when the TV is operating.



Make sure to unplug the TV when not in use for a long period of time (days).



Do not pick up or handle the TV from where the TV connects to the stand. Injury may occur if the TV is picked up or handled from this area.



## Notice for Remote Control

Avoid dropping the unit.



Avoid liquids on it.



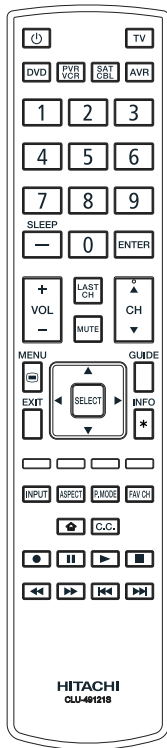
Avoid aerosol cleaners.



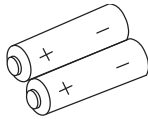
# Accessories

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

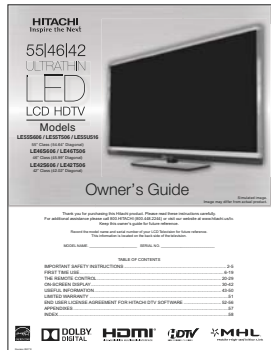
- ① Remote Control Unit  
CLU-49121S  
(Part No.: HL02569)



- ② “AAA” Size Batteries (2)



- ③ Owner's Guide



- ④ Quick Start Guide

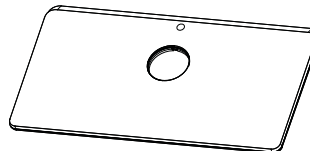


- ⑤ Stand Screws (4)



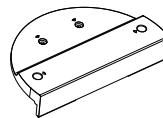
42": M4x12, Part No.: 0M1G1740 12225 CR3  
46", 55": M6x16, Part No.: 0M1G1760 16 47 CR3

- ⑥ Stand Base



42": Part No.: P34T1145AFL01L0100 & P15T141210400000LH  
46", 55": Part No.: P34T1132XAL01L0100 & X15T828130100000BL

- ⑦ Hinge cover for wall mount



42": Part No.: P34T10160GM01X0100  
46", 55": Part No.: P34T10320GM01X0100

- ⑧ Power Cord

Part No.: 389G202A15NJRB

For optional accessories, please access our web site at: [www.hitachi.us/tv](http://www.hitachi.us/tv)

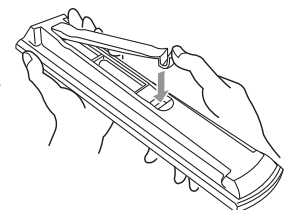
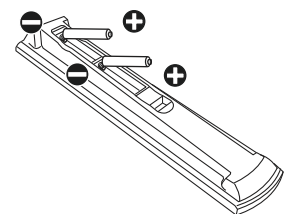
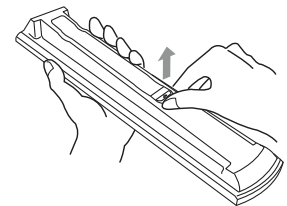
## REMOTE CONTROL BATTERY INSTALLATION AND REPLACEMENT

The remote control operates on 2 “AAA” batteries.

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



- Do not insert batteries with ‘+’ and ‘-’ polarities reversed as this may cause the batteries to swell or rupture resulting in leakage.
- Never mix used and new batteries in the device.
- Replace all the batteries in the device at the same time.
- Remove the batteries if the remote control is not going to be used for an extended period of time.
- The batteries (batteries installed) shall not be exposed to excessive heat such as sunshine, fire, etc.



# How To Install Your New Hitachi LCD Television

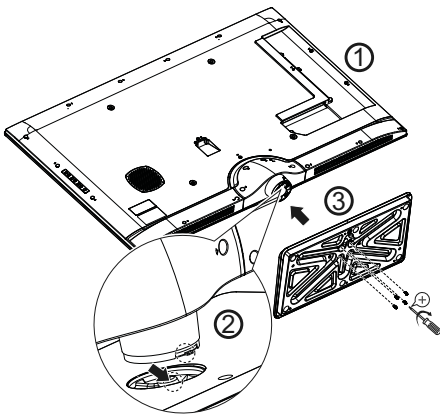
Take the following precautions to prevent the LCD Television from tipping over and possibly causing injury. It is important to mount the unit on a stable and flat surface.

## ASSEMBLE THE BASE

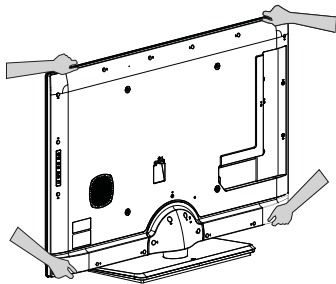
### IMPORTANT:

The base of the LCD TV must be assembled prior to use.

1. Carefully place the TV screen face-down on a cushioned, clean surface to protect it from damages or scratches.
2. Carefully align and insert the base to the stand until the latch locks the base into position.
3. Insert the screws included with the accessories to the bottom of the base and tighten them to the stand with a screw driver.



## CAUTION WHEN MOVING THE MAIN UNIT



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

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

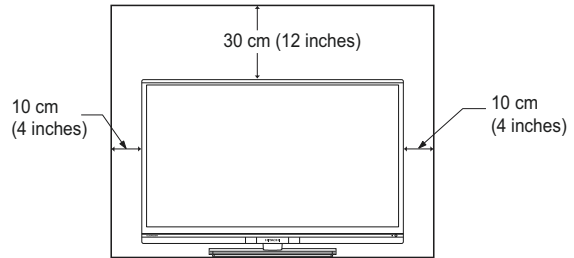
Please use caution when handling the left and right bottom corners of the TV, as these areas protrude slightly from the TV's frame. Handle this area with care to avoid damaging the unit and the possibility of personal injury.

## LOCATION

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

Also, be sure that the location selected allows a free flow of air to and from the perforated back cover of the set. In order to prevent an internal temperature increase,

maintain a space of 10 cm (4 inches) from the sides/back of the Television, and 30 cm (12 inches) from the top of the television to the ceiling. To avoid cabinet warping, cabinet color changes, and increased chance of set failure, do not place the TV where temperatures can become excessively hot, for example, in direct sunlight or near a heating appliance, etc.

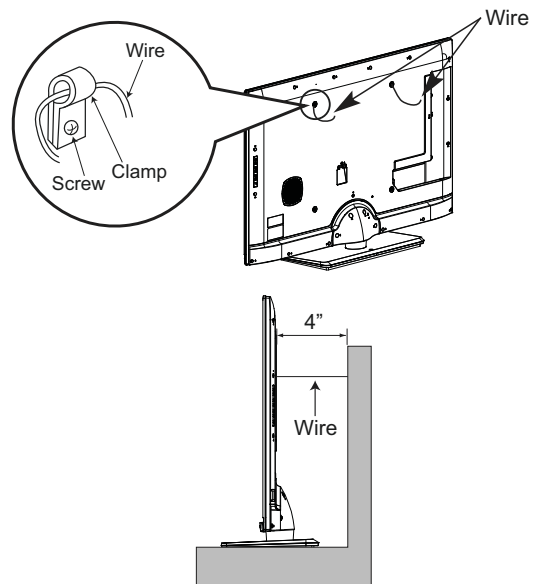


- NOTES**
- Do not block the ventilation holes of the LCD Television. Blocking the ventilation holes might cause overheating and damage.
  - In case of an abnormal symptom, unplug the power cord and contact 800.HITACHI.
  - If you purchased a wall mount bracket, it is recommended that you ask for professional installation.
  - Install the unit at a proper area where it does not expose anyone to any danger of hitting themselves (For example: their hands, head or face, etc.) against the edge of the unit that could cause personal injury.



## SECURING TO A WALL

1. Use a metallic wire (two locations) to fasten the set to the clamping screw on the rear of the LCD TV as shown below.
2. Keep the LCD television 4 inches away from the wall, except when mounted using the wall mount bracket, and secure to the wall as shown below:



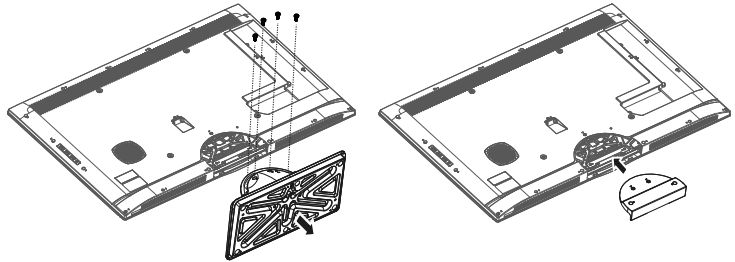
# How To Install Your New Hitachi LCD Television

## WALL MOUNTING SETUP

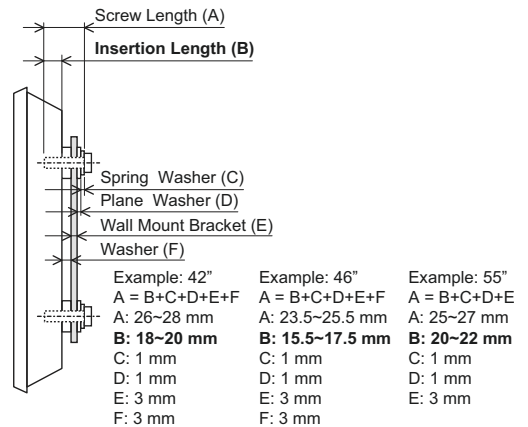
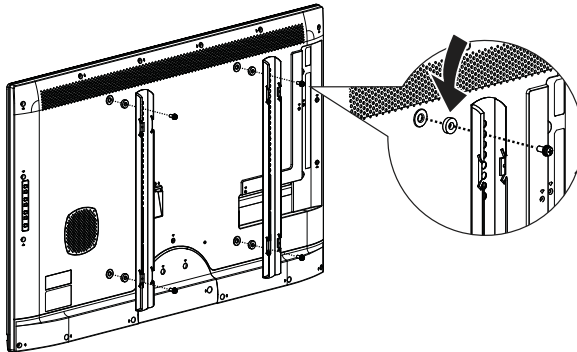
### STEP (1) : REMOVE THE STAND BASE FROM THE LCD TELEVISION

In order to remove the stand from the TV safely, please put the TV set on a soft and flat surface (blanket, foam, cloth, etc.) to prevent any damage; then remove the screws to separate the STAND from the TV. Useful dimensions for the WALL MOUNT assembly are illustrated on page 47 ~ 49.

Use the screws removed from separating the STAND to secure the hinge cover.



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



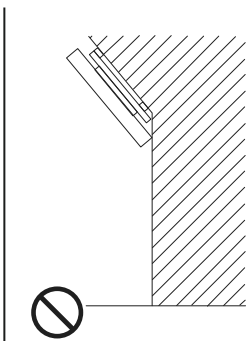
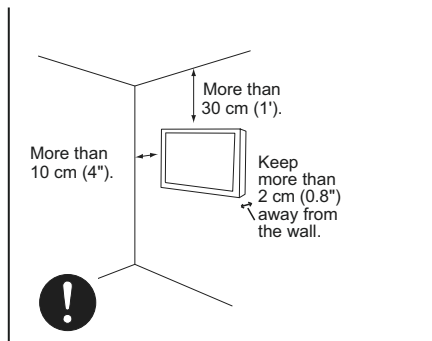
- DO NOT reuse the original screws that were in these screw mounting holes or the screws removed in STEP(1) above, as such screws are not long enough to properly secure the TV to the wall bracket. Please refer to example at right and caution below to determine proper screw length.
- For proper Wall Mount assembly on both 42" and 46" model, a washer of more than 3mm thick added in between the screw hole and the VESA holder is recommended.

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



- 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 panel.
- This LCD television product is designed for a maximum tilting angle of 45 degrees from vertical.
- Insertion length (B) of the screws must be within (i) 18~20 mm for 42", or (ii) 15.7~17.5 mm for 46", or (iii) 20~22 mm for 55". If the length is less than specified, the TV's weight cannot be maintained. If the length is more than specified, a space is created between the Wall Mount Bracket and the LCD Television. This insertion length is **very important**.

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



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

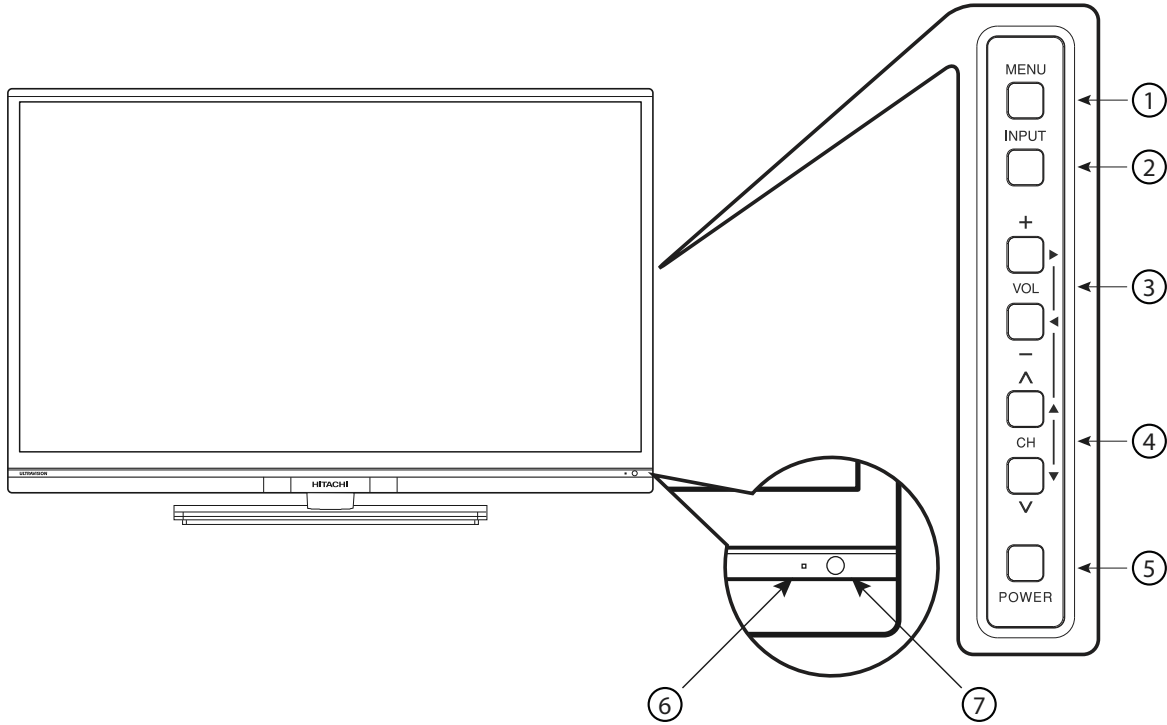


- Although this LCD Display Panel can be installed using a variety of third party wall mounting brackets/devices, such third party brackets/devices have not been tested or approved by Hitachi for use or compatibility with this LCD Display Panel. Accordingly, Hitachi accepts no responsibility or liability for any injuries or property damage resulting from the use of such third party brackets/devices. Hitachi strongly advises that any installation of this LCD Display Panel using wall mounting brackets/devices be performed only by a qualified and experienced television installation technician who has completed a thorough evaluation of:
  - a) the weight-bearing strength and stability of the intended wall mount surface; and
  - b) the weight-bearing strength and compatibility of the intended wall mount brackets/device.



# Front/Side Controls

**FIRST TIME USE**

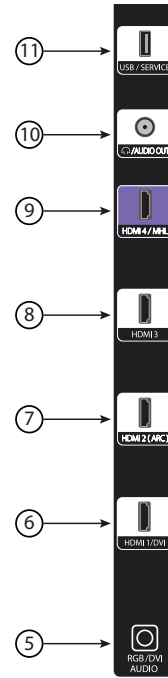
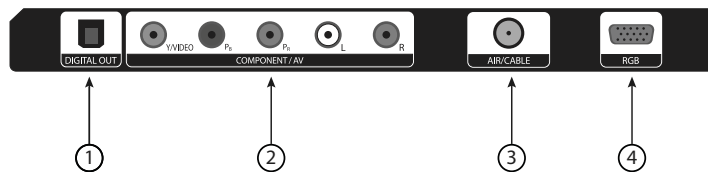


- ① **MENU Button**  
This button allows you to enter the MENU, making it possible to set TV features to your preference without using the remote control. This button also serves as the Return button when in the MENU system.
- ② **INPUT Button**  
Press this button to access the INPUT menu. This button also serves as SELECT when in the MENU system.
- ③ **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 the MENU system.
- ④ **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 the MENU system.
- ⑤ **POWER Button**  
This button is for turning ON the LCD TV, in order to turn the TV On, the standby indicator must be lit red. If the indicator is off, plug the power cord into the AC outlet.
- ⑥ **POWER Light Indicator**  
To turn the TV ON, press the POWER button (⑤). A blue indicator lamp located on the lower right corner of the front bezel illuminates to indicate the TV power is ON.
- ⑦ **REMOTE CONTROL Sensor**  
Point your remote control at this area when selecting channels, adjusting volume, etc.

Indicating Lamp	Power Status	Operating
Lights Red	OFF (Stand-by)	When the LCD TV is plugged to the AC outlet.
Lights Blue	ON	TV Power is ON; picture is shown.
Quickly Blinking Red	ON	The TV is powering OFF. It will soon be in the Off (Stand-by) state.

- NOTES**
- Your Hitachi LCD TV will not show any picture if there is no video input when AV, Component, VGA, or HDMI 1 ~ 4 is selected. Instead, a message will indicate "No Signal", and the Power Light will remain Blue until the TV is turned off or in Stand-by mode (lights red) when not in use.
  - The remote control can turn the TV On/Off as well as control various devices and any compatible HDMI CEC devices.
  - Please do not put anything around the remote control sensor.

# Side/Rear Panel Jacks



## ① DIGITAL OUT (Optical Digital Audio)

This jack provides digital audio output for your audio device that is RAW and PCM compatible, such as an audio amplifier.

### NOTE

- The Digital Output option will gray out with all input sources, except for HDMI input and DTV with a digital program channel on the AIR/CABLE input source.

## ② COMPONENT / AV: Y-PbPr Video and Audio L/R Inputs

These jacks provide Y-PbPr and Audio jacks for connecting device with this capability, such as a DVD player or set top box.

### NOTES

- Your component outputs may be labeled Y, B-Y, and R-Y. In this case, connect the components B-Y output to the TV's Pb input and the components R-Y output to the TV's Pr input.
- Your component outputs may be labeled Y-CbCr. In this case, connect the component Cb output to the TV's Pb input and the component Cr output to the TV's Pr input.
- It may be necessary to adjust Tint to obtain optimum picture quality when using the Y-PbPr inputs (See page 32).

## ③ AIR/CABLE

To switch between Cable and Air, go to the Channels Menu option to change the signal source for Cable or Air (See page 36).

## ④ RGB

This RGB input provides PC video connection.

## ⑤ RGB/DVI AUDIO

This RGB/DVI AUDIO input provides PC and DVI audio connection.

## ⑥ HDMI 1 / DVI

Use this HDMI input for AV connection such as set top boxes or DVD players equipped with an HDMI output. (See page 15 for reference)

## ⑦ HDMI 2 (ARC)

Besides the regular HDMI connection, this jack also provides ARC (Audio Return Channel) feature. (See page 16 for reference)

## ⑧ HDMI 3

Use this HDMI input for AV connection such as set top boxes or DVD players equipped with an HDMI output. (See page 15 for reference)

## ⑨ HDMI 4 / MHL

Besides the regular HDMI connection, this jack also provides a MHL (Mobile High-Definition Link) connection from your SmartPhone.

## ⑩ AUDIO OUT

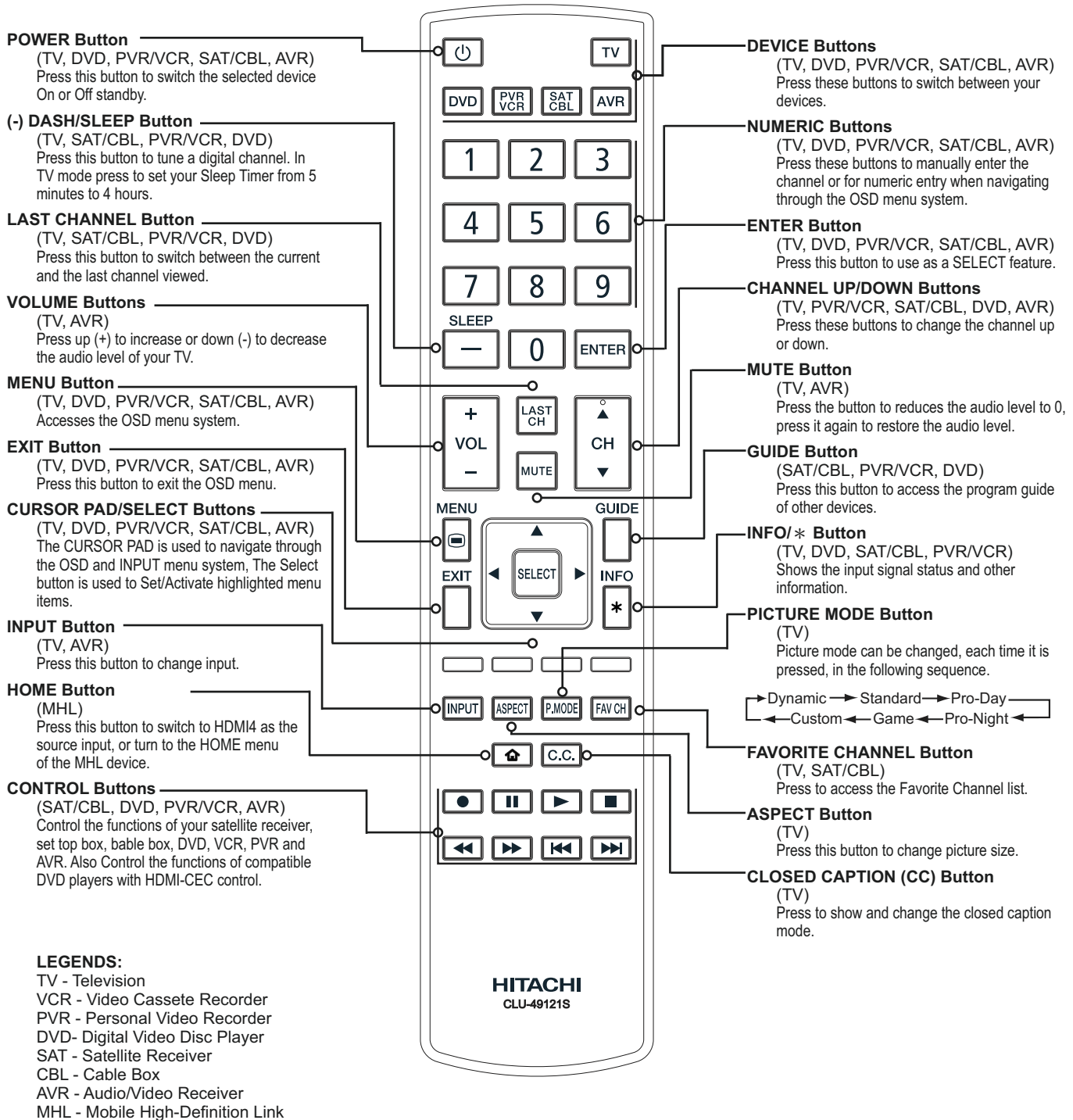
This jack provides stereo audio output from your TV to your headphone, or to audio device, such as audio amplifier.

## ⑪ USB / SERVICE

This USB slot is for use with the photo browser feature and future software upgrades. (See page 42 for reference)

# Quick Reference Remote Control Buttons And Functions

In addition to controlling all of the functions on your Hitachi LCD TV, the new remote control is designed to operate different types of devices, such as, DVD Players, cable boxes (CBL), set top boxes, satellite receivers (SAT), VCRs and compatible HDMI CEC DVD Players. The remote control must be programmed to control the chosen device. Please see pages 20 ~ 29 for a complete description of all features and programming of the remote control.



- NOTES**
- The TV's remote control sensor is located at the right bottom corner of the TV frame. To control TV functions, please point the remote control directly at the sensor for best controlling.
  - For HDMI CEC details, please see page 40.

# Quick Setup Guide

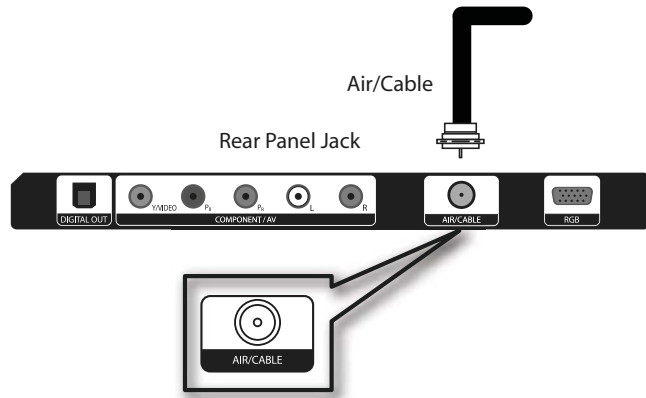
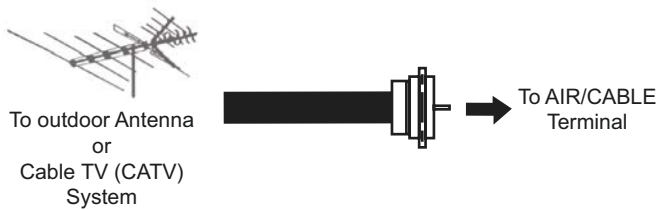
Perform the following steps to quickly setup your new Hitachi LCD Television Set.

## 1. ANTENNA CONNECTION

Unless your LCD 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.

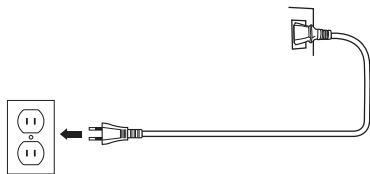
### VHF (75-Ohm) antenna/CATV (Cable TV)

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

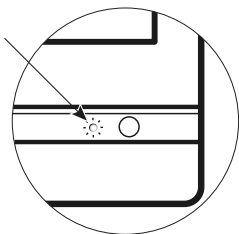


## 2. CONNECT YOUR NEW HITACHI LCD TV TO THE POWER SOURCE

a). Connect the power cord to the AC outlet.

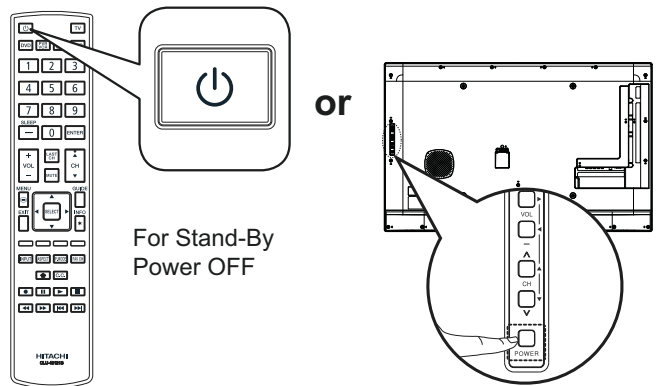


b). The Indicating Lamp will light red (Standby mode).



## 3. POWER ON/OFF YOUR NEW HITACHI LCD TV

Press the POWER button on the remote control or the POWER button on the Side Control Panel to power on/off the LCD TV.



### NOTE

- If the Indicating lamp is off, the POWER button on the remote control will not operate. Please make sure that the power cord is plugged to the AC outlet.

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

# TV Setup Wizard

For the first time after powering on your Hitachi LCD TV, the following illustration of Setup Wizard appears on the TV screen, and will guide you through the initial setup step-by-step.

The first step of the initial setup is the energy saving mode. Here you can select either **Home** or **Retail** mode.



The **Home** mode is intended for home use, and will save much energy, compared to the showroom Retail mode which sets the TV to a more energy consumptive mode.

If later you want to change the mode, you can change it via the **Home/Retail** selection under **Energy Options** on the **Setup** menu (See page 41).

**NOTE** • Any menu or control change in **RETAIL** mode will not be saved when the TV is turned off.

The second step is to set the language used for the TV On-Screen-Display Menu.

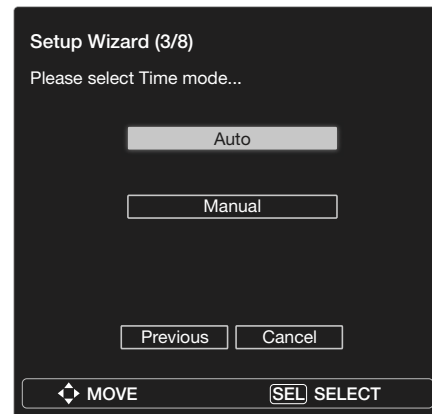
Press the CURSOR PAD ▲ or ▼ on your remote control to select your language. Press the SELECT button to confirm.



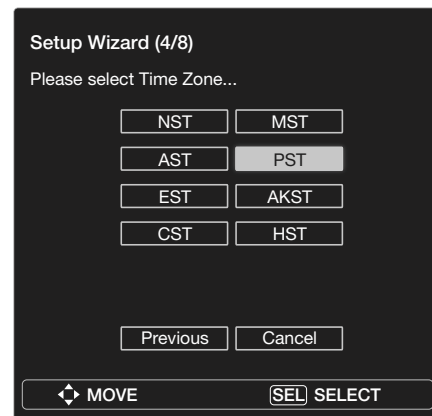
The third and fourth steps are to set the date and time.

There are two options; one for automatic time setting in which you will be able to select only the time zone of your area, and another for manual setup.

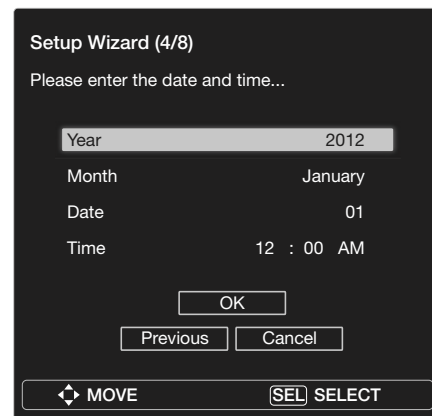
FIRST TIME USE



Press the CURSOR PAD ▲ or ▼ on your remote control to select **Auto** for automatic setting. At the following step, you will need to select only the time zone of your area.

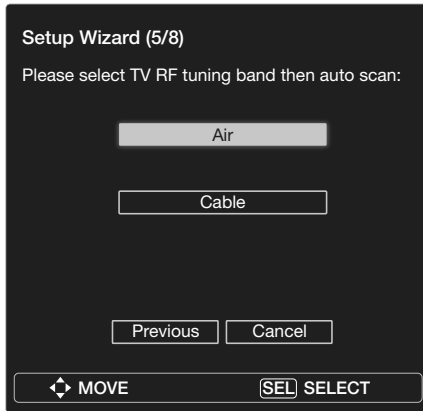


If you select **Manual** for manual setting, you can set up your local time in detail at the following step.



# TV Setup Wizard

The fifth step is to select broadcasting or cable channels. There are two options: **Air** for an external antenna, and **Cable** for a cable system provider in your area. Use the CURSOR PAD ▲ or ▼ to select, and press SELECT button to confirm.

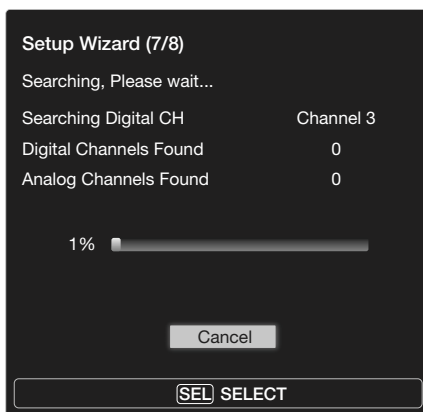


The sixth step will start the scanning feature to find the channels available on the antenna or cable system. Press SELECT button to start the channel scan.



The seventh step is the channel scanning process. The Setup Wizard shows the scanning process of digital channels first, and then the analog channels next. The scanning process will show how many channels in total have been found. Please wait while the scanning process is searching for the available channels in your area.

To cancel the process, press SELECT button on the remote control.



## NOTES

- Once you cancel the Setup Wizard, it will not be shown again.
- During the scanning process, if you find not connecting antenna cable to TV, turn off the TV, unplug the power cord, and connect the antenna cable according to the Antenna Connection in the “**First Time Use**” section of this Owner’s Guide.

The final step is the completion of process. The TV screen shows a brief message that the setup is done. This final message will be shown for only a few seconds and then the first detected channel will be tuned in.

You may press EXIT button on the remote control to tune to the first detected channel right away.



## NOTE

- The Setup Wizard will not appear once you have completed. For updating and adding channels, refer to the **Add Channels to List** feature on page 36.

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

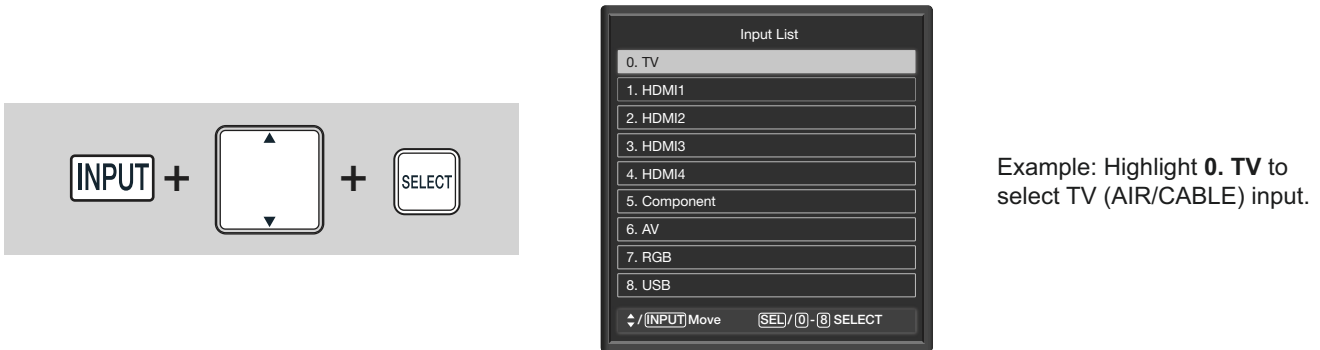
# Panel Connections

Your Hitachi LCD TV provides an easy connection of audio and video sources. Locate the input at the back of the TV, and connect as the illustration shown here.

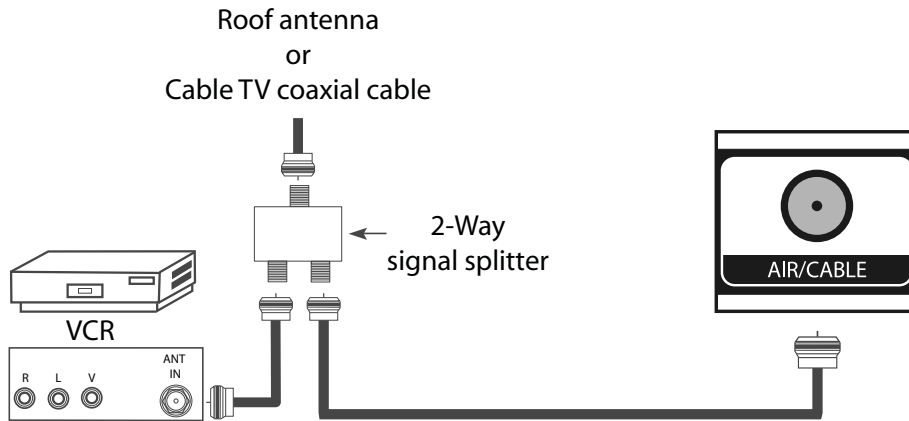
- NOTES**
- Cables are not included.
  - Completely insert connection cord plugs, otherwise, the picture and/or sound may be abnormal.
  - Cable plugs are often color-coded. Match colors of plugs and jacks, i.e. connect red to red, white to white, etc.

## Before Operating External Video Devices

Connect an external device to one of the input jacks, then press the INPUT button to show the Inputs List. Use the CURSORS (▲ and ▼) to select the input of your choice. Then press the SELECT button to confirm your choice (See page 21).



## ANTENNA CONNECTION



## HDMI CONNECTION

There are four HDMI jacks provided as a convenience to allow easily connecting HDMI or DVI signals from a DVD, set top box, or Video Game console as shown in the following examples (A separate audio device would be needed for a DVI-to-HDMI connection.)

### Connecting HDMI device:

1. Connect with HDMI cable from your HDMI device to the TV **HDMI 3** input.
2. Press the **INPUT** button on the remote control and select **3. HDMI 3** input source.



# Panel Connections

## Connecting to external audio amplifier with one HDMI cable:

Besides the normal HDMI connection, the **HDMI 2 (ARC)** input also provides ARC feature to send audio of all your video sources out to your stereo amplifier for high-fidelity audio reproduction.

1. Connect with HDMI cable to your audio amplifier from the TV **HDMI 2 (ARC)** input.

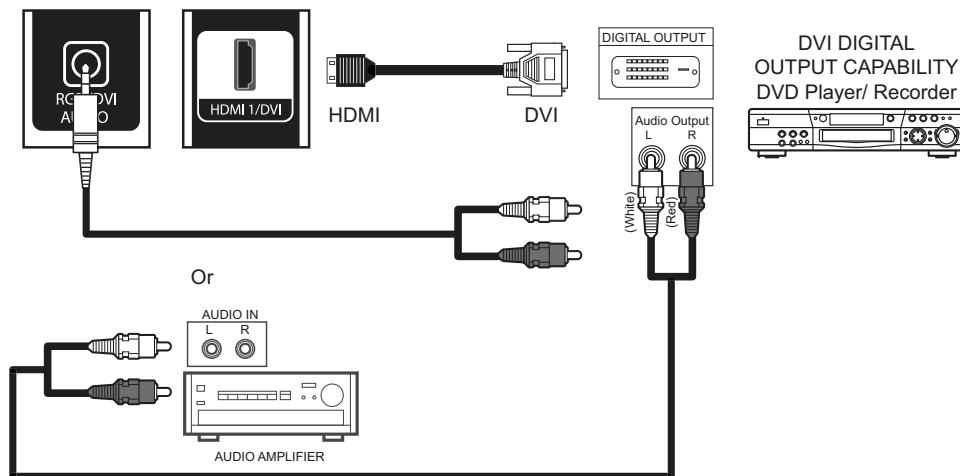
**NOTE** • The **ARC (Audio Return Channel)** feature at this input enables your Hitachi TV to send audio data “upstream” to your A/V receiver or surround audio controller via a single HDMI cable, increasing user flexibility and eliminating the need for any separate S/PDIF audio connection.



## Connecting DVI device:

The DVI connection to the HDMI input is only available through the **HDMI 1/DVI** input.

1. Connect with a DVI-to-HDMI cable from your DVI device to the TV **HDMI 1/DVI** input.
2. Press the **INPUT** button on the remote control and select **1. HDMI 1** input source.
3. Connect with a separate audio cable from your DVI device to the **RGB/DVI AUDIO** input.



*Note : An external Audio amplifier can be used for the same purpose.*

## Tips on HDMI connections:

- When using an HDMI input from a set top box, it is recommended to use a 1080p, 1080i or 720p input signal.
- When the HDMI input is a 1080p signal, it is recommended that the length of the cable should be less than 5 meters.

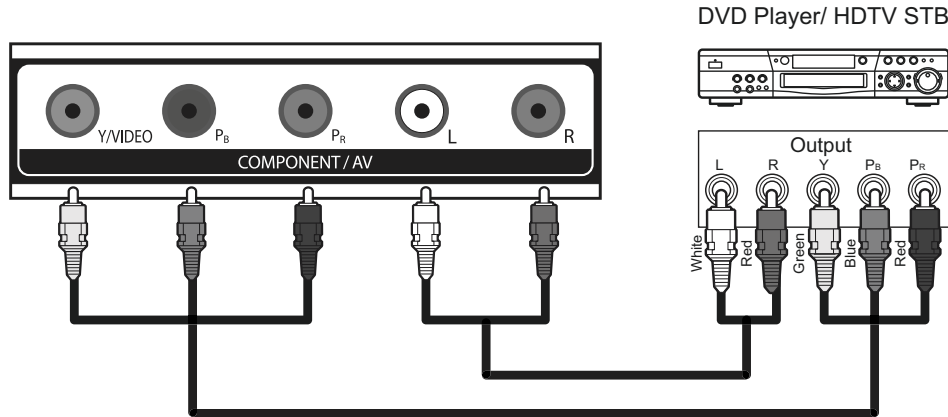


# Panel Connections

## COMPONENT/AV CONNECTION

### Connecting COMPONENT device:

1. Connect with Y-PbPr video cable from the video output of your AV device to the TV **COMPONENT/AV Y-PbPr** input.
2. Connect with L/R audio cable from the audio output of your AV device to the TV **COMPONENT/AV L/R** input.
3. Press the **INPUT** button on the remote control and select **5. Component** input source.

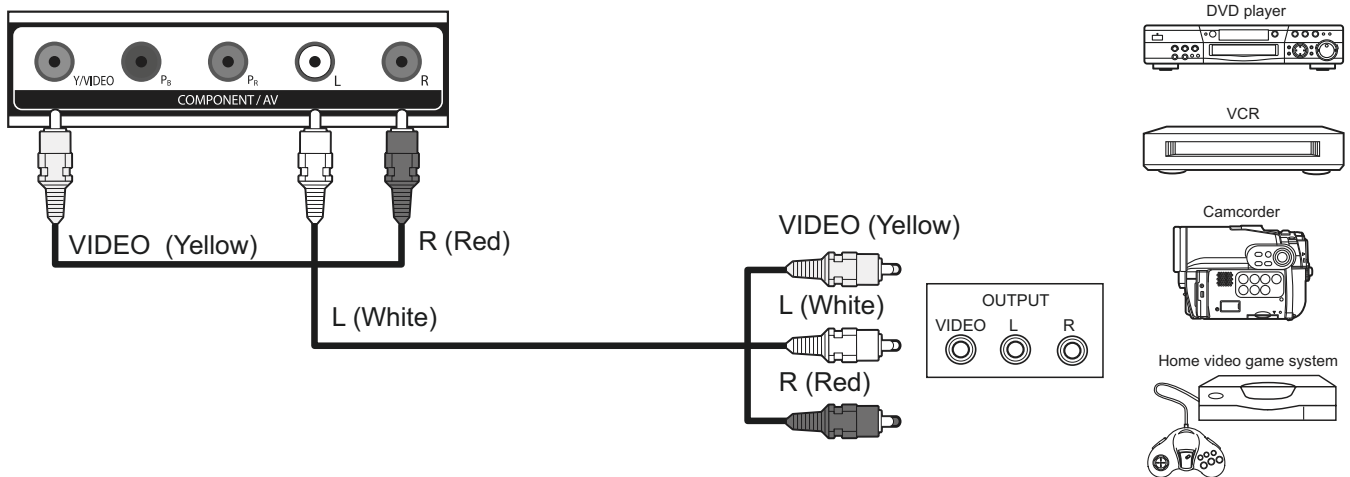


### Tips on COMPONENT connections:

- The COMPONENT Y-PbPr connection is provided for high performance DVD players, VCRs etc. that have this feature. Use these connections in place of the standard video connection if your device has this feature.
- For additional information on connecting your other electronic devices, please refer to the device's owner's guide.
- Your component outputs may be labeled Y, B-Y, and R-Y. In this case, connect the components B-Y output to the TV's Pb input and the components R-Y output to the TV's Pr input.
- Your component outputs may be labeled Y-CbCr. In this case, connect the devices Cb output to the TV's Pb input and the devices Cr output to the TV's Pr input.
- It may be necessary to adjust TINT to obtain optimum picture quality when using the Y-PbPr inputs. (See page 32).

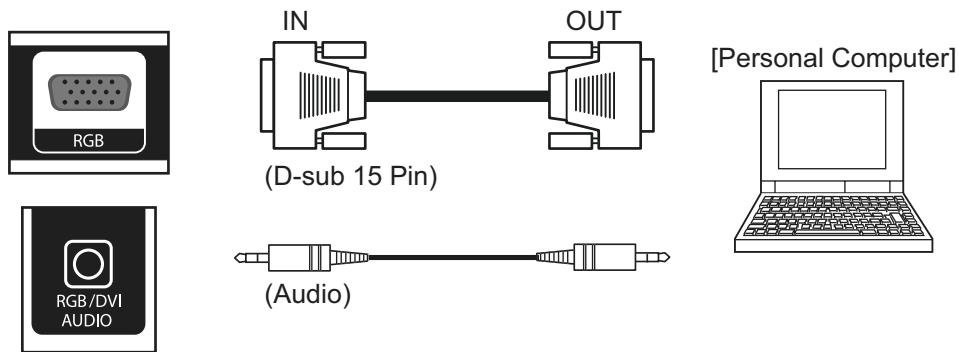
### Connecting AV device:

1. Connect with AV video cable from the video output of your AV device to the TV **COMPONENT/AV Y/VIDEO** input.
2. Connect with L/R audio cable from the audio output of your AV device to the TV **Component/AV L/R** input.
3. Press the **INPUT** button on the remote control and select **6. AV** input source.



# Panel Connections

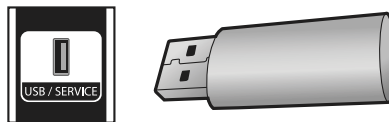
## PERSONAL COMPUTER CONNECTION



1. Connect with RGB (D-sub 15 Pin) video cable from the RGB output of your PC to the TV **RGB** input.
2. Connect with an analog audio cable from the audio output of your PC to the TV **RGB/DVI AUDIO** input.
3. Press the **INPUT** button on the remote control and select **7. RGB** input source.

## USB DISK CONNECTION

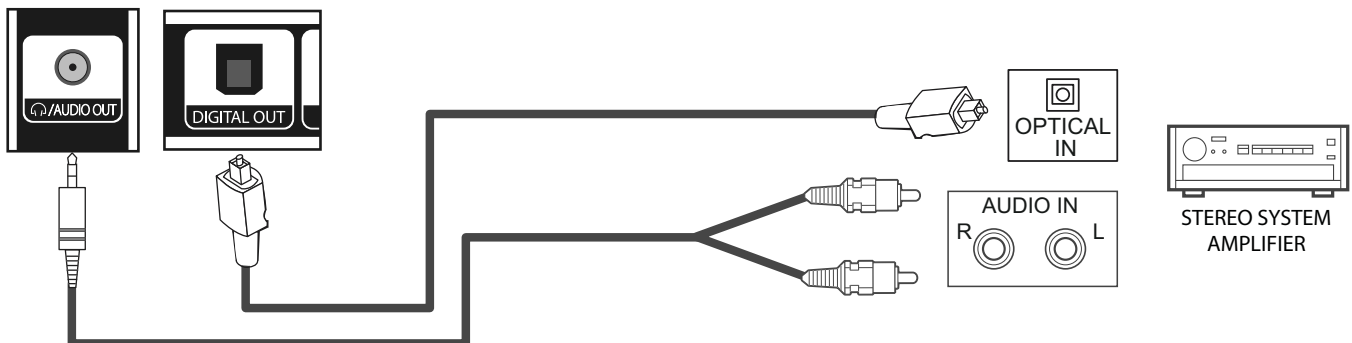
Your Hitachi LCD TV features a Photo Browser that allows watching digital still pictures from your USB disk plugged to the USB slot at the side panel. See page 42 for details.



## ANALOG/DIGITAL AUDIO OUTPUT CONNECTION

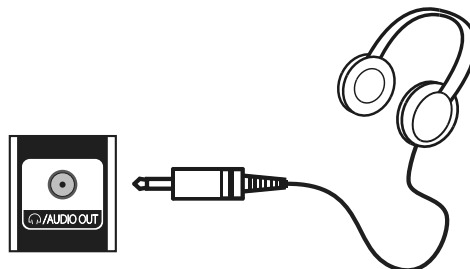
Connect with an analog audio cable from the **AUDIO OUT** jack to your analog stereo audio amplifier.

Connect with an optical fiber cable from the **DIGITAL OUT** jack to your digital stereo audio amplifier.



## HEADPHONE CONNECTION

Connect your stereo headphone to this output.



### NOTES

- Turn the TV volume down before connecting headphones.
- The audio from the TV speakers will be muted after connecting to headphones.

# Panel Connections

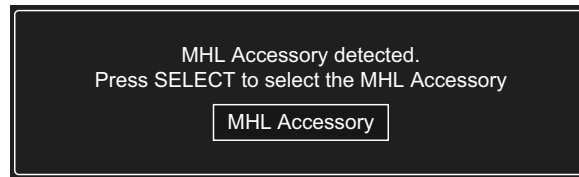
## CONNECTING A MHL-ENABLED DEVICE:

You can connect a MHL-enabled device, such as a SmartPhone or Roku Streaming Stick™, and show its screen image on your TV.

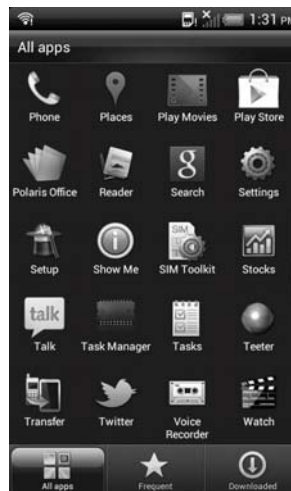
1. Connect a MHL cable (not provided) to the micro USB port on the device, then connect the other end of the cable to the **HDMI 4/MHL** jack on the side of your TV.
2. Press the **INPUT** button on the remote control and select **4. HDMI 4** input source.



3. Connect a MHL-enabled device to your TV. The following message is displayed. Press the **SELECT** button on the remote control to access your MHL-enabled device.



4. Your device's menu opens. You can use **CURSOR** left (◀), right (▶), down (▼), or up (▲) buttons to navigate on your device, and press the **SELECT** button on the remote control to access its menu.



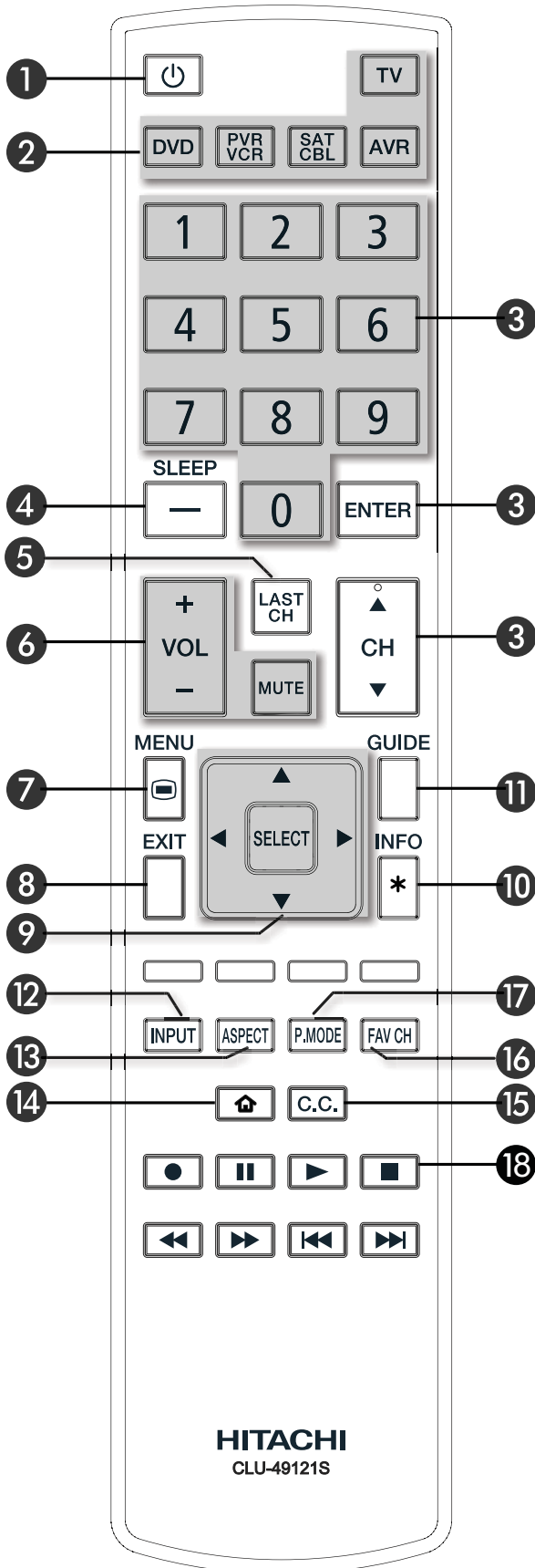
**NOTE** • Your device's menu varies with the device and the apps you have loaded.

5. To switch to a MHL-device that is already connected, you can press the **INPUT** button on the remote control and select **4. HDMI4 (Roku)** input source.



**FIRST TIME USE**

# The Remote Control



## 1 POWER Button

Press this button to turn the TV set on or off.

## 2 DEVICE Buttons

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

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

Repeat the same procedure for other devices. Press the DVD button for DVD players, press the PVR/VCR button for personal video recorders, press the SAT/CBL button for satellite/cable boxes, and press the AVR button for audio video receivers.

See pages 24 ~ 27 for instructions on how to program the remote control to control your device.

## 3 CHANNEL SELECTOR/ENTER Buttons

The CHANNEL SELECTOR buttons are used to select channels, lock access code, etc. Use the CHANNEL SELECTOR buttons to enter one, two, or three numbers to select channels. Enter 0 first for channels 1 to 9, or simply press the single digit channel you wish to tune, then press the ENTER button for the TV to tune. Channel selection may also be performed by CHANNEL (CH) UP (▲) or CHANNEL (CH) DOWN (▼).

## 4 (-) DASH/SLEEP Button

Use the (-) DASH button with the CHANNEL SELECTOR buttons to enter Digital Channels that have subchannel numbers indicated by (-) DASH (For example: 15-1). Also press to Set the Sleep Timer from 5 minutes to 4 hours.

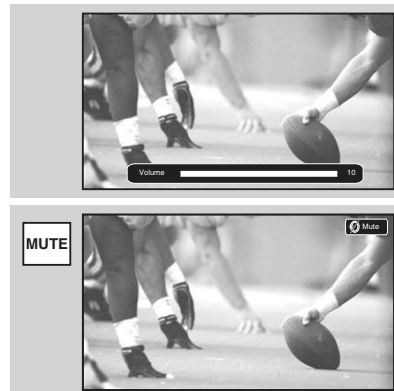
## 5 LAST CHANNEL (LAST CH) Button

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

## 6 VOLUME (VOL), MUTE Button

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

Press the MUTE button to turn the sound off completely (**Mute**) or half the normal level (**Soft Mute**). To restore the sound, press the MUTE button again for **Mute Off**, or press the VOL UP (+) button directly.



# How To Use The Remote Control To Control Your TV

Closed Captioning will display automatically when MUTE is on and Closed Caption is set to **With Mute** (See page 39).

When the TV power is turned off at a volume level 21 or greater, the volume level will default to a level 20 when the TV is turned on. However, if it is set to a level 20 or less, the volume level will be at the level it was set when the TV was turned off.

## 7 MENU Button

The MENU button will start the On-Screen Display.

## 8 EXIT Button

This button will exit all On-Screen Displays.

## 9 CURSOR PAD/SELECT Button

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

## 10 INFO/\* Button

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

## NOTES

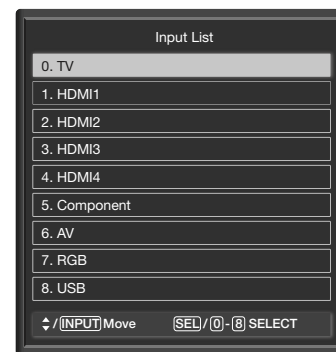
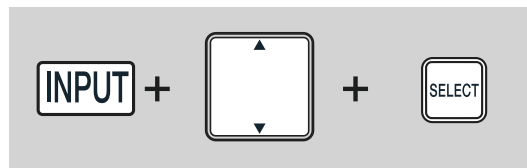
- Press the **INFO** button again or the **EXIT** button to return to normal viewing.
- The **Aspect INFO** will not be shown when the **INFO** button is pressed.

## 11 GUIDE Button

Press this button to access the Channel Guide of your satellite receiver, set top box or cable box while in SAT/CBL mode.

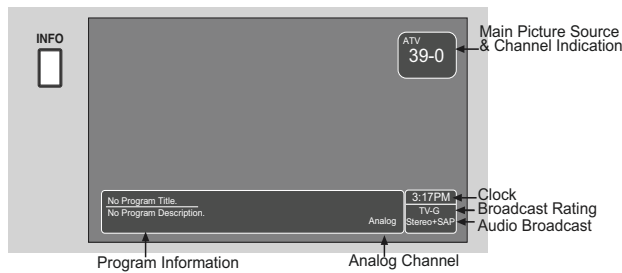
## 12 INPUT Button

Press this button to access the Input List. Use the CURSOR and SELECT buttons to select the desired input. Pressing the INPUT button repeatedly will also cycle through the inputs that are available. Then press the SELECT button or wait 4 seconds to automatically select the highlighted input.

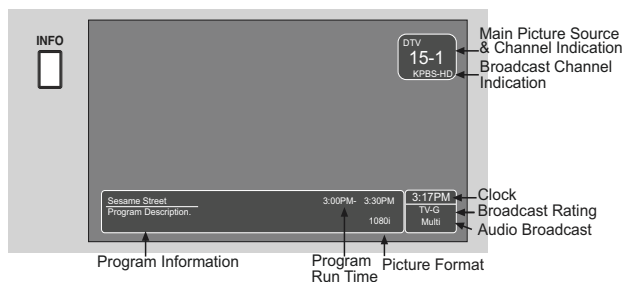


REMOTE CONTROL

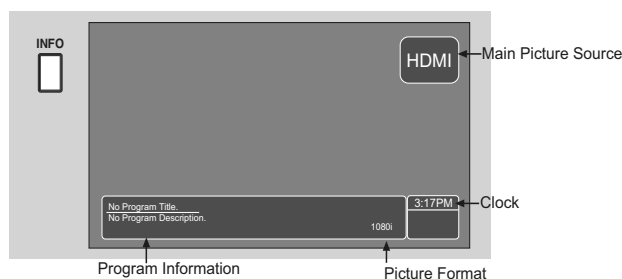
### ANALOG CHANNELS



### DIGITAL CHANNELS



### VIDEO INPUTS



- |              |                                       |
|--------------|---------------------------------------|
| 0. TV        | Watch TV from an Air or Cable signal. |
| 1. HDMI1     | Select to choose HDMI1 Input.         |
| 2. HDMI2     | Select to choose HDMI2 or ARC Input.  |
| 3. HDMI3     | Select to choose HDMI3 Input.         |
| 4. HDMI4     | Select to choose HDMI4 or MHL Input.  |
| 5. Component | Select to choose Component Input.     |
| 6. AV        | Select to choose AV Input.            |
| 7. RGB       | Select to choose PC input.            |
| 8. USB       | Select to choose USB input.           |

## NOTE

- Depending on the device, it may be required to turn on the device for the TV to recognize if it is available. You can access these inputs by using the cursor or number buttons on the remote control.

# How To Use The Remote Control To Control Your TV

## 13 ASPECT Button

Press this button to quickly change the picture format ASPECT ratio. Depending on the picture format, ASPECT allows you to adjust the image through the following options.

### Auto

Use this aspect mode to have the aspect mode change automatically by signal detector.

### Normal

Use this aspect mode to display conventional (4:3) images. Side panels (black areas) are placed to the left and right of the image to preserve the original aspect ratio of the source.

### Wide

Use this aspect mode to display 16:9 sources like HDTV and DVD's preserving the original 16:9 aspect ratio showing 95% for SD / 97.5% for HD of the size.

### Cinema

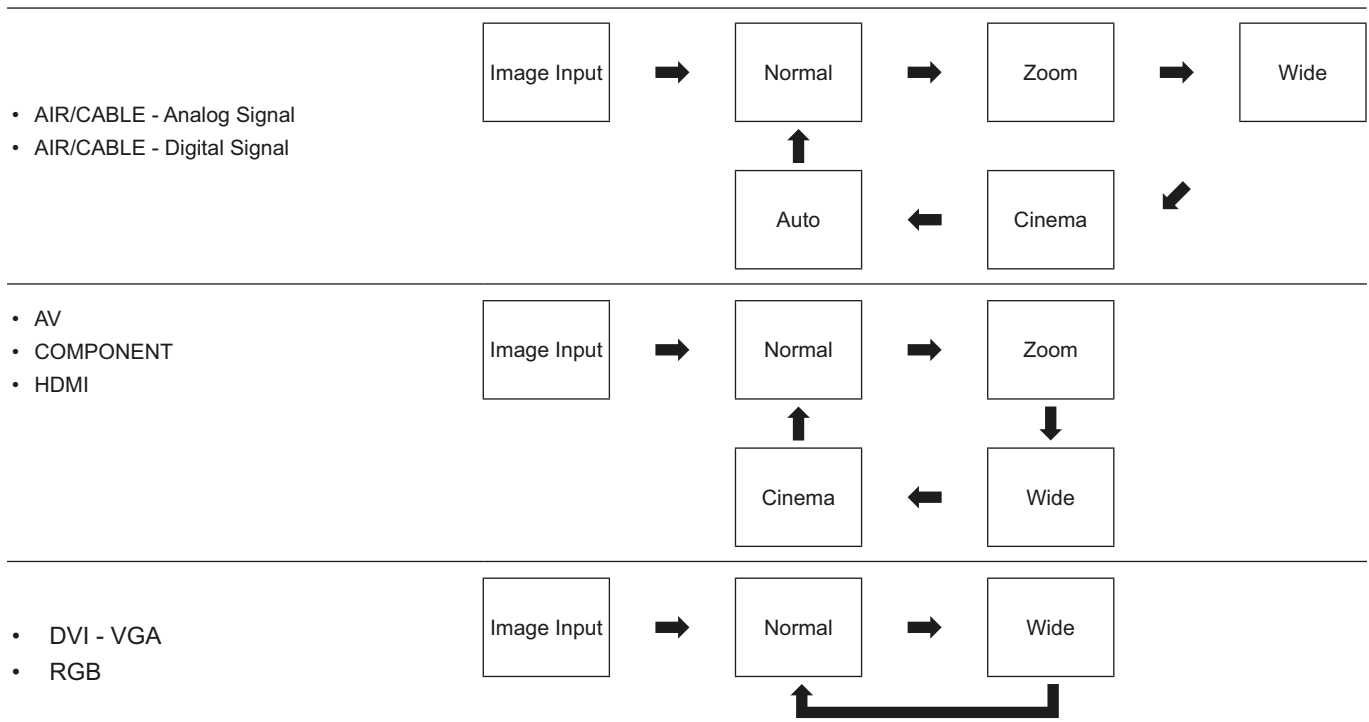
Use this aspect mode to fill the screen with very widescreen movies.

### Zoom

Use this aspect mode to zoom in and to reduce the black bars.

### NOTES

- Each input has memory for the Aspect setting. Changing the aspect on one input will not affect the aspect settings on other inputs.
- See page 57 for Aspect availability according to signal format in use.




# How To Use The Remote Control To Control Your TV

## 14 HOME Button

If you are not in the HDMI4 input, pressing this button will automatically switch to the HDMI4 input.

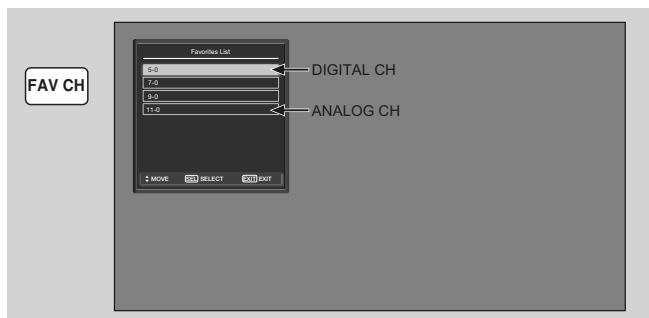
If HDMI4 is your current input, pressing this button will activate the HOME menu of the MHL device connect to the HDMI4/MHL port.

## 15 CLOSED CAPTIONS (C.C.) 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 .

## 16 FAVORITE CHANNEL (FAV CH) Button

Press the **FAV CH** button to display the Favorite CH List. You have to first setup the Favorite Channels in the Channels Menu in order to display the list. Press the **FAV CH** button on the remote control to display the list and select the desired channel using the CURSOR PAD and then press **SELECT** button to view.



## 17 PICTURE MODE (P.MODE) Button

Press this button to toggle among **Dynamic**, **Standard**, **Pro-Day**, **Pro-Night**, **Game**, and **Custom** picture mode settings. Select **Dynamic** mode for automatic brightness and contrast adjustment. Select **Standard** mode for day time viewing with more brightness and contrast to compete with room light. Select **Custom** mode for viewing with your own brightness and contrast picture settings. **Game** mode is for automatic brightness and contrast adjustment when playing video games.

## 18 DEVICE CONTROL Buttons

These buttons can control external devices (i.e. PVR/VCR, DVD, etc.) directly depending on the device mode set on the remote control. Also, these buttons are for controlling devices with Consumer Electronics Control (CEC) through the HDMI connection like Blu-Ray or DVD players, PVR, or Set Top Boxes while in TV mode.

**NOTE**

- For some devices, these buttons are not available to control through the TV and HDMI connection; please refer to the device's owner's guide for more information.

# How To Use The Remote Control To Control Your AV Device

## OPERATING THE PRECODED FUNCTIONS FOR YOUR AV DEVICE.

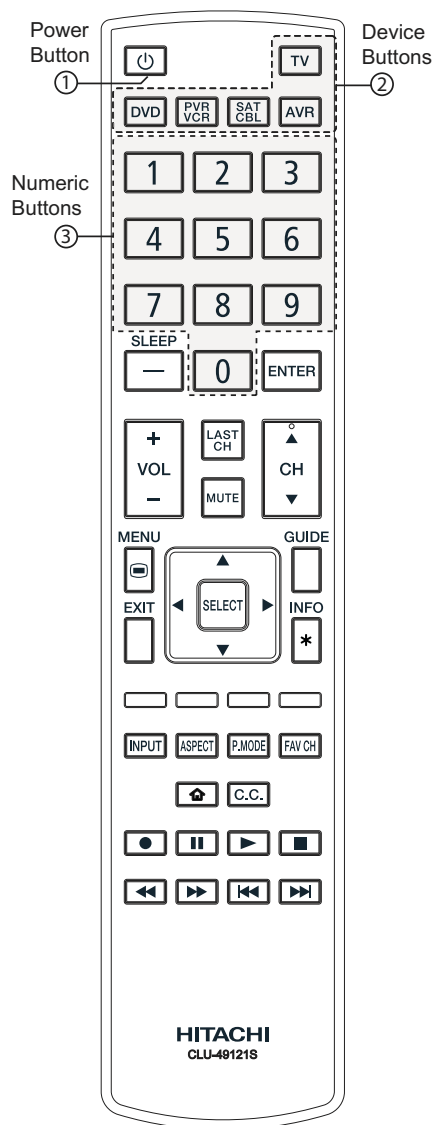
The new remote control is designed to operate different types of VCRs, cable boxes, set top boxes, satellite receivers, DVD players, and other audio/video device. You must first program the remote control to match the remote control system of your AV device (refer to pages 28 ~ 29 for a preprogrammed code number).

### AV DEVICE CONTROL SETUP PROCEDURE

1. Turn on your AV Device.
2. elect the desired mode: DVD, PVR/VCR, SAT/CBL or AVR by pressing the corresponding button.
3. Hold down the device button (DVD, PVR/VCR, SAT/CBL or AVR) on the remote control and enter the four digit preset code that matches your device as shown on pages 28 ~ 29.
4. Release the device button.
5. If done correctly, the device LED indicator will blink 3 times to confirm proper setup.
6. The remote control will now control the desired device.

### SETUP EXAMPLE (HITACHI CABLE BOX WITH PRECODE 0003)

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

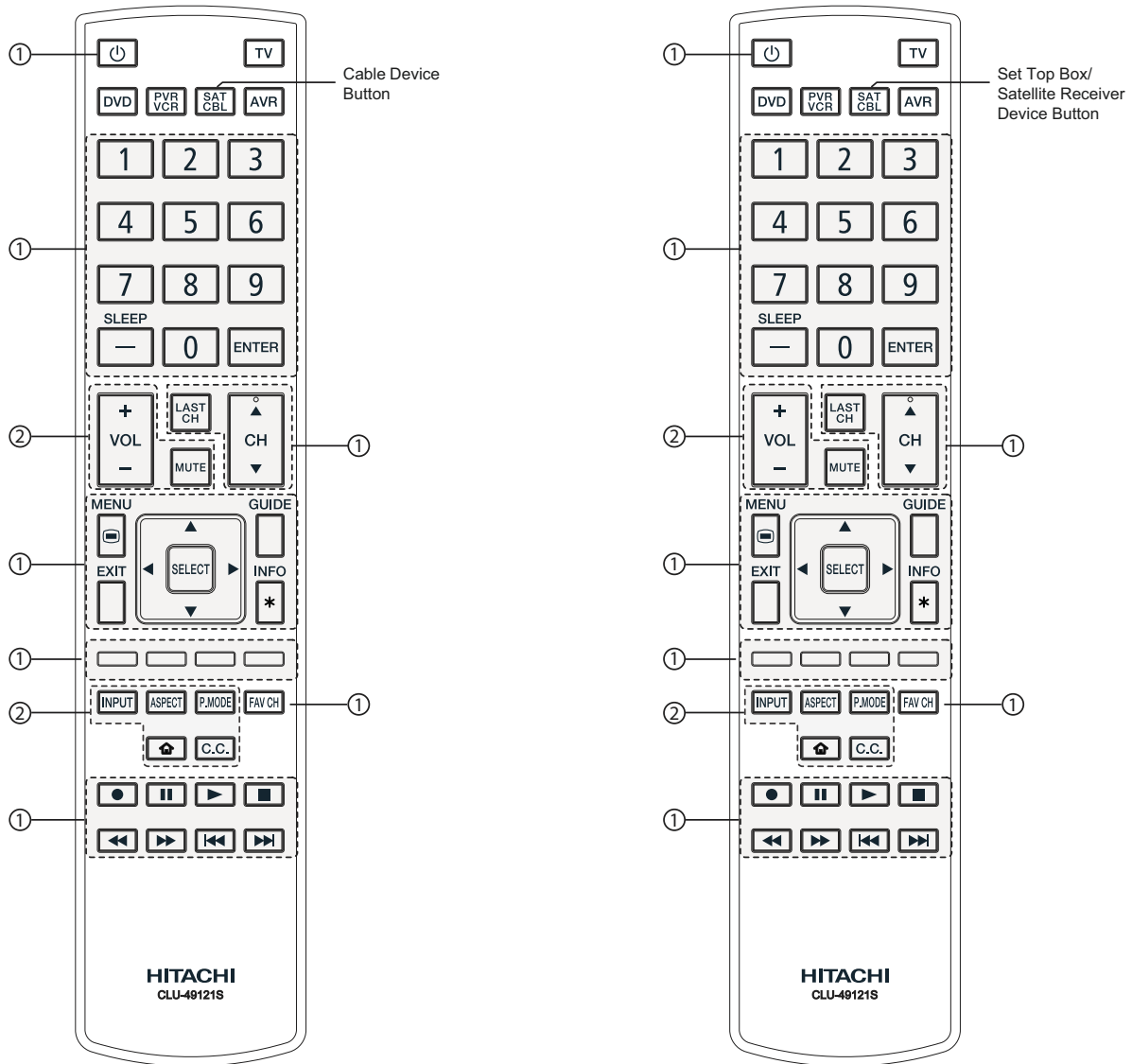


### NOTES

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



# How To Use The Remote Control To Control Your AV Device



**REMOTE CONTROL**

**MY CABLE BOX CODE IS:** \_\_\_\_\_

**NOTE**

- Refer to the instruction manual of the cable box for operation of the buttons exclusively for the cable box.

**① PRECODED CABLE BOX Buttons**

These buttons transmit the chosen pre-coded cable codes:

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

**② EXCLUSIVE TV Buttons**

These buttons are for operating the TV :

- |          |                |        |
|----------|----------------|--------|
| -P. Mode | -CC            | -Input |
| -Aspect  | -Vol Up & Down | -Mute  |
| -Home    |                |        |

**MY SET TOP BOX/SATELLITE RECEIVER CODE IS:** \_\_\_\_\_

**NOTE**

- Refer to the instruction manual of the set top box/satellite receiver for operation of the buttons exclusively for the set top box/satellite receiver.

**① PRECODED SET TOP BOX/SATELLITE Buttons**

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

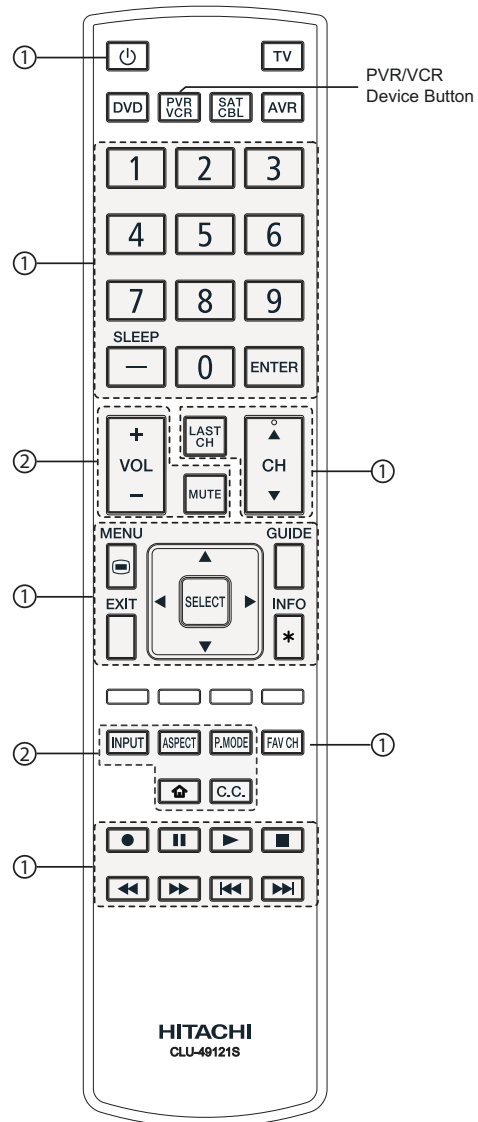
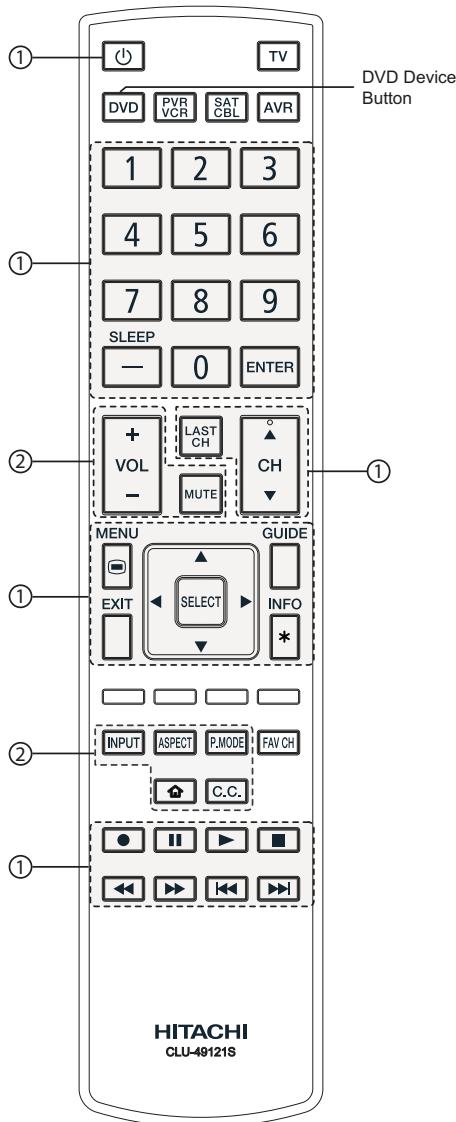
- |   |                    |                |
|---|--------------------|----------------|
| -Power  | -Cursor & Select   | -Number PAD    |
| -Menu   | -Info              | -Enter         |
| -Exit   | -Channel Up & Down | -Dash (-)      |
| -Guide  | -Last CH           | -Fav CH        |
| -Play, Stop,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

**② EXCLUSIVE TV Buttons**

These buttons are for operating the TV :

- |          |                |        |
|----------|----------------|--------|
| -P. Mode | -CC            | -Input |
| -Aspect  | -Vol Up & Down | -Mute  |
| -Home    |                |        |

# How To Use The Remote Control To Control Your AV Device



**MY DVD PLAYER CODE IS:** \_\_\_\_\_

**MY VCR/PVR CODE IS:** \_\_\_\_\_

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

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

## ① PRECODED DVD Buttons

These buttons transmit the chosen precoded DVD codes:

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

## ② EXCLUSIVE TV Buttons

These buttons are for operating the TV:

- |          |                |        |
|----------|----------------|--------|
| -P. Mode | -CC            | -Input |
| -Aspect  | -Vol Up & Down | -Mute  |
| -Home    |                |        |

## ① PRECODED VCR/PVR Buttons

These buttons transmit the chosen precoded set top box/satellite receiver codes :

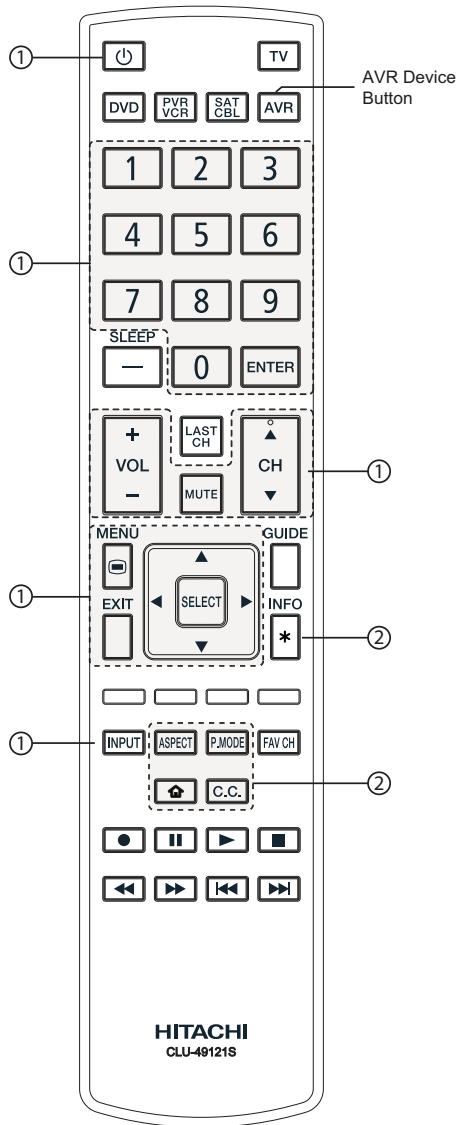
- |                        |                    |                 |
|------------------------|--------------------|-----------------|
| -Power                 | -Cursor & Select   | -Enter          |
| -Menu                  | -Channel Up & Down | -Dash(-)        |
| -Exit                  | -Number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

## ② EXCLUSIVE TV Buttons

These buttons are for operating the TV :

- |          |                |        |
|----------|----------------|--------|
| -P. Mode | -CC            | -Input |
| -Aspect  | -Vol Up & Down | -Mute  |
| -Home    |                |        |

# How To Use The Remote Control To Control Your AV Device



**REMOTE CONTROL**

## MY AUDIO/VIDEO RECEIVER (AVR)

IS: \_\_\_\_\_

**NOTE**

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

### ① PRECODED AVR Buttons

These buttons transmit the chosen pre-coded AVR codes:

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

### ② EXCLUSIVE TV Buttons

These buttons are for operating the TV:

- P. Mode
- Home
- CC
- Aspect



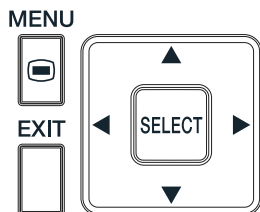


# On-Screen Display

## To enter the OSD (On-Screen Display):

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

This part of the screen shows which selections are available.



### NOTE

- The On Screen Display (OSD) for the different submenus shown in the following pages are for illustration purposes only, there may be slight differences from the actual appearance of the OSD of your Hitachi LCD TV.

## Video

- **Picture Mode** Select among different picture modes.
- **Brightness** Adjust picture brightness.
- **Contrast** Adjust picture contrast.
- **Color** Adjust color.

**Advanced Video** Adjust advanced video feature to fine tune the picture.

- **Reel120<sup>®</sup> Motion** Adjust the smoothness of motion in movies.
- **Color Temperature** Set to High for less intense color with more blue, set to Medium for natural color and set to Standard for warm colors.
- **Noise Reduction** Reduce noise in the picture.
- **Tint** Adjust the overall color tone to appear natural.
- **Sharpness** Adjust the fine detail in the picture.
- **Dynamic Gamma** Automatically adjust picture detail and brightness.
- **Aspect Ratio** Select the preferred picture's aspect ratio.
- **Overscan** When connecting a computer, turn off to show the full image on the TV.
- **Backlight** Adjust to increase or decrease the brightness of backlight.
- **White Balance** Adjust the shadow color (Cutoff) and white color (Drive) to achieve natural whites and neutral grey shadow
- **Lock Settings** Select On to lock your favorite settings.
- **Reset** Choose to Reset Video Settings to factory settings.

## Audio

- **Sound Mode** Selects 6 audio presets (Standard, Movie, Music, News, Custom, Equalizer).
- **Balance** Adjust the balance.

**Advanced Audio** Adjust additional audio features.

- **Bass** Adjust the intensity of low frequencies.
- **Treble** Adjust the intensity of high frequencies.

## On-Screen Display

• <b>Equalizer</b>	Fine tune the audio frequencies seperately at 130Hz, 400Hz, 1.2kHz, 4kHz, and 9.5kHz.
• <b>Internal Speakers</b>	Turn On/Off internal speakers.
• <b>Digital Output</b>	Select Optical Output options (Available for digital channel and HDMI).
• <b>Audio Source</b>	Select between three Audio Sources (Stereo, Mono, SAP) (Available for analog channel).
• <b>Audio Language</b>	Select Language options if available (Available for digital channel).
• <b>Perfect Volume</b>	Adjust volume to be closer in level between channels.
• <b>Reset</b>	Resets all Audio settings the original condition.

### Channels

• <b>Source</b>	Select the signal Source for the TV.
• <b>Auto Channel Scan</b>	Search for active channels and store them to the channel list.
• <b>Signal Strength</b>	Access Signal Strength meter (Available for digital channel).
• <b>Add/Skip Channels</b>	Set changes to Channel List.
• <b>Favorite Channels</b>	Manage your Favorite Channels.
• <b>Channel Labels</b>	Assign names to any of the channels.
• <b>Audio Only</b>	Play the audio with the picture turned off.
• <b>Auto Aspect</b>	Automatically adjust aspect ratio based on TV size and TV program.

### Setup

• <b>Menu Language</b>	Choose English, Spanish, or French for OSD Language.
• <b>Parental Controls</b>	Ratings system to block various types of programs.
• <b>Closed Captions</b>	Feature to turn On/Off closed captions.
• <b>Time</b>	Set Clock Settings.
• <b>Input Labels</b>	Assign name to any of available inputs excluding the TV input.

• <b>HDMI - CEC</b>	Set to On, this feature will enable simplified operation of compatible HDMI CEC devices.
• <b>RGB Options</b>	Adjust Horizontal Position, Vertical Position, Clock, Phase and Reset.
• <b>System Info</b>	Display information about your TV.
• <b>Energy Options</b>	Select Power Consumption Savings options.
• <b>Light Control</b>	Turn On or Off the Accent Light on the front of your TV.
• <b>Demo Mode</b>	Turn the Demo Mode On or Off.
• <b>Reset AV &amp; Setup</b>	Resets all Audio, Video and Setup settings to the original condition.

### Photos

• <b>Photos</b>	View digital still pictures from USB Drives.
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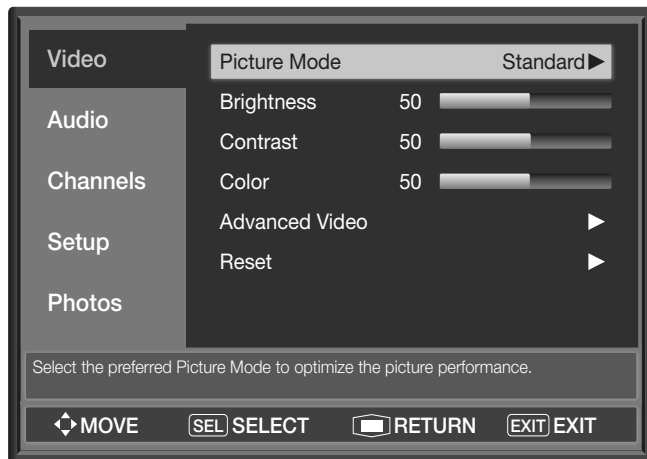
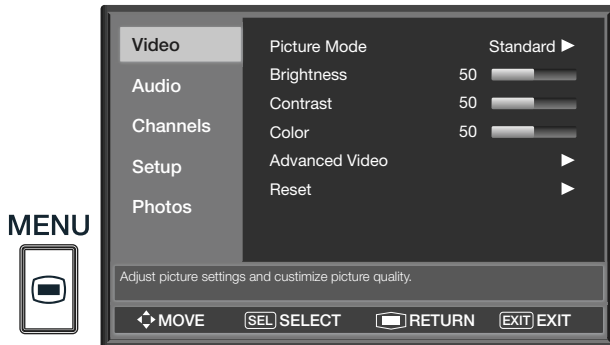
### NOTES

- If there are any options grayed out, this is an indication that the option is not available for that specific input or mode.
- Changing of any Video/Audio settings, other than the Standard/Default settings, may not meet the ENERGY STAR requirements.

# Video

## VIDEO MENU

Select **Video** to adjust picture settings and improve picture quality. You can independently customize each of the video inputs, including Analog channels separately from Digital Channels (under TV Mode). The adjustments will be applied to Custom settings.



### Picture Mode

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

1. Use the CURSOR PAD ► to select Picture Mode settings.
2. Then press the CURSOR PAD ◀ to return to the Video menu or press the EXIT button to quit menu.
3. There are six Picture Modes available: **Dynamic**, **Standard**, **Pro-Day**, **Pro-Night**, **Game**, and **Custom** Mode. **Standard** mode is the factory preset mode for your TV. The only mode that can be directly changed by adjusting any Video setting to your desired conditions is the **Custom** mode. The other modes, with the exception of the **Pro-Day** and **Pro-Night**, are preset. **Game** mode is for automatic brightness and contrast adjustment when playing video games. Any changes made to these modes will be applied to **Custom** mode.

### NOTES

- For the PC input, there are only two Picture modes available: **Standard** and **Custom**. In this case, only the **Custom** mode can be changed to your desired conditions.
- Video setting can be set to the user's preference in **Game** mode (Similar to **Custom** mode) with the exception of the "**Reel120 Motion**" setting.
- If you change any of the adjustments in the **Dynamic**, and **Standard** modes, the name of the **Custom** option will change. For example, the changes on **Dynamic** will rename the option as "**Custom-Dyn.**". This means that the original picture mode is not affected by the changes; the only thing affected is that **Custom** mode will take the video adjustments of the mode where the change was made.
- For Input Mode, **CABLE** and **AIR** share the same Video adjustment settings. Also, each of the video inputs have their own independent video adjustment settings.

### Brightness

Use this function to change the overall brightness of the dark areas of the picture.

### Contrast

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

### Color

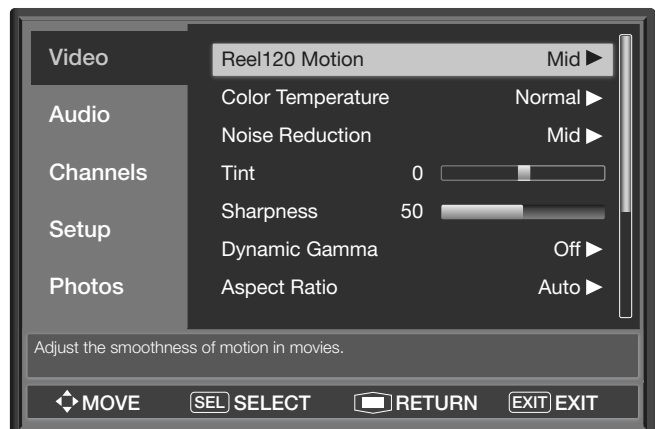
Use this function to adjust the level of color in the picture.

### Advanced Video Settings

Press the SELECT button or the CURSOR PAD ► to enter the function settings.

#### Reel120® Motion

Hitachi's advanced video processor can display movies at 120 frames per second. The following settings are available to smooth the motion of movie sources. Please note that the effect may not be immediately noticeable and the effect depends on the content of the movie.





# Video

1. Use the CURSOR PAD ▲ or ▼ to highlight Reel120 Motion function.
2. Press the CURSOR PAD ► to select:

**24p Film Mode:** Select for a smooth and clear motion from film based video.

**High:** Select for the maximum smooth motion effect.

**Mid:** Select for a moderate smooth motion effect.

**Low:** Select for a mild smooth motion effect.

**Off:** Select this setting if there is noise with the High, Medium or Low settings.

## Color Temperature

Set to **High** for cooler color with more blue, set to **Medium** for a more natural color or set to **Standard** for accurate color.

## Noise Reduction

The Noise Reduction function automatically reduces conspicuous noise in the picture without degrading picture quality. Set Noise Reduction to **Off** if you see individual blocks 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.

## Dynamic Gamma

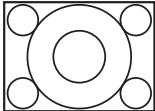
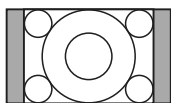
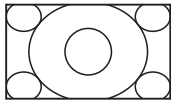

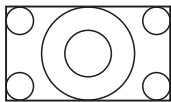

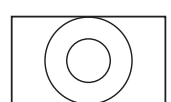
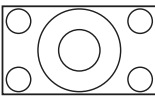
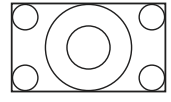
The Dynamic Gamma feature produces greater picture detail in dark or bright scene area.

## Aspect Ratio

Use this function to select the Picture Format Aspect Ratio.

**Auto Aspect:** Automatically adjust the Aspect Ratio depending on the input signal.

**Aspect Modes:** Manually select the Aspect Ratio. There are different aspect ratios available according to the signal in use. See page 57.

Input Signal	Display Screen	Display Aspect Recommended	To display suitable screen as follows:
<b>When Watching Standard Definition Pictures:</b>			
 (4:3 Signal)		Normal	Displays 4:3 programs in their original aspect ratio with bars to the left and right of the image.
		Wide	Expands a 4:3 aspect ratio program to fill the widescreen 16:9 screen
 (Vista)		Zoom	Use this aspect mode to expand letterbox movies to fill the screen. Note that some of the image may not be visible.
 (Cinema)		Cinema	Use this aspect mode to fill the screen with very widescreen movies. Note that some of the image may not be viewable in this mode.
<b>When Watching High Definition Pictures:</b>			
 (16:9 Signal)		Wide	Plays a 16:9 image faithfully showing 95% for SD / 97.5% for HD of the size.

# Video

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## Overscan

When connecting a computer, turn off to show the full image on the TV.

## Backlight

Adjust the brightness of the Backlight for maximum visibility. It changes the intensity of the backlight. Increase for bright rooms and decrease for darker rooms to make the dark areas of the picture black.

## White Balance

Use this function to adjust the dark end (Cutoff) and bright end (Drive) of the White background.

## Lock Settings

Select On to lock your favorite settings

### NOTE

- *This function is available only for **Pro-Day** and **Pro-Night** modes.*

## Reset

This function allows you to reset the Video Menu Settings of the present input source and return it to the Standard video mode.

1. Use the CURSOR PAD ▲ or ▼ to highlight this function.
2. Press the SELECT button or the CURSOR PAD ► to select **Yes** or **No**.
3. Press the SELECT button on the **Yes** option to execute the reset of the Video settings.

Depending on the video program being viewed, you can customize each video input to your preference to increase viewing performance and pleasure.

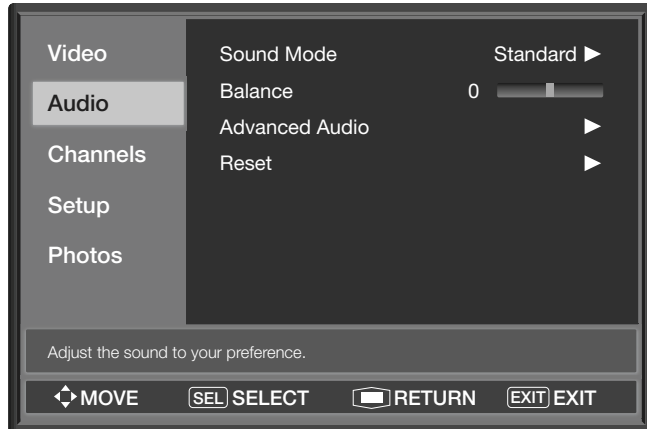
### NOTES

- *If you run this Reset function, only the present input source will reset to its initial condition. For example, if the Reset function has been selected and done for HDMI 1 input source, only the HDMI 1 settings will return to its factory default.*
- *If "**Lock Settings**" is turned on (refer to page 34) running the Reset function will not effect your **Pro-Day** and **Pro-Night** Mode settings.*

# Audio

## AUDIO MENU

Select Audio to adjust the sound to your preference.



### Sound Mode

Select the sound mode you like.

- **Standard:** Normal audio conditions.
- **Movie:** Enhanced treble and bass for watching movies.
- **Music:** Good for music listening.
- **News:** Clear for watching news programs.
- **Custom:** Manually adjust for your preference.
- **Equalizer:** Allows you to adjust separately at the spectrum 130Hz, 400Hz, 1.2kHz, 4kHz, and 9.5kHz.

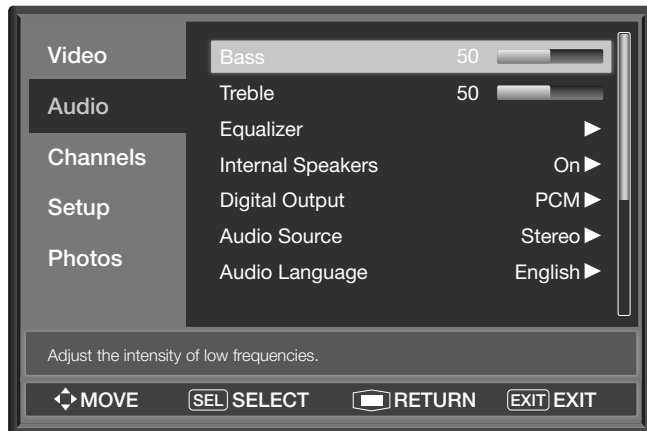
The only mode that can be directly changed by adjusting any audio setting to your desired conditions is the **Custom** mode. The other modes are preset and any changes made to these modes will be applied to Custom mode.

### Balance

This function controls the left to right audio balance of both the internal speakers and headphone jack.

### Advanced Audio

Press the CURSOR PAD ► to enter its sub-menu.



### Bass

This function controls the low frequency audio to the speakers.

### Treble

This function controls the high frequency audio to the speakers.

### Equalizer

After selecting **Equalizer** as your sound mode, you can adjust the audio spectrum each at 130Hz, 400Hz, 1.2kHz, 4kHz, and 9.5kHz.

### Internal Speakers

This function is useful when using external speakers. Select **On** if using the internal speakers only. Select **Off** if you prefer to use the speakers from a separate stereo system.

### Digital Output

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

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

### 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 SAP(Second Audio Program) which may be a secondary language, weather report, etc. This setting is only for analog channels.

### Audio 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 10 language options (if available). Please try all available options.

### Perfect Volume

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

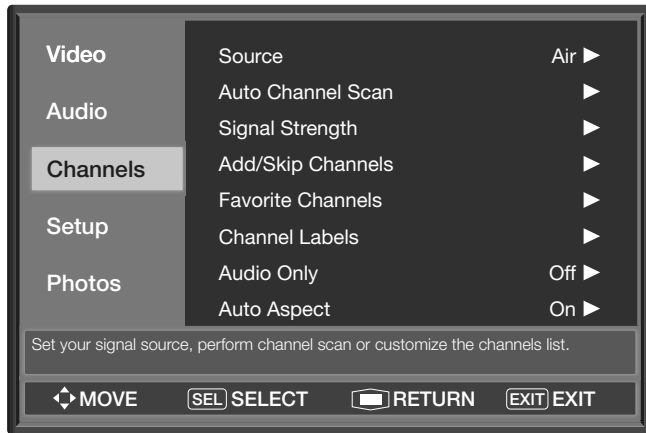
### Reset

This function allows you to reset the Audio Menu Settings of the present input source and return it to the Standard mode and default settings.

# Channels

## CHANNELS MENU

Select Channels to set your signal source options, run New Channel Scan, check Signal Meter and set Channel List (Add channels to List, Channel/Labels and Favorite Channels).



1. Press the CURSOR PAD ▲ or ▼ to highlight functions.
2. Press the SELECT button or the CURSOR PAD ► enter the next sub-menu.
3. Press the CURSOR PAD ▲ or ▼ to select.

### Source

Select the signal Source for the TV. Select Air for using an indoor or outdoor antenna. Select Cable for using a cable system.

### Auto Channel Scan

This feature will automatically store active Analog and Digital channels to the Channel list. This scan will erase all channels previously stored in the list.

### Signal Strength

Select Signal Strength when using an indoor or outdoor antenna. This feature will show the signal strength of the antenna signal to help you adjust your antenna to optimize signal reception. Use the MENU or the EXIT button to return.

**NOTE** • The Signal Strength meter will not be available (grayed out) when watching analog channels.

### Add/Skip Channels

This function allows you to add channels to the channel memory.

### Favorite Channels

This function allows you to manage your favorite channels.

1. Use the CURSOR PAD ▲ or ▼ to navigate the Channels.



2. Press the SELECT button or the CURSOR PAD ► to check mark the channel and make it a Favorite channel. Select all desired channels.
3. Press the EXIT button to return to normal viewing.
4. To view all the Favorite channels that you have chosen, press the FAV CH button on the remote control.



### Channel Labels

Use this feature to give a name to any of the channels.



### Audio Only

Play the audio with the picture turned off.

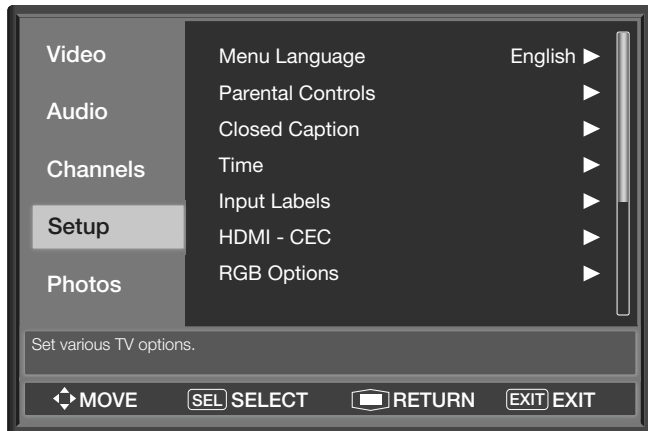
### Auto Aspect

Automatically adjust aspect ratio based on TV size and TV program.

# Setup

## SETUP MENU

Select Setup when setting up your TV for the first time.



1. Use the CURSOR PAD ▲ or ▼ to select the Setup menu.
2. Use the CURSOR PAD ► to enter the option of your choice and make the changes that you need.
3. Press the MENU button to return.

### Menu Language

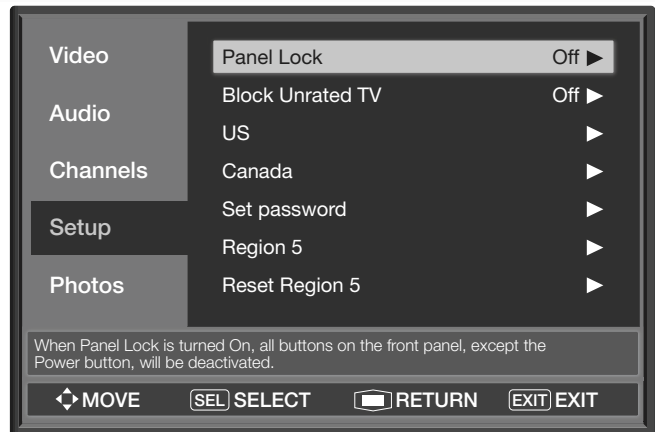
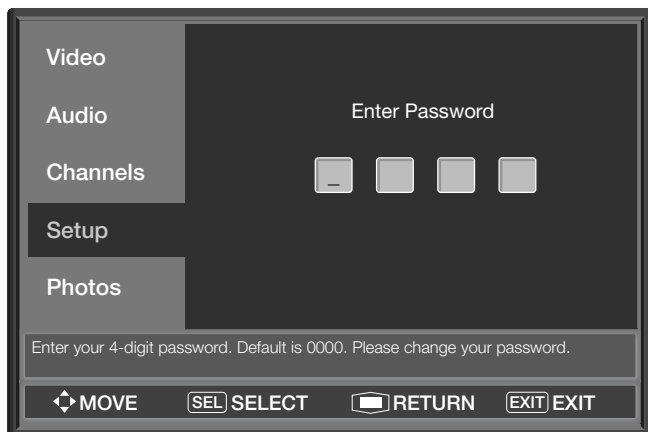
Sets the Language of the Menu OSD. This feature will allow you to select any one of three different languages for the on-screen displays.

1. Use the CURSOR PAD ► to select the language of your choice.
2. Press the EXIT button to quit the menu or the MENU button to return to the previous menu.

### Parental Controls

This function will block out the picture and sound of the selected rating levels.

The password to enter the Locks feature is a 4 digit number. The factory preset password is **0000**. Use the NUMERIC buttons to enter the password.



### Panel Lock

When Panel Lock is turned On, all buttons on the front panel, except the POWER button, will be deactivated.

### Block Unrated TV

When this feature is turned On, programs without ratings will be blocked.

### US

This option will block TV and Movie Ratings in the USA to prevent viewing of any content that you feel may be inappropriate (See page 37).

### Canada

This option will block TV and Movie Ratings in Canada to prevent viewing of any content that you feel may be inappropriate due to its content (See page 38).

## U.S. Motion Picture Ratings Table

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

### NOTES

- If the movie does not carry a rating, the TV will not block it.
- Blocking NOT RATED programs may block emergency programming, sports, news, public service announcements, religious programs and weather.

# Setup

## U.S. TV Parental Guide Ratings Table

TV-Y	All children. The themes and elements in this program are specifically designed for a very young audience, including children from ages 2-6.
TV-Y7	Directed to older children. Themes and elements in this program may include mild physical or comedic violence, or may frighten children under the age of 7.
TV-G	General audience. It contains little or no violence, no strong language, and little or no sexual dialogue or situations.
TV-PG	Parental guidance suggested. The program may contain infrequent coarse language, limited violence, some suggestive sexual dialogue and situations.
TV-14	Parents strongly cautioned. This program may contain sophisticated themes, intense sexual situation, more intense violence and intensely suggestive dialogue.
TV-MA	Mature audiences only. This program may contain mature themes, indecent language, graphic violence, and explicit sexual content.

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

### NOTES

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

## Canadian Ratings English Table

C	Programming intended for children under age 8 - Violence Guidelines; Careful attention is paid to themes, which could threaten children's sense of security and well-being. There will be no realistic scenes of violence. Depictions of aggressive behavior will be infrequent and limited to portrayals that are clearly imaginary, comedic or unrealistic in nature. Other Content Guidelines: There will be no offensive language, nudity or sexual content.
C8+	Programming generally considered acceptable for children 8 years and over to watch on their own - Violence Guidelines: Violence will not be portrayed as the preferred, acceptable, or only way to resolve conflict; or encourage children to imitate dangerous acts which they may see on television. Any realistic depictions of violence will be infrequent, discreet, of low intensity and will show the consequences of the acts. Other Content Guidelines: There will be no profanity, nudity or sexual content.

G	General Audience - Violence Guidelines: Will contain very little violence, either physical or verbal or emotional. Will be sensitive to themes which could frighten a younger child, will not depict realistic scenes of violence which minimize or gloss over the effects of violent acts. Other Content Guidelines: There may be some inoffensive slang, no profanity and no nudity.
PG	Parental Guidance - Programming intended for a general audience but which may not be suitable for younger children. Parents may consider some content inappropriate for unsupervised viewing by children ages 8-13. Violence Guidelines: Depictions of conflict and/or aggression will be limited and moderate; may include physical, fantasy, or supernatural violence. Other Content Guidelines: May contain infrequent mild profanity, or mildly suggestive language. Could also contain brief scenes of nudity.
14+	Programming contains themes or content which may not be suitable for viewers under the age of 14 - Parents are strongly cautioned to exercise discretion in permitting viewing by pre-teens and early teens. Violence Guidelines: May contain intense scenes of violence. Could deal with mature themes and societal issues in a realistic fashion. Other Content Guidelines: May contain scenes of nudity and/or sexual activity. There could be frequent use of profanity.
18+	Adult - Violence Guidelines: May contain violence integral to the development of the plot, character or theme, intended for adult audiences. Other Content Guidelines: May contain graphic language and explicit portrayals of nudity and/or sex.

## Canadian Ratings French Table

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.

# Setup

## Set password

1. To change the password, select Set the Password option to change the factory preset password (**0000**) to your preference. If you forget your password, use the factory password **7777** to change your password.
2. Enter a new four digit number.
3. Press the EXIT button to quit the menu.

## Region 5

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

## Reset Region 5

Clear the downloaded Region 5 rating information and restore to the factory default settings.

## Ratings Procedure

1. Use the CURSOR PAD ◀ or ▶ to select the Rating category (MPAA, TV Rating, etc.) that you want to block.
2. Press the SELECT button to block the Rating that you have selected.
3. Press the EXIT button to quit the menu.


## Region 5 Alternate Ratings (Example Only)

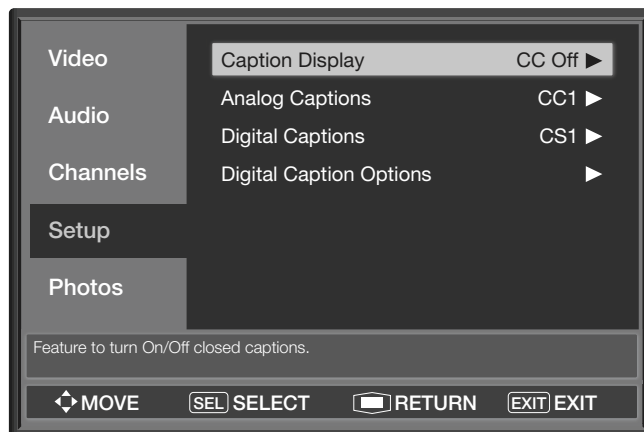
G	General audiences. All ages admitted.
PG	Parental guidance suggested. Some material may not be suitable for children.
PG-13	Parents strongly cautioned. Some material may be inappropriate for children under 13.
R	Restricted. Under 17 requires accompanying parent or adult guardian.
NC-17	No one 17 and under admitted.
X	Adults only.
Y	Adults only.

### NOTES

- In order to set the Region 5 Ratings the ATSC Digital channel received must include Region 5 Ratings data. To see if the channel has Region 5 Ratings, press the INFO button on the remote control.
- Once the TV has received Region 5 Ratings data, the Region 5 option in the Parental Controls menu will become available and display the data.

## Closed Caption

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



1. Use the CURSOR PAD ▲, ▼ and ▶ to highlight and select the function to change.

### CC On / CC Off

Turn the display **CC** on or off.

### CC With Mute

Turn the display **CC** on when Mute is on.

2. Press the EXIT button to quit menu or press MENU to return to the Main MENU.

## Analog Captions

Set captions for analog programs. This function will help choose and set available mode and channel.

### CC1 ~ CC4

These are for the program you are viewing.

### TEXT1 ~ TEXT4

These are 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.

## Digital Captions

Set captions for digital programs and set available language.

### Digital Caption Options

This function will help choose and set font, size, color and background style of digital captions.

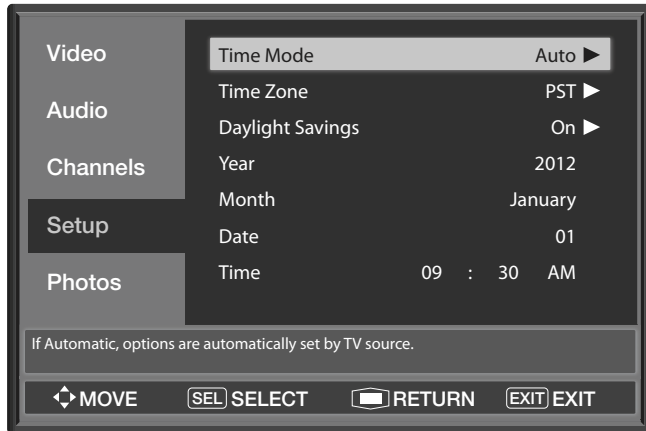
### NOTES

- The Digital Closed Captions feature only works when using the "TV" input of this television.
- Caption Display will not work when viewing a 480i, 480p, 720p, 1080i or 1080p input via the COMPONENT: Y-PbPr or HDMI inputs.
- Analog and digital Closed Captions availability and content depends on the broadcaster. Digital Closed Caption are available when the Closed Caption icon is displayed on the info banner.
- Digital Captions language will not be available (grayed out) when using analog channels.

# Setup

## Date/Time

Use this option to set the Clock, Date and Time Zone for your LCD TV.



1. Use the CURSOR PAD ▲, ▼ and ► to highlight and setup the Time settings.
2. If you observe daylight savings, use the CURSOR PAD to highlight **Daylight Savings** and press the CURSOR PAD ► to activate it. This can only be changed if the Time Mode is set to **Auto**.
3. Use the CURSOR PAD to highlight and adjust the Current Time (hour and minute), AM or PM, Month, Day and Year.
4. Press the SELECT button to set the Time.
5. Press the EXIT button to quit the menu or the MENU to return to the previous menu.

### NOTES

- When Auto is set, Daylight Savings can be set, the TV will automatically calculate the clock adjustment for Daylight Saving. Set this setting according to the current DST status.
- The TV counts electrical pulses for regulating the timers. When the power cord is unplugged quickly, the clock will reset to factory default setting.
- The Year, Month, Date, and Time setup can be changed only if the Time Mode is set to Manual.

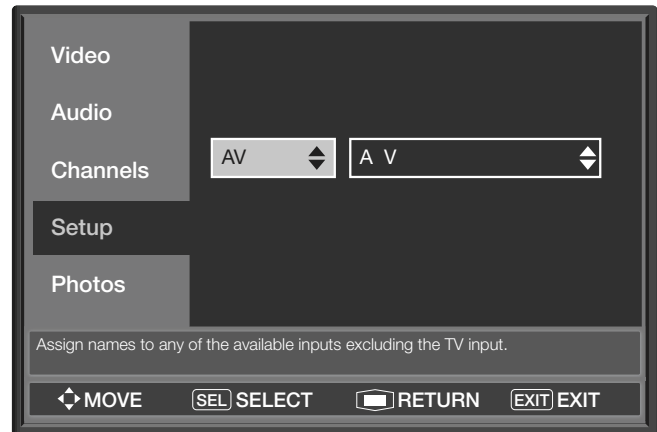
## Sleep Timer

Select this feature to set your Sleep Timer from 5 minutes to 240 minutes.

## Input Labels

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

1. Press the CURSOR PAD ▲ or ▼ to highlight Inputs Labels.
2. Press the CURSOR PAD ► to select your choices.



## HDMI - CEC

Set to On and this feature will enable the HDMI-CEC signal bus to allow your Hitachi LCD TV to discover and communicate automatically with other compatible HDMI-interfaced Audio/Video device.

The CEC signal bus makes global controls possible, based on “plug & play” automation, to minimize the number of IR remotes and key-presses required for basic operation of your AV device. Select Off to disable this option.



With the “HDMI - CEC” feature, you can interface the connected device through the HDMI jack automatically if the connected device meets the “HDMI CEC (Consumer Electronics Control)” industry standard. Please check if the connected device supports HDMI CEC before using this feature.

For example, here are three common functions after setting item “CEC Enable” to “On”.

Feature	Description
One-Touch Play (TV Auto On)	Pushing the “Play” button on the CEC enabled device will command the device to play, turn the TV on, and the HDMI input, that the device is connected to, will become the active input device for the TV.
System Standby (Device Auto Off)	When the user turns off the TV, all active CEC enabled devices on the HDMI input will go to Standby.



# Setup

Feature	Description
Playback Control	The user can operate the CEC enabled device's deck control functions (i.e. Play, Stop, Fast Forward and Rewind) by the TV's remote control's transport keys (ie. ▶, ■, ◀◀ and ▶▶).

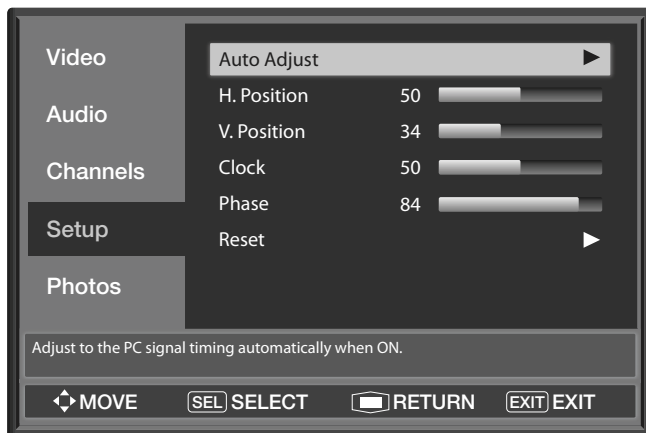
**NOTE** • *Not all devices with an HDMI connection have the CEC feature. Consult the instruction manuals for the device you are trying to control to confirm whether or not CEC is available.*

## RGB Options

This function is to adjust the RGB input to match your PC or laptop output with your LCD Television.

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

There are six options for the RGB input: **Auto Adjust**, **H-Position**, **V-Position**, **Clock**, **Phase**, and **Reset**.



### Auto Adjust

Adjusts Horizontal Position, Vertical Position, Clock, and Phase automatically.

### H-Position

Adjusts the display position horizontally.

### V-Position

Adjusts the display position vertically.

### Clock

Minimizes vertical stripes on the screen.

### Phase

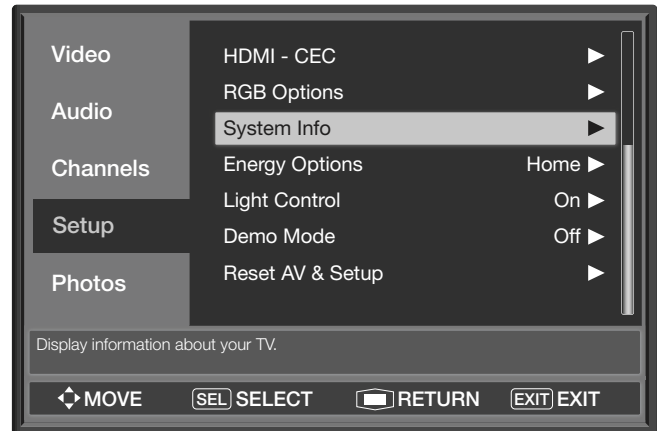
Minimizes the blurring of letters and stripes on horizontal row.

### Reset

Each item in RGB Options Menu will be restored to the factory setting by selecting Yes.

## System Info

Display information about your TV.



## Energy Options

Select Power Consumption Savings options.

### Home/Retail

You can change the initial setting to either **Home** or **Retail** mode quickly through this menu option, without running the TV Setup Wizard again (See page 13).

**NOTE** • *Retail mode is intended for showroom use only. Any menu or control changes in this mode will not be saved when the TV is turned off.*

## Light Control

This feature allows you to save electric energy consumption by turning Off the Accent Light on the front of your TV.

### Demo Mode

Turn the demo mode On or Off.

A TV feature introduction will be popped up at the upper right screen corner.

### Reset AV & Setup

This feature restores all Audio, Video and Setup settings to the factory default values.

**NOTE** • *If "Lock Settings" is turned on (refer to page 34) running the Reset function will not effect your Pro-Day and Pro-Night Mode settings.*

# Photos

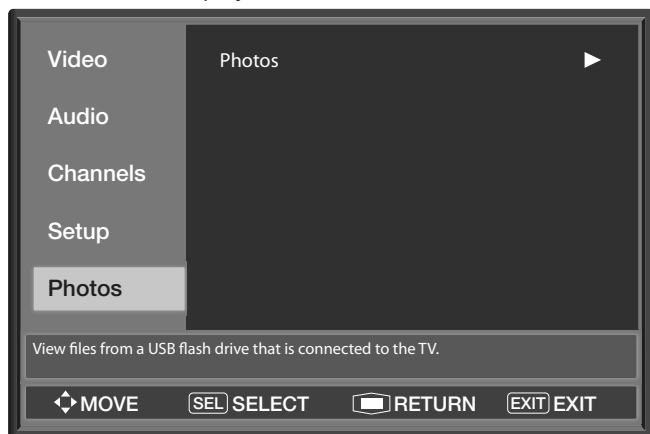
## PHOTOS MENU

Your Hitachi LCD TV allows watching digital still pictures from your USB disk plugged to the USB slot at the side panel.

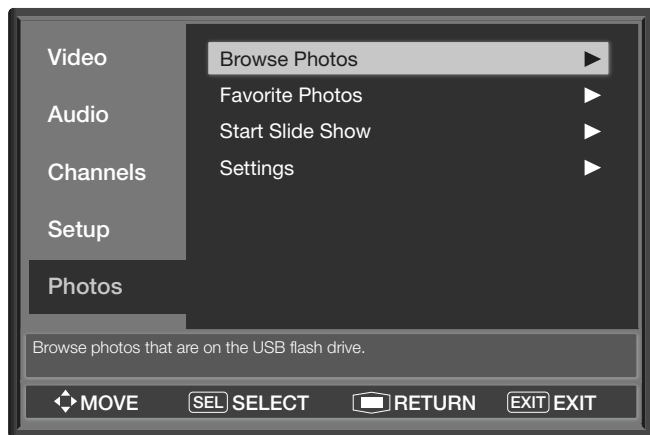
### To browse your photos:

With your USB disk plugged to the TV, you can browse your photos at anytime.

1. Press MENU button on the remote control to enter the On-Screen Display.



2. Use the CURSOR PAD ▲ or ▼ to highlight **Photos** and use the CURSOR PAD ► to select and enter its sub-menu.



### Browse Photos

Press the CURSOR PAD ► button to enter the file folder that contains photos you want to browse.

### Favorite Photos

Browse only the selected photos. To do so, you will have to press **FAV CH** button to check on the photo as one of your favorite photos while in the **Browse Photos** menu.

#### NOTE

- This function is available only when selected **8. USB** as the input source.

### Start Slide Show

Press to browse your photos in a slideshow manner.

## Settings

Customize the slideshow settings: **Repeat**, **Shuffle**, **Speed**, and **Transition**.

- **Repeat:** Repeats the slideshow when it reaches the end.
- **Shuffle:** Displays the slideshow photos in random order.
- **Speed:** Sets the amount of time a photo is displayed before the slideshow moves to the next photo. The options are 4 Sec, 6 Sec, or 8 Sec.
- **Transition:** Selects the way photos transition when moving to the next file in the slideshow. You can select:
  - **None:** No transition effect.
  - **Fade to Black:** Fades the screen to black between photos.
  - **Vertical Wipe:** Wipes the screen from top to bottom between photos.
  - **Horizontal Wipe:** Wipes the screen from left to right between photos.
  - **Random:** Randomly selects a transition effect.

# 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 LCD Television away from extreme heat, humidity and extremely dusty places.
- Remove the plug from the wall outlet if your LCD 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 tape on your LCD Television.
- Avoid repeatedly touching the screen.
- Do not drop or hit the remote control. This may cause internal damages.
- Avoid placing the remote control in a high humidity place or getting it wet. Do not leave it on or near a heater. Excessive heat or moisture may cause the unit to fail.
- When the batteries run down, remote control operation will become erratic or become unresponsive. Replace the old batteries with two new "AAA" size batteries. Do not use an old battery with a new battery.
- Exposing the screen to direct sunlight for a long period of time or heat may cause damage to the LCD screen.
- Do not spray any cleaners directly onto screen.

Troubles are sometimes caused by simple "faults" that you can correct without the help of a service technician. If you experience any difficulty with your TV, check a few basic remedies before calling your service technician.

### TV will not turn ON

1. Press the POWER button (ON/OFF button) once.
2. If there is still no power, wait 30 seconds and press the POWER button 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 button again.

### When the Following Messages Appear on the Screen

Message	Condition / Action
No Signal	<p>The unit cannot detect any signals from any input jacks or the TV channel does not show picture.</p> <ul style="list-style-type: none"> <li>• Check if the cable is connected correctly and firmly.</li> <li>• Check if the power of any external device is ON.</li> <li>• Check if the input selection matches the connection jack.</li> <li>• This message will be displayed for 15 minutes then the TV will turn off.</li> </ul>

### Symptom and Checklist

SYMPTOM	CHECKLIST	PAGES
No picture - no sound	<ul style="list-style-type: none"> <li>• Check the indicating lamp status (Off, Red, Blue).</li> <li>• Check the connection of the power cord and/or other cables.</li> <li>• Check if the power of the unit or external device is ON.</li> <li>• Check if the correct Video input is selected.</li> <li>• Check if the unit is in "Standby mode".</li> <li>• Adjust the values in "Video menu" and "Audio menu".</li> </ul>	9, 12 15~19 12 21 9, 12 32~35
Multiple images-normal sound	<ul style="list-style-type: none"> <li>• Check the connections to external device.</li> </ul>	15~19
Intermittent interference	<ul style="list-style-type: none"> <li>• Check if the source of interference is shielded correctly.</li> <li>• Move these kinds of electrical devices away from the unit.</li> </ul>	45
Normal picture, but no sound	<ul style="list-style-type: none"> <li>• Check the volume level.</li> <li>• Check if the MUTE button has been pressed or not.</li> <li>• Check the connections to external device.</li> <li>• Try next/other Audio Language.</li> </ul>	9, 20 20 15~19 35

# Troubleshooting

SYMPTOM	CHECKLIST	PAGES
No picture - normal sound	<ul style="list-style-type: none"> <li>Check the value level of "Brightness" and "Contrast" in "Video Menu".</li> </ul>	32
The remote control does not work.	<ul style="list-style-type: none"> <li>Check if the batteries are installed correctly.</li> <li>The batteries might be exhausted. Replace them with new ones.</li> <li>Remove all obstructions from in front of the sensor window on the unit.</li> <li>Check if the buttons on the control panel are working.</li> </ul>	6, 9
The buttons on both the remote control and control panel do not work.	<ul style="list-style-type: none"> <li>Unplug and connect the power cord again.</li> </ul>	12, 43
Normal picture but no color-normal sound	<ul style="list-style-type: none"> <li>Check the connections to external device.</li> </ul>	15~19
No picture The Indicating lamp → Off	<ul style="list-style-type: none"> <li>Check if the power cord is plugged into the socket securely.</li> </ul>	12
No picture The indicating lamp → Blue	<ul style="list-style-type: none"> <li>Check if the signal cable is connected correctly and securely.</li> <li>Adjust the level of Brightness and Contrast lower.</li> </ul>	15~19 32
Some screen display aspects cannot be switched in.	<ul style="list-style-type: none"> <li>Check the signal status by pressing the INFO button on the remote control. The available screen display aspect is different depending on the current signal status.</li> </ul>	11, 22, 57
No power	<ul style="list-style-type: none"> <li>Check the power cord is connected to the AC outlet.</li> </ul>	9, 12
Turns Off by itself	<ul style="list-style-type: none"> <li>Check or ensure Sleep Timer settings are not activated.</li> </ul>	11, 20, 40
Turns On by itself	<ul style="list-style-type: none"> <li>Check if the HDMI-CEC feature is activated.</li> </ul>	40
Picture may "block" or freeze when watching a digital channel.	<ul style="list-style-type: none"> <li>Check signal strength under "Signal Strength".</li> </ul>	36

## HDMI Issues

SYMPTOM	CHECKLIST	PAGES
No picture - no sound	<ul style="list-style-type: none"> <li>Make sure you have selected the correct HDMI input. Toggle through them while HDMI device is ON or during playback.</li> <li>Unplug and re-plug HDMI connection while TV and HDMI source device are powered on.</li> <li>Turn TV and HDMI device off. Turn TV on first and then HDMI device second.</li> </ul>	15, 16, 21
Error notice comes to screen	<ul style="list-style-type: none"> <li>Try pressing "exit" on HDMI device remote control and then on TV remote control to find source of the error OSD. If error persist or comes back even after pressing exit, try alternate HDMI input on TV.</li> <li>Unplug and re-plug HDMI connection while TV and HDMI source device are powered on.</li> <li>Turn TV and HDMI device off. Turn TV on first and then HDMI device second.</li> </ul>	9, 11, 15
No sound from TV Optical Out when using HDMI devices	<ul style="list-style-type: none"> <li>Change Digital Output selection.</li> <li>As an option, use audio optical output from HDMI source device directly to separate Audio Amplifier.</li> </ul>	18
Picture flickers during channel change w/ using HDMI set top boxes	<ul style="list-style-type: none"> <li>This is normal operation from the source switching delay itself. It's not an indicator of a TV malfunction.</li> </ul>	
Picture is blurry or fuzzy	<ul style="list-style-type: none"> <li>If HDMI source is HD capable, ensure it's output is set to 1080p, 1080i or 720p under HDMI device menu (of the HDMI source device).</li> </ul>	
Pixelization noise or loss connection ("No Signal" message display)	<ul style="list-style-type: none"> <li>Check HDMI input picture format, if use 1080p format confirm cable length it is recommended that the length of the cable should be less than 5 meters, or change HDMI input picture format to 1080i.</li> </ul>	

If the problem cannot be solved with the suggested procedures, contact 800.HITACHI. For your safety, never try to repair the product yourself.

# Reception Problems

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## 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.

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## 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.

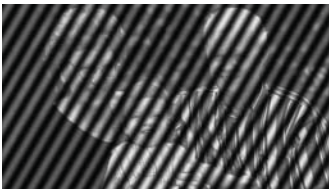
---



## 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.

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## 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 device other than the television. If you find a problem receiving Radio when using the television, check the instructions mentioned above.

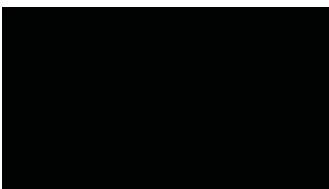
---



## BLOCK NOISE or FREEZE (DIGITAL INPUT):

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

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## BLACK SCREEN:

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

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### NOTE

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

# Features And Specifications

## Picture Performance:

- 120Hz 1080p Perfected (1920 x 1080)
- Reel120® Motion Correction
- HDMI® Key Features
  - InstaPort
  - CEC(Consumer Electronics Control)
  - ARC(Audio Return Channel)
  - 1080p/60/24
- MHL (Mobile High-Definition Link)
- 3D Y/C Comb Filter
- 3 Preset Color Temperatures
- Custom White Balance
- Game Mode

## Convenience Features:

- Picture Modes:  
Dynamic/Standard/Game/Custom/Pro-Day/Pro-Night  
PRO-Mode Lockable Day/Night Memories  
Picture Memory by Input
- Screen Aspect Modes: (Normal/Cinema/Zoom/Wide/  
Auto)<sup>1</sup>
- V-Chip Parental Control
- Lighting LOGO

## Audio Performance Features:

- 6 Sound Modes (Custom, Standard, Movie, Music, News, Equalizer)
- Rated Output Power: 10W+10W (L/R)

## Inputs:

- Power Input..... AC 120V, 60Hz
- Power Consumption
  - Maximum Power (42")..... 110 W, 0.92A
  - Maximum Power (46")..... 140 W, 1.17A
  - Maximum Power (55")..... 175 W, 1.46A
- Antenna Input Impedance..... 75 Ohm
- Channel Coverage..... 191ch.
  - VHF-Band ..... 2~13
  - UHF-Band ..... 14~69
  - CATV Mid Band..... A5~A1, A~I
  - Super Band ..... J~W
  - Hyper Band ..... W+1~W+28
  - Ultra Band ..... W+29~W+94
- Television System..... NTSC Standard  
..... ATSC Standard (8VSB)  
..... Cable Standard (64-QAM, 256-QAM)
- Video..... 1.0Vp-p, 75 Ohm
- Component Video
  - Luminance (Y)..... 1.0Vp-p, 75 Ohm
  - Chrominance (Pb/Pr) ..... 0.7Vp-p, 75 Ohm
- Audio Input Impedance..... >10k Ohm
- Audio Input Sensitivity ..... 500mVrms
- HDMI..... (19 PIN)

## Supplied Accessories:

- Remote Control
- Batteries (AAA)
- Owner's Guide
- Easy Graphic Guide
- Stand Base
- Stand Screws
- Hinge cover for wall mount
- Power Cord

## Inputs/Outputs:

- (4) HDMI®
- (1) MHL (Shared HDMI 4)
- (1) Component Y, Pb, Pr / Composite Video Input
- (1) RGB Video Input
- (1) RGB/DVI Audio Input (3.5mm Stereo)
- (1) USB Multimedia/Service Input
- (1) Antenna (RF) Input
- (1) Digital Audio Output (Optical)
- (1) Headphone/Lineout Output (3.5mm Stereo)

## Specifications:

- FCC class ..... B for Consumer Use
- Power Requirements ..... 108-132VAC, 60Hz

<sup>1</sup> Screen mode availability varies by input format.

VGA and XGA are trademarks of International Business Machines Corporation.

VESA is a registered trademark of the Video Electronics Standard Association.

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](http://www.hitachi.us/tv) for detailed specifications and dimensions for custom installations.



HDMI, the HDMI logo and High-Definition Multimedia Interface are trademarks or registered trademarks of HDMI Licensing LLC in the United States and other countries.



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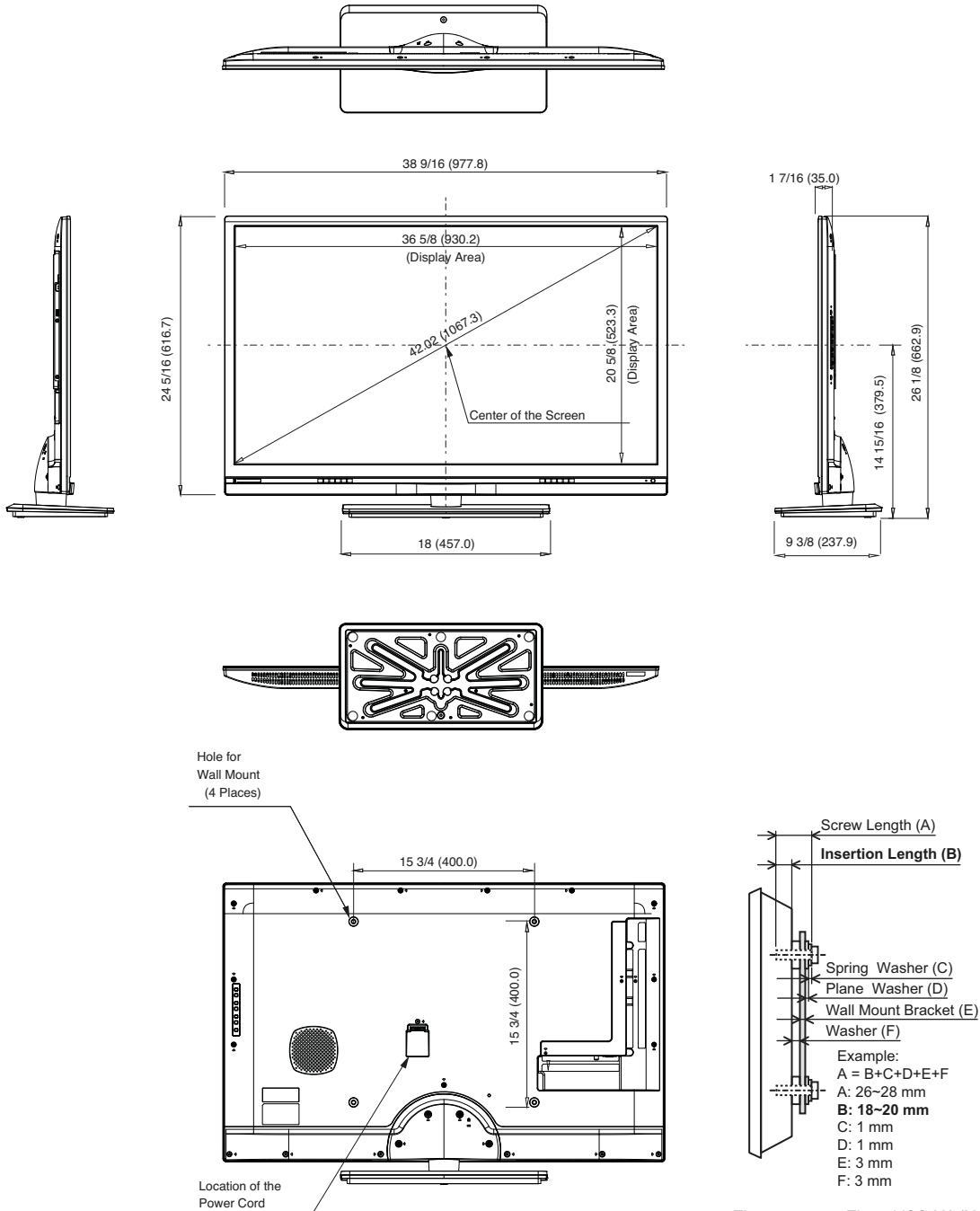


MHL, Mobile High-Definition Link and the MHL Logo are trademarks or registered trademarks of the MHL, LLC.

# Set Dimensions

42" model (Includes Table Top Stand) Weight (lbs./kg): 30.9/14.0

Units : Inches (mm)



Rear View  
Use as Reference for Wall Mount Bracket

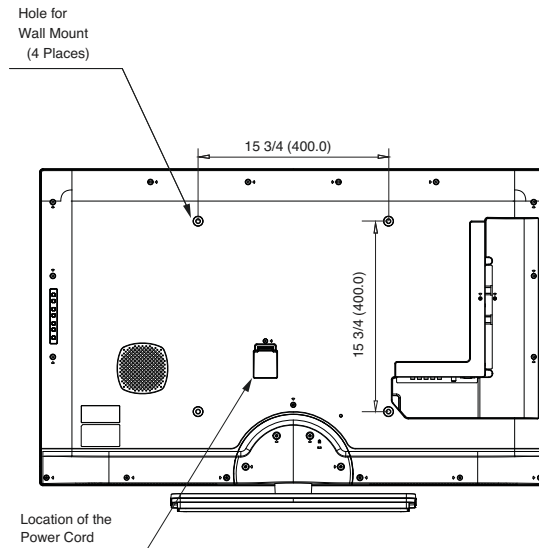
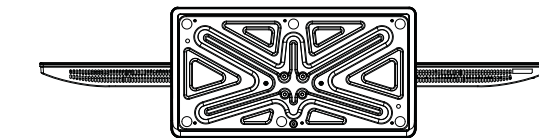
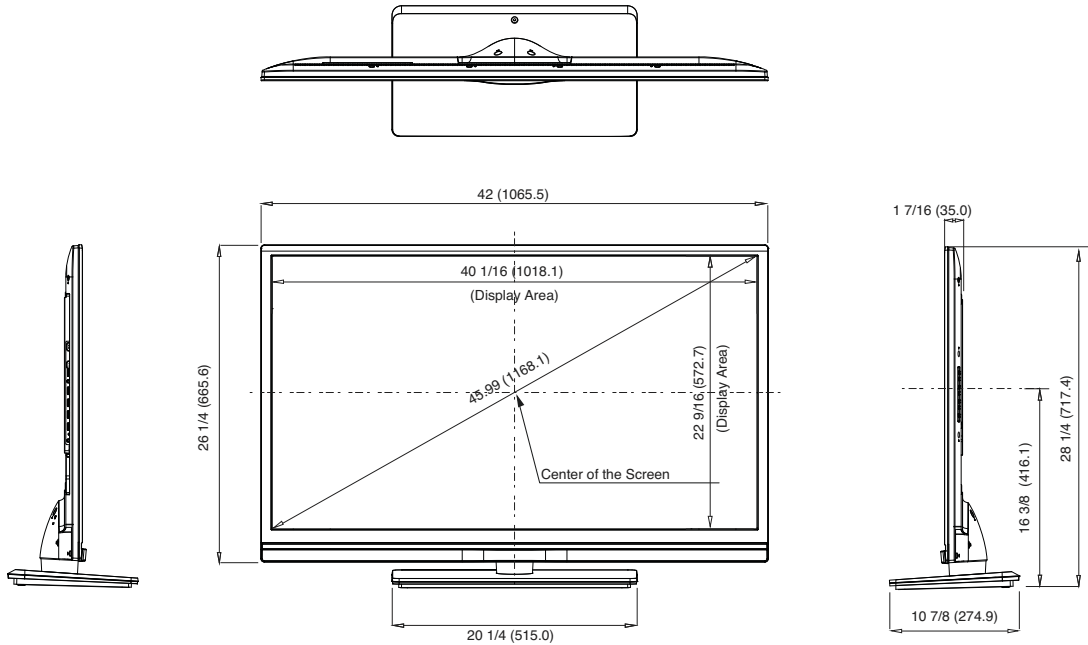
Side View  
Wall Mount Screw specification

**USEFUL INFORMATION**

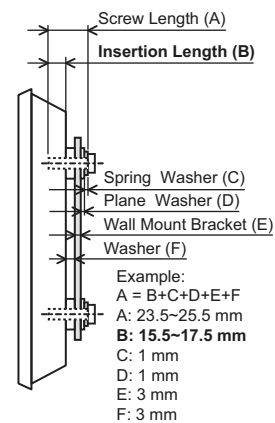
# Set Dimensions

46" model (Includes Table Top Stand) Weight (lbs./kg): 39.5/17.9

Units : Inches (mm)



Rear View  
Use as Reference for Wall Mount Bracket



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

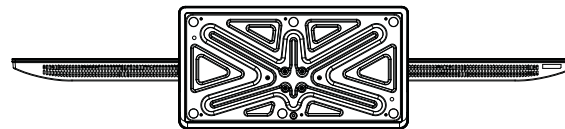
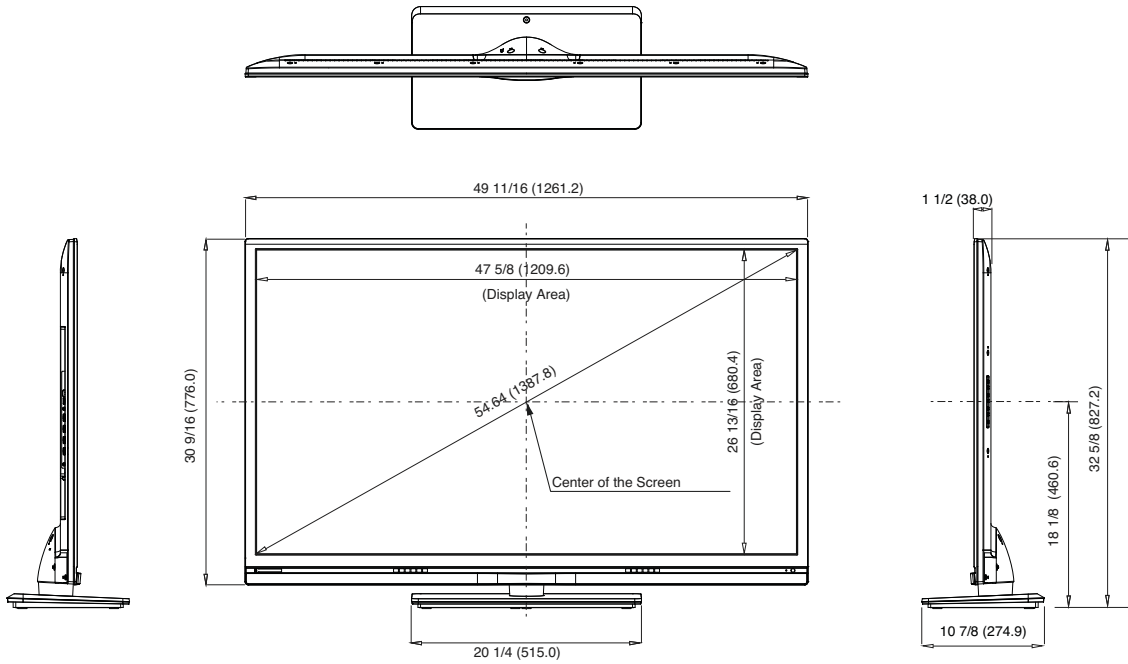
Side View  
Wall Mount Screw specification



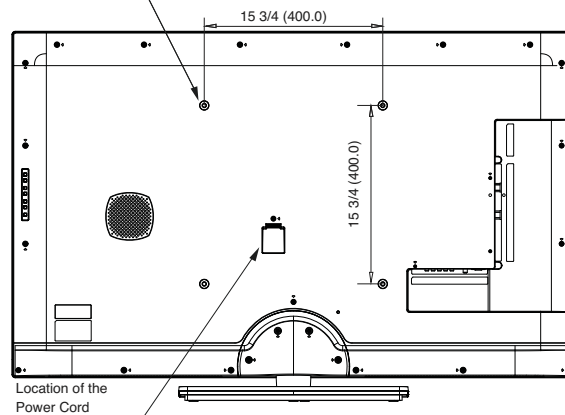
# Set Dimensions

55" model (Includes Table Top Stand) Weight (lbs./kg): 56.5/25.6

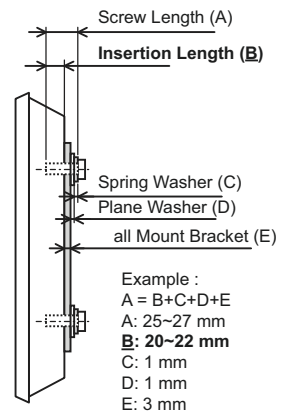
Units : Inches (mm)



Hole for Wall Mount (4 Places)



Rear View  
Use as Reference for Wall Mount Bracket



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

Side View  
Wall Mount Screw specification

**USEFUL INFORMATION**

## Service Information

**800.HITACHI**  
(800.448.2244)

**Monday ~ Friday**  
**8:00 am - 7:00 pm CST**

[www.hitachi.us/tv](http://www.hitachi.us/tv)



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**HITACHI**  
Inspire the Next

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Our Customer Service Representatives will provide you with the assistance you need and if necessary coordinate the repair process with a local Authorized Service Facility in your area. Please be prepared to submit proof of purchase and/or delivery receipts to your 800.HITACHI Customer Service Representative. Warranty coverage will be provided in accordance with the provisions of your Limited Warranty (see the Limited Warranty page in this owner's guide).

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

### Au Canada: 800.HITACHI (800.448.2244)

Lundi~ Vendredi 8:00 am – 7:00 pm HNC

**Hitachi America, Ltd., Digital Media Division**  
**Customer Service Support**

**P.O. Box 99652**

**Troy, MI. 48099**

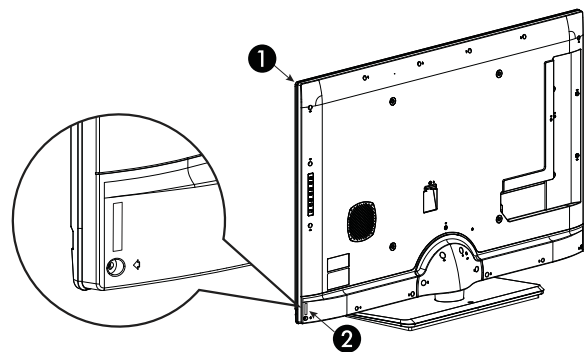
**U.S.A.: [customerservice.ce@hal.hitachi.com](mailto:customerservice.ce@hal.hitachi.com)**

**Canada: [customerservice.canada@hal.hitachi.com](mailto:customerservice.canada@hal.hitachi.com)**

### Customer Record

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

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



Model Name \_\_\_\_\_

Serial Number \_\_\_\_\_

# Limited Warranty

Congratulations on your purchase of a new Hitachi display product.

## LIMITED WARRANTY

Hitachi America, Ltd. warrants this product in accordance with the terms and conditions applicable to the products identified below:

## Conditions of Hitachi Limited Warranty

This Hitachi display product (the "Product") is warranted to be free from defects in materials and workmanship beginning on the date of purchase by the original owner and continuing for the duration of the applicable time periods specified below. If the Product is found to be defective, Hitachi will repair or replace (at Hitachi's option) defective parts at no charge, subject to the conditions of this Limited Warranty. If the original owner rejects, refuses or otherwise does not accept Hitachi's offer to repair or replace such defective parts under this Limited Warranty, this Limited Warranty shall be void and of no further force or effect. This Limited Warranty extends to the original owner only and is not transferable, and such owner must provide a dated sales receipt for the Product to qualify for parts or service under this Limited Warranty. The original owner must notify Hitachi of a defect claim **by calling 800.HITACHI** during the applicable Limited Warranty period for this Limited Warranty to be effective. This Limited Warranty is valid only in the U.S.A. and Puerto Rico.

Hitachi Product :  
LCD Flat Panel Televisions

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

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

**SERVICE LOCATION:** In-home warranty service, which includes either in-home repair or free pick-up and delivery (at Hitachi's option), applies to all Hitachi products except: (i) 32-inch and smaller LCD Flat Panel Televisions; (ii) Products located outside the U.S.A. or Puerto Rico; (iii) Products located more than seventy-five (75) driving miles from Hitachi's nearest Authorized Service Facility. If the foregoing clauses (i), (ii), (iii) apply, then the Product owner will be responsible for bringing/delivering the Product to a Hitachi Authorized Service Facility and, following warranty service, retrieving the Product from such Authorized Service Facility.



CERTIFIED  
SERVICE  
CENTER

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

### IMPORTANT:

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

### 800.HITACHI (800.448.2244)

Please call 800.HITACHI (800.448.2244) for operational, hook up or warranty service support.

### Visit our website at [www.hitachi.us/tv](http://www.hitachi.us/tv) :

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

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

## Warranty Limitations

This Hitachi Limited Warranty does not cover:

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

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**LIMITED WARRANTY**

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10. **TERMINATION.** **HITACHI** may terminate this Agreement immediately at any time by providing notice to you.
11. **GOVERNING LAW; SEVERABILITY.** This Agreement will be governed by the laws of the State of New York, and you consent to the exclusive jurisdiction and venue in the federal courts sitting in the Southern District of New York, unless no federal subject matter jurisdiction exists, in which case you consent to the exclusive jurisdiction and venue in the Borough of Manhattan, New York, USA.

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This Hitachi TV incorporates software based in part on the work of the Independent JPEG Group.

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JPEG decoder	jpeglib.h	<a href="http://www.ijg.org/">http://www.ijg.org/</a>	Free

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The "source code" for a work means the preferred form of the work for making modifications to it. "Object code" means any non-source form of a work.

A "Standard Interface" means an interface that either is an official standard defined by a recognized standards body, or, in the case of interfaces specified for a particular programming language, one that is widely used among developers working in that language.

The "System Libraries" of an executable work include anything, other than the work as a whole, that (a) is included in the normal form of packaging a Major Component, but which is not part of that Major Component, and (b) serves only to enable use of the work with that Major Component, or to implement a Standard Interface for which an implementation is available to the public in source code form. A "Major Component", in this context, means a major essential component (kernel, window system, and so on) of the specific operating system (if any) on which the executable work runs, or a compiler used to produce the work, or an object code interpreter used to run it.

The "Corresponding Source" for a work in object code form means all the source code needed to generate, install, and (for an executable work) run the object code and to modify the work, including scripts to control those activities. However, it does not include the work's System Libraries, or general-purpose tools or generally available free programs which are used unmodified in performing those activities but which are not part of the work. For example, Corresponding Source includes interface definition files associated with source files for the work, and the source code for shared libraries and dynamically linked subprograms that the work is specifically designed to require, such as by intimate data communication or control flow between those subprograms and other parts of the work.

The Corresponding Source need not include anything that users can regenerate automatically from other parts of the Corresponding Source.

The Corresponding Source for a work in source code form is that same work.

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- a) The work must carry prominent notices stating that you modified it, and giving a relevant date.
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# Appendixes

## Appendix A: Picture Format for Each Input Source

Aspect Specifications

Yes: Available / --: Not Available

Input Signal		Aspect					
		Normal (4:3)	Wide (16:9)		Zoom	Cinema	Auto
			Video	PC			
AIR / CABLE	NTSC, 480i (4:3), 480p (4:3)	Yes	Yes	--	Yes	Yes	Yes <sup>*3</sup>
	480i (16:9), 480p (16:9), 720p, 1080i	Yes	Yes	--	Yes <sup>*2</sup>	Yes <sup>*2</sup>	Yes <sup>*3</sup>
COMPOSITE		Yes	Yes	--	Yes	Yes	--
COMPONENT	480i, 480p	Yes	Yes	--	Yes <sup>*2</sup>	Yes <sup>*2</sup>	--
	720p, 1080i	Yes	Yes	--	Yes <sup>*2</sup>	Yes <sup>*2</sup>	--
HDMI (from PC)	VGA	Yes	--	Yes	--	--	--
	480p (4:3)	Yes	Yes	--	Yes <sup>*2</sup>	Yes <sup>*2</sup>	--
	480p (16:9), 720p, 1080p	Yes	Yes	--	Yes <sup>*2</sup>	Yes <sup>*2</sup>	--
HDMI (from non-PC)	480i (4:3), 480p (4:3)	Yes	Yes	--	Yes <sup>*2</sup>	Yes <sup>*2</sup>	--
	480i (16:9), 480p (16:9), 720p, 1080i, 1080p	Yes	Yes	--	Yes <sup>*2</sup>	Yes <sup>*2</sup>	--
VGA		Yes	--	Yes	--	--	--

\*1 Keep 16:9 video as Wide mode

\*2 Only available when Overscan is on

\*3 Only available when Auto Aspect is on

## Appendix B: RGB Format

640 x 480 @60Hz
720 x 400 @70Hz
800 x 600 @60Hz
1024 x 768 @60Hz
1280 x 720 @60Hz
1280 x 768 @60Hz
1280 x 1024 @60Hz
1440 x 900 @60Hz
1680 x 1050 @60Hz
1920 x 1080 @60Hz

The type of video board or connecting cable may not allow for correct displays adjustment of H-Position, V-Position, Clock, and Phase.

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