

LCD HDTV with Built-in BD Player



Owners Guide

Thank you for purchasing this Hitachi product. Please read these instructions carefully. For additional assistance please Call Toll Free 1-800-289-0981 or visit our website at www.hitachi.us/tv Keep this owners 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 and right side of the television.

MODEL NAME. _____ SERIAL NO. _

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BDLIVE PANDORA

















CAUTION RISK OF ELECTRIC SHOCK

DO NOT OPEN





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 sufficient magnitude to constitute a risk of electric shock.

CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER (OR BACK). NO USER-SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.



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.

WARNING: TO PREVENT FIRE OR SHOCK HAZARD, DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE. TO PREVENT THE SPREAD OF FIRE, KEEP CANDLES OR OPEN FLAMES AWAY FROM THIS PRODUCT AT

ALL TIMES.

CAUTION: TO PREVENT ELECTRIC SHOCK, DO NOT USE THIS POLARIZED PLUG WITH AN EXTENSION CORD, RECEPTACLE OR OTHER OUTLET UNLESS THE BLADES CAN BE FULLY INSERTED TO PREVENT BLADE EXPOSURE.

WARNING:

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 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/TV technician for help.

CAUTION:

Changes or modifications not expressly approved by the party responsible for compliance with the FCC Rules could void the user's authority to operate this equipment.

CAUTION:

THIS DIGITAL VIDEO PLAYER EMPLOYS A LASER SYSTEM.

TO ENSURE PROPER USE OF THIS PRODUCT, PLEASE READ THIS OWNER'S MANUAL CAREFULLY AND RETAIN FOR FUTURE REFERENCE. SHOULD THE UNIT REQUIRE MAINTENANCE, CONTACT AN AUTHORIZED SERVICE LOCATION-SEE SERVICE PROCEDURE.

USE OF CONTROLS, ADJUSTMENTS OR THE PERFORMANCE OF PROCEDURES OTHER THAN THOSE SPECIFIED HEREIN MAY RESULT IN HAZARDOUS RADIATION EXPOSURE.

TO PREVENT DIRECT EXPOSURE TO THE LASER BEAM, DO NOT TRY TO OPEN THE ENCLOSURE. RADIATION MAY BE PRESENT WHEN THE ENCLOSURE IS OPENED. DO NOT STARE INTO THE BEAM.



Location of the required Marking

The rating sheet and the safety caution are on the rear of the unit.

CERTIFICATION: COMPLIES WITH FDA RADIATION PERFORMANCE STANDARDS, 21 CFR SUBCHAPTER J.

Complies with FDA performance standards for laser products except for deviations pursuant to Laser Notice No. 50, dated June 24, 2007.

Lead/Mercury Notice



This product contains lead and one or more non-replaceable mercury backlights. Do not put in trash. Recycle or dispose of according to applicable laws. For product recycling and disposal information, contact your local government agency or visit www.eiae.org (in USA) or www.epsc.ca (in Canada). FOR MORE INFORMATION, CALL 800-289-0981.

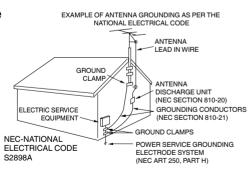
This television's factory default settings as shipped meet ENERGY STAR requirements.

Please see the Convenience Functions section of this operating guide for more information on factory settings and the energy saving Auto Shut Off feature.

This Hitachi LCD TV/Blu-ray Combo is in part operated by the Linux OS. The Linux OS contains software that complies with GPL/ LGPL. In order to obtain additional information and the source code please visit ORION's website at www.orionsalesinc.com/GPL.

IMPORTANT SAFETY INSTRUCTIONS

- 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 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) Apparatus should not be exposed to dripping or splashing, and objects filled with liquids, such as vases, should not be placed on the apparatus.
- 16) An outside antenna system should not be located in the vicinity of overhead power lines or other electric light or power circuits, or where it can fall into such power lines or circuits. When installing an outside antenna system, extreme care should be taken to keep from touching such power lines or circuits, as contact with them might be fatal.
- 17) Do not overload wall outlets and extension cords, as this can result in a risk of fire or electric shock.
- 18) Do not push objects through any openings in this unit, as they may touch dangerous voltage points or short out parts that could result in fire or electric shock. Never spill or spray any type of liquid into the unit.
- 19) If an outside antenna or cable system is connected to the unit, be sure the antenna or cable system is grounded to provide some protection against voltage surges and built-up static charges, Section 810 of the National Electrical Code, ANSI/NFPA 70, provides information with respect to proper grounding of the mast and supporting structure, grounding of the lead-in wire to an antenna discharge unit, size of grounding conductors, location of antenna discharge unit, connection to grounding electrodes, and requirements for the grounding electrode.
- 20) When replacement parts are required, be sure the service technician uses replacement parts specified by the manufacturer or those that have the same characteristics as the original part.
 - Unauthorized substitutions may result in fire, electric shock or other hazards.
- 21) Upon completion of any service or repairs to this unit, ask the service technician to perform safety checks to determine that the unit is in proper operating condition.
- 22) Keep your fingers clear of the disc slot as it is closing. It may cause injury.
- 23) When you connect the product to other equipment, turn off the power and unplug all of the equipment from the wall outlet. Failure to do so may cause an electric shock and serious personal injury. Read the owner's manual of the other equipment carefully and follow the instructions when making any connections.
- 24) Reduce the volume to the minimum level before you turn off the product. Otherwise, sudden high volume sound may cause hearing or speaker damage.



IMPORTANT SAFETY INSTRUCTIONS (continued)

- 25) Do not allow the product to output distorted sound for an extended period of time. It may cause speaker overheating.
- 26) When you use the headphones, keep the volume at a moderate level. If you use the headphones continuously with high volume sound, it may cause hearing damage.
- 27) Do not look into the opening of the disc slot or ventilation opening of the product to see the source of the laser beam. It may cause eye damage.
- 28) Do not use a cracked, deformed, or repaired disc. These discs are easily broken and may cause serious personal injury and product malfunction.
- 29) This reminder is provided to call the cable TV system installer's attention to Article 820-40 of the NEC that provides guidelines for proper grounding and, in particular, specifies that the cable ground shall be connected to the grounding system of the building, as close to the point of cable entry as practical.
- 30) The socket-outlet must be installed near the unit and easily accessible.
- 31) The mains plug is used as the disconnect device and shall remain readily operable.

CONDENSATION

Moisture will form in the operating section of the player if the player is brought from cool surroundings into a warm room or if the temperature of the room rises suddenly. When this happens, player's performance will be impaired.

To prevent this, let the player stand in its new surroundings for about an hour before switching it on, or make sure that the room temperature rises gradually.

Condensation may also form during the summer if the player is exposed to the breeze from an air conditioner. In such cases, change the location of the player.

HOW TO HANDLE THE LCD PANEL

- · Do not press hard or jolt the LCD panel. It may cause the LCD panel glass to break and injury may occur.
- If the LCD panel is broken, make absolutely sure that you do not touch the liquid in the panel. This may cause skin inflammation. If the liquid gets in your mouth, immediately gargle and consult with your doctor. Also, if the liquid gets in your eyes or touches your skin, consult with your doctor after rinsing for at least 15 minutes or longer in clean water.

Power source

This LCD television is designed to operate on 120 volts 60 Hz, AC current. Insert the power cord into a 120 volt 60 Hz outlet. To prevent electric shock, do not use the LCD television's (polarized) plug with an extension cord, receptacle, or other outlet unless the blades and ground terminal can be fully inserted to prevent blade exposure.

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

Warning

To reduce the risk of fire or electric shock, do not expose this apparatus to rain or moisture.

Caution

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

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

Declaration of Conformity

This device compiles 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 ATTN: Customer Relations

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:

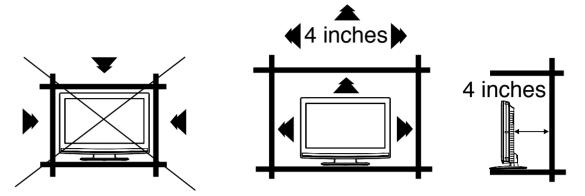
- Use a mount that has been recommended by the display manufacturer and/or listed by an independent laboratory (such as UL, CSA, ETL).
- Follow all instructions supplied by the display and wall mount manufacturers.
- If you have any doubts about your ability to safely install your flat panel display, 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.





SAFETY PRECAUTIONS

The unit emits heat when in operation. Do not place any covers or blankets on the unit, this may cause overheating. Do not block ventilation holes, or set up near radiators. Do not place in direct sunlight. When placing on a shelf leave 4 inches (10 cm) free space around the entire unit.



Notes when mounting the LCD TV/BD on a wall

If the unit is to be mounted on the wall, contact the retailer where you purchased the LCD TV/BD for advice, and have the equipment professionally installed. Incomplete or improper installation may cause injury to you, and/or damage to the LCD TV/BD.

The screws ISO M6 thread type should be used. The insertion length must be within 12 - 16mm.

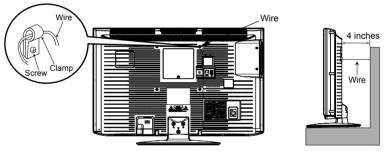
If the insertion length is less than 12mm, the weight can not be maintained.

If the insertion length is more than 16mm, a space is created between the Wall Mount Bracket and the Television.

(Insertion Length) = (Screw Length) - (Washers Thickness) - (Mounting Bracket Thickness)

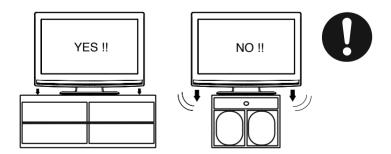
Securing to a Wall

- 1. Using metallic wire fasten the set to the clamping screw (supplied) on the rear of the LCD TV/BD as shown below.
- 2. Keep the LCD TV/BD 4 inches away from the wall except when mounted using the wall mount bracket and secure to the wall as shown below:



NOTICE FOR TV CABINET

If the unit is to be mounted on a cabinet smaller than length of the unit, it could result in an unstable location and the unit may tumble over, making a risk of personal, possibly fatal injury. Also, this would damage the product seriously. Accordingly, Hitachi accepts no responsibility or liability for any injuries or property damage resulting from the improper installation.



IMPORTANT NOTICE

The following symptoms are not signs of malfunction but technical limitation. Therefore we disclaim any responsibility for these symptoms.

- LCD Panels are manufactured using an extremely high level of precision technology, however sometimes parts of the screen may be
 missing picture elements or have luminous spots.
 This is not a sign of a malfunction.
- Do not install the LCD Panel near electronic equipment that is susceptible to electromagnetic waves. Some equipment placed too near this unit may cause interference.
- · Effect on infrared devices There may be interference while using infrared devices such as infrared cordless headphones.

Plavable discs

- 12,000			
Disc type and logo mark		content	
Blu-ray Video	lu-ray Video Blu-ray Disc		
DVD Video	VIDEO M	Audio + Video	
CD-DA	COMPACT DIGITAL AUDIO	Audio	

The following discs are also available.

- DVD-R/RW discs of DVD Video format.
- CD-R/RW discs of MP3/WMA/JPEG.

CAUTION:

- Only the left types of discs can be played on this unit. DVD-ROM, DVD-RAM, DVD-Audio, SACD, CD-ROM, SVCD, CVD, VCD, etc. cannot be played.
- 8cm discs can be played directly. If an 8cm disc adapter is used it will cause errors.
- If you insert an irregular shaped disc, it may get stuck and cause a malfunction.
- The use of a ring protector or other disc accessories will cause errors.
- This unit is to be used exclusively with the NTSC color system.
 PAL and SECAM system discs cannot be used with this unit.
- Some CD-R/RWs and DVD-R/RW cannot be played back depending on the recording conditions.

Region codes

Blu-ray Discs and DVDs have region codes to help prevent illegal distribution of discs. If the disc's region code does not match the unit's region code, the disc will not play.

The unit's region code is "A", "1" and "ALL". The disc's region code is displayed on the disc or disc packaging.

Title

When two or more movies are recorded on a disc, the disc is divided into two or more sections. Each section is called a "TITLE".

Chapter

The titles can be subdivided into many sections. Each section is called a "CHAPTER".

Track

An Audio CD can contain several items.

These are assigned to the tracks.

Removing Disc from Case

Be sure to hold the edge of disc. Do not touch the surface of the disc. Pick up the disc gently from the case.

- Do not scratch the disc.
- Do not get dirt on the surface of the disc.
- Do not stick a label or adhesive tape on the disc.
- Do not drop or bend the disc.

Storing Disc

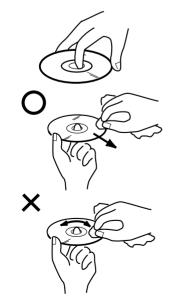
- Store the disc in the case to avoid risk of scratches, dirt or damage.
- Do not leave disc exposed to direct sunlight or in hot or humid places.

Cleaning Disc

Wipe the disc with a clean, dry cloth from center to edge.

- Do not wipe the disc in a circular motion.
- Do not use liquid or aerosol cleaners.





Features

LCD color TV With BD/DVD/CD player

Unique space saving design combines a 32" class LCD color TV and a BD/DVD/CD player.

A BD has much more capacity, but is the same size as a DVD. The Picture/Audio quality of a BD is very good.

The audio quality is higher than an audio CD. The BD/DVD also has special options; audio language selection, subtitle language selection, or multi-angle, etc.

The BD/DVD PLAYER can play back both audio CDs and MP3/WMA/JPEG CDs.



Built-in Blu-ray Player



Personalized Radio You'll Love

Subscription service and/or internet connection is required



Watch Live HD Broadcasts



1080p Perfected



2 Pure Digital Inputs



Component Inputs



Connect Your Computer



UltraClear Picture for Bright Rooms



High Quality Video



Sleep Timer



High Quality Sound



Featuring DTS® Technology



Closed Captions Capability



Energy Saving LCD Design



Netflix-Ready!

Netflix Streaming Video will be ready in August.

Please upload by "Update Via Network" (see page29) after August.

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- * VGA and XGA are trademarks of International Business Machines Corporation.
- * VESA is a registered trademark of the Video Electronics Standard Association.

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How to attach the stand

Installing the stand

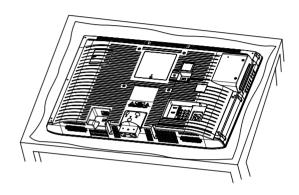
Tips

- Unplug the AC cord from the AC INPUT jack.
- Before beginning this process, make sure that you lay the unit on a clean, safe, and cushioned surface to avoid any damage to the unit.
- Do not touch or press the TV screen. The glass might break under pressure.

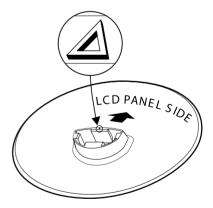
To install the stand:

1 Place the unit face down on table, aligning the bottom of the unit with the edge of the table.

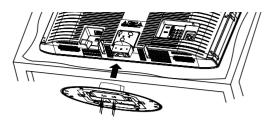
Place a towel or similar material between the screen and the table to protect the screen.

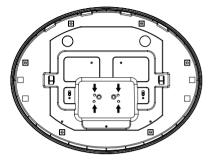


- 2 Align the stand assembly with the metal bracket on the bottom of the unit. The bracket will only fit in one direction. Do not touch or apply pressure to the screen. It may break.
- 3 Place the base on the stand assembly. Make sure that the symbol ▲ is pointing toward the screen side of the unit.



4 Secure the bottom plate with the four provided silver screws (M6×10mm)

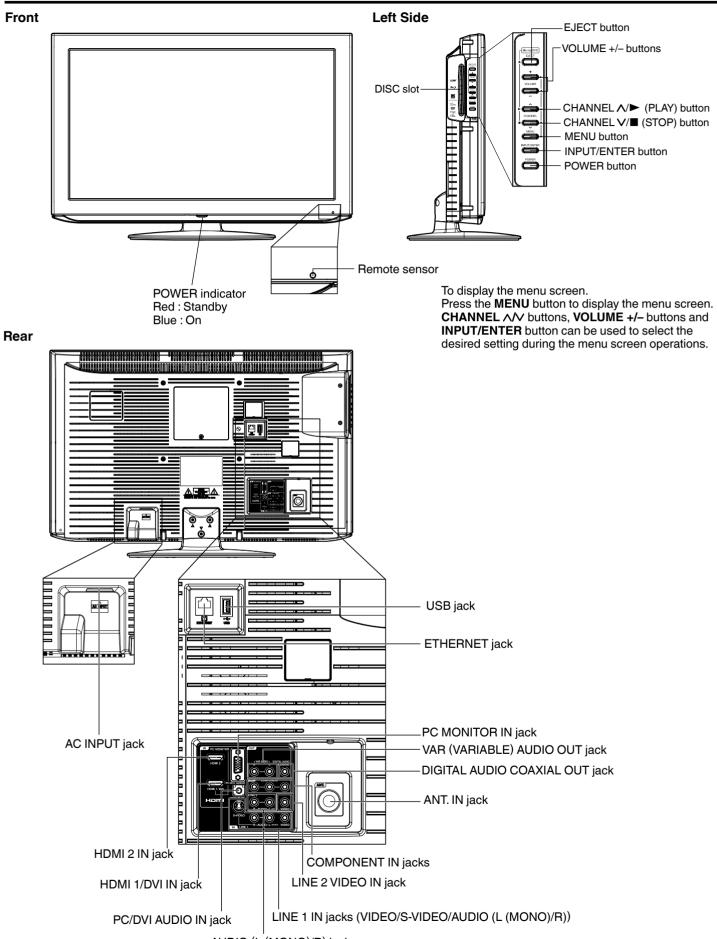




Note:

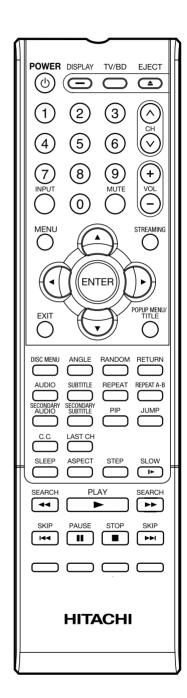
· To remove the stand, reverse these steps.

Location of controls



AUDIO (L (MONO)/R) jacks (for COMPONENT IN and LINE2 VIDEO IN)

Remote control



POWER ()	Power On/Off	
DISPLAY/-	Display TV information	
	Display DVD information	
	Input "-" for digital channels	
TV/BD	Switch between TV/AV and Blu-ray	
EJECT ▲	Eject a disc	
0-9	Direct channel selection of TV	
	Input setting Enter a password	
INPUT	Display source selection menu	
MUTE	Switch off the sound	
CH^/Y	Select channel of TV	
VOL +/-	Adjust volume of TV	
MENU	Display menu of TV	
STREAMING	Shortcut for Network applications	
▲▼∢ ►	Cursor buttons	
ENTER	Enter information in the menu	
EXIT	Exit from On-Screen menu	
POPUP MENU/	In Blu-ray mode, press to open the top menu.	
TITLE		
DISC MENU	In Blu-ray mode, press to open the Blu-ray setup menu.	
ANGLE	Press to select an alternate viewing angle (if available) on a Blu-ray Disc or DVD.	
RANDOM	In Audio CD mode, press to play songs in random order.	
RETURN	Press to exit the Blu-ray setup menus.	
AUDIO	Press to cycle through the languages available on a Blu-ray Disc.	
SUBTITLE	Press to cycle through the available subtitle languages or a Blu-ray Disc or DVD.	
REPEAT	Press to repeat the current title, chapter, track, or repeat all.	
REPEAT A-B	Press to repeat a specific portion of a Blu-ray Disc, DVD, or CD.	
SECONDARY AUDIO	In PIP mode, press to turn the audio for the secondary video on or off.	
SECONDARY SUBTITLE	In PIP mode, press to turn the subtitle for the secondary video on or off.	
PIP	Press to turn PIP (picture-in-picture) mode on or off.	
JUMP	Locating desired scene	
C. C.	Closed Caption	
LAST CH	Switch between present/last channel	
SLEEP	Sleep timer	
ASPECT	Display ASPECT menu	
STEP	Press to advance one frame at a time on a Blu-ray Disc or DVD. Press PLAY to resume normal playback.	
SLOW I►	Press to play forward slowly on a Blu-ray Disc or DVD.	
SEARCH ◀◀	Press to fast-reverse on a Blu-ray Disc, DVD, or CD.	
PLAY ►	Press to start playback on a Blu-ray Disc, DVD, or CD.	
SEARCH ▶▶	Press to fast-forward on a Blu-ray Disc, DVD, or CD.	
SKIP I◀◀	Press to go to the previous chapter on a Blu-ray Disc or DVD or to the previous track on a CD.	
PAUSE II	Press to pause playback on a Blu-ray Disc, DVD, or CD.	
STOP ■	Press to stop disc playback.	
SKIP ►►	Press to go to the next chapter on a Blu-ray Disc or DVD or to the next track on a CD.	
(blue) (red) (green) (yellow)	Some Blu-ray Discs (those with Java™) are programmed to use these buttons to access certain playback features. If you insert a Java Blu-ray Disc, follow the on-screen instructions or the documentation that came with the disc.	

Remote control (continued)

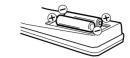
Inserting Batteries

Open the battery compartment cover in the direction of the arrow.

2 Install two "AA" batteries, paying attention to the polarity diagram in the battery compartment.

3 Replace the compartment cover.

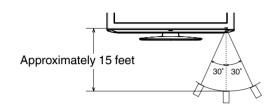






Operation

- Aim the remote control at the remote sensor and press control buttons to operate.
- Operate the remote control within a 30° angle on either side of the remote sensor, up to a distance of approximately 15 feet.



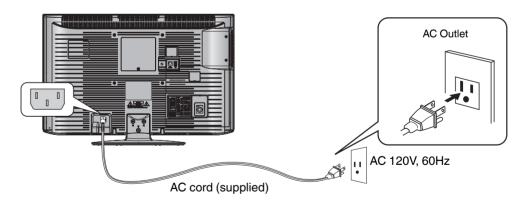
NOTE:

- Do not leave the remote control unit exposed to direct sunlight or in hot or humid places.
- The remote control unit uses infrared beams to transmit signals, so sunlight or fluorescent light on the remote sensor may shorten operating distance.
- Incorrect use of batteries may cause them to leak or burst. Read the battery warnings and use the batteries properly.
- Do not mix old and new batteries.
- Do not mix alkaline, standard (carbon-zinc), or rechargeable (ni-cad, ni-mh, etc) batteries.
- Remove batteries if the remote control will not be operated for an extended period of time.
- Please use caution when inserting batteries to avoid battery damage. If the spring terminal in the remote control remains in contact
 with a side of a damaged battery it can cause a short circuit. Never use damaged batteries as they can become very hot and are
 dangerous.

Power source

TO USE AC POWER

- 1. Connect the AC cord plug into this unit's AC IN jack.
- 2. Connect the AC cord into an AC outlet.



NOTE:

- Please make sure to insert the cord securely at both the LCD TV/BD and the wall outlet.
- The AC Cord has a grounding-type AC line plug. If the supplied AC cord does not match your AC outlet, contact a qualified electrician, do not defeat the purpose of a grounding plug.

WARNING:

- DO NOT CONNECT THIS UNIT TO THE POWER USING ANY DEVICE OTHER THAN THE SUPPLIED AC CORD. THIS COULD CAUSE FIRE, ELECTRICAL SHOCK, OR DAMAGE.
- DO NOT USE WITH A VOLTAGE OTHER THAN THE POWER VOLTAGE SPECIFIED. THIS COULD CAUSE FIRE, ELECTRICAL SHOCK, OR DAMAGE.

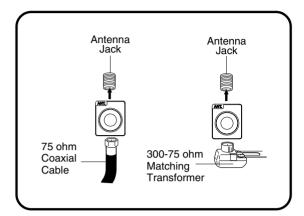
CAUTION:

- WHEN THIS UNIT IS NOT USED FOR A LONG TIME, (E.G., AWAY ON A TRIP) IN THE INTEREST OF SAFETY, BE SURE TO UNPLUG IT FROM THE AC OUTLET.
- DO NOT PLUG/UNPLUG THE AC CORD WHEN YOUR HANDS ARE WET. THIS MAY CAUSE ELECTRICAL SHOCK.
- IF YOU NEED TO REPLACE THE SUPPLIED AC ADAPTER OR AC CORD, THE SPECIFIED ONE IS RECOMMENDED. CONTACT THE DEALER THAT YOU PURCHASED THE UNIT FROM.

Antenna connections

If you are using an indoor or outdoor antenna, follow the instructions below that correspond to your antenna system. If you are using a Cable TV service, see page 15 for Cable TV connections.

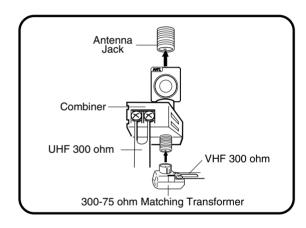
Combination VHF/UHF Antenna (Single 75 ohm cable or 300 ohm twin-lead wire)



Connect the 75 ohm cable from the combination VHF/UHF antenna to the antenna jack.

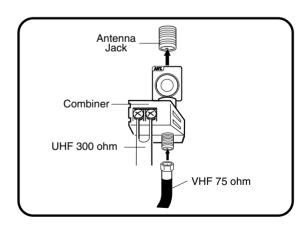
If your combination VHF/UHF antenna has a 300 ohm twin-lead wire, the use of the 300-75 ohm matching transformer may be necessary.

Combination VHF/UHF Antenna (Separate VHF and UHF 300 ohm twin-lead wires)



Connect the UHF 300 ohm twin-lead wire to the Combiner (not supplied). Connect the VHF 300 ohm twin-lead wire to the 300-75 ohm Matching Transformer. Attach the Transformer to the Combiner, then attach the Combiner to the Antenna Jack.

Separate VHF/UHF Antennas (75 ohm VHF cable and 300 ohm UHF twin-lead wires)



Connect the VHF 75 ohm cable and UHF 300 ohm twin-lead wire to the Combiner (not supplied).

Attach the Combiner to the Antenna Jack.

IMPORTANT NOTICE

The nationwide switch to digital television broadcasting was scheduled to be complete on June 12, 2009, but your local television stations may switch sooner. After the switch, analog-only television sets that receive TV programming through an antenna will need a converter box to continue to receive over-the-air TV. Watch your local stations to find out when they will turn off their analog signal and switch to digital-only broadcasting. Information about the DTV transition is available from your local television stations, www.DTV.gov, or 1-888-CALL-FCC (TTY 1-888-TELL-FCC), and www.dtv2009. gov or 1-888-DTV-2009 (TTY 1-877-530-2634) for information about

subsidized coupons for digital-to-analog converter boxes. Please review this Operating Guide for further information regarding such connections.

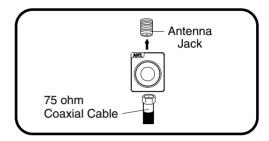
Hitachi supports the DTV transition and as a member of the DTV Transition Coalition urges consumers to visit these web sites for interactive guides and further detailed information:

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

Cable TV connections

This TV has an extended tuning range and can tune most cable channels without using a Cable TV Converter box. Some cable companies offer "premium pay channels" where the signal is scrambled. Descrambling these signals for normal viewing requires the use of a descrambler device which is generally provided by the Cable TV company.

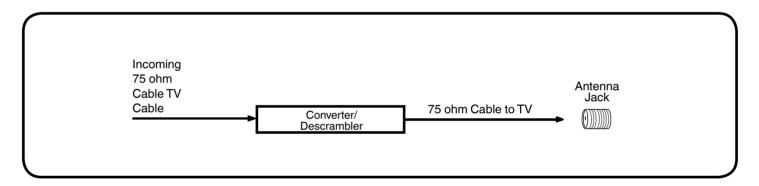
For subscribers to basic Cable TV service



For basic Cable TV service not requiring a Converter/Descrambler box, connect the 75 ohm Coaxial Cable directly to the Antenna Jack on the back of the TV.

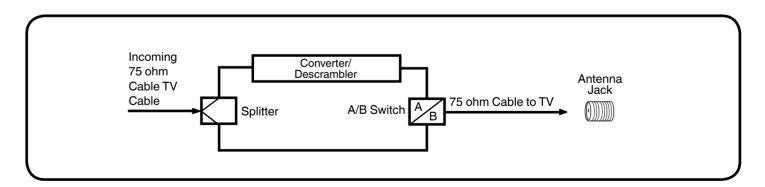
For subscribers to scrambled Cable TV service

If you subscribe to a Cable TV service which requires the use of a Converter/Descrambler box, connect the incoming 75 ohm Coaxial Cable to the Converter/Descrambler box. Using another 75 ohm Coaxial Cable, connect the output jack of the Converter/Descrambler box to the Antenna Jack on the TV. Follow the connections shown below. Set the TV to the output channel of the Converter/Descrambler box (usually channel 3 or 4) and use the Converter/Descrambler box to select channels.



For subscribers to unscrambled Cable TV service with scrambled premium channels

If you subscribe to a Cable TV service in which basic channels are unscrambled and premium channels require the use of a Converter/Descrambler box, you may wish to use a signal Splitter and an A/B Switch box (available from the Cable TV company or an electronics supply store). Follow the connections shown below. With the switch in the "B" position, you can directly tune any nonscrambled channels on your TV. With the switch in the "A" position, tune your TV to the output of the Converter/Descrambler box (usually channel 3 or 4) and use the Converter/Descrambler box to tune scrambled channels.



Starting setup

The Starting Setup menu appears the first time you turn on the TV. It will assist you to specify the Air/Cable setting and program your channels automatically.

IMPORTANT: Make sure that the antenna or cable TV system connection is made!

1 To turn on the TV, press **POWER** (POWER indicator on the front of the unit changes blue. It may take approx. 10 seconds for a picture to appear on screen.). The starting setup function begins.



Press ▲/▼ to select "TV Location", then press ◄/▶ to select "Home" or "Store". This product qualifies for ENERGY STAR V4.0. in Home mode default setting.

NOTE:

- This unit has been preset to Store brightness. This setting does not qualify under ENERGY STAR V4.0. To reduce brightness and energy consumption, change setting to 'Home'. This setting does qualify under ENERGY STAR V4.0.
- The device may not conform to the ENERGY STAR V4.0. standard after Reset is performed or the Backlight is adjusted.
- Press ▲ or ▼ to select "Source", then press ◀ or ▶ to select "Cable" or "Air".
- 4 Press ▲ or ▼ to select "Scan", then press ▶ or ENTER.
- 5 Now the "Auto Setup" starts. After the starting setup is completed, the TV channel appears on the screen.
 - Depending on the reception condition, it may take from 15 minutes to 30 minutes to complete memorizing digital cable channels. Please be patient.

NOTE:

- If you press ENTER in the process of "Auto Setup", the Starting Setup stops and changes to the normal screen.
- When you make a menu selection, your changes occur immediately. You do not have to press EXIT to see your changes.

TV operation

- To turn on the TV, press **POWER**.

 (POWER indicator on the front of the unit changes blue. It may take approx. 10 seconds for a picture to appear on screen.)
- Adjust the volume level by pressing VOL + or . The volume level will be indicated on the screen by blue bars. As the volume level increases, so do the number of bars. If the volume decreases, the number of blue bars also decreases.
- 3 Set the Signal Type option to the appropriate position (see "Air/Cable selection" on page 19).
- Press the Direct Channel Selection (0-9, –) buttons to select the channel. (If you press only the channel number, channel selection will be delayed for a few seconds.)

TO SELECT ANALOG CHANNELS

1-9: Press 1-9 as needed. Example, to select channel 2, press 2. then press ENTER.

10-99: Press the 2 digits in order. Example, to select channel 12, press 1, 2, then press ENTER.

100-135: Press the 3 digits in order. Example, to select channel 120, press **1**, **2**, **0**, then press **ENTER**.

TO SELECT DIGITAL CHANNELS

Press the first 3 digits, then press the – button, followed by the remaining number.

Example, to select channel 15-1, press 1, 5, –, 1, then press ENTER.

- If a channel is selected with only audio content, "Audio Only" will be displayed on the screen.
- If a channel is selected with a weak digital signal, "Weak Signal or Channel not available." will be displayed on the screen.
- The same program may be available on either an analog channel or a digital channel. You may choose to watch either format.
- If a channel is selected to which you have not subscribed, "Digital channel is encrypted" will be displayed on the screen.

VHF/UHF/CABLE CHANNELS

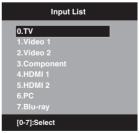
Air	Cable	
VHF	VHF	
2-13	2-13	
UHF	STD/HRC/IRC	
14-69	14-36 (A) (W)	
	37-59 (AA) (WW)	
	60-85 (AAA) (ZZZ)	
	86-94 (86) (94)	
	95-99 (A-5) (A-1)	
	100-135 (100) (135)	
	01 (4A)	

NOTE:

- If a channel with no broadcast is selected, the sound will automatically be muted.
- It may take a few seconds for a digital channel picture to appear on screen after being selected.

To select the video input source

To view a signal from another device connected to your LCD TV/BD, such as a VCR player, press INPUT, then press ▲/▼ or corresponding Number buttons (0-7), then press ENTER. You can select TV, Video 1, Video 2, Component, HDMI1, HDMI2, PC or Blu-ray (Built-in) depending on which input jacks you used to connect your devices.



CH ^/~

Press and release **CH** \land / \checkmark . The channel automatically stops at the next channel set into memory.

For proper operation, before selecting channels, they should be set into the memory. See "Memorizing channels" on page 19.

DISPLAY

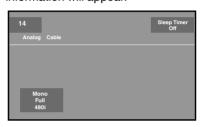
Press **DISPLAY** to display the current information on the screen.

When the TV receives a digital signal, the digital information will appear.



- · Channel number
- Station name
- Channel label (if preset)
- Broadcast program name
- V-Chip rating
- Signal type
- Sleep timer
- Audio language
- · Program guide
- Picture size
- Resolution

When the TV receives an analog signal, the analog information will appear.



- · Channel number
- Channel label (if preset)
- · V-Chip rating
- Signal type
- Sleep timer
- Picture size
- Audio information (Stereo, SAP or Mono)
- Resolution

Press **DISPLAY** again to clear the display.

NOTE:

 After a few seconds, DISPLAY screen will return to normal TVoperation automatically.

LAST CH

This button allows you to go back to the last channel selected by pressing **LAST CH**. Press **LAST CH** again to return to the last channel you were watching.

MUTE

Press **MUTE** to switch off the sound. The TV's sound will be silenced and "Mute" will appear on the screen. The sound can be switched back on by pressing this button again or by pressing the **VOL** + or – buttons.

SLEEP

To set the TV to turn off after a preset amount of time, press **SLEEP** on the remote control. The clock will count up 10 minutes for each press of the **SLEEP** button (Off, 0h 10m, 0h 20m, ..., 2h 0m). After the sleep timer is programmed, the display will appear briefly every ten minutes to remind you that the sleep timer is operating. To confirm the sleep timer setting, press **SLEEP** and the remaining time will be displayed for a few seconds. To cancel the sleep timer, press **SLEEP** repeatedly until the display turns to Off.

Quick guide for menu operation

Example: Select Language.

- 1 Press **INPUT** to select TV mode.
- Press **MENU**. The TV menu screen will appear.



- Press ▲ or ▼ to select "Setup", then press ▶ or ENTER.
- Press ▲ or ▼ to select "Menu Language", then press ◀ / ▶ to select the desired language.
 - ...on the following pages the menu can be called in the same way as here.
- **5** Press **EXIT** to return to the normal screen.

NOTE:

 If no buttons are pressed for more than 60 seconds, the menu screen will clear and the TV will return to normal viewing automatically.

Convenience functions

You can change the default settings to your preferred settings.

Icon	Sel	ected Items	Setup hint
Video	Picture Setting	Brightness / Contrast / Sharpness / Color / Tint	You can adjust the picture quality to your preference.
		Color Temperature	Bluish (Cool) / Neutral (Standard) / Reddish (Warm)
		Backlight *3	The Backlight feature adjusts the screen brightness for improved picture clarity.
	Picture Mode	Dynamic	Bright and dynamic picture (factory-set)
		Standard	Standard picture quality (factory-set)
		Movie	Movie-like picture setting (factory-set)
		Custom	Your personal preferences (set by you; see "Picture Setting")
	DBC *2	On/Off	Use this feature to change the Back light automatically according to the brightness of an image. The Back light will become bright in a bright scene, and will become dark in a dark scene.
	Aspect		See page 22.
	Auto Movie Mode	On/Off	A smoother motion may be obtained by setting the Auto Movie Mode to "On" when you view a external input signal.
	PC Setting	H Position / V Position	Adjust the horizontal / vertical position of the image on the PC Monitor screen. Each video standard will require a different value for this setting.
		Clock	Minimize any vertical bars or stripes visible on the screen background.
		Phase	This must be adjusted after the frequency has been set optimize picture quality.
		Auto Adjust	Adjust the all PC settings automatically.
	Noise Reduction	On/Off	Noise Reduction can reduce the roughness of the picture.
Audio	Bass / Treble /	Balance	You can adjust the sound quality to your preference.
	MTS	Stereo / SAP / Mono	The multi-channel TV sound (MTS) feature provides high-fidelity stereo sound. MTS also can transmit a second audio program (SAP) containing a second language or other audio information. When the TV receives a stereo or SAP broadcast, the word "Stereo" or "SAP" displays on-screen when you press DISPLAY .
	Surround	On/Off	The dynamic presence and sound created offers a thoroughly enjoyable listening experience.
	Audio Language		When two or more audio languages are included in a digital signal, you can select one of the audio language. (This function is available only for digital broadcast.)
	HDMI 1 Audio	НОМІ	When you connect the HDMI device to the TV, select this setting.
		DVI	When you connect the DVI device to the TV with an analog audio connection, select this setting.
	Speakers	On/Off	Use this feature to turn the TV/BD speakers off when you connect an audio system.
Channel	Channel Mana	ger	See page 19.
	Signal Meter		See page 20.
	Auto Channel S	Scan	See page 19.
	Channel Labels	s	See page 20.
Locks			See page 20.
Setup	Closed Caption	าร	See page 22.
•	Menu Language		You can choose from three different languages (English, Français (French) and Español (Spanish)) for the on-screen displays. Select the language you prefer first, then proceed with the other menu options.
	Video Label		See page 20.
	On Timer	Off / 0h30m / 1h00m / 1h30m / 2h00m / 3h00m · · · 12h00m	You can set the On Timer to automatically turn on the TV. To cancel the On Timer select "Off".
	Auto Shut *1 Off	On/Off	If the Auto Shut Off feature is On, a station being viewed stops broadcasting and the TV is not operated, the TV will automatically shut itself off after 15 minutes.
	Auto Setup		See page 16.
	Reset *3		The Reset function returns your settings to the factory settings. "Aspect", "MTS", "Audio Language", "HDMI1 Audio" and "Speakers" cannot be reset by this function.

NOTE:

- *1 If there is no input signal in the HDMI or PC mode after 1 minute, Auto Shut Off will be activated.
- *2 In PC mode, the DBC option is not available.
 *3 The device may not conform to the ENERGY STAR V4.0. standard after Reset is performed or the Backlight is adjusted.

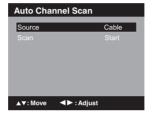
Memorizing channels

This TV is equipped with a channel memory feature which allows channels to skip up or down to the next channel set into memory, skipping over unwanted channels. Before selecting channels, they must be programmed into the TV's memory. To use this TV with an antenna, set the Source option to the Air mode. When shipped from the factory, this menu option is in the Cable mode.

Air/Cable selection

- 1 Select "Channel", then press ▶ or ENTER.
- Press ▲ or ▼ to select "Auto Channel Scan", then press ► or ENTER.
- 3 Press ▲ or ▼ to select "Source".
- 4 Press ◀ or ▶ to select "Air" or "Cable".





NOTE

 It may take a few seconds for a digital channel picture to appear on screen after being selected.

Automatic search

- 1 Select "Channel", then press ▶ or ENTER.
- Press ▲ or ▼ to select "Auto Channel Scan", then press ► or ENTER.
- 3 Press ▲ or ▼ to select "Scan", then press ► or ENTER.



- 4 The TV will begin memorizing all the channels available in your area.
 - It may take from 15 minutes to 30 minutes to complete memorizing digital cable channels.
 - Depending on the reception condition, a bar display may not advance for several minutes, please be patient.

NOTE:

- Memorizing channels is best accomplished during evening "PRIMETIME" hours, as more stations are broadcasting digital signals. Memorizing channels can only be accomplished while a station is broadcasting a digital signal to set that channel into memory.
- If you are unsure of the digital channels available in your area, you may visit <u>www.antennaweb.org</u> to receive a list based on your address or zip code. Should you require further assistance you may call our toll-free customer service line at 1-800-289-0981.
- New digital channels may be added to your area periodically, it is recommended to perform the "Scan" procedure regularly.

Adding Channel

If you find a new unregistered digital channel, you can add the new channel into the channel memory.

- 1 Tune in the new channel.
- 2 Select "Channel", then press ▶ or ENTER.
- Press ▲ or ▼ to select "Channel Manager", then press ► or ENTER.



4 Press ▲ or ▼ to select "Add Digital Channel", then press ► or ENTER. The new channel will be added into the channel memory.

Add/Delete channel

You can select the channel that you want to skip.

- Select "Channel", then press ▶ or ENTER.
- Press ▲ or ▼ to select "Channel Manager", then press ► or ENTER.
- Press ▲ or ▼ to select "View/Skip", then press ► or ENTER.
- 4 Press ▲ or ▼ to select the channel that you want to skip.



- 5 Press o r to select "View" or "Skip", whichever function you want to perform.
- 6 Repeat steps 4 5 for other channels you want to view or skip.

Clear All

All channels are deleted from the channel memory.

- Select "Channel", then press ▶ or ENTER.
- Press ▲ or ▼ to select "Channel Manager", then press ▶ or ENTER.
- 3 Press ▲ or ▼ to select "Clear All", then press ▶ or ENTER.



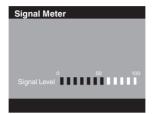
Checking the digital-signal strength

This TV will allow you to view the digital signal meter for digital channels.

1 Select "Channel", then press ▶ or ENTER.

Press ▲ or ▼ to select "Signal Meter".

Press ➤ or ENTER to check the Digital-Signal strength.
The Digital-Signal strength screen will appear.
If necessary, adjust the direction of the antenna to obtain the maximum signal strength.



NOTE:

• Signal meter feature is not available for analog channels.

 After 240 seconds, Signal Meter screen will clear and the TV will return to normal viewing automatically.

Labeling channels

Channel label appears with the channel number display each time you turn on the TV, select a channel, or press DISPLAY. You can choose any four characters to identify a channel.

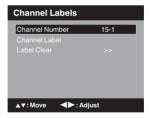
To create channel labels

Select "Channel", then press ▶ or ENTER.

Press ▲ or ▼ to select "Channel Labels", then press ► or ENTER.

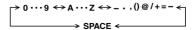
The "Channel Labels" menu will appear.

3 Press ◀ or ▶ to select a channel you want to label, then press ▼.





The characters rotation as follows:



If the character which you desire appears, press **ENTER**. Repeat this step to enter the rest of the characters. If you would like a blank space in the label name, you must choose the empty space from the list of characters.

- 5 Repeat steps 3-4 for other channel. You can assign a label to each channel.
- 6 When you finish inputting the label name, press **EXIT** to return to the normal screen.

To clear a Channel Label

After step 3 above, press ▲ or ▼ to select "Label Clear", then press ► or ENTER.

NOTE:

• The channel labels will be reset after "Scan" on page 19.

Labeling video inputs

The Video Label feature allows you to label each input source for your TV.

Select "Setup", then press ▶ or ENTER.

Press ▲ or ▼ to select "Video Label", then press ▶ or ENTER.

3 Press ▲ or ▼ to select an input which you want to label.

4 Press ✓ or ► to select the desired label for that input source.



- : Uses the default label name
VCR : Video cassette recorder
DVD : DVD video

DTV : Digital TV set-top box SAT : Satellite box

CBL : Cable box

HD: HDMI device (only for HDMI inputs)

Setting the Parental Control

An age limitation can be set to restrict children from viewing or hearing violent scenes or pictures that you may choose to exclude. The restriction applies to "TV" and "Movie" if this data is transmitted. You may set this restriction separately. To use the Parental Control function, you must register a password.

To register a password

Select "Locks", then press ▶ or ENTER.

2 Select and enter your password (4 digits) using **Number** buttons (0-9), then press **ENTER**.



"*" appears instead of the number.

Enter the same password again to confirm, then press ENTER.

The password is now registered.

NOTE:

 If you forget the password, contact Customer Service at 1-800-289-0981 for assistance.

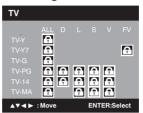
Your original remote control will be required.

 To avoid forgetting the password, write it down and keep in a safe place.

To set the Parental Control

- Select "Locks" menu, then press ▶ or ENTER.
- Use **Number buttons (0-9)** to enter your password, then press **ENTER**. Then Locks menu will appear.
- Press ▲ or ▼ to select "Parental Control", then press ◄ or ▶ to select "On".
- 4 Press ▲ or ▼ to select "Ratings", then press ▶ or ENTER. The Ratings Menu appears.
- Press ▲ or ▼ to select which rating will be used, then press ► or ENTER. Each rating below will appear.

TV Rating



You can set the rating using age level and genre.

Age:

TV-Y : All children

TV-Y7 : 7 years old and above
TV-G : General audience
TV-PG : Parental guidance
TV-14 : 14 years old and above
TV-MA : 17 years old and above

Genre:

ALL : All
D : Dialogue
L : Language
S : Sex
V : Violence

FV : Fantasy Violence

Movie Rating



G : All ages

PG: Parental guidance

PG-13 : Parental guidance less than 13 years old R : Under 17 years old parental guidance

suggested

NC-17: 17 years old and above

X : Adult only

- Press ▲/▼/Վ/► to select the desired rating, then press ENTER.
- Press **EXIT** to return to the normal screen. Parental Control function is activated now.

To use the TV after the TV is protected.

When a program is received that is blocked by the Parental Control, press **MUTE**, then enter your password. The protection will be temporarily overridden. If the TV is turned off or the channel is changed, the Parental Control restriction will be reactivated.

NOTE:

 The Parental Control function is activated only on programs and input sources that include a rating signal.

To change the password

- Select "Locks", then press ▶ or ENTER.
- 2 Use Number buttons (0-9) to enter your password, then press ENTER. The Locks menu will appear.
- Press ▲ or ▼ to select "Change Password", then press ► or ENTER.

The Change Password screen will appear.

- 4 Enter a new password using **Number buttons (0-9)**, then press **ENTER**.
- 5 Enter the same password again to confirm, then press ENTER.

The password is now registered.

Downloading the additional Parental Control rating system

As a supplement to the standard Parental Control rating system, your television will be able to download an additional rating system, if such a system becomes available in the future.

To download the additional Parental Control rating system (when available)

- 1 Select "Locks", then press ▶ or ENTER.
- 2 Use **Number buttons (0-9)** to enter your password, then press **ENTER**. The Locks menu will appear.
- 3 Press ▲ or ▼ to select "Parental Control", then press ◄ or ► to select "On".
- 4 Press ▲ or ▼ to select "Region 5", then press ▶ or ENTER.
- If the TV is not storing the additional rating system, the TV will begin downloading it, which may take some time to be completed.
- 6 Set your preferred content rating limits for the additional rating system.
- You also need "Region 5 Update" procedure to update rating information.

NOTE:

- You can only download the additional Parental Control rating system when your TV is receiving a digital signal.
- When you download the additional rating system, it may take some time for the download to occur.
- The Parental Control rating information and system are not determined or controlled by the TV.
- The standard Parental Control rating system is available whether your TV is receiving a digital signal or not, and will block both analog and digital programs. To set the restriction level using the standard Parental Control rating system, select Parental Control Set in step 4.
- The downloadable Parental Control rating system is an evolving technology, and availability, content, and format may vary.
- You cannot select this feature if the TV is not receiving a digital signal for the current station.

To clear the all Parental Control settings

- Select "Locks", then press ▶ or ENTER.
- 2 Use **Number buttons (0-9)** to enter your password, then press **ENTER**. The Locks menu will appear.
- Press ▲ or ▼ to select "Reset", then press ► or ENTER. The Password screen will appear.
- 4 Use **Number buttons (0-9)** to enter your password, then press **ENTER**. All your settings return to the factory settings.

Closed Caption

WHAT IS CLOSED CAPTIONING?

This television has the capability to decode and display Closed Captioned television programs. Closed Captioning will display text on the screen for hearing impaired viewers.

Captions: This Closed Caption Mode will display text on the screen in English or another language if program supports other languages. Generally, Closed Captions in English are transmitted on CC1 and a Closed Caption in other languages is transmitted on CC2.

Text: The Text Closed Caption Mode will usually fill 1/2 of the screen with other text information such as weather if program supports this feature.

- Select "Setup", then press ➤ or ENTER.
- 2 Press ▲ or ▼ to select "Closed Captions", then press ► or ENTER.

The Closed Caption menu will appear.

- 3 Press

 or

 to set "CC Display" to "On".

 On: Captions will be displayed on the screen.

 Off: Captions will not be displayed on the screen.
- 4 Press ▲ or ▼ to select "Analog Caption" or "Digital Caption".

When you select "Analog Caption", you can choose from CC1, CC2, CC3, CC4, Text1, Text2, Text3 and Text4.

When you select "Digital Caption", you can choose from Service1, Service2, Service3, Service4, Service5 and Service6.

- 5 Press ◀ or ► to select the desired Closed Caption mode for both Digital and Analog Caption.
- 6 Press ▲ or ▼ to select "CC Priority", then press ◀ or ▶ to select "Digital CC" or "Analog CC".
 - Depending on the broadcast signal, some Analog Captions will function with a Digital broadcast signal. This step prevents that two kind of captions are overlapping.

NOTE:

- If the program or video you selected is not closed-captioned, no captions will display on-screen.
- If text is not available in your viewing area, a black rectangle may appear on-screen. If this happens, set the CC Display to "Off".
- When selecting Closed Captions, the captioning will be delayed approx. 10 seconds.
- If no caption signal is received, no captions will appear, but the television will remain in the Caption Mode.
- Misspellings or unusual characters may occasionally appear during Closed Captioning.
- This is normal with Closed Captioning, especially with live programs. This is because during live programs, captions are also entered live. These transmissions do not allow time for editing.
- When Captions are being displayed, on-screen displays, such as volume and mute may be seen but may interfere with Closed Captions.
- Some cable systems and copy protection systems may interfere with the Closed Captioned signal.
- If using an indoor antenna or if TV reception is very poor, the Closed Caption Decoder may not appear or may appear with strange characters or misspelled words. In this case, adjust the antenna for better reception or use an outdoor antenna.

CC advanced

When you have selected Custom as the display method, you can adjust the various setting listed below as follows:

This feature is designed to customize Digital Captions only.

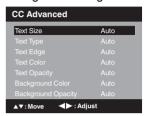
- Select "Setup", then press ▶ or ENTER.
- Press ▲ or ▼ to select "Closed Captions", then press ► or ENTER.

The Closed Caption menu will appear.

- 3 Press ◀ or ▶ to set "CC Display" to "On".
- 4 Press ▲ or ▼ to select "Digital CC Preset", then press ◄ or ► to select "Custom".
- 5 Press ▲ or ▼ to select "CC Advanced", then press ► or ENTER.

The CC Advanced menu will appear.

6 Press ▲ or ▼ to select the desired item, then press ◀ or ▶ to change the setting.



You can select from among the following items and parameters.

Text Size: Auto, Small, Standard, Large

Text Type: Auto, Style1, Style2, Style3, Style4, Style5,

Style6, Style7

Text Edge: Auto, None, Raised, Depressed, Uniform, Left

Shadow, Right Shadow

Text Color: Auto, Black, White, Red, Green, Blue, Yellow,

Magenta, Cyan

Text Opacity: Auto, Solid, Transparent, Translucent,

Flashing

Background Auto, Black, White, Red, Green, Blue, Yellow,

Color: Magenta, Cyan

Background Auto, Solid, Transparent, Translucent,

Flashing

NOTE:

Opacity:

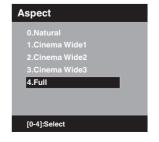
- You cannot set both "Text Color" and "Background Color" as a same color.
- You cannot set both "Text Opacity" and "Background Opacity" to "Transparent".

Aspect Switching

You can display the image at its optimum condition by selecting display aspect.

Selecting the picture format aspect ratio

- Select "Video", then press ▶ or ENTER.
- Press ▲ or ▼ to select "Aspect", then press ► or ENTER to display Aspect. Press ▲/▼ or corresponding Number buttons (0-4) to select the desired picture format aspect ratio, as described below.

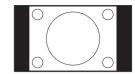


NOTE:

- Selectable picture format aspect ratios may vary depending on the input source or broadcast signal.
- Picture Size menu also can be displayed by pressing ASPECT on the remote control.

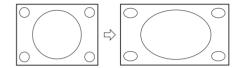
Natural

In some cases, this image will display the size of standard 4:3 with a black side bar.



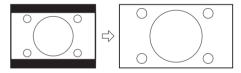
Cinema Wide1 (for 4:3 format programs)

To fill the screen, the right and left edges are extended. However, the center of the picture remains near its former ratio. The top and bottom edges of the picture may be hidden.



Cinema Wide2 (for letter box programs)

To fill the width of the screen, it is extended horizontally. However, it is only slightly extended at the top and the bottom. The top and bottom edges of the picture may be hidden.



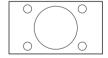
Cinema Wide3 (for letter box programs with subtitles)

To fill the width of the screen, it is extended horizontally. However, it is only slightly extended at the top and the bottom. The top and bottom edges of the picture may be hidden.



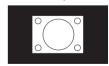
Full (for 16:9 source programs)

Full will display the picture at the maximum size.



Native (for PC mode only)

Detects the resolution of the signal of the image and it will be shown on the screen with same amount of pixels.



NOTE:

- Some High Definition and/or Digital broadcasts may not allow you to change the picture format aspect ratio.
- In HDMI or COMPONENT mode with a scanning rate of 720p, 1080i or 1080p (only HDMI), only the Cinema Wide2 and Full are available.
- In PC Mode, only the Natural, Full and Native are available. In PC Mode (WXGA), only the Full and Native are available.

Using the Blu-ray Disc player

Playing a disc - Standard playback

- 1 Press **POWER** on the unit or on the remote, then press **TV/BD** to select Blu-ray mode.
- Place the disc in the disc slot with the label side facing forward. Hold the disc without touching either of its surfaces, align it with the guides, and place it in position.

The main menu as shown below will appear.



3 Press ▲ or ▼ to select the disc, then press ENTER.

After a period of time, Chapter 1 of Title 1 on the disc will begin playback.

On many BD/DVDs, Chapter 1 of Title 1 is an advertisement or preview of upcoming releases. If you wish, you may press **DISC MENU** to bring up the main disc menu. From there, you can use ▲, ▼, ◀ or ▶ to select the "PLAY MOVIE" menu item.

- 4 To stop playback, press **STOP** .
- 5 Press **EJECT ≜** to remove the disc.

When you eject the disc, you may hear mechanism noise, but it is not malfunction.

NOTE:

- Some discs may take a minute or so to start playback.
- If an 8 cm disc is placed into the disc slot and picture playback or menu display does not begin automatically, press PLAY ►.
- A "Prohibited" symbol "
 o" may appear at the upper right of the screen. This symbol means either the feature you tried is not available on the disc, or the unit cannot access the feature at this time. This does not indicate a problem with the unit.
- If you place a single-faced disc label backwards (i.e. the wrong way) then "No Disc" will be displayed.
- Some playback operations of BDs may be intentionally fixed by software producers. Since this unit plays BDs according to the disc content recorded, some playback features may not be available. Also refer to the instructions supplied with the BDs.

Playing a disc - Special playback

Fast Forward Playback

Press **SEARCH** ▶ during normal playback.

Fast forward begins at 2x normal playback speed. Each press of **SEARCH** ► cycles the playback speed through 2x, 4x, 8x, 16x, 32x, 64x and 128x.

To resume normal playback, press PLAY ►.

Fast Reverse Playback

Press **SEARCH** during normal playback.

Fast reverse begins at 2x normal playback speed. Each press of **SEARCH** ◀◀ cycles the playback speed through 2x, 4x, 8x, 16x, 32x, 64x and 128x.

To resume normal playback, press PLAY ►.

Still Playback

Press PAUSE II during normal playback to pause playback.

To resume normal playback, press PLAY ►.

Frame Advance

Press **STEP** during playback. Each time you press **STEP**, one frame is advanced.

To resume normal playback, press PLAY ►.

Slow Forward Playback

Press **SLOW I**► during playback.

Each press of **SLOW I** cycles the playback speed through x 1/2, x 1/4 and x 1/8 of the normal speed.

To resume normal playback, press PLAY ►.

Skipping to the next chapter

Press **SKIP** In once during normal playback to jump to the next chapter on the disc. The next chapter will start playing automatically.

Skipping to the start of the current chapter

Press **SKIPI** once during normal playback to jump to the beginning of the currently playing chapter. The current chapter will start playing from the beginning automatically.

Skipping to a previous chapter

Press **SKIPI** once during normal playback to jump to the beginning of the currently playing chapter, then press the button again to skip to the beginning of the previous chapter. The previous chapter will start playing from the beginning automatically.

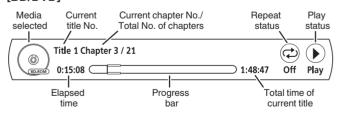
NOTE:

- The unit is capable of holding a still video image or On screen display image on your television screen indefinitely. If you leave the still video image or On screen display image displayed on your TV for an extended period of time, you risk permanent damage to your television screen.
- There may be a slight delay between when you press the button and the function activating.

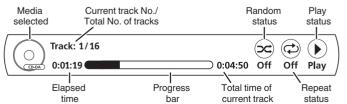
Status display of disc

- Press DISPLAY to display the disc status on screen. Display content may vary depending on the disc or file.
- 2 To remove the status display, press **DISPLAY** again.

[BD/DVD]



[CD-DA]



Repeat playback

Title, chapter Playback

Pressing **REPEAT** causes "Repeat Off" to appear on screen. The second time you press this button, unit repeats the current title. The third time you press this button, unit repeats the current chapter. The fourth time you press this button, "Repeat Off" will disappear and normal playback resumes.

A-B Repeat Playback:

A-B repeat playback allows you to repeat material between two selected points.

- 1 Press **REPEAT A-B** during playback. The start point is selected.
- Press REPEAT A-B again.
 The end point is selected. Playback starts at the point that you selected. Playback stops at the end point, returns to Point A automatically, then starts again.
- 3 To resume normal playback press REPEAT A-B again.

NOTE:

- · Some discs may not work with the repeat operation.
- In A-B repeat mode, subtitles near point A or B may not appear.
- During the A-B Repeat Playback the ANGLE feature will not operate.
- You may not be able to set A-B Repeat, depending on the scenes of the BD/DVD.
- A-B Repeat does not work with an interactive BD/DVD, MP3/ WMA/JPEG-CD.

Changing soundtrack language

You can select the language when you play a multilingual disc.

- Press **AUDIO** during playback. The popup menu will appear.
- Press ▲ or ▼ to select "Audio" or "PIP Audio", then press ENTER.
- 3 Press ▲ or ▼ to select the desired language.



The on-screen display will disappear after a few seconds.

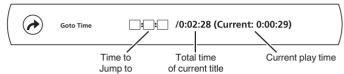
NOTE:

- If the desired language is not heard after pressing AUDIO several times, the language is not recorded on the disc.
- Changing soundtrack language is canceled when you eject the disc.

The initial default language or available language will be heard if the disc is played back again.

Locating desired scene

- Press **JUMP** one or more times to select:
 The popup menu will appear.
 - Title: first button press
 - · Chapter: second button press
 - Time: third button press



Press the number buttons to enter the title number, chapter number, or amount of elapsed time, then press **ENTER**. Unit goes to the title, chapter, or elapsed time you specified.

Subtitles

Turning the subtitles on and off

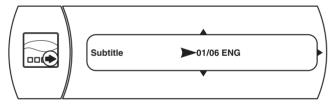
When playing back a disc recorded with subtitles, you can turn the subtitles on or off.

Press **SUBTITLE** during playback until "Off" appears.

Changing the subtitle language

You can select the language when playing back a disc recorded with multilingual subtitles.

- Press **SUBTITLE** during playback. The popup menu will appear.
- Press ▲ or ▼ to select "Subtitle" or "PIP Subtitle", then press ENTER.
- 3 Press ▲ or ▼ to select the desired subtitle.



The on-screen display will disappear after a few seconds.

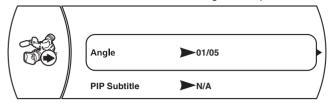
NOTE:

- · Changing subtitle language is canceled when you eject the disc.
- Some functions may not work on some BD/DVD. You may not be able to turn subtitles on or off or change subtitles. While playing the BD/DVD, the subtitle may change when:
 - you eject the disc.
- you change the title.
- In some cases, the subtitle language may not change to the selected one immediately.

Changing angles

When playing back a disc recorded with multi-angle facility, you can change the view angle.

- 1 Press **ANGLE** during playback. The popup menu will appear.
- Press ▲ or ▼ to select the desired angle, then press ENTER.

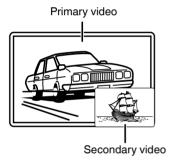


NOTE:

 Depending on the BD/DVD, you may not be able to change the angles even if multi-angles are recorded on the BD/DVD.

Using PIP (picture-in-picture) mode

Some Blu-ray Discs are compatible with picture-in-picture (PIP) mode. In PIP mode, the primary video is displayed on the full screen, and the secondary video is displayed in a small window.



See the documentation that came with the disc for playback instructions.

- Press **PIP** during playback. The popup menu will appear.
- Press ▲ or ▼ to select the desired secondary video, then press ENTER.
 - If PIP mode is on, press SECONDARY AUDIO to change the PIP audio or press SECONDARY SUBTITLE to change the PIP subtitle (if available).

MP3/WMA/JPEG and Audio CD playback

This player can play back MP3/WMA/JPEG-data which has been recorded on CD-R or CD-RW. To produce MP3/WMA/JPEG-data, you need a Windows-PC with CD-ROM drive and MP3/WMA/JPEG-encoding software (not supplied). The Apple-HFS-System cannot be played.

MP3/WMA/JPEG CD information

Limitations on MP3/WMA/JPEG CD playback

- MP3/WMA/JPEG CD is the disc that is standardized by ISO9660, its file name must include 3-digit extension letters, "mp3", "wma", "ipg".
- The directory and file names of MP3/WMA/JPEG CD must correspond to ISO standardized files.
- This unit can read 2046 files per directory. If one directory has more than 2046 files, it reads up to 2046 files, the remaining files will be omitted.
- MP3/WMA CDs cannot be used for playback for the purpose of recording.
- It may take more than one minute for this unit to read MP3/ WMA/JPEG files depending on its structure.
- Music recorded by "Joliet Recording Specification" can be played back.
- The music files recorded by "Hierarchical File System" (HFS) cannot be played.
- The unit can play back baseline and progressive JPEG files.

Notes on MP3/WMA/JPEG files

To play back MP3/WMA/JPEG CD in the recorded order,

- Use MP3/WMA/JPEG software that records data alphabetically or numerically.
- 2. Name each file including a two-digit or three-digit number (e.g. "01" "02" or "001" "002").
- 3. Refrain from making too many sub-folders.

CAUTION:

- Some MP3/WMA/JPEG CDs cannot be played back depending on the recording conditions.
- The CD-R/RW that has no music data or non-MP3/WMA/JPEG files cannot be played back.

Preparing the BD player for music/photo playback

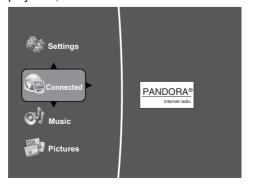
If you will be viewing photos and/or listening to music burned onto a data disc, insert the disc.

If you will be viewing photos and/or listening to music stored in a USB drive, you must turn off the TV before inserting the USB drive. After inserting the USB drive, turn the TV on.

NOTE:

 Inserting/removing a USB drive during playback may corrupt the data on the USB drive.

When a data disc or USB drive containing picture and audio files is inserted into the BD player, the menu screen displays icons indicating the files or that music or picture files are available for playback, as shown below:



NOTE:

 At least one available media type must be in the unit for the menu to appear.

CAUTION:

Compatible USB drives are flash memory. Some USB drives
may not be recognized correctly. We do not guarantee
compatibility with all mass storage devices and assumes no
responsibility for any loss of data that may occur with a device
connected to the unit.

To select the playback source:

- To turn on the unit, press **POWER**.
- 2 Insert a disc or USB drive. A file type selection screen will appear.

When both (disc and USB drive) are inserted, select the desired source, then press **ENTER**.

Playing audio files

To play audio files:

- Insert a disc or USB drive that contains an MP3 or WMA file(s).
- Press ▲ or ▼ to select "Music", then press ► or ENTER. The Music browser will appear.
- Press ▲, ▼, ◀ or ▶ to select the file you want to play, then press ENTER.

The selected file plays and the information on the file appears.

Once a song starts playing, playback status will appear, showing the File, Title, Artist, Album, Album name (if available) and playback duration. Pressing **RETURN** cause the status information to disappear and return to the Music browser.

To play individual audio files, navigate through the files and folders, select the desired file, then press **ENTER**.

To control MP3 or WMA playback:

- To pause playback, press PAUSE II.
- To stop playback, press STOP ■.
- To fast forward or fast reverse, press SEARCH ➤
 (forward) or SEARCH ◄◄ (reverse).
- Within four seconds of starting playback of a file, press
 SKIP I

 d

 to go to the previous file.
 - After four seconds of playback, press **SKIPI**◄ to go to the beginning of the file and press **SKIPI**◄ again to go to the previous file. Each press of **SKIP** ► skips the current file and plays to the next file.
- To return to the previous menu, press **RETURN**.

Viewing JPEG files

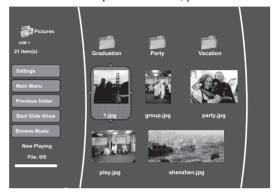
To view JPEG files:

- Insert a disc or USB drive that contains the JPEG file(s).
- Press ▲ or ▼ to select "Pictures", then press ► or ENTER. The Picture browser will appear.
- Press **A**, **V**, **◄** or **>** to select the file you want to view, then press **ENTER**.

The selected JPEG picture(s) will appear on screen.

A folder list and supported picture files will appear (along with thumbnail views of the pictures themselves).

• To return to the previous menu, press **RETURN**.



To control JPEG playback:

- To go to the next or previous file, press SKIP ►►I or SKIP
 I◄◄.
- To return to the previous menu, press RETURN.

To view JPEG files in a slide show:

- Press ◀ and press ▲ or ▼ to select "Settings", then press ENTER.
- Press ◀ and press ▲ or ▼ to select "Slide Show Effects" or "Slide Show Delay", then press ENTER.

You can select one of the following options by pressing \blacktriangle or \blacktriangledown , then press **ENTER**.

Press ▼ to select "OK", then press ENTER.

Slide Show Effects: None/Horizontal Scroll/Fade/Shutter Slide Show Delay: 5 Seconds/2 Seconds/1 Seconds/ No Delay/10 Seconds/15 Seconds/30 Seconds

- Press ▲ or ▼ to select "Start Slide Show", then press ENTER. The slide show starts.
 - To return to the previous menu, press **RETURN**.

Using Pandora

This option provides music personalized to your taste.

1 Press **TV/BD** to select Blu-ray mode. The Setup Menu screen will appear.

NOTF:

- If the BD player is not properly connected to the Internet, an alert message will appear on the main menu. In this case, press the RED button to properly configure the network connection (refer to "Connecting to the network" on page 31 for details).
- Press ▲ or ▼ to select "Connected". The Pandora screen will appear.



3 Press ► or ENTER.

Press ▲ or ▼ to select the option, then press ENTER. If you already have a Pandora account, select "I have a Pandora account".

If you do not have a Pandora account, select "I am new to Pandora" to display a Pandora website popup. You can obtain a new account by entering the activation code on this website.

5 Enter your email address and password, then press ▼ to select "next".

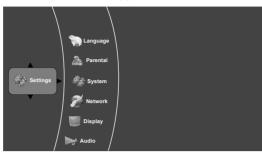
A list of stations created from the website or player will appear and start playing music.

NOTE:

• To cancel Pandora setting in step 4, select "Exit Pandora".

Quick guide for Setup Menu operation

- Press **POWER** on the unit or on the remote.
- Press **TV/BD** to select Blu-ray mode. The main menu will appear.
- Press ▲ or ▼ to select "Settings", then press ENTER. The Setup Menu will appear.



- 4 Press ▲ or ▼ to select the desired menu option on the Setup Menu, then press ENTER. A list of sub-options appears on the right of the screen.
- Press ▲ or ▼ to select the desired sub-option, then press ENTER. The circled checkmark ✓ will move to the selected option.



6 Press ✓ or RETURN until the Setup Menu returns, then press ✓ to select another menu category.

Setup Menu options

Icon	Option	Description	
	BD-Live Internet Access	Sets the Internet access level.	
	BD-Live Storage	Selects a USB drive to store BD-Live content.	
System	Erase Blu-ray Storage	Clears the non-volatile storage (application data area) on a Blu-ray Disc. The application data area is the space on a Blu-ray Disc that stores information such as the subtitle language selection. When you select this option, a confirmation box will appear. If you select "Ok", unit erases the Blu-ray Disc application data area. (Press ► or ENTER to select Erase Blu-ray Storage, Update Via Network and Restore factory defaults options.)	
	Update Via Network	Updates the BD player's software via the Internet. Check if the unit is connected to the Internet properly, then select "Update Via Network" from the Setup Menu. When there is new software available on the software update server, the "Automatic Upgrades Over the Internet" screen will appear. Select "Ok", then press ENTER. Downloading will start automatically and a progress bar will appear on screen. Once the update is complete, the unit will automatically turn off and on.	
	Restore factory defaults	Restore factory setting—Resets all settings to factory default. Deactivate Pandora—Resets Pandora settings.	
when confirming the unit and "Link down" if not. • MAC Address—Shows ur • IP Mode—Selects the IF IP address), Manual (let Gateway, Primary DNS a		 Link Status—Indicates whether or not the BD player is currently able to access an Internet site. Useful when confirming the unit is properly connected to a network; "Link Up" is displayed if properly connected and "Link down" if not. MAC Address—Shows unit's MAC address. IP Mode—Selects the IP configuration mode. Select Dynamic (uses DHCP to automatically obtain an IP address), Manual (let you manually configure network settings, such as IP Address, Subnet Mask, Gateway, Primary DNS and Secondary DNS settings), or Off (disables the network interface). * The network cannot be connected to the Internet by way of a proxy server. 	
	Network Test	Press ENTER to select this option. It tests unit's Internet connection by "pinging" an IP address. A "ping" sends a message to an Internet address and waits for a reply to verify that a connection is working.	
Display	BD/DVD Output	Selects the picture size, so you can match the size of the TV screen. You can select "16:9 Wide" or "16:9 Pillarbox". Note: For a wide-screen TV, select one of the 16:9 aspect ratios. If you select an aspect ratio that does not match your TV's screen size, the resulting picture display may be unpredictable. This setting applies to Blu-ray mode only. It changes the aspect ratio for a disc recorded at in a 4:3 format, but does not change the aspect ratio for a disc recorded in a 16:9 format.	
	Digital Output	Selects the digital audio output. The option you select depends on the capabilities of the sound system you have connected to unit. • PCM Stereo—Sends mixed digital audio over SPDIF in two-channel PCM format. • Bitstream—Sends the original bitstream from disc over SPDIF using legacy audio formats. Blu-ray Disc audio is limited to the soundtrack for main movie and does not send PIP audio or audio effects. • Bitstream Mixed—Blu-ray Disc audio streams are mixed and encoded into a single bitstream. Use this option if you are using an SPDIF 5.1CH receiver and you want to enjoy mixed Blu-ray Disc audio in surround sound. Note: When "Bitstream" is selected, unit cannot output secondary audio.	
Audio	Dynamic Range Control	Sets Dynamic Range Control to "On" or "Off". Dynamic Range Control is only active when a Dolby Digital signal is received. When you turn on this option and movie soundtracks are played at low volume or from smaller speakers, unit applies compression to make low-level audio more intelligible and prevents loud audio from getting too loud. On—Select this option if you play movies at low volume or if you have small speakers. Unit uses compression to make low-audio content easier to hear and prevent high-audio content from getting too loud. Off—Select this option if you do not want to use the DRC feature. The DRC gain value is ignored, and the audio program is reproduced with full dynamic range.	
	OSD	Selects the Setup Menu language. You can select "English", "Français", or "Español".	
Language	Menu	Selects the menu language for the disc.	
	Audio	Selects the audio language for the disc.	
	Subtitle	Selects the subtitle language for the disc.	
	Parental Country		
	Parental Control		
Parental	Parental Level	See page 30.	
	Parental Password		

Setting disc parental controls

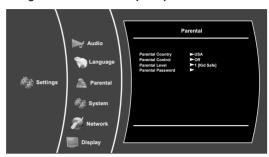
Some discs are specified as not suitable for children. Such discs can be limited not to playback with the unit.

To set parental controls:

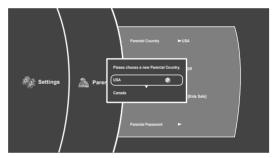
Press **TV/BD** to select Blu-ray mode.

Press ▲ or ▼ to select "Settings", then press ► or ENTER.

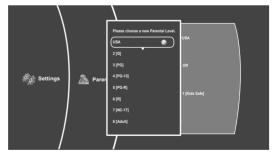
Press ▲ or ▼ to select "Parental", then press ► or ENTER. "Please Input 4-Digit Parental Password:" screen will appear when "Parental Control" is set to "On". Enter the password using Number buttons (0 - 9).



Press ▲ or ▼ to select "Parental Country", then press ENTER. Press ▲ or ▼ to select the country you live in, then press ENTER.



5 Press ▲ or ▼ to select "Parental Level", then press ENTER.



Press ▲ or ▼ to select the rating you want to block, then press ENTER.

You can select:

- 1[Kid Safe]—Suitable for all children.
- 2[G]—General audiences.
- 3[PG]—Parental guidance suggested.
- 4[PG-13]—Not suitable for anyone under 13.
- 5[PG-R]—Parental guidance recommended.
- 6[R]—Not suitable for anyone under 17 unless supervised by a parent or adult guardian.
- 7[NC-17]—Not suitable for anyone under 17.
- 8[Adult]—All BDs or DVDs can be played.

Press ▲ or ▼ to select "Parental Control", then press ENTER.

Press ▲ to select "On", then press ENTER.

Parental Control must be set to "On" for parental controls to work

To change the password:

Press ▲ or ▼ to select "Parental Password", then press ENTER.

"Please enter new parental control password:" screen will appear.



- 2 Enter the new password using **Number buttons (0 9)**, then press ▼ to select "Ok".
- 3 Press **ENTER** to save your password and return to the previous menu level.

NOTE:

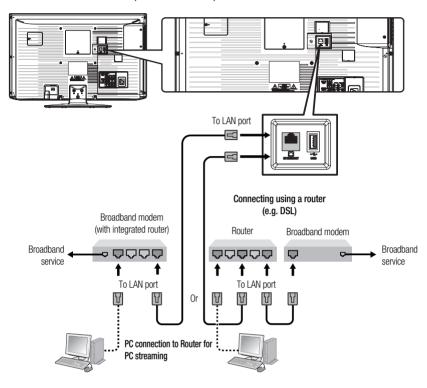
If you forget your password it can be reset. With no disc in the
player and in Blu-ray mode, press STOP on the unit. Continue
holding the button and press 7 on the remote at the same time.
"Release Parental Lock Completed!" appears on screen. Now
the password has been returned to the initial value (0000).

Connecting to the network

To access network service or upgrade the current firmware, you must make one of the following connections. By connecting the unit to a network, you have access to services such as software updates, BD-Live content, and streaming services such as Pandora, etc. We recommend you use an AP or router for the network.

Cable network

Connect the BD player's Ethernet port to the corresponding port on your modem or router using a LAN cable. Use a commercially available LAN or Ethernet cable (CAT5 or better) with RJ45 connector.



NOTE:

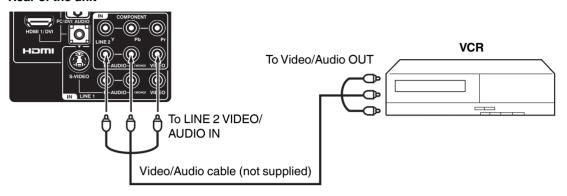
- Make sure to set network options after connecting the LAN cable.
- Internet access to the software update server may not be allowed, depending on the router you use or the ISP's policy. For more information, contact your ISP (Internet Service Provider).
- For DSL users, please use a router to make a network connection.
- Our company is not responsible for any malfunction of the BD player and/or the Internet connection feature due to communication errors/malfunctions associated with your Internet connection, or other connected equipment.
- Our company is not responsible for any trouble with your Internet connection.
- The use of a router may not be allowed or its usage may be limited depending on the policies and restrictions of your ISP. For details, contact your ISP directly.
- Your ISP may prevent this BD player from being connected to the network by checking the MAC Address. In that case, contact your ISP and request that the MAC Address be initialized.

Connections to other equipment

The exact arrangement you use to interconnect various video and audio components to this unit is dependent on the model and features of each component. Check the Owner's Manual provided with each component for the location of video and audio inputs and outputs.

To connect the LCD TV/BD to a VCR

Rear of the unit



To connect the LCD TV/BD to a VCR with an S-Video cord

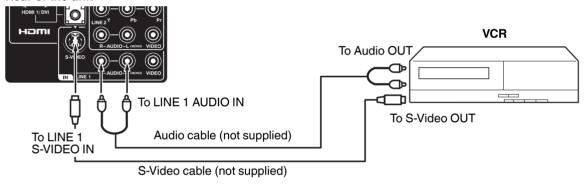
If you connect a VCR with a S-Video cable to the S-VIDEO IN jack on the rear side of the unit, you must also connect the audio cables to the AUDIO IN jacks on the rear side of the unit.

The S-Video cable only carries the video signal. The audio signal is separate.

NOTE:

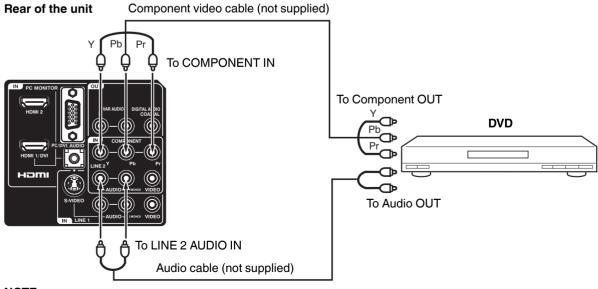
• When the S-Video cable and the standard video cable are connected at the same time, the S-Video cable takes precedence.

Rear of the unit



To connect to a BD or DVD player with Component Video Input

You can enjoy a high quality picture by connecting the unit's COMPONENT VIDEO OUT jacks of your BD or DVD player with the COMPONENT video cables (not supplied).



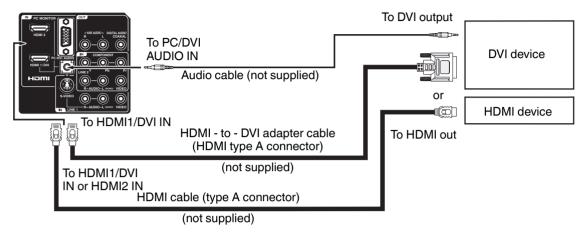
NOTE:

 Component Video input of the unit are for use with a device which output 480i/1080i interlaced signals and 480p/720p progressive signals.

To connect a HDMI or a DVI device to the unit

The HDMI 1 input receives digital audio and uncompressed video from a HDMI device or uncompressed digital video from a DVI device. When you connect to a DVI device with a HDMI-to-DVI adapter cable, it transfers only video signal. Separate analog audio cables are required.

Rear of the unit



NOTE:

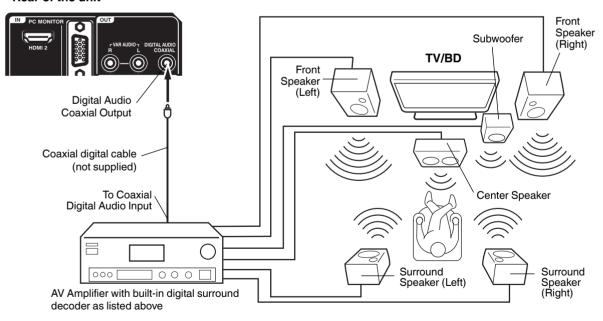
• When using HDMI 1/DVI to connect your HDMI or DVI devices, you must select the corresponding audio input source (HDMI or DVI) on the menu screen (see page 18). Otherwise you will only see the image with no sound.

Using an AV Amplifier with built-in digital surround

If you are using an Amplifier with built-in digital surround sound, you can enjoy various audio systems including Dolby Digital Surround audio that sounds just like the movie.

Connect an AV amplifier with built-in Dolby Digital decoder, DTS decoder etc. as shown below.

Rear of the unit

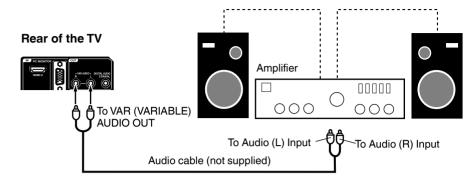


NOTE:

• When you are viewing digital broadcast, this unit will not work in conjunction with DTS audio. There will be no sound output if connected to an AV amplifier with a built-in DTS decoder.

To connect an audio system

This connection allows you to use an audio amplifier and external speakers, and adjust the audio level using the TV's remote control. To control the audio, turn on the TV and the stereo amplifier, and turn off the TV's built-in speakers (see page 18).



NOTE:

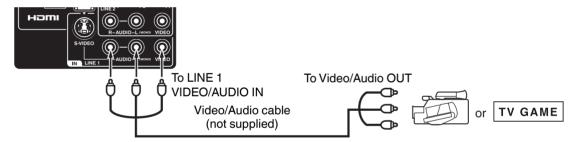
To hear sound when using an external audio amplifier, the volume of both the TV and the amplifier must be set above 0 (zero). For example, if the volume of the TV is set to 0, you will not be able to hear any sound, even if the volume of the amplifier is at its highest level.

To connect the TV/BD to a camcorder, or a TV Game

To play back from a camcorder, connect the camcorder to the unit as shown.

This unit can also be used as a display device for many video games. However, due to the wide variety of signals generated by these devices and subsequent hook-up variations required, they have not all been included in the suggested connection diagrams. You'll need to consult each component's Owner's Manual for additional information.

Rear of the unit

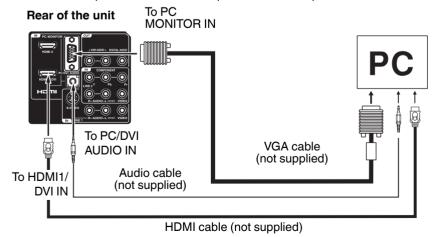


To connect the TV/BD to a PC (Personal Computer)

Before you connect this TV/BD to your PC, change the adjustment of your PC's Resolution and Refresh rate (60 Hz). Connect one end of a (male to male) VGA cable to the video card of the computer and the other end to the VGA connector PC MONITOR IN on the rear of the TV/BD. Attach the connectors firmly with the screws on the plug. In case of a Multimedia computer, connect the audio cable to the audio output of your Multimedia computer and to the AUDIO connector of the PC/DVI AUDIO IN jack of the TV/BD. You can also connect the PC with HDMI cable. If you use a HDMI cable, you don't have to connect the audio cable. If you use a DVI-to-HDMI cable, please connect the audio cable in the same way as the VGA cable.

Press INPUT on the remote control to select PC mode.

Switch on the computer. The TV/BD can operate as the computer monitor.



Monitor Display modes

MODE	Resolution	Refresh rate	
VGA	640x480	60/ 72/ 75 Hz	
VGA	720x400	70Hz	
SVGA	800x600	56/ 60/ 72/ 75 Hz	
XGA	1024x768	60/ 70/ 75 Hz	
SXGA	1280x1024	60Hz	
WXGA	1280x768	60Hz	
WXGA	1280x720	60Hz	
WXGA	1360x768	60Hz	
WXGA+	1440x900	60Hz	
FHD	1920x1080	60Hz	
To return to normal mode Press INPUT again.			

NOTE:

- The on-screen displays will have a different appearance in PC mode than in TV mode.
- If there is no video signal from the PC when the unit is in PC mode, "No signal" will appear on the TV screen.

Reception disturbances



IGNITION NOISE:

Black spots or horizontal streaks may appear, picture may flutter or drift. Usually caused by interference from automobile ignition systems, neon lamps, electrical drills, and other electrical appliances.



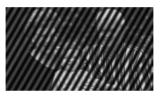
GHOSTS:

Ghosts are caused by the television signal following two paths. One is the direct path and the other is reflected from tall buildings, hills or some other objects. Changing the direction or position of the antenna may improve reception. Ghosting may also be caused by defects in the antenna system such as unshielded leads or connecting several sets to the same antenna without using multiple antenna couplers.



SNOW:

If your receiver is located in the fringe area of a television station where the signal is weak, your picture may be marred by the appearance of small dots. When the signal is extremely weak, it may be necessary to install a special antenna to improve the picture.



RADIO FREQUENCY INTERFERENCE:

The interference produces moving ripples or diagonal streaks, and in some cases, causes loss of contrast in the picture.

PREVENTION OF AN OBSTACLE TO RADIO RECEIVERS

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

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

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



BLOCK NOISE or FREEZE (DIGITAL INPUT):

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



BLACK SCREEN:

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

NOTE:

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

FOR CUSTOMER SERVICE, ADDITIONAL SET-UP AND OPERATING ASSISTANCE, OR TO ORDER ACCESSORIES PLEASE CALL:

1-800-289-0981

WHEN CALLING CUSTOMER SERVICE - PLEASE HAVE YOUR MODEL NUMBER READY

OR WRITE TO: ORION SALES, INC. 3471 N. UNION DR. OLNEY, ILLINOIS 62450

Problems and troubleshooting

Use the following check list for troubleshooting when you have problems with your TV/BD. Consult your local dealer or service outlet if problems persist.

Be sure all connections are properly made when using with other units.

SYMPTOMS	POSSIBLE SOLUTIONS	PAGE
POWER		•
TV/BD does not operate.	Make sure the power cord is plugged in.Unplug unit, then plug it back in.	13
TV BROADCAST RECEPTION		
Poor sound or no sound.	 Station or Cable TV experiencing problems, tune to another station. Check Volume adjustments or mute mode. Check for sources of possible interference. 	16 16, 17 35
Poor picture or no picture.	 Station or Cable TV experiencing problems, tune to another station. Check antenna or Cable TV connections, reorient antenna. Check for sources of possible interference. Check picture control adjustments. 	16 14, 15 35 18
Poor reception on some channels.	 Station or Cable TV experiencing problems, tune to another station. Station signal is weak, reorient antenna to receive stronger station. Check for sources of possible interference. 	16 14 35
Poor color or no color.	 Station or Cable TV experiencing problems, tune to another station. Make sure channels are set into memory. Check picture control adjustments. Check antenna or Cable TV connections, reorient antenna. Check for sources of possible interference. 	16 19 18 14, 15 35
Picture wobbles or drifts.	 Station or Cable TV experiencing problems, tune to another station. Make sure channels are set into memory. Cable TV company is scrambling signal. Check antenna orientation. 	16 19 - 14
No Cable TV reception.	 Check all Cable TV connections. Set Source option to the "Cable" mode. Station or Cable TV system problems, try another station. 	15 19 16
Horizontal or diagonal bars on screen.	 Check antenna connections, reorient antenna. Check for sources of possible interference. 	14 35
No reception above channel 13.	 Make sure Source option is in the appropriate mode. If using antenna, check UHF antenna connections. 	19 14
TV shuts off.	No broadcast on station tuned.Sleep Timer is set.Power interrupted.	16 17 -
Closed - Caption is not available.	 TV station experiencing problems or program tuned is not closed captioned. Try another program. Set Closed caption in the menu. 	16 22
Display is not shown in your language.	Select proper language in the menu options.	18
PC		I
The image on the screen is moving in an oblique direction.	Check "Clock" and "Phase".	18
Vertical stripes can be seen in full-display mode.	Check "Clock".	18
Part of the image is missing.	Check "Auto Adjust".	18
Horizontal stripes are moving vertically with flickering screen.	Check the signal status of the PC.	_
When the characters are displayed on the whole screen, vertical stripes appear and some of the characters are blurred.	 Check "Auto Adjust". If the display condition is not improved with "Auto Adjust", check "Clock". 	18

[•] The LCD panel is a very high technology product, giving you fine picture details. Occasionally, a few non-active pixels may appear on the screen as a fixed point of blue, green or red. Please note that this is not a malfunction.

SYMPTOMS	POSSIBLE SOLUTIONS	PAGE
PC		
When a letter string is displayed in full- screen, all of the characters on the screen are blurred.	Check "Auto Adjust". If the condition is not improved with "Auto Adjust", check "Phase" until you get the clearest image.	18
When small patterns are displayed on the screen, the entire screen is flickering.	Check "Auto Adjust". If the condition is not improved with "Auto Adjust", check "Phase" until you get a flicker-free display.	18
Image cannot be displayed in the correct position.	Check the signal status of the PC.	-
DVD/Blu-ray Disc		
TV/Blu-ray combo does not work.	A built-in safety device may have been activated. Press POWER on the side of unit to turn it off, then turn it on again. If unit still does not turn on, unplug the power cord, wait about one minute, plug it in again, then press POWER on the side of unit. Condensation may have formed inside unit. Turn off unit and wait about two to three hours for the condensation to evaporate.	- -
Playback will not start, or playback starts then stops.	 If you see (S), the action you are trying is not allowed by unit or the disc. Make sure that the disc is inserted with the label facing forward. Make sure that the disc is not dirty. The disc may be blank or not compatible with unit. 	23 23 7 7
No picture.	TV/BD selector is not set correctly.	23
No sound.	 Check the input selector of the amplifier is set properly. The unit is in the Special playback mode. Select the correct Audio Output position on AV amplifier. 	23 34
Startup is slow.	Startup may be slow if the TV is connected to the HDMl cable. Startup may be slow the first time you plug in the power cord or after a power failure.	-
The player is on and displays the start logo and menu, but there is no image from the disc displayed.	Make sure that the disc is not dirty. Try resetting your player. Press POWER, wait five seconds, then press POWER again.	7 -
Picture is distorted during CUE or REVIEW.	The picture will be distorted occasionally.	-
Stopping playback, search, slow-motion play, repeat play, or program play, etc. cannot be performed.	Some discs may not allow these functions.	-
No surround sound.	The setup does not match your stereo system.	33
The unit is not functioning.	Turn off the unit and unplug the AC power cord for several minutes, then replug it.	13
Playback does not start when the title is selected.	Check the Parental setup.	30
Audio soundtrack and/or subtitle language is not changed when you play back a disc.	Multilingual language is not recorded on the disc.	25
No subtitle.	Some discs have no subtitles. Subtitles are cleared. Press SUBTITLE .	25
Angle cannot be changed.	Multi-angles are not recorded on the disc.	25
"Prohibited", "\(\sigma\)" or "This operation can't be performed" appears on the screen.	The function is prohibited with the unit or the disc.	23
BD-Live, Pandora and USB conr	nections	
Cannot connect to the Internet.	Make sure that the Internet connection is set up correctly. Test the Internet connection to make sure that it is working. Make sure that the BD-Live Internet Access option is not set to Prohibit Access. Make sure that the disc you are playing is a legal copy.	- 31 -
After connecting to the Internet, cannot download a file.	BD storage may be full. Try clearing storage. Make sure that the Internet connection is still working. Try testing the connection. If you are using a USB drive, try a different drive.	- - -
File downloaded successfully, but playback pauses.	Make sure that the USB drive is a 2.0 USB drive. If the drive is a 1.1 USB drive, pausing can occur.	-
When playing a file on a USB drive, playback pauses.	Try another USB drive.	-
REMOTE CONTROL		
The remote control does not function.	Aim the remote control at the remote sensor. Operate within Approx. 15 feet or reduce the light in the room. Clear the path of the beam. The batteries are weak. Replace the batteries. Check that the batteries are inserted correctly.	13

Energency Disc Eject

Note: This procedure must be done in the order described below.

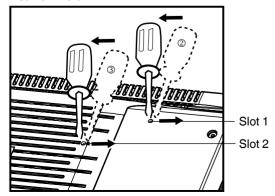
Problems and troubleshooting

- ① Be sure to unplug the power cord from the AC outlet.
- ② Insert the tip of a flathead screwdriver (5 mm dia. or smaller) vertically into Slot 1 on the back of the TV. Push the internal lever to the right until it stops.
- ③ Insert the tip of the screwdriver vertically into Slot 2. Push the internal lever to the right until the disc ejects.

Attention

- A flashlight may be required to see the release levers.
- Be sure to perform these steps in the order shown above, and as exhibited in the diagram, or a malfunction may occur.
- This procedure is for emergency use only. Performing these steps on a normal operating unit may cause the TV to malfunction.
- · Please call the service center if Disc does not eject.

Rear of the unit



Specifications

GENERAL		
Power supply	AC 120V 60Hz	
Power consumption	Operation: 130W Stand by: 0.3W	
Weight	13.6 kg (30.0 lbs)	
Dimensions	Width: 796 mm (31-5/16 inches) Height: 549 mm (21-5/8 inches) Depth: 300 mm (11-13/16 inches)	
Operating temperature	5°C - 35°C	
Operating humidity	Less than 80%	
TELEVISION		
Туре	31.55 inches (801.3 mm diagonal)	
Display method	Transmission TFT color LCD panel	
Number of pixels	1920 (H) x 1080 (V)	
Broadcasting system	US system M ATSC standard (8VSB), QAM	
Receiving channels	VHF 2-13 UHF 14-69 CATV 14-36 (A)-(W) 37-59 (AA)-(WW) 60-85 (AAA)-(ZZZ) 86-94 (86)-(94) 95-99 (A-5)-(A-1) 100-135 (100)-(135) 01 (4A)	
Tuner type	Frequency synthesized	
Inputs	S-Video: Y-Input:1.0 V (p-p), 75 ohms C-Input:0.3 V (p-p), 75 ohms Video: 1.0 V p-p/75 ohms Audio: -8 dBm/50K ohms Component video: (Y) 1.0 V (p-p), 75 ohms (Pb)/(Pr) 0.7 V (p-p), 75 ohms HDMI: HDMI compliant (type A connector) HDCP compliant E-EDID compliant Suggested scan rates: 1080p, 1080i, 720p, 480p, 480i HDMI Audio: 2-channel PCM 32/44.1/48 kHz sampling frequency 16/20/24 bits per sample PC Monitor: Mini-Dsub 15pin x 1 USB: USB 2.0 Antenna: VHF/UHF In 75 ohms coaxial Digital audio out: 0.5 Vp-p 75 ohms terminated	
<u>'</u>		
Speaker	41 mm x 122 mm (1-5/8 inches x 4-13/16 inches), 8 ohms x 2	
Audio output power	10.0W + 10.0W	
BD/DVD/CD player	NTCC	
Signal system	NTSC	
ACCESSORIES	BD-ROM, BD-JAVA 1.1, DVD-Video, DVD-RW/-R, CD-RW/-R, CD-DA Remote control Batteries (AA) x 2 AC Cord Clamp Clamp Screw Stand Stand Screw x 4	

- Designs and specifications are subject to change without notice.
 For information on our other products, please visit our website at <u>www.hitachi.us</u>

HITACHI

LIMITED WARRANTY

32" LCD HDTV with Built-in BD Player

ORION warrants this product to be free from manufacturing defects in material and workmanship under normal use and conditions for a period of 1 year from date of original purchase in the United States.

Should service be necessary under this warranty for any reason due to a manufacturing defect or malfunction during the first 12 months from date of original purchase, ORION will provide carry-in service only by an ORION authorized Independent Service Center at no charge. Also, if an original part fails due to manufacturing defect in material and workmanship within one year from date of original purchase we will replace the defective part, provided the defect or malfunction is verified along with dated proof of purchase.

There are ORION authorized Independent Service Centers located throughout the country. For the one nearest you, DIAL TOLL FREE: 1-800-289-0981. ORION will not be liable for damages incurred in shipment of the unit. If there are no ORION authorized Independent Service Centers in your area please call - 1-800-289-0981 for assistance.

Note: This warranty is void if the product is:

- (a) Damaged through negligence, misuse, abuse, or accident.
- (b) Used in a commercial application or rentals.
- (c) Modified or repaired by anyone other than an Independent Service Center authorized by ORION to effect warranty repairs to the class of product or by the ORION Factory Service Center.
- (d) Damaged because it is improperly connected to the equipment of other manufacturers.

This warranty does not cover:

- (a) Damage to video disc.
- (b) Damage to equipment not properly connected to the product.
- (c) Costs incurred in the shipping of the product to an ORION authorized Independent Service Center or ORION Factory Service Center.
- (d) Damage or improper operation of unit caused by customer abuse, misuse, negligence, or failure to follow operating instructions provided with the product.
- (e) Ordinary adjustments to the product which can be performed by customer as outlined in the owner's manual.
- (f) Signal reception problems caused by external antenna or cable systems.

THIS WARRANTY IS NON TRANSFERABLE AND APPLIES ONLY TO THE ORIGINAL PURCHASER AND DOES NOT EXTEND TO SUBSEQUENT OWNERS OF THE PRODUCT. ANY APPLICABLE IMPLIED WARRANTIES, INCLUDING THE WARRANTY OF MERCHANTABILITY, ARE LIMITED IN DURATION TO A PERIOD OF THE EXPRESS WARRANTY AS PROVIDED HEREIN BEGINNING WITH THE DATE OF ORIGINAL PURCHASE AT RETAIL AND NO WARRANTIES, WHETHER EXPRESS OR IMPLIED SHALL APPLY TO THIS PRODUCT THEREAFTER. ORION MAKES NO WARRANTY AS TO THE FITNESS OF THE PRODUCT FOR ANY PARTICULAR PURPOSE AND USE.

UNDER NO CIRCUMSTANCES SHALL ORION BE LIABLE FOR ANY LOSS, DIRECT, INDIRECT, INCIDENTAL, SPECIAL, OR CONSEQUENTIAL DAMAGE ARISING OUT OF OR IN CONNECTION WITH THE USE OF THIS PRODUCT.

THIS WARRANTY IS VALID ONLY IN THE UNITED STATES OF AMERICA. THIS WARRANTY GIVES YOU SPECIFIC LEGAL RIGHTS, HOWEVER, YOU MAY HAVE OTHER RIGHTS WHICH MAY VARY FROM STATE TO STATE. SOME STATES DO NOT ALLOW LIMITATION ON IMPLIED WARRANTIES OR EXCLUSION OF CONSEQUENTIAL DAMAGE, THEREFORE THESE RESTRICTIONS MAY NOT APPLY TO YOU.

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