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Hitachi UltraVision® HDTV Monitor

1.5™ UltraThin LCD HDTV Monitor

32" Class (31.51" Diagonal)

Anthracite Pearl Crystal Frame (UT32A302)

White Pearl Metallic Crystal Frame(UT32A302W)

1366 x 768p, PictureMaster™ V

(1) $\mathrm{HDMI}^{\mathrm{TM}}$ (V.1.3 with CEC) Input; (1) RGB D-sub15 Input with Audio

Operating Guide

Model Name
UT32A302
UT32A302W

READ THE ENCLOSED INSTRUCTIONS CAREFULLY.
KEEP THIS OPERATING GUIDE FOR FUTURE REFERENCE.
Record the serial number of your monitor for future reference.
SERIAL NO. _____

This serial number is located on the back and right side of the monitor.

If you have a question about this product please call 800-Hitachi for assistance



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IMPORTANT SAFETY INSTRUCTIONS

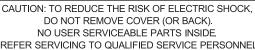
SAFETY POINTS YOU SHOULD KNOW ABOUT YOUR HITACHI LCD MONITOR

Our reputation has been built on the quality, performance, and ease of service of Hitachi LCD Monitors.

Safety is also foremost in our minds in the design of these units. To help you operate these products properly, this section illustrates safety tips which will be of benefit to you. Please read it carefully and apply the knowledge you obtain from it to the proper operation of your Hitachi LCD Monitor.

Please fill out your warranty card and mail it to Hitachi. This will enable Hitachi to notify you promptly in the improbable event that a safety problem should be discovered in your product model. Model and serial numbers are indicated on back side and right side of the LCD Monitor.







The lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of a sufficient magnitude to constitute a risk of electric shock to a person.



The exclamation point within an equilateral triangle, is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

READ BEFORE OPERATING EQUIPMENT

Follow all warnings and instructions marked on this LCD Monitor

- 1. Read these instructions.
- 2. Keep these instructions.
- Heed all warnings.
- 4. Follow all instructions.
- Do not use this apparatus near water.
- Clean only with a dry cloth.
- 7. Do not block any ventilation openings. Install in accordance with the manufacturer's instructions.
- 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.
- Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.
- Only use the attachments/accessories specified by the manufacturer.
- 12. Use only with the cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with the apparatus. When a cart is used, use caution when moving the cart/apparatus combination to avoid injury from tip-over.

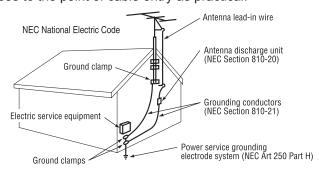


- Unplug this apparatus during lightning storms or when unused for long periods of time.
- 14. Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.

- 15. Monitors and Televisions are designed to comply with the recommended safety standards for tilt and stability. Do not apply excessive pulling force to the front, or top, of the cabinet which could cause the product to overturn resulting in product damage and/or personal injury.
- Follow instructions for wall, shelf or ceiling mounting as recommended by the manufacturer.
- 17. An outdoor antenna should not be located in the vicinity of overhead power lines or other electrical circuits.
- 18. If an outside antenna is connected to the receiver and the monitor be sure the antenna system is grounded so as to provide some protection against voltage surges and built up static charges. Section 810 of the National Electric Code, ANSI/NFPA No. 70-1984, provides information with respect to proper grounding for the mast and supporting structure, grounding of the leadin wire to an antenna discharge unit, size of grounding connectors, location of antenna discharge unit, connection to grounding electrodes and requirements for the grounding electrode.

NOTE

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



IMPORTANT SAFETY INSTRUCTIONS (continued)

Warning



- To reduce the risk of fire or electric shock, do not expose this apparatus to rain or moisture.
- The LCD Monitor should not be exposed to dripping or splashing and objects filled with liquids, such as vases, should not be placed on the Monitor.
- This apparatus shall be connected to a mains socket outlet with a protective earthing connection.
- The mains plug is used as the disconnect device and shall remain readily operable.

If problems occur during installation or operation of the product, before calling for technical support or service technicians, please read "TROUBLESHOOTING" ($\boxed{43} \sim \boxed{45}$) to determine the symptoms.

If serious problems occur (such as smoke or an abnormal odor from the unit), turn off the main power, unplug the power cord, and then, contact 800-HITACHI immediately.

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-HITACHI.**

FEDERAL COMMUNICATIONS COMMISSION NOTICE

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

- If the Monitor is connected with a Set Top Box or TV Receiver, reorient or relocate the receiving antenna.
- Increase the separation between the equipment and the receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/television technician for help.

Declaration of Conformity

This device complies with part15 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 Home Electronics (America), Inc. 900 Hitachi Way Chula Vista, CA 91914-3556 Tel. 800-448-2244 (800-HITACHI) ATTN: Customer Relations

Modifications

The FCC requires the user to be notified that any changes or modifications made to this device that are not expressly approved by Hitachi Home Electronics (America), Inc. may void the user's authority to operate the equipment.

Cables

Connections to this device must be made with shielded cables with metallic RFI/EMI connector hoods to maintain compliance with FCC Rules and Regulations.

Any cables that are supplied with the system must be replaced with identical cables in order to assure compliance with FCC rules. Order Hitachi spares as replacement cables.

INDUSTRY CANADA AGENCY REGULATORY INFORMATION

This class B digital apparatus meets all requirements of the Canadian Interference-Causing Equipment Regulations. This Class B digital apparatus complies with Canadian ICES-003.

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

INTRODUCTION

Thank you for purchasing the Hitachi 1.5 LCD Monitor. We hope that you will enjoy the outstanding performance of this product.

This LCD Monitor has been designed to comply with international standards. However, it could cause personal injury and property damage if improperly handled. In order to prevent potential danger and obtain maximum benefit from your set, please read this operating guide carefully before operating this product and observe the following instructions when installing, operating, and cleaning the product. To ensure proper operation, please read and follow ALL the instructions, especially the "IMPORTANT SAFETY INSTRUCTIONS" and "SAFETY PRECAUTIONS".

Keep this manual for future reference and record the serial number of your set in the space provided on the front

Keep this manual for future reference and record the serial number of your set in the space provided on the front cover page of this manual.

About This Manual

- The information in this manual is subject to change without notice.
- This manual has been produced with the utmost care. If you have any comments or questions regarding this manual, please contact your local dealer or our Customer Service Center.
- Before operating the set, please fully understand the prerequisites such as specifications or constraints for the hardware and software. Hitachi is not responsible and accept no liability for any loss, damage or injury as a result of misuse.
- Reproduction, copying, utilization, modification and/or transmission in whole or in part of this manual are prohibited except by prior written consent.
- All other products and company names used in this manual are trademarks or registered trademarks of their respective owners.

Trademark Credits

- VGA and XGA are trademarks of International Business Machines Corporation.
- VESA is a registered trademark of the Video Electronics Standard Association.
- HDMI, the HDMI logo and High-Definition Multimedia Interface are trademarks or registered trademarks of HDMI Licensing LLC.

Even if no special note has been made of company or product trademarks, these trademarks have been fully respected.

<u>Software</u>

It is illegal for you to alter, decompile, disassemble, decrypt, or otherwise reverse-engineer the software installed in this product.

Features

- Hitachi® UltraVision® 32" HDTV Monitor
- 1.5" UltraThin Liquid Crystal Display
- Anthracite Pearl Crystal Frame(UT32A302)
- White Pearl Metallic Crystal Frame(UT32A302W)
- Wide Viewing Angle IPS (In-Plane Switching) Technology
- High Resolution Progressive Display 1366(H) x 768(V)
- High Efficiency EEFL (External Electrode Fluorescent Lamp) BackLight
- (1) HDMI™ (V.1.3 with CEC) Input
- (1) RGB D-sub15 Input with Audio
- Preprogrammed Remote Control
- Easy-to-use Multi-Language On-Screen Display
- High Quality Audio System with 4 Drivers
- High Efficiency Display with Power Saving Features

SAFETY PRECAUTIONS

For your safety, please read the following precautions carefully before using this product. Improper use would cause serious personal injury and/or damage to your property or the product.

Explanation of the Symbols

The following are the symbols used in this manual and affixed to the unit itself. Please fully understand the meanings of the symbols before reading the instructions in this section.

⚠ WARNING	Never ignore the instruction. There are risks of serious or fatal injury to the user.
A CAUTION	Do not ignore the instruction. There are risks of personal injury and/or property damage.

	Other Symbols				
	The triangle with illustration is intended to alert the users that there are risks of fire, explosion, or high temperature if the product is handled improperly. Each illustration within the triangle specifies the contents in detail. (The figure on the left is an example.)				
	The circle with diagonal line and illustration indicates a prohibited action (the symbol to the left indicates that dismantling is prohibited).				
0-5	This symbol indicates a compulsory action. The contents are clearly indicated in or adjacent to an illustration (the symbol to the left indicates that the power plug should be disconnected from the power outlet).				



There is a risk of fire, electric shock, or serious injury.

■ If serious problems occur, unplug the power cord immediately.

Serious problems such as:

- Smoke, abnormal odor or noise emitted from the product.
- \bullet No picture, no sound or distorted picture on the display.
- Foreign matter (such as water, metals etc.) entered the unit.

Do not continue using the product under these abnormal conditions.

Turn off the main power, unplug the power cord, and contact your dealer immediately.

For your safety, never try to repair the product yourself.



- Do not allow liquids or any foreign matter (such as metals or flammable items) to enter the unit.
 - If this does occur, turn off the main power, unplug the power cord, and contact your dealer immediately.
 - Exercise special caution when young children are around the unit.



- Do not remove covers, or modify the product.
 - High-voltage components are installed inside of the unit. Removing covers can expose you to high
 -voltage electric shock, and other hazardous conditions.
 - Contact your local dealer to perform servicing such as inspection, adjustment or repair work.





MARNING

There is a risk of fire, electric shock or serious injury.

■ Install the unit in a proper location where it does not expose anyone to danger.

• If you bump against the edges of the unit, you could be injured.



■ Do not rest weight on top of the unit.

Objects such as

- Liquid containers (vase, fish tank, flowerpot, cosmetics or liquid medicine).
- If water or any liquid spills onto the unit, it may cause short-circuiting and result in fire or electric shock. If this occurs, turn off the main power, unplug the power cord, and contact your dealer immediately.
- Do not rest anything heavy on top of the unit.
- Do not climb on or hang from the unit.
- Do not allow your pets to get on top of the unit

■ Do not install the unit in an unsuitable location.

• This could cause a malfunction or in extreme cases danger of electric shock. Locations where high moisture is likely, such as bathrooms or shower rooms, close to windows, or outside where rain, snow or other inclement conditions could occur, should be avoided. Please also avoid installing the unit in a location where fumes from hot springs could come into contact with it.





■ Unplug the unit in the event of a lightning storm.

• To reduce the risk of electric shock, do not touch the product when lightning occurs.





plug from the power outlet.

■ Do not do anything that may damage the power cord.

- Do not damage, modify, twist, forcibly bend, heat, or pull excessively on the power cord.
- Do not place heavy objects (including the unit itself) on top of the power cord.
- If the power cord is damaged, contact your dealer for repairs or exchange.



■ Use only with designated power supply voltage.

• To prevent the risk of fire and electric shock, operate the product only with the power supply voltage indicated on the



■ Be careful not to drop or allow any impact to affect the unit.

- Take extra care while moving the unit.
- There is no protection glass on the surface of the LCD panel. Therefore do not press the panel surface with your fingers or hands. Also do not hit any objects against the monitor. These actions would damage the LCD cells or the panel surface and could cause failure or personal injury.



- In the event that you drop the unit or the cabinet is damaged, turn off the main power, unplug the power cord and contact your local dealer immediately.
- Continuing use of the product under the above conditions may cause fire or electric shock.

Clean dust or metals from on or around the pins of the power plug regularly.

- Continuing use of the product under the above conditions may cause fire or electric shock.
- Always unplug the power cord first, then clean the pins using a dry cloth.



■ Do not place the unit on an unstable surface.

Unstable surfaces such as:

- Tilted surface or shaky shelving, table, stand or trolley.
- \bullet If the unit falls down, this could cause personal injury.



ACAUTION

■ Do not place or use the unit in a dusty location.

• This could cause a malfunction.

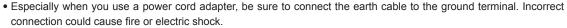


■ Do not cover or block any ventilation holes on the product.

The unit would overheat and this could cause fire or damage to the product which may shorten its service lifetime.

- Install the product in accordance with the instructions in this manual.
- Do not place the unit with the ventilation side downward.
- . Do not install the unit on carpeting or bedding.
- Do not cover the unit with table cloths etc.









Connect the earth cable.

■ Observe the anti-tumble measures described in this manual.

• If the unit tumbles over, there is a risk of personal, possibly fatal injury. Also, this would damage the product seriously.



■ Do not install the unit near medical devices.

• To prevent malfunction of medical devices, do not use the product and medical devices in the same room.



■ Do not place a CRT-based television near the speakers of the LCD Monitor.

This could cause partial discoloration or blurring of the image on the CRT-based television.
 Please install it away from the speakers of the unit.



Disconnect all of the external connection cables and detach the anti-tumble measures before moving the unit.

• Otherwise fire, electric shock or personal injury may result.



■ Connect the power plug securely.

- Improper connection will cause overheating and may result in fire.
- Do not touch the pins of the plug while connecting it to the wall socket. This could cause electric shock.
- If the plug is not suitable for the wall socket, contact your dealer for replacement.



■ Do not handle the power cord with wet hands.

• This could result in electric shock.



■ Do not pull the cord when you unplug the power cord.

- \bullet This may damage the cord and could result in fire or electric shock.
- Grip the plug when disconnecting it.



■ Unplug the power cord when you do not intend to use the product for long periods of time.



Handle the batteries properly.

- Improper or incorrect use of the batteries may cause corrosion or battery leakage, which could cause fire, personal injury or damage to property.
- Use only the types of batteries which are indicated in this manual.
- Do not replace batteries with used ones.
- Install the batteries correctly by observing the polarity (+ and -) indications on the battery compartment.
- Do not dispose of used batteries as domestic waste. Dispose of them in accordance with the local regulations.



ACAUTION

■ Do not install the unit in locations where it will be subjected to high temperature.

This could damage the cabinet or components of the product.

- Do not install near any heat sources such as radiators, heating grilles, stoves, or other apparatus that produce heat.
- Keep the unit out of direct sunlight. Otherwise the resulting increase in temperature of the unit may cause a malfunction.

■ Viewing Advice

- The lighting of the environment in which the product is used should be appropriate. Too bright/dark environments are not good for your eyes.
- Take time to relax your eyes occasionally.
- When you use the product, view from a distance equal to 3 to 7 times the height of the screen. This is the best viewing distance in order to protect your eyes against eyestrain. Example: (3X)= approx: 1.5m (4'), (7X)= approx: 3.5m (9').
- Adjust the volume to an appropriate level, especially during night time.

■ Transporting the product

• When the product needs to be transported due to moving or repair, use the carton box and buffer material that came with the product.



- Always transport the product upright; otherwise this could damage the LCD panel.
- Avoid laying the product down on its face or back.
- Avoid vibrations. If the product "must" be transported laying on its face, be sure to provide soft cushioning material.

■ Keep radios away from the unit while in use.

The unit is designed to meet the international EMI standards to prevent radio interference. However, the unit may generate noise in the radio.



- If noise is heard on the radio, please try the following actions.
 - Adjust the direction of the radio antenna in order not to receive interference from the unit.
 - Keep the radio away from the unit.

■ Infrared communication devices

- Infrared communication devices such as cordless microphones or cordless headphones may not operate properly around the unit. This is because of communication failure. Please note that this is not a malfunction.
- When you dispose of the product at the end of its service lifetime, follow the regulations in your residential area.
 - For more information, contact the local authority or the dealer where you purchased the product.

Cleaning and Maintenance

Please make sure to unplug the power cord before cleaning the unit.

■ How to clean the LCD panel of the unit.

- Wipe the panel with a lint-free and dry cloth in order to prevent damage to the panel surface.
- Do not use a chemical cloth or cleaners. Depending on the ingredients, these may cause discoloration and damage to the panel surface.
- Do not wipe with a rough cloth or rub hard. This may damage the panel surface.
- In case of greasy dirt such as fingerprints, wipe the panel surface with a lint-free cloth moistened with a diluted neutral detergent solution (dilute 1 part of detergent to 100 parts of water), and then wipe with a soft and dry cloth.
- Do not use a spray cleaner. This could cause a malfunction.

■ How to clean the cabinet of the unit.

- The following may cause cracking, deformation and peeling of paint.
 - Do not wipe the cabinet with benzene, thinners and other chemical products.
 - Do not spray volatile solutions such as insecticide over the cabinet.
 - Do not leave the cabinet in prolonged contact with plastic or rubber materials.
- Do not use a chemical cloth, cleaner or wax. Depending on the ingredients, these may cause cracking and deformation.
- Use a lint-free cloth (e.g. cloth for cleaning glasses) to clean the cabinet and control panel of the unit. In case of the excessive dirt, wipe with a soft cloth moistened with a diluted neutral detergent solution and then wipe with a soft and dry cloth.
- Never use the following detergents. They could cause cracking, discoloration and scratching.
 - Acidic/alkaline detergents, alcoholic detergents, abrasive cleaners, soap powder, OA cleaner, car wax, glass cleaner, etc.

Main Unit Installation

When installing the main unit, be sure to use the specified mounting units in order to obtain maximum performance and maintain safety.

Hitachi assumes no responsibility nor liability for personal injuries or property damage caused by use of other mounting units or improper installation.

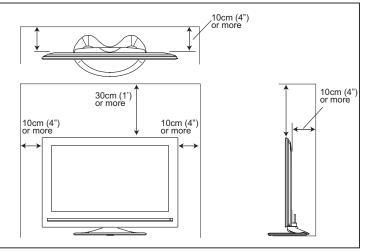
With respect to installation instructions, please read each user manual for the respective mounting units: for Desktop Setup, Floor Stand Setup, Wall Mounting, and Ceiling Mounting.

If using Wall or Ceiling Mounting units, contact your local dealer and ask for an approved installation specialist to set up the unit. Never attempt to install it yourself. That could cause injury or damage.

Please leave adequate space around the unit in order to avoid increasing the internal temperature.

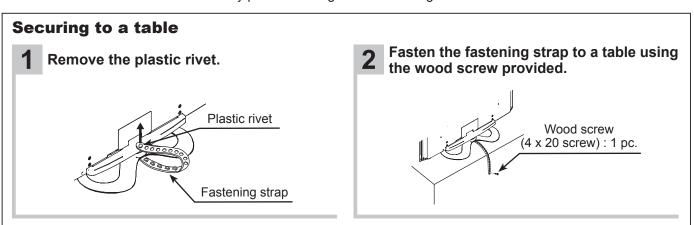
Make sure not to block any ventilation holes.

Do not install the unit in a small space such as inside a cabinet, closet or box without adequate ventilation. Leave at least 10cm (4") of clearance from each side of the unit and 30cm (1') from the top of the unit to ceiling.



Anti-tumble Measures

Install in a stable location and take safety precautions against overturning.



Securing to ceiling or wall

Use the specified mounting unit to secure the set to a ceiling. For Wall Mounting setup please refer to page (1). For Floor Stand setup please refer to page (1).

NOTE

- For more information regarding mounting of the unit, please contact your dealer.
- Please install the unit in a proper location where it does not expose anyone to the danger of bumping themselves (for example their hands, head or face, etc) against the edges of the unit and causing personal injury.

Child Safety Notice

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 in mind:



THE ISSUE

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

HITACHI CARES!

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

TUNE INTO SAFETY

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





Wall Mount Setup

1 Remove the Stand Base from the Monitor

About the Installation

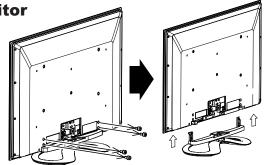
This product is heavy and should be carried by at least 2 people.

Please make sure screws are tightened properly. The torque should be 1.8~3.0 N.m (18~30 kgf.cm).

CAUTION

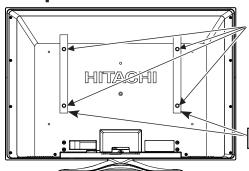
Keep the screws. They may be used for the Wall Mount installation.

• For Wall Mount assembly; please refer to the Installation Manual of the



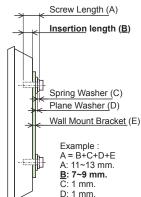
Remove the 4 screws and raise straight up from tabletop stand.

Install the Wall Mount Brackets on the Monitor using 4 screws (Screws Specification is shown below).



Screw Mounting Holes (4 places).Don't use the original flat head screws (A) that comes in the monitor, for the Wall Mount Braket. The length is not long enough.

Wall Mount Brackets



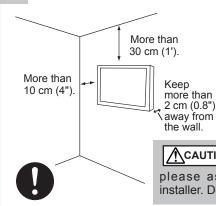
- The screw type :Theread ISO M5 (Metric type, do not use Standard type).
- Wall Mount Unit.

 If the Wall Mount Bracket thickness is 1~3 mm. the original screws removed from the stand base can be used for the Wall Mount installation.
- **∴**CAUTION

3

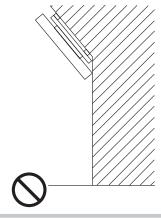
Insertion length ($\underline{\mathbf{B}}$) of the screws must be within 7~9 mm. If the length is less than 7mm, the weight can not be maintained. If the length is more than 9mm, a space is created between the Wall Mount Bracket and the Monitor. This length is <u>very important</u>.

Tips to consider for the location of the Monitor.



Do not block the ventilation holes. In addition please keep a cetain distance around and make sure not to obstruct ventilation. Blocking the ventilation holes might cause fire or defect

CAUTION If you purchased the Wall Mount unit, please ask for a professional installer. Do not install by yourself.



This ultrathin unit features an advanced ventilation system configured for vertical installation. A knowledgeable and experienced professional technician can perform other mounting or installation orientations (e.g., horizontal, tilted) provided that you specifically inform the technician of the unit's specialized ventilation needs. Call 800-HITACHI for additional info and guidance.

∴ CAUTION

Although this LCD Monitor can be installed using a variety of third party wall mounting brackets/devices, such third party brackets/devices have not been tested or approved by Hitachi for use or compatibility with this LCD Monitor. Accordingly, Hitachi accepts no responsability or liability for any injuries or property damage

resulting from the use of such third party brackets/devices. Hitachi strongly advises that any installation of this LCD Monitor using wall mounting brackets/devices be performed only by a qualified and experienced television installation technician who has completed a thorough evaluation of:

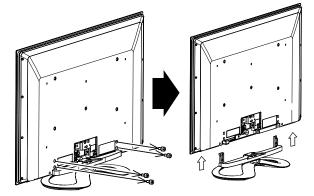
- a) the weight-bearing strength and stability of the intended wall mount surface; and
- b) the weight-bearing strength and compatibility of the intended wall mount brackets/device.

Floor Stand Setup

1 Remove the Stand Base from the Monitor

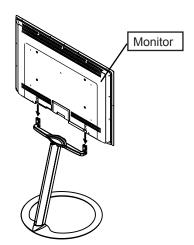


Keep the screws. They will be used for the Floor stand installation.



Remove the 4 screws and raise straight up from tabletop stand.

Install the Monitor on the Floor Stand



About the Installation

This product is heavy and should be carried by at least 2 people.

• For Stand Assembly; please refer to the Installation Manual of the Floor Stand AS-LSZ0081 or AS-LSZ0082.

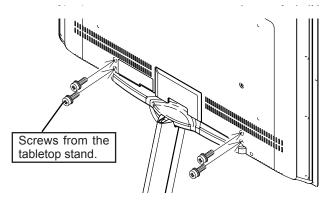
Attach the Monitor to the Floor Stand with the 4 screws used with the tabletop stand.

∴ CAUTION

Adjust Monitor position left or right to match with screw holes. If the screw holes do not align, the Monitor may be damaged.

<u></u> **MARNING**

Please make sure screws are tightened properly.

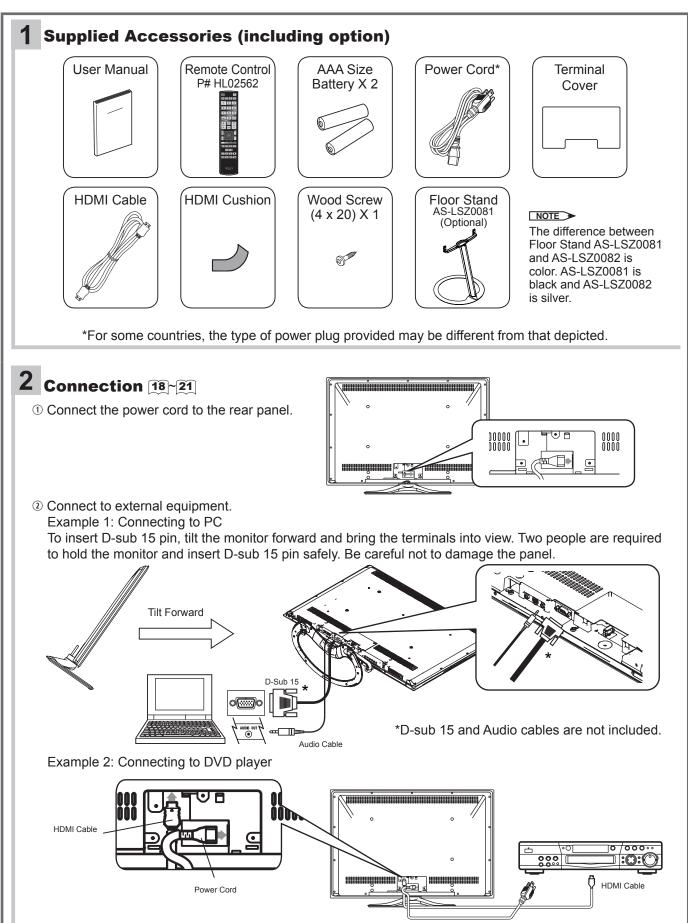


⚠CAUTION

UT32A302 and UT32A302W LCD UT Monitors are only for use with the Hitachi AS-LSZ0081 and AS-LSZ0082 Floor stands respectively. Use with other floor stands could cause instability and possible injury.

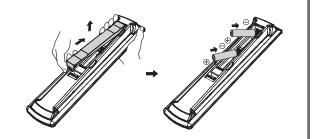
QUICK START GUIDE

For more information on connecting and using your monitor, please be sure to read all instructions in this user manual.



QUICK START GUIDE (continued)

Insert the Batteries into the Remote Control... 17



4 Power On... 22

① Connect the plug into the wall socket after all other connections are completed.

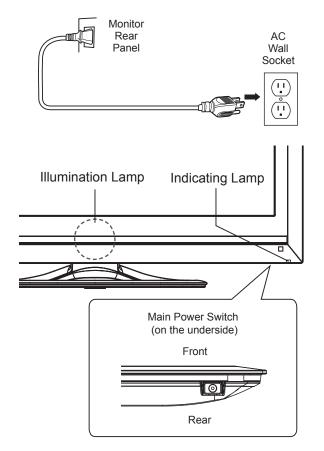
ACAUTION

• Ensure that both ends of the power cord are easily accessible.

The Main Power Switch is factory set to On (activated), therefore after you connect the plug into the wall socket, the color of the indicating lamp must turn Green and the Illumination Lamp turns Blue. The image will display on screen.

Once the **Main Power** switch is on, you can turn On/ Off by pressing the **Power (On/Off)** button on the remote control.

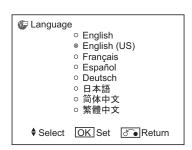
If no equipment is connected to the Monitor the color of the indicating lamp turns to Orange, and the Illumination Lamp turns off indicating Power Save Mode.



5 Language Selection

The initial language setting for on-screen displays is English (US). You can change to your preferred language.

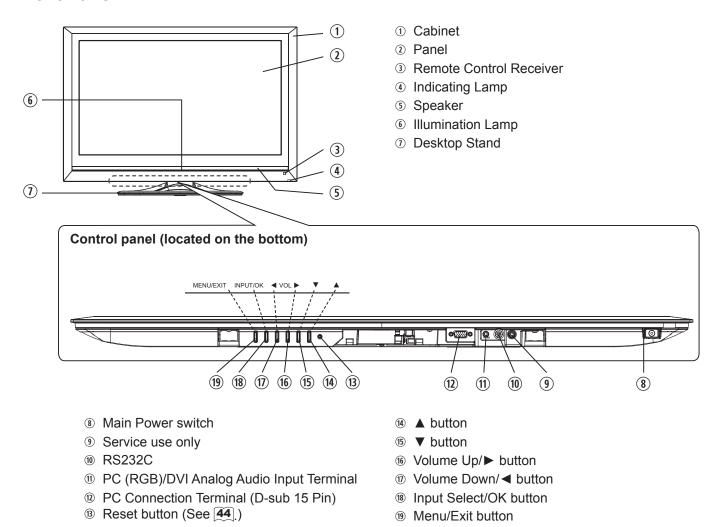
- ① Press the button to display Main Menu.
- ② Select "Language" using the 🛊 button.
- ③ Select the language you prefer from the list using the ♠ button and then press the ok button.



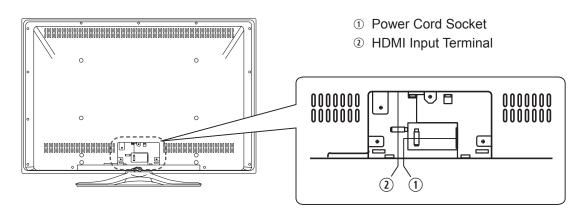
COMPONENT NAMES

Main Unit

Front Panel



Rear Panel

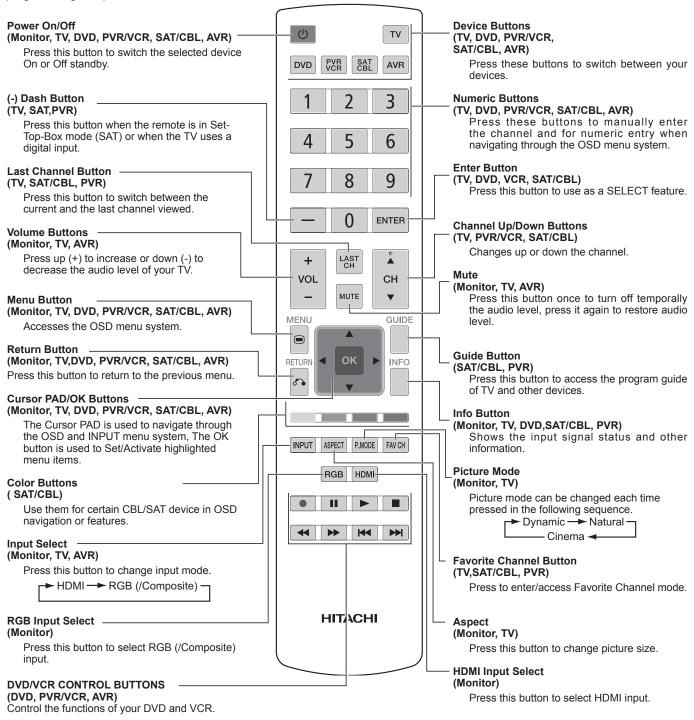


Please refer to 18 ~ 21 for detailed information regarding the connections.

COMPONENT NAMES (continued)

Remote Control

In addition to controlling all of the functions on your Hitachi UT LCD Monitor, the new remote control is designed to operate different types of devices, such as, DVD players, Cable Boxes, Set-Top-Boxes, Satellite Receivers, VCR's, PVR's and AVR's. The remote control must be programmed to control the chosen device. Please refer to pages 25 ~28 for external device programming setup.



LEGENDS

TV - Television VCR - Video Cassete Recorder PVR - Personal Video Recorder DVD- Digital Video Disc Player SAT - Satellite Receiver CBL - Cable Box AVR - Audio/Video Receiver

NOTE

- Pressing any button will illuminate the backlight for 4 seconds.
- TV Mode is used for LCD Monitor. Please notice that NOT all keys are available for this LCD Monitor, the only working keys are the ones marked as **Monitor** in parenthesis, since other ones are available when equipped with Hitachi Set-Top-Box and Monitor is used as a TV.
- For the Record button there is a feature for safety; so this key have to be press twice in order to start recording.

PREPARATION

Remote Control Battery Installation

The remote control operates on 2 "AAA" batteries.

1. Open the battery compartment cover

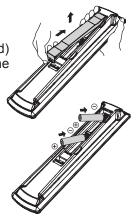
 Push and pull open the battery compartment cover on the backside in the direction of the arrow, and remove the cover.

2. Install the batteries

 Install 2 "AAA" batteries (included) making sure the polarities match the indication inside the compartment.

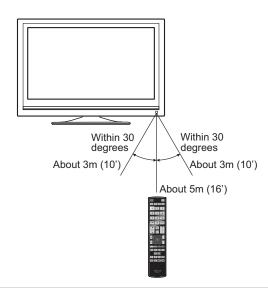
3. Close the battery compartment cover

 Make sure the tabs rest in the corresponding holes and push down the compartment cover until it clicks shut.



Handling the Remote Control

Use the remote control within a distance of about 5m (16') from the front of the unit's remote control sensor and within an angle of about 30 degrees on both sides.



<u>A</u>CAUTION

Risk of corrosion or battery leakage. Tampering with batteries may result in physical injury and/or property damage including fire.

- Never mix used and new batteries in the device.
- Replace all the batteries in the device at the same time.
- Remove the batteries if the remote control is not going to be used for an extended period of time.

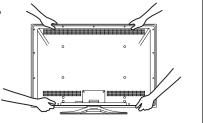
To avoid possible malfunction, read the following instructions and handle the remote control correctly.

- Do not drop or allow impact to affect the remote control.
- Do not spill water or any liquid on the remote control.
- Do not place the remote control on a wet surface.
- Do not place the remote control under direct sunlight or near sources of excessive heat.

Caution When Moving the Main Unit

Whenever the unit is moved, two people are required to transport it safely.

Whenever the unit is moved, it should be lifted forwards by holding the top and base on both sides of the unit for stability.



CONNECTION

The unit is suitable for various kinds of connections. Make a connection in the following steps. Be sure to turn off the main power first when connecting external equipment.

- **1.** Connect power cord to the rear panel.
- 2. Connect your external equipment (if any) to the unit.
- **3.** Attach cushion, secure with clamps and fit terminal cover.
- 4. Connect the power plug to the wall socket.

1. Connect Power Cord to the Rear Panel

Connect the power cord to the unit.

Do not connect the power plug to the wall socket until all other connections are completed.

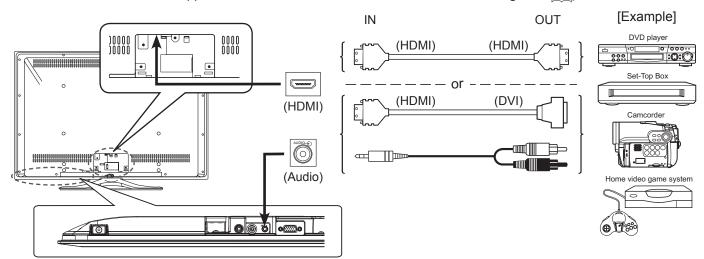
2. Connect your Equipment to the Monitor

Connecting to Equipment Having HDMI or DVI Output Terminals

The **HDMI** terminal can be connected to devices with HDMI output.

If the external device has a DVI output, this can be connected using the HDMI-DVI cable. If the HDMI-DVI cable is used, connect analog audio signal to the **PC** (**RGB**)/**DVI** Analog Audio Input terminal.

Please be sure to attach the supplied cushion around the HDMI cable when connecting. See [20]



Information

The HDMI (High Definition Multimedia Interface) is a multimedia I/O (Input/Output) interface. Only one cable is used to transmit all video/audio/control signals, thus facilitating easy connection.

Moreover, the digital signals can produce high quality data without any degradation.

(g) If your external device has an HDMI terminal, HDMI connection is recommended for higher quality picture and sound.

NOTE >

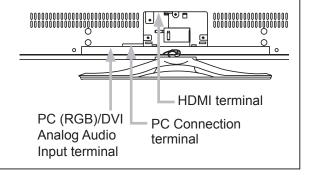
• PC (RGB)/DVI analog audio input terminal

This terminal can be used in either one of the following cases only.

- ① The external device is connected to the PC Connection terminal of the unit.
- ② The DVI output of an external device is connected to the HDMI terminal using the HDMI-DVI cable.

Make sure that the video and audio terminals are connected to the same external device.

For details of the output format of an external device, refer to "Recommended Signal List" on [48].



CONNECTION (continued)

2. Connect your Equipment to the Monitor (continued)

Connecting to Equipment Having a HDMI Output Terminal

HDMI-Interfaced System

With "HDMI Control" function, you can interface the connected equipment through the HDMI terminal automatically if the connected equipment meets an industry standard "HDMI CEC (Consumer Electronics Control)". Please check if the connected equipment supports HDMI CEC before using this function.

- 1. Press the button.
- 2. Select "Function" menu.
- 3. Select "HDMI Control".
- 4. Select "Auto Input Change" or "System Standby".

Function HDMI Control Auto Input Change Off System Standby Off AV Center Control On
♦ Select

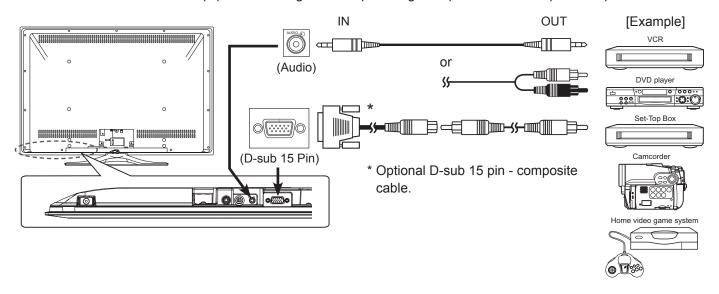
Auto Input Change	Off	Condition : while the monitor is in Standby mode. When the connected equipment starts (such as DVD			
Auto Input Change	On	playback and Disc insertion), the monitor is automatically turned On and switches the picture and audio to HDMI input.			
System Standby	Off	Condition: while the monitor is On. When the monitor is switched off or set to Standby mode, the connected equipment is also turned off or in Standby mode.			
	On				
AV Center Control	Off	Selecting On will activate AV Center OSD interface, in case			
	On	you purchased the optional Hitachi A/V Center.			

NOTE >

If the HDMI-DVI cable is used, this HDMI-interfaced system is not available.

Connecting to Equipment Having Video Output Terminals

The unit can be connected to equipments having video output using the optional D-sub 15 pin - composite cable.



NOTE

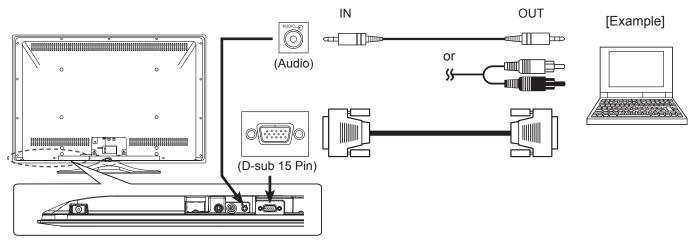
• About the connection of D-sub 15 pin, see 13 for details.

CONNECTION (continued)

2. Connect your Equipment to the Monitor (continued)

Connecting to a PC

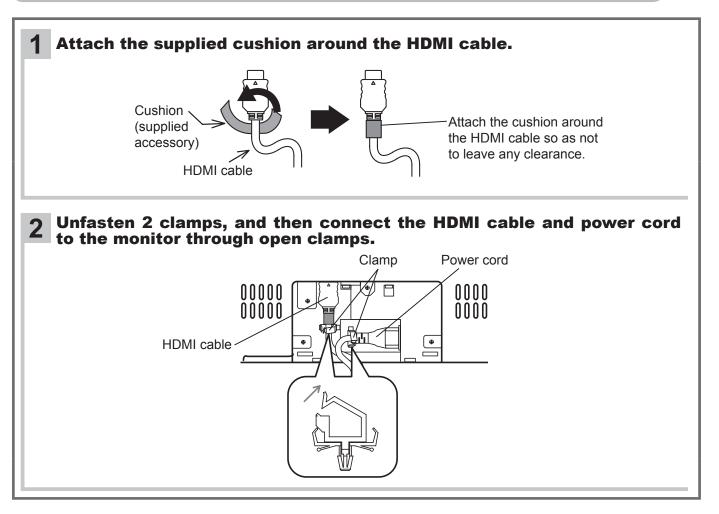
The **PC connection** terminal (D-sub 15 pin) + the **PC (RGB)/DVI Analog Audio Input** terminal are connected to the PC, allowing an analog RGB signal.



NOTE

• About the connection of D-sub 15 pin, see 13 for details.

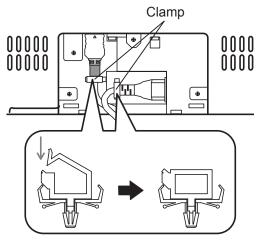
3. Attach Cushion, Secure with Clamps and Fit Terminal Cover



CONNECTION (continued)

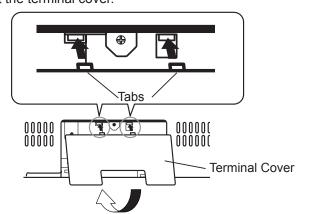
3. Attach Cushion, Secure with Clamps and Fit Terminal Cover (continued)



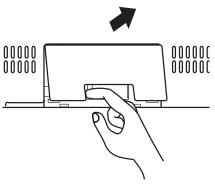


4 Fit the terminal cover onto the monitor.

Insert the tabs into the slots as shown and fold downward to fit the terminal cover.



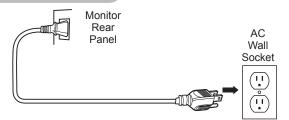
How to remove the cover.



Using your fingers, pull backwards to lift the cover.

4. Connect the Power Plug into the Wall Socket

Connect the power cord after completing all other connections. (For some countries the type of plug is different that depicted.)



ACAUTION

- Use only the power cord provided.
- Do not use a power supply voltage other than that indicated (AC120, 60Hz). It may cause fire or electric shock.
- For the LCD monitor, a three-core power cord with a ground terminal is used for efficiency protection. Always be sure to connect the power cord to a three-pin grounded outlet and make sure that the cord is properly grounded. If you use a power source converter plug, use an outlet with a ground terminal and screw down the ground line.
- Ensure that both ends of the power cord are easily accessible.
- If you have to change the power cord, please use a certified power cord that meets your region's safety standards.

BASIC OPERATION

Power On/Off

Turn On the power of the unit.

• To turn On the power to the unit:

- 1. Press the Main Power switch on the unit.
 - The Indicating Lamp illuminates in Green, and the Illumination Lamp turns Blue.

The image will display on screen.

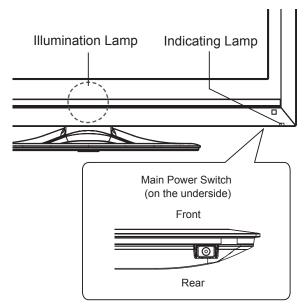
2. Once the **Main Power** switch is on, you can turn On/Off by pressing the **Power (On/Off)** button on the remote control.

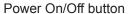
• To turn Off the power to the unit:

- 1. Press the Power (On/Off) button on the remote control.
 - The image disappears from the screen. The Indicating Lamp turns **Red** (Standby mode), and the Illumination Lamp turns off.
- **2.** Press the **Main Power** switch on the unit to completely turn Off the power to the unit.



 While the Indicating Lamp illuminates in Red (Standby mode), you can turn On/Off by pressing the Power (On/Off) button on the remote control.







The Indicating Lamp/Illumination Lamp Status

Indicating Lamp	Illumination Lamp	Power Status	Remark
Off	_	Off	_
Red	_	Standby mode	-
Green	Blue	On	_
Orange	_	Power Save mode	Refer to 42 and 43 for the condition.
Blinking Green	Blue	On	Receiving Remote Control signal

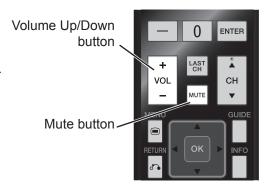
NOTE

- If the image does not appear on the screen at all, or if there is any problem with it, see "TROUBLESHOOTING" on 43~45. This may help you to solve the problems.
- After turning On, it takes about 6 seconds until the monitor starts up. Please note that buttons on the remote control and the unit (such as the Power button) do not work during this period of time.
- If power is interrupted during use of the unit, to avoid sudden surges of electricity when the power comes back on, turn off the main power to the unit before leaving home.

BASIC OPERATION (continued)

Volume Up/Down

- **1.** To increase the sound volume, press the **Volume Up** button on the remote control or control panel.
 - The Volume Indicator value on the screen will shift to the right.
- **2.** To decrease the sound volume, press the **Volume Down** button on the remote control or control panel.
 - The Volume Indicator value on the screen will shift to the left.

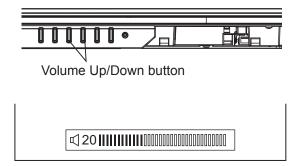


Mute

- **1.** To mute sounds, press the MUTE button on the remote control.
 - The sound of the unit is temporarily turned Off.
 - The color of the Volume Indicator will turn into **grey** while muting the volume.
- **2.** To turn the sound back on, press the MUTE button again, or press the **Volume Up** button on either the remote control or control panel.
 - The color of the Volume Indicator will turn back to blue.

NOTE

 You can decrease the volume by pressing the Volume Down button while the sound is muted.



BASIC OPERATION (continued)

Input Switching to HDMI and RGB

By pressing the Input Select button NPUT, you can switch the input to display the image outputting from the external equipment connected to each terminal (HDMI and RGB (/Composite)).

<From Remote Control>

• Press the INPUT button on the remote control.

Each time this button is pressed, the screen displays the corresponding mode in the following sequence.

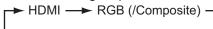


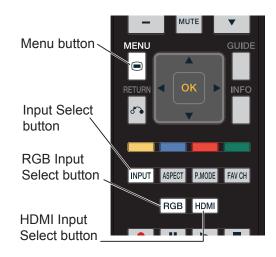
• Press the RGB or HDMI button to directly select the input mode.

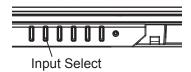
<From Control panel>

The Input modes can also be switched using the Input Select button on the control panel.

Each time this button is pressed, the screen displays the corresponding mode in the following sequence.







NOTE > Switching between RGB and Composite Mode

When pressing RGB button, you will see the image from either RGB or Composite mode. You can set up the mode in advance if necessary.

- 1. Press MENU button in RGB or Composite mode.
- 2. Select "Setup" menu.
- 3. Select "RGB input".

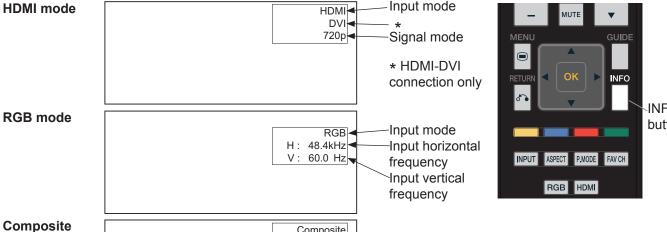
mode

- Select "Composite" to display the image from a video source via the optional D-sub 15 pin composite
- Select "RGB" to display the image from PC.

See 38 and 39 for details of "RGB input" menu.

Input Signal Screen Display

The input signal status can be displayed on the screen by pressing the button on the remote control. • The display will go out in approximately 6 seconds.



Composite

INFO button

SETUP OPERATION

How to Use the Remote to Control your External Devices

OPERATING THE PRECODED FUNCTIONS FOR YOUR EXTERNAL DEVICES.

The new remote control is designed to operate different types of VCRs, cable boxes, set-top-boxes, satellite receivers, DVD players, and other audio/video equipment. You must first program the remote to match the remote system of your external equipment (refer to pages $29 \sim 30$ for precodes).

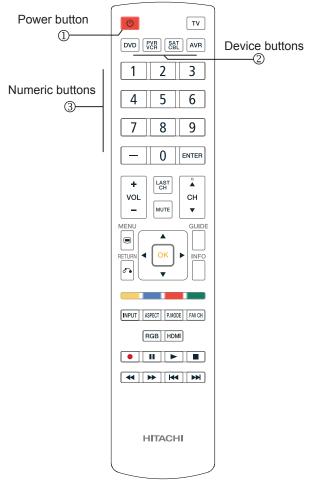
EXTERNAL DEVICE CONTROL SETUP PROCEDURE

- 1. Turn on your external device.
- 2. Select the desired device mode DVD, PVR/VCR, SAT/CBL or AVR by pressing the corresponding device button.
- Hold down the device button (DVD, PVR/VCR, SAT/CBL or AVR) on the remote and enter the four digit preset code that matches your device as shown on pages 29 ~ 30.
- 4. Release the device button.
- 5. If done correctly, the device LED indicator will blink 3 times to confirm proper setup.
- 6. The remote will now control the desired device.

SETUP EXAMPLE (Hitachi Cable Box with precode 0003)

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

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



Remote Control Backlight Feature

When you press any remote control button, the buttons will light up. The illumination will light a few seconds during this time. The buttons will appear to light if the room is dark.

Disabling Remote Control Backlight Feature

- 1. Place the RC in TV mode.
- 2. Press and HOLD the TV mode key.
- 3. While holding the TV mode key enter ASPECT, MUTE in sequence.
- To re-enable the backlight feature do steps 1~3 again (these steps toggle the Backlight Feature on and off, default is ON).

NOTE

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

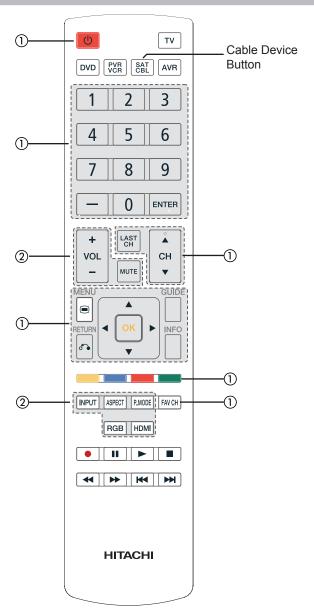
How to Use the Remote to Control your External Devices

1

1

(1)

2



MY CABLE BOX CODE IS:

• Refer to the operating guide of the Cable Box for operation of the buttons exclusively for the Cable Box.

① PRECODED CABLE BOX buttons

These buttons transmit the chosen precoded cable codes:

-Power -Cursor & OK -Info

-Number PAD

-Menu

-Enter

-Return -Channel Up & Down -Fav CH

-Guide -Dash(-) -Color Buttons

-Last CH

2 EXCLUSIVE TV mode (Monitor) buttons

These buttons are for operating the TV:

-P. Mode -HDMI -Input

-Aspect

-Vol Up & Down

-RGB -Mute

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

NOTE

· Refer to the operating guide of the Set-Top-Box/Satellite Receiver for operation of the buttons exclusively for the Set-Top-Box/Satellite Receiver.

ΤV

AVR

3

6

9

ENTER

Ă

СН

GUIDE

INFO

①

1

(1)

PVR SAT CBL

5

8

0

LAST CH

MUTE

INPUT ASPECT P.MODE FAV CH

RGB HDMI

• II **•** I

HITACHI

DVD

4

+

VOL

MENU

RETURN

8

Set-Top-Box/

Device Button

Satellite Receiver

① PRECODED SET-TOP-BOX/SATELLITE buttons

These buttons transmit the chosen precoded STB/Satellite codes:

-Power -Cursor & OK -Number PAD -Menu -Info -Enter -Return -Channel Up & Down -Fav CH -Guide -Dash(-) -Color Buttons -Last CH

2 EXCLUSIVE TV mode (Monitor) buttons

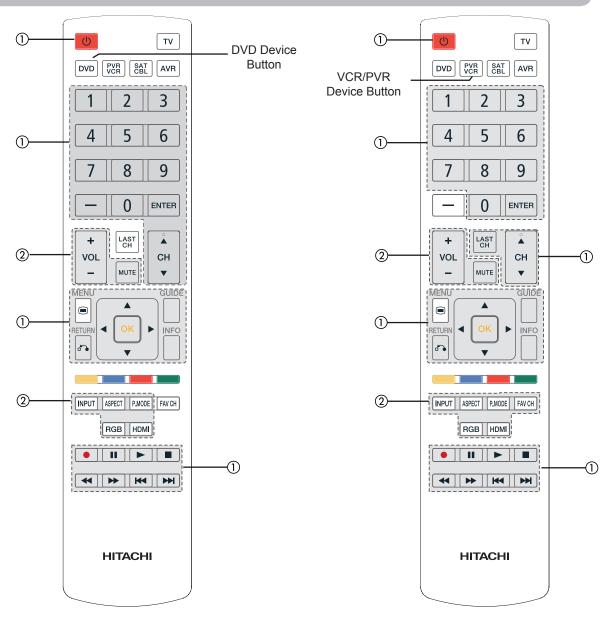
These buttons are for operating the TV:

-P. Mode -HDMI -Input

-Aspect -Vol Up & Down

-RGB -Mute

How to Use the Remote to Control your External Devices



MY DVD PLAYER CODE IS:

NOTE >

 Refer to the operating guide of the DVD Player for operation of the buttons exclusively for the DVD Player.

① PRECODED DVD buttons

These buttons transmit the chosen precoded DVD codes:

-Power -Cursor & OK -Play, Stop, Pause, -Menu -Info RWD, FWD, Skip -Return -Number PAD RWD, Skip FWD, Rec

2 EXCLUSIVE TV mode (Monitor) buttons

These buttons are for operating the TV:

-P. Mode -HDMI -Input

-Aspect -Vol Up & Down

-RGB -Mute

MY VCR/PVR CODE IS:

NOTE

 Refer to the operating guide of the VCR/PVR for operation of the buttons exclusively for the VCR/PVR.

1) PRECODED VCR/PVR buttons

These buttons transmit the chosen precoded VCR/PVR codes:

-Power -Cursor & OK -Record

-Menu -Channel Up & Down
-Return -Number PAD PWD, Skip
-Info -Last CH (FWD,RWD)

-Guide -FAV CH

2 EXCLUSIVE TV mode (Monitor) buttons

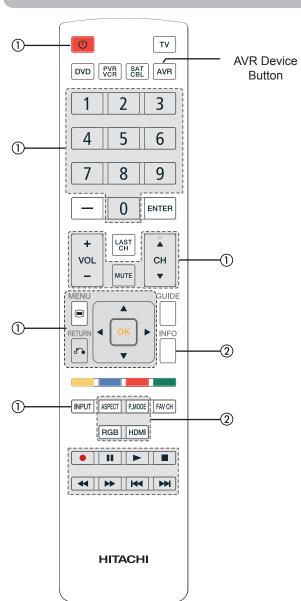
These buttons are for operating the TV:

-P. Mode -HDMI -Input

-Aspect -Vol Up & Down

-RGB -Mute

How to Use the Remote to Control your External Devices



MY AUDIO/VIDEO RECEIVER (AVR) CODE IS:

NOTE

• Refer to the operating guide of the AVR for operation of the buttons exclusively for the AVR.

① PRECODED AVR buttons

These buttons transmit the chosen precoded cable codes:

-Power -Channel Up & Down -Input -Number PAD -Vol Up & Down -Mute -Cursor PAD -Menu -Return

2 EXCLUSIVE TV mode buttons

These buttons are for operating the TV:

-P. Mode -HDMI -Info

-Aspect -RGB

Remote Control Codes

CABLE Brand	CODES	CROSSDIGITAL		ADVENTURA ADYSON	0037,0240,0000 0072	INSTANT REPLAY	0035	QUARTZ QUASAR	0035,0047,0046 0035,0162,0002
A-MARK ABC	0008,0144 0237.0003.0008	DIRECTV	1377,0392,0566 0639,1639,1142	AIKO	0278	ITT NOKIA	0240,0041		1162
ACCUPHASE	0003		0247,0749,1749 0819,1856,1076	AIWA AKAI	0037,0000,0124 0041,0175	JANEIL JENSEN	0240 0067,0041	RADIOSHACK	0035,0162,0037 0048,0047,0240
ACORN	0237		1108,0099,1109	ALBA	0209,0072,0278	JVC	0067,0041,1162		0000,0104,0046
ACTION	0237		1392,1414,1442 1443,1609,1640	ALIENWARE ALLEGRO	1972 0039	KEC KENWOOD	0037,0278 0067,0041,0038	RADIX	1037,1162 0037
ACTIVE	0237	DISH	1505,1005,0775	AMERICA ACTION			0046	RANDEX	0037
ADB	2092,2586	NETWORK SYSTEM	1170,1775	AMERICAN HIGH AMSTRAD	0035,0081 0000	KLH KODAK	0072 0035,0037	RCA	0060,0035,0048 0240,0045,0000
ARCHER	0237	DISHPRO	1505,1005,0775	ASHA	0240	KTV	0000		0042,0065,0105 0880
BCC	0276		1775	ASTRA	0035,0081	LG	0037,0240,0038 1037	REALISTIC	0035,0162,0037
BRITISH TELECOM	0003	ECHOSTAR	1505,1005,0775 1170.1775	AUDIOVOX AVIS	0000 0000,0072	LINKSYS	1972		0048,0047,0240 0000.0104.0121
CENTURY	8000	EXPRESSVU	0775,1775	BEAUMARK	0240	LLOYD'S	0240,0000,0072 0038		0278,0046,0065
DIGEO	1187,2187	FORTEC STAR	1821	BELL & HOWELL	0035,0048,0039 0000,0104,0046	LOEWE	0081	REPLAY TV	1162 0614,0616
DIGI	0637	FUNAI	1377	PPOKOONIO	0479	LOGIK LUMATRON	0240,0000,0072 0278	RICAVISION	1972
DIRECTOR	0476	GE	0392,0566	BROKSONIC	0184,0121,0209 0002,0479	LUXOR	0046	RUNCO SAMSUNG	0039 0060,0240,0045
DUMONT FOSGATE	0637 0276	GENERAL INSTRUMENTS	0869	CALIX	0037	LXI	0037,0000,0042 0067	OAMOONO	0000,0038,0432
GE	0144	GOI	0775,1775	CANDLE CANON	0037,0038 0035	M ELECTRONIC		SAMTRON	0739 0240
GENERAL	0476,0810,0276	HITACHI	0749,0819,1250	CAPEHART	0002	MAGNASONIC	0037,0240,0000 0072,0278	SANKY	0048,0039
INSTRUMENT GIBRALTER	0003 0003	HOUSTON	0775	CARRERA CARVER	0240 0035,0081	MAGNAVOX	0035,0037,0048	SANSUI	0240,0000,0067 0209,0041,0072
GOLDSTAR	0144	HTS HUGHES	0775,1775 1142,0749,1749	CCE	0072,0278		0039,0081,0240 0000,0563,0618	CANIVO	0002,0479
HITACHI	0003,0008	NETWORK	1442,1443	CINERAL CITIZEN	0278 0035,0037,0240		1593	SANYO	0047,0240,0000 0104,0046,0159
INSIGHT	0476,0810	SYSTEMS	0000		0000,0209,0278	MAGNIN MARANTZ	0240 0035,0081,0038	CCOTT	0479
JERROLD	0476,0810,0276	INNOVA JERROLD	0099 0869	CLASSIC	0479 0037	MARTA	0037	SCOTT	0184,0045,0121 0043
MEMOREX	0003 0000	JVC	0775,1170,1775	COLORTYME	0060,0035,0045	MATSUI MATSUSHITA	0037,0209 0035,0162,0081	SEARS	0060,0035,0162 0037,0048,0039
MITSUBISHI	0003	LG	1414	COLT	0278 0000,0072		1162		0047,0033,0045
MOTOROLA	1376,0476,0810	MAGNAVOX	0722	CRAIG	0037,0047,0240	MEDIA CENTER PC	1972		0000,0042,0104 0067,0043,0209
	0276,1187,1254 1106	MCINTOSH	0869	CRITERION	0072 0000,0072	MEI	0035		0041,0072,0046
NOVA VISION	0008	MITSUBISHI	0749	CROSLEY	0035,0081,0000	MEMOREX	0035,0162,0037 0048,0039,0047	SHARP	0065,0105 0048,0047,0032
NOVAPLEX	8000	MOTOROLA NETSAT	0869,0856 0099	CROWN CURTIS MATHES	0072,0278 0060,0035,0162		0240,0000,0104		0000,0065,0848
NSC	0637	NEXT LEVEL	0869	001111011111111111111111111111111111111	0240,0000,0041		0209,0072,0278 0046,0479,1037	SHINTOM	0039,0240,0000 0072
PACE	1877,0877,0237 0008	PANASONIC	0247,0701	CYBERNEX	0278,0432 0240	METZ	1162	SHOGUN	0240
PANASONIC	0000,0008,0144	PANSAT	1807	CYBERPOWER	1972	MGA	0037 0060,0240,0043	SIEMENS SIGNATURE	0037,0104 0060,0035,0037
PANTHER	0637	PHILIPS	1142,0749,1749 0775,0819,1076	DAEWOO	0037,0045,0278 0046	MGN	0240		0048,0000,0046
PARAGON	0000,0008,0525		0722,0099,1442	DAYTRON	0037,0278	TECHNOLOGY MICROSOFT	1972	SINGER	0065,0479 0037,0240,0072
PENNEY	0000,0637	PIONEER PRIMESTAR	1142,1442 0869	DELL DENON	1972 0081,0042	MIDLAND	0240	SONIC BLUE	0614,0616
PHILIPS PIONEER	1305,0317 1877,0877,0144	PROSCAN	0392,0566	DERWENT	0041	MIND MINOLTA	1972 0042,0105	SONOGRAPHE SONY	0046 0035,0047,0032
FIUNEER	0533	RADIOSHACK RCA	0566,0775,0869 0392,0566,1142	DIRECTV DUAL	0739 0000	MITSUBISHI	0060,0048,0047		0033,0000,0067
PULSAR	0000	NOA	0775,0855,0143	DURABRAND	0039,0038		0000,0042,0067 0043,0041		0046,0636,1032 1972
QUASAR	0000	SAMSUNG	1392,1442 1377,1142,1276	DYNATECH ELECTROHOME	0240,0000 0060,0037,0240	MOTOROLA	0035,0048	SOUNDMASTER STACK 9	0000 1972
REGAL RUNCO	0276 0000	<i>5,6</i>	1108,1109,1442		0000,0043,0209	MOVIE WALKER MTC	0240,0000,0072	STS	0042,0105
SAMSUNG	0003,0144	SKY	1609 0856,0099	ELECTROPHONIC EMERALD	0037 0184,0121	MTX	0000	SV2000 SVA	0000,0072 0000
SASKTEL	1737	SONY	0639,1639,1640	EMEREX	0032	MULTITECH NAD	0039,0000,0072 0240,0104	SYLVANIA	0035,0081,0000
SCIENTIFIC	1877,0877,0477	STAR CHOICE STAR TRAK	0869 0869	EMERSON	0037,0184,0240 0000,0121,0043	NEC	0104,0067,0041	SYMPHONIC	0043,1593 0240,0000,0002
ATLANTA	0237,0003,0000 0008	THOMSON	0392,0566		0209,0002,0278	NEW TECH	0038 0072		1593
SONY	1006	TIVO TOSHIBA	1142,1442,1443 0749.1749.0790	FISHER	0479,1593 0039,0047,0000	NIKKO	0037,0278	SYSTEMAX TAGAR SYSTEMS	1972
SPRUCER	0144	ULTIMATE TV	1392,1640	FUJI	0104,0046	NIKKODO NISHI	0037,0278 0240	TANDY	0000,0104
STARCOM	0003	ULTRASAT UNIDEN	1806 0722	FUJITSU	0035,0033 0000	NIVEUS MEDIA	1972	TASHIKO TATUNG	0037 0048,0081,0000
STORM SUPERCABLE	0637 0276	VOOM	0869	FUNAI	0037,0000,0072 0278,1593	NOBLEX NORTHGATE	0240 1972		0067,0041
TORX	0003	ZENITH	0856,1856,1810	GARRARD	0000	OLYMPUS	0035,0162,0104	TEAC TECHNICS	0000,0067,0041 0035.0162.0037
TOSHIBA	0000	SAT/PVR COMBO	CODES	GATEWAY GE	1972 0060,0035,0048	ONKYO OPTIMUS	0222 1062,0035,0162		0000
UNITED CABLE	,	BELL	0775,1170	GE	0240,0000,0065		0037,0048,0047 0240,0000,0104	TEKNIKA TELECORDER	0035,0037,0000 0240
US ELECTRONICS	0276,0003,0008	EXPRESSVU		GEMINI GENEXXA	0060 0037,0000,0278		0432,1048,1162	TELEFUNKEN	0041
VIDEOWAY	0000	DIRECT TV	1377,0392,0639 1142,1076,0099	GO VIDEO	0240,0432,0526	ORION	0184,0240,0000 0104,0121,0209	TEVION THOMAS	0479 0000,0002
ZENITH	0000,0525		1392,1442,1443 1640	GOLDSTAR	0614 0035,0037,0039		0002,0278,0479	THOMSON	0060,0041
		DISH	1505,0775		0000,0278,0038	PANAMA PANASONIC	0035 1062,0035,0162	TISONIC TIVO	0278 0618,0636,0739
CABLE/PVR COMBO	CODES	NETWORK SYSTEM		GOODMANS	0037,0081,0000 0072,0278	171171001110	0000,0225,0614		1337
DIGEO	1187,2187	DISH PRO	1505,0775	GRADIENTE	0000	PENNEY	0616,1162 0035,0162,0037	TMK TNIX	0240,0000 0037
GENERAL	0810	ECHOSTAR EXPRESSVU	1505,0775,1170 0775	GRANADA GRUNDIG	0081,0042 0081		0047,0081,0240	TOCOM	0240
INSTRUMENTS JERROLD	0810	HUGHES	1142,1442,1443	HARLEY DAVISON			0000,0042,0067 0038	TOSHIBA	0240,0045,0000 0043,0209,0041
MOTOROLA	1376,0810,1187	NETWORK SYSTEMS		HARMAN/ KARDON	0081,0038	PENTAX	0042,0065,0105		1008,1972,1988
	1106	JVC	1170	HARVARD	0072	PHILCO	0035,0081,0000 0209,0479	TOSONIC TOTEVISION	0278 0037,0240
PACE	1877,0237	MOTOROLA PHILIPS	0869 1142,1442	HARWOOD HEADQUARTER	0072 0046	PHILIPS	0035,0162,0048 0081,0045,0000	TOUCH	1972
PIONEER SASKTEL	1877,0877 1737	PROSCAN	0392	HEWLETT	1972		0209,0616,0618	TRIX ULTRA	0037 0045,0278
SCIENTIFIC	1877,0877	RCA SAMSUNG	1392 1442	PACKARD HI-Q	0035,0047,0000	PILOT	0739,1081,1181 0037	UNITECH	0240
ATLANTA		SONY	0639,1640	HITACHI	0035,0037,0045	PIONEER	0162,0081,0042	VECTOR VECTOR	0045 0184,0038
SONY	1006	STAR CHOICE TIVO	0869 1142,1442,1443		0000,0042,0041 0065,0105	POLK AUDIO	0067,1337 0081	RESEARCH	
SUPERCABLE	0276	ZENITH	1810	HOWARD	1972	PORTLAND	0278	VEXTRA VICTOR	0072 0067,0041
SATELLITE	CODES		CODES	COMPUTERS HP	1972	PRESIDIAN PROFITRONIC	1593 0240	VIDEO	0067,0041
BRAND		VCR Brand A-MARK	0037,0240,0000	HUGHES	0042,0739	PROSCAN	0060	CONCEPTS VIDEOMAGIC	0037
(Set Top Box) BELL	0775,1170	ABS	0278,0046 1972	NETWORK SYSTEMS		PROTEC PROTECH	0000,0072 0072	VIDEOSONIC	0240,0000,0072
EXPRESSVU	5775,7770	ACCURIAN	0000	HUMAX	0739,1797,1988	PULSAR	0039,0240,0278	VIEWSONIC VILLAIN	1972 0000
CHAPARRAL	0216	ADMIRAL	0060,0048,0039 0047,0104,0209	HUSH HYTEK	1972 0047,0000,0072	PULSER QUARTER	0240 0046	VOODOO	1972
COOLSAT	1806,2147		0065,0479	IBUYPOWER	1972	SOULIFU	0070		

Remote Control Codes

WARRE	0000 0025 0027	AMPLIION	0070	LITEON	1050 1150 1446	V0000000	1260	DCA
WARDS	0060,0035,0037 0048,0047,0081	AMPHION MEDIA WORKS	0872	LITEON	1058,1158,1416 1440	VOCOPRO XBOX	1360 0522,2083	RCA REALISTIC
	0033,0240,0045 0000,0042,0043	AMW APEX DIGITAL	0872	LOEWE LOGIX	0741 0783	YAMAHA	0490,0539,0545	REVOX SAMSUNG
	0041,0072,0038 0479,0065,0046	APEX DIGITAL	0533,0672,1020 1056,1061	MAGNASONIC	0675	YAMAKAWA	0497 0872	SANGEAN
WHITE	0000,0209,0072	ARRGO	1023	MAGNAVOX	0503,0539,0646 0675,1354,1506	ZENITH	0503,0591,0741	SANSUI SHERWOOD
WESTINGHOUSE WORLD	0209,0002,0479	ASPIRE DIGITAL	1168	MALATA	1159	ZEUS	0869 0784	SIRIUS SONY
XR-100	0035,0240,0000 0072	AUDIOVOX	0790	MARANTZ	0503,0539,0646 0675,1354,1506	ZOECE	1265	SONT
YAMAHA	0041,0038	AWA	0730	MCINTOSH MEMOREX	1533,1273			
ZENITH	0037,0039,0033 0000,0209,0041	B & K BBK	0655,0662 1224	WEWOREX	0695,0831,1270 2213	BLU-RAY DISC LG	O741	SOUNDESIGN
77.000.00	0278,0479,1139	BEL CANTO	1571	MICROSOFT MINATO	0522,2083 0752	PANASONIC	1641	STEREOPHOI TEAC
ZT GROUP	1972	DESIGN BLUE PARADE	0574	MITSUBISHI	1521,0521	PHILIPS	2084	TECHNICS
PVR Brand	CODES	BLUE SKY	0571 0695	MUSTEK MYRAD	0730 0894	PIONEER	0142	THORENS TOSHIBA
ABS	1972	BROKSONIC	0695	NAD	0741	SAMSUNG SONY	0199 1516	VENTURER WARDS
ALIENWARE	1972	CALIFORNIA AUDIO LABS	0490	NAIKO NEC	0770 0785,0869			XM
CYBERPOWER DELL	1972 1972	CELESTIAL	1020	NEXXTECH NINTAUS	1402	DVD/PVR COMBO	CODES	YAMAHA
DIRECTV	0739	CENTREX	0672	NORCENT	1051 1003,0872,1107	GO VIDEO	1730	
GATEWAY	1972	CINEA	0831	ONKYO	1265 0503,0627,1769	PANASONIC	0490	AUDIO
GO VIDEO	0614	CINEVISION CITIZEN	0876,0833,0869 1003,0695,1277	OPPO	0575,1224,1525	PHILIPS	1340	AUDIO AMPLIFIER B
HEWLETT PACKARD	1972	01112211	1587,2116	OPTIMUS	2185 0571	PIONEER RCA	0631 0522	ADCOM
HOWARD	1972	CLAIRTONE	0571	PALSONIC	0672,0852	SHARP	1256	BOSE
COMPUTERS HP	1972	COBY	0778,0852,1077 1086,1107,1165	PANASONIC	0503,0490,0571 0703,1641,1762	SONY	1033,1070,1536	CARVER CARY AUDIO
HUGHES	0739		1177,1351	PHILCO	0675	SYLVANIA	0675	DESIGN
NETWORK SYSTEMS		CRAIG	0831	PHILIPS	0503,0539,0646	TOSHIBA	1503	CLASSE
HUMAX	0739,1797,1988	CREATIVE	0503,0539		0675,1267,1340 1354,2056,2084	HD-DVD	CODES	FLEXTRONIC
HUSH	1972	CURTIS MATHES	1087	PIANODISC	1024	LG	0741	HALCRO
IBUYPOWER	192	CYBERHOME	0816,0874,1023	PIONEER	0525,0571,0142 0631,1571	MICROSOFT	2083	HARMAN/ KARDON
LINKSYS	1972 1972		1024,1129,1502 1537	POLAROID	1020,1061,1086	ONKYO	1769	KRELL
MEDIA CENTER PC	1972	CYTRON	0705	POLK AUDIO PORTLAND	0539 0770	RCA TOSHIBA	1769 1769	LEFT COAST LEXICON
MICROSOFT	1972	DAEWOO	0784,0705,0770	PRESIDIAN	0675	XBOX	2083	MARANTZ
MIND NIVEUS MEDIA	1972 1972		0833,0869,1169 1172,1234,1242	PRIMA PROCEED	2126,2127 0672	AUDIO	20050	MARK LEVINS PARASOUND
NORTHGATE	1972	DANSAI	0770	PROSCAN	0522	AUDIO RECEIVER Brand	CODES	PHILIPS
PANASONIC	0614,0616	DAYTEK	0872	PROVISION RADIONETTE	0778 0741	AIWA	1405,0189,0121	POLK AUDIO PRIMARE
PHILIPS	0618,0739	DECCA	0770	RADIOSHACK	0571	ALCO	1243,1388,1641 1390	YAMAHA
PIONEER RCA	1337 0880	DENON DENVER	0490,0634 0778	RCA	0522,0571,0790 0822,1769	ANAM	1609	TELEVISION
		DIGITREX	0672	REALISTIC	0571	APEX DIGITAL ARCAM	1774 1189	HITACHI
REPLAY TV	0614,0616	DISNEY	0675,1270	REOC RIO	0752 0869	AUDIOTRONIC	1189	
SAMSUNG SONIC BLUE	0739 0614,0616	DI VIDO	0705	RJTECH ROTEL	1360 0623,1178	AUDIOVOX B & K	1390 0820,0840	
SONY	0636,1972	DUAL DURABRAND	0675	SAMPO	0698,0752	BOSE BRIX	0639,1253,1933 1602	
STACK 9	1972	DVD2000	1127 0521	SAMSUNG	0490,0573,0744 0199,0820,1044	CAIRN	0189	
SYSTEMAX	1972	EMERSON	1003,2116		1075,2069	CARVER CURTIS MATHES	1189,0189,0121	
TAGAR SYSTEMS	1972	ENTERPRISE	0591,0675	SANSUI SANYO	0695 0675,0695,0873	DELPHI	1414	
TIVO	0618,0636,0739	ENTIVO ENZER	0503,0539	SAIVIO	1919	DENON	1360,0121,1142 1306	
TOCHIDA	1337	FISHER	0770 1919	SCHNEIDER SCHWAIGER	0783 0752	ELECTROHOME	2026	
TOSHIBA TOUCH	1008,1972,1988 1972	FUNAI	0675	SENSORY SCIENCE	1158	GRUNDIG HARMAN/	0189 0189,0891,1304	
VIEWSONIC	1972	GATEWAY	1073,1077,1158	SHARP	0630,0675,0752 1256	KARDON	1306	
VOODOO ZT GROUP	1972	GE GO VIDEO	0522,0815	SHERWOOD	0633,0770,1043	HITACHI INSIGNIA	0228 1030,2169	
ZT GROUP	1972	GO VIDEO	0573,0744,0715 0741,0783,0833	SHINSONIC	1077 0533	INTEGRA	0842,1298,1320	
DBS/PVR	CODES		0869,1044,1075	SLIM ART	0784	JBL	1805 1306	
COMBO DIRECTV	0739		1099,1144,1158 1304,1730	SM ELECTRONIC SONIC BLUE	0730 0573,0715,0783	JVC	1058,1374,1495	
HUGHES	0739	GOLDSTAR	0741,0869		0869,1099	KAWASAKI	1811 1390	
NETWORK SYSTEMS		GOODMANS	0790	SONY	0533,1533,0864 1033,1070,1431	KENWOOD	1570,1569	
PHILIPS	0739	GPX GRADIENTE	0769		1516,1536	KLH KOSS	1390,1428 1497	
SAMSUNG TIVO	0739 0739	GRUNDIG	0490 0539,0705	SYLVANIA SYMPHONIC	0675 0675	LG	2197	
		HARMAN/	0582,0702	TAG MCLAREN	0894	LINN LIQUID VIDEO	0189 1497	
DVD/PVR	CODES	KARDON HELLO KITTY	0831	TATUNG TEAC	0770 0571,0790	MAGNAVOX	1189,1269,0189	
COMBO HUMAX	1797,1988	HITACHI	0573,0664,1919	TECHNICS	0490,0703	MARANTZ	1266,1514 1189,1269,0189	
PIONEER			0070	TECHNIKA	0770		0891	
	1337	HITEKER	0672					
RCA SYLVANIA		HITEKER INSIGNIA INTEGRA	2095 0571,0627	TECHSONIC	0730	MICROMEGA MITSUBISHI	1189,0189 1393	
RCA SYLVANIA TIVO	1337 0880 0000 1337	INSIGNIA INTEGRA IRT	2095 0571,0627 0783	TECHSONIC THETA DIGITAL	0730 0571	MITSUBISHI MYRAD	1393 1189	
RCA SYLVANIA	1337 0880 0000	INSIGNIA INTEGRA IRT JBL JMB	2095 0571,0627 0783 0702 0695	TECHSONIC	0730	MITSUBISHI	1393 1189 0097,1555	
RCA SYLVANIA TIVO TOSHIBA DVD Brand	1337 0880 0000 1337 1008,1988	INSIGNIA INTEGRA IRT JBL JMB JSI	2095 0571,0627 0783 0702 0695 1423	TECHSONIC THETA DIGITAL THOMSON	0730 0571 0522 1503 0503,0573,0539	MITSUBISHI MYRAD NAKAMICHI ONKYO	1393 1189 0097,1555 0842,1298,1320 1805	
RCA SYLVANIA TIVO TOSHIBA DVD Brand 3D LAB	1337 0880 0000 1337 1008,1988 CODES 0503,0539	INSIGNIA INTEGRA IRT JBL JMB JSI JVC	2095 0571,0627 0783 0702 0695 1423 0558,0623,0867 1164	TECHSONIC THETA DIGITAL THOMSON TIVO	0730 0571 0522 1503 0503,0573,0539 0695,1154,1503	MITSUBISHI MYRAD NAKAMICHI	1393 1189 0097,1555 0842,1298,1320 1805 1023,0014,0121	
RCA SYLVANIA TIVO TOSHIBA DVD Brand 3D LAB ACCURIAN ACOUSTIC	1337 0880 0000 1337 1008,1988	INSIGNIA INTEGRA IRT JBL JMB JSI JVC JWIN	2095 0571,0627 0783 0702 0695 1423 0558,0623,0867 1164 1049,1051	TECHSONIC THETA DIGITAL THOMSON TIVO	0730 0571 0522 1503 0503,0573,0539 0695,1154,1503 1608,1769 0800,0803	MITSUBISHI MYRAD NAKAMICHI ONKYO OPTIMUS ORITRON	1393 1189 0097,1555 0842,1298,1320 1805 1023,0014,0121 0670 1497	
RCA SYLVANIA TIVO TOSHIBA DVD Brand 3D LAB ACCURIAN ACOUSTIC SOLUTIONS	1337 0880 0000 1337 1008,1988 CODES 0503,0539 0675,1416 0730	INSIGNIA INTEGRA IRT JBL JMB JSI JVC JWIN KAWASAKI KENWOOD	2095 0571,0627 0783 0702 0695 1423 0558,0623,0867 1164 1049,1051 0790 0490,0534	TECHSONIC THETA DIGITAL THOMSON TIVO TOSHIBA TREDEX UNIMAX	0730 0571 0522 1503 0503,0573,0539 0695,1154,1503 1608,1769 0800,0803 0770	MITSUBISHI MYRAD NAKAMICHI ONKYO	1393 1189 0097,1555 0842,1298,1320 1805 1023,0014,0121 0670 1497 1308,1518,1288	
RCA SYLVANIA TIVO TOSHIBA DVD Brand 3D LAB ACCURIAN ACOUSTIC SOLUTIONS ADCOM AFREEY	1337 0880 0000 1337 1008,1988 CODES 0503,0539 0675,1416 0730 1094 0698	INSIGNIA INTEGRA IRT JBL JMB JSI JVC JWIN KAWASAKI KENWOOD KLH	2095 0571,0627 0783 0702 0695 1423 0558,0623,0867 1164 1049,1051 0790 0490,0534 0790,1020,1149	TECHSONIC THETA DIGITAL THOMSON TIVO TOSHIBA TREDEX UNIMAX UNITED	0730 0571 0522 1503 0503,0573,0539 0695,1154,1503 1608,1769 0800,0803 0770	MITSUBISHI MYRAD NAKAMICHI ONKYO OPTIMUS ORITRON PANASONIC	1393 1189 0097,1555 0842,1298,1320 1805 1023,0014,0121 0670 1497 1308,1518,1288 1316,1548,1633 1763,1764,2967	
RCA SYLVANIA TIVO TOSHIBA DVD Brand 3D LAB ACCURIAN ACOUSTIC SOLUTIONS ADCOM AFREEY AIWA	1337 0880 0000 1337 1008,1988 CODES 0503,0539 0675,1416 0730 1094 0698 0641	INSIGNIA INTEGRA IRT JBL JMB JSI JVC JWIN KAWASAKI KENWOOD KLH KLOSK KONKA	2095 0571,0627 0783 0702 0695 1423 0558,0623,0867 1164 1049,1051 0790 0490,0534 0790,1020,1149 0533 07711,0721	TECHSONIC THETA DIGITAL THOMSON TIVO TOSHIBA TREDEX UNIMAX UNITED UNIVERSUM	0730 0571 0522 1503 0593,0573,0539 0695,1154,1503 1608,1769 0800,0803 0770 0730	MITSUBISHI MYRAD NAKAMICHI ONKYO OPTIMUS ORITRON	1393 1189 0097,1555 0842,1298,1320 1805 1023,0014,0121 0670 1497 1308,1518,1288 1316,1548,1633 1763,1764,2967 1189,1259,0189	
RCA SYLVANIA TIVO TOSHIBA DVD Brand 3D LAB ACCURIAN ACOUSTIC SOLUTIONS ADCOM AFREEY AIWA AKAI	1337 0880 0000 1337 1008,1988 CODES 0503,0539 0675,1416 0730 1094 0698 0641 0695,0705,0770 1089	INSIGNIA INTEGRA IRT JBL JMB JSI JVC JWIN KAWASAKI KENWOOD KLH KLOSS KONKA	2095 0571,0627 0783 0702 0695 1423 0558,0623,0867 1164 1049,1051 0790 0490,0534 0790,1020,1149 0533 0711,0721 0769,1061,1423	TECHSONIC THETA DIGITAL THOMSON TIVO TOSHIBA TREDEX UNIMAX UNITED	0730 0571 0522 1503 0593,0573,0539 0695,1154,1503 1608,1769 0800,0803 0770 0730	MITSUBISHI MYRAD NAKAMICHI ONKYO OPTIMUS ORITRON PANASONIC	1393 1189 0097,1555 0842,1298,1320 1805 1023,0014,0121 0670 1497 1308,1518,1288 1316,1548,1633 1763,1764,2967 1189,1269,0189 0891,1266 1023,0014,0630	
RCA SYLVANIA TIVO TOSHIBA DVD Brand 3D LAB ACCURIAN ACOUSTIC SOLUTIONS ADCOM AFREEY AIWA AKAI ALBA	1337 0880 0000 1337 1008,1988 CODES 0503,0539 0675,1416 0730 1094 0698 0641 0695,0705,0770 1089 0672	INSIGNIA INTEGRA IRT JBL JMB JSI JVC JWIN KAWASAKI KENWOOD KLH KLOSS KONKA KOSS LASONIC LECSON	2095 0571,0627 0783 0702 0695 1423 0558,0623,0867 1164 1049,1051 0790 0490,0534 0790,1020,1149 0533 07711,0721 0769,1061,1423 0627 1533	TECHSONIC THETA DIGITAL THOMSON TIVO TOSHIBA TREDEX UNIMAX UNITED UNIVERSUM URBAN CONCEPTS V VENTURER	0730 0571 0522 1503 0503,0573,0539 0695,1154,1503 1608,1769 0800,0803 0770 0730 0591 0503,0539 1064,1226 0790	MITSUBISHI MYRAD NAKAMICHI ONKYO OPTIMUS ORITRON PANASONIC PHILIPS PIONEER	1393 1189 0097,1555 0842,1298,1320 1805 1023,0014,0121 0670 1497 1308,1518,1288 1316,1548,1633 1763,1764,2967 1189,1269,0189 0891,1266 1023,0014,0630 1384,1935	
RCA SYLVANIA TIVO TOSHIBA DVD Brand 3D LAB ACCURIAN ACOUSTIC SOLUTIONS ADCOM AFREEY AIWA AKAI	1337 0880 0000 1337 1008,1988 CODES 0503,0539 0675,1416 0730 1094 0698 0641 0695,0705,0770 1089	INSIGNIA INTEGRA IRT JBL JMB JSI JVC JWIN KAWASAKI KENWOOD KLH KLOSS KONKA KOSS LASONIC	2095 0571,0627 0783 0702 0695 1423 0558,0623,0867 1164 1049,1051 0790,0534 0790,1020,1149 0533 0711,0721 0769,1061,1423 0627	TECHSONIC THETA DIGITAL THOMSON TIVO TOSHIBA TREDEX UNIMAX UNITED UNIVERSUM URBAN CONCEPTS V	0730 0571 0522 1503 0503,0573,0539 0695,1154,1503 1608,1769 0800,0803 0770 0730 0591 0503,0539 1064,1226	MITSUBISHI MYRAD NAKAMICHI ONKYO OPTIMUS ORITRON PANASONIC	1393 1189 0097,1555 0842,1298,1320 1805 1023,0014,0121 0670 1497 1308,1518,1288 1316,1548,1633 1763,1764,2967 1189,1269,0189 0891,1266 1023,0014,0630	

SETUP OPERATION

How to Use the On-Screen Display (OSD) System

You can use the On-Screen Display system to access the various kinds of the features and functions.

Basic Operation

1. Press the button on the remote control or the **Menu** button on the control panel of the unit. The **Main Menu** is displayed on the screen as shown on the right.

2. To select the item, press the 🛊 button.

The selected item will be highlighted in Yellow.

3. Press the ok button to set your selection. The selected menu page will be displayed on the screen.

4. Use the 🗘 button to choose the item on the menu page.

Press the ok button to set your selection.

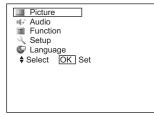
5. Use the button to adjust the item values or choose options.

Press the ok button to set your selection.

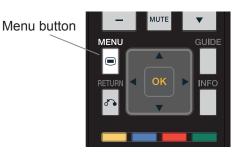
6. To exit from the menu, press the or the button.

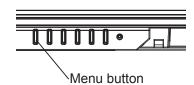
NOTE >

- The OSD menu screen will be closed automatically when no operation has been made for about one minute.
- If the item on the menu is shown in gray, it means that it cannot be selected or adjusted.



<Main Menu>





Select Language

Select the language from the list so that the OSD menu can be displayed in the selected language. The default setting is English (US).

How to set Language

- 1. Enter the "Language" menu from the Main Menu.
- 2. Select your preferred language from the list using the \$\displaystyle{\psi}\$ button. The selected item will be highlighted in Yellow.
- **3.** Press the ok button to set your selection. The mark on the left turns into a double circle when the selection is fixed.
- **4.** Press the button to exit from the entire OSD menu.



Main Menu List

			Menu	Page		
	Picture Mode		Select between 3 picture modes according to the lighting condition.	33		
	Contrast		Adjust to increase or decrease the picture contrast.			
	Brightness		Adjust to brighten or darken the picture.	33		
	Color		Adjust to increase or decrease the color density.	33		
	Sharpness		Adjust to sharpen or soften the picture.	33		
	Tint		Adjust to obtain natural skin color.	33		
	Color Temperature		Select between 3 settings according to your preferred color tone.	33		
	Back Light		Adjust to increase or decrease the brightness of back light on LCD panel.			
Picture	Reset		Reset each item on the menu screen to the factory setting.			
(HDMI/Composite)	Contrast Mode		Select between 3 contrast modes to suit your preference.	34		
	3D Color Managemen	i	Adjust the suitable tint, color density, and brightness on image.	34		
	Black Enhancement		Adjust the black level compensation.	34		
	DNR		Reduce noise for picture signal.	35		
	MPEG NR		Reduce mosquito noise in the picture.	35		
	Film Mode		Adjust to make the moving image smooth.	36		
	3D Comb Filter		Reduce the color blurring to reproduce purer color.	34		
	Reset		Reset each item on the menu screen to the factory setting.	34		
	Color Temp. Adjust		Set specific adjustment in each of 3 color temperature modes.	34		
	Contrast		Adjust to increase or decrease the picture contast.	38		
	Brightness		Adjust to brighten or darken the picture.	38		
	Color		Adjust to increase or decrease the color density.	38		
	Tint		Adjust to obtain natural skin color.	38		
Picture(RGB)	Color Temperature		Select between 3 settings according to your preferred color tone.	38		
	Color Temp. Adjust		Set specific adjustment in each of 3 color temperature modes.			
	Back Light		Adjust to increase or decrease the brightness of back light on LCD panel.			
	Reset	Reset each item on the menu screen to the factory setting.		38		
	Treble	Adjust to increase or decrease the level of treble. (-15~+15)		-		
	Bass		Adjust to increase or decrease the level of bass. (-15~+15)	-		
	Balance		Adjust the balance of sound from the bottom right and left speakers. (-10~+10)	-		
	Surround		Select surround-sound. (Off/On)	-		
Audio	Bass Boost		Enhance bass sounds. (Off/On)			
	Clear Voice		Select clearer and more realistic sounds. (Off/On)	-		
	Perfect Volume		Adjust sound volume appropriately. (Off/On)	-		
	Speakers		Select if using internal speakers. (Off/On)	-		
	Reset		Reset each item on the menu screen to the factory setting.	-		
	System		This function is not available.			
		Auto Input Change	In response to the connected equipment (such as DVD) through HDMI cable, the monitor is automatically turned On and switched to HDMI input.	19		
Function	HDMI Control	System Standby	In response to the monitor, the connected equipment (such as DVD) through HDMI cable is automatically turned Off (standby mode).	19		
		AV Center Control	Selecting On will activate AV Center OSD interface, in case you purchased the optional Hitachi A/V Center.	19		
Setup	Video Power Save		Save power consumption when no signal can be input in HDMI/Composite input mode.	42		
(HDMI/Composite)	RGB Input		Select the effective signal.	37		
. ,	Color System		Select color system.	37		
	Auto Adjust		Adjust Horizontal Position, Vertical Position, Horizontal Clock, and Clock Phase automatically.			
	Horizontal Position		Adjust the display position horizontally.			
	Vertical Position		Adjust the display position vertically.			
	Horizontal Clock		Minimize the vertical stripes on the screen.			
Setup(RGB)	Clock Phase		Minimize the blurring of the letters and stripes on horizontal row.	39		
	Reset		Reset each item on the menu screen to the factory setting.	39		
	Frequency Display		Set On for PC signal frequency information to be displayed on the Input Signal Screen Display.	39		
	WXGA Mode		Select the resolution when WXGA signal is received.	39		
	RGB Input		Select the effective signal.	39		
Language	-			31		

NOTE

• The picture settings can be stored for each of inputs except "Picture Mode".

Watching Images from HDMI/Composite Input

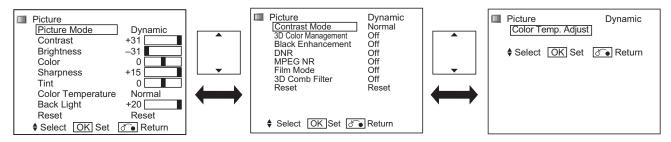
- 1. Connect to external equipment. (See 18 and 19 for details.)
- 2. Press the (HDMI) or (INPUT) button to switch to HDMI mode.

Press the RGB or NPUT button to switch to Composite mode.

3. Press the button.

Setting Picture Adjustment

You can adjust the display condition such as color settings. Select **"Picture"** from Menu list.



Selected Item	s	Setup hint
	Dynamic	You can make the best selection from 3 modes depending on the lighting condition and intended use.
Picture Mode	Natural	Dynamic: Suitable for brighter conditions.
	Cinema	Natural : Suitable for normal lighting conditions. Cinema : Suitable for watching movies.
Contrast	-31~+31 (+32~+40)	This adjusts the contrast to meet the surrounding brightness by using the button. • The maximum value is extended up to [+40] by pressing the button for more than 2 seconds at [+31]. The value between [+32] ~ [+40] appears in magenta. This is the special feature for dark images, so it is recommended to set the value less than [+31] under normal conditions.
Brightness	-31~+31	Adjust brightness according to personal preference by using the button.
Color	-31~+31	Adjust color according to personal preference by using the button.
Sharpness	-15~+15	Preferred sharpness can be adjusted by pressing the button for softer image or the button for sharper image.
Tint	-31~+31	Pressing the button enhances red and weakens green, while pressing the button weakens red and enhances green. The setup hint is to adjust for realistic skin color.
	Cool	You can select from 3 settings depending on the color
Color Temperature	Normal	condition using the 🕩 button.
	Warm	
Back Light	-20~+20	Adjust the brightness of the Back Light for maximum visibility.
Reset		Each item on this menu screen can be restored to the factory settings by pressing the ok button.

Watching Images from HDMI/Composite Input (continued)

Setting Picture Adjustment (continued)

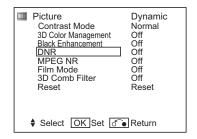
Selected Items			Setup hint	
		Dynamic	It allows you to choose from 3 modes. Dynamic: Sharpen the gradation to improve the contrast	
Contrast Mode	Normal		feeling. Normal: Improve the contrast feeling to reproduce a faithful gradation.	
		Linear	Linear : Reproduce as faithful gradation as possible.	
3D Color Management		Off	On: It automatically adjusts the suitable tint, color density, and brightness on images.	
3D Golor Management		On	Off: Set it off if the image does not look natural.	
		Off		
Black Enhancement		Low	Adjusts the black level compensation.	
		Middle		
		High		
3D Comb Filter	Off		This function is available only if D-sub 15 pin - composite cable is used.	
	Low		This reduces the dot and color blurring in minute scales so that it can reproduce purer color. • This is not available for NTSC4.43, PAL60, SECAM, PAL-N and PAL-M system.	
	Middle			
	High		This is available only when receiving NTSC3.58/PAL composite signal.	
Reset			Each item on this menu screen can be restored to the factory settings by pressing the ok button.	
		Amplitude	On: When you want to set specific adjustments in each of	
		Red	the 3 Color Temperature modes. You can adjust on the Amplitude and Cut Off. The settings reflect on the	
		Green	Color Temperature.	
		Blue	Amplitude: Subdue the colors (Red/Green/Blue) on the brighter parts (-63~0).	
	On	Cut Off	Cut Off : Subdue the colors (Red/Green/Blue) on	
Color Temp. Adjust		Red	the darker parts (-31~+31).	
		Green	Reset (Available when On): Select to restore amplitude	
		Blue	and Cut Off adjustments to default settings by pressing the ok button.	
		Reset	button.	
	Off		Off: Remains as default setting.	

Watching Images from HDMI/Composite Input (continued)

Reducing Noise

You can reduce the unwanted picture noise.

Select "Picture" from the Menu list.

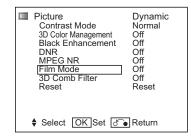


Selected Items		Setup hint
DNR	Off	This is a noise reduction system for picture signals.
	Low	
	Middle	
	High	
MPEG NR	Off	This is a noise reduction system for MPEG picture signals. (e.g. against mosquito noise and block noise.)
	Low	
	High	

Watching Images from HDMI/Composite Input (continued)

Making the Moving Image Smooth

Using this function helps to make the moving image smooth. Select **"Picture"** from the Menu list.



Selected Items		Setup hint	
Film Modo	Off	On: Automatically identifies if it is a movie and faithfully reproduces the original film images. Off: Set to Off if the image does not look natural. This is available only when receiving NTSC, 480i, PAL,	
Film Mode			

NOTE ➤ About "Film Mode"

• The image might not look natural depending on the image contents.

Phenomena such as

- ① When switched to the subtitles of a film or images, the image displays fine horizontal streak lines.
- ② When switched to scenes such as commercial and animation, the image displays fine horizontal streak lines.
- ③ When displaying a ticker or subtitle, the text on the image becomes rough (aliasing).
- When watching the image in Composite mode, which is connected to any external equipment, the OSD of external equipment displays fine horizontal streak lines.

These phenomena occur due to the method of converting the image. Please note that this is not a malfunction. In the event that this is disturbing, please set to Off.

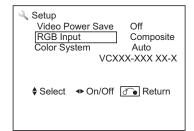
In addition, the effect of this menu might vary depending on the aspect setting (See 40).

Also, this might be ineffective depending on the scene of the image.

Watching Images from HDMI/Composite Input (continued)

Advanced Setting

Select "Setup" from the Menu list.



Selected Items		Setup hint
Video Power Save	Off	See 42 for details.
Video Power Save	On	See 🔁 Ioi details.
RGB Input	RGB	Select the effective signal.
KGB IIIput	Composite	Select the ellective signal.
	Auto	
	PAL	This function is available only if D-sub 15 pin - composite cable is used.
	SECAM	dasio lo dodd.
Color System	NTSC 4.43	Selects the color system depending on the input signal.
Color System	NTSC 3.58	 Generally, select [Auto] to receive all signals. If the input signal has too much noise, the signal level is
	PAL60	too low or the operation is unstable in [Auto], select the
	PAL-M	system according to the color system of the input signal. • Composite input only.
	PAL-N	

If your external equipments do not have an HDMI terminal or a DVI terminal, you can watch images from your external equipments through the optional D-sub 15 pin - composite cable.

1. Connect to your external equipment with the optional D-sub 15 pin - composite cable. (See 19.)

2. Switch to RGB input by pressing the RGB or NPUT button.

3. Press the button and select "Setup" from the menu list.

4. Then you can select "Composite" in "RGB Input".

NOTE ➤ Checking Software Version	Setup
The Software Version is displayed on Setup(HDMI/Composite) menu.	Video Power Save Off RGB Input Composite
Software Version ————	Color System Auto VCXXX-XXX XX-X
	♦ Select ◆ On/Off Return

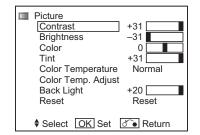
Viewing Images from a PC

- 1. Connect to the PC. (See 20 for details of connection to PCs.)
- **2.** Switch to RGB input by pressing the $\fbox{\tiny RGB}$ or $\fbox{\tiny INPUT}$ button.
- 3. If necessary select "RGB" option under "Setup/RGB Input" menu.
- **4.** Press the button.

Setting Picture Adjustment

You can adjust the display condition such as position adjustment and color settings.

① Picture Menu Select "Picture" from the Menu list.

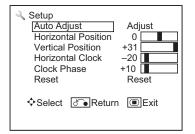


Selected Items		Setup hint		
Contrast	-31~+31 (+32~+40)	This adjusts the contrast to meet the surrounding brightness using the ◆ button. • The maximum value is extended up to [+40] by pressing the button for more than 2 seconds at [+31]. Values between [+32] ~ [+40] appear in magenta. This is the special feature for dark images, so it is recommended to set the value less than [+31] under normal conditions.		
Brightness	-31~+31	Adjust the brightness according to personal preference using the button.		
Color	-31~+31	Adjust the color according to personal preference using the button.		
Tint	-31~+31	Pressing the button enhances red and weakens green, while pressing the button weakens red and enhances green. These adjustments are for realistic skin color.		
	Cool			
Color Temperature	Normal	You can select from 3 settings with the ▶ button.		
	Warm			
Color Temp. Adjust	Amplitude Red Green Blue On Cut Off Red Green Blue Reset Off	On: When you want to set specific adjustments in each of the 3 color temperature modes. You can adjust the Amplitude and Cut Off. The settings reflect on the Color Temperature. Amplitude: Subdues the colors (Red, Green, Blue) on the brighter parts (-63~0). Cut Off: Subdues the colors (Red, Green, Blue) on the darker parts (-31~+31). Reset (Available when On): Select to restore amplitude and Cut Off adjustments to default settings by pressing the button.		
Back Light	-20~+20	<u> </u>		
Reset		Each item in the Picture Menu can be restored to the factory setting by pressing the ok button.		

Viewing Images from a PC (continued)

Setting Picture Adjustment (continued)

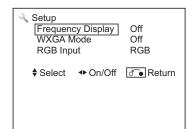
② Setup Menu Select "Setup" from the Menu list.



Selected Items		Setup hint		
Auto Adjust		Adjusts Horizontal Position, Vertical Position, Horizontal Clock, and Clock Phase automatically. • Select "Adjust" then press the ok button to start automatic adjustment as necessary. The message "Auto Adjusting" is displayed. • The image might not be adjusted to its optimum condition depending on the types of signals. In that case, adjust each item manually.		
Horizontal Position	-63~+63	Adjusts the display position horizontally. • When the value exceeds a possible range, it will be displayed in magenta.		
Vertical Position -31~+31		Adjusts the display position vertically. • When the value exceeds a possible range, it will be displayed in magenta.		
Horizontal Clock	-31~+31	Minimizes vertical stripes on the screen.		
Clock Phase 0~+63		Minimizes the blurring of letters and stripes on horizontal row. • Be sure to adjust Horizontal Clock before adjusting Clock Phase. • When the value exceeds a possible range, it will be displayed in magenta.		
Reset		Each item in Setup Menu can be restored to the factory setting by pressing the ok button.		

Advanced Setting

Select "Setup" from the Menu list and skip to the second page.



Selected Items		Setup hint	
Frequency Display	Off	Set to On for PC signal frequency information to be	
Frequency Display	On	displayed on the Input Signal Screen Display.	
	Off		
WXGA Mode	1280X768	Selects the resolution when a WXGA signal is received.	
	1360X768		
RGB Input	RGB	Selects the effective signal. Refer to 24 and 38 for details.	
NGB IIIput	Composite	Refer to A and Se for details.	

INPUT ASPECT P.MODE FAV CH

RGB HDMI

• II **> I**

Aspect button -

FUNCTION

Aspect Switching

Each time the ASPECT button of the remote control is pressed, the screen display aspect is switched in sequence, and the status will be displayed at the bottom of the screen.

HDMI/Composite Signal Input

Display Aspect

Watching Standard Definition Pictures (480i, 480p, 576i, 576p, Composite)



Watching High Definition Pictures (720p, 1080i, 1080p)

You can display the image at its optimum condition by selecting display aspect depending on the current output image as shown below.

Input Signal	Display Screen	Display Aspect	To display suitable screen as follows.		
When Watching Standard Definition Pictures:					
		4:3	Plays a 4:3 image on screen faithfully. Blanking occurs on both sides.		
(4:3 Signal)		Panoramic 1	Plays a 4:3 image which enlarges horizontal and vertical size of the middle in equal scales, and displays both sides appearing much wider.		
(110 0191111)		Panoramic 2	The vertical size of Panoramic1 is reduced so that you can see the whole image, including any subtitles, that might otherwise not be fully visible on the screen.		
(Vista)		Zoom 1	Plays a 16:9 image in 4:3 frame (Vista aspect) faithfully. *In some cases, slight blanking may remain at the top and bottom.		
(Cinema)		Zoom 2	Plays a 21:9 image in 4:3 frame (Cinema aspect) expanding vertically. *In some cases, slight blanking may remain at the top and bottom.		
(Squeeze)		Full	Plays a 4:3 image faithfully in the standard vertical size and horizontally squeezed.		
When Watchi	ng High Definit	ion Pictures:			
		Full 1	Plays a 16:9 image faithfully showing 95% of the size.		
(16:9 Signal)		Full 2	Plays a 16:9 image faithfully showing 100% of the size. *In some cases, the screen display has unnecessary blanking or noise at the edges.		
(4:3 Image in 16:9 Frame)		Zoom	Plays a 4:3 image in 16:9 frame by enlarging a 4:3 image the 16:9 screen.		

FUNCTION (continued)

Aspect Switching (continued)

HDMI/Composite Signal Input (continued)

Position Adjustment

Vertical picture position can be adjusted for **Panoramic 1**, **Zoom 1** and **Zoom 2** mode as follows.

- 1. Press the 🗘 button while operating the picture aspect display.
- 2. "Position" display will appear.
- **3.** Adjust the position using the 🛊 button.

The adjustment ranges of each picture aspect are as shown below.

Display Aspect	Adjustable Range	
Panoramic 1	-12~+12	
Zoom 1, Zoom 2	-31~+31	





Press A

Press ▼

ACAUTION

Using a wide-screen monitor

- The monitor has a screen mode selection feature. If an incompatible screen mode is selected to play certain software, such as a TV program, the image would appear different from the original. Take this into consideration when making screen mode choices.
- Use of the wide feature displaying enlarged pictures in coffee shops, hotel and other establishments for commercial or public viewing purposes could infringe on the copyright holder's rights, which are protected by Copyright Law.
- When a normal 4:3 image (not wide screen) is displayed over the entire screen in the Panoramic mode, the peripheral image may disappear partly and/or appear distorted in some cases. Use 4:3 mode to view the image reflecting the original intention.

RGB Signal Input

Display Aspect

You can select a suitable aspect depending on the resolution.



* Real mode gives the image with same shapes as that of a computer monitor (neither compression nor stretching). This mode is not available if the input signal is 1280 x 1024 (SXGA).

Display Area Selection Diagram

Resolution	Input signal	Full display	Circular	display
Display		Full	Normal	Real*
640 X 480 (VGA) 800 X 600 (SVGA) 1024 X 768 (XGA) 1280 X 1024 (SXGA)				
640 X 400 (VGA) 1280 X 768 (WXGA) 1360 X 768 (WXGA)				

FUNCTION (continued)

Power Save Mode

When HDMI/Composite Input is Selected

You are provided the function to save power consumption when no signal is detected in the HDMI/Composite input. Set to On in "Video Power Save" from the Setup Menu, which leads to the power save mode.

- MENU
- **1.** Press the button when in HDMI/Composite mode.
- **2.** Select the "**Setup**" menu and press the ok button.
- 3. Select "Video Power Save".

Video Power Save	Off	
video Powei Save	On	

When no signa	al is detected	When signal is input during
Condition	Indicating Lamp	On in "Video Power Save"
Power Save	Orange	Turns On automatically.

When RGB Input is Selected

When the unit is connected to a VESA DPMS computer, the Power Save mode (Operation mode: Off) can be set to be activated automatically when the computer is not being used, in order to reduce the power consumption of the unit.

RGB sync signal	Horizontal	Yes	No	Yes	No
	Vertical	Yes	Yes No No		No
PC sign	PC signal		Blank (no display)		lay)
Operation mode		On	Off		
Indicating lamp		Lights green	Lights orange		je

• To return to operating status, operate the personal computer, or press either the **Input Select** button on the control panel or the INPUT or RGB button on the remote control.

TROUBLESHOOTING

About LCD Display Technology

The following are common phenomena occurring when viewing LCD display devices due to its characteristics. Please note that these are not malfunctions.

Defective Spots on Panel

The LCD panel is manufactured with high-precision technology. However, there might be some spots that are not illuminated, or are brighter than others, or are in different colors, etc.

Surface on Panel

The LCD panel displays images by the fluorescent lamps internally. This can raise the temperature of the display surface.

In addition, do not allow any heavy impact to the front of the panel because the LCD panel is made of high precision glass.

Use Under Low Temperature Conditions

Because of the structural characteristics of the LCD panel, the response speed of the LCD panel becomes slower when the ambient temperature becomes too low. In some cases, this may result in a residual image. The residual image will disappear of its own accord as the temperature rises again to a normal level.

Before calling a service technician, check the following tables first. If the problem cannot be solved with the suggested procedures, contact your local dealer. For your safety, NEVER try to repair the product yourself.

When the Following Messages Appear on the Screen

Message	Condition / Action	Page
Power Save	This indicates it is in Power Save mode. (in HDMI/RGB mode) This message appears 5 seconds before Power Save mode starts. The indicating lamp lights in orange.	42
No Sync. Signal	The unit cannot detect any signals from any input terminals. Check if the cable is connected correctly and firmly. Check if the power of any external equipment is ON. Check if the input selection matches the connection terminal. Check if the PC is in Power Save mode or not.	18 ~ 21 42
Invalid Scan Freq.	The unit receives unsupported signals. • Check if the cable is connected correctly and firmly. • Check if the input signal is compatible with the specification of the monitor.	46, 48
Not Available	This shows when the selected operation is not available.	
Auto Adjusting	This indicates that it is in the process of auto adjusting. (in RGB mode)	39

Symptom and Checklist

Symptoms		Checklist	Page
No picture - no sound		 Ensure the Main Switch is On. Check the Indicating lamp status (Off, Red, Green, or Orange). Check the connection of the power cord and/or other cables. Check if the power of the unit or external equipment is ON. Check if the correct mode is selected. Check if the unit is in "Standby mode" or "Power Save mode". Adjust the values in "Picture menu" and "Audio menu". 	18 ~ 22 24, 42
Multiple images-normal sound	197	Check the connections to external equipment.	18~21
Intermittent interference	~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~	Check if the source of interference is shielded correctly. Move these kinds of electrical devices away from the unit.	

TROUBLESHOOTING (continued)

Symptom and Checklist (continued)

Symptoms	Checklist	Page
	Check the volume level. Check audio settings on HDMI source must be set to PCM. Check if the MITE better her have received a good.	
Normal picture, but no sound	Check if the MUTE button has been pressed or not. Check the connections to external equipment. Check if input signal is HDMI or DVI by pressing button, remember DVI audio must be input by separate.	23
No picture - normal sound	Check the value level of "Brightness" and "Contrast" in "Picture Menu".	33, 38
The remote control does not work.	Check if the batteries are installed correctly. The batteries might be exhausted. Replace them with new ones. Remove all obstructions from in front of the sensor window on the unit. Check if the buttons on the control panel are working.	16, 17
 Only some buttons work on the remote control. 	This is normal, some buttons are intended to use with optional Hitachi Set- Top Box	16
 Picture Frezze and/or the buttons on both the remote control and control panel do not work. 	Unplug and connect after 5 minutes the power cord or turn Main switch Off and On after 5 minutes. Hold down the Reset button on the control panel for over a second.	15
Normal picture but no color-normal sound	Check the connections to external equipment.	18 ~ 21
 No picture The Indicating lamp → Off 	Check if the power cord is plugged into the socket securely. Check if the main switch is on.	21, 22
 No picture The Indicating lamp → Orange It means that the unit is in "Power Save mode". 	 Check if all the cables to external equipment are connected correctly and securely. Check if the power to the external equipment is ON. Check if the HDMI mode has been selected correctly. Check if the PC is in Power Save mode or not. Refer to "Power Save Mode" and "When the Following Messages Appears on the Screen". 	42
No picture The indicating lamp → Green	Check if the signal cable is connected correctly and securely. Adjust the level of Brightness and Contrast lower.	18 ~ 21
 The top of the unit and surface of the panel heat up. 	This may occur if you use the unit for a long time. Turn off the main power to the unit for a while. Please note that this is not a malfunction.	
Some screen display aspects are not possible.	Check the signal status by pressing the button on the remote control. The available screen display aspect is different depending on the current signal status.	24 40, 41
Image cannot be displayed from HDMI input.	Check if the cables are connected correctly. Turn off Monitor and HDMI source, then turn Monitor on first then HDMI source. Check the output format of the equipment. (Please refer to "CONNECTION" and "Recommended Signal List".)	46 ~ 48
The image and audio are mismatched when in RGB or HDMI-DVI mode.	Check if the PC (RGB)/DVI analog audio input terminal is connected to the same external device.	18, 20
Some digital programming looks blurry during fast changing scenes	This is normal and its due regular digital compression scheme, please note this is not a malfunction.	

TROUBLESHOOTING (continued)

Symptom and Checklist (continued)

Symptoms		Checklist	Page
The image on the screen is moving in an oblique direction. (RGB input mode only)		Adjust "Horizontal Clock" and "Clock Phase".	39
The coarse vertical stripes can be seen in full-display mode. (RGB input mode only)		Adjust "Horizontal Clock".	39
Part of the image is missing. (RGB input mode only)		• Try "Auto Adjust".	39
The horizontal stripes are moving vertically with flickering screen. (RGB input mode only)		Check the signal status of the PC by pressing the button on the remote control to check if the input signal of the displayed image is compatible with the specification of the unit.	24, 46 48
When the characters are displayed on the whole screen, the vertical stripes appear and some of the characters are blurred. (RGB input mode only)	ABCDEFGHIJ abcdefgABCDEFGabcd ABCDEFGHIJ abcdefgABCDEFGabcd	Try "Auto Adjust". If the display condition is not improved with "Auto Adjust", adjust "Horizontal Clock".	39
When the letter string is displayed in full-screen, all of the characters on the screen are blurred. (RGB input mode only)	ABCDEFGHIJ abcdefgABCDEFGabcd ABCDEFGHIJ abcdefgABCDEFGabcd	Try "Auto Adjust". If the condition is not improved with "Auto Adjust", adjust "Clock Phase" until you get the clearest image.	39
When small patterns are displayed on the screen, the entire screen is flickering. (RGB input mode only)	***	Try "Auto Adjust". If the condition is not improved with "Auto Adjust", adjust "Clock Phase" until you get a flicker-free display.	39
Image cannot be displayed in the correct position. (RGB input mode only)		Press the button to check if the input signal of the displayed image is compatible with the specification of the unit.	24 , 46 48

PRODUCT SPECIFICATIONS

SPECIFICATIO	N				
Display dimensions		27 5/8 (H) x 15 19/32 (V) in, Approx. 32 inches measured diagonally. 701 (H) x 396 (V) mm, Approx. 801 mm measured diagonally.			
Panel	Resolution	1366 (H) x 768 (V) pixels			
	Pixel Pitch	0.510(H) x 0.510(V) mm.			
Net dimensions	•	including Stand: 814(W) x 587(H) x 249(D) mm / 32 1/32(W) x 23 1/8(H) x 9 3/16(D) in excluding Stand: 814(W) x 538(H) x 39(D) mm / 32 1/32(W) x 21 3/16(H) x 1 9/16(D) in			
Net weight		including Stand: 13.5 kg / 29.7 lb excluding Stand: 10.9 kg / 24 lb			
Ambient	Temperature	Operating: 5°C to 35°C, Storage: 0°C to 40°C			
conditions	Relative humidity	Operating: 20% to 80%, Storage: 20% to 90% (non-condensing)			
Power supply		AC120V, 60Hz			
Power consur	nption/ at standby	136 W, 1.2 A/< 0.5 W			
Audio output		speaker 6W + 6W			
FCC Class		B for Consumer Use			
(HDMI input)					
Input terminals		HDMI : HDMI input terminal Audio input terminal (Mini-pin)*			
Input signals		HDMI: VGA/60, 480i, 576i, 480p, 576p, 720p/50, 720p/60, 1080i/50, 1080i/60, 1080p/50, 1080p/60, 1080p/24			
(RGB/Composi	te input)				
Input terminals		Analog RGB input terminal (D-sub 15 pin) Audio input terminal (Mini-pin)*			
Input signals		0.7 Vp-p, analog RGB (Recommended Signal) Composite video: PAL, SECAM, NTSC3.58, NTSC4.43, PAL60, PAL-M, PAL-N			
Sync signals		H/V separate, TTL level [2KΩ]			

[•] The unit takes at least 30 minutes to attain the status of optimal picture quality.

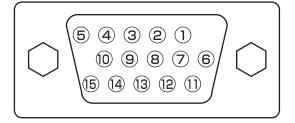
^{*} This analog audio input terminal can be used for PC (RGB) or HDMI-DVI.

PRODUCT SPECIFICATIONS (continued)

Signal Input

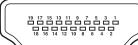
RGB terminal (D-sub 15 pin connector)

Pin	Input signal			
1	R			
2	G/Composite			
3	В			
4	No connection			
5	GND			
6	R.GND			
7	G.GND/Composite			
8	B.GND			
9	+5V			
10	GND			
11	No connection			
12	[SDA]			
13	H.sync			
14	V.sync.			
15	[SCL]			



HDMI connector pin specifications

Pin	Input signal	Pin	Input signal
1	TMDS Data2+	11	TMDS Clock Shield
2	TMDS Data2 Shield	12	TMDS Clock-
3	TMDS Data2-	13	CEC
4	TMDS Data1+	14	Reserved(N.C. on device)
5	TMDS Data1 Shield	15	SCL
6	TMDS Data1-	16	SDA
7	TMDS Data0+	17	DDC/CEC Ground
8	TMDS Data0 Shield	18	+5V Power
9	TMDS Data0-	19	Hot Plug Detect
10	TMDS Clock+		



PRODUCT SPECIFICATIONS (continued)

Recommended Signal List

With HDMI input

		Signal mode Horizontal		Dot clock		
No.	Signal Name	Resolution	Vertical frequency (Hz)	frequency (kHz)	frequency (MHz)	Remarks
1	VGA	640 X 480	59.94	31.47	25.18	CEA-861D
2	576i	720(1440) X 576	50.00	15.63	27.00	CEA-861D
3	480i	720(1440) X 480	59.94	15.73	27.00	CEA-861D
4	576p	720 X 576	50.00	31.25	27.00	CEA-861D
5	480p	720 X 480	59.94	31.47	27.00	CEA-861D
6	1080i/50	1920 X 1080	50.00	28.13	74.25	CEA-861D
7	1080i/60	1920 X 1080	60.00	33.75	74.25	CEA-861D
8	720p/50	1280 X 720	50.00	37.50	74.25	CEA-861D
9	720p/60	1280 X 720	60.00	45.00	74.25	CEA-861D
10	1080p/50	1920 X 1080	50.00	56.25	148.50	CEA-861D
11	1080p/60	1920 X 1080	60.00	67.50	148.50	CEA-861D
12	1080p/24	1920 X 1080	24.00	27.00	74.25	CEA-861D

With RGB input

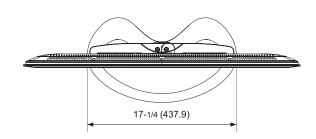
Timing Name	Horizontal Frequency (kHz)	Vertical Frequency (Hz)	Pixel Frequency (MHz)	Sync Polarity (H/V)	Remarks
640 x 400 @ 70Hz	31.469	70.086	25.175	-/+	VGA
640 x 480 @ 60Hz	31.469	59.940	25.175	-/-	VGA
800 x 600 @ 60Hz	37.879	60.317	40.000	+ / +	VESA
1024 x 768 @ 60Hz	48.363	60.004	65.000	-/-	VESA
1280 x 768 @ 60Hz	47.776	59.870	79.500	-/+	VESA / WXGA Mode : 1280x768
1360 x 768 @ 60Hz	47.712	60.015	85.500	+ / +	VESA / WXGA Mode : 1360x768

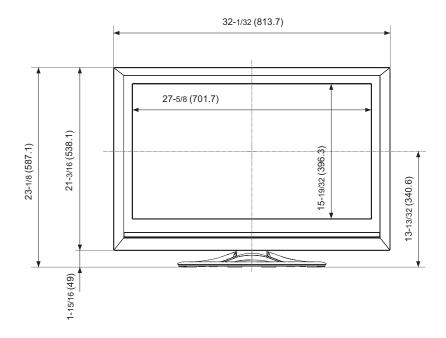
- The type of video board or the connecting cable used may not allow for correct displays adjustment of Horizontal Position, Vertical Position, Horizontal Clock and Clock Phase.
- The unit differentiates the signal modes according to the horizontal and vertical frequencies and the horizontal and vertical sync signal polarities. Note that different signals having all these elements alike may be handled as the same signal.

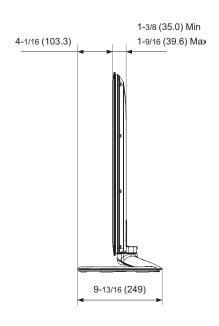
PRODUCT SPECIFICATIONS (continued)

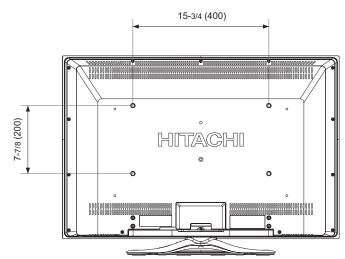
Dimensions

Unit: Inch/(mm)









SERVICE INFORMATION

800.HITACHI

(800.448.2244)

Operational, hook up and warranty questions for your product.

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

www.hitachi.us/tv



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

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

Our Support Hotline will provide you with the assistance you need and if necessary the location of the nearest Authorized Service Facility in your area. Please present proof of purchase and/or delivery receipts to the Hitachi Authorized Service Facility and service will be rendered in accordance with the terms of the limited warranty as stated on your warranty card or operating guide.

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



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HITACHI HOME ELECTRONICS (CANADA)

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

In Canada: 800.HITACHI (800.448.2244)

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

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

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

Au Canada: 800.HITACHI (800.448.2244)

 $\begin{array}{ll} \mbox{Lundi\sim Vendredi} & 9:00 \mbox{ am} - 7:00 \mbox{ pm L'EST} \\ \mbox{Samedi} & 9:00 \mbox{ am} - 5:00 \mbox{ pm L'EST} \end{array}$

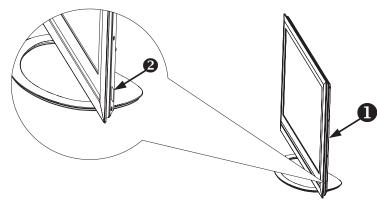
La version français de votre manual se trove a l'exterieur de la boîte. Si le manuel est manquant coposez le **800-HITACHI** pour obenir votre copie

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

Customer Record

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

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



Model Name

Serial Number

LIMITED WARRANTY

Congratulations on your purchase of a new Hitachi Director's Series[®] display product. Register your product online at www.hitachi.us/tv or mail the included warranty registration card:

LIMITED WARRANTY

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

Director's Series Products: LCD Flat Panel Televisions LCD Flat Panel Monitors Plasma Televisions Plasma Monitors

Conditions of Hitachi Limited Warranty

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

PARTS: The Limited Warranty period for parts is 2 years from the date of original purchase. During the Limited Warranty period for parts, Hitachi will replace defective parts with new or rebuilt parts (at Hitachi's option) at no charge for such parts. Any replacement part will be warranted for the remainder of the original warranty period applicable to the part replaced.

LABOR: The Limited Warranty period for labor is 2 years from the date of original purchase. During the Limited Warranty period for labor, Hitachi will repair or replace (at Hitachi's option) defective parts without charge for labor. SERVICE LOCATION: In-home warranty service, which includes either in-home repair or free pick-up and delivery (at Hitachi's option), applies to all Director's Series Products except: (i) 26-inch and smaller LCD Flat Panel Televisions or LCD Flat Panel Monitors; (ii) Products located outside the U.S.A. or Puerto Rico; (iii) Products located more than seventy-five (75) driving miles from Hitachi's nearest Authorized Service Facility. If the foregoing clauses (i), (ii), (iii) apply, then the Product owner will be responsible for bringing/delivering the Product to a Hitachi Authorized Service Facility and, following warranty service, retrieving the Product from such Authorized Service Facility.



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

IMPORTANT:

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

800-HITACHI (800-448-2244)

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

Visit our website and register your product online:

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

To register your new Hitachi Director's Series display product online, go to: www.hitachi.us/tv Support and Contact/Warranty Registration

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

Warranty Limitations

This Hitachi Limited Warranty does not cover:

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

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