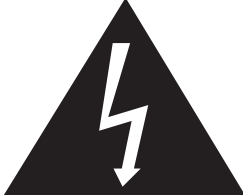





LCD PDP TV

User's Manual

WARNING

Please read this manual carefully before using your TV and keep the manual handy for future reference.

	<table border="1"><tr><td>CAUTION</td></tr><tr><td>RISK OF ELECTRICAL SHOCK, DO NOT OPEN</td></tr></table>	CAUTION	RISK OF ELECTRICAL SHOCK, DO NOT OPEN	
CAUTION				
RISK OF ELECTRICAL SHOCK, DO NOT OPEN				
Warning				
TO REDUCE THE RISK OF ELECTRIC SHOCK DO NOT REMOVE COVER (OR BACK). NO USER SERVICEABLE PARTS INSIDE. REFER TO QUALIFIED SERVICE PERSONNEL.				
	The lightning flash with the arrowhead symbol, within an equilateral triangle, is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute an electric shock to persons.			
	The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.			

Warning:

TO PREVENT FIRE OR ELECTRIC SHOCK HAZARD, DO NOT EXPOSE THIS PRODUCT TO RAIN OR MOISTURE. ALSO DO NOT USE THIS UNIT'S POLARIZED PLUG WITH AN EXTENSION CORD RECEPTACLE OR OTHER OUTLETS, UNLESS THE PRONGS CAN BE FULLY INSERTED. REFRAIN FROM OPENING THE CABINET AS THERE ARE HIGH-VOLTAGE COMPONENTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.

Still image (immovable) screen may cause permanent damage to TV.

- 1) Lengthy displayed still images from Video games, banners, graphics and others may fatally damage the screen.
- 2) When using the TV in 4:3 formats with sidebars for a long period of time, it may cause damage to the panel. It is recommended that you use 14:9 or other formats. (Image Sticking can be avoided by using "Panel" function of the Setting's sub menu. However, once image sticking occurs, it may not disappear completely. An image will be dimmed as the image is displayed long time or repeatedly)

※ Any damage to the panel caused by improper usage (such as image sticking) shall not be covered by the warranty.

SAFTY INSTRUCTIONS

Important safeguard for you and your new product

Your product has been manufactured and tested with your safety in mind. However, improper use can result in potential electrical shock or fire hazards. To avoid defeating the safeguards that have been built into your new product, please read and observe the following safety points when installing and using your new product, and save them for future reference.

Observing the simple precautions discussed in this booklet can help you get many years of enjoyment and safe operation that are built into your new product.

1. Read Instructions

All the safety and operating instructions should be read before the product is operated.

2. Follow Instructions

All operating and use instructions should be followed.

3. Retain Instructions

The safety and operating instructions should be retained for future reference.

4. Heed Warnings

All warnings on the product and in the operating instructions should be adhered to.

5. Water and Moisture

Do not use this product near water, for example, near a bath tub, wash bowl, kitchen sink, or laundry tub, in a wet basement, or near a swimming pool.

6. Accessories, Carts, and Stands

Do not place this product on a slippery or tilted surface, or on an unstable cart, stand, tripod, bracket, or table.

The product may slide or fall, causing serious injury to a child or adult, and serious damage to the product.

Use only with a cart, stand, tripod, bracket, or table recommended by the manufacturer, or sold with the product. Any mounting of the product should follow the manufacturer's instructions, and should use a mounting accessory recommended by the manufacturer.

7. Transporting Product

A product and cart combination should be moved with care.

Quick stops, excessive force, and uneven surfaces may cause the product and cart combination to overturn.



PORTABLE CART WARNING

8. Attachments

Do not use attachments not recommended by the product manufacturer as they may cause hazards.

9. Ventilation

Slots and openings in the cabinet are provided for ventilation and to ensure reliable operation of the product and to protect it from overheating, and these openings must not be blocked or covered.

The openings should never be blocked by placing the product on a bed, sofa, rug, or other similar surface. This product should not be placed in a built-in installation such as a bookcase or rack unless proper ventilation is provided or the manufacturer's instructions have been adhered to.

10. Power Sources

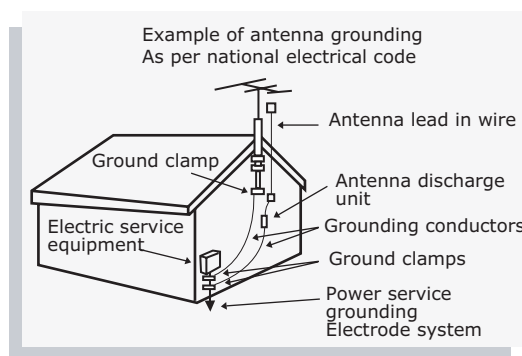
This product should be operated only from the type of power source indicated on the marking label. If you are not sure of the type of power supply to your home, consult your product dealer or local power company.

For products intended to operate from battery power, or other sources, refer to the operating instructions.

< Safety Instructions continued >

11. Outdoor Antenna Grounding

If an outside antenna or cable system is connected to the product, be sure the antenna or cable system is grounded so as to provide some protection against voltage surges and built-up static charges.



12. Lightning

For added protection for this product (receiver) during a lightning storm, or when it is left unattended and unused for long periods of time, unplug it from the wall outlet and disconnect the antenna or cable system.

This will prevent damage to the product due to lightning and power-line surges.

13. Power Lines

An outside antenna system should not be located in the vicinity of overhead power lines or other electric light or power circuits, or where it can fall into such power lines or circuits. When installing an outside antenna system, extreme care should be taken to keep from touching such power lines or circuits as contact with them might be fatal.

14. Overloading

Do not overload wall outlets and extension cords as this can result in a risk of fire or electric shock.

15. Heat

The product should be situated away from heat sources such as radiators, heat registers, stoves, or other products (including amplifiers) that produce heat.

16. Cleaning

Unplug this product from the wall outlet before cleaning. Do not use liquid cleaners or aerosol cleaners. Use a dry cloth for cleaning.

17. Servicing

Do not attempt to service this product yourself as opening or removing covers may expose you to dangerous voltage or other hazards.

Refer all servicing to qualified service personnel.

18. Damage Requiring Service

Unplug this product from the wall outlet and refer servicing to qualified service personnel under the following conditions:

- When the power-supply cord or plug is damaged.
- If liquid has been spilled, or objects have fallen into the product.
- If the product has been exposed to rain or water.
- If the product does not operate normally by following the operating instructions. Adjust only those controls that are covered by the operating instructions as an improper adjustment of other controls may result in damage and will often require extensive work by a qualified technician to restore the product to its normal operation.
- If the product has been dropped or the cabinet has been damaged in any way.
- When the product exhibits a distinct change in performance.

19. Whenever you connect all external A/V equipment to your television, ensure that all equipments are switched off.

Also refer to the user manual supplied with your A/V equipment for detail connection instructions and associated safety precaution.

FCC Compliance Statements

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

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

Warning : You are cautioned that any change or modifications to the equipment not expressly approved by the party responsible for compliance could void your authority to operate such equipment.

Contents

Safety Instruction **Features and Package Contents** **The names of Each part** **Inserting the Batteries into the Remote Control** **Remote Controller**

Installation

- Connecting an Outdoor Air Antenna / Cable Television Network
- Connecting VCR
- Connecting Cable Box / Satellite Receiver
- Connecting DVD Player / Video Game Machine
- Connecting a PC

TV Function

- Getting Started
- Channel Edit and Source Select
- Scanning Channels (Automatic)
- Channel Edit – Store or Delete the channels
- Using Favorite (FAV) Channel Function
- Displaying EPG (Electronic Program Guide)
- Viewing the Information
- Changing the Input Mode
- Viewing the Current Connected External Devices

Picture and Sound Configuration

- Adjusting the Aspect Ratio
- Changing the Preset Picture Mode
- Customizing the Picture
- Adjusting Color Tone
- Changing the Preset Sound Mode
- Adjusting the Equalizer
- Automatic Volume Level Control
- To set MTS (Multi Track Sound) Mode

Additional Function

- Changing the OSD Menu language
- Setting the Blue Back Screen
- Setting the Current Time (Time Zone)
- Automatic Power on/off (On Timer / Off Timer)
- Setting the Sleep Timer
- Pixel Shift
- DNR (Digital Noise Reduction)
- WIPER
- PIP
 - Adjusting the Size of Sub picture
 - Changing Input mode of Sub picture
 - Adjusting the position of Sub picture
 - Swapping the main with sub picture
- Viewing Closed Caption
- Parental Rating Control (V-Chip)

Adjusting PC Picture Settings

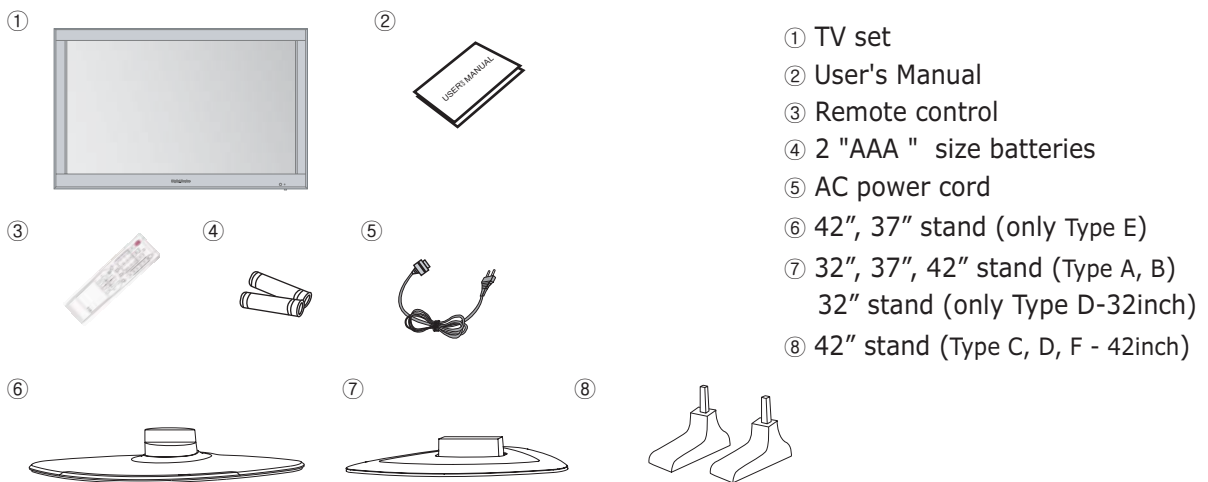
- Using as a PC Monitor
- Check the current Resolution and Frequency rate
- Automatic Adjustment of the PC picture
- Setting the position of PC Picture
- Adjusting the PC Picture Settings
- Adjusting the Color Tone
- Customizing the Color Tone
- Adjusting the Frequency / Phase

Features and Package

Features

- Menu driven On Screen Display(OSD) for Brightness and Contrast, Sharpness, Hue and Saturation, Channel, PIP(Picture In Picture), Aspect Ratio, Input Source, Audio, Audio Adjust, Language, Function
- IR Remote control for all functions
- Built-in Television Digital Tuner for ATSC(Optional)
- Speaker output : 2 channel-Left, Right
(Built-in speaker / External speaker)
- Selectable Aspect Ratio (14:9, 4:3, Wide, Zoom, Auto wide, Panorama)
- PIP(Picture in Picture), Twin Screen
- Multiple Mounting Options : Wall mount or Stand
- Monitor Composite video Output (Only TV)
- Large Viewing Angle (170°)
- Input Video Sources : PC(Analog RGB)
HDMI with DVI-HDCP compatible
RS-232(Software Upgrade)
Video(AV) Input
Component Video Input
RF(TV signal) Input

Package Contents



*Operating position : Table top or Desk Top

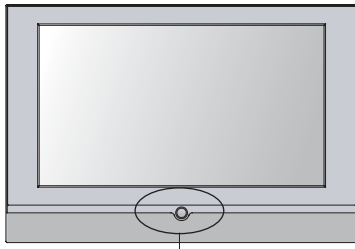
* AV Cable is not included in the product package.

The Name of Each Part

Front Panel Controls

Type A

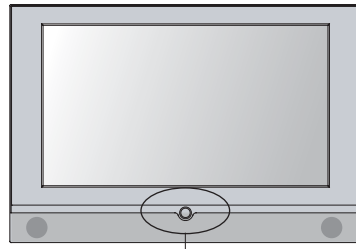
32, 37, 42inch



① ⑥ ⑦

Type B

32, 37, 42inch



① ⑥ ⑦

Type C

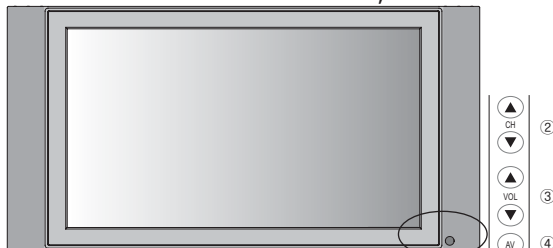
42inch



④ ② ③ ①

Type D

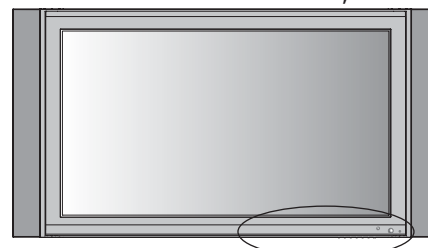
32, 42inch



① ⑥ ⑦

Type E

37, 42inch



⑤ ④ ② ③ ① ⑦ ⑥

Type F

42inch



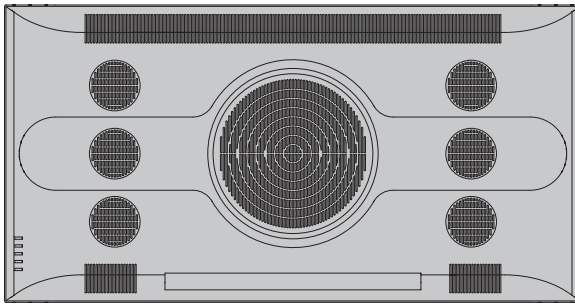
④ ② ③ ①

- ① Standby Power ON : Touch to turn on(Operation Mode) and off.
- ② Channel UP/DOWN : Touch to change the channel at TV mode.
- ③ Volume UP/DOWN : Touch to increase and decrease the volume.
- ④ AV : Press to select all available source.
 - i) Press Menu button.
 - ii) Press CH UP/DOWN button to move desired mode.
 - iii) Press Vol UP/DOWN button to select desired mode.
- ⑤ MENU : Touch to Menu
- ⑥ Power Indicator : Red color (Standby mode), Blue color (Operation mode)
- ⑦ IR Receiver

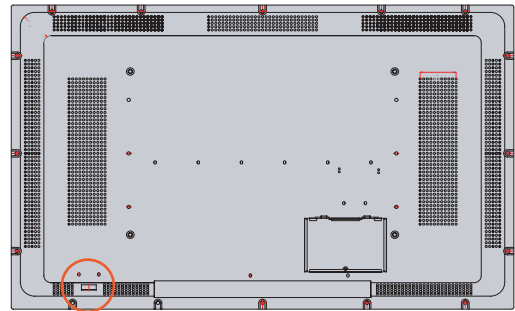
The Name of Each Part

Rear Panel Jacks

Type A, B, D, E

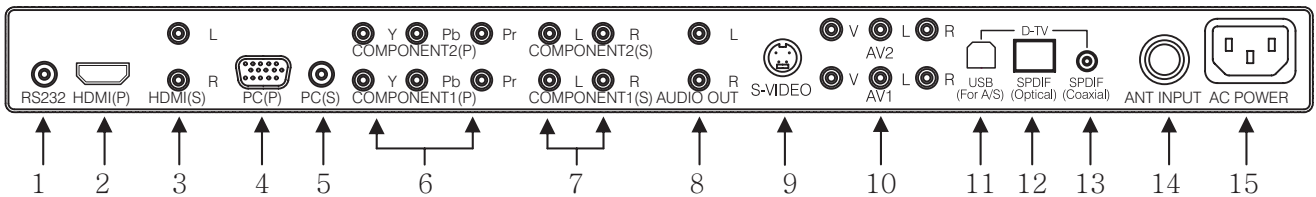


Type C, F

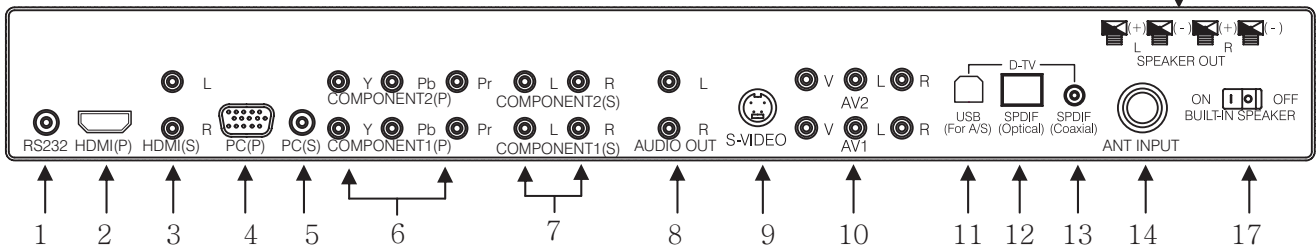


12

Type A, B, D, E



Type C, F



1. RS232 Service Port
2. HDMI with DVI-HDCP
3. Audio Input
4. PC Picture Input(D-Sub 15 pin)
5. PC Audio Input
6. Component 1/2 Picture Input
7. Component 1/2 Sound Input
8. Line Level Audio Out
9. S-Video Input

10. AV1/2 Input
11. USB V2.0(for Service)
12. SPDIF(Optical) Output
13. SPDIF(Coaxial) Output
14. Antenna Input
15. AC Power Input
16. Speaker Output
17. Built-In Speaker Switch

Inserting the Batteries into the Remote Control

Inserting the Batteries



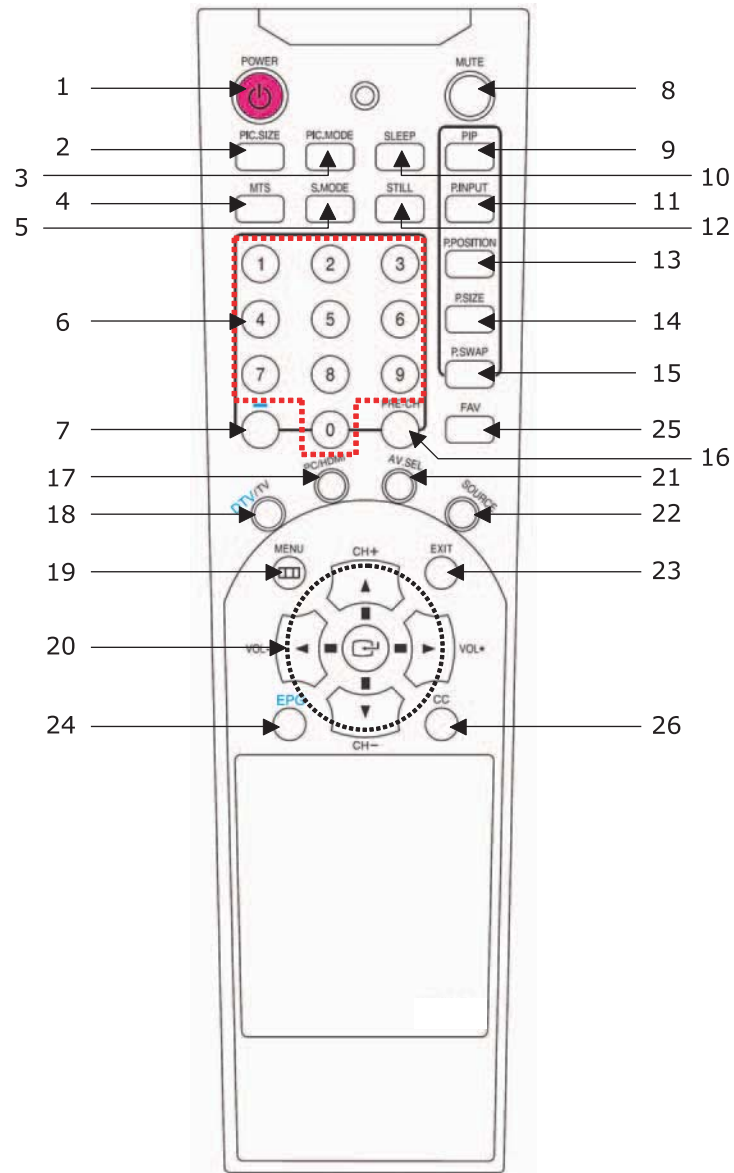
- ① Remove the rear cover of the remote controller by pressing the arrow Symbol downwards and then pulling firmly to remove it.
- ② Insert two 1.5V of AAA type batteries by following polarities (+,-).
- ③ Close the cover.

Tip

To confirm proper battery installation, press any button on the remote control and check the red LED on the remote control twinkles.

Remote Controller

Remote Controller



Remote Controller

TV Function

1. POWER: Turn TV on and off.
2. PIC.SIZE: Change Screen Aspect Ratio.
3. PIC.MODE: Adjust the TV Picture by selecting one of the preset factory settings before using this product
4. MTS (Multi Channel Television Stereo): Sound mode change to Stereo, Mono, or Separate Audio Program (SAP Broadcast)
5. S.MODE: Adjust TV Sound by selecting one of the factory settings.
6. NUMBER Buttons: Push to change channel.
7. -: Approach to Digital TV Channel (Virtual Channel, e.g., 6-1)
8. MUTE: Temporarily cut off the sound.
9. PIP: Turn Picture-In-Picture on or off.
10. SLEEP: Set the sleep timer.
11. P.INPUT: Select the Input mode for the sub picture
12. STILL: Pause the moving Image.
13. P.POSITION: Change the position of sub Picture (PIP).
14. P.SIZE: Adjusts the sub picture (PIP) size.
15. P.SWAP: Exchange main with sub picture.
16. PRE-CH: Move to the previous channel.

Mode Setting / Menu Selection

17. PC/HDMI: Select PC or HDMI mode.
18. DTV/TV: Select DTV or TV
19. MENU: Display On Screen Display Menu.
20. Direction Keys: Adjusts channels, volume level and navigate the menu.
21. AV.SEL: Change input source every time pushed.
22. SOURCE: Display the all the connected or available external devices on the screen.
23. EXIT: Terminated menu screen

Teletext

24. EPG (Electronic Program Guide): Weekly Program Guide Display with reference to date, time and channels
25. FAV: Change among the channels assigned as favorite every time pushed.
26. CC: Closed Caption

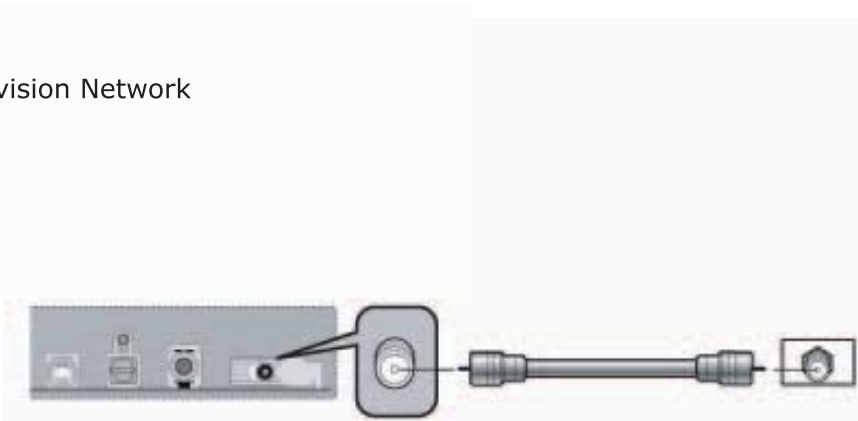
Installation

Connecting an Outdoor Air Antenna / Cable Television Network

Outdoor Air Antenna with 75-ohm Round Lead



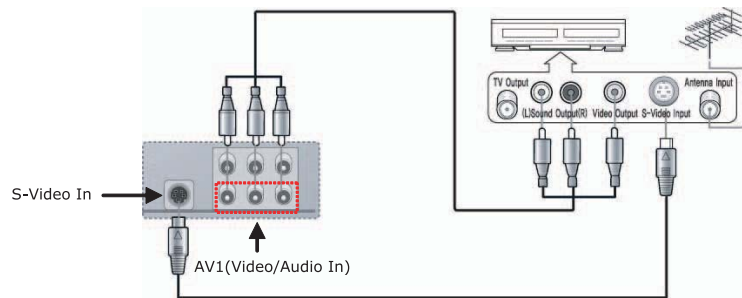
Cable Television Network



Installation

Connecting VCR

Composite or S-Video Connection



How to Connect

1. Connecting Guide

- 1.1. Using the Composite Cable: When you connect Audio/Video composite cables, beware of the colors of the jacks. (Video is Yellow, Audio is White and Red)
- 1.2. Using S-Video Cable: If the VCR, you have, supports S-Video Output, connect S-Video Input of the TV to S-Video Output of the VCR and do the same in Sound cable (White and Red).

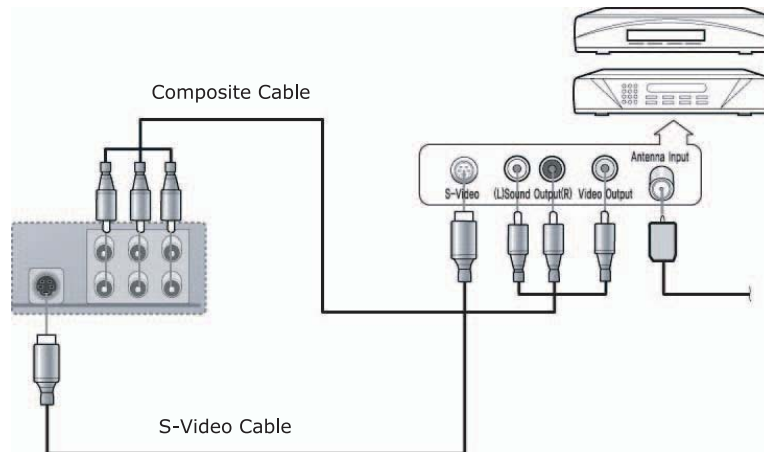
To Watch VCR

1. Turn on the product, press [AV.SEL] button on the remote control to select 'AV' or 'S-Video' mode. (Or press [SOURCE] button to see all the available external connections on the screen and select 'AV' or 'S-Video' mode)
2. Turn on the VCR, insert a video tape then press [Play] button.

Installation

Connecting Cable Box / Satellite Receiver

Composite (Video / Sound) or S-Video connection



How to Connect

1. Connecting the Antenna Cable to Cable Box / Satellite Receiver: Plug the Antenna cable with 75-Ohm Round Lead into the Antenna Input terminal of the Cable Box / Satellite Receiver.
2. Connecting Guide
 - 2.1. Using Composite (A/V) Cable
 - Video Connection: Connect the Video Input port to the Video Output port of the Cable Box / Satellite Receiver with the Composite cable. The color of Video Cable and Output Port is Yellow.
 - Sound Connection: Connect the Sound Input port to the Sound Output Port of the Cable Box / Satellite Receiver with Composite cable. The color of Sound Cable and Output Ports are White and Red.
 - 2.2. Using S-Video Cable (While S-Video is supported)
 - Video Connection: Connect the S-Video Input port of the TV to the S-Video Output port of the Cable Box / Satellite Receiver by using S-Video cable.
 - Sound Connection: Connect the Sound Input port of the TV to the Sound Output Port of the Cable Box / Satellite Receiver with Sound Cable. The color of Sound Cable and Output Ports are in White and Red.

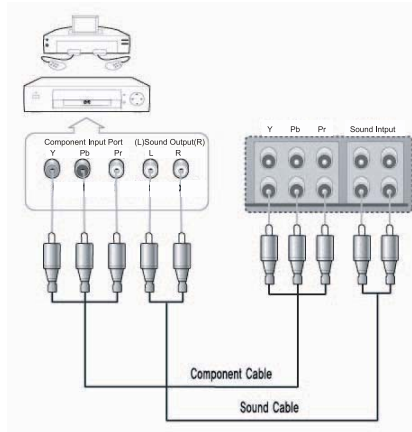
To watch Cable / Satellite Broadcast

1. Turn on the TV and press [AV.SEL] button on the remote control until the connected Input Source is selected.
(Or press [SOURCE] button to show and select the connected and available external devices on the screen.)
2. Turn on the Cable Box / Satellite Receiver and select the channel you would like to watch.

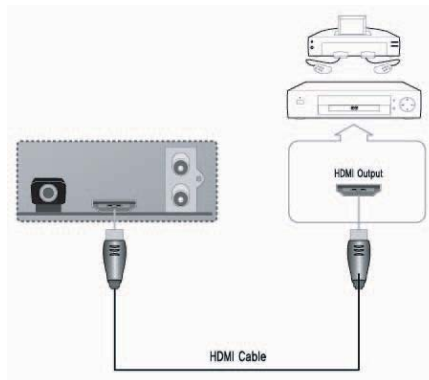
Installation

Connecting DVD Player / Video Game Machine

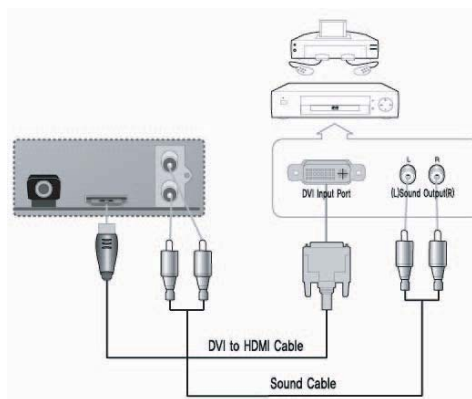
Component Connection



HDMI Connection



DVI to HDMI Connection



Installation

How to Connect

1. Connecting Guide

1.1. Using Component Cable (Green, Blue & Red Color).

- Video Connection: Connect the Component Input port of the TV to the Component Output port of the DVD Player / Video Game Machine with the Component cable. The color of the Cable and the In/Out Ports are Green, Blue & Red Color accordingly.
- Sound Connection: Connect the Sound Input port of the TV to the Sound Output Port of the DVD Player / Video Game Machine with Composite cable. The color of Sound Cable and Output Ports are in White and Red. In this case, the sound ports are generally located by the component ports.

*Component Connection is also required to connect sound L/R properly. If fails, there will be no sound.

1.2. Using HDMI (Source) to HDMI Cable:

This is only where both of devices have HDMI Port.

Since HDMI deliver sound signal with its video signal, it does not require any additional sound connections.

1.3. Using DVI (Source) to HDMI Cable: This is applicable if there only DVI output exist on DVD Player / Video Game Machine.

In this case DVI to HDMI Cable can be used to connect each other. Unlike HDMI to HDMI as mentioned in the above, DVI does not deliver sound signal. Additional sound connection should be done.

- Video Connection: Connect the HDMI Input port of the TV to the DVI Output port of the DVD Player / Video Game Machine with the DVI to HDMI cable.
- Sound Connection: Connect the Audio In port of the TV to the Audio Out Port of the DVD Player / Video Game Machine with Composite cable. The color of Sound Cable and Output Ports are in White and Red. In this case, the Audio In ports are generally located by the HDMI ports.

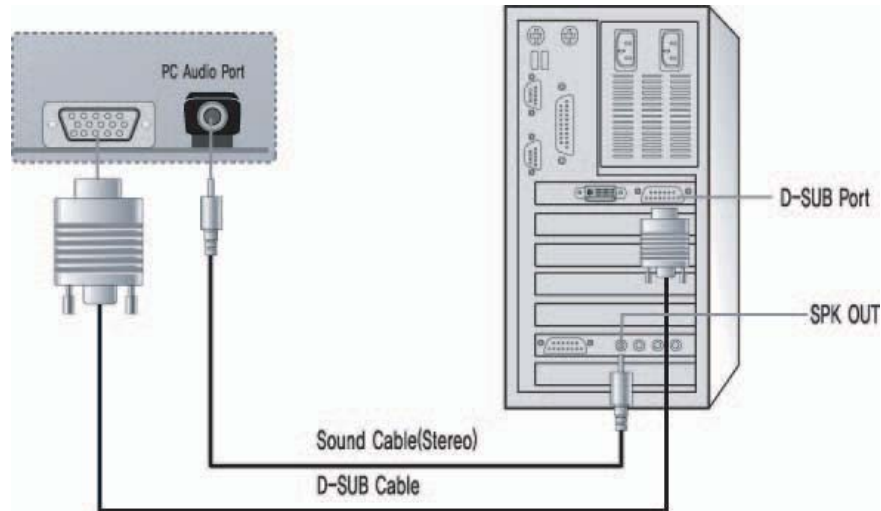
To watch DVD / Play Video Game Machine

1. Turn on the TV and press [AV.SEL] button on the remote control until the connected Input Source is selected.
(Or press [SOURCE] button to show and select the connected and available external devices on the screen.)
2. Turn on the DVD Player and press [Play] button.

Installation

Connecting a PC

D-Sub or HDMI Connection



How To Connect

1. Connecting Guide

1.1. Using DVI (Source) to HDMI Cable: This is applicable if there only DVI output exists on PC. In this case DVI to HDMI Cable can be used to connect each other. Since DVI does not deliver sound signal, additional sound connection should be done.

-Video Connection: Connect the HDMI Input port of the TV to the DVI Output port of the PC with the DVI to HDMI cable.

-Sound Connection: Connect the Audio In port of the TV to the Audio Out port of the PC with Stereo Jack (headphone Jack type) to RCA L/R Cable. The color of Sound Cable and input Ports are in White and Red. In this case, the sound ports are generally located by the HDMI ports.

*DVI to HDMI Cable is sold separately.

1.2. Using D-SUB Cable: The most common way to use TV as a computer monitor

-Video Connection: Connect the D-Sub In port of the TV to the D-Sub Out port of the PC with the D-Sub cable.

-Sound Connection: Connect the Sound In port of the TV to the Sound Out port of the PC with Stereo Jack (Male to Male Headphone Jack Type) Cable. In this case, the sound ports are generally located by the D-Sub ports.

To use it as a Computer Monitor

1. Connected through DVI (Source) to HDMI Cable: press [SOURCE] button to show and select the connected or available external devices on the screen. Select [HDMI]

2. Connected through D-SUB Cable: Turn on and press [PC] button on Remote Control. (Or press [SOURCE] button to show and select the connected or available external devices on the screen. Select [PC])