

## **ATTACHMENT E.**

**- USER'S MANUAL-1 -**



## User's Guide

HYUNDAI IT CORP.  
[www.hyundaiIT.com](http://www.hyundaiIT.com)

# Full HD Digital LCD TV

MODELS : E425D | E465D  
E426D | E466D



## FCC Information

### User Instructions

The Federal Communications Commission Radio Frequency Interference Statement includes the following warning :

**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 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 radiocommunications. 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 receptions, 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 assistance.

### User Information

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment. Connecting of peripherals requires the use of grounded shielded signal cables.

## Important Tip

### Image Retention Effect (Image Sticking)

#### 1. Cause :

- Image Retention Effect may come from displaying a still picture in certain period of time with at a certain area continuously, as the feature of LCD panel. This is caused due to brightness degradation. Many LCD manufacturers are trying to overcome this limitation.

#### 2. Prevention

- To avoid this matter, use the product after reducing brightness and contrast, especially when a still image is displaying for a long time. (Contrast 50/Brightness 50 - *See 33,34 page*)  
Once image retention occurs, use the mode that displays more motion pictures. It will help reduce this matter.

#### 3. Solution

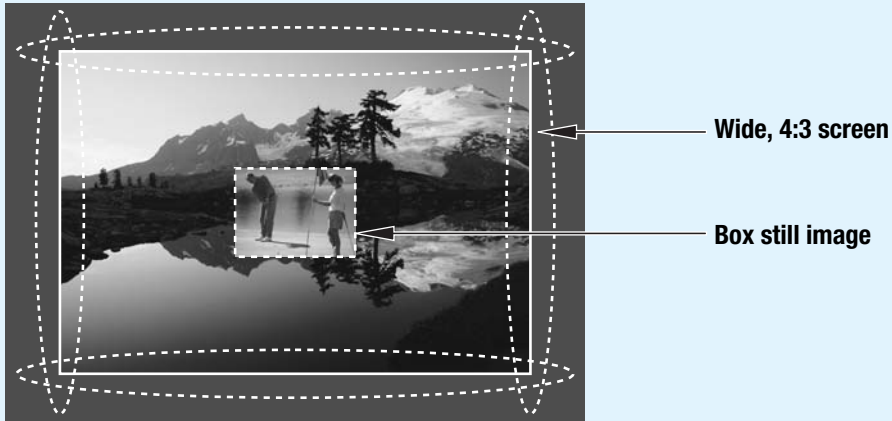
- The temporary image sticking would decrease with displaying Full-White pattern during 10 hours.  
\* The permanent image sticking could not take off under the latest technology.  
This method may be used to eliminate a temporary retained image that occurs after displaying a still image for a certain period of time. Since it may take several minutes to several hours to remove image sticking, it is recommendable to display motion pictures during 2~3 minutes every hour when keeping displaying a still image. As image sticking is influenced by the brightness of a still image being displayed and its display time, it is recommended that you reduce the brightness of the screen when displaying a still image for a long time.

\* Image Sticking does not come under the warranty.



## Image Sticking Precaution

### When watching a still Image within motion pictures and Wide/4:3 screen



#### 1. Note :

- When the central area of the screen and the screen edges are fixed, the different brightness level of the edges may cause image retention on the edges when watching for a long time .
- This phenomenon is the same matter to other LCD manufacturers. Please do not watch a still image for a long time.
- If you watch a still image for a long time, this may damage your TV.

\* This matter does not come under the warranty.

## Features

### Integrated HDTV

A HDTV has a built-in ATSC digital tuner. It does not need a separate set-top box to receive over-the-air DTV signal.

### Dual Scan/Multi-Viewing

You can program analog TV broadcasting and digital TV broadcasting automatically at the same time for multi-viewing.

### A Wide Array of Screen Settings

You can choose different screen settings depending on the type of program you are watching or the surrounding conditions (the outside weather conditions). You can switch among STANDARD, MILD, VIVID, MULTIMEDIA options or you can configure the screen settings for yourself.

### A Wide Array of Sound Settings

You can choose an optimal sound setting for the type of program you are watching. You can switch among custom Standard, Movies, Music, and Speech options or you can configure the sound settings for yourself.

### Favorite Channel Memory

You can memorize the channels you are watching frequently.

### SRS TrueSurround XT

You can enjoy dynamic and surround sound with ordinary speakers.

### Dolby Digital

When receiving digital broadcast signal, you can enjoy dynamic and surround sound with two ordinary speakers just like Dolby Digital 5.1.

### A Variety of Aspect Ratios

You can adjust the screen size at your preference.



## ENGLISH USER'S GUIDE

---

# Table of Contents

## General Information

- Safety Precaution .....5
- Contents of the Package .....9
- Products Sold Separately .....9
- Parts Names and Functions .....10
- Remote Control .....14

## Connections

- How to connect indoor/outdoor TV Antenna(UHF/VHF) .....16
- Before Connecting the Video/Audio Connections to External Device. ....17
- How to Connect a VCR/Cable Receiver .....18
- How to Connect a SET-TOP BOX or DVD Player .....19
- How to Connect a Camcorder/Game Player .....20
- How to Connect to a PC .....21
- HDMI Connection .....23
- How to Connect an External Visual Device .....25
- How to Use Digital Sound .....26

## Channel Setup

- How to Select TUNER MODE .....27
- How to Store Channels Automatically .....28
- How to Add/Eraser Channels Manually .....29
- How to Set Channel Edit and Favorite Channels .....30
- How to See Signal Strength .....31
- How to Set The Input Mode .....32

## Picture Setup

- How to Select the Picture Mode .....33
- How to Set the Desired Picture .....34
- How to Select the Aspect Ratio .....35
- How to Watch PIP/POP .....36

## Sound Setup

- How to Select the Audio Mode .....38
- How to Adjust the Desired Audio Mode .....39
- How to Use the Automatic Volume Control .....40
- How to Listen to SRS TruSurround XT (Surround).....41

- How to Set Audio Language .....42
- How to Set the Digital Audio Output .....43

## Function Setup

- How to Set Auto Lock .....44
- How To Set Block By Rating.....46
- How to View Closed Captions.....48
- How to Set the EPG View .....51
- How to View Reservation List.....52

## Setup

- How to Set Date / Time .....53
- How to Set Power On Time .....54
- How to Set Power Off Time .....55
- How to Set Sleep Time .....56
- How to Choose Menu Language.....57
- How to Set Menu Opacity.....58
- How to Set Emergency Alert .....59
- How to Set the Geometry in PC Mode.....60
- Picture on Function Guide .....61

## Appendix

- How to Use an External Device Using the Remote Control ...62
- Glossary .....64
- Troubleshooting .....67
- Care and Cleaning .....69
- Product Specifications .....70





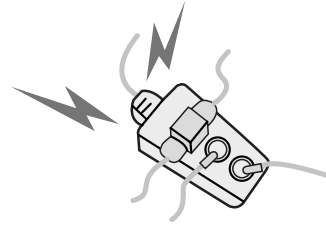
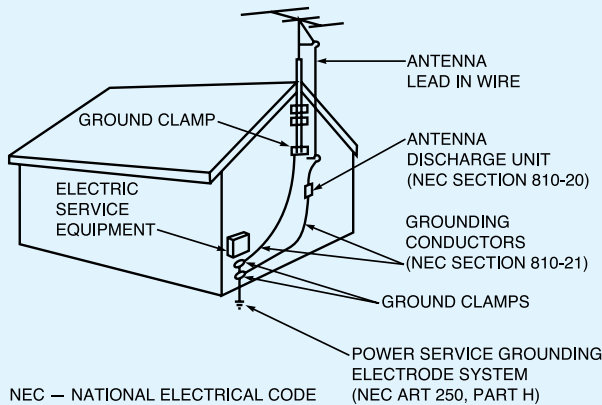
# Safety Precaution

The contents of this section are provided for the safety of users and their property. Please read the instructions carefully before using.

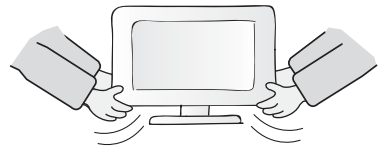
## Outdoor Antenna Grounding

If an outside antenna or cable system is connected to the TV, be sure the antenna or cable system is grounded so as to provide some protection against voltage surges and built-up static charges. Section 810 of the National Electrical Code, ANSI/NFPA No.70-1984, provides information about proper grounding of the mast and supporting structure, grounding of the lead-in wire to an antenna discharge unit, size of grounding conductors, location of antenna discharge unit, connection to grounding electrodes, and requirements for the grounding electrode.

## Example of Grounding According to National Electrical Code Instruction



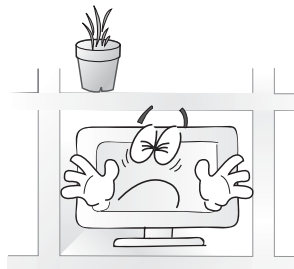
**Do not connect multiple electrical appliances to a single outlet.**  
- It may cause a fire due to overheating from the outlet.



**Make sure to remove the speakers before moving the TV with speakers mounted on it.**  
- When the speakers are detached from the unit while carrying it, this may cause damage to the unit or personal injury.

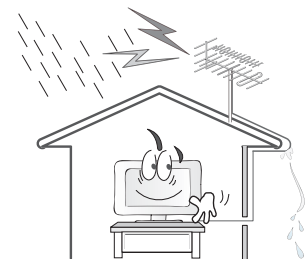
**Do not use or store a flammable spray or inflammable things near the TV.**

- They may cause explosion or fire.



**Do not install the TV in a bookshelf, closet, or a place where there is poor air circulation.**

- Fire may be caused due to the rise of internal temperature.

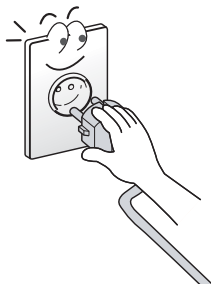


**Any necessary action such as making the antenna cable loop at the entrance of the building should be taken to prevent rainwater on the outdoor antenna cable from possibly running into the indoor.**

- If raindrop gets into the LCD TV, it may cause a fire or an electric shock.

If there is a persistent accumulation of dusts or water on the plug, please make sure to wipe it off using a dry cloth.

- It may cause a fire or an electric shock.

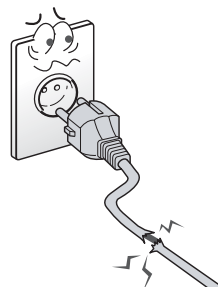


Firmly plug in the power cord so that it does not pull out.

- An unstable connection may cause fire.

Do not use a damaged power cord or plug, or loose outlet.

- It may cause electric shock or fire.

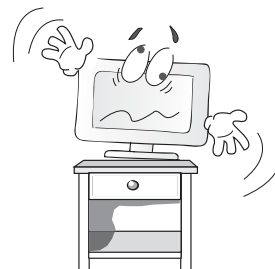


Do not put a water bowl, vase, candle, bug repellant, smoke, cigarette, plants, or heavy thing on the TV.

- It may cause electric shock or fire and also heavy things may cause injury when they fall.

Do not install in a place where there is oil, smoke, excessive humidity, or where water may be sprinkled on it.

- This may cause electric shock or fire.



Do not install on an unstable place or small support.

- This may cause the TV to fall, resulting in serious injury to a child or adult.

Never attempt to open, fix, or modify your TV.

- When there is a need for fixing, call a service center. Fire or electric shock may be caused.



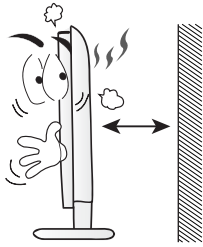
Do not put a metallic object like chopstick, wire, or puncher or inflammables like paper or a match in a vent, headphone jack, or AV jacks of the TV.

- Electric shock or fire may be caused.

When the TV produces abnormal noise, burning smell, or smoke, unplug the TV immediately and call a service center.

- Electric shock or fire may be caused.





Keep the TV at least 10cm away from the wall for ventilation.

- Fire may be caused due to the rise of inner temperature.

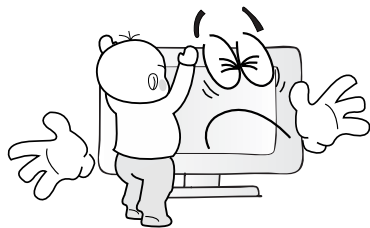


Do not place any heat sources such as radiators and heat registers, etc. near the TV.

- It may cause a fire.

Do not block ventilating slits with a table cloth.

- Blocking the ventilation slits may produce inner heat increase, resulting in a fire.

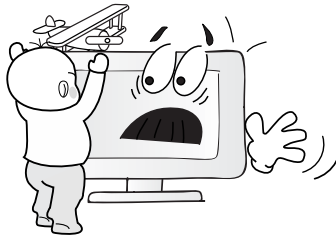


Do not allow children to climb or play on the TV.

- If it falls over on children, it may cause serious injury.

Do not place toys and cookies, etc. on the TV, which may attract children's attention.

- If it falls over on children, it may cause serious injury.

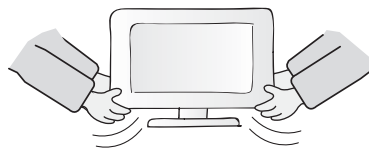


When cleaning the TV, make sure to disconnect the power plug and use a dry, soft cloth for a cleanup.

- Please avoid using chemicals such as wax, benzene, alcohol, thinner, mosquito spray, air freshener, lubricant or synthetic detergent.

Unplug when you do not use your TV for a long time.

- If dust is stacked on the TV, electric shock or fire may be caused from heat, fire, or deterioration of insulation.

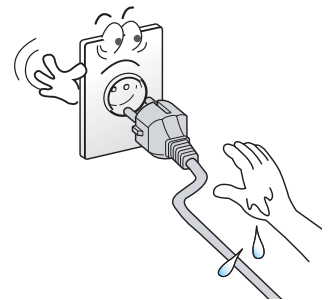


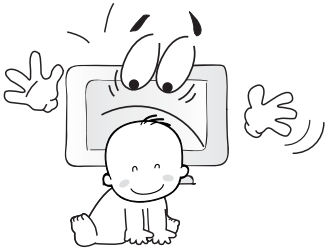
When moving the TV, two or more people are advised to carry it.

- Injury or damage may be caused when the TV falls.

Never touch the power plug or outlet with wet hands.

- This may cause electric shock.



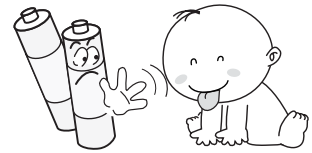
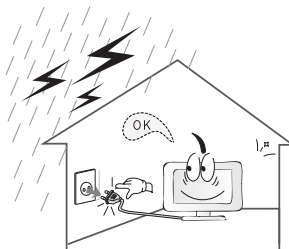


**Do not install the product on the floor.**

- This may cause the TV to fall resulting in serious injury.

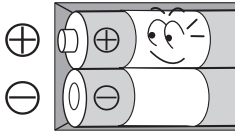
**Unplug the product during lightning or thunderstorms and never touch the antenna cable.**

- It may cause a fire or an electric shock.



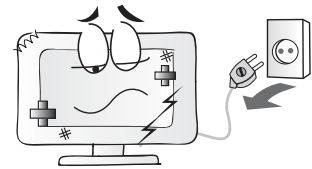
**Keep the remote control batteries out of sight and out reach of children.**

- If your child swallows a battery, see your doctor immediately.



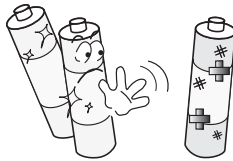
**Always use the standard batteries and avoid using old batteries together with new ones.**

- Otherwise it may result in internal damage to batteries, fire due to leakage or contamination.



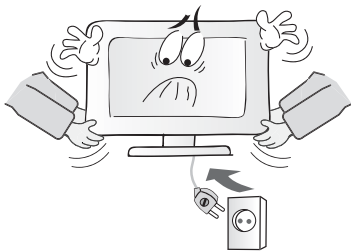
**When replacing batteries, make sure to match the batteries to the (+) and (-) marks in the battery compartment.**

- Mismatching of polarities may result in internal damage to batteries, fire due to leakage or contamination.



**In the event of damaging or dropping the product, switch off the power and remove the plug.**

- Using a damaged product may cause an electric shock or a fire.
- Contact your local service center.



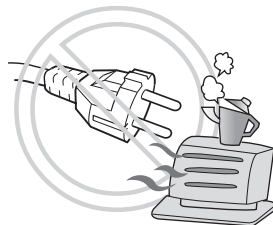
**Ensure the power cord doesn't trail across any hot objects like a heater.**

- This may cause a fire or an electric shock.



**Before moving the product, ensure to switch off the power and unplug all the electrical cords and the external connection cords such as an antenna cable and other source connections, etc.**

- Electrical cords may be damaged, resulting in a fire or an electrical shock.



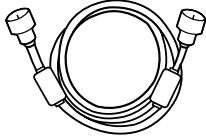
**Consult a service center or customer service for inside cleaning about once a year.**

- When dust is piled inside the TV for long time, fire or malfunction may be caused.

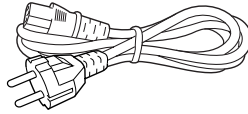


# Contents of the Package

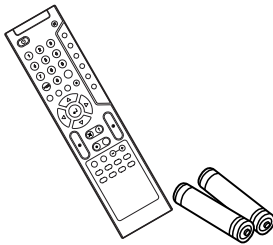
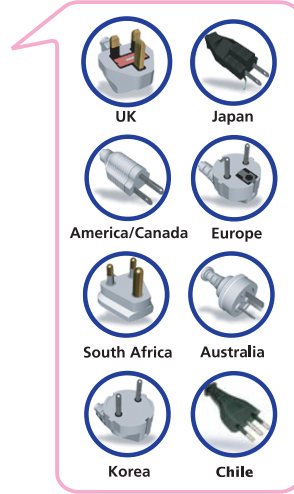
When opening the package, please ensure to check the following accessories provided.



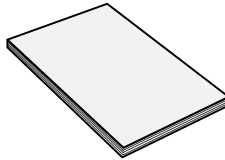
Antenna Cable  
(coaxial cable)



Power Cord



Remote Control & 2 batteries  
(1.5V AAA)



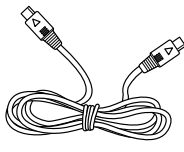
User's Guide

# Products Sold Separately

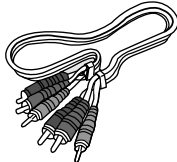
If you want to purchase separately sold products, consult a service center, electronics shops, or parts seller.



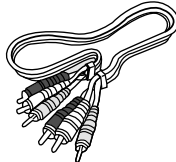
HDMI cable



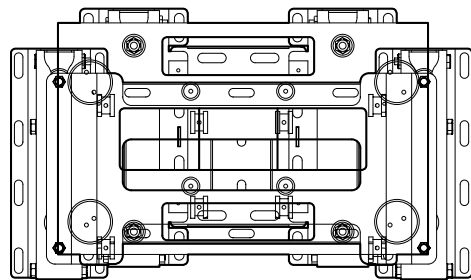
S-video Cable



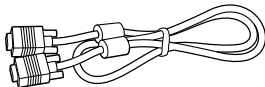
Component Cable  
(Y, Pb, Pr)



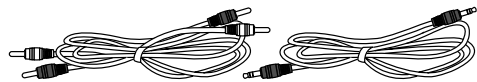
Composite Cable  
(Video/Audio)



Wall Mounting Support



PC signal Cable (D-SUB)

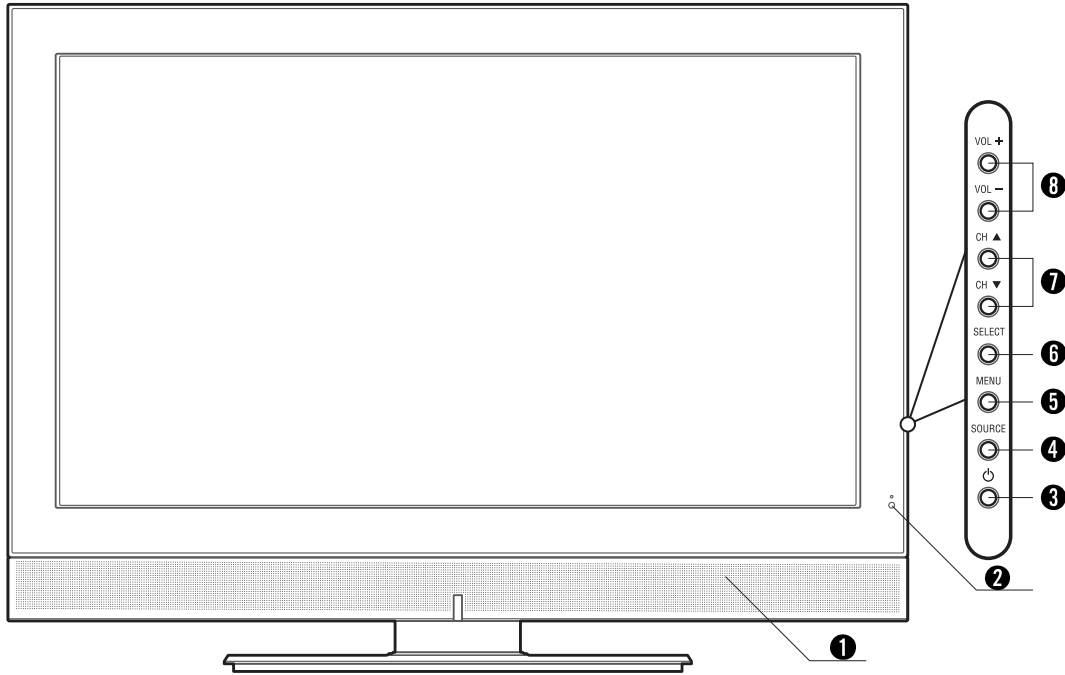


Audio Cable (DVD)

Audio Cable (PC)

# Parts Names and Functions

## Front View - E425D/E465D



\* This product image may be a bit different from the actual product.

**1 Speaker**

**2 Remote sensor and power LED.**

- Point the remote control toward here.
- It displays standby or operation status.

**- Power Indicator Status -**

Indicator	Status
Red	Standby
Green	Power on

**3 Power button**

Use this button to turn on or off the TV.

**4 Source button**

Use this button to switch among inputs connected to the TV.

**5 Menu button**

Use this button to display or exit from menus.

**6 Select button**

Use this button to select each item of menu.

**7 Channel buttons**

Use these buttons to change channels. These buttons also serve as the cursor of Down and Up buttons when in Menu mode.

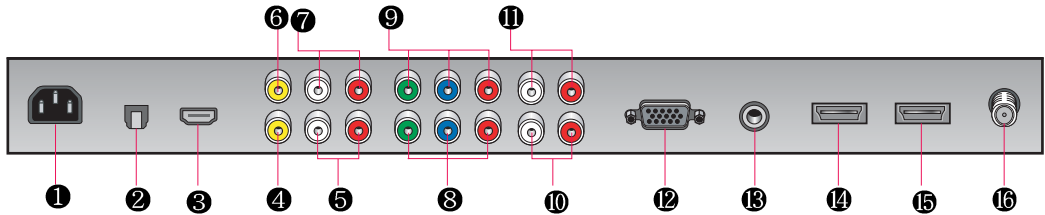
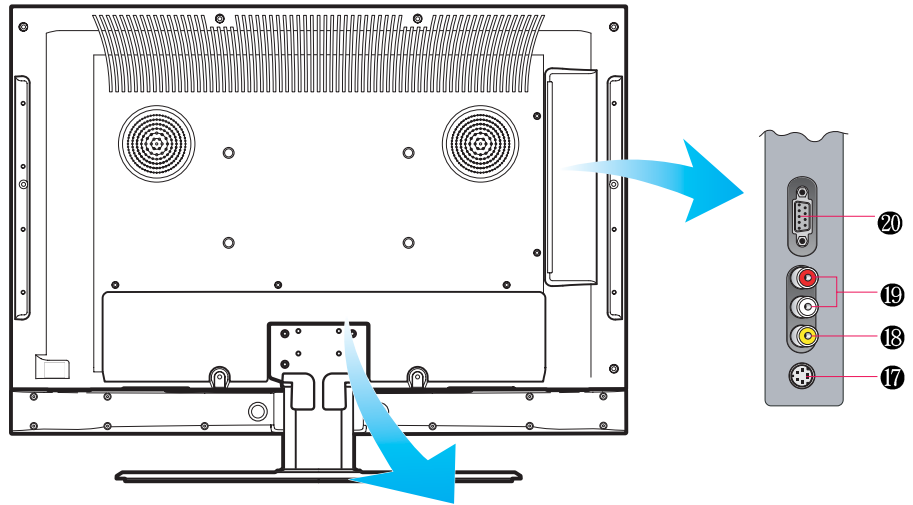
**8 Volume buttons**

Use these buttons for your desired sound level. These buttons also serve as the cursor of Select/Adjust when in Menu mode.



## Rear View - E425D/E465D

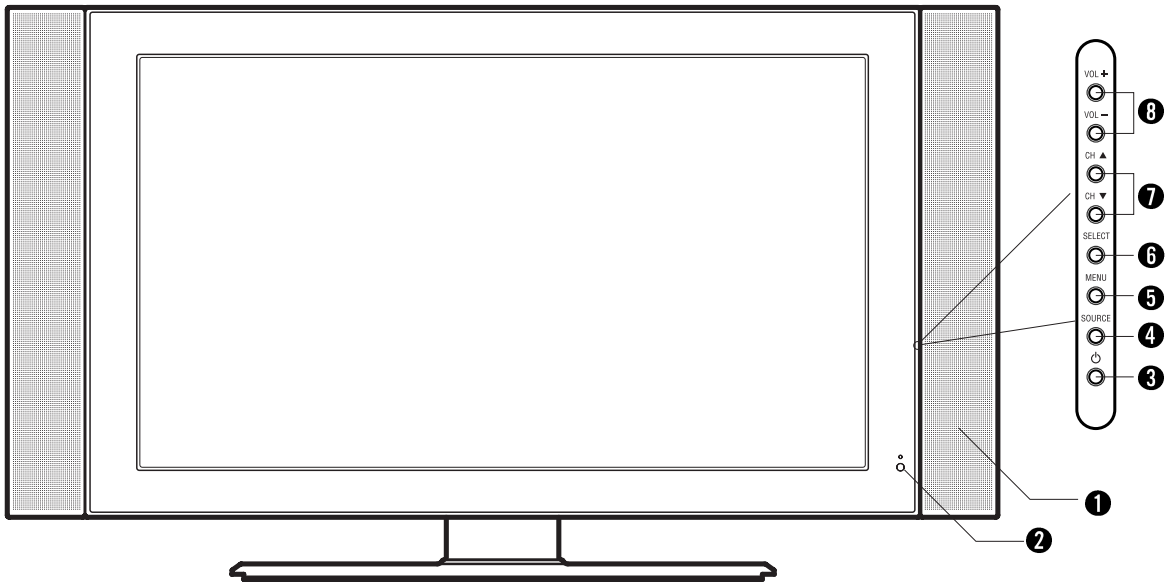
GENERAL INFORMATION



\* This product image may be a bit different from the actual product.

- ① Power(AC) input terminal  
connect the power cord to this terminal
- ② SPDIF optical digital audio output terminal
- ③ Mini USB input terminal  
This is used for picture on or service check.
- ④ Video output terminal
- ⑤ Audio output terminal
- ⑥ AV 1 (Video 1) input terminal
- ⑦ AV 1 (Video 1) audio input terminal
- ⑧ Component 2 video input terminal
- ⑨ Component 1 video input terminal
- ⑩ Component 2 audio input terminal
- ⑪ Component 1 audio input terminal
- ⑫ PC input terminal
- ⑬ PC audio input terminal
- ⑭ HDMI 1 input terminal
- ⑮ HDMI 2 input terminal
- ⑯ Antenna (Analgo/DTV) input terminal
- ⑰ AV 3 (S-Video) input terminal
- ⑱ AV 2 (Video 2) / AV 3 (S-Video) audio input terminal
- ⑳ RS-232C  
This is used for service check.

Front View - E426D/E466D



\* This product image may be a bit different from the actual product.

**1 Speaker**

**2 Remote sensor and power LED.**

- Point the remote control toward here.
- It displays standby or operation status.

- Power Indicator Status -

Indicator	Status
Red	Standby
Green	Power on

**3 Power button**

Use this button to turn on or off the TV.

**4 Source button**

Use this button to switch among inputs connected to the TV.

**5 Menu button**

Use this button to display or exit from menus.

**6 Select button**

Use this button to select each item of menu.

**7 Channel buttons**

Use these buttons to change channels. These buttons also serve as the cursor of Down and Up buttons when in Menu mode.

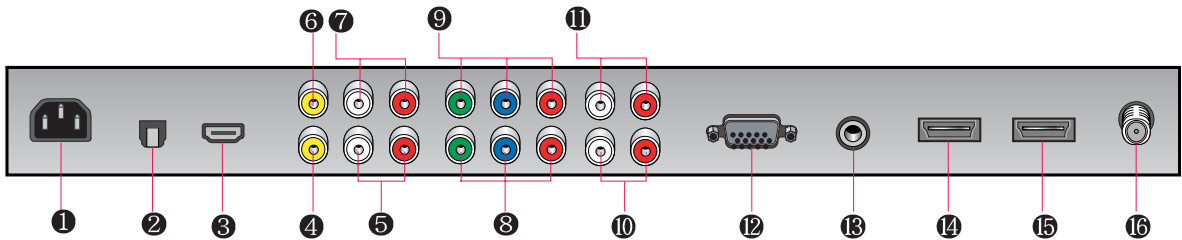
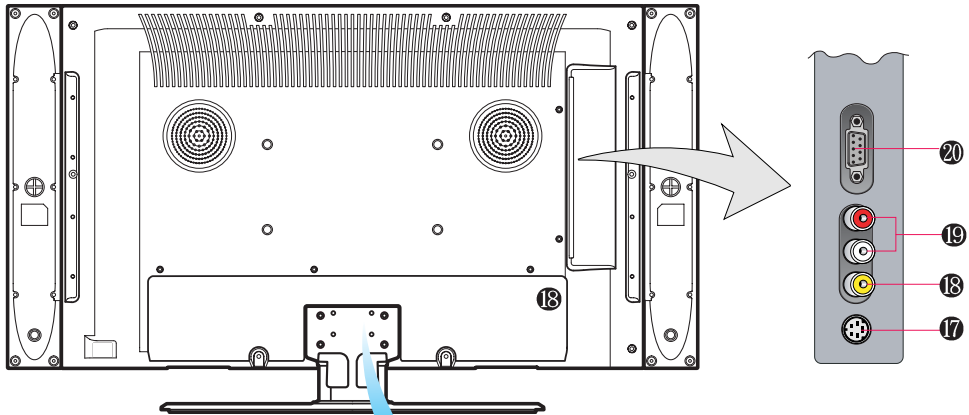
**8 Volume buttons**

Use these buttons for your desired sound level. These buttons also serve as the cursor of Select/Adjust when in Menu mode.





## Rear View - E426D/E466D



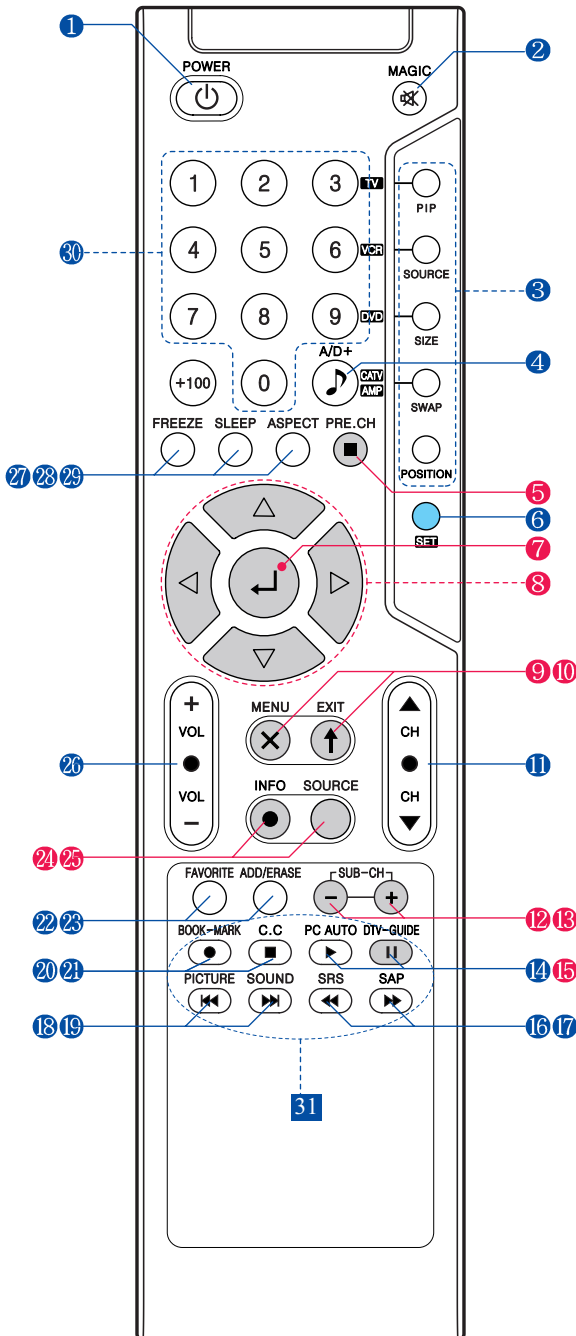
\* This product image may be a bit different from the actual product.

- ① Power(AC) input terminal  
connect the power cord to this terminal
- ② SPDIF optical digital audio output terminal
- ③ Mini USB input terminal  
This is used for picture on or service check.
- ④ Video output terminal
- ⑤ Audio output terminal
- ⑥ AV 1 (Video 1) input terminal
- ⑦ AV 1 (Video 1) audio input terminal
- ⑧ Component 2 video input terminal
- ⑨ Component 1 video input terminal

- ⑩ Component 2 audio input terminal
- ⑪ Component 1 audio input terminal
- ⑫ PC input terminal
- ⑬ PC audio input terminal
- ⑭ HDMI 1 input terminal
- ⑮ HDMI 2 input terminal
- ⑯ Antenna (Analog/DTV) input terminal
- ⑰ AV 3 (S-Video) input terminal
- ⑱ AV 2 (Video 2) input terminal
- ⑲ AV 2 (Video 2) / AV 3 (S-Video) audio input terminal

- ⑳ RS-232C  
This is used for service check.

# Remote Control



## 1. POWER/STANDBY

## 2. MUTE/Magic

This button is also used when setting up to use other external device.

## 3. PIP FUNCTIONS

- PIP : Use this button for PIP On/Off.
- SOURCE : Use this button to select the input source of sub-picture.
- SIZE : Use this button to select the size of sub-picture.
- SWAP : Use this button to swap main and sub-picture.
- POSITION : Use this button to select the position of sub-picture.

## 4. A/D+

- channel button

## 5. Previous Channel

Use this button to return to the previous channel.

## 6. Other external device selection

## 7. MENU SELECTION

Use this button to select menu items.

## 8. LEFT/RIGHT MOVE/ADJUST

Use these buttons to move between menu items or to adjust each item.

## 9. MENU

Use this button to call the OSD to the screen.

## 10. EXIT

Use this button to end the OSD.

## 11. CHANNEL SELECTION

Use this button to select the channel.

## 12-13. SUB-PICTURE CHANNEL SELECTION

## 14. PC AUTO

Use this button to automatically adjust the screen in PC Mode.

## 15. DTV-GUIDE

Use this button to see digital broadcast information.

## 16. SRS

Use this button to select 3D surround sound.

## 17. SAP

Use this button to listen in a foreign language or in Stereo



**18. PICTURE MODE**

**19. SOUND MODE**

**20. BOOK-MARK**

Use this button to select/deselect your frequently-used channel.

**21. CC(Closed Caption)**

**22. FAVORITE**

Use this button when watching your favorite channel.

**23. ADD/ERASE**

Use this button to add or erase channels.

**24. INFORMATION**

Use this button to display resolution or various program information.

**25. SOURCE**

Use this button to select External Input

**26. VOLUME**

**27. FREEZE**

**28. SLEEP**

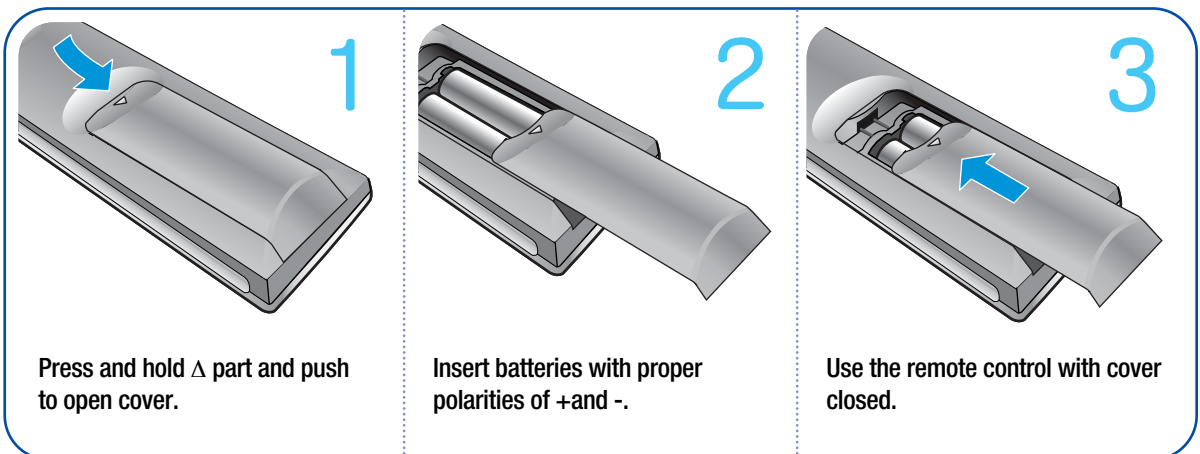
**29. ASPECT RATIO**

Use this button to change the picture size.

**30. NUMERIC KEYS**

**31. Use this buttons to use other manufacturer's DVD or VCR.**

## How to Insert Batteries in Remote Control

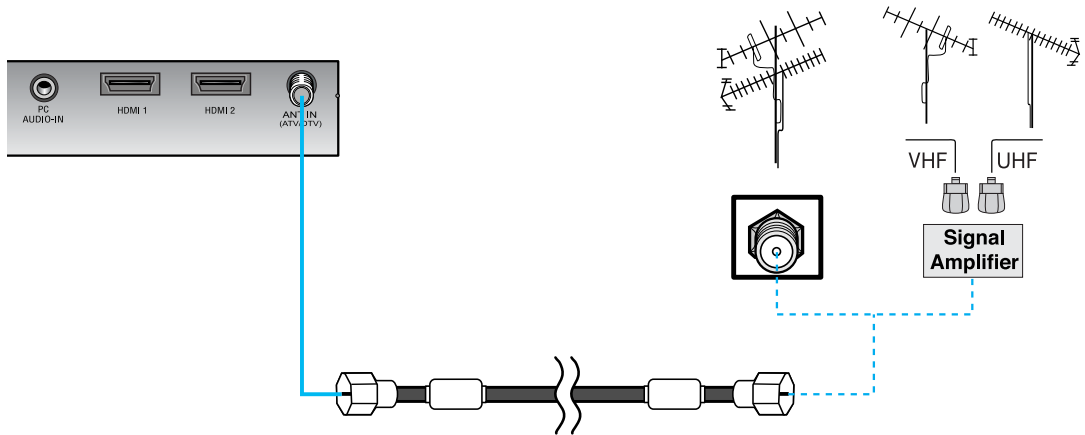


\* Battery type :1.5V/AAA

## How to connect indoor/outdoor TV Antenna(UHF/VHF)

### Connection Method

- ➔ Make sure that the antenna cable is connected to ANT.
- Antenna or Cable service without a cable box connections
- For optimum picture quality, adjust antenna direction if need,





### TIP

- When inserting a 75  $\Omega$  (ohm) coaxial cable into the input connection, ensure the wire tip not to bend.
- If you experience poor signal reception, we recommend you purchase a signal amplifier for better picture quality.

### How to Watch

- 1 Turn on TV to activate Auto Channel (See page 28) to memorize the available channels.



- 2 Press  button or  button to select the desired channels.



## Before Connecting the Video/Audio Connections to External Devices...

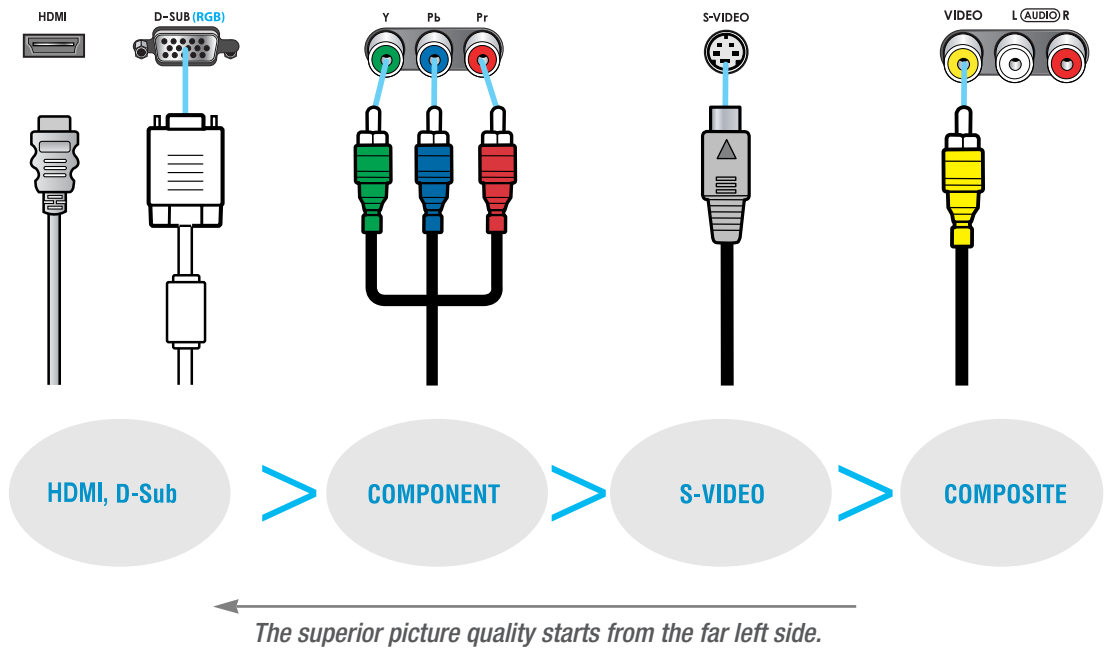
Please make sure to read the following information on connection to enjoy best picture quality.

### Video/Audio connectors

Types of video/audio cable :

① HDMI ② 15-Pin D-Sub ③ COMPONENT ④ S-VIDEO ⑤ COMPOSITE

*Best picture quality is displayed in the following order.*



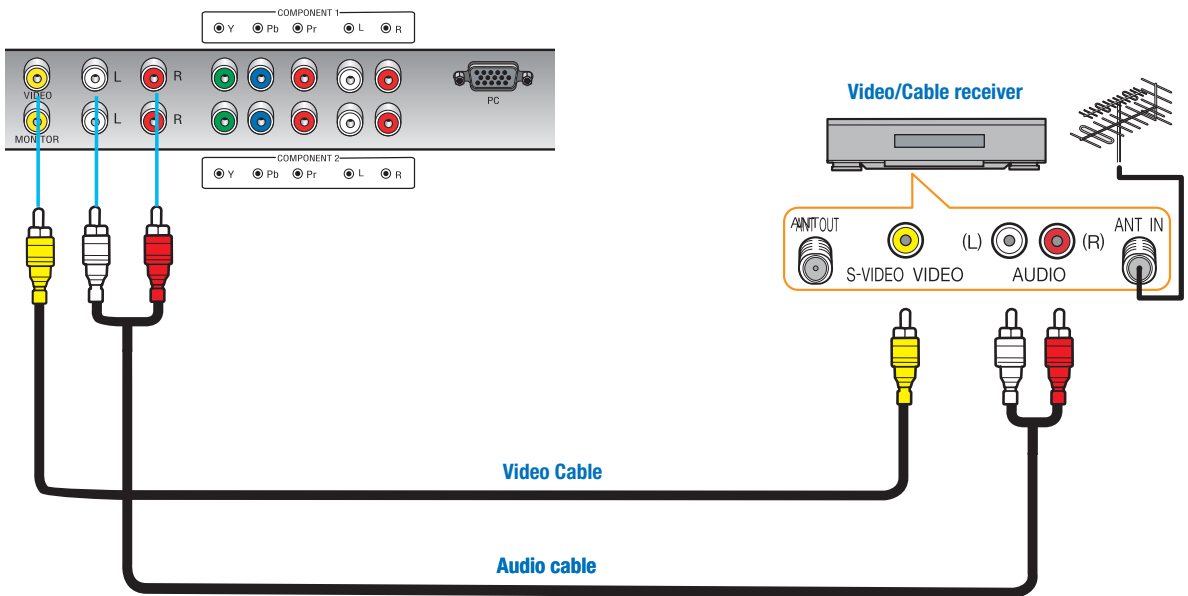
#### TIP

- When connecting an external device, ensure to read the connecting device's manual. The location or the number of the terminals on the external device may be different depending on its model.
- Connect a **HDMI** connection to the output of DVD, cable receiver or satellite receiver. Connecting a **HDMI** connection to a PC may result in a message, "Unknown Signal".
- Do not power on until all necessary connections are made. If power is given before connections completed, this may damage the product.
- Make sure to match the cable in color with the terminal.
- Make sure to check the type of terminals to be connected.


# How to Connect a VCR/Cable Receiver

## Connection Method

- 1 Connect the Video cable or S-Video cable between Video/S-Video output terminal of VCR or Cable receiver and Video/S-Video input terminal of TV. (Connect the jacks to terminals in the same color.)
- 2 Connect the Audio cable (Left: white, Right: red) between Audio output terminal of VCR or cable receiver and Audio input terminal of TV. (Connect the jacks to terminals in the same color.)



## How to Watch

- 1 Turn on TV and press  on remote control and then select AV1/AV2/AV3 banner on the bottom side.

AV1(Video)

AV2(Video)

AV3(S-Video)

For more information, read the user's guide of VCR or cable receiver.

**TIP**

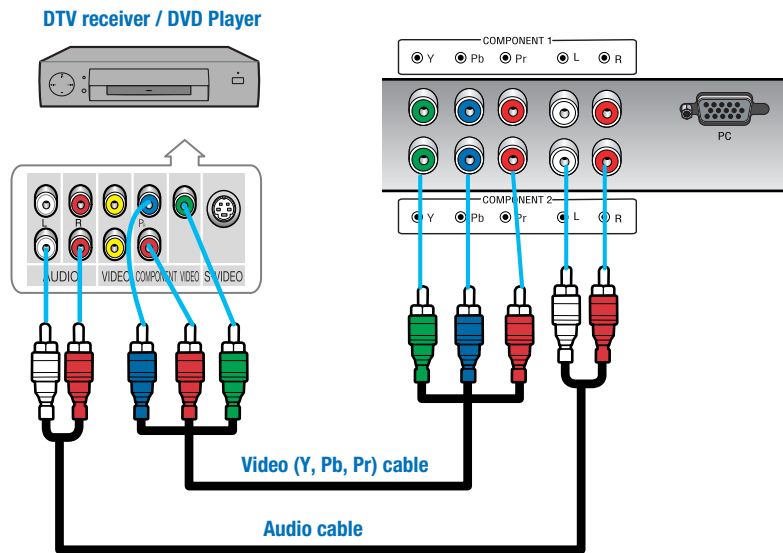
To enjoy better picture quality, use the S-Video cable rather than the composite cable.



# How to Connect a SET-TOP BOX or DVD Player

## Connection Method

- 1 Connect the Video cable (Y, Pb, Pr) between output terminals (Y, Pb, Pr) of DTV receiver or DVD player and the input terminals (Y, Pb, Pr) of DTV/DVD (480i/480p/576i/576p/720p/1080i) on the rear of TV. (Connect the jacks to terminal in the same color.)
- 2 Connect the Audio cable between Audio output terminal of DTV receiver or DVD player and Audio input terminal for DTV/DVD Audio on the rear of TV. (Connect the jacks to terminals in the same color.)



## How to Watch

- 1 Turn on TV and press  on remote control until showing AV4/AV5 banner on the bottom side.

AV4(Component1)

AV5(Component2)

For more information, read the user's guide of DTV receiver or DVD player.

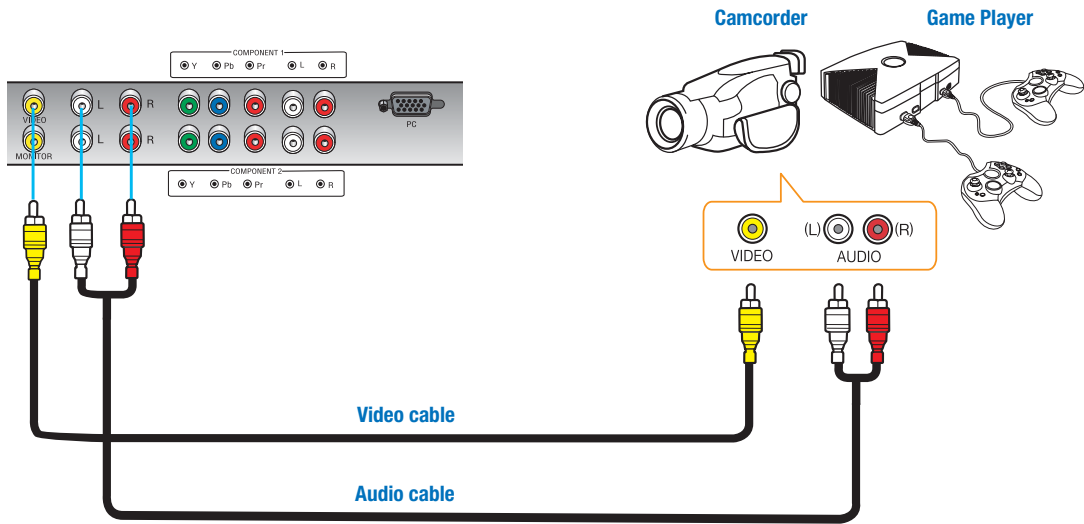
### TIP

- Output terminal mark (Y, Pb, and Pr) of DVD player may be indicated as Y, B-Y, R-Y/Y-Cb-Cr /Y-Pb-Pr according to the type of DVD player models.
- If your DVD player or Set Top Box supports **HDMI** /D-SUB, see Connecting to a PC (page 21) for connection. You can enjoy more clear picture quality.

# How to Connect a Camcorder/Game Player

## Connection Method

- 1 Connect the Video/S-Video cable between Video/S-Video output terminal of Camcorder/Game player and Video/S-Video input terminal of TV. (Connect cables and terminal in the same colors.)
- 2 Connect the Audio cable (Left-white, Right-red) between Audio output terminal of Camcorder/Game player and Audio input terminal of TV. (Connect the jacks to terminals in the same color.)



## How to Watch

- 1 Turn on TV and press  on remote control and then AV1/AV2/AV3 banner on the bottom side.

For more information, read the user's guide of Game player or Camcorder.

AV1(Video)

AV2(Video)

AV3(S-Video)

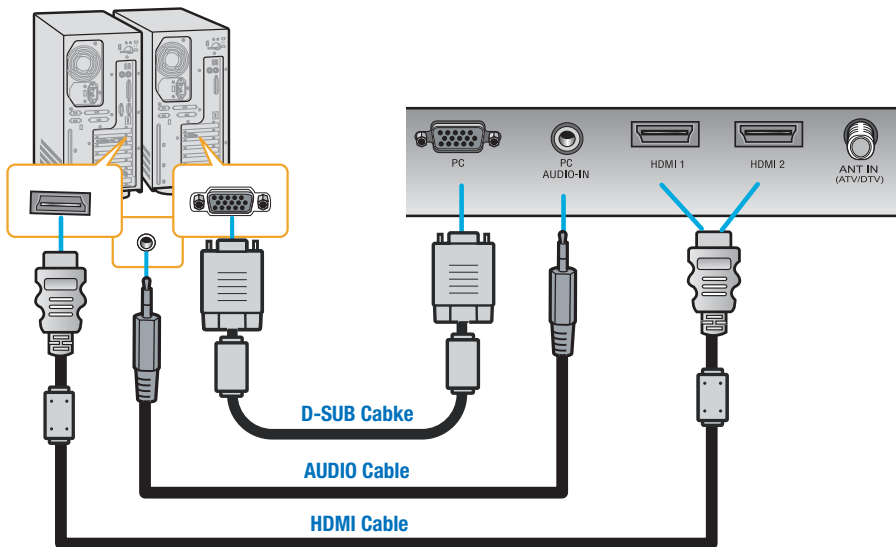




# How to Connect to a PC

## Connection Method

- 1 Connect the PC signal cable (15-pin D-sub) between the output terminal of PC and the D-sub input terminal of TV.
- 2 Connect the Audio cable between Audio output terminal of PC and Audio input terminal for PC on the rear of TV. (Connect the jacks to terminals in the same color.)



## When Using as a PC Monitor

- 1 Turn on TV and press  on remote control until showing PC/HDMI1/HDMI2 banner on the bottom side.

PC

HDMI1

HDMI2

### TIP

- If you use the **HDMI** connection, you can enjoy better picture quality.
- This product supports Plug-and-Play function.
- We recommend the above method if the DVD player or set top box supports DTV signal with **HDMI/D-Sub** (15 pin) cable for the better picture quality.
- If you input an unsupported resolution in PC or **HDMI** mode, the screen won't be displayed properly.

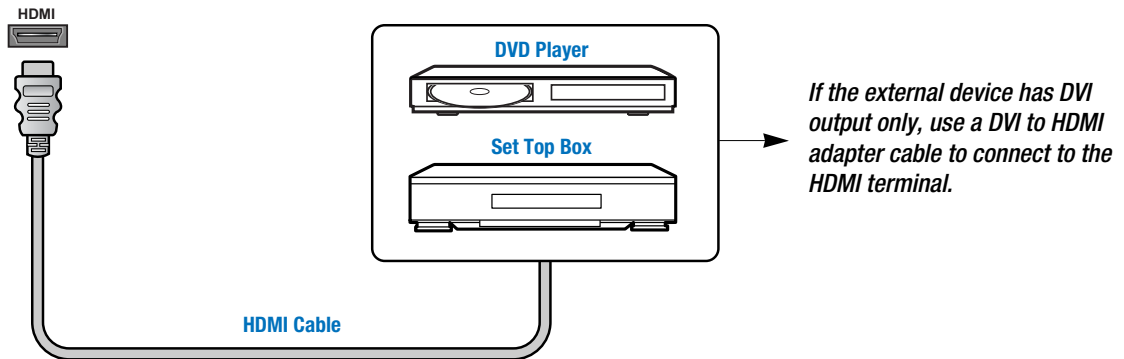
## Resolutions Supported in PC

Resolution	Horizontal frequency(KHz)	Vertical frequency(Hz)
640 x 480	31.47	59.94
	37.50	75.00
720 x 400	31.47	70.08
800 x 600	37.88	60.32
	46.88	75.00
1024 x 768	48.36	60.00
	56.50	70.10
	60.02	75.03
1280 x 1024	63.90	60.00
1920 x 1080	67.50	60.00



## HDMI Connection

HDMI \*1 (High Definition Multi media Interface) is the first all digital consumer electronics A/V interface that supports uncompressed standard. The HDMI terminal supports both video and audio information. To the HDMI input terminal, you can connect an EIA/CEA-861/861B\*2 compliant consumer electronic device, such as a Set Top Box or DVD player with HDMI or DVI output terminal. Input a High-bandwidth Digital Content Protection (HDCP) high-definition picture source to this HDMI terminal, so you can display the high-definition pictures on this TV in the digital form.



### Compatible VIDEO Signal

Resolution	No. of dots(HXV)	Vertical scanning frequency(Hz)
1080 p/i	1920 X 1080 p/i	50/60
720 p	1280 X 720 p	50/60
576 p/i	720 X 576 p/i	50/60
480 p/i	640 X 480 p/i	50/60

This input terminal is not intended for use with computers.

**Compatible sampling frequency of AUDIO signal through HDMI (L.PCM) : 48kHz / 44.1kHz / 32 kHz**

**Notes:**

- This HDMI connector is Type A.
- If you connect an equipment without a digital output terminal, connect to the COMPONENT VIDEO, S VIDEO or VIDEO input terminal on the TV so you can enjoy an analog signal.
- The DIGITAL IN terminal can only be used with 480i/576i/480p/576p/720p/1080i/1080p picture signals. Set the Digital Set -Top -Box DIGITAL OUT terminal Output setting to 1080i, 1080p, 480i or 480p. For detailed information, refer to the Digital Set -Top -Box instruction manual. If you cannot display the picture because your Digital Set -Top -Box does not have a DIGITAL OUT terminal Output setting, use the component Video Input (or the S Video Input or Video Input). In this case the picture will be displayed as an analog signal.

## How to Watch

- 1 Turn on TV and Press  on remote control until showing HDMI1/HDMI2 banner on the bottom side.

HDMI1

HDMI2

**TIP**

- \*1 HDMI, the HDMI logo and High-Definition Multimedia Interface are trademarks or registered trademarks of HDMILicensing LLC.
- \*2 EIA/CEA-861/861B profiles compliance covers profiles for transmission of uncompressed digital video including high bandwidth digital content protection.

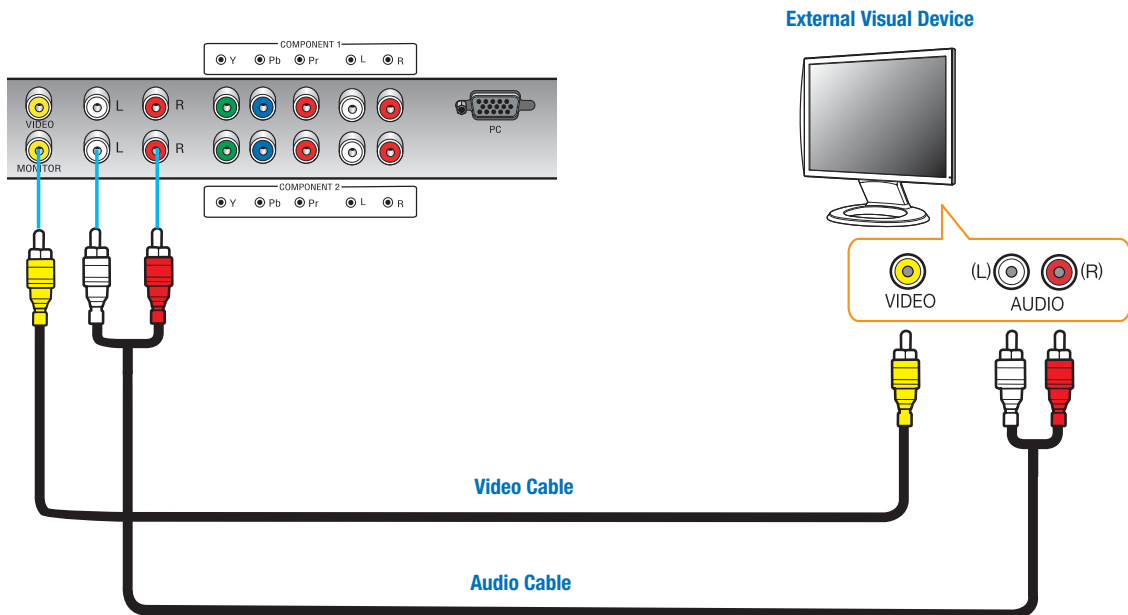


# How to Connect an External Visual Device

You can connect your TV to other visual device to watch TV program at the same time.

## Connection Method

- 1 Connect the Composite Video cable between Video input terminals of an external device and the Video output terminals for Video on the rear of TV.  
(Connect the jacks to terminals in the same color.)
- 2 Connect the Audio cable between Audio input terminal (Left-white, Right-red) of an external device and Audio output terminal for Video on the rear of TV. (Connect the jacks and terminals in the same color.)
- 3 For more information, read the user's guide of an external device.

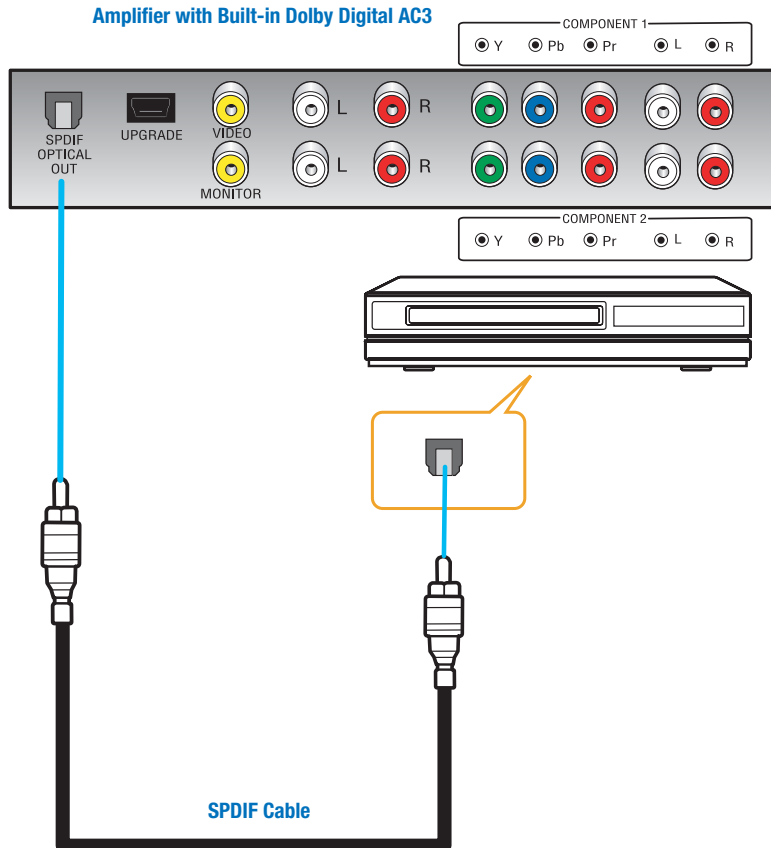


**TIP** Video and Audio outputs are available only when watching an Analog TV, Digital TV or VCR. This is not supported in the Input Mode of Component, HDMI /D-SUB or S-Video.

# How to Use Digital Sound

## Connection Method

- 1** Connect the optical cable to the digital audio output terminal for SPDIF optical digital audio output terminal on the rear of TV.
- 2** Select Digital Sound Output. (See page 43)
- 3** For more information, read the user's guide of the external sound device.



# How to Select TUNER MODE

You can choose the RF-input between off-air and cable.



Press Menu button.  
Menu items appear on the screen.

1



Press up or down button to move to "channel".  
Press or buttons to select "channel".

2



Press up or down button to move to Tuner Mode.  
Press or buttons to select Tuner Mode.

3



Press up or down button to move to Air / Cable  
and press button to select item you want.



Press MENU button after the setting is done and menu goes to the previous menu.  
If the EXIT button is pressed, the menu will disappear.



# How to Store Channels Automatically

- Your TV can memorize and store all of the available analog/digital broadcast signals for both “off-air” (antenna) and cable channels.
- Before your television can begin memorizing the available channels, make sure to specify the type of the signal source (antenna or cable) connected to your TV.



Press Menu button.  
Menu items appear on the screen.

1



Press Up or Down button to move to “channel”.  
Press or button to select “channel”.



2



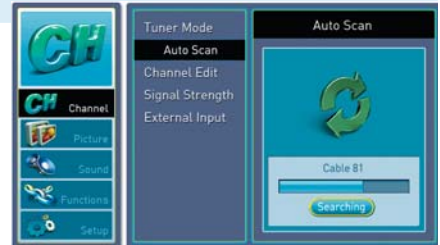
Press Up or Down button to move to “AUTO SCAN”.  
Press or button to select “AUTO SCAN”.



3



Press button and Auto Scan is Activated



**TIP**

- In the middle of AUTO SCAN, if you press button or Menu Button, AUTO SCAN is interrupted. Then the original channel is returned.
- If you have changed the connection of an antenna or cable, perform AUTO SCAN again.





# How to Add/Eraser Channels Manually

Users can add or erase the desired channels.

CHANNEL

1



Press the number buttons on remote control to view the channels that will be added.

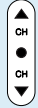
2



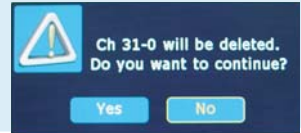
To Add Channel , Add the channel by pressing the ADD/ERASE button.



3



To Delete Channel, Press channel buttons or the number buttons on remote control to erase the channel.



4



Press the ADD/ERASE button to erase the channel Press Left and Right buttons to set 'YES/NO'.

# How to Set Channel Edit and Favorite Channels

Users can store frequently watched channels to quickly access a preferred channel.

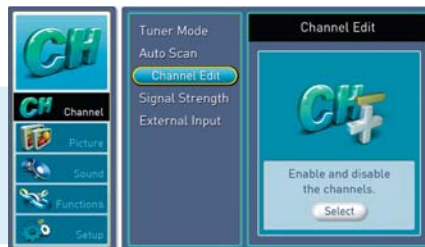


Press Menu button.  
Menu items appear on the screen.

1



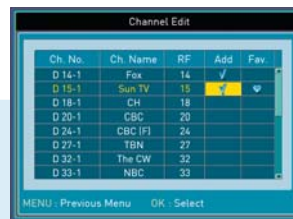
Press Up or Down button to move to "channel".  
Press button or to select "channel".



2



Press Up or Down button to move to "channel edit".  
Press button or to select "channel edit".



3



Press button to "select".

You can channel and Favorite-channels by pressing add/erase, Up/Down, left/right and buttons.



Press MENU or exit button after the setting is done, and you can save the channels you select.

How to Directly Add and Erase Favorite Channels : Press button.

How to Directly See Favorite Channels : Press button.

**TIP**

The Favorite function is available only with remote control.



# How to See Signal Strength

The function is only for DTV channel.



Press menu button.  
menu items appear on the screen.

1



Press Up or Down button to move to "channel".  
Press ◀ or ▶ button to select "channel".



2



Press Up or Down button to move to "signal strength".  
Press ◀ or ▶ button to select "signal strength"  
then the signal strength of antenna appears  
on the screen.



Press MENU button after the setting is done and menu  
goes to the previous menu.  
If the EXIT button is pressed, the menu will disappear.

# How to Set The Input Mode



Press Menu button.  
Menu items appear on the screen.

1



Press Up or Down button to move to "channel".  
Press ◀ or ▶ button to select "channel".



2



Press Up or Down button to move to "external input".  
Press ◀ or ▶ button to select "external input".



3



Press left or right button to set input mode  
Whenever press left/right button to set input mode  
Changes in following order.

- ⇒ TV(Air/Cable) ⇒ AV1(Video1) ⇒ AV2(Video2)
- ⇒ AV3(S-Video) ⇒ AV4(Component1)
- ⇒ AV5(Component2) ⇒ AV6(PC) ⇒ AV7(HDMI1) ⇒ AV8(HDMI2)



Press Menu button after the setting is done and menu goes to the previous Menu.  
If the Exit button is prested, the menu will disappear.

You can set the input mode quickly using the remote control press the  button

Whenever press this button, the input mode changes if following order

- ⇒ TV(Air/Cable) ⇒ AV1(Video1) ⇒ AV2(Video2) ⇒ AV3(S-Video) ⇒ AV4(Component1)
- ⇒ AV5(Component2) ⇒ AV6(PC) ⇒ AV7(HDMI1) ⇒ AV8(HDMI2)



# How to Select the Picture Mode

Users can automatically adjust the picture mode according to the input mode.



Press Menu button.  
Menu items appear on the screen.

1



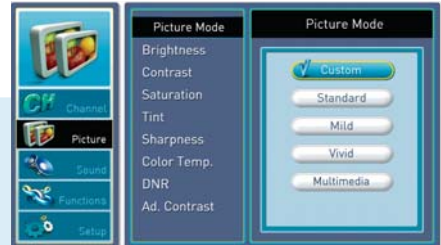
Press Up or Down button to move to picture.  
Press ◀ or ▶ button to select picture.



2



Press Up or Down button to move to picture mode  
Press ◀ or ▶ button to select



3



Whenever you press Up or Down button, the mode changes in following order.  
⇒ Custom ⇒ Standard ⇒ Mild ⇒ Vivid  
⇒ Multimedia



Press MENU button after the setting is done and menu goes to the previous menu.  
If the EXIT button is pressed, the menu will disappear.

**CUSTOM** : When the user wants to directly set the values ➔ [See the next page](#)

**STANDARD** : Most video contents are appropriate to this mode

**MILD** : Soft display

**VIVID**: Clear and Vivid display

**MULTIMEDIA** : For multimedia screen like movies

PICTURE

How to Directly Select Picture Mode : ◀▶ Press Picture button.

- Whenever press this button, the mode changes in following order. ⇒ CUSTOM ⇒ STANDARD  
⇒ MILD ⇒ VIVID ⇒ MULTIMEDIA.



- If the adjustment of Contrast, Brightness, Sharpness, Saturation and Tint is changed, it's changed to the Custom mode automatically.

# How to Set the Desired Picture

Users can manually adjust their desired picture.



Press Menu button.  
Menu items appear on the screen.

1



Press Up or Down button to move to picture.  
Press ◀ or ▶ button to select picture.

2



Press Up or Down button to move to picture mode.  
Press ◀ button or ▶ to select picture mode.

3



Press Up or Down button to move to custom and  
Press ◀ button to make a selection.

4



Press Up or Down button to move to "Brightness".  
Press ◀ or ▶ button to select "Brightness".

5



Press Left or Right button to adjust.



Press MENU button after the setting is done and menu goes to the previous menu.  
If the EXIT button is pressed, the menu will disappear.



- BRIGHTNESS** : Adjust the brightness of the entire picture.
- CONTRAST** : Adjust the brightness and darkness of object and background.
- SATURATION** : Adjust colors into deeper or lighter colors.
- TINT** : Adjust colors naturally.
- SHARPNESS** : Adjust clarity of outline of objects.
- COLOR TEMP** : Whenever You Press left or right button, the mode changes in following order NORMAL ⇄ WARM ⇄ COOL
- DNR** : Reduce the Digital Noise in the DTV mode.
- AD.CONTRAST** : Adaptive contrast

**TIP**

TINT is not applied to PC mode



# How to Select the Aspect Ratio

Users can manually adjust size of the screen.

PICTURE

<b>16 : 9</b> General broadcast picture is adjusted to 16:9.	
<b>4 : 3</b> 4:3 general picture size	
<b>ZOOM 1</b> Picture enlarged to 16:9 format, letter box format.	
<b>ZOOM 2</b> Picture which enlarges 16:9 vertically	
<b>PANORAMA</b> Picture size for panorama video	
<b>REAL</b> Real size in HDMI, Component	

How to Directly Select Picture Mode :  ASPECT Press Aspect button.



- You can use ASPECT key as follows.
- Digital TV input : 16 : 9 ⇨ 4 : 3 ⇨ Zoom 1 ⇨ Zoom 2
  - Analog TV input (in Video, TV mode) : 16 : 9 ⇨ 4 : 3 ⇨ Zoom 1 ⇨ Zoom 2 ⇨ Panorama
  - PC mode : 16 : 9 ⇨ 4 : 3
  - HDMI, COMPONENT Input : 16 : 9 ⇨ 4 : 3 ⇨ Zoom 1 ⇨ Zoom 2 ⇨ Real
- what is Real Mode?
- This Mode allows to show original display without over scanning when 1080i/p signal used in component/HDMI Input Mode.
  - According to inputted video signal. Some noise can be displayed Mode on side of screen but this noise is originally from inputted video signal.

# How to Watch PIP/Double Window

Press  button to set up PIP

PIP ⇨ POP is selected whenever you press



<PIP>



<Double Window>

Press  button to select input source of sub screen.

Select input source of sub screen by pressing ▲ ▼ button and press OK button.

Press  button to adjust sub screen.

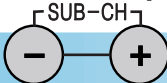
Sub screen's size will change whenever you press.

Press  button to swap main and sub screen.

Main and sub screen will be swapped whenever you press.

Press  button to change the position of sub screen.

⇨ It moves left top ⇨ right top ⇨ right bottom ⇨ left bottom ⇨

Press  buttons to select the channel of sub screen.

Only in case sub screen's input is TV.



Main and sub screen can't be used for same input sources.