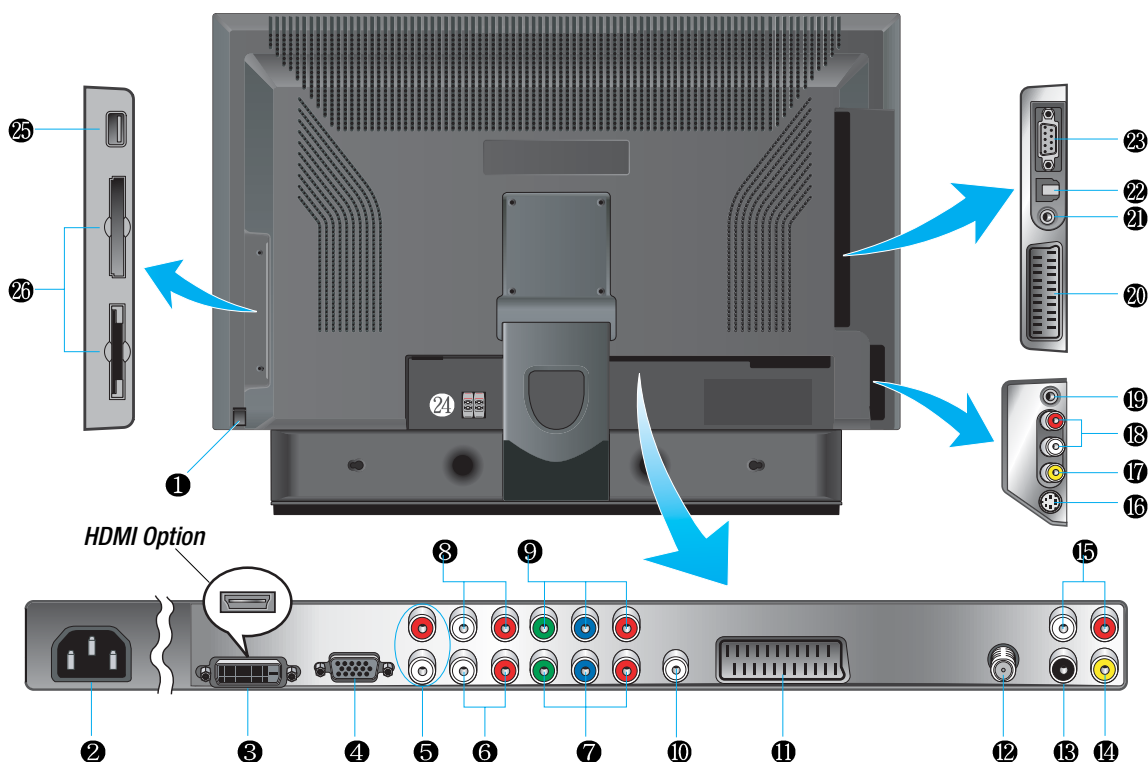


Rear View



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

- | | | |
|------------------------------------|---|---|
| ① Power switch | ⑪ Full Scart input terminal | ⑳ Half Scart input terminal |
| ② Power (AC) input terminal | ⑫ Antenna input terminal | ㉑ Extend an RS-232 input for ATV communication. |
| ③ DVI Video / HDMI input terminal | ⑬ Digital Audio output terminal for coaxial cable | ㉒ SPDIF Optical audio output terminal |
| ④ D-SUB input terminal | ⑭ Subwoofer output terminal | ㉓ Extend an RS-232 input for DTV communication. |
| ⑤ DVI/D-SUB Audio input terminal | ⑮ Extend Audio output terminal | ㉔ Speaker terminal |
| ⑥ Component 2 Audio input terminal | ⑯ S-Video input terminal | ㉕ USB Input Terminal |
| ⑦ Component 2 Video input terminal | ⑰ Video(CVBS) input terminal | ㉖ Memory Card Slot |
| ⑧ Component 1 Audio input terminal | ⑱ Audio(CVBS) input terminal | |
| ⑨ Component 1 Video input terminal | ⑲ Headphone output terminal | |
| ⑩ CVBS output terminal | | |

* ㉕ + ㉖ For Q320 Model only

Parts Names and Functions - 40" LCD TV

Front View



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

❶ Speakers

❷ Power Switch

❸ Remote sensor and power LED.

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

- Power Indicator Status -

Indicator	Status
Red	Standby
Green	Power on

❹ Standby/On button

Use this button to turn on or off the TV.

❺ Source button

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

❻ Menu button

Use this button to display or exit from the menu mode.

❼ Select button

Use this button to select each item from the menu mode.

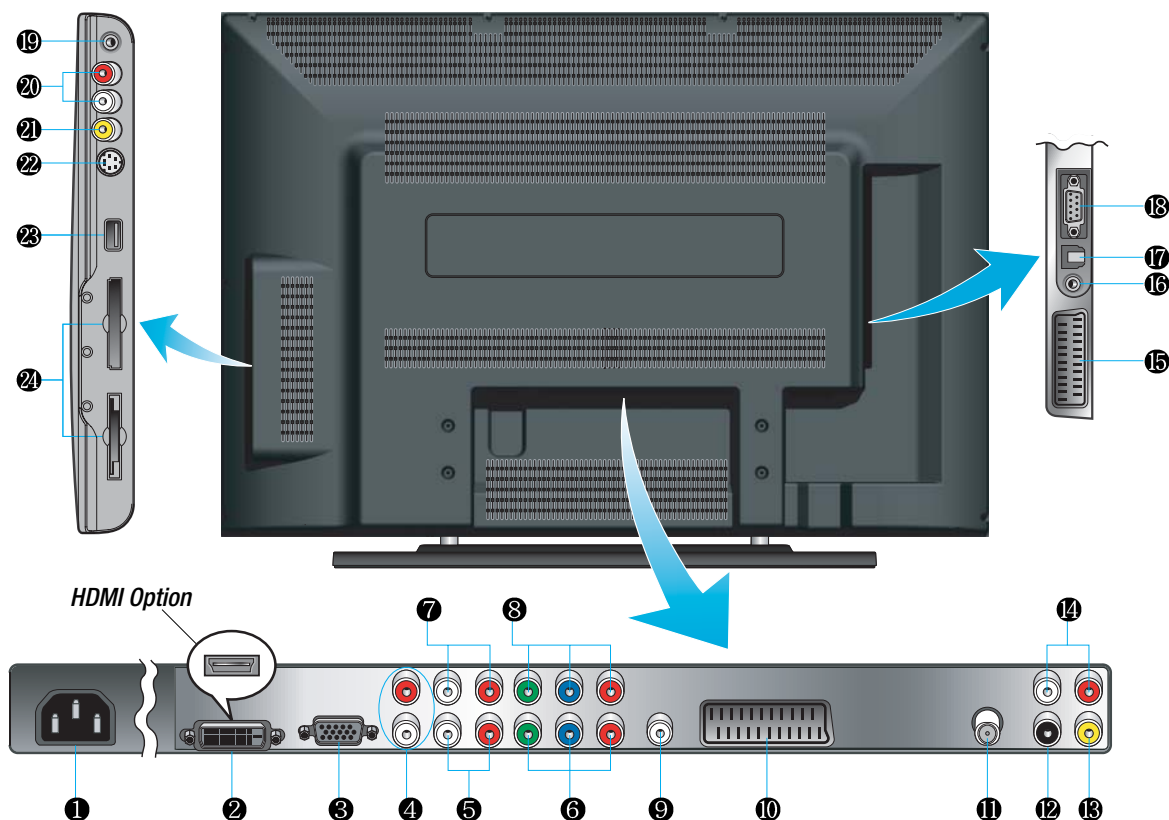
❽ Channel buttons

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

❾ Volume buttons

Use these buttons to adjust sound levels. These buttons also serve as the cursors of Select/Adjust in Menu mode.

Rear View



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

- ① Power (AC) input terminal
- ② DVI Video / HDMI input terminal
- ③ D-SUB input terminal
- ④ DVI/D-SUB Audio input terminal
- ⑤ Component 2 Audio input terminal
- ⑥ Component 2 Video input terminal
- ⑦ Component 1 Audio input terminal
- ⑧ Component 1 Video input terminal
- ⑨ CVBS output terminal
- ⑩ Full Scart input terminal

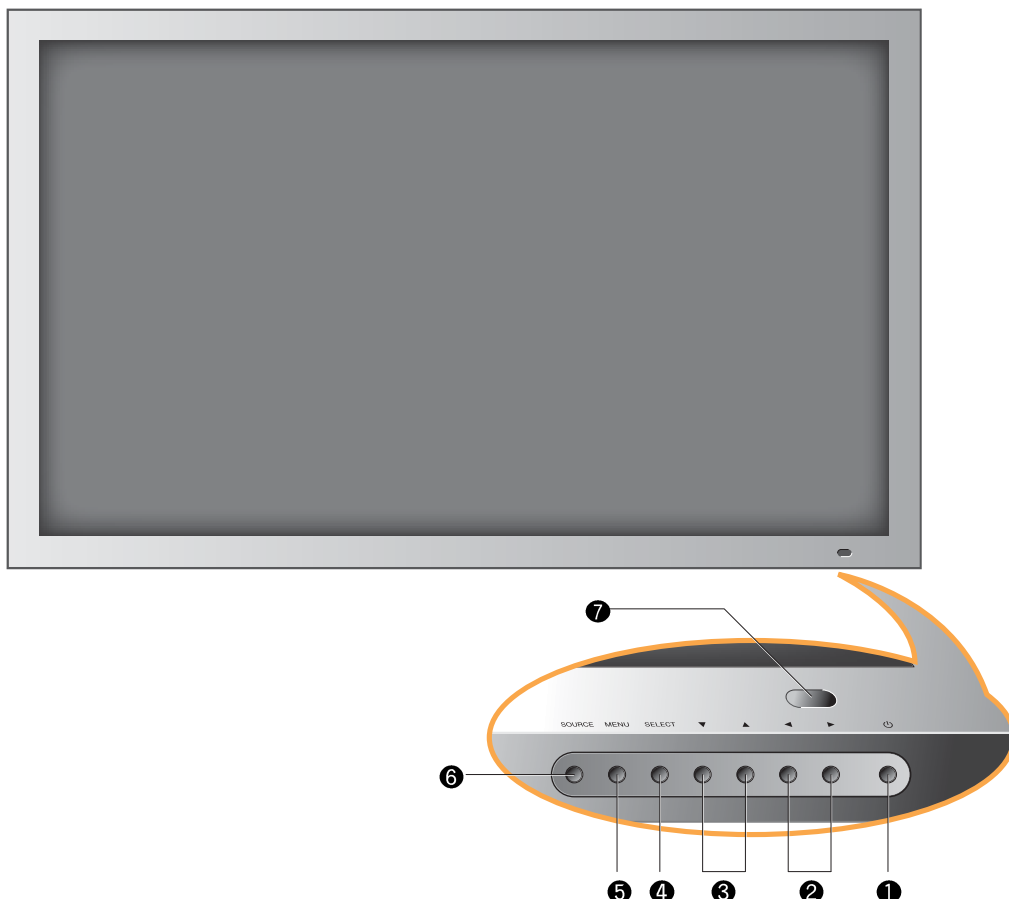
- ⑪ Antenna input terminal
- ⑫ Digital Audio output terminal for coaxial cable
- ⑬ Subwoofer output terminal
- ⑭ Extend Audio output terminal
- ⑮ Half Scart input terminal
- ⑯ Extend an RS-232 input for ATV communication
- ⑰ SPDIF Optical audio output terminal
- ⑱ Extend an RS-232 input for DTV communication

- ⑲ Headphone output terminal
- ⑳ Audio(CVBS) input terminal
- ㉑ Video(CVBS) input terminal
- ㉒ S-Video input terminal
- ㉓ USB Input Terminal
- ㉔ Memory Card Slot

* ㉓ + ㉔ For Q400 Model only

Parts Names and Functions - 42"/50" PDP TV

Front View



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

❶ Power button

Use this button to turn on or off the TV.

❷ Volume buttons

Use these buttons to adjust sound levels. These buttons also serve as the cursors of Select/Adjust in Menu mode.

❸ Channel buttons

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

❹ Select button

Use this button to select each item from the menu mode.

❺ Menu button

Use this button to display or exit from the menu mode.

❻ Source button

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

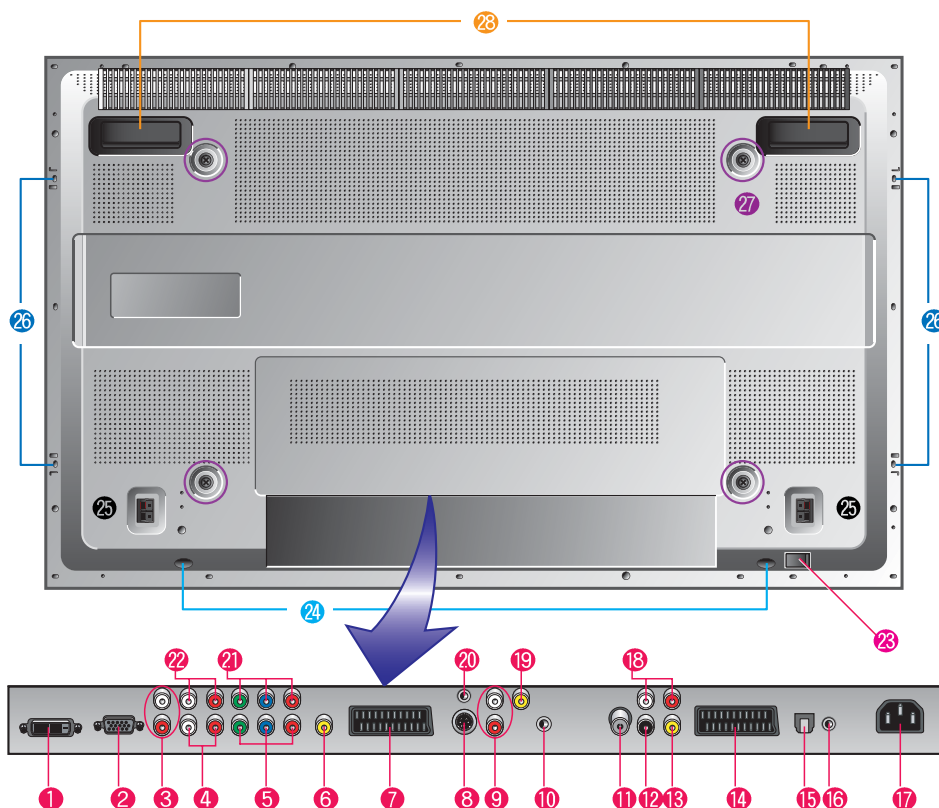
❼ Remote sensor and power LED.

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

- Power Indicator Status -

Indicator	Status
Red	Standby
Green	Power on

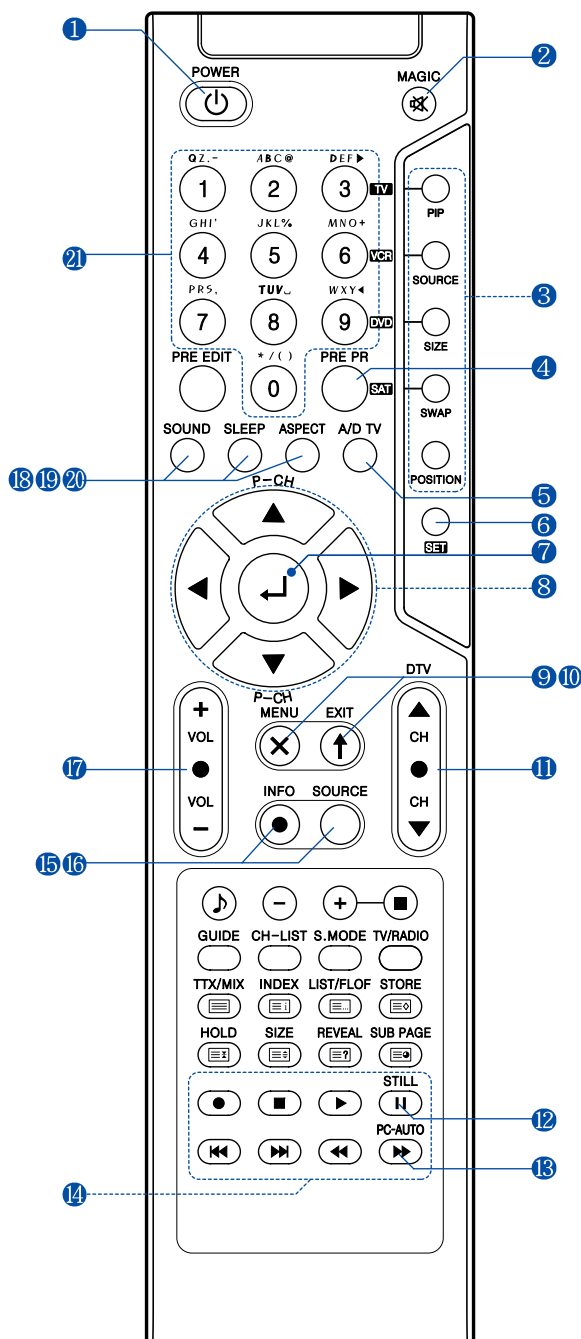
Rear View



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

- | | | |
|------------------------------------|---|------------------------------------|
| ① DVI Video input terminal | ⑫ Digital Audio output terminal for coaxial cable | ⑳ Component 1 Video input terminal |
| ② D-SUB input terminal | ⑬ Subwoofer output terminal | ㉑ Component 1 Audio input terminal |
| ③ DVI/D-SUB Audio input terminal | ⑭ Half Scart input terminal | ㉒ Power switch |
| ④ Component 2 Audio input terminal | ⑮ SPDIF Optical audio output terminal | ㉓ Stand assembly |
| ⑤ Component 2 Video input terminal | ⑯ Extend an RS-232 input for DTV communication | ㉔ Speaker terminal |
| ⑥ CVBS output terminal | ⑰ Power (AC) input terminal | ㉕ Speaker assembly |
| ⑦ Full Scart input terminal | ⑱ Video(CVBS) input terminal | ㉖ Screw hole for fixing on a wall |
| ⑧ S-Video input terminal | ㉑ Extend an RS-232 input for ATV communication | ㉗ Carrying handles |
| ⑨ Audio(CVBS) input terminal | | |
| ⑩ Headphone output terminal | | |
| ⑪ Antenna input terminal | | |

Remote Control



1. POWER/STANDBY

2. MUTE

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

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. PREVIOUS PROGRAM

5. A/D TV

Use this button to switch the input source from analog to digital

6. Other external device selection (➔ 59P)

7. MENU SELECTION

Use this button to select menu items.

8. LEFT/RIGHT MOVE/ADJUST

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

- Use UP/DOWN buttons to select Analog TV channels.

9. MENU

Use this button to call the OSD on the screen.

10. EXIT

Use this button to end the OSD.

11. DTV CHANNEL SELECTION

You can also use these buttons when changing pages in TTX mode.

12. STILL

13. PC-AUTO (For PDP TV only)

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

15. INFORMATION

Use this button to display resolution or various program.

16. SOURCE

Use this button to select External Input.

17. VOLUME

18. SOUND MODE

19. SLEEP

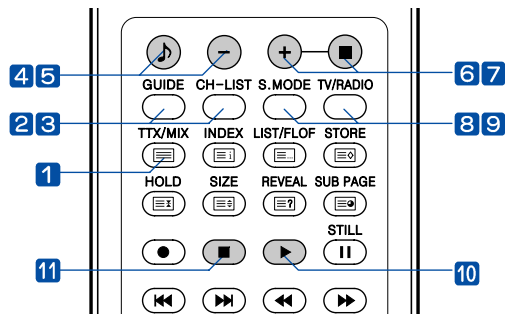
20. ASPECT RATIO

Use this button to change the picture size.

21. NUMERIC KEYS

Teletext & Fastext Function

(See pages 34 for more details.)



1. TTX/MIX

To see Teletext Service Data for Analog TV and Digital TV.

2. GUIDE (EPG-Electronic Program Guide)

To watch the program information. Press once more to return to normal mode.

3. CH. LIST

To watch the channel list for Digital TV. Press $\rightarrow$ key to confirm or press EXIT to return to previous channels.

4. RED rubber

- DTV : To setup favorite channel lists in the Channel List menu.
- ATV : To delete a channel in the Program Edit menu.

5. GREEN rubber

- DTV : To lock favorite channel lists in the channel list menu.
- ATV : To sort channels in the Program Edit menu.

6. YELLOW rubber

- DTV : To move favorite channel lists in the channel list menu.
- ATV : To edit channel names in the Program Edit menu.

7. BLUE rubber

DTV : To delete a channel from the channel List menu. To show extended program information in the EPG menu.

8. S.MODE

To adjust the subtitle and audio condition/status of the current channel for Digital TV

9. TV-RADIO

To switch between the TV channel and radio channel for Digital TV.

10. WHITE rubber

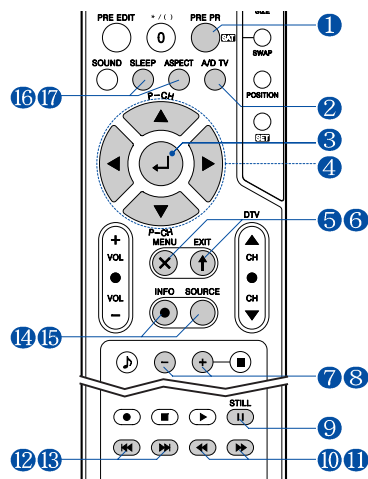
DTV : To add a new channel to the Channel List menu.

11. ORANGE rubber

DTV : To see variant channel lists for user's convenience in the Channel List menu.

Using buttons when in Memory Mode -* For Q320, Q400 Model only

➔ The following buttons are used differently in each menu. (See pages 51~58 for more details.)



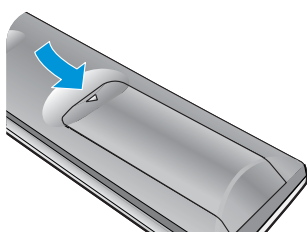
- ➊ Power Saving Function when listening to music
- ➋ Music Playback Setting (Repeat 1, Repeat All, Sequence)
- ➌ Select, Start, Pause/Playback
- ➍ Move between file listings, Previous Track/Next Track, Reverse/Fast Forward, Photo Rotation
- ➎ Exit, Cancel
- ➏ Eject Card
- ➐ Slide Show
- ➑ Zoom In
- ➒ Check Version (Initial Screen), Check Running Time (Movie Mode)
- ➓ Hide Menu
- ➔ When Shifting into Memory Mode

➔ Other buttons available in Memory Mode

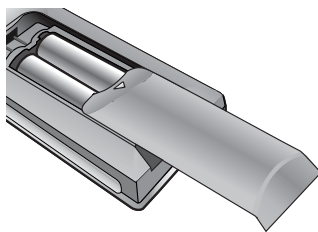
- 10 11 12 13 16 17

How to Insert Batteries in the Remote Controller

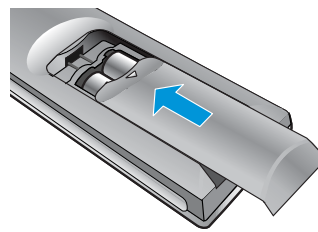
* Battery type :1.5V/AAA



Press and hold Δ part and push to open cover.



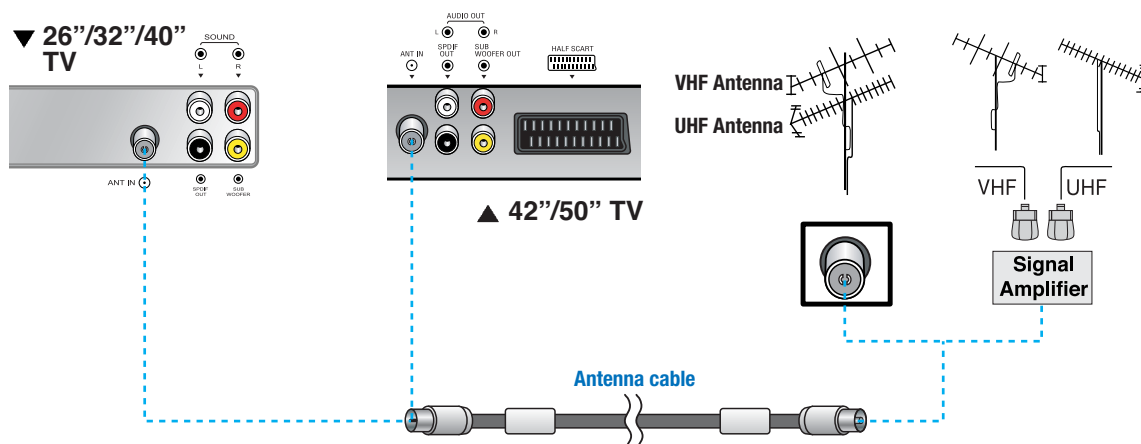
Insert batteries with proper polarities of + and -.



Use the remote control with cover closed.

Connecting Indoor/Outdoor TV Antenna(UHF/VHF)

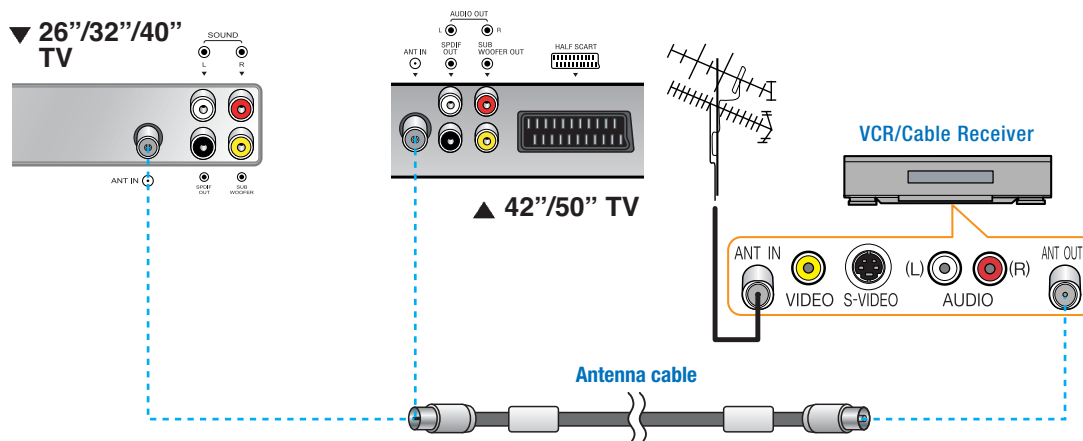
- Antenna or Cable service without cable box connections
- For on optimum picture quality, adjust the direction of antenna if needed.



- ✓ When inserting a 75 Ω 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.

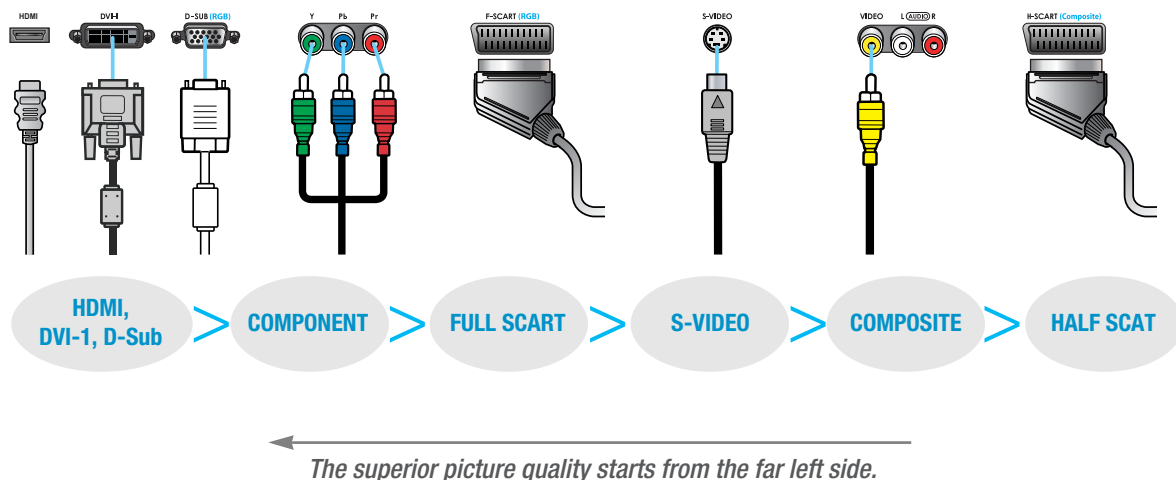
Connecting Antenna Input Connection to External Equipments

1. Connect an antenna cable to VCR/Cable/Satellite Receiver with the antenna input.
2. Use a coaxial cable to connect VCR/Cable/Satellite Receiver's antenna output to the antenna input on your TV.



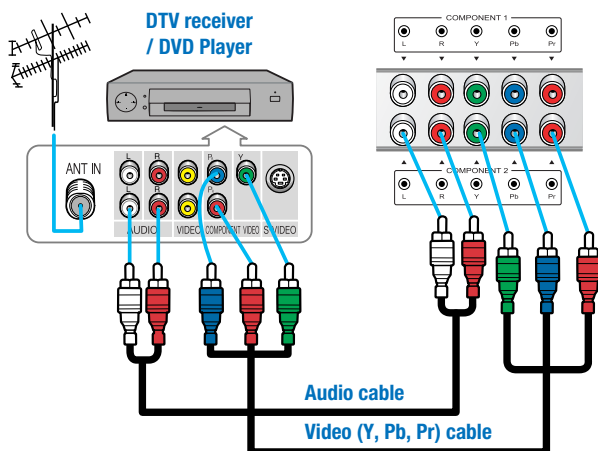
Before Connecting the Video/Audio Connections to External Devices...

Please make sure to read the following instruction to enjoy the best picture quality.
Best picture quality is displayed in the following order.



How to Connect a DTV Receiver or DVD Player

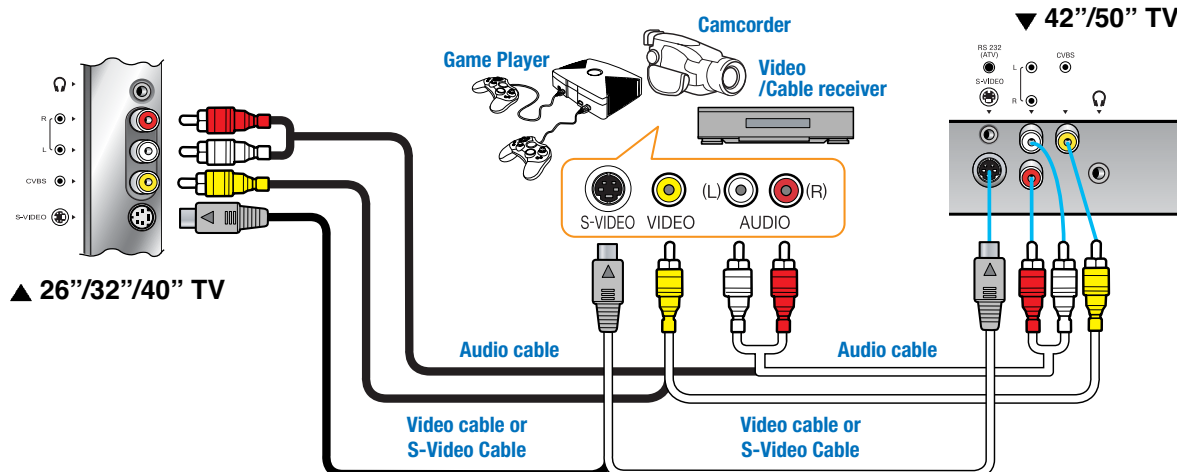
1. Connect the Video cable (Y, Pb, Pr) between output terminals (Y, Pb, Pr) of DTV receiver or DVD player and the input terminals (Y, Pb, Pr) of DTV/DVD (576i/576p/720p/1080i) on the rear of TV.
(Connect the jacks to terminals in the same color.)
2. Connect the Audio cable between Audio output terminals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



- ✓ 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/DVI or D-SUB, see Connecting to a PC (page 22) for connection. You can enjoy more clear picture quality.

How to Connect a VCR, Cable Receiver, Camcorder, Game Player

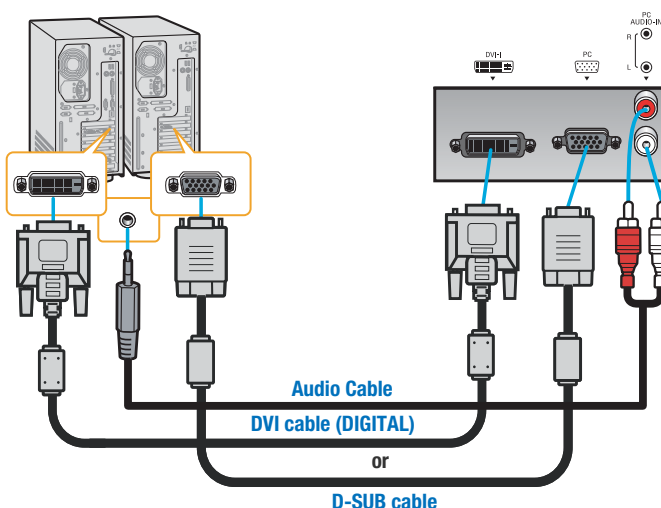
1. Connect the Video cable or S-Video cable between Video/S-Video output terminals of VCR or Cable receiver and Video/S-Video input terminal of TV. (Connect the jacks to terminals in the same color.)
2. Connect the Audio cable (Left: white, Right: red) between Audio output terminals of VCR or cable receiver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



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

How to Connect to a PC

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.)



- ✓ If you use DVI/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 DVI/D-sub (15 pin) cable for better picture quality.
- ✓ If you input an unsupported resolution in PC or DVI/HDMI mode, the screen won't be displayed properly.

Resolutions Supported in PC

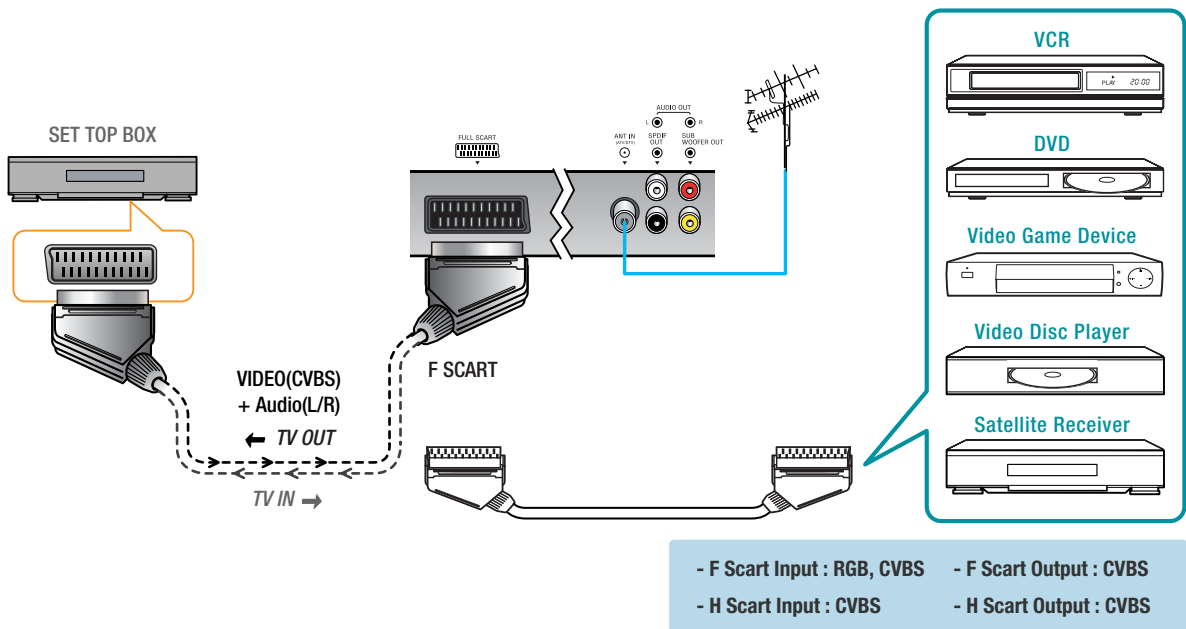
Model	26" / 32" / 40" LCD TV		42" / 50 PDP TV	
Resolution	Horizontal frequency	Vertical frequency	Horizontal frequency	Vertical frequency
640 x 350	31.47	70.00	31.47	70.09
	-	-	37.86	85.08
640 x 480	37.86	72.80	31.47	59.94
	31.50	75.00	37.86	72.80
	-	-	37.50	75.00
	-	-	43.27	85.01
720 x 400	31.47	70.08	31.47	70.08
800 x 600	37.88	60.32	37.88	60.32
	46.88	75.00	48.08	72.18
	48.08	72.19	46.88	75.00
			53.67	85.06
832 x 624	49.73	74.55	49.72	74.55
1024 x 768	48.36	60.00	48.36	60.00
	56.48	70.07	60.02	75.03
	60.02	75.03	68.68	85.00
1280 x 1024	63.98	60.02	-	-
1366 x 768	61.27	74.99	-	-

Scart Connection to the External Input/Output

If you have a second VCR and wish to copy cassettes tape. Connect the source VCR to “F Scart” and the target VCR to “H Scart” so that you can redirect the signal from “F Scart” to “H Scart”.

*** “F Scart” sends the TV broadcast signal received through an antenna to a set-top box and receives the descrambled signal back, which allows you to view TV broadcasts in AV Mode.**

* "H Scart" you are capable to record live TV broadcasts on the TV screen. (Please make sure that your TV is "ON".)

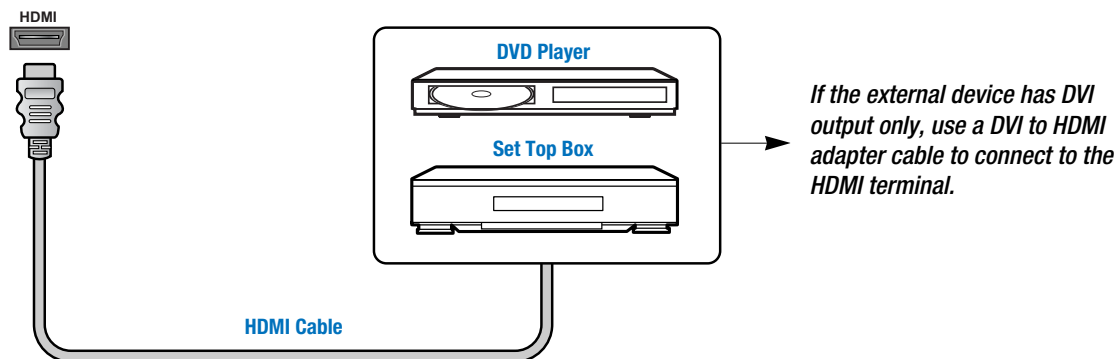


✓ When switching voltage comes into the Scart-Pin 8 during viewing a TV program, the current mode will be switched to Scart mode.

HDMI Connection (For HDMI model only)

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-861/861*² compliant consumer electronic device, such as a Set Top Box or DVD player with HDMI or DVI output terminal.



► Compatible VIDEO Signal

Model	Resolution	Vertical frequency
1080i	1,920 x 1,080i	50
576p	720 x 576p	50
	640 x 576p	50
720p	1280 x 720p	50

- 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

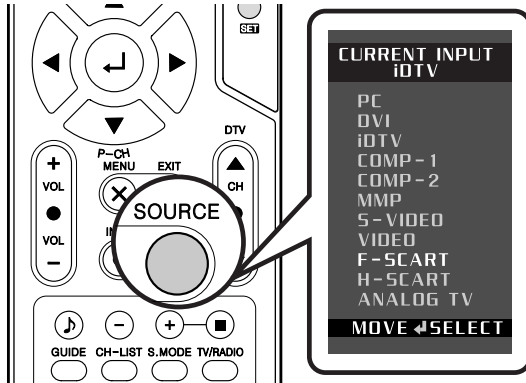
► Notes :

- 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 1080i, 720p or 576p picture signals. Set the Digital Set -Top -Box DIGITAL OUT terminal Output setting to 1080i, 720p or 576p. 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.

*1. HDMI, the HDMI logo and High-Definition Multimedia Interface are trademarks or registered trademarks of HDMI Licensing LLC.

*2. EIA/CEA-861/861B profiles compliance covers profiles for transmission of uncompressed digital video including high bandwidth digital content protection.

How to Set the OSD Screen



PC : For supporting Personal Computer connection.

DVI* : Digital Visual Interface for using TMDS transmission reduces the loss of signal.

➔ **Notes : "DVI" is changed to "HDMI" in HDMI model.*

HDMI* : High Definition Multi media Interface that supports both video and audio information.

COMP-1 / COMP-2 : For supporting greater color accuracy than composite video or S-VIDEO by splitting chrominance into one video signal.

S-VIDEO : For supporting better resolution than composite video, which carries the signals together.

VIDEO : For supporting the color shade(chrominance) and brightness(luminance) information into one video signal.

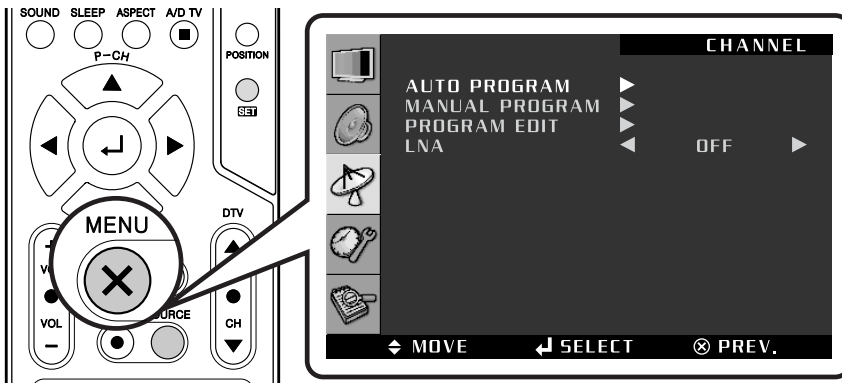
F-SCART - For supporting composite video and RGB video signals. SCART connectors is used with many European video equipments.

H-SCART - Basically the same as Full SCART in function but not supporting RGB Video signals.

ANALOG TV - Terrestrial broadcasting for supporting analog PAL/SECAM system.

Different OSD Menu

You can confirm OSD menu of three different type.



✓ The menu button "EXIT" or "PREV." may occur depending on the model.

✓ In case of the source in Analog TV, S-VIDEO, VIDEO, F-SCART, H-SCART



✓ In case of the source in iDTV



✓ In case of the source in PC, DVI, COMP-1, COMP-2

How to Select the Picture Mode

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



- 1 Press MENU button.
Menu items appear on the screen.
- 2 Press $\downarrow$ button to select "Picture" Icon.
"PICTURE MODE" is highlighted.
- 3 Press $\leftarrow$ / $\rightarrow$ buttons, then the menu changes in the following order.
→ STANDARD → DYNAMIC → MOVIE → MILD → USER →
- 4 Press EXIT button to TV viewing or press MENU button to return to the previous menu.

- ♦ STANDARD : Most video contents are appropriate to this mode.
- ♦ DYNAMIC : Clear display
- ♦ MOVIE : When watching a movie
- ♦ MILD : Soft display.
- ♦ USER : When the user wants to set the values directly.

✓ In the user's mode, the users can adjust their desired contrast, brightness, sharpness, hue, saturation.

How to Set the Desired Picture

Users can manually adjust their desired picture



- 1 Press MENU button.
Menu items appear on the screen.
- 2 Press $\downarrow$ button to select "Picture" Icon.
"PICTURE MODE" is highlighted.
- 3 Press $\leftarrow$ / $\rightarrow$ buttons to select "USER".
- 4 Select required option by pressing the $\blacktriangle$ / $\blacktriangledown$ button, then Press $\leftarrow$ / $\rightarrow$ button to adjust.
- 5 Press EXIT button to TV viewing or press MENU button to return to the previous menu.

- ♦ CONTRAST : Adjust the brightness and darkness of the object and backgrounds.
- ♦ BRIGHTNESS : Adjust the brightness of the entire picture.
- ♦ SHARPNESS : Adjust the clarity of object outlines.
- ♦ SATURATION : Adjust colors into deeper or lighter colors.

How to Set the Desired Picture in PC, DVI/HDMI Input Modes

Users can adjust Color as users want.



- 1 Press MENU button.
Menu items appear on the screen.
- 2 Press $\downarrow$ button to select "Picture" Icon.
"CONTRAST" is highlighted.
- 3 Select required option by pressing the $\blacktriangle$ / $\blacktriangledown$ buttons, then Press $\blacktriangleleft$ / $\blacktriangleright$ buttons to adjust.

After selecting COLOR TEMP, then the menu changes in the following order.
→ NORMAL → WARM → COOL → sRGB → USER →
- 4 Press EXIT button to TV viewing or press MENU button to return to the previous menu.

- ♦ NORMAL : For a general Color Tone.
- ♦ WARM : For warm colors with reddish tone.
- ♦ COOL : For cool colors with bluish tone.
- ♦ USER : When the user wants to set the degree of RGB directly.

How to Select a Color Temperature

Users can adjust Color as users want.



- 1 Press MENU button.
Menu items appear on the screen.
- 2 Press $\downarrow$ button to select "Picture" Icon.
"PICTURE MODE" is highlighted.
- 3 Press $\blacktriangle$ / $\blacktriangledown$ buttons to move to "COLOR TONE".
- 4 Press $\blacktriangleleft$ / $\blacktriangleright$ buttons, then the menu changes in the following order.
→ STANDARD → WARM → COOL →
- 5 Press EXIT button to TV viewing or press MENU button to return to the previous menu.

- ♦ STANDARD : For a general Color Tone.
- ♦ WARM : For warm colors with reddish tone.
- ♦ COOL : For cool colors with bluish tone.

How to Set the Display Scale

Users can adjust the display scale as they want



- 1 Press MENU button.
Menu items appear on the screen.
- 2 Press $\downarrow$ button to select "Picture" Icon.
"PICTURE MODE" is highlighted.
- 3 Press $\blacktriangle$ / $\blacktriangledown$ buttons to move to "SCALE".
- 4 Press $\blacktriangleleft$ / $\blacktriangleright$ buttons, then the mode change in the following order.
→ WIDE → ZOOM1 → ZOOM2 → 4:3 → 14:9 →
- 5 Press EXIT button to TV viewing or press MENU button to return to the previous menu.

- ♦ WIDE - General broadcast picture is adjusted to 16:9.
- ♦ ZOOM 1 - Picture enlarged to 16:9 format, letter box format.
- ♦ ZOOM 2 - Zoom in 16:9 in vertical direction
- ♦ 4:3 - 4:3 general picture size
- ♦ 14:9 - 14:9 picture size

How to Set Noise Reduction

User can eliminate noises on the screen in Video mode



- 1 Press MENU button.
Menu items appear on the screen.
- 2 Press $\downarrow$ button to select "Picture" Icon.
"PICTURE MODE" is highlighted.
- 3 Press $\blacktriangle$ / $\blacktriangledown$ buttons to move to "NOISE REDUCT".
- 4 Press $\blacktriangleleft$ / $\blacktriangleright$ buttons to set "ON/OFF".
- 5 Press EXIT button to TV viewing or press MENU button to return to the previous menu.