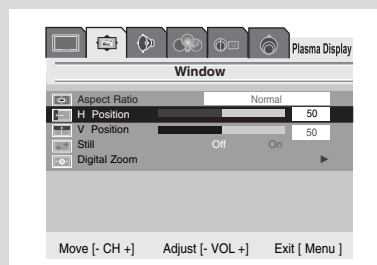
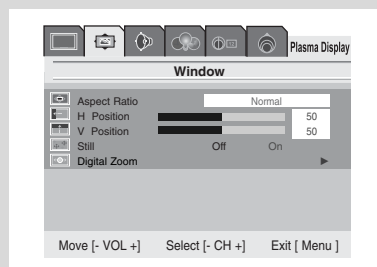


Adjusting the picture position (RGB or DVI Mode)

Preset to the RGB or DVI mode by using the INPUT button.

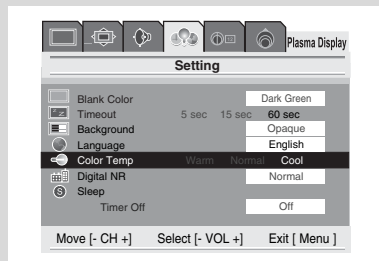
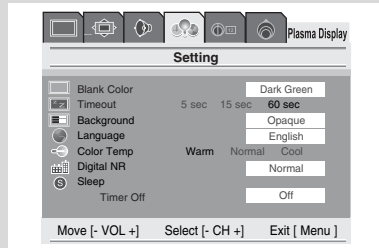
- 1 Press the **MENU** button.
The main menu is displayed.
- 2 Press the **VOL -** or **VOL +** button to select **Window**.
The options available in the **Window** group are displayed.
- 3 Press the **CH -** button to select the options in the Window group.
- 4 Press the **CH +** or **CH -** button to select the option (**H Position**, **V Position**) to be adjusted.
- 5 Press the **VOL -** or **VOL +** button.
The horizontal bar is displayed. Move the horizontal bar's cursor left or right by pressing the **VOL -** or **VOL +** button.
- 6 When you are satisfied with the settings, press the **MENU** button.



Adjusting the Color Temperature

Your television has several settings which allow you to control picture quality.

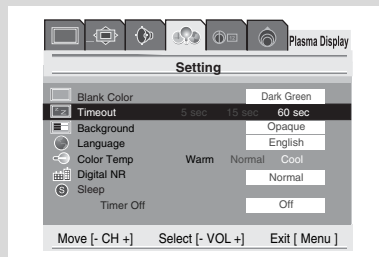
- 1 Press the **MENU** button.
The main menu is displayed.
- 2 Press the **VOL -** or **VOL +** button to select **Setting**.
The options available in the **Setting** group are displayed.
- 3 Press the **CH -** button to select the options in the **Setting** group.
- 4 Select the **Color Temp** by pressing **CH +** or **CH -** button.
- 5 Select the option (**Warm**, **Normal**, or **Cool**) by pressing **VOL -** or **VOL +** button.
- 6 When you are satisfied with the settings, press the **MENU** button.



Setting the OSD Timeout

You can select for how long the OSD will be shown.

- 1 Press the **MENU** button.
The main menu is displayed.
- 2 Press the **VOL -** or **VOL +** button to select **Setting**.
The options available in the **Setting** group are displayed.
- 3 Press the **CH -** button to select the options in the **Setting** group.
- 4 Select the **Timeout** by pressing **CH +** or **CH -** button.
- 5 Select the option (**5 sec**, **15 sec**, or **60 sec**) by pressing **VOL -** or **VOL +** button.
- 6 When you are satisfied with the settings, press the **MENU** button.

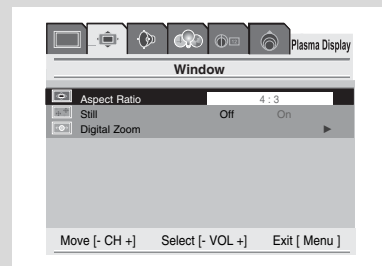
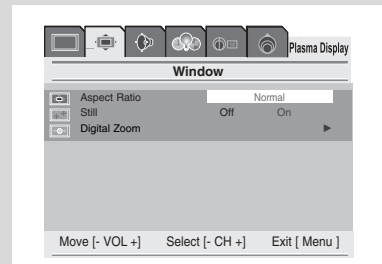


Selecting the Picture Size

You can select the picture size which best corresponds to your viewing requirements.

- 1 Press the **MENU** button.
The main menu is displayed.
- 2 Press the **VOL -** or **VOL +** button to select **Window**.
The options available in the **Window** group are displayed.
- 3 Press the **CH -** button to select the options in the **Window** group.
- 4 Select the **Aspect Ratio** by pressing **CH +** or **CH -** button.
- 5 Press the **VOL -** or **VOL +** button to change the setting.
 - **Normal**: Sets the picture to 16:9 wide mode.
 - **4 : 3**: Displays the current picture on the 4:3 aspect ratio format screen.
 - **Panorama**: Choose when you adjust a 16:9 image to the normal 4:3 screen.
 - **Letterbox**: Choose when you magnify the 16:9 image vertically
 - **Letterbox Subtitles**: If subtitles are interrupted and not viewed when Letter box is selected, select this to view subtitles.
 - **Zoom**: Choose when you magnify the image vertically at the Letter box screen.
 - **Video Game Zoom**
: Select this to prevent any interruption at both sides of the screen in the Video Game mode.

- NOTE:**
- You can select these options by simply pressing the **ARC** button on the remote control.
 - The picture size can not be changed in the PIP mode.
 - Depending on the input source, the **Aspect Ratio** options may vary.

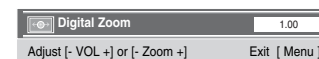
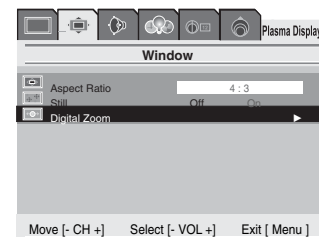
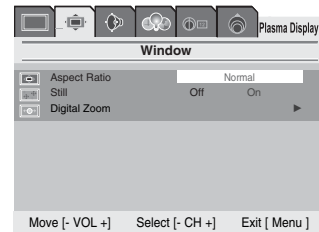


Using the digital zoom

You can minutely expand the picture to the desired size.

- 1 Press the **MENU** button.
The main menu is displayed.
- 2 Press the **VOL -** or **VOL +** button to select **Window**.
The options available in the **Window** group are displayed.
- 3 Press the **CH -** button to select the options in the **Window** group.
- 4 Select the **Digital Zoom** by pressing **CH +** or **CH -** button.
- 5 Press the **VOL -** or **VOL +** button to use the digital zoom function.
The menu that allows you to adjust the Digital Zoom digit will appear at the bottom of the screen.
- 6 Press the **VOL - / VOL +** or **ZOOM - / ZOOM +** button to adjust the digital zoom.
- 7 When you are satisfied with the settings, press the **MENU** button.

NOTE: You can also set this option simply by pressing the **ZOOM -** or **ZOOM +** button.



Viewing the Picture In Picture (PiP)

- 1 Press the **Multi-PiP** button.
- 2 Select the Multi-PiP option by pressing the **VOL -** or **VOL +** button.

The options are displayed in the following order:



- 3 Select a option of the sub picture by pressing the **CH -** or **CH +** button.

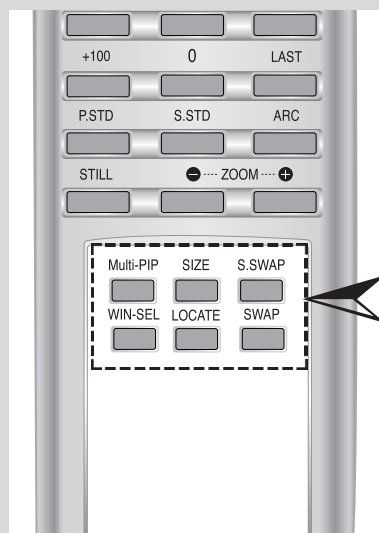
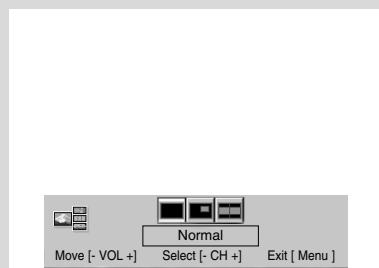
NOTE: If the sub picture has no signal and the main picture is output from a Component, RGB or DVI signal, the sub picture will be viewed in blank color as you set. For detailed instructions on Setting Blank Color, see page 43.

Easy functions of remote control.

Buttons	Feature
Multi-PiP	Multi-PiP On/Off
SIZE	Sub-Picture size selection (PiP)
S.SWAP	Main/Sub sound swap (PiP,PBP)
LOCATE	Sub-Picture location selection

The Table of PiP Settings

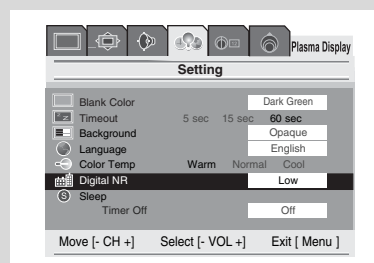
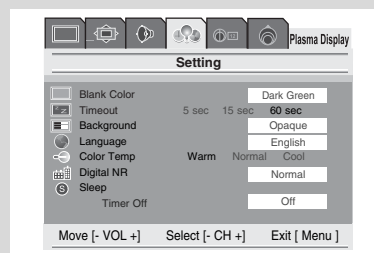
Main Sub	Component (576p, 480p) (720p, 1080i)	RGB	DVI
TV	○	○	○
Video1, 2	○	○	○
S-Video1, 2	○	○	○



Using the Digital NR (Digital Noise Reduction) Feature

If the signal received by your television is weak, you can activate this feature to help reduce any static and ghosting that may appear on the screen.

- 1 Press the **MENU** button.
The main menu is displayed.
- 2 Press the **VOL -** or **VOL +** button to select **Setting**.
The options available in the **Setting** group are displayed.
- 3 Press the **CH -** button to select the options in the **Setting** group.
- 4 Select the **Digital NR** by pressing **CH +** or **CH -** button.
- 5 Press the **VOL -** or **VOL +** button to select the options.
The options are displayed in the following order:
 - Normal – Low – Medium – High – Highest

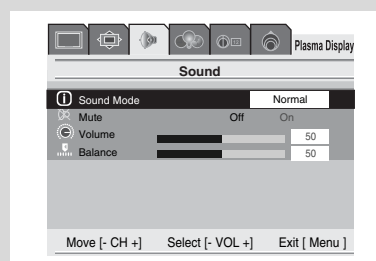
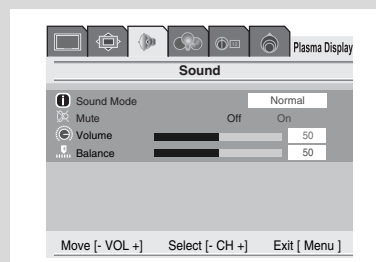


Changing the Sound Standard

You can select the type of special sound effect to be used when watching a given broadcast.

- 1 Press the **MENU** button.
The main menu is displayed.
- 2 Press the **VOL -** or **VOL +** button to select **Sound**.
The options available in the **Sound** group are displayed.
- 3 Press the **CH -** button to select the options in the **Sound** group.
- 4 Select the **Sound Mode** by pressing **CH +** or **CH -** button.
- 5 Press the **VOL -** or **VOL +** button to select the options.
The sound effects are displayed in the following order.
 - Normal – Music – Movie – Speech – User
- 6 Press the **CH +** or **CH -** button to select the option (**Volume**, **Balance**).
- 7 Press the **VOL -** or **VOL +** button to reach the required setting.
- 8 When you are satisfied with the settings, press the **MENU** button.

NOTE: You can also set these options simply by pressing the **S.STD** (Sound Mode) button.

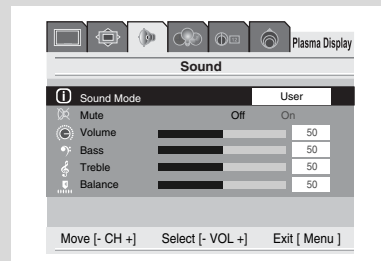
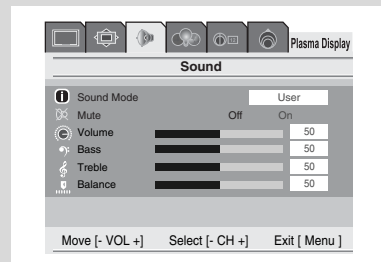


Adjusting the Sound Settings

The sound settings can be adjusted to suit your personal preferences.

- 1 Press the **MENU** button.
The main menu is displayed.
- 2 Press the **VOL -** or **VOL +** button to select **Sound**.
The options available in the **Sound** group are displayed.
- 3 Press the **CH -** button to select the options in the **Sound** group.
- 4 Select the **Sound Mode** by pressing **CH +** or **CH -** button.
- 5 Press the **VOL -** or **VOL +** button to select **User**.
The User menu is displayed with the current option.
- 6 Press the **CH +** or **CH -** button to select **User**.
- 7 Press the **CH +** or **CH -** button to select the option (**Volume**, **Bass**, **Treble**, **Balance**).
- 8 Press the **VOL -** or **VOL +** button to reach the required setting.
- 9 When you are satisfied with the settings, press the **MENU** button.

NOTE: You can also set these options simply by pressing the **S.STD** (Sound Mode) button.



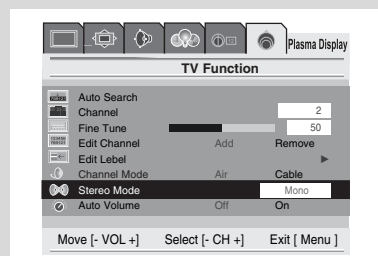
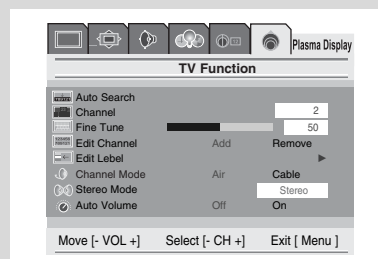
Selecting the Sound Mode (depending on the model)

The “DUAL” button displays/controls the processing and output of the audio signal. When power is switched on, the mode is automatically preset to either “Dual-I ” or “Stereo”, depending on the current transmission.

Type of broadcast	On-screen indication
Regular broadcast (Standard audio)	Mono
Bilingual or Dual-I/II	Dual-I ↔ Dual-II
Stereo	Stereo ↔ Mono (Forced mono)

- 1 Press the **MENU** button.
The main menu is displayed.
- 2 Press the **VOL -** or **VOL +** button to select **TV Function**.
The options available in the **TV Function** group are displayed.
- 3 Press the **CH -** button to select the options in the **TV Function** group.
- 4 Select the **Stereo Mode** by pressing **CH +** or **CH -** button.
- 5 Press the **VOL -** or **VOL +** button to select the option (**Mono**, **Stereo**, **Dual I**, **Dual II**).
- 6 When you are satisfied with the settings, press the **MENU** button.

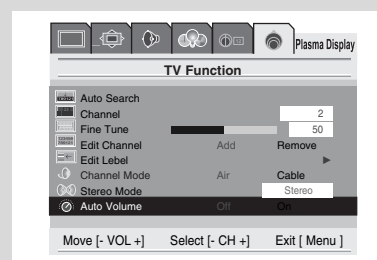
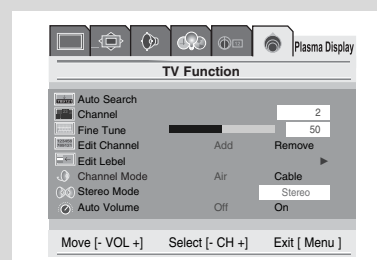
NOTE: You can also set these options simply by pressing the **DUAL** button.



Adjusting the Volume Automatically

Each broadcasting station has its own signal conditions, and so it is not easy for you to adjust the volume every time the channel is changed. This feature lets you automatically adjust the volume of the desired channel by lowering the sound output when the modulation signal is high or by raising the sound output when the modulation signal is low.

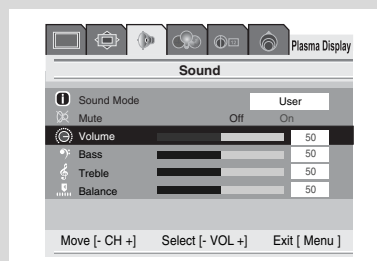
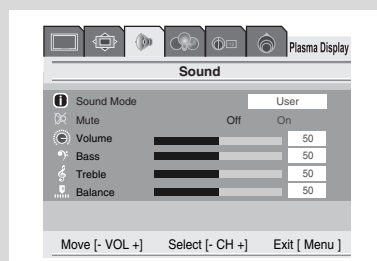
- 1 Press the **MENU** button.
The main menu is displayed.
- 2 Press the **VOL -** or **VOL +** button to select **TV Function**.
The options available in the **TV Function** group are displayed.
- 3 Press the **CH -** button to select the options in the **TV Function** group.
- 4 Select the **Auto Volume** by pressing **CH +** or **CH -** button.
- 5 Press the **VOL -** or **VOL +** button to select **Off** or **On**.
- 6 When you are satisfied with the settings, press the **MENU** button.



Adjusting the Volume Manually

- 1 Press the **MENU** button.
The main menu is displayed.
- 2 Press the **VOL -** or **VOL +** button to select **Sound**.
The options available in the **Sound** group are displayed.
- 3 Press the **CH -** button to select the options in the **Sound** group.
- 4 Select the **Volume** by pressing **CH +** or **CH -** button.
- 5 Press the **VOL -** or **VOL +** button to reach the required setting.
- 6 When you are satisfied with the settings, press the **MENU** button.

NOTE: You can also set this option simply by pressing the **VOL -** or **VOL +** button.



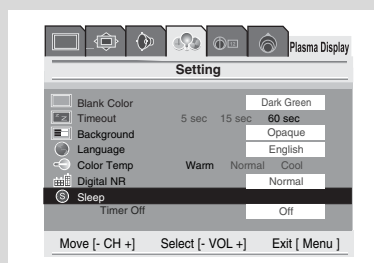
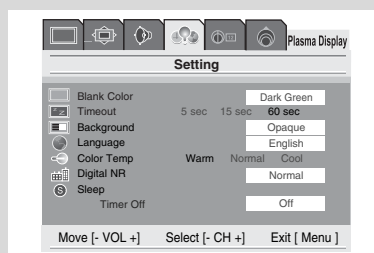
Setting the Sleep Timer

You can select a time period of between 30 and 120 minutes after which the television automatically switches to Standby mode.

- 1 Press the **MENU** button.
The main menu is displayed.
- 2 Press the **VOL -** or **VOL +** button to select **Setting**.
The options available in the **Setting** group are displayed.
- 3 Press the **CH -** button to select the options in the **Setting** group.
- 4 Select the **Sleep** by pressing **CH +** or **CH -** button.
- 5 Select the preset time intervals (**Off**, **30**, **60**, **90**, **120**) by pressing the **VOL -** or **VOL +** button.
- 6 When you are satisfied with the settings, press the **MENU** button.

NOTE:

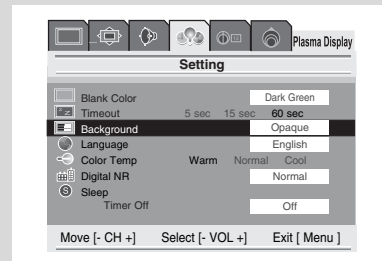
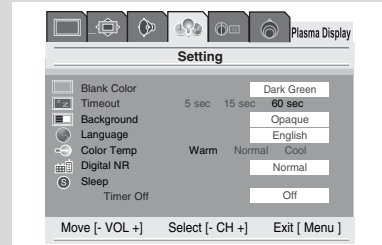
- You can also set these options simply by pressing the **SLEEP** button.
- If the sleep timer is not yet set, Off is displayed. If the sleep timer is already set, the remaining time before which the television switches to Standby mode is displayed.



Adjusting the Background

You can give the transparency OSD background in this menu.

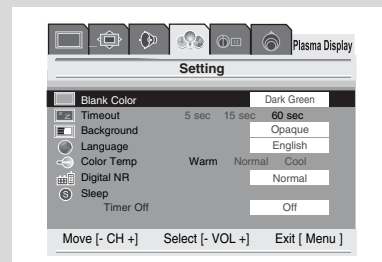
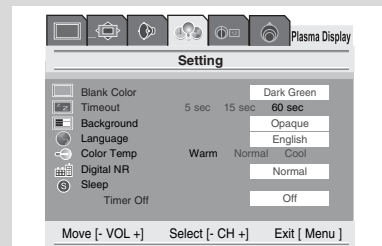
- 1 Press the **MENU** button.
The main menu is displayed.
- 2 Press the **VOL -** or **VOL +** button to select **Setting**.
The options available in the **Setting** group are displayed.
- 3 Press the **CH -** button to select the options in the **Setting** group.
- 4 Select the **Background** by pressing **CH +** or **CH -** button.
- 5 Select **Background** to **Translucent** or **Opaque** by pressing the **CH +** or **CH -** button.
- 6 When you have finished, press the **MENU** button to exit.



Using the Blank Color

If no signal is being received or the signal is very weak, a blank color as you set automatically replaces the noisy picture background.

- 1 Press the **MENU** button.
The main menu is displayed.
- 2 Press the **VOL -** or **VOL +** button to select **Setting**.
The options available in the **Setting** group are displayed.
- 3 Press the **CH -** button to select the options in the **Setting** group.
- 4 Select the **Blank Color** by pressing **CH +** or **CH -** button.
- 5 Select the option by pressing the **VOL -** or **VOL +** button.
The options are displayed in the following order :
 - Black – White – Red – Green – Blue – Dark Blue – Dark Green – Dark Red.
- 6 When you have finished, press the **MENU** button to exit.

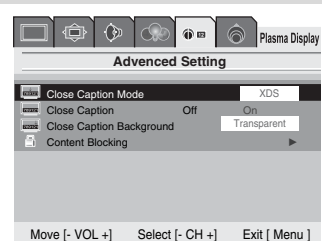
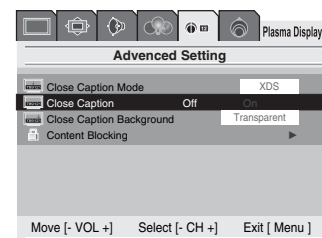
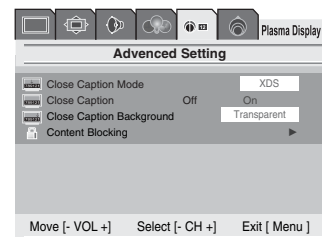


Viewing Advanced Setting

Your TV decodes and displays the closed captions that are broadcast with certain TV shows. These captions are usually subtitles for the hearing impaired or foreign-language translations. All VCRs record the closed caption signal from television programs, so home-recorded video tapes also provide closed captions. Most pre-recorded commercial video tapes provide closed captions as well. Check for the closed caption symbol in your television schedule and on the tape's packaging: **CC**

NOTE: The Caption feature does not work with DVD or DTV signals.

- 1 Press the **MENU** button.
The main menu is displayed.
- 2 Press the **VOL -** or **VOL +** button to select **Advanced Setting**.
The options available in the **Advanced Setting** group are displayed.
- 3 Press the **CH -** button to select the options in the **Advanced Setting** group.
- 4 Press the **CH +** or **CH -** button to select **Close caption**.
- 5 Press the **VOL -** or **VOL +** button to turn close caption (**Off** or **On**).
- 6 Press the **MENU** button, then select **Close Caption Mode** by pressing the **CH +** or **CH -** button.
- 7 Press the **VOL -** or **VOL +** button to select option (**CC1**, **CC2**, **T1**, **T2**, or **XDS**).
- 8 Press the **MENU** button to exit.

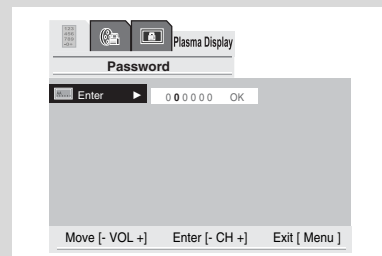
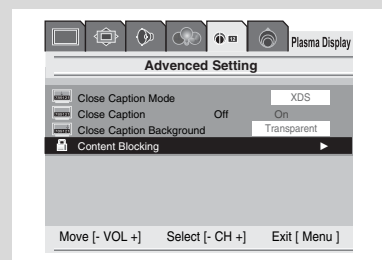
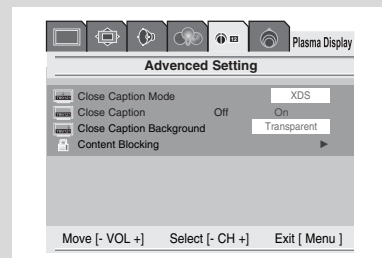


Viewing Advanced Setting (continued)

The V-Chip feature automatically locks out programs that are deemed inappropriate for children. The user must enter a password before any of the Content Blocking are set up or changed.

Setting Up Your password

- 1 Press the **MENU** button.
The main menu is displayed.
- 2 Press the **VOL -** or **VOL +** button to select **Advanced Setting**.
The options available in the **Advanced Setting** group are displayed.
- 3 Press the **CH -** button to select the options in the **Advanced Setting** group.
- 4 Press the **CH +** or **CH -** button to select **Content Blocking**, then press the **VOL +** button.
- 5 Press **CH -** button to select **Enter**, then press the **VOL +** button.
- 6 Press the **CH +** or **CH -** button to choose 6-digit number.
Press the **VOL -** or **VOL +** button to move to the each digit.
- 7 Press the **VOL -** or **VOL +** button to move **OK**, then press the **INPUT** button. The option available in the **Password** group are displayed.
- 8 Press the **CH -** button to change the password, then press the **VOL +** button.
- 9 Choose any 6 digits for your password by using **CH +** or **CH -** button. Press the **VOL -** or **VOL +** button to move to the each digit.
- 10 Press the **VOL -** or **VOL +** button to move **OK**, then press the **INPUT** button.
- 11 Press the **MENU** button to exit.

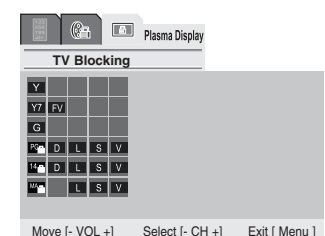
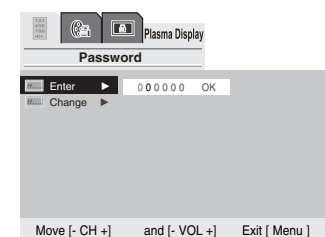
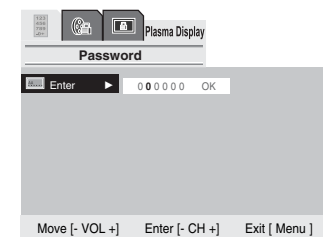
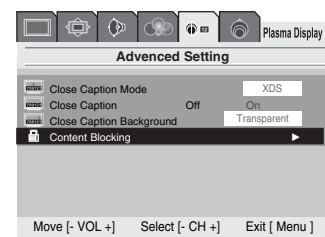
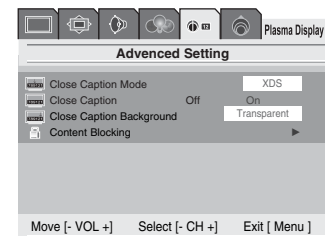


Viewing Advanced Setting


How to Set up Restrictions using the "TV Blocking"

Parental restrictions can be set up using either of two methods:
The TV Blocking or the Movie Blocking.

- 1 Press the **MENU** button.
The main menu is displayed.
- 2 Press the **VOL -** or **VOL +** button to select **Advanced Setting**.
The options available in the **Advanced Setting** group are displayed.
- 3 Press the **CH -** button to select the options in the **Advanced Setting** group.
- 4 Press the **CH +** or **CH -** button to select **Content Blocking**.
- 5 Press the **VOL +** button to select the options in the **Content Blocking** group.
- 6 Press **CH -** button to select **Enter**, then press the **VOL +** button.
- 7 Press the **CH +** or **CH -** button to choose 6-digit number.
Press the **VOL -** or **VOL +** button to move to the each digit.
- 8 Press the **VOL -** or **VOL +** button to move **OK**, then press the **INPUT** button. The **Content Blocking** options are activated.
- 9 Press the **CH +** button, then select TV Blocking by using the **VOL +** button. The TV Blocking screen will appear.
- 10 Press the **CH -** button to adjust the TV Blocking option, then press the **CH +** or **CH -** button to select one of the six ages based categories :
 - Y** Young children
 - Y7** Children 7 and over
 - G** General audience
 - PG** Parental guidance
 - 14** Viewers 14 and over
 - MA** Mature audience



Viewing Advanced Setting (continued)



- 11** At this point, one of the TV-Ratings is selected. Press the **INPUT** button. Depending on your existing setup, a symbol “” will be selected. To select a different TV-Rating, press the **CH +** or **CH -** button and then repeat the process.

NOTE1: The Y7, PG, 14 and MA have additional options. See the next step to change any of the following sub-ratings:

FV: Fantasy violence
D: Sexually Suggestive Dialog
L: Adult Language
S: Sexual situation
V: Violence

NOTE2: The Blocking TV will automatically block certain categories that are “more restrictive”. For example, if you block “**Y**” category, then Y7 will automatically be blocked. Similarly, if you block the G category, then all the categories in the “young adult” group will be blocked (G, PG, 14 and MA). The sub-ratings (D, L, S, V) work together similarly. (See next section.)

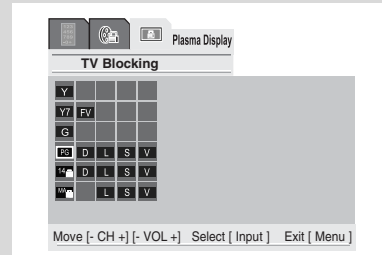
- 12** How to set the FV, D, L, S and V sub-ratings. First, select one of these TV-Ratings: Y7, PG, 14 or MA (See Step 4, on previous page), and press **INPUT** button.

A symbol “” will be displayed for each sub-rating. While “” is selected, press the **CH +** or **CH -**, **VOL -** or **VOL +** button to change the sub-rating. To select a different TV-Rating, press the **CH +** or **CH -** button and then repeat the process.

NOTE: The V-chip will automatically block certain categories that are “More restrictive”. For example, if you block “**L**” sub-rating in PG, then the “**L**” sub-ratings in 14 and MA will automatically be blocked.

- 13** Press the **INPUT** button to clear the screen. (Or proceed to the next section, and set up additional restrictions based on the MPAA codes).

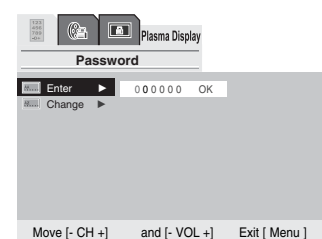
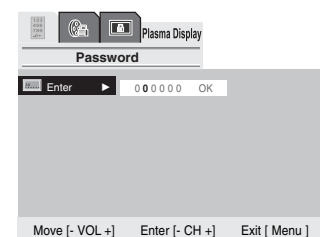
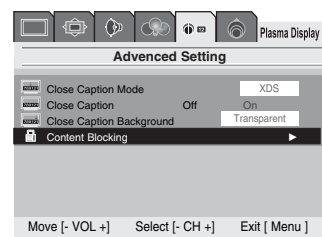
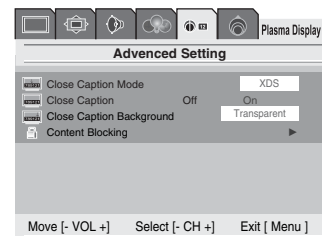
NOTE: These categories consist of two separate groups: Y and Y7 (young children through age 7), and G through MA (everybody else). The restrictions for these two groups work independently: If a household includes very young children as well as young adults, the TV guidelines must be set up separately for each age group.



How to Set up Restrictions using the Blocking Movie(MPAA): G, PG, PG-13, R, NC-17, X

The Blocking Movie (MPAA) rating system uses the Motion Picture Association of America (MPAA) system, and its main application is for movies. When the V-Chip lock is on, the TV will automatically block any programs that are coded with objectionable ratings (either Movie Blocking or TV Blocking).

- 1 Press the **MENU** button.
The main menu is displayed.
- 2 Press the **VOL -** or **VOL +** button to select **Advanced Setting**.
The options available in the **Advanced Setting** group are displayed.
- 3 Press the **CH -** button to select the options in the **Advanced Setting** group.
- 4 Press the **CH +** or **CH -** button to select **Content Blocking**.
- 5 Press the **VOL +** button to select the options in the **Content Blocking** group.
- 6 Press **CH -** button to select **Enter**, then press the **VOL +** button.
- 7 Press the **CH +** or **CH -** button to choose 6-digit number.
Press the **VOL -** or **VOL +** button to move to the each digit.
- 8 Press the **VOL -** or **VOL +** button to move **OK**, then press the **INPUT** button. The **Content Blocking** options are activated.
- 9 Press the **CH +** button, then select Movie Blocking by using the **VOL +** button. The Movie Blocking screen will appear.



How to Set up Restrictions using the Blocking Movie(MPAA): G, PG, PG-13, R, NC-17, X (continued)

- 10** Press the **CH +** or **CH -** button to select a particular Movie Blocking category. Pressing the **CH +** or **CH -** button will cycle through the Movie Blocking categories :

G General audience (no restrictions).

PG Parental guidance suggested.



PG-13 PG-13 (Parents strongly cautioned).

R R (Restricted. Children under 17 should be accompanied by an adult).

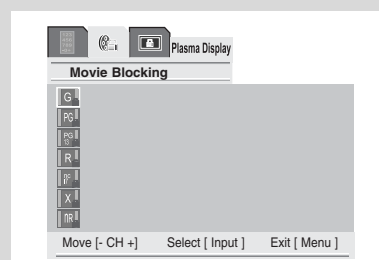
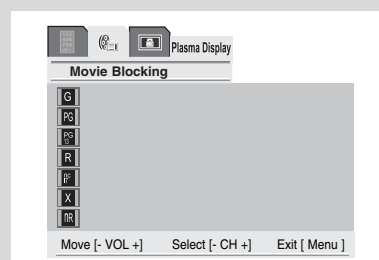
NC-17 No children under age 17.

X (Adults only).

NR Not rated.

- 11** While a particular category is selected, press the **INPUT** button to activate it. A selected symbol “” will be displayed. Press the **CH +** or **CH -** button to select “”.

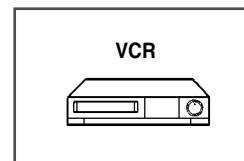
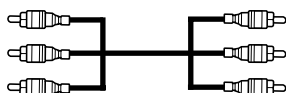
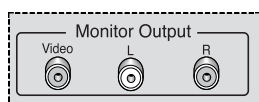
NOTE1: The V-Chip will automatically block any category that is “more restrictive”. For example, if you block the “PG-13” category, then “R”, “NC-17” and “X” will automatically be blocked also.



Connecting to the External Devices

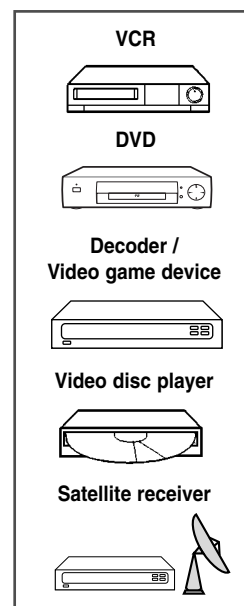
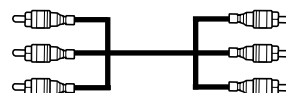
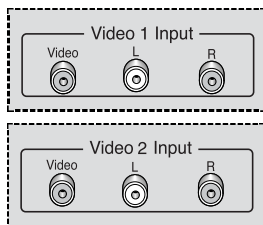
Use the Monitor Out jack to connect a component (VCR) equipped with an external input jack like VCR.

Rear of the TV



Use the Video In jack to connect a component (VCR or DVD) equipped with a video output jack.

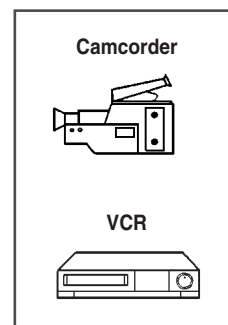
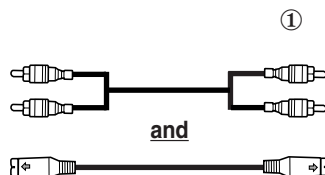
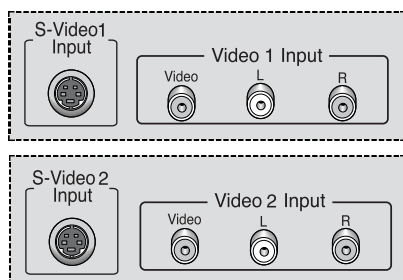
Rear of the TV



Connecting to the S-Video Input

The S-VIDEO1 and RCA (AUDIO-L/R) connectors are used for equipment with an S-Video output, such as a camcorder or VCR.

Rear of the TV



① To play picture and sound, both the S-VIDEO and RCA connectors must be used.

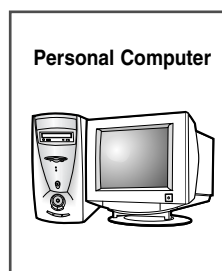
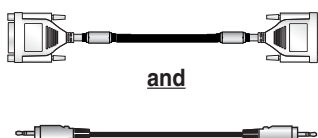
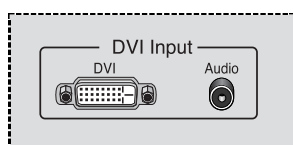


Whenever you connect an audio or video system to your television, ensure that all elements are switched off. Refer to the documentation supplied with your equipment for detailed connection instructions and associated safety precautions.

Connecting to the DVI Input

The DVI (video) and L-AUDIO-R connectors are used for equipment with a DVI output.

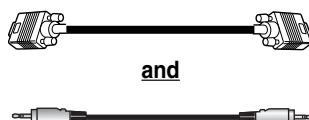
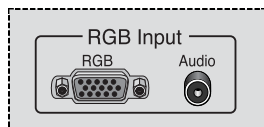
Rear of the TV



Connecting to the RGB Input

The RGB (video) and AUDIO connectors are used for interfacing with your PC.

Rear of the TV

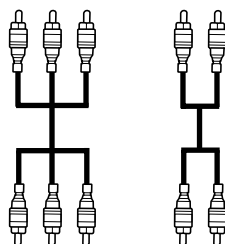
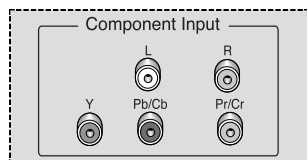


Personal Computer



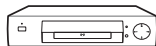
Connecting to the Component Input

Rear of the TV



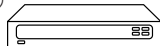
①

DVD



②

DTV receiver



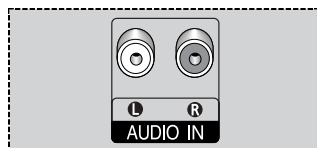
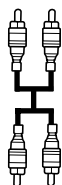
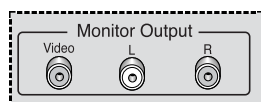
① The **Component Input** connectors are used for equipment with a DVD output.

② The **Component** connectors are used for DTV receiver.

Connecting and Using the Home Theater System

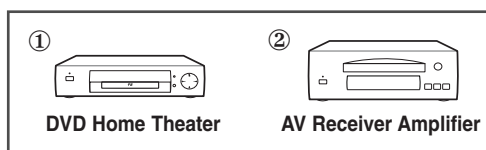
Use the Monitor Out ports of the PDP for Home Theater System Connections.

Rear of the TV



Connecting the Home Theater System

- ① Connect the monitoring audio out L, and R jacks of the Monitor Output on the rear-side connection panel of the PDP TV to the AUDIO IN jacks of the DVD Home Theater System (or AV Receiver) using the audio cable.
- ② Press the **INPUT** button to select the desired external device connected to the PDP TV.
- ③ If you want to hear the sound through separate speakers, cancel the internal amplifier.



- 💡 ● Refer to corresponding user's manual from the manufacturer for wiring the speakers to the DVD Home Theater System (or AV Receiver).
- Disable the PDP TV internal speaker to enjoy the rich sound through the speakers of your Home Theater System.
- In this case, enjoy the sound from the Home Theater System while the PDP TV does not produce the audio.

Setting up Your PC Software (Windows only)

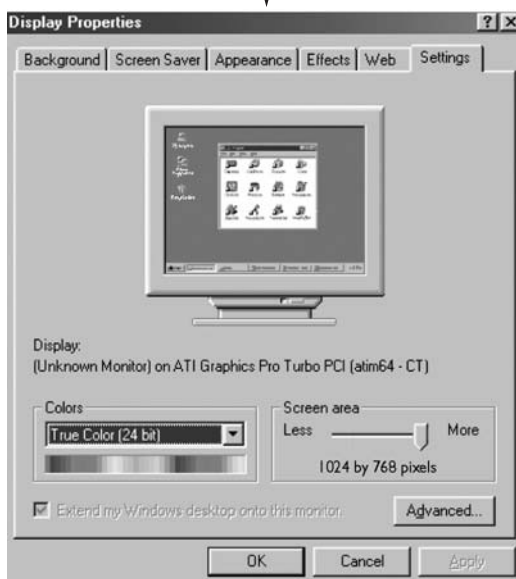
The Windows display-settings for a typical computer are shown below. But the actual screens on your PC will probably be different, depending upon your particular version of Windows and your particular video card. But even if your actual screens look different, the same, basic set-up information will apply in almost all cases. (If not, contact your computer manufacturer or your dealer Dealer.)



On the windows screen, select in the following sequence: **Start** → **Settings** → **Control Panel**.



When the control panel screen appears, click on **Display** and a display dialog-box will appear.



Select the **Settings** tab in the display dialog-box.

The two key variables that apply the television-PC interface are "Resolution" and "Colours". The correct settings for these two variables are:

- Size (sometimes called "Resolution")
- **800 x 600 pixels**
- Colour
24-bit colour (might also be expressed as "16 million colours")
Shown at left is a typical screen for "Display" dialog box.

If a vertical-frequency option exists on your display settings dialog box, the correct value is **60 Hz**. Otherwise, just click **OK** and exit the dialog box.

Input Mode (RGB/DVI)

Both screen position and size will vary depending on the type of PC monitor and its resolution. The table below shows all of the display modes that are supported:

DVI/RGB Mode Table

Mode	Resolution	Horizontal Frequency (kHz)	Vertical Frequency (Hz)	Pixel Clock Frequency (MHz)
VGA	640 x 350	31.460	70.000	25.170
	640 x 400	37.861	85.000	31.500
	720 x 400	31.469	70.000	28.320
	640 x 480	31.460	50.000	25.170
		31.500	60.000	25.175
		37.700	72.000	31.500
		37.500	75.000	31.500
		43.300	85.000	36.000
SVGA	800 x 600	35.100	56.000	36.000
		37.900	60.000	40.000
		48.100	72.000	50.000
		46.900	75.000	49.500
		53.700	85.000	56.250
	832 X 624	49.720	75.000	57.280
XGA	1024 X 768	48.400	60.000	65.000
		56.500	70.000	75.000
		60.000	75.000	78.750
		64.000	80.000	85.500
		68.300	85.000	94.500
	1152 X 870	68.680	75.000	100.000
SXGA	1280 X 1024	64.000	60.000	108.000
		79.976	75.000	135.000
SDTV 480p	720 x 480	31.470	59.940	27.000
SDTV 576p	720 x 576	31.250	50.000	27.000
HDTV 720p	1280 X 720	45.000	60.000	74.250
		44.960	59.940	74.180
		37.500	50.000	74.250
HDTV 1080i	1920 X 1080	33.750	30.000	74.250
		33.720	29.970	74.180
		31.250	25.000	74.250
		28.125	25.000	74.250

Input Mode (RGB/DVI) (continued)

Component Mode Table

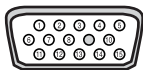
Mode	Resolution	Horizontal frequency (kHz)	Vertical frequency (Hz)	Pixel Clock Frequency (MHz)
EDTV 480i	720 x 480	15.730	29.970	13.5000
EDTV 576i	720 x 576	15.630	25.000	13.5000
SDTV 480p	720 x 480	31.470	59.940	27.000
SDTV 576p	720 x 576	31.250	50.000	27.000
HDTV 720p	1280 x 720	45.000	60.000	74.250
		44.960	59.940	74.180
		37.500	50.000	74.250
HDTV 1080i	1920 x 1080	33.750	30.000	74.250
		33.720	29.970	74.180
		31.250	25.000	74.250
		28.125	25.000	74.250

Notes

- The PC text quality is optimum in **VGA** mode (800 x 600@60Hz).
- When this television is used as a PC display, 24-bit colour is supported (over 16 million colours).
- Your PC display screen might appear different depending on the manufacturer (and your particular version of Windows). Check your PC instruction book for information about connecting your PC to a television.
- If a vertical and horizontal frequency-select mode exists, select 60Hz (vertical) and 31.5kHz (horizontal). In some cases, abnormal signals (such as stripes) might appear on the screen when the PC power is turned off (or if the PC is disconnected). If so, press the **INPUT** button to enter the Video mode. Also, make sure that the PC is connected.
- When connecting a notebook PC to the television, make sure that the PC screen is displayed through only the television (Otherwise, random signals might appear).
- When horizontal synchronous signals seem irregular in RGB mode, check PC power saving mode or cable connections.
- The Display Settings Table above complies to the IBM/VESA standards, and based on the analog input.
- The DVI support mode is regarded as same to the PC support mode.
- The best timing for the vertical frequency to each mode is 60Hz.

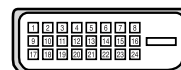
Pin Configurations

**RGB Input Connector
(15Pin)**



Pin	RGB IN
1	Red (R)
2	Green (G)
3	Blue (B)
4	Grounding
5	Grounding (DDC)
6	Red (R) Grounding
7	Green (G) Grounding
8	Blue (B) Grounding
9	Reserved
10	Sync Grounding
11	Grounding
12	Data (DDC)
13	Horizontal sync.
14	Vertical sync.
15	Clock (DDC)

**DVI Input Connector
(24Pin)**



Pin	Signal
1	T.M.D.S. Data2-
2	T.M.D.S. Data2+
3	T.M.D.S. Data2/4 Shield
4	T.M.D.S. Data4-
5	T.M.D.S. Data4+
6	Clock (DDC)
7	Data (DDC)
8	Not Connected
9	T.M.D.S. Data1-
10	T.M.D.S. Data1+
11	T.M.D.S. Data1/3 Shield
12	T.M.D.S. Data3-
13	T.M.D.S. Data3+
14	+5V Power
15	5V Grounding
16	Hot Plug Detect
17	T.M.D.S. Data0-
18	T.M.D.S. Data0+
19	T.M.D.S. Data0/5 Shield
20	T.M.D.S. Data5-
21	T.M.D.S. Data5+
22	T.M.D.S. Clock Shield
23	T.M.D.S. Clock+
24	T.M.D.S. Clock-

Troubleshooting: Before Contacting Service Personnel

Before contacting your dealer after-sales service, perform the following simple checks.

If you cannot solve the problem using the instructions below, note the model and serial number of the television and contact your local dealer.

No sound or picture	<ul style="list-style-type: none"> ● Check that the mains lead has been connected to a wall socket. ● Check that you have pressed the "I" button (On/Off) and the POWER (⏻) button. ● Check the picture contrast and brightness settings. ● Check the volume.
Normal picture but no sound	<ul style="list-style-type: none"> ● Check the volume. ● Check whether the volume MUTE (🔇) button on the remote control has been pressed.
No picture or black and white picture	<ul style="list-style-type: none"> ● Adjust the colour settings. ● Check that the broadcast system selected is correct.
Sound and picture interference	<ul style="list-style-type: none"> ● Try to identify the electrical appliance that is affecting the television, then move it further away. ● Plug your television into a different mains socket.
Blurred or snowy picture, distorted sound	<ul style="list-style-type: none"> ● Check the direction, location and connections of your aerial. This interference often occurs due to the use of an indoor aerial.
Remote control malfunctions	<ul style="list-style-type: none"> ● Replace the remote control batteries. ● Clean the upper edge of the remote control (transmission window). ● Check the battery terminals.

Technical Specifications (continued)

Item			Specifications		
			SD		HD
			V6 Module	V7 Module	
Display	Screen Size (Active Area)		42" (920.1 mm(H) x 518.4 mm(V) ± 5mm)		
	Aspect ratio		16:9		
	Number of Pixels		852 (H) x 480 (V)		1024 (H) x 768 (V)
	Pixel Pitch		1.080 mm (H) x 1.080mm (V)		0.900 mm (H) x 0.676mm (V)
	Displayable Colors		16.77 million	1 billion	1 billion
	Brightness		1000 cd/m²	1500 cd/m²	1000 cd/m²
	Contrast Ratio		3000:1	10000:1	3000:1
	Color Temperature		9500 K		
Viewing Angle		Over 160 degrees			
In / Out Terminals	Speaker Output	Internal Speaker	10W(L) + 10W(R)[RMS] / 8Ω 2 Way 2 Speaker		
		External Speaker	10W(L) + 10W(R)[RMS] / 8Ω 2 Way 6 Speaker System		
	RS-232C	D-Sub 9-pin x 1	TXD/RXD		
	DVI Input	DVI 24-pin x 1	Digital RGB : TMDS 1280 X 1024 / 75 Hz (SXGA)		
		Ear Jack x 1	Audio : 0.5V [RMS] (L+R)		
	RGB Input	D-Sub 15-pin x 1	RGB : 0.7V[p-p](75Ω), H/CS/V : TTL (2.2 kΩ), SOG : 1V[p-p](75Ω) 1280 X 1024 / 75 Hz (SXGA)		
		Ear Jack x 1	Audio : 0.5V[RMS] (L+R)		
	Component Input	RCA-pin x 1	Y : 1V[p-p](75Ω), Pb/Cb : 0.7V[p-p](75Ω), Pr/Cr : 0.7V[p-p](75Ω) EDTV : 525i(480i), 625i(576i) SDTV : 625p(576p), 525p(480p) HDTV : 750p(720p), 1125i(1035i,1080i)		
		RCA-pin x 1	Audio : 0.5V[RMS] (L+R)		
	S-Video Input	Min DIN 4-pin x 2	Y : 1V[p-p] (75Ω), C: 0.286V[p-p] (75Ω) [NTSC] Y : 1V[p-p] (75Ω), C: 0.3V[p-p] (75Ω) [PAL/SECAM]		
	Video Input	RCA-pin x 2	Video : 1V[p-p] (75Ω) [NTSC/PAL/SECAM]		
		RCA-pin x 2	Audio : 0.5V[RMS] (L+R)		
	Monitor Output	RCA-pin x 1	Video : 1V[p-p] (75Ω)		
		RCA-pin x 1	Audio : 0.5V[RMS] (L+R)		
	Antenna Input	DIN - Type x 1	Analog Air/Cable (75Ω) [Unbalanced] NTSC/PAL - M/N		
General	Power Supply		AC 100V ~ 240V, 50/60Hz		
	Power Consumption (Typical)		290W	240W	340W
	Dimensions (Without Stand) (W mm x H mm x D mm)		1028 x 625 x 89.8	1028 x 625 x 107.4	1028 x 625 x 107.4
	Weight (Without Stand)		29 kg	29 kg	31 kg
Environment Condition	Temperature	Operational	0 ~ 40 °C		
		Storage	-20 ~ 60 °C		
	Humidity	Operational	20 ~ 80% RH (No condensation)		
		Storage	10 ~ 90% RH (No condensation)		
	Pressure	Operational	800 ~ 1100 hPa (Altitude : 0 ~ 2,000 m)		
		Storage	700 ~ 1100 hPa (Altitude : 0 ~ 3,000 m)		

◆ The specifications are subject to change without notice

Technical Specifications

External Speaker (Optional)

Item	Specifications
Dimensions (W x H x D)	113 mm x 626.6 mm x 83.7 mm
Weight	5.8 kg (L + R)
Type	2 Way 6 Speaker System
Input	10 W (RMS)
Impedance	8 Ω
Output Sound Pressure	87 dB/W/M
Frequency Response	45 Hz ~ 20 KHz

◆ The specifications are subject to change without notice

Internal Speaker (Optional)

Item	Specifications
Type	2 Way 2 Speaker System
Input	10 W (RMS)
Impedance	8 Ω
Output Sound Pressure	88 dB/W/M
Frequency Response	140 Hz ~ 10 KHz

◆ The specifications are subject to change without notice

Accessories

Standard	Owner's Instructions, Remote Controller/AAA Batteries, Antenna Cable, Power Cord, Speaker Cable
Optional	Foot Stand, Table-Top stand, Wall-Mount Bracket, Ceiling-Mount Bracket, Internal Speaker System, External Speaker System, DVI Cable, VGA(D-SUB) Cable, Audio Cable, Component Cable, RCA Video Cable, RCA Audio Cable, S-Video Cable.

◆ The specifications are subject to change without notice

FCC NOTICE

THIS DEVICE COMPLIES WITH PART 15 OF THE FCC RULES.
OPERATION IS SUBJECT TO THE FOLLOWING TWO CONDITION:
(1) THIS DEVICE MAY NOT CAUSE HARMFUL INTERFERENCE, AND
(2) THIS DEVICE MUST ACCEPT ANY INTERFERENCE RECEIVED,
INCLUDING INTERFERENCE THAT MAY CAUSE UNDERSIRED
OPERATION.

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 communication. 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.

NOTE : The manufacturer is not responsible for any radio or TV interference caused by unauthorized modifications to this equipment. Such modifications could void the user's authority to operate the equipment.