

PDP-TV (PLASMA DISPLAY PANEL)

Model : OP-42TN1U/OP-42TN2U

Owner's Instructions

Before operating the unit,
please read this manual thoroughly, and retain it for future
reference.

Safety Instructions

- Do not place the PDP on an unstable cart, stand, tripod, bracket, table, or floor where it can fall.
- Do not expose the PDP to extreme temperature conditions or to extreme humidity conditions.
- Do not expose the PDP to direct sunlight and other sources of heat.
- Do not expose the PDP to any liquids.
- Never put objects of any kind into the television, and do not place a water-containing vessel on the PDP.
- During a storm conditions (especially when there is lightning) unplug the PDP from the mains socket and aerial.
- Do not step on or twist the power cord.
- Do not overload wall outlets or extension cords as this can result in a risk of fire or electric shock.
- Please use a soft and dry cloth (not containing volatile matter) when you clean the PDP.
- If the PDP is broken, do not try to repair it yourself. Contact qualified service personnel.
- If the remote control is not used for a long period of time, remove the batteries and store it in a cool, dry place.
- Do not drop the remote control.
- When installing a PDP such as for an exhibition, etc., there is risk of overheating the unit if placed directly on a floor or carpet. Be sure to use a proper stand, wall mount, ceiling mount, or Lift-Stand offered by your dealer. (Do not use and exhibit by laying down or sitting the unit directly on the floor.)
- Ventilation : The ventilation should not be impeded by covering the ventilation openings with items, such as newspapers, table-clothes, curtains, etc.

Accidental contact with high voltage components could be result in electric shock.

Never place the set in a confined space such as a bookcase or built-in cabinet, unless proper ventilation is provided.

The set requires minimum distances around the apparatus for sufficient ventilation

- Water and Moisture : Never install the set in the following places : in the bathroom, in a wet basement (Dripping or splashing water).

No objects filled with liquids, such as vases, shall be placed on the apparatus.

Caution



CAUTION
RISK OF ELECTRIC SHOCK
DO NOT OPEN



CAUTION: TO PREVENT ELECTRICAL SHOCK,
DO NOT REMOVE REAR COVER, NO USER
SERVICEABLE PARTS INSIDE. REFER SERVICING
TO QUALIFIED SERVICE PERSONNEL.

WARNING: TO PREVENT DAMAGE WHICH MAY
RESULT IN
FIRE OR SHOCK HAZARD, DO NOT EXPOSE THIS
APPLIANCE TO RAIN OR MOISTURE.

The lightning flash and arrow head
within the triangle is a
warning sign alerting you of
"dangerous voltage" inside
the product.



The exclamation point within the
triangle is a warning sign alerting
you of important instructions
accompanying
the product.



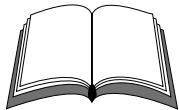
NOTE:

The main voltage is indicated on the rear of the
PDP and the frequency is 50 or 60Hz.

User Instructions

- **Screen Image retention**
Do not display a still image (such as on a video game or when hooking up a PC to this PDP) on the plasma monitor panel for more than 2 hours as it can cause screen image retention. This image retention is also known as "screen burn". To avoid such image retention, reduce the degree of brightness and contrast of this screen when displaying a still image.
- **Cell Defect**
The plasma display panel consists of fine cells. Although the panels are produced with more than 99.9 percent active cells, there may be some cells that do not produce light or remain lit.
- **Height**
The PDP can normally operate only under 2000m in height. It might abnormally function at a place over 2000m in height and do not install and operate there.
- **Warranty**
 - Warranty does not cover any damage caused by image retention.
 - Burn-in is not covered by the warranty.

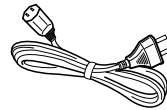
Checking Parts



Owner 's Instructions



Remote Control/AAA Batteries



Power CORD

Contents

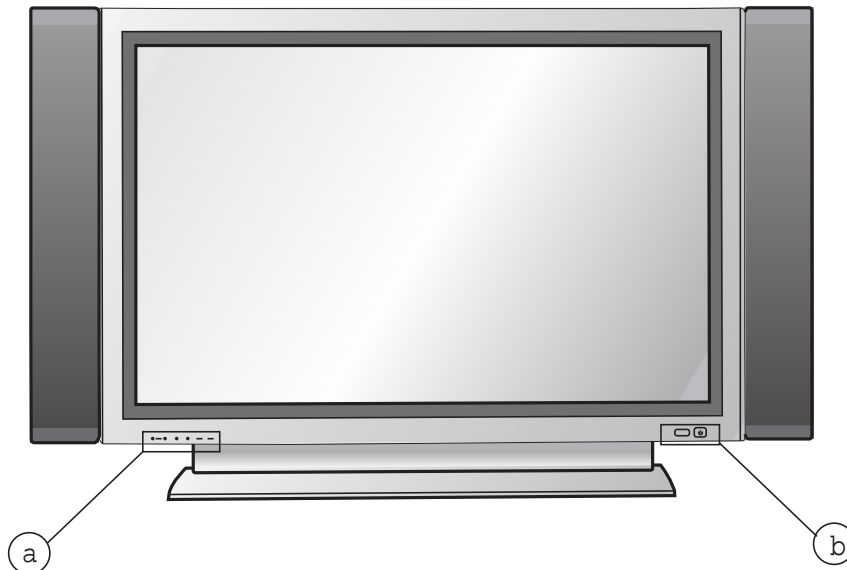
• FOREWORD	
Safety Instructions.....	2
Caution	2
User Instructions.....	3
• CONNECTING AND PREPARING YOUR DISPLAY	
Your New Plasma Display Panel.....	6
Infrared Remote Control.....	8
Inserting the Batteries in the Remote Control	9
Connecting to an Aerial or Cable Television Network	10
Connecting a Satellite Receiver or Decoder.....	10
Switching On and Off.....	11
Placing in Standby Mode.....	11
Choosing Your Language	12
Viewing an External Signal Source	12
• SETTING THE CHANNELS	
Storing Channels Automatically	13
Storing Channels Manually	14
• USING YOUR DISPLAY	
Using the Fine Tune	15
Changing the Picture Standard.....	16
Freezing the Current Picture	16
Adjusting the Picture Settings	17
Adjusting the Picture Settings (RGB or DVI Mode)	18
Setting the Picture (RGB or DVI Mode).....	19
Adjusting the Picture Position (RGB or DVI Mode)	20
Adjusting the Color Temperature	21
Selecting the Picture Size	22
Using the digital zoom	23
Viewing the Picture In Picture (PIP).....	24
Using the Digital NR (Digital Noise Reduction)Feature.....	25
Changing the Sound Standard.....	26

Contents (continued)

• USING YOUR DISPLAY (Continued)	
Adjusting the Sound Settings	27
Adjusting the Volume Manually	28
Setting the Sleep Timer	29
Selecting the Sound Mode	30
Selecting the Closed Caption	31
Selecting the Content Blocking	32
Setup Content Blocking	33
Change Password	33
Content Blocking On/OFF	33
Setup Movie/ TV Blocking	34
Closed Caption Background	35
• ADDITIONAL INFORMATION AND CONNECTIONS	
Connecting to the External Devices	36
Connecting to the S-Video Input	37
Connecting to the DVI Input	37
Connecting to the RGB Input	38
Connecting to the Component Input	38
Setting up Your PC Software (Windows only)	39
Input Mode (RGB/DVI)	40
Pin Configurations	42
• RECOMMENDATIONS FOR USE	
Troubleshooting: Before Contacting Service Personnel	43
Technical Specifications	44

Your New Plasma Display Panel

FRONT PANEL



a

INPUT

Press to display all of the available video sources (TV, Video1, Video2, S-Video, Component, RGB, DVI)

Menu

Displays the main on-screen menu and exit the menu.

- Vol +

Press to increase or decrease the volume. Also used to select or adjust items on the on-screen menu.

- CH +

Change channels. Also used to move up or down in the On-screen menu.

b



Press to turn the PDP on and off.

Power Indicator

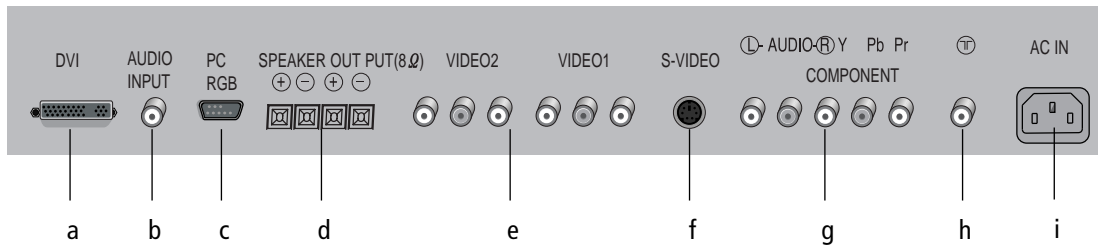
Stand by : Red

Remote Control Signal Receiver

Aim the remote control towards this spot on the PDP.

Your New Plasma Display Panel (continued)

Rear Panel



a) DVI

Connect to the digital video for device with DVI output.

b) AUDIO INPUT

Connect to audio input jack for device with DVI and RGB output.

c) RGB

Connect to the video on your PC.

d) External Speaker Output

Connect the external speakers.

e) VIDEO 1, 2

Output for external devices, such as VCR, DVD, video game device or video disc players.

f) S-VIDEO

Video inputs for external devices with an S-Video output, such as a camcorder or VCR.

g) Component

Video (Y/Pb/Pr or Y/Cb/Cr) and audio (AUDIO L,R) inputs for Component.

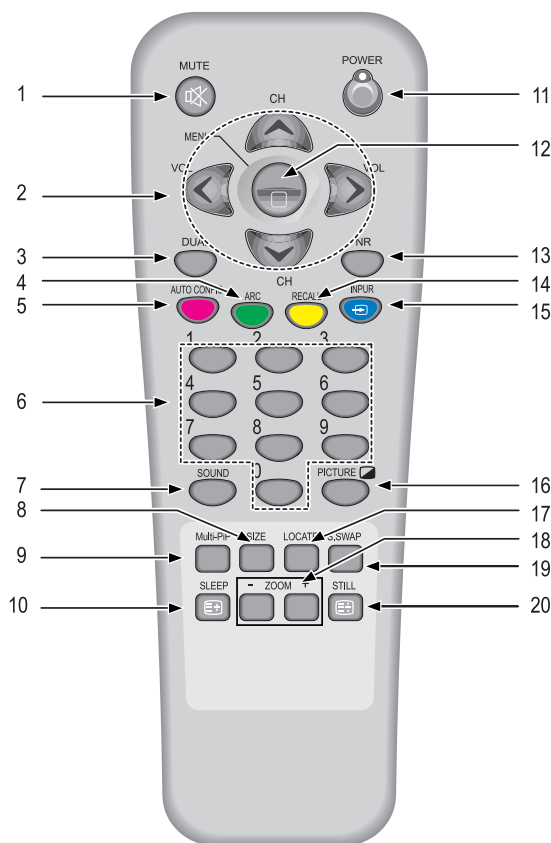
h) ANT

75Coaxial connector for Aerial/Cable Network.

i) AC IN

Connect the supplied power cord.

Infrared Remote Control



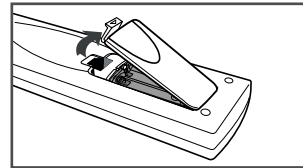
1. MUTE
Temporary sound switch-off
2. CH +
Move to the required menu option /
TV Channel UP
- CH -
Move to the required menu option /
TV Channel Down
- VOL + / VOL -
Volume increase, decrease
3. DUAL
TV Sound selection(Mono, Stereo, Dual(I)/Dual(II))
4. ARC
Picture Size(ratio)selection
5. AUTO CONFIG.
This function is for the automatic adjustment
of the screen POSITION, PHASE and FREQUENCY.
(only PC Mode)
6. NUMBER (0~9)
Direct channel selection
7. SOUND
Sound Mode selection
8. SIZE
Sub-Picture size selection
9. Multi-PiP
Multi-PiP On/Off
10. SLEEP
Automatic switch-off
11. POWER
Turns the PDP on and off
12. MENU
Menu display / exit the menu
13. NR
Noise Reduction
14. RECALL
Picture Information Display
15. INPUT
Input Source Selection
16. PICTURE
Picture Mode selection
17. LOCATE
Sub-Picture location selection
18. ZOOM- / ZOOM +
Zoom down, up
19. S.SWAP
Main/Sub sound swap(PIP,PBP)
20. STILL
Picture still

Inserting the Batteries in the Remote Control

You must insert or replace the batteries in the remote control when you:

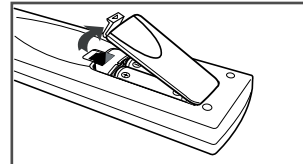
- Purchase the PDP
- Find that the remote control is no longer operating correctly

1 Remove the cover on the rear of the remote control by pressing the symbol (▼)downwards and then pulling firmly to remove it.

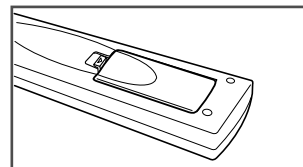


2 Insert two R03,UM4,"AAA " 1.5V or equivalent batteries aking care to respect the polarities:

- -on the battery against -on the remote control
- +on the battery against +on the remote control



3 Replace the cover by aligning it with the base of the remote control and pressing it back into place.



Connecting to an Aerial or Cable Television Network

To view television channels correctly, a signal must be received by the set from one of the following sources:

- An outdoor aerial
- A cable television network
- A satellite network

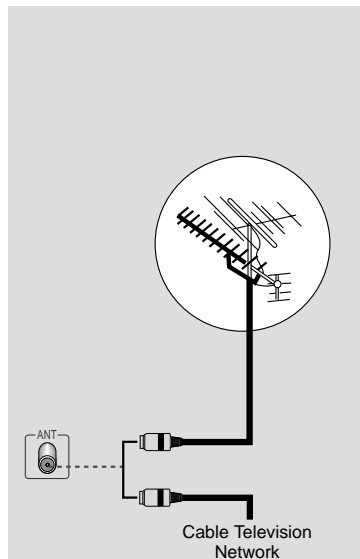
1 In the first three cases, connect the aerial or network input cable to the 75 Ω coaxial socket on the rear of the PDP.

2 If you are using an indoor aerial, you may need to turn it when tuning your PDP until you obtain a picture that is both sharp and clear.

For further details, refer to:

- "Storing Channels Automatically" on page 13
- "Storing Channels Manually" on page 14

3 The angle can be adjusted from 0 ° to 15 ° by ± 2 °.



Connecting a Satellite Receiver or Decoder

In order to watch television programmes broadcast via a satellite network, you must connect a satellite receiver to the rear of the PDP. Also, in order to descramble a coded transmission signal, you must connect a decoder to the rear of the PDP.

Using a Coaxial cable

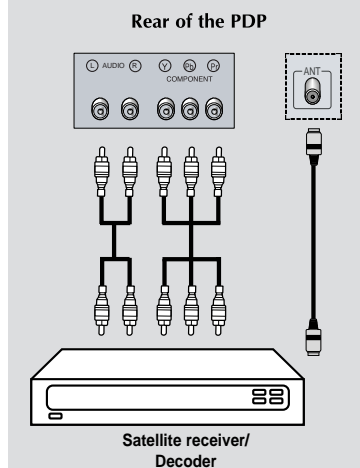
Connect a coaxial cable to the:

- Receiver (or Decoder) output socket.
- Television aerial input socket.

NOTE : If you wish to connect both a satellite receiver (or decoder) and a VCR, you should connect the:

- Receiver (or Decoder) to the VCR
- VCR to the PDP

Otherwise, connect the receiver (or decoder) directly to the PDP.





Switching On and Off


The mains lead is attached to the rear of your PDP.

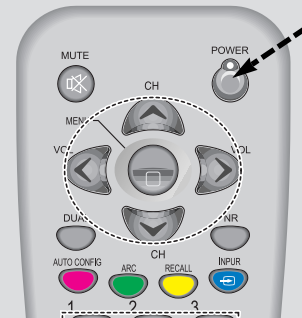
If you have purchased this PDP in the United Kingdom, refer to page 45 for further instructions on plug wiring.

- 1** Plug the mains lead into an appropriate socket.
The Standby indicator on the front of the PDP lights up.
NOTE : The main voltage is indicated on the rear of the PDP and the frequency is 50 or 60Hz.

- 2** Press the "I /  " button on the front of the PDP (or POWER  button on the remote control) to switch the PDP on. The programme that you were watching last is re-selected automatically.

NOTE: If you have not yet stored any channels, No clear picture appears. Refer to "Storing Channels Automatically " on page 13 or "Storing Channels Manually " on page 14.



- 3** To switch your PDP off, press the "I /  " button again.

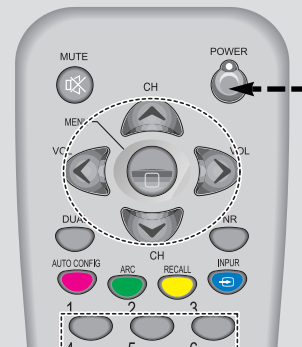


Placing in Standby Mode

Your PDP can be placed in Standby mode, in order to reduce the Power consumption.

The Standby mode can be useful when you wish to interrupt viewing temporarily (during a meal, for example).

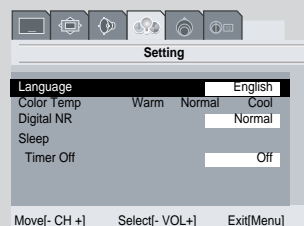
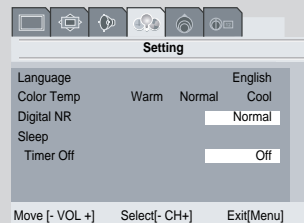
- 1** . Press the POWER()button on the remote control.
The screen is turned off and the Standby indicator on the front of the PDP lights.
- 2** To switch the PDP back on, simply press the POWER() button again.



Choosing Your language

When you start using your television for the first time, you must select the language which will be used for displaying menus and indications.

- 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** Press the CH +or CH -button to select Language .
- 5** Select the appropriate language by pressing the VOL -or VOL +button.
- 6** When you are satisfied with your choice,press the MENU button to return to normal viewing.

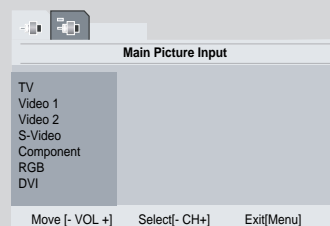


Viewing an External Signal Source

Use the remote control to switch between viewing signal from connected equipment, such as VCR, DVD, Set-Top-box and the TV source (broadcast or cable)

- 1** Press the INPUT button.
The options available in the Input group are displayed.
- 2** Select the signal source by pressing CH +or CH -button, then press the VOL -or VOL +button.
- 3** Set other signal sources (TV , Video1, Video2, S-Video, Component ,RGB or DVI)using the same method as listed above.

NOTE: If you change the external source while viewing, pictures might take a short period of time to be switched.

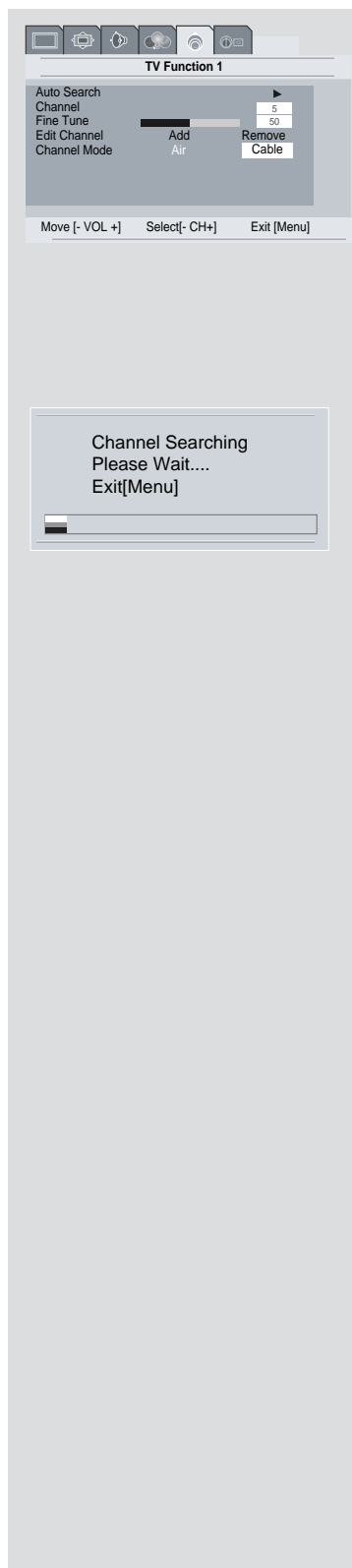


Storing Channels Automatically

You can scan for the frequency ranges available to you. Automatically allocated programme numbers may not correspond to actual or desired programme numbers. However you can sort numbers manually and clear any channels you do not wish to watch.

- 1** Press the MENU button.
The main menu is displayed.
- 2** Press the VOL -or VOL +button to select TV Function 1 .
The options available in the TV Function1 group are displayed.
- 3** Press the CH -button to select "Auto Search" in the TV Function 1 group.
- 4** Press the VOL -or VOL +button to start the search.
The search will end automatically.Channels are sorted and stored in an order which reflects their position in the frequency range,(with lowest first and highest last).
The programme originally selected is displayed.

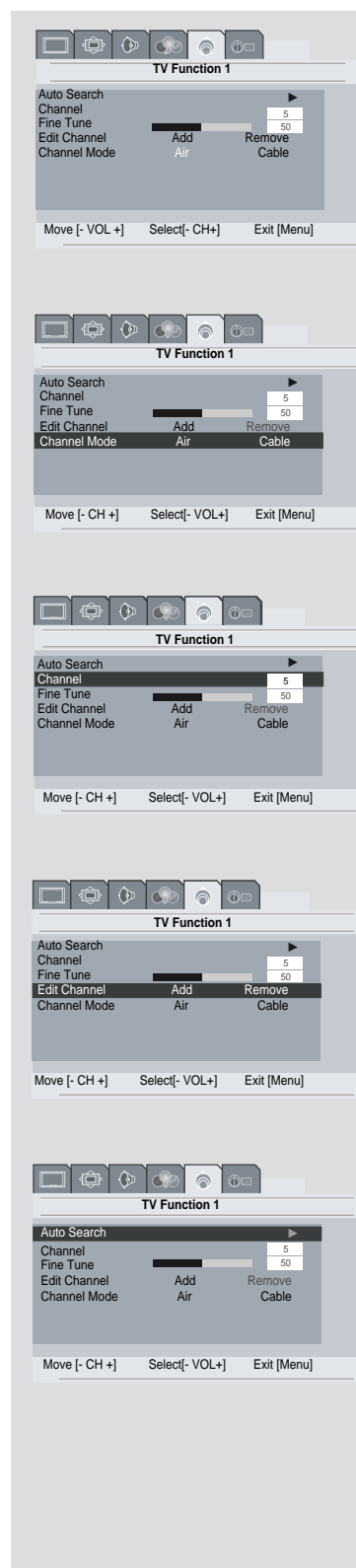
NOTE : To stop the search before it has finished, press the MENU button.



Storing Channels Manually

The TV set has 68 channels [AIR2~AIR69] in Air mode and 125 channels [CATV1~CATV125] in cable mode.

- 1** Press the MENU button.
The main menu is displayed.
- 2** Press the VOL -or VOL +button to select TV Function 1 .
The options available in the TV Function 1 group are displayed.
- 3** Press the CH -button to select the options in the TV Function 1 group.
- 4** Press the VOL-or VOL+to select the number of the channel.
The tuner scans the frequency range until the first channel or the channel that you selected is received on your screen.
- 5** Press the CH +or CH -button to select Channel Mode .
Press the VOL-or VOL+button to select Air or Cable .
- 6** Press the CH+/- button to select Edit channel Add/Remove.
- 7** By pressing VOL+/- button, select ADD for adding the current channel to the TV's memory or select Remove for erasing the current channel.

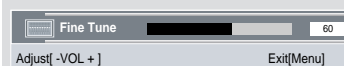
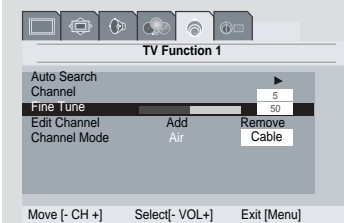


Using the Fine Tune

If reception is weak, you can fine tune a channel manually.

- 1** Press the MENU button.
The main menu is displayed.
- 2** Press the VOL -or VOL +button to select TV Function 1 .
The options available in the TV Function 1group are displayed.
- 3** Press the CH -button to select the options in the TV Function 1 group.
- 4** Press the CH +or CH - button to select Fine Tune and
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 to reach the required setting.
- 5** Press the VOL -or VOL + button until the picture and sound are both
clear and sharp.

NOTE: If you are unable to fine tune a channel,check that the System
settings are correct.

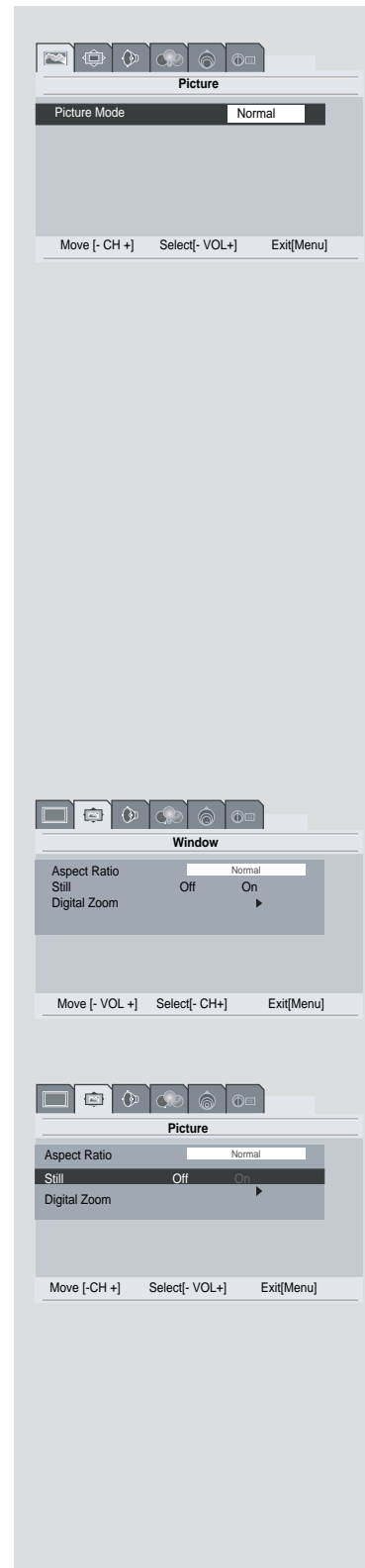


Changing the Picture Standard

You can select the type of picture 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 Picture .
The options available in the Picture group are displayed.
- 3** Press the CH -button to select the options in the Picture group.
- 4** Select the option by pressing the VOL -or VOL +button.
The following modes are available depending on the input source.
 - Normal - Movie - Mild - Dynamic - User

NOTE : You can also set these options simply by pressing the PICTURE(Picture Mode)button.



Freezing the Current Picture

You can freeze the picture when watching a television programme.

- 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 Still by pressing CH +or CH -button.
- 5** Press the VOL -or VOL +button to select Off or On .

Adjusting the Picture Settings

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 Picture .
The options available in the Picture group are displayed.
- 3** Press the CH -button to select the options in the Picture group.
- 4** Select the User by pressing the VOL -or VOL +button.
The User options are listed.
- 5** Press the CH -button to select the options in the User group.
 - User : Brightness, Contrast, Sharpness, Color, Tint (ONLY VIDEO1, 2 RF, S-Video)
- 6** Press the CH +or CH -button to select the option you want to change.
- 7** Press the VOL -or VOL +button to change the setting.
The horizontal bar is displayed.
- 8** Move the horizontal bar 's cursor left or right by pressing the VOL -or VOL + button.
- 9** When you are satisfied with the settings,press the MENU button to exit.

NOTE: When the User Picture Mode is set,the settings values may vary depending on the input source.

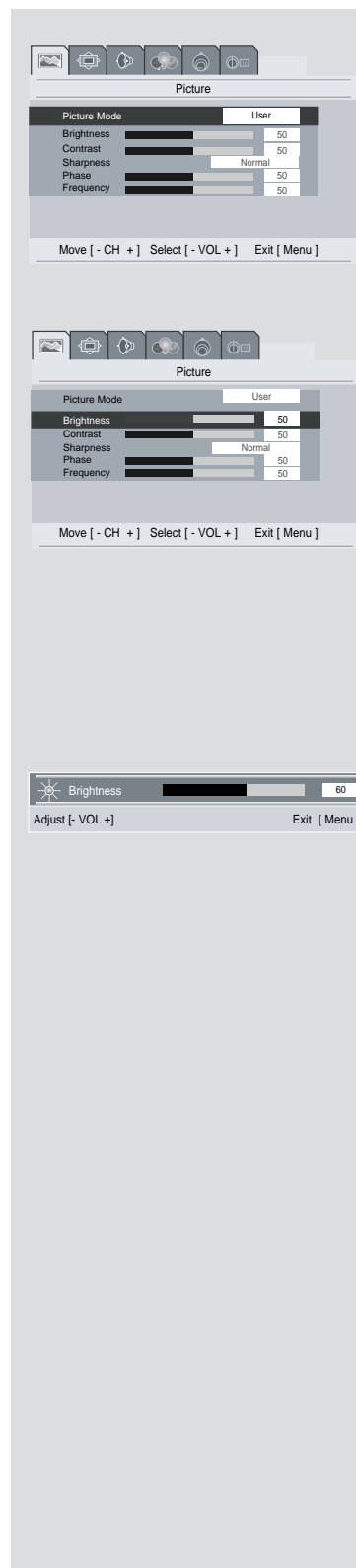


Adjusting the Picture Settings (RGB or DVI Mode)

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 Picture .
The options available in the Picture group are displayed.
- 3** Press the CH -button to select the options in the Picture group.
- 4** Select the User by pressing the VOL -or VOL +button.
The User options are listed.
- 5** Press the CH -button to select the options in the User group.
 - User: Brightness, Contrast, Sharpness, Phase, Frequency
- 6** Press the CH +or CH -button to select the option you want to change.
- 7** Press the VOL -or VOL +button to change the setting.
The horizontal bar is displayed.
- 8** Move the horizontal bar 's cursor left or right by pressing the VOL -or VOL +button.
- 9** When you are satisfied with the settings,press the MENU button to exit.

NOTE : When the User Picture Mode is set,the settings values may vary depending on the input source.



Setting the Picture (RGB or DVI Mode)

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

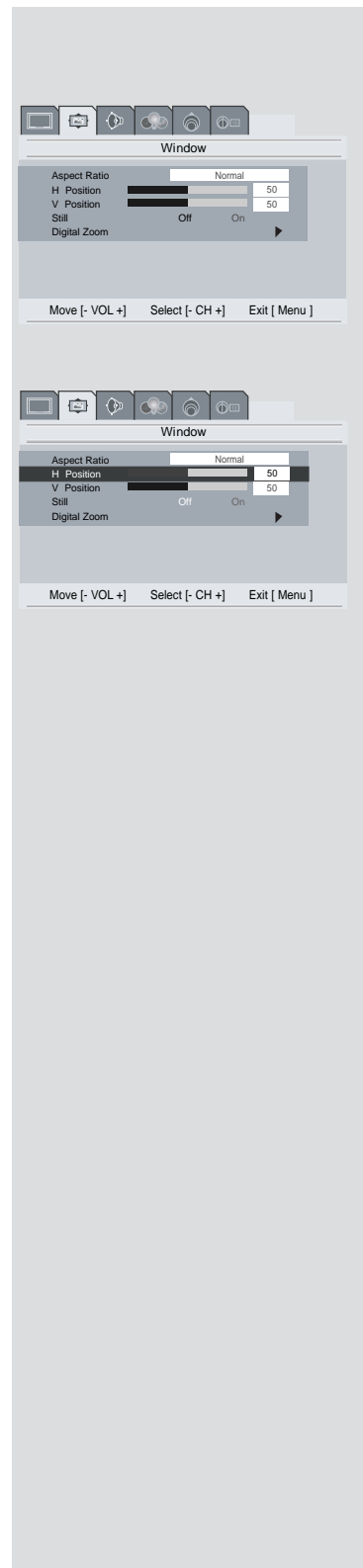
- 1** Press the MENU button.
The main menu is displayed.
- 2** Press the VOL -or VOL + button to select Picture .
The options available in the Picture group are displayed.
- 3** Press the CH - button to select the options in the Picture group.
- 4** Select the option (Phase,Frequency)by pressing the CH +or CH - button.
- 5** Press the VOL -or VOL + button to change the setting.
The horizontal bar is displayed.
- 6** Move the horizontal bar's cursor left or right by pressing the VOL - or VOL + button.
- 7** When you are satisfied with the settings,press the MENU button to exit.



Adjusting the picture position (RGB or DVI Mode)

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

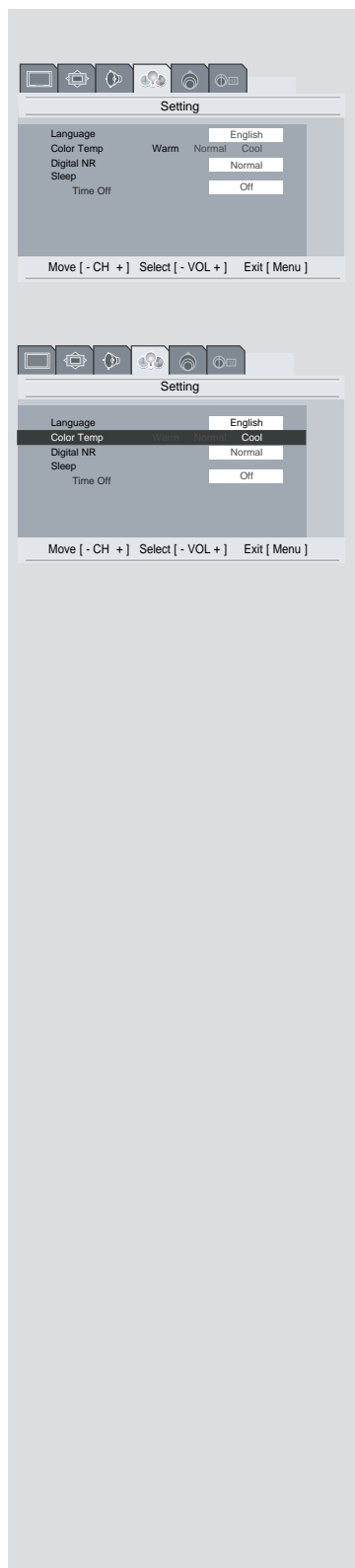
- 1** Press the MENU button.
The main menu is displayed.
- 2** Press the VOL -or VOL +button to select Window .
The options available in the Window group are displayed.
- 3** Press the CH -button to select the options in the Window group.
- 4** Press the CH +or CH -button to select the option (H Position,V 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.



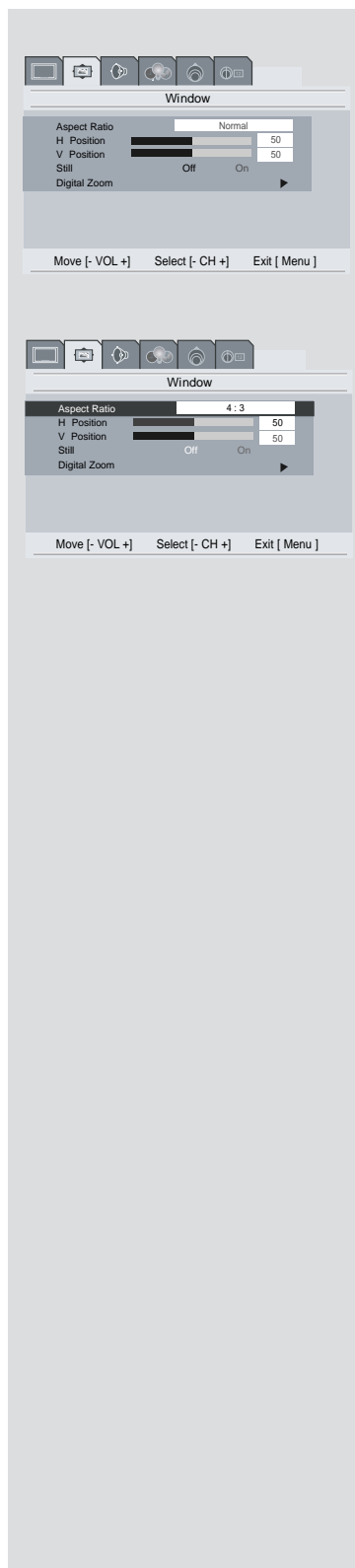
Selecting the Picture Size

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 : Use this mode for the wide aspect ratio of a panoramic picture.
 - Letterbox : Choose the letter box format,the 16:9 image is shrunk until the entire width of the program fits on your TV.Since the aspect ratio of the program is maintained, the image is no longer tall enough to fill your screen,so black/gray bars are seen at the top and bottom of the screen.
 - Letterbox Subtitles : If subtitles are interrupted and not viewed when Letter box is selected,select this to view subtitles.
 - Zoom : Magnify the size of the picture vertically on 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)

The function for watching another input picture with the TV at the same time.

- 1 Press the Multi-PIP button.
The Multi-PIP menu is displayed.
- 2 Move an option of the sub picture by pressing the VOL - or VOL + button.
- 3 Select the sub picture option by pressing CH + or CH - button.
The options are displayed in the following order
: POP3-Sub Picture(only RF)

Normal PIP PBP POP3

NOTE: If the sub picture is black in PIP mode, press "size key" and "volume +" key in the remote control to see the real display.

Main picture setting (PIP, PBP Mode)

1. Press the INPUT button.
2. Press the VOL- or VOL+ button to select INPUT.
The options available in the INPUT group are displayed.
3. Press the CH- button to select the option in the INPUT group.
4. Press the CH- or CH+ button to select options. (COMPONENT, RGB, DVI)

Sub picture setting (PIP, PBP Mode)

1. Press the INPUT button.
2. Press the VOL- or VOL+ button to select Multi-PiP Input .
The options available in the Multi-PiP Input group are displayed.
3. Press the CH- button to select the option in the Multi-PiP Input group.
4. Press the CH- or CH+ button to select options. (TV, VIDEO1, VIDEO2, S-VIDEO)

Easy functions of remote control.

Buttons Feature

Multi-PiP Multi-PiP On/Off

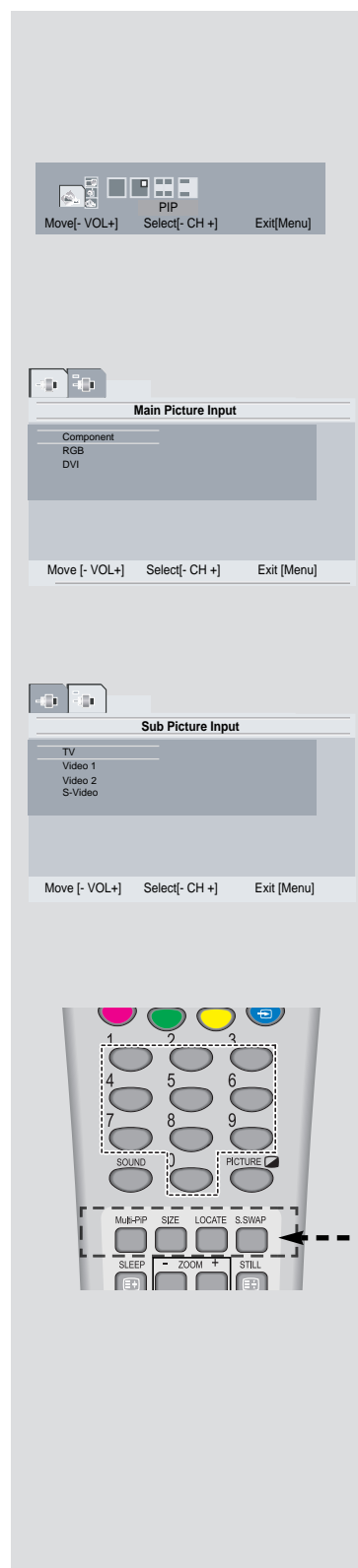
SIZE Sub-Picture size selection (PIP)

S.SWAP Main/Sub sound swap (PIP,PBP)

LOCATE Sub-Picture location selection

The Table of PIP Settings

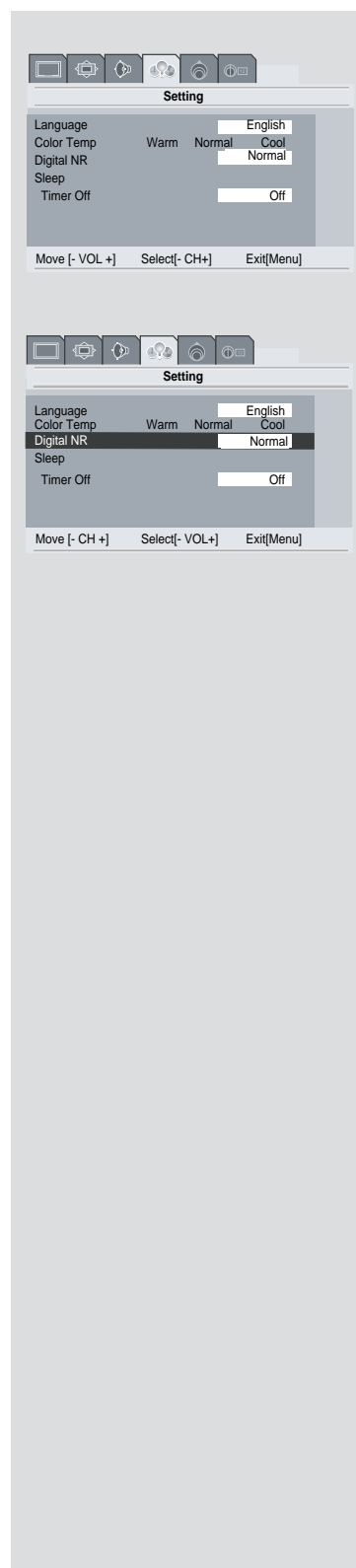
Main \ Sub	TV	VIDEO1,2	S-Video	Component	RGB	DVI
TV	X	X	X	X	X	X
VIDEO1,2	X	X	X	X	X	X
S-Video	X	X	X	X	X	X
Component	480i	X	X	X	X	X
	others	O	O	O	X	X
RGB	O	O	O	X	X	X
DVI	O	O	O	X	X	X



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

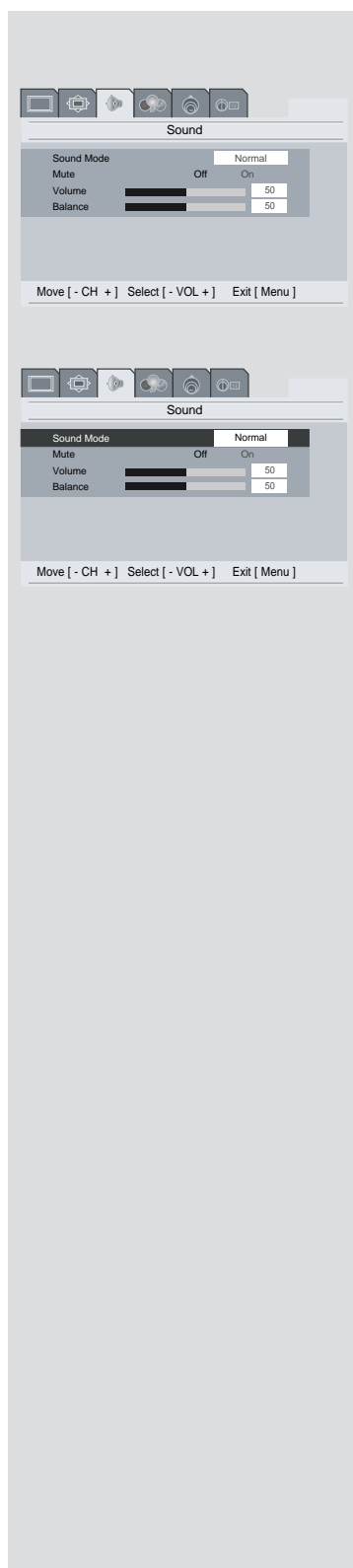


Changing the Sound Standard

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.

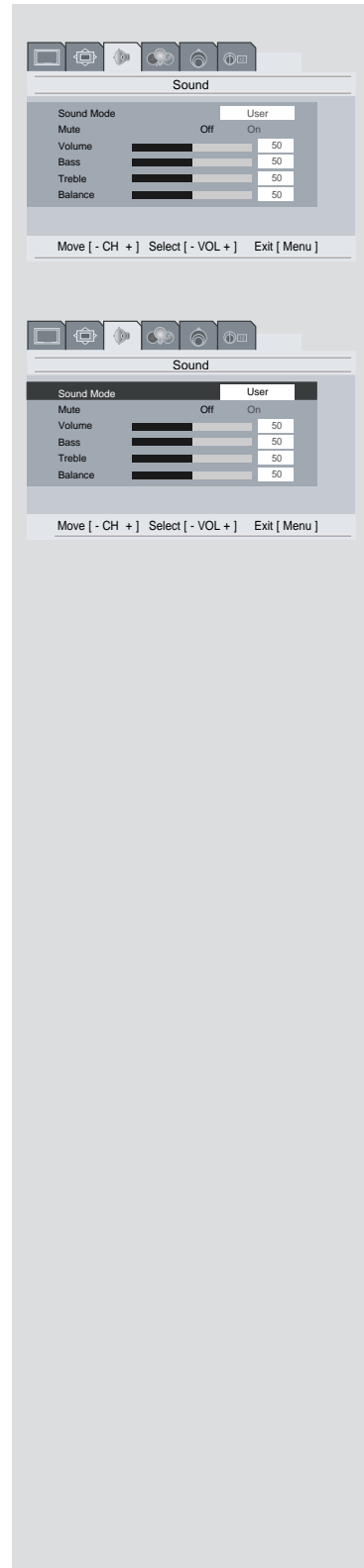
NOTE : You can also set these options simply by pressing the Sound(Sound Mode)button.



Adjusting the Sound Settings

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

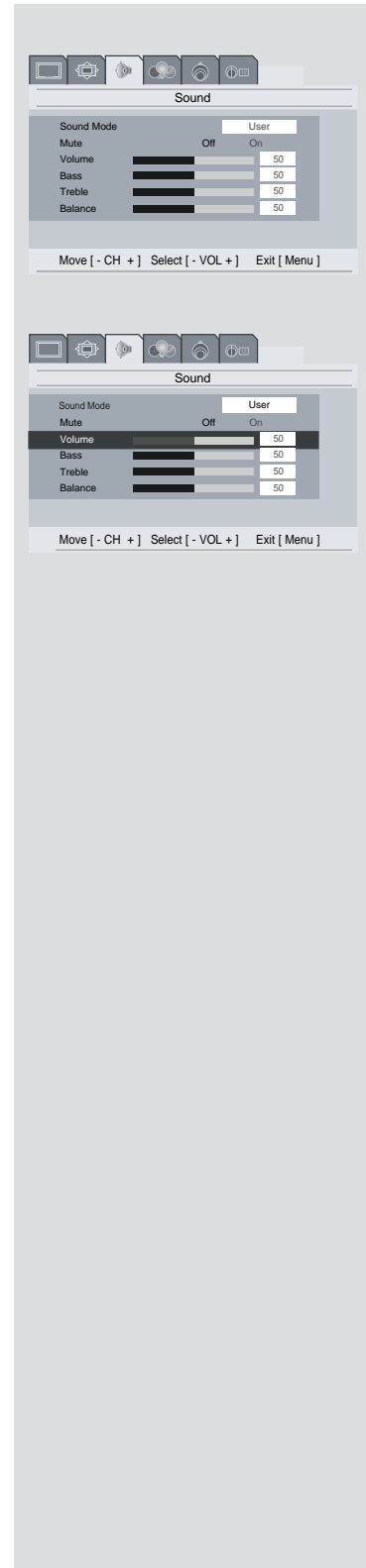
- 1** Press the MENU button.
The main menu is displayed.
- 2** Press the VOL -or VOL +button to select Sound .
The options available in the Sound group are displayed.
- 3** Press the CH -button to select the options in the Sound group.
- 4** Select the Sound Mode by pressing CH +or CH -button.
- 5** 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.



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.



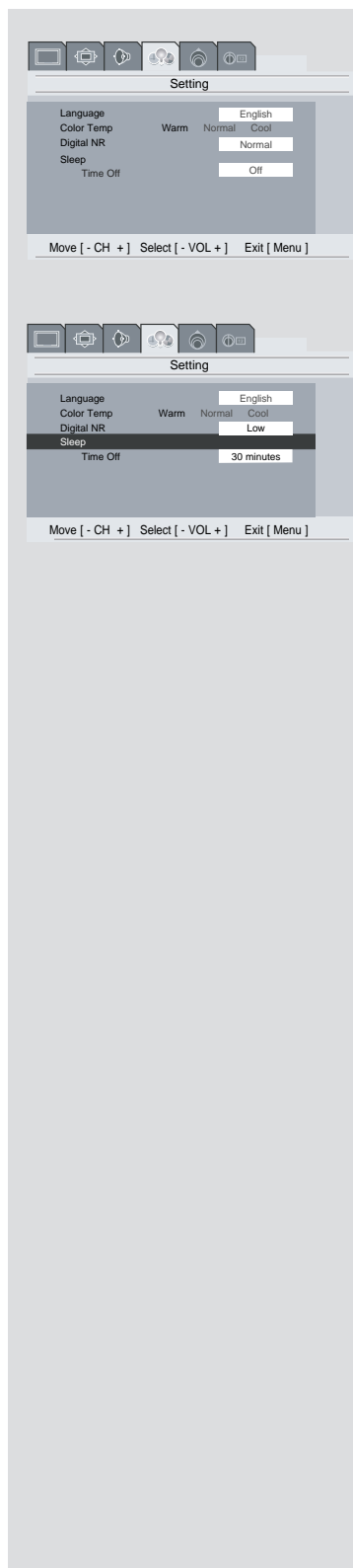
Setting the Sleep Timer

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 SEEP button.

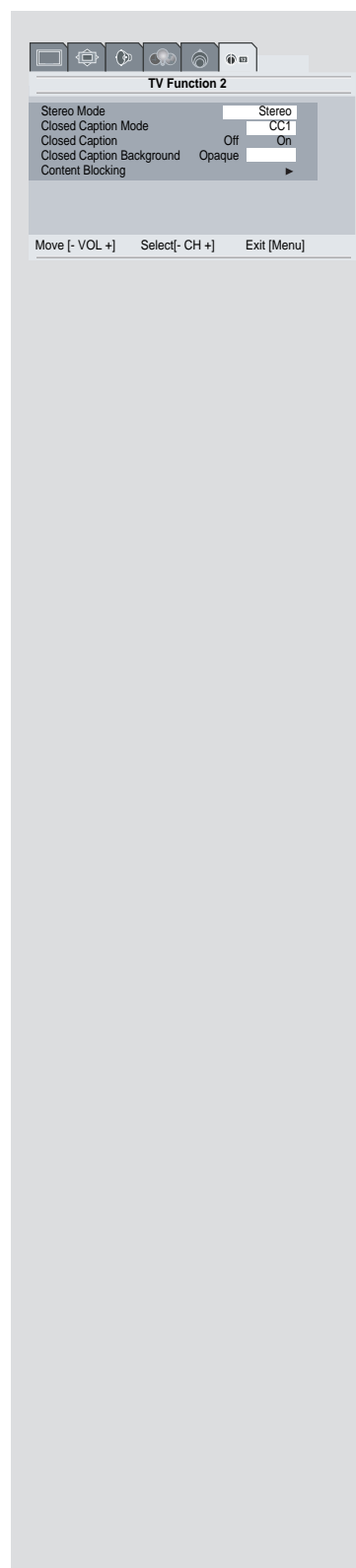
- If the sleep timer is not yet set,,Off is displayed.If the sleep timer is already set,the remaining time before which the television switches to Standby mode is displayed.



Selecting the Sound Mode

- 1** Press the MENU button.
The main menu is displayed.
- 2** Press the VOL -or VOL +button to select TV Function 2 .
The options available in the TV Function 2 group are displayed.
- 3** Press the CH -button to select the options in the TV Function 2 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.



Selecting the Closed Caption

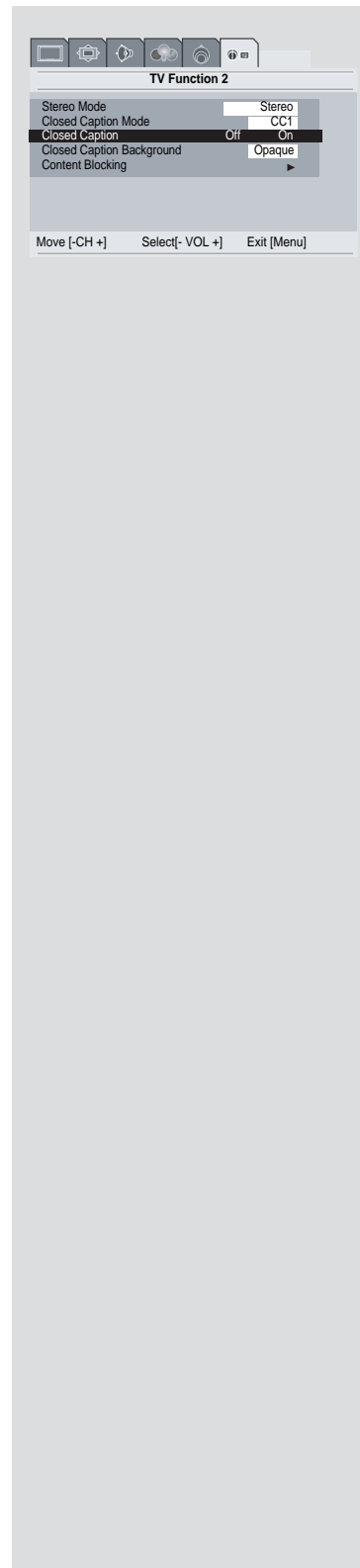
- This TV set is equipped with an internal closed caption decoder. Closed caption is the system which allows you to view conversations, narration and sound effects of TV programs and home videos in the form of subtitles on your Display.
- Not all the programs and videos offer closed caption. Please look for the "CC" symbol to ensure that captions will be shown.
- "CC1" or "CC2" displays the subtitles of TV dramas and news programs while allowing a full picture view.
- "T1", "T2" or "XDS" superimposes other information (e.g. TV guide, weather) on the screen, which is independent from the program in progress.

1 Press the MENU button.
The main menu is displayed.

2 Press the VOL -or VOL +button to select TV Function 2 .
The options available in the TV Function 2 group are displayed.

3 Select and adjust the items below as you want using the CH+/- or VOL+/- buttons.
Closed Caption Mode: CC1 - CC2- T1 - T2 - XDS
Closed Caption: Turn Caption mode ON or OFF.

- The TV may not receive CLOSED CAPTION signals normally in the following situations.
 - ① Poor reception conditions.
 - ② As old, bad or illegally recorded tape is played.
 - ③ Strong, random signals from a car interface with the TV signal.
 - ④ The program wasn't captioned when it was produced, transmitted or taped.



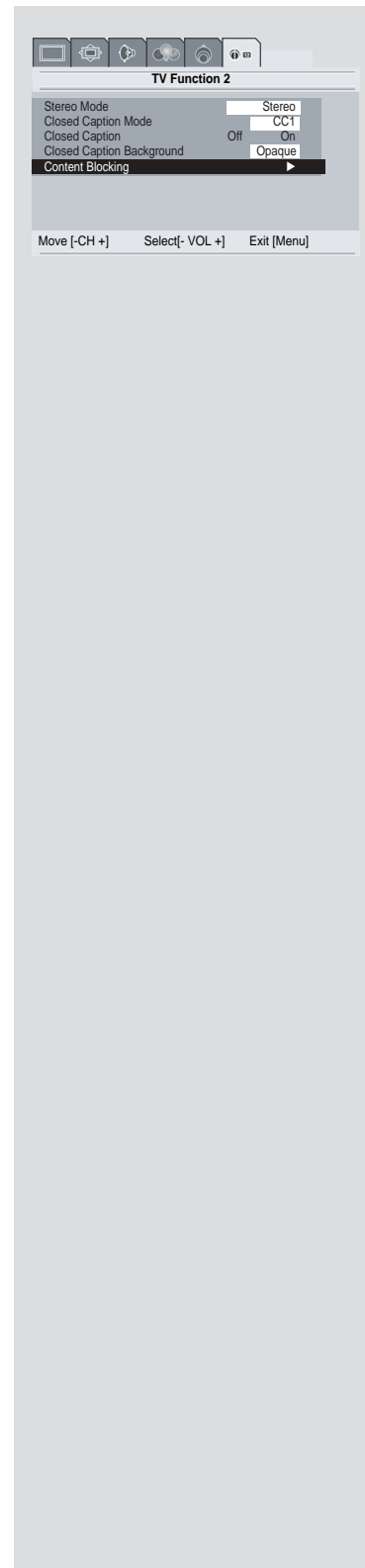
Selecting the Content Blocking

Content Blocking(Parental control)

Content Blocking is an electronic filtering device built into your System. This tool gives parents a great degree of control over the broadcasts within their children's reach. It allows parents to select programs judged suitable to child while blocking the other judged unsuitable. It does so automatically once you activate the Content Blocking feature in your PDP Television.

"Content Blocking" will not be selectable from the menu if you do not first configure your secret number.

- The U.S. has two rating systems for viewing content: TV Parental Guidelines and movie ratings.
- The TV Parental Guidelines work in conjunction with the Content Blocking to help parents screen out inappropriate television shows for their children.
- Movie ratings are used for original movies rated by the Motion Picture Association of America (MPAA) as watched on cable TV and not edited for television. The Content Blocking can also be set to block MPAA-rated movies



Setup Content Blocking

- 1** Move to "Content Blocking" by pressing CH+ /- buttons.
- 2** Press VOL+ /- button.
Password screen will be displayed.
- 3** Press CH+ /- button to select the Enter in the Password.
- 4** Press VOL+ /- or CH+ /- button to input the password, and Press INPUT button to OK.
(Input 6- digit number and initial password of Content setting is fixed on "000000")

Change Password

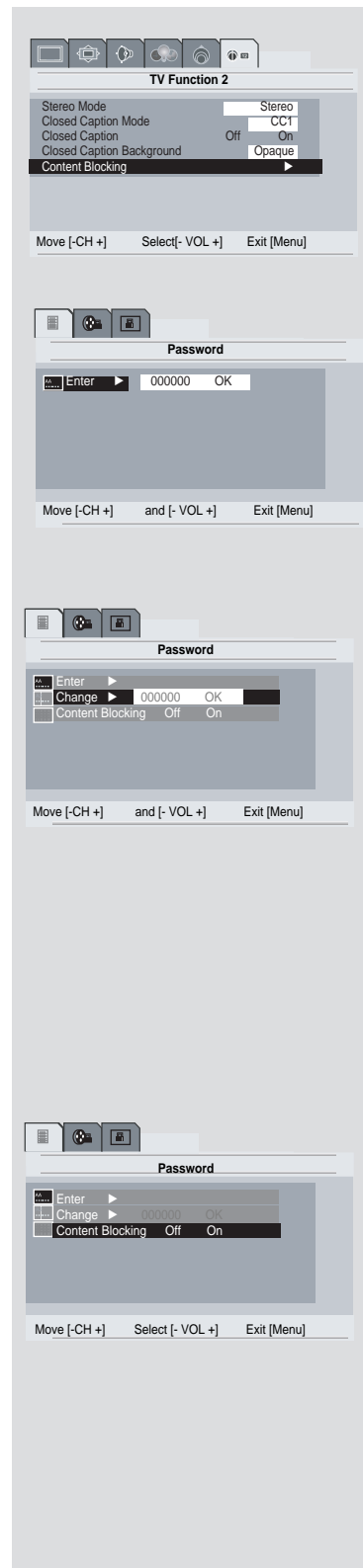
Initial password of Content Blocking is fixed on 000000, change the password if necessary.

- 1** Repeat steps 1~ 4 from "Set up Content Blocking"
- 2** Select "Change" with CH+/- button, and Press VOL+ /- or CH+ /- button to new the password.

NOTE : If you forget the password, input "555555" to initialize the password.

Content Blocking On/Off

- 1** Repeat steps 1~ 4 from "Set up Content Blocking"
- 2** Select "Content Blocking" with CH+/- button.
- 3** Choose "On" or "Off" with VOL +/- button, Then Content Blocking function dose not work.



Setup Movie / TV Blocking

- 1 Input the correct password , then press menu button and VOL+ / - button for the next step (Movie/ TV Blocking).
- 2 Press CH+ / - button to select rating and choose Blocking or other contents with INPUT button.
- 3 Press MENU button to return to the previous menu.

Voluntary movie rating system (MPAA)

Rating	Description
G	General audiences. All ages admitted.
PG	Parental guidance suggested. Some materials may not be suitable for children.
PG-13	Parents strongly cautioned. Some materials may be inappropriate for children under 13.
R	Restricted. Under 17 requires accompanying parent or adult guardian (age varies in some jurisdictions).
NC-17	No one under and at the age of 17 admitted.
X	A rating that has now been superseded by NC-17.
NR	No Rating

- **MPAA RATING :** Select the desired TV Rating among G, PG, PG-13, R, NC-17, X and NR. See the table below for details.



- If you select "PG-13", this will automatically block higher ratings "R", "NC-17", "X" and "NR".
- Voluntary movie rating system uses only an age-based rating.

TV Parental Guidelines

Suggested age	Rating	Contents			
		V	S	L	D
Y (All children)		○	○	○	○
Y7 (Directed to older children)		○	○	○	○
Y7 FV (Directed to older children)					
G (General audience)		○	○	○	○
PG (Parental Guidance suggested)		○	○	○	○
14 (Parents strongly cautioned)		○	○	○	○
MA (Mature audience only)		○	○	○	○



FV : Fantasy violence

V : Violence

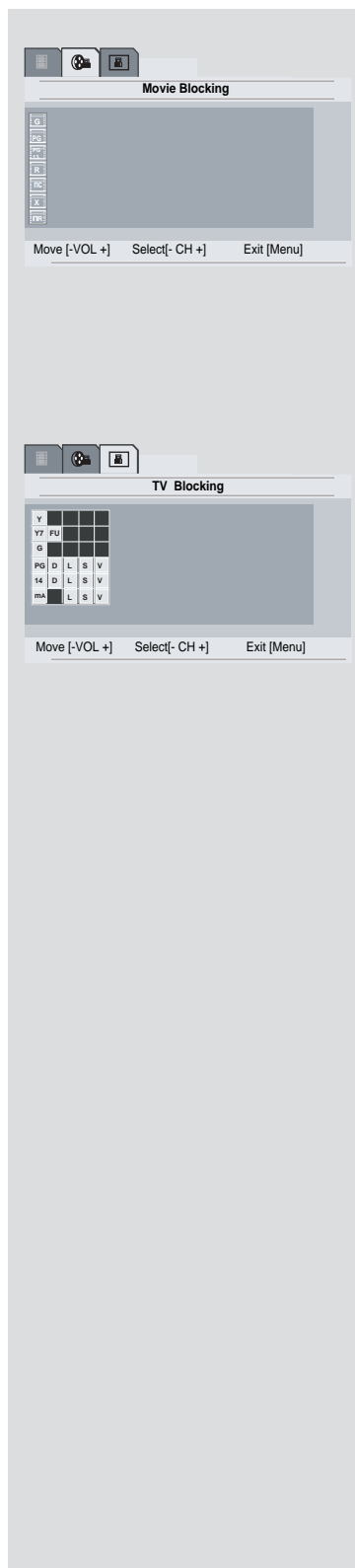
S : Sexual situation

L : Adult language

D : Sexually suggestive dialog

○ : Content rating can be set.

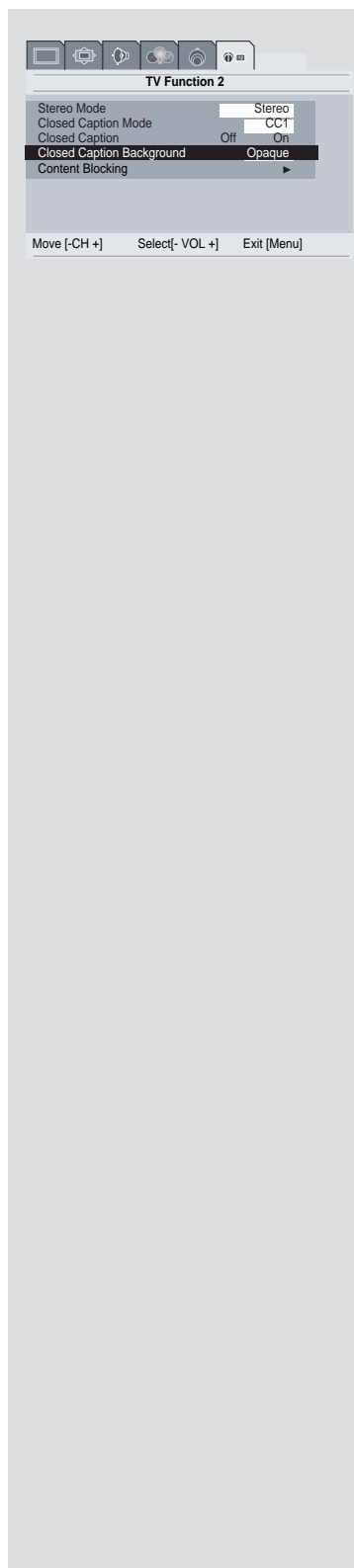
○ : The content rating can be set, but this rating is not normally broadcast by TV station.



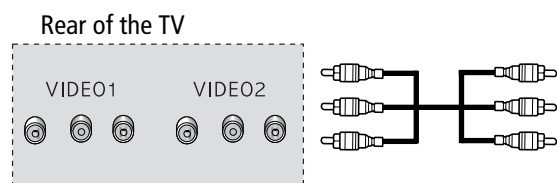
Closed Caption Background

You can choose the Closed Capion Background to be Transparent or Opaque.

- 1** Press the MENU button.
- 2** Press the VOL+/- button to select TV Function2.
the option available in the TV Function2 group are displayed.
- 3** Press the CH- button to select the options in the TV Function2 group.
- 4** Select the Closed Caption Background by CH+ button.
- 5** Press the VOL+/- button to select the option.(Transparent, Opaque)

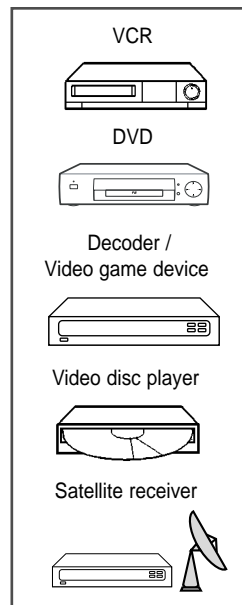


Connecting to the External Devices



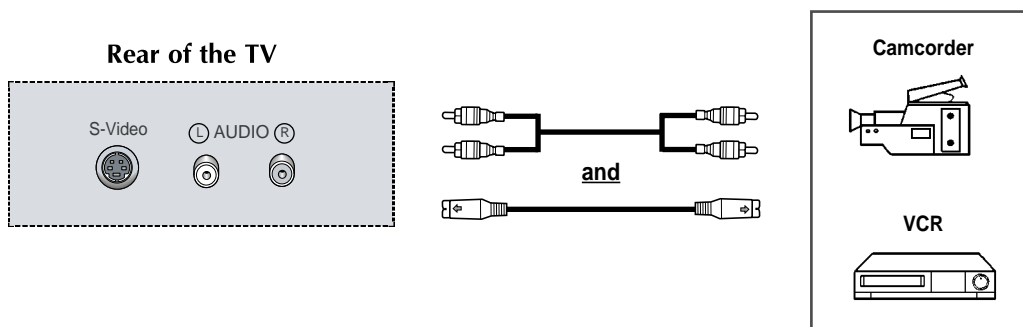
Input Specification

Connector	Input	
	Video	Audio (L/R)
VIDEO1	✓	✓
VIDEO2	✓	✓



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.

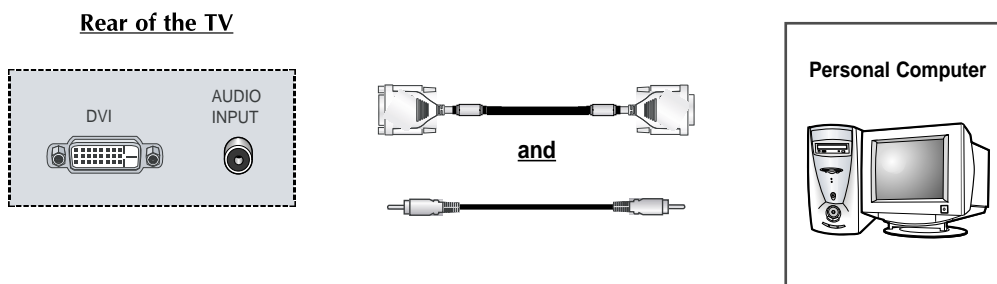


- ① To play picture and sound, both the S-VIDEO and RCA connectors must be used.

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.

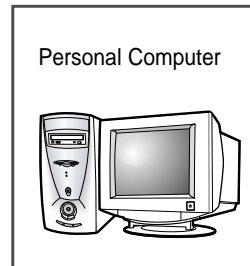
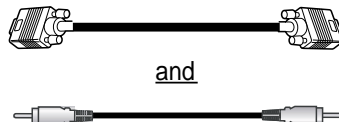
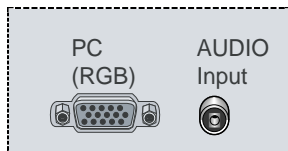
Connecting to the DVI Input

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

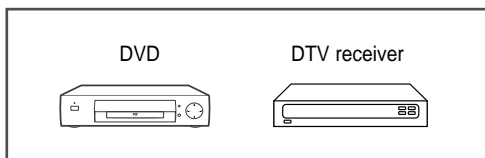
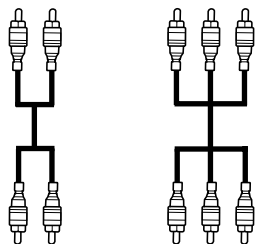
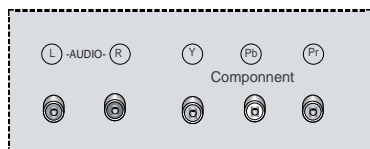


Connecting to the RGB Input

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



Connecting to the Component Input



The Component Input connectors are used for equipment with a DVD output or DTV receiver.

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.



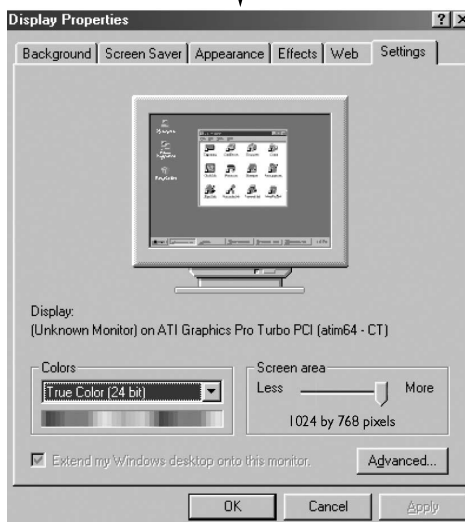
Select the Settings tab in the display dialog-box.

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")
 - 640 x 480 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
SDTV 480p	720 x 480	31.470	59.940	27.000
SDTV 575p	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

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 575i	720 x 576	15.630	25.000	13.5000
SDTV 480p	720 x 480	31.470	59.940	27.000
SDTV 575p	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

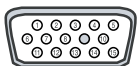
Input Mode (RGB/DVI)continued

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

PDP TV

ITEM			SPECIFICATIONS	
			OP-42TN1U(SD)	OP-42TN2U(HD)
Display	Screen Size(Active Area)		42"(920 mm(H)x 518.4 mm(V))	
	Aspect ratio		16:9	
	Number of Pixels		852 (H)x 480 (V)	1024(H) x 768(V)
	Pixel Pitch		1080 μ m (H)x 1080 μ m (V)	900 μ m(H) x 676 μ m(V)
	Displayable Colors		16.77 million colors	107.31million colors
	Brightness		1000 cd/m ²	
	Contrast Ratio		3000:1	
	Color Temperature		9500 K	
	Viewing Angle		Over 170 degrees	
In/Out Terminals	DVI Input	DVI 24-pin x 1	Digital RGB :TMDS 1024 X 768/75 Hz (XGA)	
	RGB Input	D-Sub 15-pin x1	RGB : 0.7V [p-p](75 Ω), H/CS/V : TTL (2.2 k Ω), SOG : 1V [p-p](75 Ω), 1024 X 768/75 Hz (XGA)	
	Audio Input	Ear Jack x 1	0.5V [rms] ((L+R)	
	Speaker Output	External Speaker	10W(L)+10W(R)[RMS] /8 Ω 2 Way 2 Speaker System	
	S-Video Input	Mini DIN 4-pin x1	Y:1V [p-p] (75 Ω), C : 0.286V [p-p] (75 Ω)[NTSC] C : 0.3V [p-p] (75 Ω)[PAL/SECAM] [NTSC/PAL/SECAM]	
	Component Input	RCA-pin x 1	Y:1V [p-p](75 Ω), Pb/Cb :0.7V [p-p](75 Ω), Pr/Cr :0.7V [p-p](75 Ω) EDTV :525i(480i), 625i(576i) SDTV :625p(576p), 525p(480p) HDTV :750p(720p), 1125i(1035i,1080i)	
	Audio Input	RCA-pin x 1	0.5V [rms] ((L +R)	
	Video Input	RCA-pin x 2	Video :1V [p-p] (75 Ω) Audio :0.5V [rms] (L+R)	
	Antenna Input	DIN -Type x 1	Analog Air/Cable (75 Ω)[Unbalanced] NTSC-M	
General	Power Supply		AC 100V ~240V,50/60Hz	
	Power Consumption (Typical)		300W	330W
	Dimensions (W x H x D)	Without Stand	1028 mm x 625 mm x 89.8 mm	
		With Stand	1028 mm x 692.5 mm x 270 mm	
	Weight	Without Stand	35 kg	
		With Stand	40.5 kg	
Environment Condition	Temperature	Operational	0° ~ 40°C	
		Storage	-5° ~ 50°C	
	Humidity	Operational	20 ~80%(Without condensation)	
		Storage	10 ~90%(Without condensation)	
	Pressure	Operational Storage	800 ~ 1000 hPa(Altitude : 0~2,000m)	

* The specifications are subject to change without notice

Technical Specifications (continued)

External Speaker(Optional)

Item	Specifications
Dimensions (W x H x D)	100 mm x 100 mm x 630 mm
Weight	5 kg (L +R)
Type	2 Way 2 Speaker System
Input	10 W (RMS)
Impedence	8 Ω
Output Sound Pressure	87 dB/W/M
Frequency Response	45 Hz ~20 KHz

* The specifications are subject to change without notice

Accessories

Standard	Owner's Instructions, Remote Controller/AAABatteries, Power Cord
Optional	Table-Top stand, Wall-Mount Bracket, Ceiling-Mount Bracket, External Speaker System. Audio cable, Component cable.

* The specifications are subject to change without notice

FCC RF INTERFERENCE STATEMENT

NOTE :

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation.

This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation.

If this equipment does cause harmful interference to radio or television reception which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures.

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio, TV technical for help.
- Only shielded interface cable should be used.

Finally, any changes or modifications to the equipment by the user not expressly approved by the grantee or manufacturer could void the users authority to operate such equipment,