



# SAMSUNG PLASMA DISPLAY

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Owner's Instructions  
**SPP4251**



# Important Warranty Information Regarding Television Format Viewing

Wide screen format PDP Displays (16:9, the aspect ratio of the screen width to height) are primarily designed to view wide screen format full-motion video. The images displayed on them should primarily be in the wide screen 16:9 ratio format, or expanded to fill the screen if your model offers this feature and the images are constantly moving. Displaying stationary graphics and images on screen, such as the dark side-bars on nonexpanded standard format television video and programming, should be limited to no more than 5% of the total television viewing per week.

Additionally, viewing other stationary images and text such as stock market reports, video game displays, station logos, web sites or computer graphics and patterns, should be limited as described above for all televisions. **Displaying stationary images that exceed the above guidelines can cause uneven aging of PDP Displays that leave subtle, but permanent burned-in ghost images in the PDP picture. To avoid this, vary the programming and images, and primarily display full screen moving images, not stationary patterns or dark bars.** On PDP models that offer picture sizing features, use these controls to view different formats as a full screen picture.

Be careful in the selection and duration of television formats used for viewing. Uneven PDP aging as a result of format selection and use, as well as burned-in images, are not covered by your Samsung limited warranty.

## 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 display panel for more than several minutes as it can cause screen image retention. This image retention is also known as "screen burn". To avoid such image retention, refer to page 40 of this manual to 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.

### ● Altitude

The PDP will not operate normally at altitudes above 6500 ft.

### ● Warranty

Warranty does not cover any damage caused by image retention. Burn-in is not covered by the warranty.

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P L A S M A   D I S P L A Y   P A N E L

# General Information

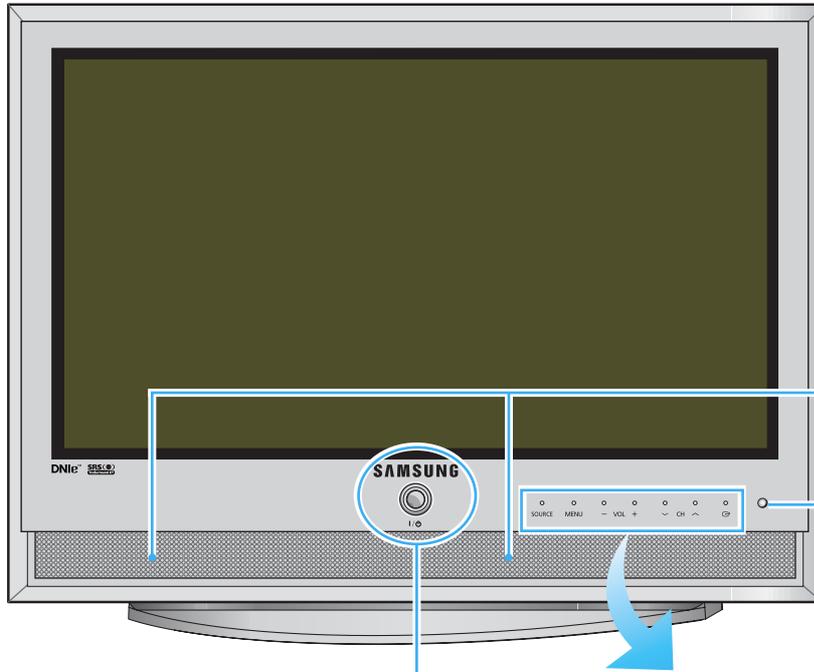


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# Your New Plasma Display Panel

## Front Panel



**Speakers**

**Remote Control Signal Receiver**

Aim the remote control towards this spot on the PDP.



Press to turn the PDP on and off.

**Power Indicator**

- Power Off: Blue
- Power On: Off

**SOURCE button**

Press to display all of the available video sources (TV, AV1, AV2, AV3, S-VIDEO1, S-VIDEO2, COMPONENT1, COMPONENT2, PC, DVI).

**MENU button**

Displays the main on-screen menu.

**VOL(+,-) button**

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

**CH(^, v) button**

Press CH^ or CH v to change Channels. Also used to move up or down in the On-screen menu.

**ENTER( ) button**

Press to confirm a selection.

## Checking Accessories

Once you have unpacked your PDP, check to make sure that you have all the parts shown here. If any piece is missing or broken, call your dealer.



Owner's Instructions (BN68-00618A)



Remote Control/AAA Batteries (BN59-00377D)



Power Cord (3903-000144)



Antenna Cable (BN39-00333A)

**Sold Separately**



S-VIDEO Cable



DVI Cable



Component Cables (RCA)

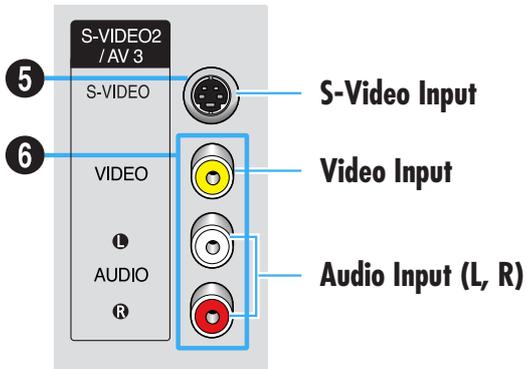


PC Cable

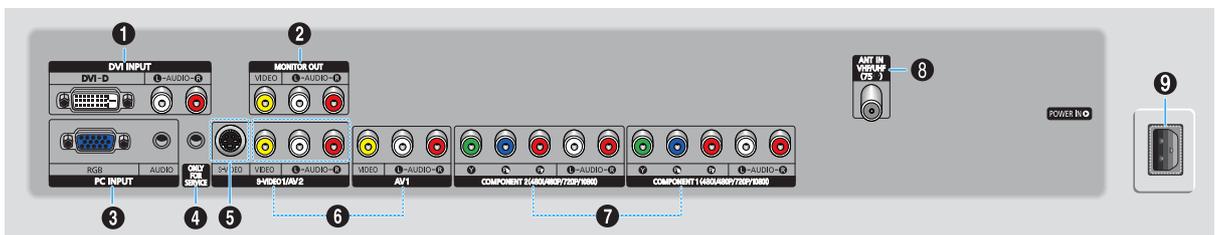


PC Audio Cable

## Side of the TV



## Rear Panel



### 1 DVI INPUT (DVI-D / L-AUDIO-R)

Connect to the digital video and audio output jack for device with DVI output.

### 2 MONITOR OUT (VIDEO / L-AUDIO-R)

Outputs for external devices

### 3 PC INPUT (RGB IN / AUDIO)

Connect to the video and audio output jack on your PC.

### 4 FOR SERVICE ONLY

Connector for service only.

### 5 S-VIDEO1, S-VIDEO2 (S-VIDEO1 or S-VIDEO2 / L-AUDIO-R)

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

### 6 AV1, AV2, AV3 (VIDEO / L-AUDIO-R)

Video and audio inputs for external devices, such as a camcorder or VCR.

### 7 COMPONENT1, COMPONENT2

Video (Y/Pb/Pr) and audio (L-AUDIO-R) inputs for Component.

### 8 ANT IN VHF/UHF (75Ω)

75Ω Coaxial connector for Antenna/Cable Network.

### 9 POWER IN

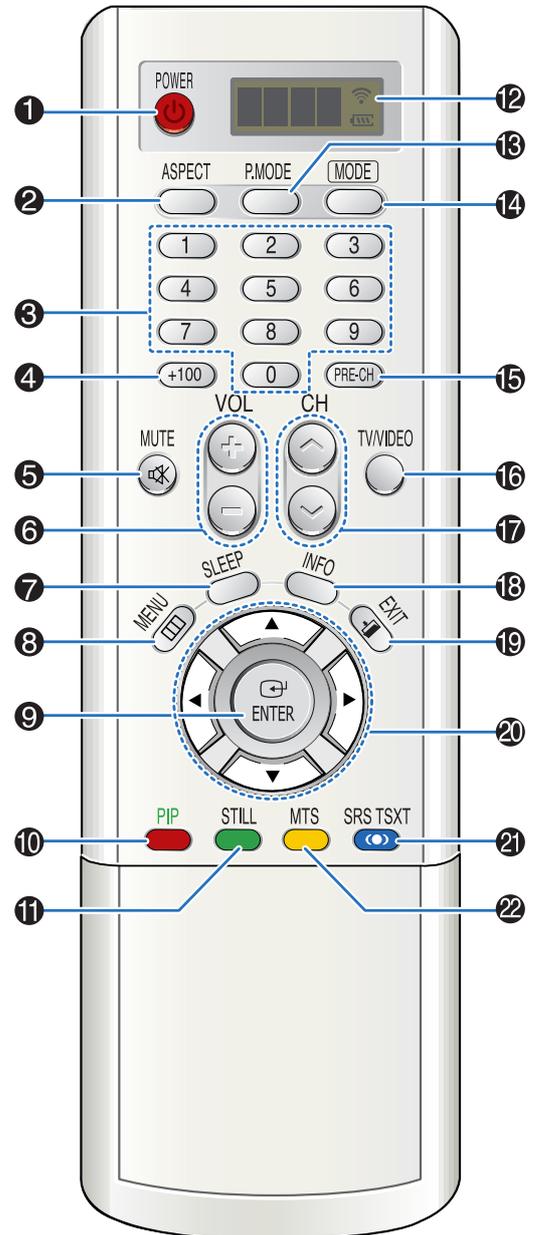
Connect the supplied power cord.



# Remote Control Buttons

## Remote Control

- 1 POWER button**  
Turns the PDP on and off.
- 2 ASPECT button**  
Press to change the screen size.
- 3 Number buttons**
- 4 +100 button**  
Press to select channels over 100. For example, to select channel 121, press "+100", then press "2" and "1."
- 5 MUTE button**  
Press to mute the PDP sound.
- 6 VOL (Volume) buttons**  
Use it to adjust volume.
- 7 SLEEP button**  
Press to select a preset time interval for automatic shutoff.
- 8 MENU button**  
Displays the main on-screen menu.
- 9 ENTER button**  
Confirms a selection.
- 10 PIP button**  
Activates picture in picture.
- 11 STILL button**  
Press to pause the current screen.
- 12 LCD Display**  
When you press a button, 'Wi-Fi' appears along with selected mode (TV, VCR, CATV, DVD or STB) and remaining batteries on LCD.
- 13 P.MODE button**  
Adjust the PDP picture by selecting one of the preset factory settings (or select your personal, customized picture settings.)
- 14 MODE button**  
Selects a target device to be controlled by the Samsung remote control (ie., VCR, Cable, DVD players or STB). If you change modes, the new mode is momentarily displayed on LCD.
- 15 PRE-CH button**  
Tunes to the previous channel.
- 16 TV/VIDEO button**  
Press to display all of the available video sources (TV, AV1, AV2, AV3, S-VIDEO1, S-VIDEO2, COMPONENT1, COMPONENT2, PC, DVI).
- 17 CH (Channel) buttons**  
Use it to switch channels.
- 18 INFO button**  
Press to display information on the PDP screen.
- 19 EXIT button**  
Press to exit the menu.
- 20 Up/Down Left/Right buttons**  
Control the cursor in the menu.



# Plasma Display

## 21 SRS TSXT button

Selects Trusurround XT mode.

## 22 MTS button

Press to choose stereo, mono or Separate Audio Program (SAP broadcast).

## 23 AUTO PROG. button

The TV automatically cycles through all of the available channels and stores them in memory.

## 24 ADD/DEL button

Press to add or delete channels in the TV's memory.

## 25 DNIe button

Activates DNIe (Digital Natural Image engine).

## 26 CAPTION button

Controls the caption decoder.

## 27 SET button

Used during set up of this Samsung remote control, so that it will work compatibly with other devices (VCR, cable box, DVD)

## 28 PIP control buttons

**SWAP** : Exchanges the video signal that is currently displayed on the main screen with the signal in the PIP window.

**SIZE** : Press to make the PIP window Large, Small or Double.

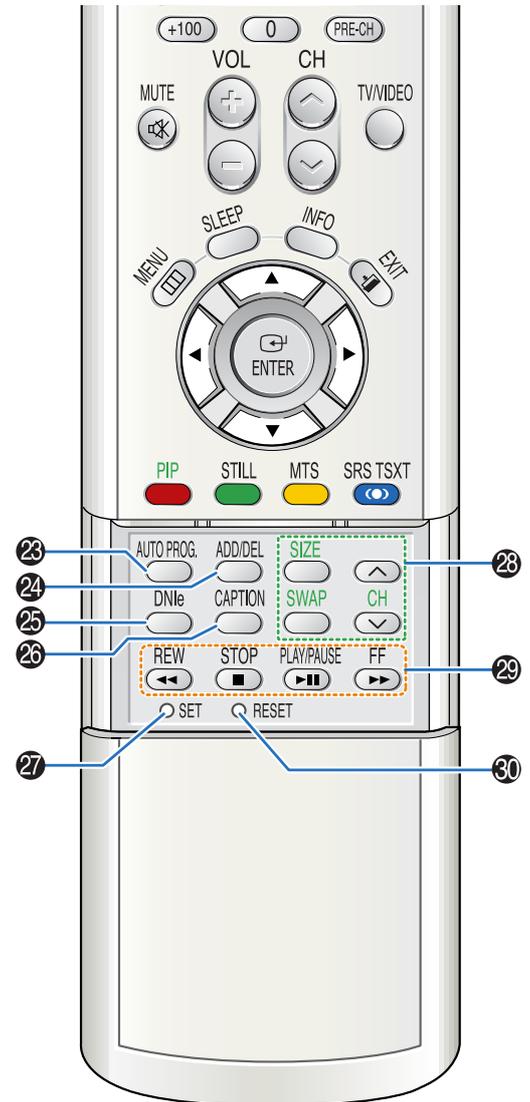
**CH**  $\wedge$ ,  $\vee$  : Displays the available channels in sequence. (These buttons change channels in the PIP window only).

## 29 VCR, DVD control buttons

Controls VCR tape or DVD disc functions: Stop, Rewind, Play/Pause, Fast Forward.

## 30 RESET button

If your remote control is not functioning properly, take out the batteries and press the reset button for about 2~3 seconds. Re-insert the batteries and try using the remote control again.

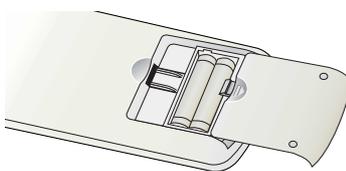


## Installing the Batteries in Your Remote Control

**1** Slide the back cover to open the battery compartment of the remote control.



**2** Install two AAA size batteries. Make sure to match the "+" and "-" ends of the batteries with the diagram inside the compartment.



**3** Slide the cover back into place.



### Remote Control Operation Range.

You can use your remote control within a distance of 23 feet and an angle of 30 degrees from the left and right sides of the PDP's remote control receiver.



# Wall Installation Instructions

## ● Installation Notes

- 
- 1 Do not install the PDP on any location other than a vertical wall.

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  - 2 To protect the performance of the PDP and prevent problems, avoid the following locations:
    - Do not install next to smoke and fire detectors.
    - Do not install in an area subjected to vibration or high voltage.
    - Do not install near or around any heating apparatus.

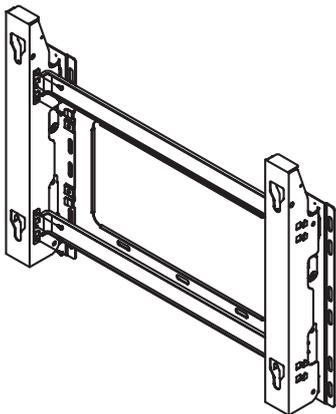
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  - 3 Use only recommended parts and components.

➤ This wall mount bracket installation guide is for the following model : SPP4251

## ● Parts (Wall attachment panel is sold separately. Check with your dealer)

### Wall Mount Bracket



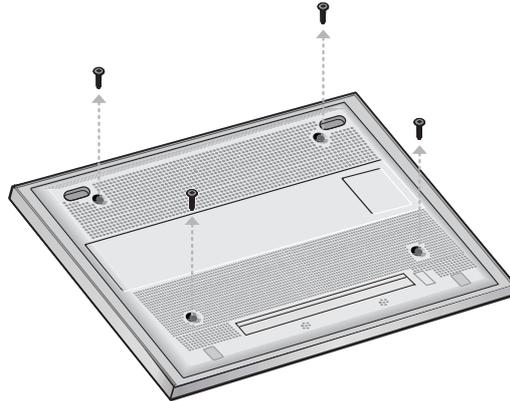
Insulation Holder ; 4 EA



Screws ; 4 EA

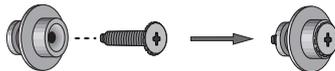
## ● Fixing the PDP panel to the wall attachment panel bracket

1 Remove the screws from the back of the PDP.

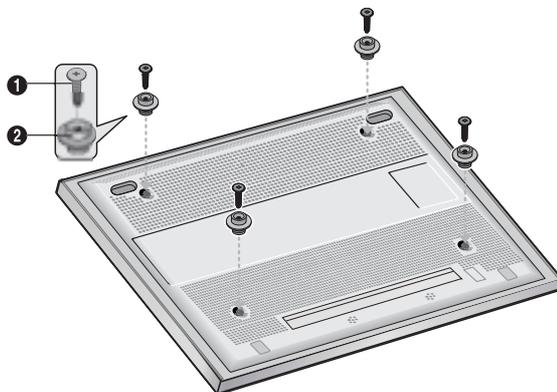


2 Connect insulation holders to screws (see the illustration below).

- If you are uncertain about installation, hire a specialist to install the wall mount bracket.
- Be sure to check that the insulation holders are completely secured on both the left and right side after hanging the PDP on the wall mount bracket.
- Be careful to avoid getting your fingers caught during installation.
- Make sure the wall attachment panels are tightened. Otherwise the PDP may fall.



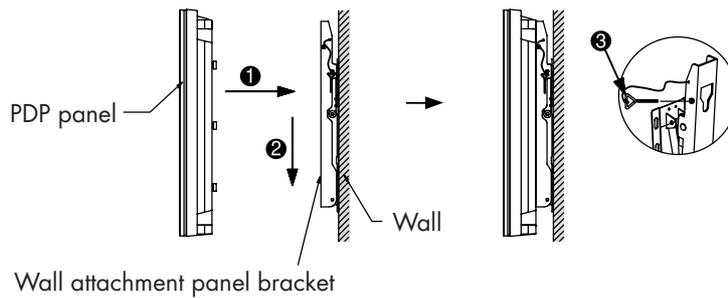
3 Tighten the screws of the insulation holders to the back of the PDP.



### **Note**

- A 5 inch gap is needed between the back of the Plasma TV and the wall.

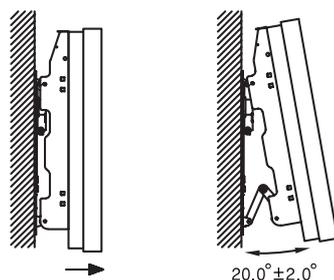
- 
- 4** Put the 4 insulation holders on the PDP in the grooves of the wall mount bracket and pull down on the PDP (1) to secure it to the wall mount bracket (2). Tighten the screws as shown (3) so that the PDP cannot be separated from wall mount bracket.



## ● Connecting External Devices to the PDP

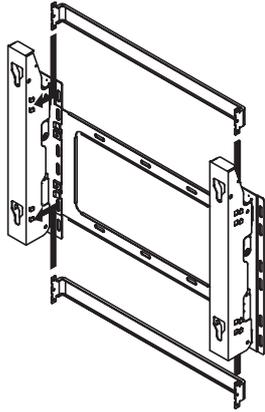
To connect external devices such as a DVD or a Home Theater System to the PDP, please refer to following instructions:

- 
- 1** Be sure to remove the safety pins underneath the PDP.
- If the safety pins are not removed, the angle cannot be adjusted. Any attempt to do so may cause damage to the PDP.
- 
- 2** Pull out the bottom of the PDP (which has been attached to the Wall Mount Bracket) in the direction indicated by the arrows (refer to the illustration) until it clicks.
- Using the PDP After Connecting External Devices.  
Be sure to secure the PDP by inserting the 2 locking pins after readjusting the angle of the PDP to 0°.
  - For safety, be sure to secure the PDP using the locking pins.  
If the safety pins are not used, the PDP may fall, causing serious injury.



## ● How to Adjust Mounting Angle

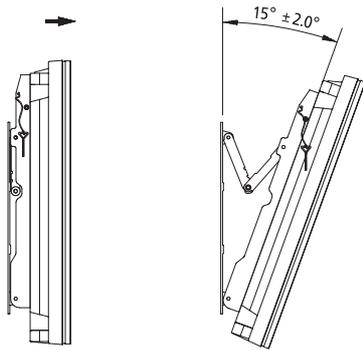
### Factory default



The wall mount bracket is delivered separately. Please tighten the captive screw in the direction of the arrow after assembling the bracket.

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### Changing the angle

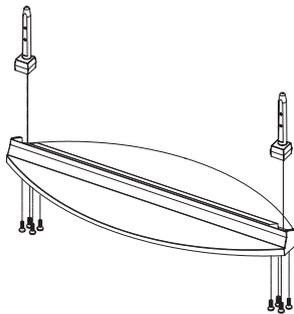


- 1 Secure the PDP to the wall mount bracket. (Please refer to the following instructions.)
- 2 Set the angle by pulling the upper end of the PDP attached to bracket in the direction of the arrow.
- 3 The angle can be adjusted from 0° to 15° by  $\pm 2^\circ$ .

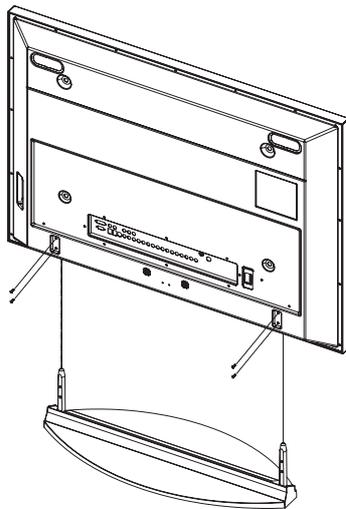


# How to assemble the Stand-Base

- 1 Assemble two support pins with the stand base and firmly secure both sides of the support pins using 8 screws provided.



- 2 Assemble the PDP with the stand and firmly secure the PDP using 4 screws provided.



▶ Two or more people should carry the PDP. Never lay the PDP on the floor because of possible damage to the screen. Always store the PDP upright.

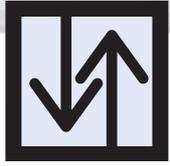
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P L A S M A   D I S P L A Y   P A N E L

**Connections**



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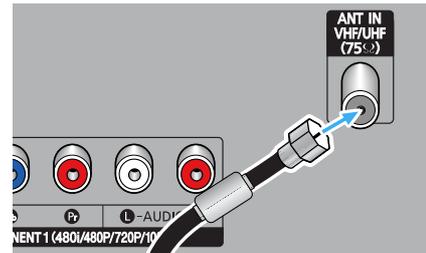


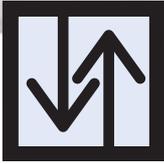
# Connecting VHF and UHF Antennas

## Antennas with 75-ohm Round Leads

If your antenna looks like this:  it has 75-ohm round leads.

- 1 Plug the antenna lead into the VHF/UHF terminal on the PDP.  
Use the Antenna Cable, an accessory included in the product package.



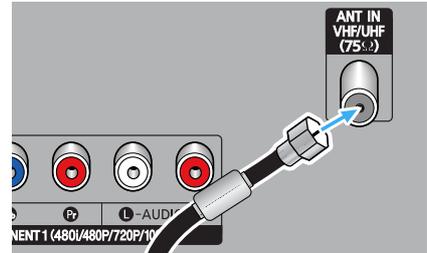


## Connecting Cable TV

You can connect different cable systems to your PDP, including cable without a cable box, and cable with a cable box that descrambles some or all channels.

### Cable without a Cable Box

- 1 Plug the incoming cable into the VHF/UHF terminal on the PDP.  
Use the Antenna Cable, an accessory included in the product package.

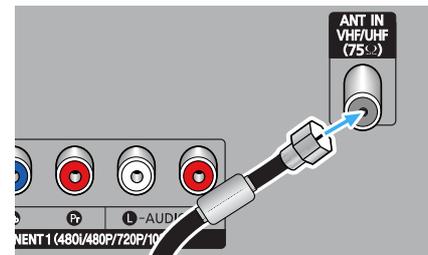


### Cable with a Cable Box that Descrambles All Channels.

- 1 Find the cable connected to the ANTENNA OUT terminal on your cable box. This terminal might be labeled "ANT OUT", "VHF OUT" or simply "OUT".



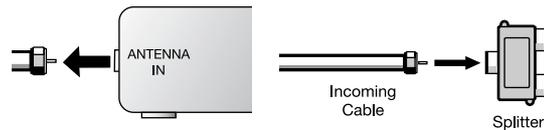
- 2 Connect the cable to the VHF/UHF terminal on the PDP.  
Use the Antenna Cable, an accessory included in the product package.



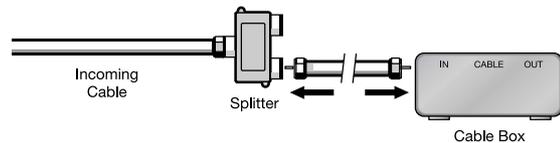
## Cable with a Cable Box that Descrambles Some (But Not All) Channels

To complete this connection you will need a two-way splitter, an RF (A/B) switch, and four coaxial cables (which you can buy from your Samsung dealer or any electronics store).

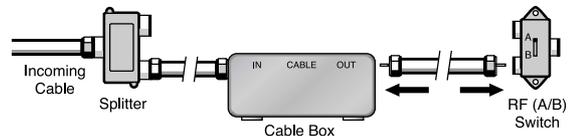
- 1 Find and disconnect the cable that is connected to the ANTENNA IN terminal of your cable box. This terminal might be labeled "ANT IN", "VHF IN" or simply, "IN". Connect this cable to a two-way splitter.



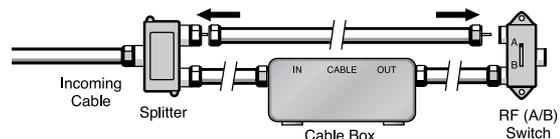
- 2 Connect a coaxial cable between an OUTPUT terminal of the splitter and the IN terminal of the cable box.



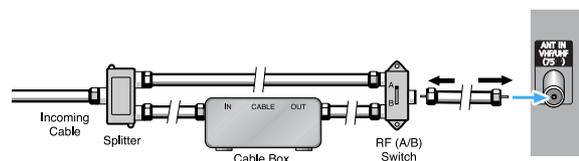
- 3 Connect a coaxial cable between the ANTENNA OUT terminal of the cable box and the B-IN terminal of the A/B switch.



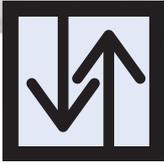
- 4 Connect a coaxial cable between the ANTENNA OUT terminal of the cable box and the B-IN terminal of the A/B switch.



- 5 Connect the last coaxial cable between the OUT terminal of the RF (A/B) switch and the VHF/UHF terminal on the PDP.

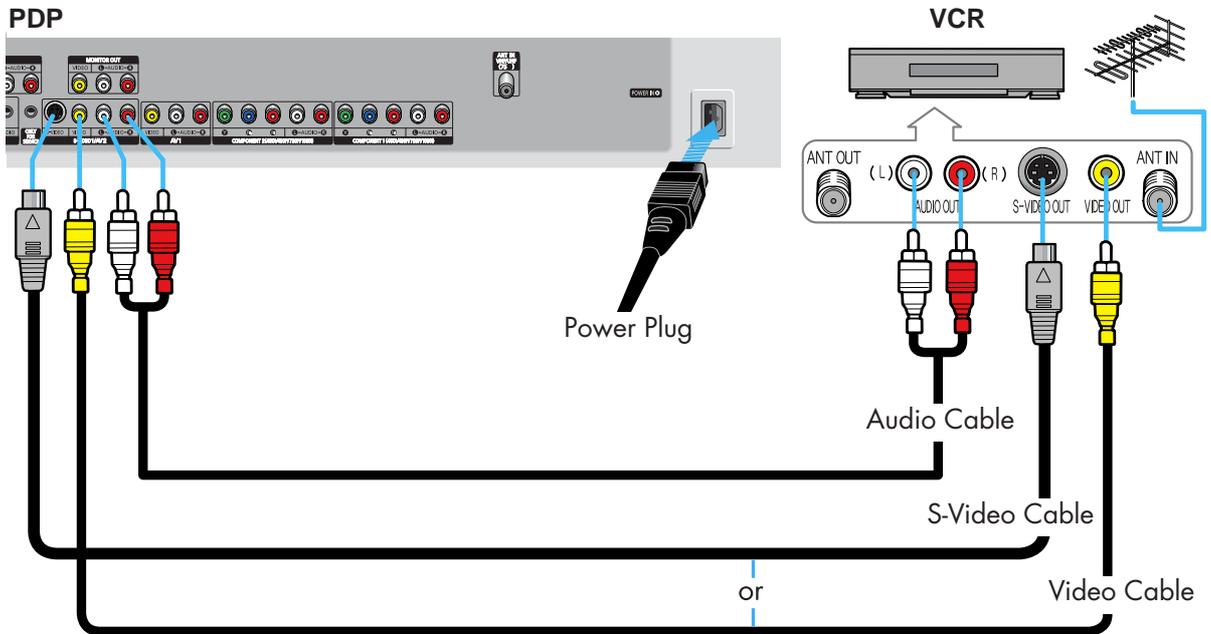


After you've made this connection, set the A/B switch to the "A" position for normal viewing. Set the A/B switch to the "B" position to view scrambled channels. (When you set the A/B switch to "B", you will need to tune your Set-Top Box to the cable box's output channel, which is usually channel 3 or 4.)



## Connecting a VCR

### Connecting a VCR to the Video or S-Video/Audio jack

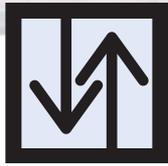


### How to Connect

Connect the Video/Audio cables between the AUDIO(L/R)/VIDEO jacks on the PDP and AUDIO/VIDEO OUT jacks on the VCR. (Note: For better video, you can use an S-Video cable.)

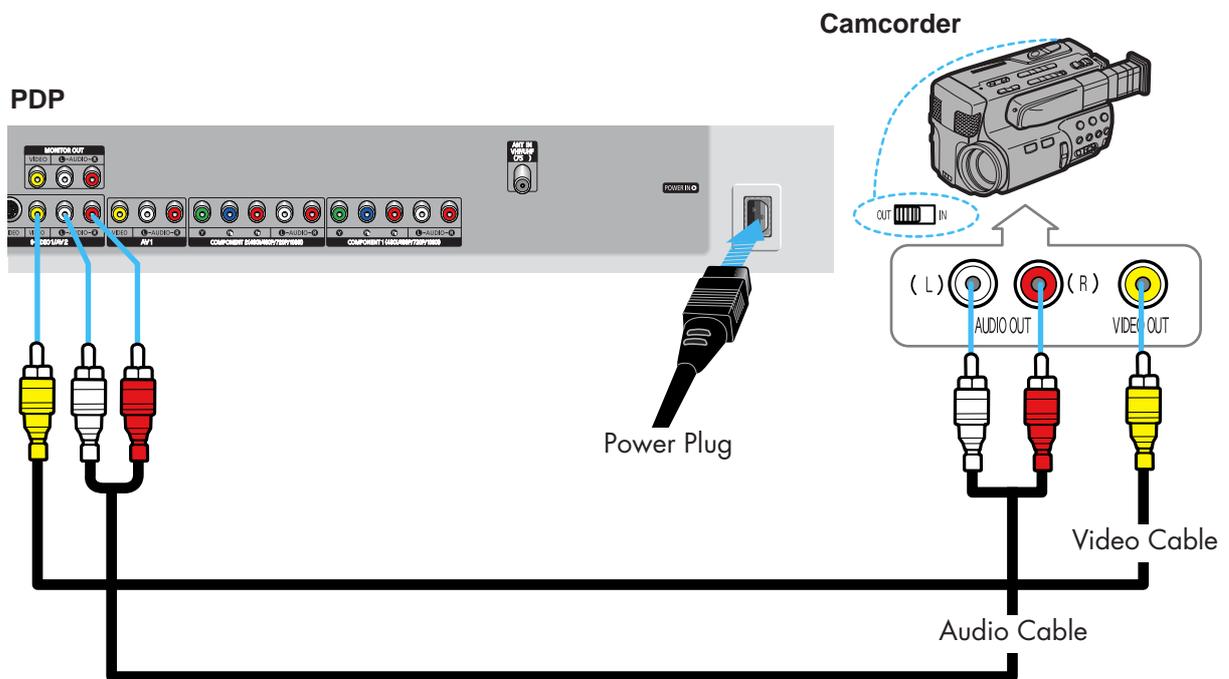
#### Videotape Playback:

1. Turn on your PDP.
2. Press the TV/VIDEO button to select "Video" or "S-Video".
3. Turn on your VCR, insert a videotape and press the play button.



# Connecting a Camcorder

## Viewing camcorder tapes

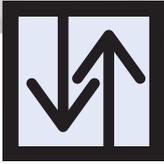


## How to Connect

Connect a Video/Audio cable between the AUDIO(L/R)/VIDEO jacks on the PDP and the VIDEO/AUDIO OUTPUT jacks on the camcorder.

### Viewing Tapes

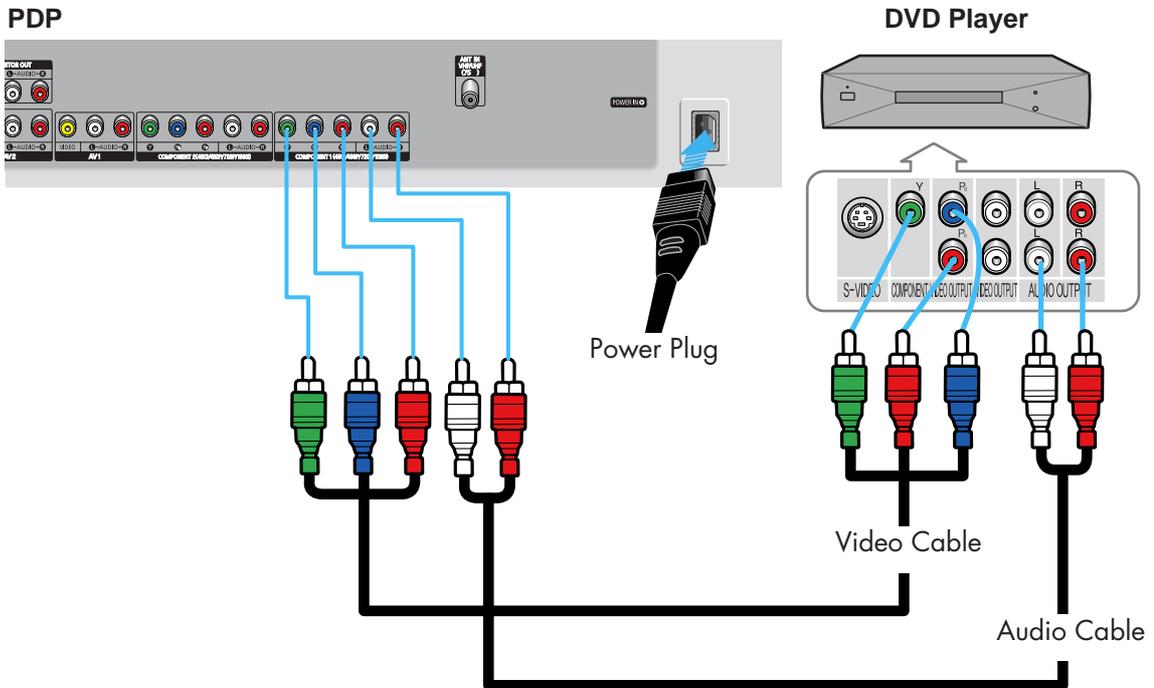
1. Turn on your PDP.
2. Press the TV/VIDEO button to select "Video".
3. Turn on your camcorder and set it to Video Mode. (For details, refer to your camcorder Owner's instructions.)
4. Set the IN/OUT switch on your camcorder to OUT.
5. Insert the tape into the camcorder and press the Play button.



## Connecting a DVD Player (480i, 480p)

This PDP displays the optimum picture in 720p mode.

### Playing DVD

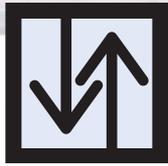


### How to Connect

- 1 Connect a Video Cable between the Y, P<sub>b</sub>, P<sub>r</sub> (COMPONENT1, 2) input jacks on the PDP and Y/P<sub>b</sub>/P<sub>r</sub> output jacks on the DVD player.
- 2 Connect a Audio Cable between the AUDIO L/R(COMPONENT1, 2) input jacks on the PDP and the AUDIO OUT jacks on the DVD player.

#### To Play DVD:

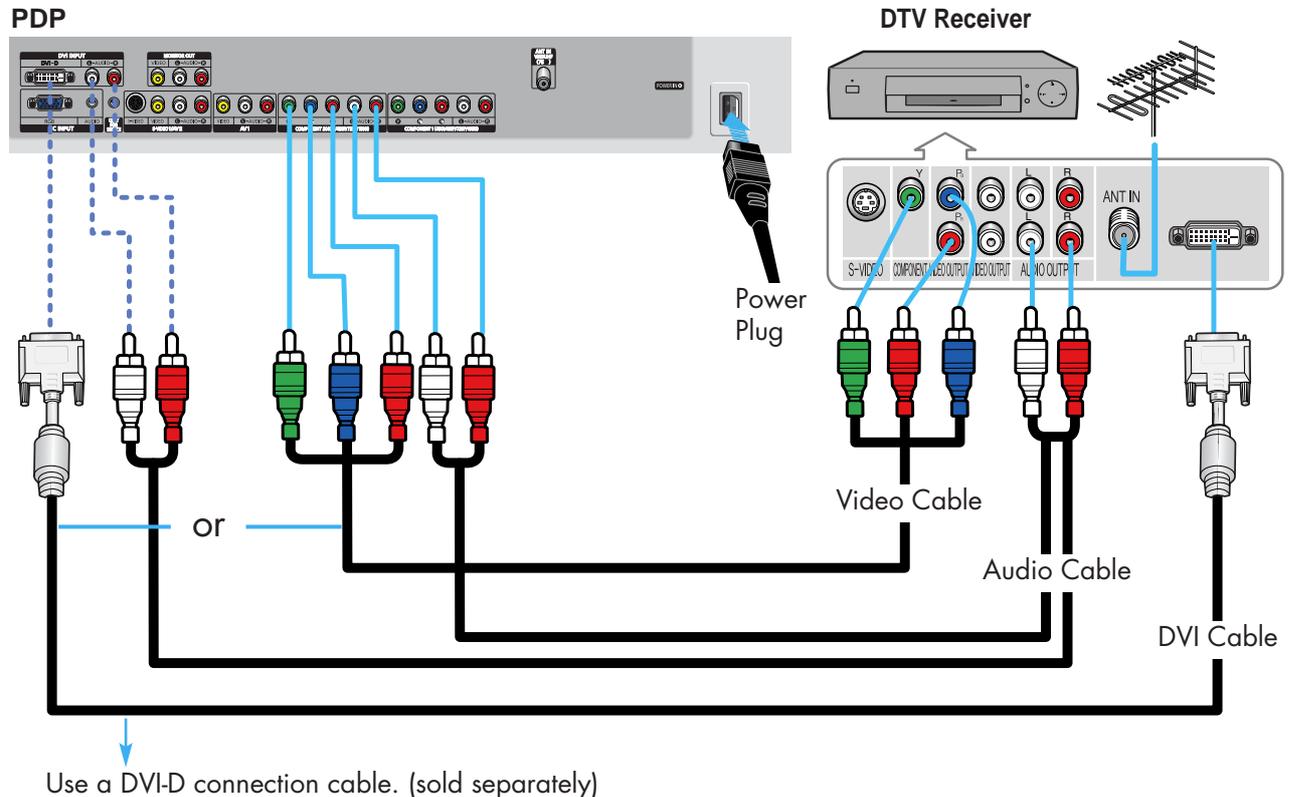
1. Turn on your PDP.
2. Press the TV/VIDEO button to select "COMPONENT1" or "COMPONENT2".
3. Turn on your DVD player, insert a DVD disc and press the Play button.
  - For an explanation of Component video, see your DVD owner's instructions.



# Connecting a DTV Receiver (480p, 720p, 1080i)

This PDP displays the optimum picture in 720p mode.

## Watching DTV



### How to Connect

- 1 Connect the cable or antenna to the antenna input jack on the DTV.
- 2 Connect a Video cable between the Y, P<sub>b</sub>, P<sub>r</sub> (COMPONENT 1, 2) or DVI jack on the PDP and the Y, P<sub>b</sub>, P<sub>r</sub> (VIDEO OUTPUT JACKS) on the DTV receiver.
- 3 Connect an Audio cable between the COMPONENT 1, 2 (L/R AUDIO) or DVI jacks on the PDP and the AUDIO OUTPUT jacks on the DTV receiver.

#### To Watch DTV:

1. Turn on your PDP.
2. Press the TV/VIDEO button to select "COMPONENT1", "COMPONENT2" or "DVI".
3. Turn on your DTV receiver.
  - For an explanation of Component video, see your DTV receiver owner's instructions.

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P L A S M A   D I S P L A Y   P A N E L

# Operation



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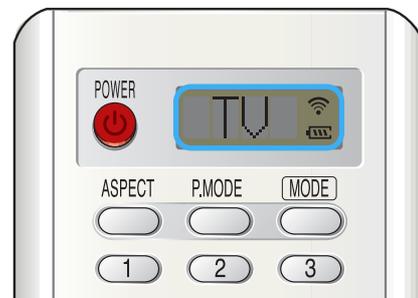
# Turning the PDP On and Off

## Turning the PDP On and Off

Press the POWER button on the remote control.  
The PDP will be turned on and you will be ready to use its features.  
You can also use the POWER (I/O) button on the front of the PDP.

### Notes:

- If your PDP isn't turned on when the power button is pressed: Press the **MODE** button to check if the TV mode has been chosen (  ).

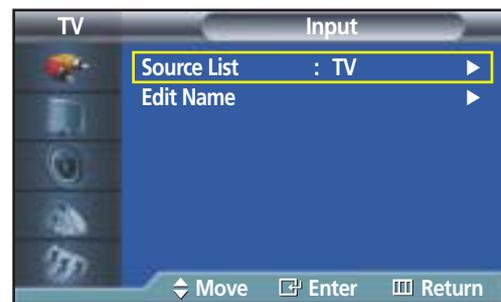


## Viewing the Menus and Displays

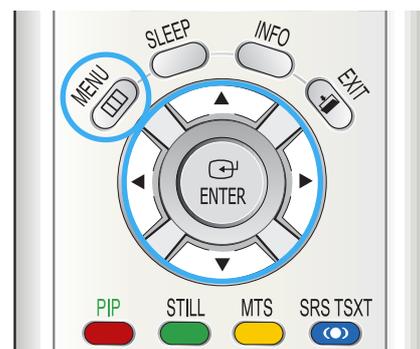
Your PDP has a simple, easy-to-use menu system that appears on the PDP screen. This system makes it convenient and fast to use features on the PDP. Your PDP also lets you display the status of many of your PDP's features.

### Viewing the Menus

- 1 With the power on, press the MENU button on the remote control. The main menu appears on the screen. The Input menu is selected.

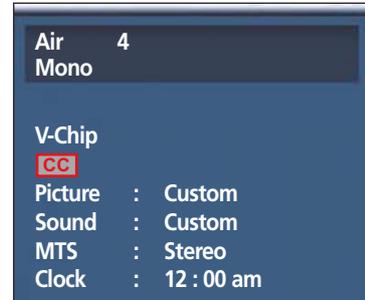


- 2 Press the ▲ or ▼ buttons to move items in the menu. Press the ◀/▶/ENTER buttons to display, change, or use the selected items. Press the ENTER (  ) button to enter items in the menu. On screen menus disappear from the screen automatically after about thirty seconds, or you can press the MENU or EXIT button on your remote control to exit the menu.



## Displaying Status Information

Press the INFO button on the remote control.  
The PDP will display the Picture mode, Sound mode, MTS, Caption, and Clock.





# Plug & Play Feature

When the television is initially powered ON, several basic customer settings proceed automatically and subsequently. The following settings are available.

1 If the television is in Standby mode, press the POWER button on the remote control.

➤ The message Start Plug & Play is displayed. It flickers for a little while, and then the Language menu is automatically displayed.

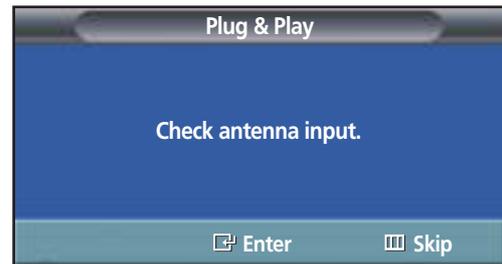


2 Select the appropriate language by pressing the ▲ or ▼ button.

➤ The message Check antenna input is displayed.

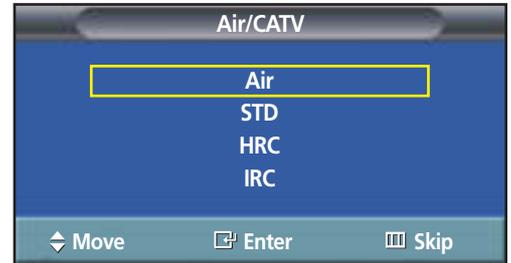


3 Press the ENTER button to confirm your choice.



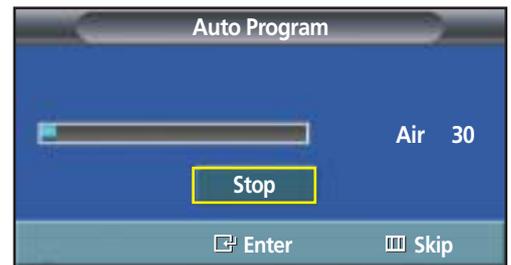
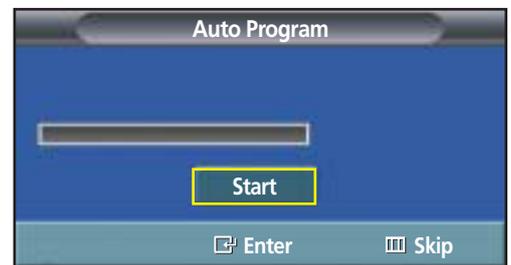
4 Press the ENTER button.

- 5 Select the correct signal source (Air, STD, HRC and IRC), then press the ENTER button.

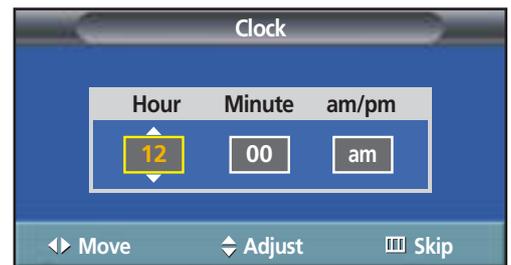


- 6 To start the search, press the ENTER button.

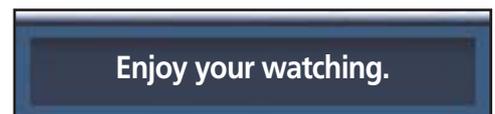
- The search will end automatically. Channels are sorted and stored in an order which reflects their position in the frequency range (with lowest first and highest last). When it has finished, the Clock Set menu is displayed.
- To stop the search before it has finished or return to normal viewing, press the MENU button.



- 7 Press the ENTER button.  
Press the ◀ or ▶ button to move to the Hour, Minute, or am/pm.  
Set the Hour, Minute, or am/pm by pressing the ▲ or ▼ button.



- 8 When it has finished, the message Enjoy your watching is displayed, and the channels which have been stored can be viewed.

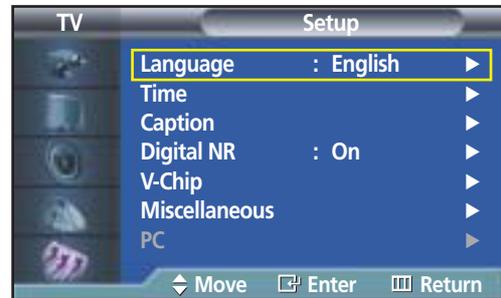




# Plug & Play Feature (continued)

If you want to reset this feature...

- 1 Press the MENU button. Press the ▲ or ▼ button to select "Setup", then press the ENTER button.



- 2 Press the ▲ or ▼ button to select "Miscellaneous", then press the ENTER button.



- 3 Press the ▲ or ▼ button to select "Plug & Play". Press the ENTER button.



- 4 For further details on how to set, refer to the previous page.



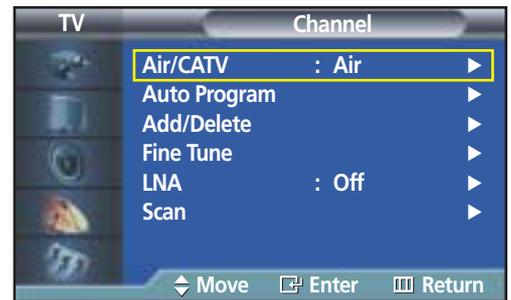
## Memorizing the Channels

Your PDP can memorize and store all of the available channels for both “off-air” (antenna) and cable channels. After the available channels are memorized, use the CH ^ and CH v buttons to scan through the channels. This eliminates the need to change channels by entering the channel digits. There are three steps for memorizing channels: selecting a broadcast source, memorizing the channels (automatic) and adding and deleting channels (manual).

### Selecting the Video Signal-source

Before your television can begin memorizing the available channels, you must specify the type of signal source that is connected to the PDP (i.e., an antenna or a cable system).

- 1 Press the MENU button. Press the ▲ or ▼ button to select “Channel”, then press the ENTER button.



- 2 Press the ENTER button to select “Air/CATV”.



- 3 Press the ▲ or ▼ button to select “Air”, “STD”, “HRC” or “IRC”.
  - If you are connected to an antenna, leave “Air” displayed. If you connected cable, press the ▲ or ▼ button to the display the type of cable system: “STD”, “HRC” or “IRC”. (If you are not sure which type of cable system you have, contact your cable company).



- 4 Press the MENU button to exit.

#### Note

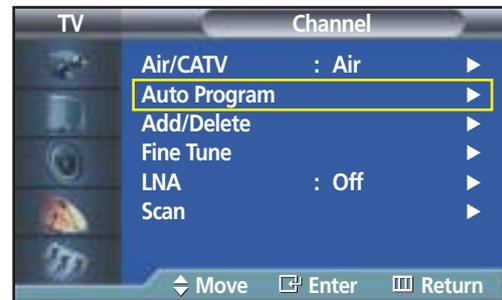
- STD, HRC and IRC identify various types of cable TV systems. Contact your local cable company to identify the type of cable system that exists in your particular area. At this point the signal source has been selected. Proceed to “Storing Channels in Memory” (Next page).

## Storing Channels in Memory (Automatic Method)

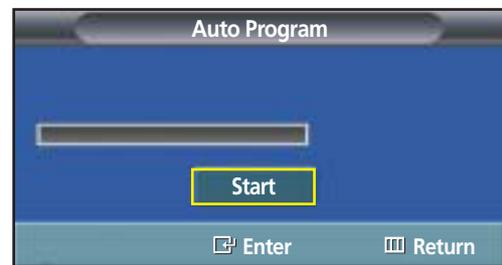
- 1 First, select the correct signal source (Air, STD, HRC and IRC). See steps on previous page. Press the MENU button. Press the ▲ or ▼ button to select "Channel", then press the ENTER button.



- 2 Press the ▲ or ▼ button to select "Auto Program", then press the ENTER button.  
➤ Quick way to access the Automatic Channel Setting: Just press the "AUTO PROG." button on the remote control.



- 3 Press the ENTER button. The PDP will begin memorizing all of the available channels. After all the available channels are stored, the Auto program menu reappears. Press the ENTER button to stop.



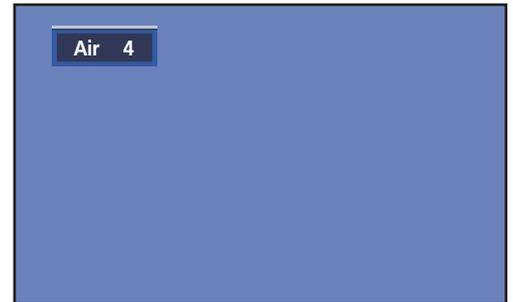
### **Note**

- The PDP automatically cycles through all of the available channels and stores them in memory. This takes about one to two minutes.

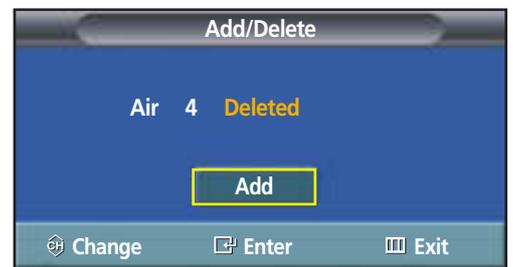
## Adding and Erasing Channels (Manual Method)

- 1 Use the number buttons to directly select the channel that will be added or deleted.

Ex) Channel "4"



- 2 Press the ADD/DEL button, then press the ENTER button. Repeatedly pressing this button will alternate between "Add" and "Delete".



- 3 Press the MENU button to exit.

### **Note**

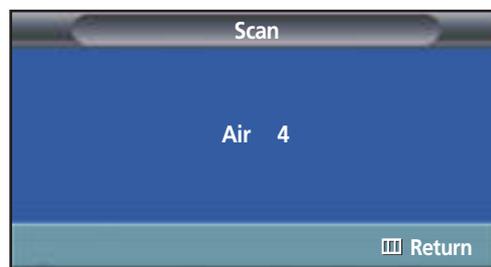
- You can view any channel (including an erased channel) by using the number buttons on the remote control.

## To View Memorized Channel (PIP Mode)

- 1 Press the MENU button. Press the ▲ or ▼ button to select "Channel", then press the ENTER button.



- 2 Press the ▲ or ▼ button to select "Scan", then press the ENTER button.  
Only the memorized channels are chosen.



- 3 Press the MENU button to stop.

## Changing Channels

### Using the Channel Buttons

Press the CH $\wedge$  or CH $\vee$  button to change channels.

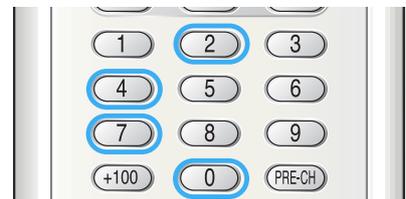
When you press the CH $\wedge$  or CH $\vee$  button, the PDP changes channels in sequence. You will see all the channels that the PDP has memorized. (The PDP must have memorized at least three channels.) You will not see channels that were either erased or not memorized.



### Directly Accessing Channels

Press the number buttons to go directly to a channel. For example, to select channel 27, press "2" then "7". The TV will change channels when you press the second number.

When you use the number buttons, you can directly select channels that were either erased or not memorized. To change to single-digit channels (0~9) faster, press "0" before the single digit. (For channel "4" press "0", then "4".)



### Using the PRE-CH button to select the previous channel

Press the PRE-CH button. The TV will switch to the last channel viewed.

To quickly switch between two channels that are far apart, tune to one channel, then use the number button to select the second channel. Then, use the PRE-CH button to quickly alternate between them.



## Adjusting the Volume

### Using the Volume Buttons

Press the VOL + or VOL - button to increase or decrease the volume.



## Using Mute

### Using the MUTE Buttons

At any time, you can temporarily cut off the sound using the MUTE button.

- 1 Press the MUTE button and the sound cuts off. The word "Mute" will appear in the lower-left corner of the screen.
- 2 To turn mute off, press the MUTE button again, or simply press the VOL + or VOL - button.





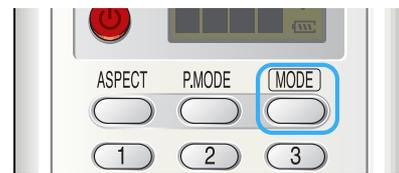
# Setting Up Your Remote Control

This PDP's remote control can operate almost any VCR, cable box or DVD. After it has been set up properly, your remote control can operate in four different modes :TV , VCR, Cable, DVD or STB. Pressing the corresponding button on the remote control allows you to switch between these modes, and control whichever piece of equipment you choose.

- Note :*
- The remote control may not be compatible with all DVD Players, VCRs, Cable boxes.
  - The remote control can only operate STB made by Samsung.

## Setting Up the Remote to Operate Your VCR, Cable box or DVD player

**1** Turn off your VCR. (or Cable box, DVD player)



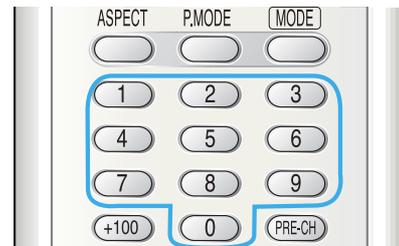
**2** Press the MODE button. Mode is changed whenever MODE button is pressed.



**3** Press the SET button on your TV's remote control.



**4** Using the number buttons on your remote control, enter three digits of the VCR (or Cable box, DVD player) code listed on page 35 of this manual for your brand of VCR (or CATV, DVD). Make sure you enter three digits of the code, even if the first digit is a "0".  
(If more than one code is listed, try the first one.)



**5** Press the POWER button on the remote control. Your VCR (or CATV, DVD) should turn on if your remote is set up correctly. If your VCR (or CATV, DVD) does not turn on after setup, repeat steps 2, 3, and 4, but try one of the other codes listed for your brand of VCR (or CATV, DVD).  
If no other codes are listed, try each code, 000 through 089 (or Cable box: 000 through 077, DVD player: 000 through 008).



### Notes

- When your remote control is in "VCR" mode, the VCR control buttons (STOP, REW, PLAY/PAUSE, FF) still operate your VCR.
- When your remote control is in "CATV" or "DVD" mode, the VCR control buttons (STOP, REW, PLAY/PAUSE, FF) still operate your VCR.
- You do not need to program the remote for Samsung STBs as the codes are pre-programmed.

## Remote Control Codes

### VCR Codes

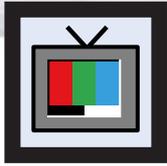
Brand	Codes	Brand	Codes	Brand	Codes
Admiral	020	JVC	007 008 018 021 026 037	RCA	017 019 002 021 035 041 043 057 068
Aiwa	025	Kenwood	007 008 018 026 037	Samsung	000 001 002 003 004 005
Akai	027 004 032	KLH	070	Sansui	026
Audio Dynamics	007 026	Lioyd	025	Sanyo	018 024
Bell&Howell	018	Logik	038	Scott	003 047 052 067
Broksonic	022	LXI	025	Sears	018 019 006 024 028 029 041
Candle	002 006 003 015 008 055	Magnavox	021 036 056 059	Sharp	020 034 045 015
Canon	021 056	Marantz	008 007 018 021 026 036	Shimom	027 033 038 058
Citizen	002 003 006 008 015 055		037 062	Signature	025
Colortyme	007	Marta	006	Sony	027 033 044
Craig	002 024	MEI	021	Sylvania	021 025 036 056 059
Curtis Mathes	002 017 007 008 021 025 056 064 066	Memorex	006 021 024 025	Symphonic	025
Daewoo	003 015 010 011 012 013 014 016	MGA	034	Tandy	018 025
DBX	007 026	Midland	005	Tashika	006
Dimensia	017	Minolta	019 041	Tatung	037
Dynatech	034	Mitsubishi	019 034 041 046	Teac	025 037 068
Emerson	001 003 006 021 022 025 030 032 034 040 047 050 052 060 063 065 066 067 069	Montgomery Ward	020	Technics	021
Fisher	018 024 028 029 048 051 061	MTC	002 025	Teknika	021 006 025 031
Funai	025	Multitech	002 025 038 005	TMK	066
General Electric	017 002 021 005 056	NEC	018 007 026 037 008 062 064	Toshiba	003 019 029 051 052
Go Video	002	Optimus	020	Totevision	002 006
LG(Goldstar)	006 007 008 009 010	Panasonic	021 056 071 072	Unitech	002
Harman Kardon	007	Pentax	019 041	VectorResearch	007 026
Hitachi	019 025 041 042	Pentex Research	008	Victor	026
InstantReplay	021	Philco	021 036 056 059	Video Concepts	007 026
JC Penny	002 007 018 019 021 026 037 041 054 056	Philips	021 036	Videosonic	002
		Pioneer	019 026 039 053	Wards	002 003 006 019 020 021 024 025 034 038 041
		Portland	015 049 055	Yamaha	007 008 018 026 037
		PROSCAN	017	Zenith	023 027 033 073
		Quartz	018		
		Quasar	021 056		
		Radio Shack/Realistic	006 018 020 021 024 025 029 034 048 056		

### Cable Box Codes

Brand	Codes	Brand	Codes	Brand	Codes
Anvision	017 018	Philips	019 021 023 028	Sprucer	022
GI	041	Pioneer	018 020 004 044	Stargate 2000	036
Hamlin	003 024 031	RCA	014 022 040	Sylvania	016
Hitachi	025 030	Regal	003	Texscan	016
Jerrold	038 039	Regency	015 023	Tocom	032
Macom	025 030	SA	042 043	Universal	033 034
Magnavox	019 023 028	Samsung	000 001 002 003 004 005	Viewstar	019 021 023 028
Oak	026		006 007	Wamer amex	046
Panasonic	003 022 027 037 044	Scientific Atlanta	042 043	Zenith	017 029 035 037 045

### DVD Codes

Brand	Codes
Samsung	000 001
JVC	002
PROSCAN	003
RCA	003
LG(Goldstar)	006
Sony	007
Denon	008
Curtis Mathes	009

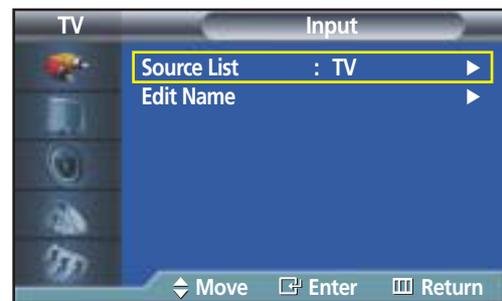


# Viewing an External Signal Source

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

## Setting the Signal Source

- 1 Press the MENU button. Press the ENTER button to select "Input".



- 2 Press the ENTER button to select "Source List".



- 3 Press the ▲ or ▼ button to select signal source, then press the ENTER button.

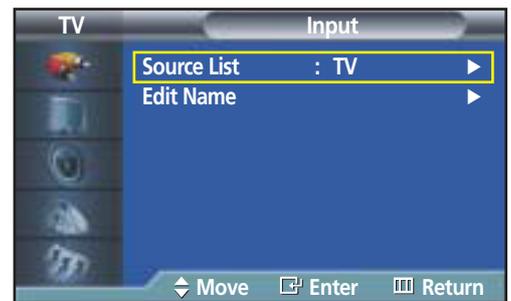


### Notes

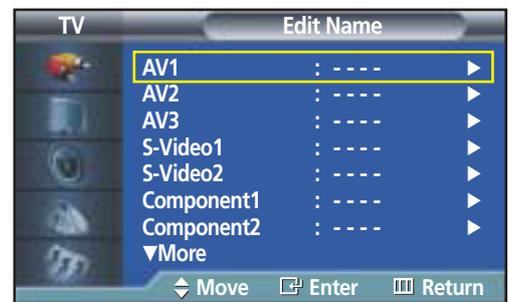
- When you connect equipment to the PDP, you can choose between the following sets of jacks: AV1, AV2, AV3, S-Video1, S-Video2, Component1, Component2, Monitor Out, PC or DVI on the PDP's rear panel.

## Assigning Names to External input mode

- 1 Press the MENU button. Press the ENTER button to select "Input".



- 2 Press the ▲ or ▼ button to select "Edit Name", then press the ENTER button.



- 3 Press the ENTER button.
  - Press the ▲ or ▼ button to select external device: VCR, DVD, Cable STB, HD STB, Satellite STB, AV Receiver, DVD Receiver, Game, Camcorder, DVD Combo, DHR or PC. Set other signal sources (AV2, AV3, S-Video1, S-Video2, Component1, Component2, PC or DVI) using the same method as listed above.



- 4 Press the MENU button to exit.

### Notes

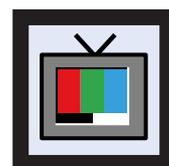
- DHR : DVD HDD Recorder

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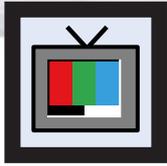
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P L A S M A   D I S P L A Y   P A N E L

# Picture Control



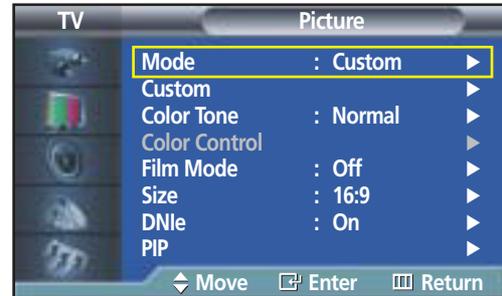
Customizing the Picture .....	40
Using Automatic Picture Settings .....	41
Selecting the Color Tone.....	42
DNle (Digital Natural Image engine) .....	43
Changing the Screen Size .....	44
Freezing the Picture .....	46
Viewing the Picture-in-Picture.....	47
Selecting a Signal Source (Antenna or Cable) for PIP.....	52



# Customizing the Picture

You can use the on-screen menus to change the Contrast, Brightness, Sharpness, Color, and Tint settings of your PDP.

- 1 Press the MENU button. Press the ▲ or ▼ button to select "Picture", then press the ENTER button.



- 2 Press the ▲ or ▼ button to select "Custom", then press the ENTER button. You will also see the items "Contrast", "Brightness", "Sharpness", "Color" and "Tint".



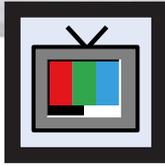
- 3 Press the ▲ or ▼ button to select the item you wish to change, then press the ENTER button. Press the ◀ or ▶ button to change the value of the item.



- 4 Press the MENU button to exit.

## **Note**

- In the PC/DVI mode, you can't adjust the Color and Tint.



## Using Automatic Picture Settings

Your PDP has automatic picture settings that allow you to adjust the video display easily.

- 1 Press the MENU button. Press the ▲ or ▼ button to select "Picture", then press the ENTER button.

➤ Quick way to access the picture setting: Just press the "P.MODE" button on the remote control.



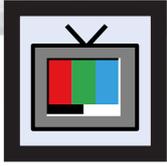
- 2 Press the ENTER button to select "Mode".



- 3 Press the ▲ or ▼ button to select "Dynamic", "Standard", "Movie", "Custom" picture setting.
  - You can select "Custom", "Entertain", "Internet", or "Text" in PC/DVI mode.



- 4 Press the MENU button to exit.



# Selecting the Color Tone

1 Press the MENU button. Press the ▲ or ▼ button to select "Picture", then press the ENTER button.



2 Press the ▲ or ▼ button to select "Color Tone", then press the ENTER button.

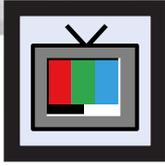


3 Press the ▲ or ▼ button to select "Cool2", "Cool1", "Normal", "Warm1" or "Warm2".

- You can select "Custom", "Cool", Normal" or "Warm" in PC mode.
- You can select "Cool", "Normal" or "Warm" in DVI mode.



4 Press the MENU button to exit.



## DNle (Digital Natural Image engine)

Samsung's New Technology brings you more detailed images with contrast, white enhancement and 3D noise reduction.

1 Press the MENU button. Press the ▲ or ▼ button to select "Picture", then press the ENTER button.

➤ Quick way to select DNle: Simply press the "DNle" button under the cover of the remote control.

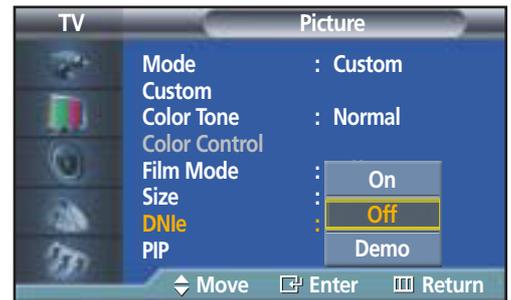


2 Press the ▲ or ▼ button to select "DNle", then press the ENTER button.

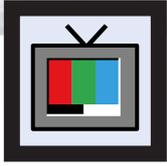


3 Press the ▲ or ▼ button to select "On", "Off" or "Demo".

- On : Switches on the DNle mode.
- Off : Switches off the DNle mode.
- Demo : The screen before applying DNle appears on the right and the screen after applying DNle appears on the left.



4 Press the MENU button to exit.



# Changing the Screen Size

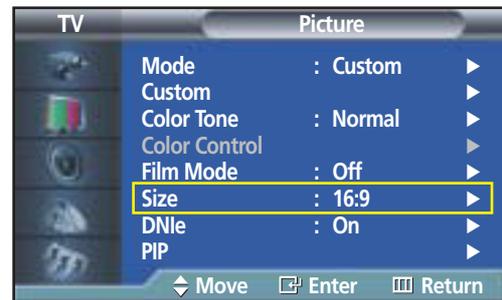
Screen size selection depends on the type of video input (DVD, PC etc.).

➤ Quick way to access the Screen Size menu : Just press the "ASPECT" button on the remote control.

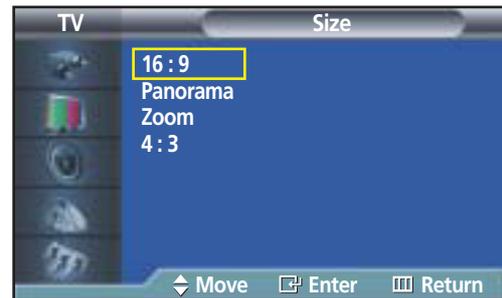
- 1 Press the MENU button. Press the ▲ or ▼ button to select "Picture", then press the ENTER button.



- 2 Press the ▲ or ▼ button to select "Size", then press the ENTER button.



- 3 Press the ▲ or ▼ button to select the screen size you want.



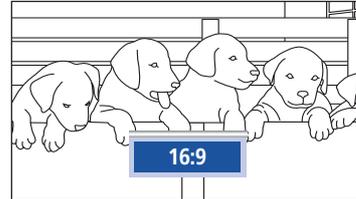
- 4 Press the MENU button to exit.

## Note

- If you watch a still image or the 4:3 (Normal) mode for a long time (over 2 hours), an image may be burned onto the screen.  
View the monitor in 16:9(Wide) or Panorama mode as much as possible.

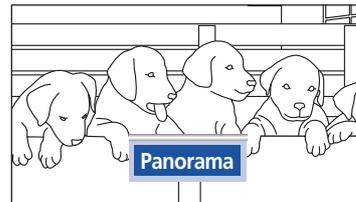
## 16:9(Wide)

16:9 Aspect Ratio that fits DVD and Wide Screen applications.



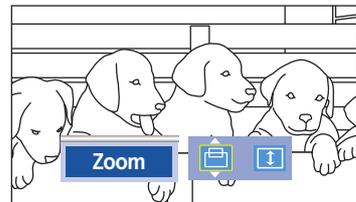
## Panorama

Fits a 16:9 picture onto a 4:3 screen and displays it without clipping the image.



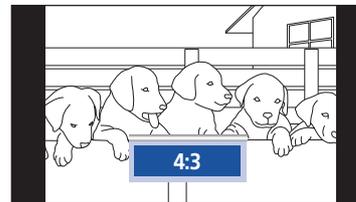
## Zoom

Magnifies the 16:9 wide picture (in a vertical direction) to fit the screen size. Select  by pressing the ◀ or ▶ button. Use the ▲ or ▼ button to move the picture up and down. After selecting , use the ▲ or ▼ button to magnify or reduce the picture size in a vertical direction.



## 4 : 3(Normal)

Standard TV and VCR screen size having a 4:3 Aspect Ratio.



## Notes

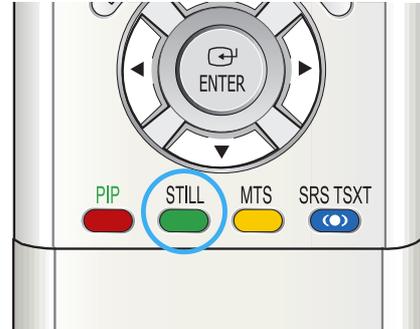
- In TV, VIDEO, S-VIDEO and Component (480i) modes, all screen modes can be selected. (16:9 → Panorama → Zoom → 4:3).
- In PC/DVI mode, only 16:9 & 4:3 modes can be selected.
- In Component (480p, 720p, 1080i) modes, Panorama mode can't be selected.
- In Component (480p, 720p, 1080i) modes, you can move the picture on screen by pressing the ▲ or ▼ button. (All screen modes)
- Changing the screen size to Normal, or Zoom during PIP mode will cause the PIP window to disappear.



# Freezing the Picture

## Still

Press the STILL button on the remote control to freeze a moving picture. Press again to cancel.





## Viewing the Picture-in-Picture

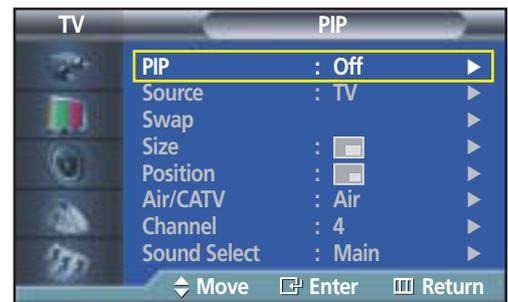
### Selecting the PIP Screen

1 Press the MENU button. Press the ▲ or ▼ button to select "Picture", then press the ENTER button.

➤ Quick way to access the PIP mode: Just press the "PIP" button on the remote control.



2 Press the ▲ or ▼ button to select "PIP", then press the ENTER button.

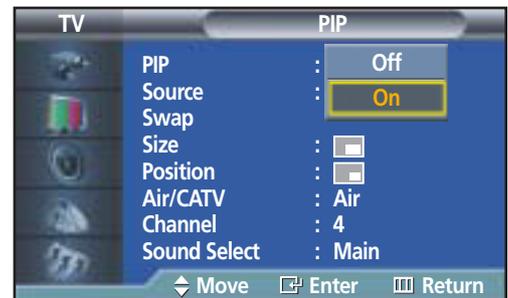


3 Press the ENTER button, then press the ▲ or ▼ button to select "On". The PIP image will appear in the corner of the screen.

- Pressing the ▲ or ▼ button will alternate between "On" and "Off".

#### Note

- Check if the V-Chip Lock (refer to page 93) is ON if the PIP On/Off will not function. PIP does not function when the V-Chip Lock is set to On. Change the setting to Off and try it again.



4 Press the MENU button to exit.

### PIP Settings

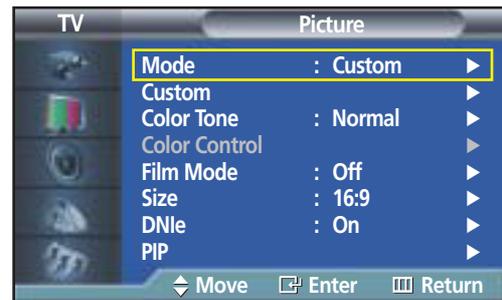
○ : PIP and Swap Operate  
X : PIP doesn't Operate

Main screen \ PIP screen	TV	AV 1	AV 2	AV 3	S-Video 1	S-Video 2	Component 1	Component 2	PC	DVI
TV	○	○	○	○	○	○	○	○	○	○
AV 1	○	X	○	○	○	○	○	○	○	○
AV 2	○	○	X	○	○	○	○	○	○	○
AV 3	○	○	○	X	○	○	○	○	○	○
S-Video 1	○	○	○	○	X	○	○	○	○	○
S-Video 2	○	○	○	○	○	X	○	○	○	○
Component 1	○	○	○	○	○	○	X	X	X	X
Component 2	○	○	○	○	○	○	X	X	X	X
PC	○	○	○	○	○	○	X	X	X	X
DVI	○	○	○	○	○	○	X	X	X	X

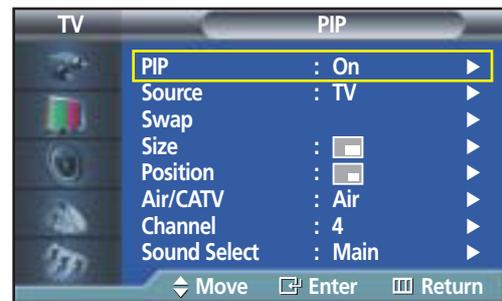
## Selecting an External Signal

You can use PIP to view a signal from an external source, such as a VCR.

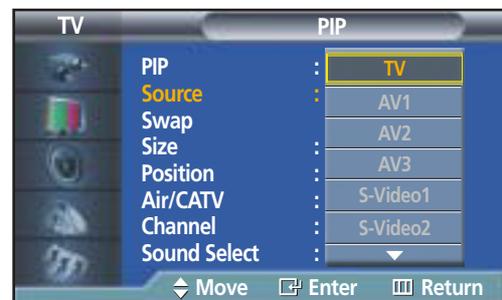
- 1 Press the MENU button. Press the ▲ or ▼ button to select "Picture", then press the ENTER button.



- 2 Press the ▲ or ▼ button to select "PIP", then press the ENTER button.

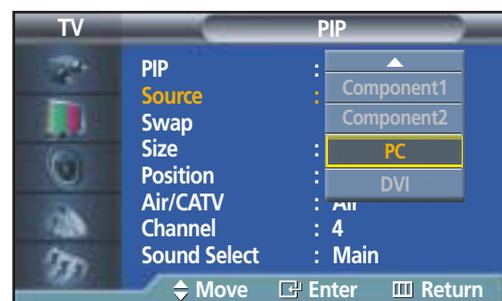


- 3 Press the ▲ or ▼ button to select "Source", then press the ENTER button.



- 4 Press the ▲ or ▼ button to cycle through all of the available signal sources: "TV", "AV1", "AV2", "AV3", "S-Video1", "S-Video2", "Component1", "Component2", "PC" and "DVI".

The signal from these inputs will not appear if you have not connected any equipment to the PDP's respective input jacks.



- 5 Press the MENU button to exit.

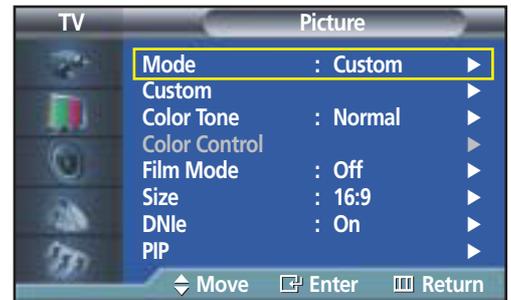
### Note

- The PIP function operates in Wide screen.
- Using Multi-Screen in the Normal or Zoom screen will change the size of the main screen to Wide screen.

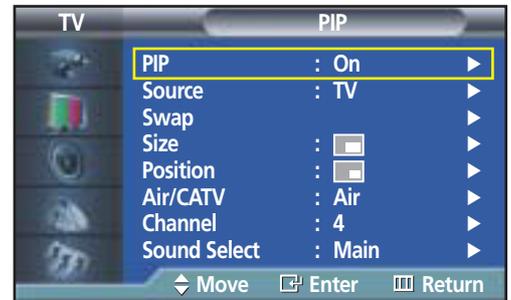
## Swapping the Contents of the PIP Image and Main Image

- 1 Press the MENU button. Press the ▲ or ▼ button to select "Picture", then press the ENTER button.

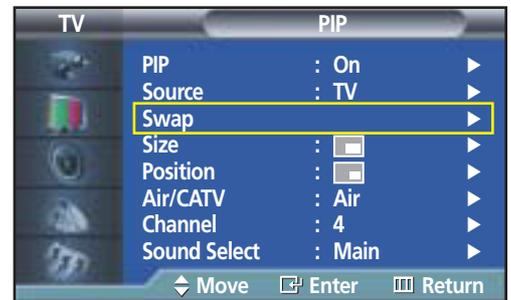
➤ Quick way to access swapping: Just press the "SWAP" button under the cover of the remote control.



- 2 Press the ▲ or ▼ button to select "PIP", then press the ENTER button.



- 3 Press the ▲ or ▼ button to select "Swap", then press the ENTER button.
  - The image in the PIP window will appear on the main screen, and vice versa.



- 4 Press the MENU button to exit.

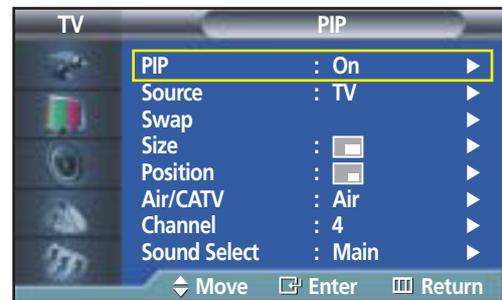
## Changing the Size of the PIP Window

- 1 Press the MENU button. Press the ▲ or ▼ button to select "Picture", then press the ENTER button.

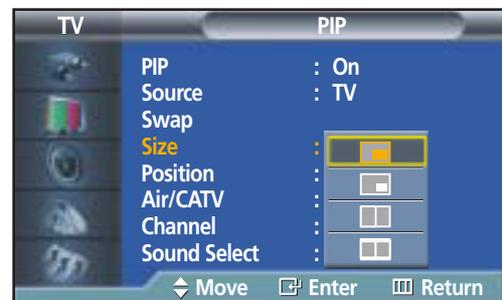
➤ Quick way to access PIP size: Just press the "SIZE" button under the cover of the remote control.



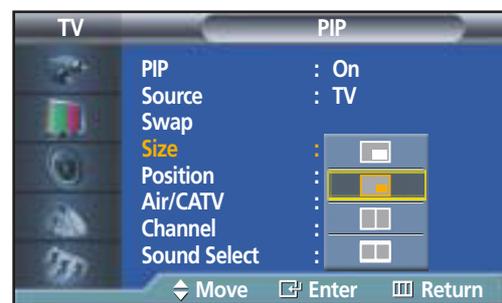
- 2 Press the ▲ or ▼ button to select "PIP", then press the ENTER button.



- 3 Press the ▲ or ▼ button to select "Size", then press the ENTER button.



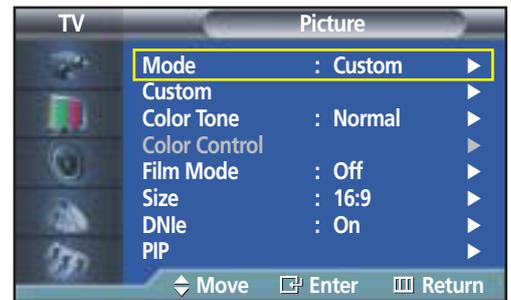
- 4 Press the ▲ or ▼ button to select option you want, then press the ENTER button.



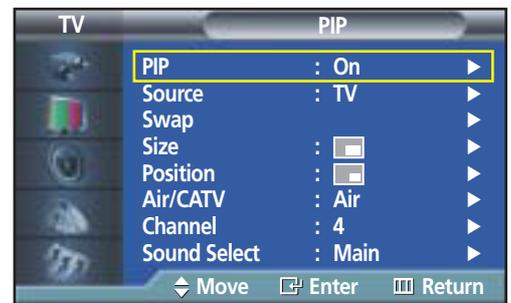
- 5 Press the MENU button to exit.

## Changing the Location of the PIP Image

1 Press the MENU button. Press the ▲ or ▼ button to select "Picture", then press the ENTER button.



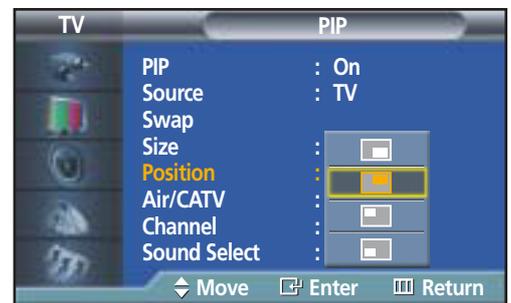
2 Press the ▲ or ▼ button to select "PIP", then press the ENTER button.



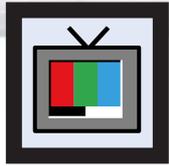
3 Press the ▲ or ▼ button to select "Position", then press the ENTER button.



4 Press the ▲ or ▼ button to select PIP position you want, then press the ENTER button.



5 Press the MENU button to exit.



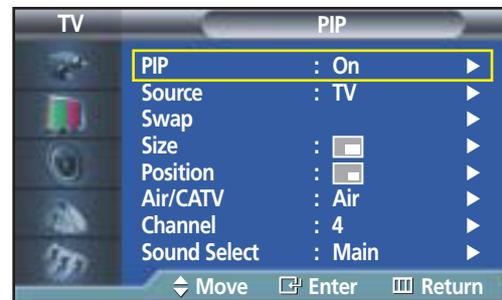
# Selecting a Signal Source (Antenna or Cable) for PIP

If the PIP source is TV while PIP is ON, you can select the broadcasting source of PIP picture separately from the main picture.

1 Press the MENU button. Press the ▲ or ▼ button to select "Picture", then press the ENTER button.



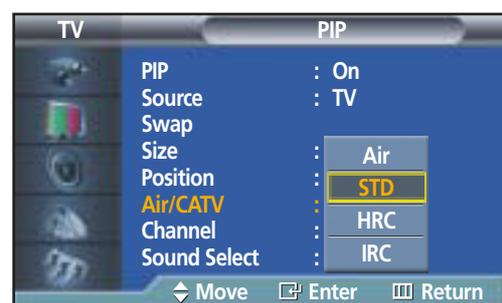
2 Press the ▲ or ▼ button to select "PIP", then press the ENTER button.



3 Press the ▲ or ▼ button to select "Air/CATV", then press the ENTER button.



4 If an antenna is connected, the setting is "Air". If a Cable TV system is providing the signal, press the ▲ or ▼ button until the appropriate type of cable system is selected ("STD", "HRC" or "IRC").

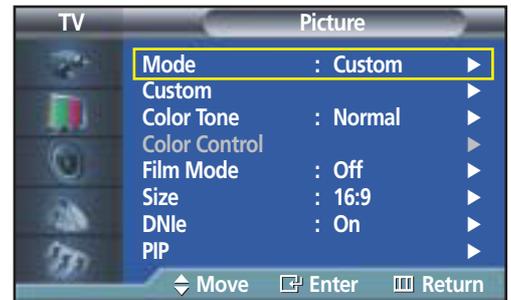


5 Press the MENU button to exit the menu.

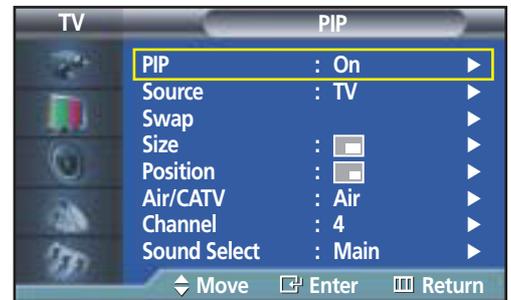
## Changing the PIP Channel

- 1 Press the MENU button. Press the ▲ or ▼ button to select "Picture", then press the ENTER button.

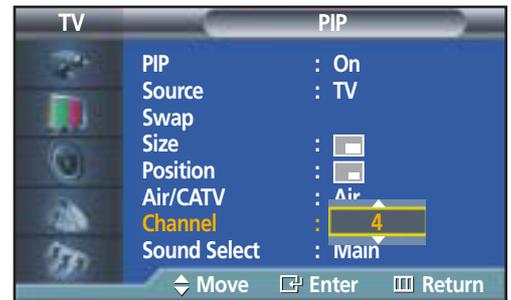
➤ Quick way to change the PIP channel: Just press the "CH ^" or "CH v" button under the cover of the remote control.



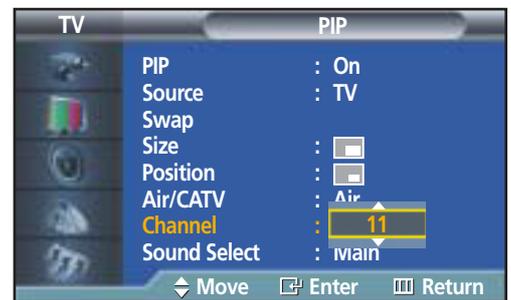
- 2 Press the ▲ or ▼ button to select "PIP", then press the ENTER button.



- 3 Press the ▲ or ▼ button to select "Channel", then press the ENTER button.



- 4 Press the ▲ or ▼ button to change the channel that appears in the PIP window.



- 5 Press the MENU button to exit.

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P L A S M A   D I S P L A Y   P A N E L

# Sound Control

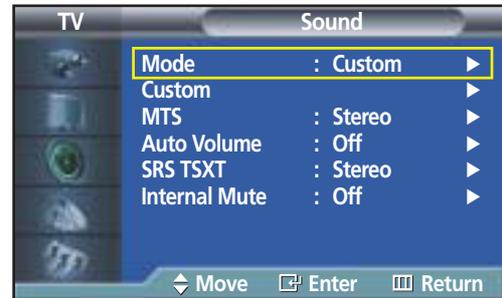


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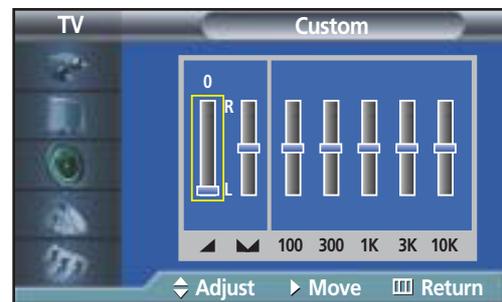


# Customizing the Sound

- 1 Press the MENU button. Press the ▲ or ▼ button to select "Sound", then press the ENTER button.



- 2 Press the ▲ or ▼ button to select "Custom", then press the ENTER button.



- 3 Select the option (volume, balance, equalizer) to be adjusted by pressing the ◀ or ▶ button. Press the ▲ or ▼ button to reach the required setting.

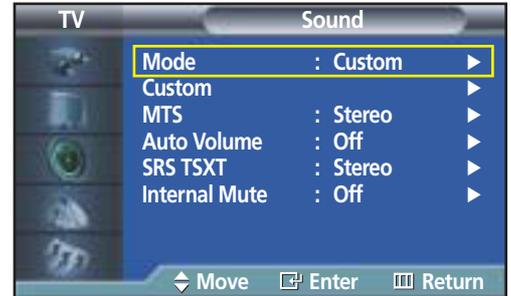
- 4 Press the MENU button to exit.

➤ If you make any changes to the equalizer settings, the sound Mode is automatically switched to the custom mode.



## Using Automatic Sound Settings

- 1 Press the MENU button. Press the ▲ or ▼ button to select "Sound", then press the ENTER button.



- 2 Press the ENTER button to select "Mode".



- 3 Press the ▲ or ▼ button to select "Standard", "Music", "Movie", "Speech" or "Custom" sound setting, then press the ENTER button.



- 4 Press the MENU button to exit.



# Choosing a Multi-Channel Sound (MTS) Soundtrack

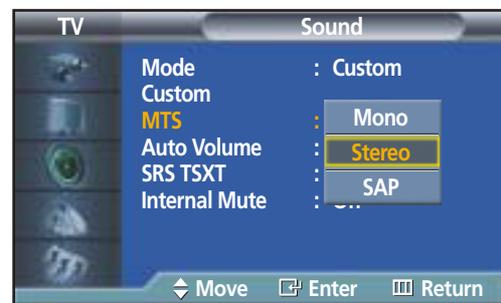
Depending on the particular program being broadcast, you can listen to stereo, mono, or a Separate Audio Program. (SAP audio is usually a foreign-language translation. Sometimes SAP has unrelated information like news or weather.)

1 Press the MENU button. Press the ▲ or ▼ button to select "Sound", then press the ENTER button.

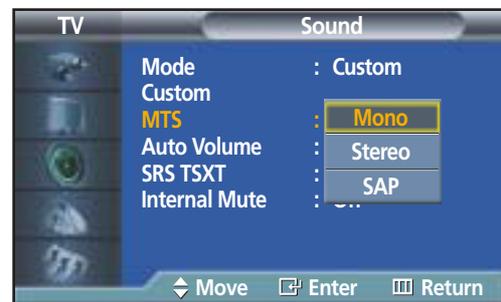
➤ Quick way to access the MTS menu: Just press the "MTS" button on the remote control.



2 Press the ▲ or ▼ button to select "MTS", then press the ENTER button.



3 Press the ▲ or ▼ button to select "Mono", "Stereo" or "SAP", then press the ENTER button.



4 Press the MENU button to exit.

- Choose *Stereo* for channels that are broadcasting in stereo.
- Choose *Mono* for channels that are broadcasting in mono, or if you are having difficulty receiving a stereo signal.
- Choose *SAP* to listen to the Separate Audio Program, which is usually a foreign-language translation.

## Note

- The MTS function operates in TV mode only.



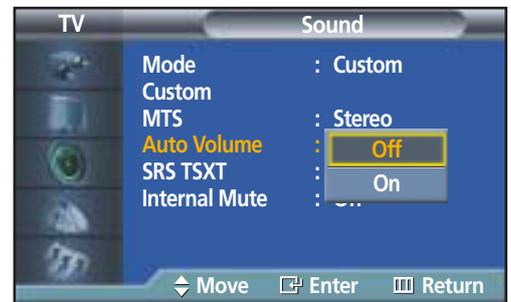
## Using the Auto Volume

Each broadcasting station has its own signal conditions, which can make it necessary to adjust the volume every time the channel is changed. "Auto volume" 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.

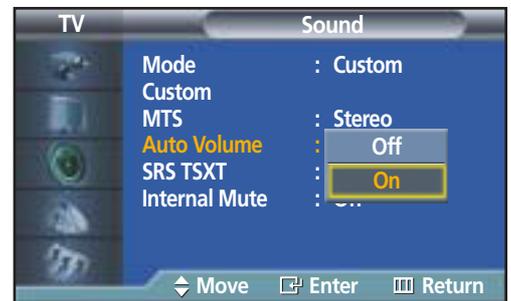
- 1 Press the MENU button. Press the ▲ or ▼ button to select "Sound", then press the ENTER button.



- 2 Press the ▲ or ▼ button to select "Auto Volume", then press the ENTER button.



- 3 Press the ▲ or ▼ button to select "On", then press the ENTER button.
  - Pressing the ▲ or ▼ button will alternate between "On" and "Off".



- 4 Press the MENU button to exit.

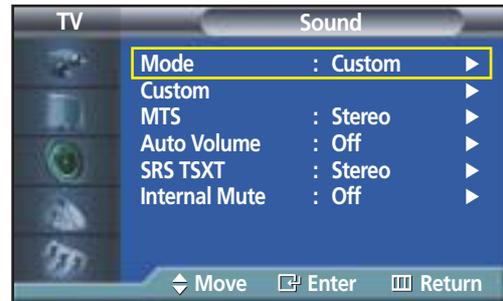


# Setting the TruSurround XT

TruSurround XT is a patented SRS technology that solves the problem of playing 5.1 multichannel content over two speakers. Trusurround delivers a compelling, virtual surround sound experience through any two-speaker playback system, including internal television speakers. It is fully compatible with all multichannel formats.

1 Press the MENU button. Press the ▲ or ▼ button to select "Sound", then press the ENTER button.

➤ Quick way to access the TruSurround XT menu: Just press the "SRS TSXT" button on the remote control.



2 Press the ▲ or ▼ button to select "SRS TSXT", then press the ENTER button.

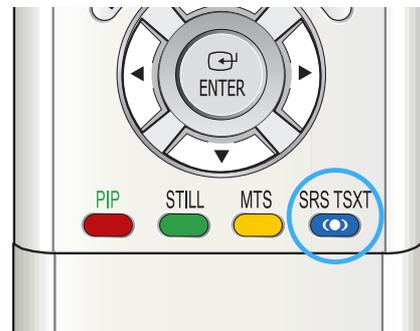


3 Press the ▲ or ▼ button to change the setting (Off, 3D Mono or Stereo), then press the ENTER button.



4 Press the MENU button to exit.

➤ TruSurround XT, SRS and ( ●● ) Symbol are trademarks of SRS Labs, Inc. TruSurround XT technology is incorporated under license from SRS Labs, Inc.





## Listening to the Sound of the Sub(PIP) Picture (PC or DVI Mode)

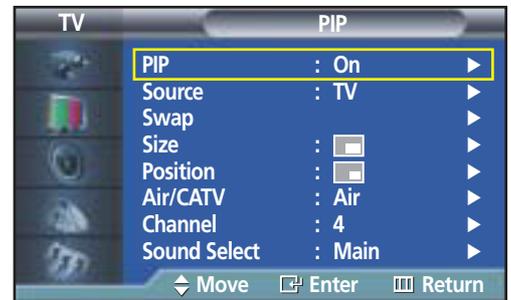
➤ Preset to the PC or DVI mode by using the SOURCE button.

During the PIP feature is activating, you can listen to the sound of the sub picture.

- 1 Press the MENU button. Press the ▲ or ▼ button to select "Picture", then press the ENTER button.



- 2 Press the ▲ or ▼ button to select "PIP", then press the ENTER button.



- 3 Press the ▲ or ▼ button to select "Sound Select", then press the ENTER button.
  - Pressing the ▲ or ▼ button will alternate between "Main" and "Sub".



- 4 Set to Sub by pressing the ▲ or ▼ button.
  - You can listen to the sound of the sub picture.

➤ To listen the sound of the main picture, set to Main.





# Selecting the Internal Mute

The internal speakers can be muted in order to hear sound from external speakers you've connected.

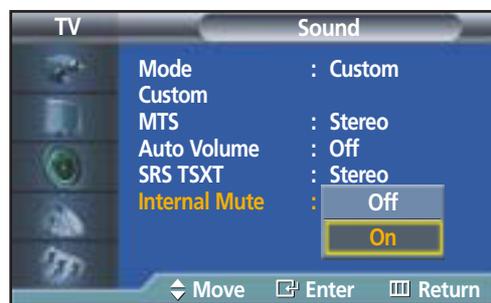
- 1 Press the MENU button. Press the ▲ or ▼ button to select "Sound", then press the ENTER button.



- 2 Press the ▲ or ▼ button to select "Internal Mute", then press the ENTER button.



- 3 Press the ▲ or ▼ button to select "On", then press the ENTER button.
  - Pressing the ▲ or ▼ button will alternate between "On" and "Off".



- 4 Press the MENU button to exit.

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P L A S M A   D I S P L A Y   P A N E L

**Channel Control**



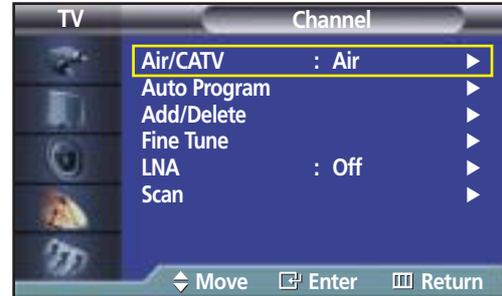
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# Fine Tuning Channels

Use fine tuning to manually adjust a particular channel for optimal reception.

1 Press the MENU button. Press the ▲ or ▼ button to select "Channel", then press the ENTER button.



2 Press the ▲ or ▼ button to select "Fine Tune", then press the ENTER button.



3 Press the ◀ or ▶ button to adjust the fine tuning.



4 To store the fine tuning setting in the TV's memory, press the ENTER button. (A star icon(\*) will appear.) To reset the fine tuning to "0", press the ▼ button to select "Reset", then press the ENTER button.



5 Press the MENU button to exit.



## LNA (Low Noise Amplifier)

If the TV is operating in a weak-signal area, sometimes the LNA function can improve the reception (a low-noise preamplifier boosts the incoming signal).

- 1 Press the MENU button. Press the ▲ or ▼ button to select "Channel", then press the ENTER button.



- 2 Press the ▲ or ▼ button to select "LNA", then press the ENTER button.



- 3 Press the ▲ or ▼ button to select "On", then press the ENTER button.
  - Pressing the ▲ or ▼ button will alternate between "On" and "Off".



- 4 Press the MENU button to exit.

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P L A S M A   D I S P L A Y   P A N E L

## Connecting a PC and Operation



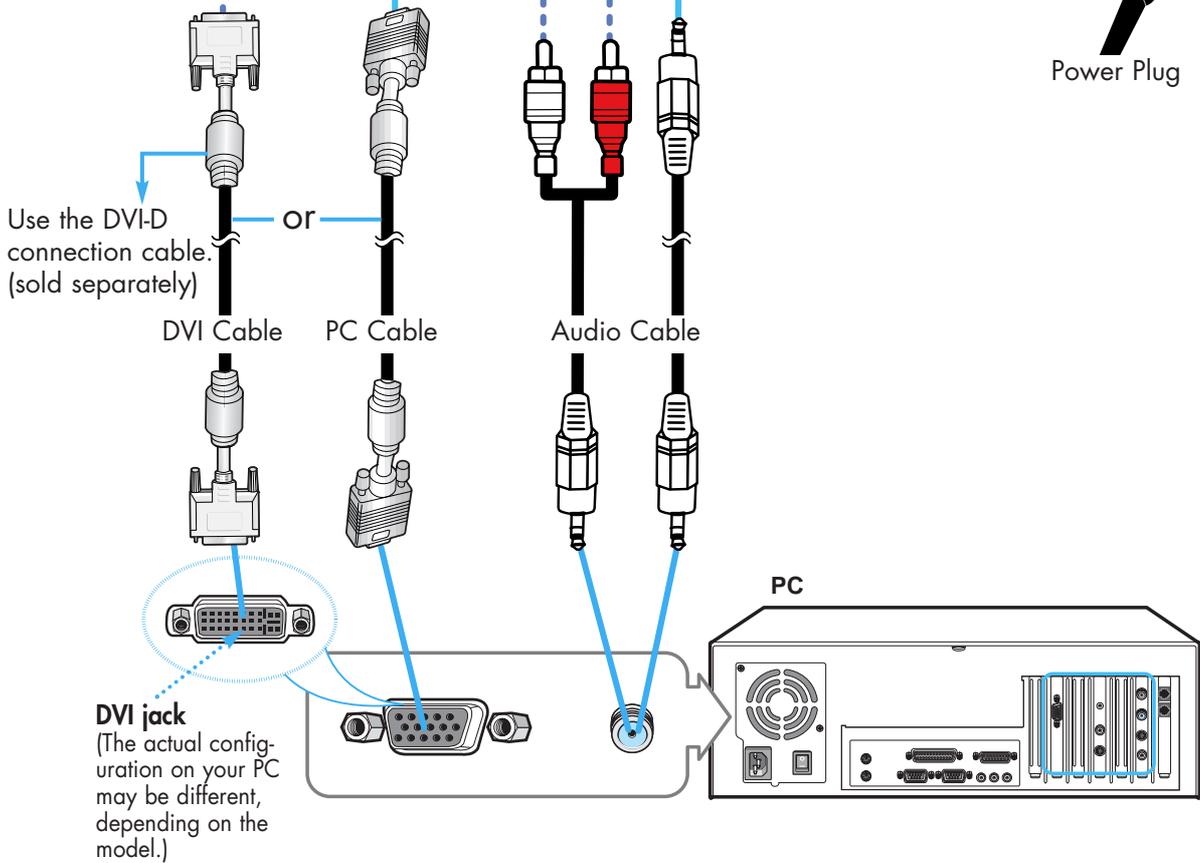
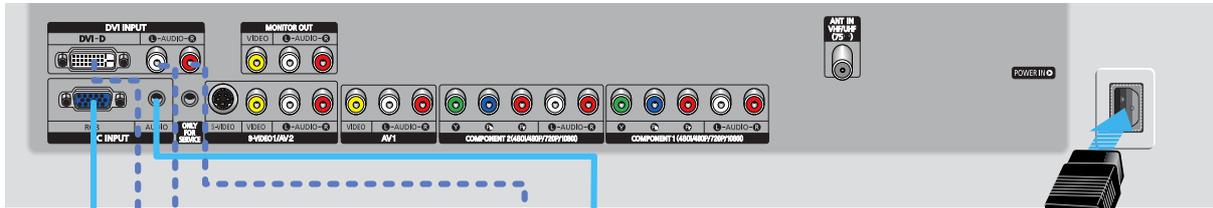
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# Connecting a PC

Connection to a Macintosh computer may require an adapter.

## PDP



## Connecting a PC to the PDP

- 1 Connect a PC (15pin) cable between the PC Output jack (or DVI jack) on the PC and the RGB IN(or DVI IN) Input jack (15p D-SUB) on the PDP.
- 2 Connect a Audio cable between the Audio (RGB or DVI) on the PC and the Audio L/R (RGB or DVI) input jacks on the PDP.

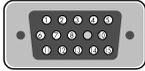
### To watch the PC screen:

1. Turn on your PDP
2. Press the TV/VIDEO button on the remote control or SOURCE button on the front panel to select "PC".
3. Turn on PC and check for PC system requirements. (Refer to pages 70 and 71 for PC system requirements.)
4. Adjust the PC screen. (Refer to pages 72 and 74.)

## Pin Configuration

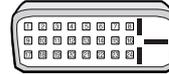
### D-Sub Cable

- 15Pin Signal Cable (based on protruded pin)



Pin No.	PC IN	PC OUT
1	Red (R)	Red (R)
2	Green (G)	Green (G)
3	Blue (B)	Blue (B)
4	Grounding	Grounding
5	Grounding (DDC)	Grounding (DDC)
6	Red (R) Grounding	Red (R) Grounding
7	Green (G) Grounding	Green (G) Grounding
8	Blue (B) Grounding	Blue (B) Grounding
9	Reserved	Reserved
10	Sync Grounding	Sync Grounding
11	Grounding	Grounding
12	Data (DDC)	Data (DDC)
13	Horizontal sync.	Horizontal sync.
14	Vertical sync.	Vertical sync.
15	Clock (DDC)	Clock (DDC)

### DVI-D Cable (Digital-Only Connector)



Pin No.	Signal Assignment	Pin No.	Signal Assignment
1	T.M.D.S. Data2-	13	T.M.D.S. Data3+
2	T.M.D.S. Data2+	14	+5V Power
3	T.M.D.S. Data2/4 Shield	15	Ground (for +5V)
4	T.M.D.S. Data4-	16	Hot Plug Detect
5	T.M.D.S. Data4+	17	T.M.D.S. Data0-
6	DDC Clock	18	T.M.D.S. Data0+
7	DDC Data	19	T.M.D.S. Data0/5 Shield
8	No Connect	20	T.M.D.S. Data5-
9	T.M.D.S. Data1-	21	T.M.D.S. Data5+
10	T.M.D.S. Data1+	22	T.M.D.S. Clock Shield
11	T.M.D.S. Data1/3 Shield	23	T.M.D.S. Clock+
12	T.M.D.S. Data3-	24	T.M.D.S. Clock-

## Setting up Your PDP (Plug and Play)

Our adoption of the new VESA® Plug and Play solution eliminates complicated and time consuming setup. It allows you to install your monitor in a Plug and Play compatible system, without the usual setup hassles and confusion. Your PC system can easily identify and configure itself for use with your display. This monitor automatically tells the PC system its Extended Display Identification data (EDID) using Display Data Channel (DDC) protocols.

## How to Set up Your PC Software (Windows only)

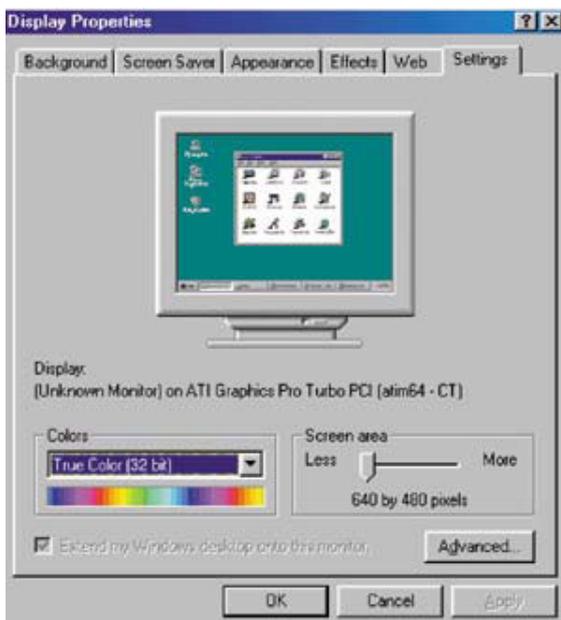
The Windows display-settings for a typical computer are shown below. However, the actual screens on your PC will probably be different, depending upon your particular version of Windows and your particular video card. But even if your actual screens look different, the same, basic set-up information will apply in almost all cases. (If not, contact your computer manufacturer or Samsung 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 to the PDP-PC interface are "resolution" and "colors". The correct settings for these two variables are:

- Size (sometimes called "resolution") :640 x 480 pixels.
- Color: "32-bit" color  
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" or "60 Hz". Otherwise, just click "OK" and exit the dialog box.

Continued...

# Plasma Display

**Notes:**

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:

Video Signal	Resolution (Dot X Line)	Vertical Frequency(Hz)	Horizontal Frequency(KHz)	Vertical Polarity	Horizontal Polarity
IBM PC / AT Compatible	640 X 350	70.086	31.469	N	P
		85.080	37.861	N	P
	640 X 400	85.080	37.861	P	N
	720 X 400	70.087	31.469	P	N
		85.039	37.927	P	N
	640 X 480	59.940	31.469	N	N
		72.809	37.861	N	N
		75.000	37.500	N	N
		85.061	43.269	N	N
	800 X 600	56.250	35.156	N/P	N/P
		60.317	37.897	P	P
		72.188	48.077	P	P
		75.000	46.875	P	P
		85.061	53.674	P	P
	848 X 480	60.000	29.838	nVidia chipset	
		72.000	36.072		
		75.000	37.650		
	1024 X 768	60.004	48.363	N	N
		70.069	56.476	N	N
		75.029	60.023	P	P
84.997		63.677	P	P	

- The interlace mode is not supported.
- The PDP operates abnormally if a non-standard video format is selected.
- This sheet conforms to IBM/VESA regulations and is prepared on the basis of Analog Input.
- The DVI Mode is supported same as above table.

**Notes:**

- When this PDP is used as a PC display, 32-bit color is supported.
- Depending on the manufacturer, your PC display screen might appear different. (and depending on your particular version of Windows.)  
Check your PC instruction book for information about connecting your PC to a PDP.
- 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 TV/VIDEO button on the remote control or SOURCE button on the front panel to enter the VIDEO mode. Also, make sure that the PC is connected.
- Connect only a PC monitor to the monitor output port while viewing the PC screen. (Otherwise, random signals might appear).



# Adjusting the PC Screen

## Adjusting the R.G.B

### Preset:

- Press the TV/VIDEO button to select "PC".

1 Press the MENU button. Press the ▲ or ▼ button to select "Picture", then press the ENTER button.



2 Press the ▲ or ▼ button to select "Color Control", then press the ENTER button. The "Color Control" is available only when "Color Tone" is set in the custom mode.



3 Press the ▲ or ▼ button to select the item you want to change, then press the ENTER button. Press the ◀ or ▶ button to change the value of the item, using the on-screen gauge as your guide.



4 Press the MENU button to exit.



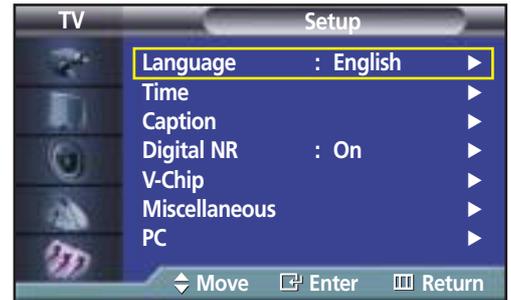
## Changing the Position of the Image

After connecting the PDP to your PC, adjust the position of the screen if it is not well-aligned.

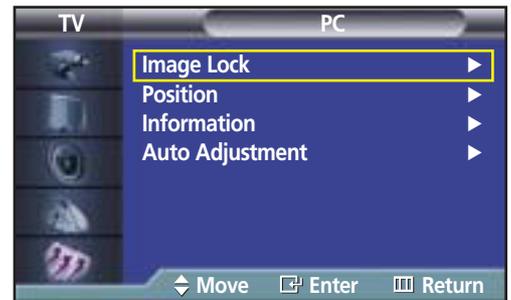
### Preset:

- Press the TV/VIDEO button to select "PC."

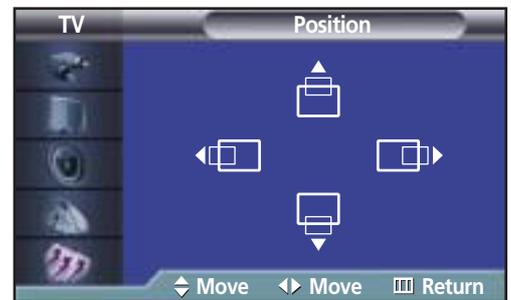
1 Press the MENU button. Press the ▲ or ▼ button to select "Setup", then press the ENTER button.



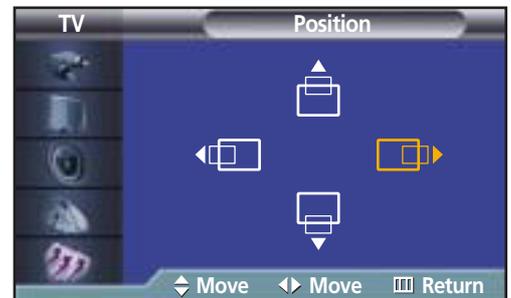
2 Press the ▲ or ▼ button to select "PC", then press the ENTER button.



3 Press the ENTER button to select "Position".



4 Adjust the position of screen by pressing the ▲ / ▼ / ◀ / ▶ button.



5 Press the MENU button to exit.



# Picture Quality Adjustment

## Picture Automatic Adjustment

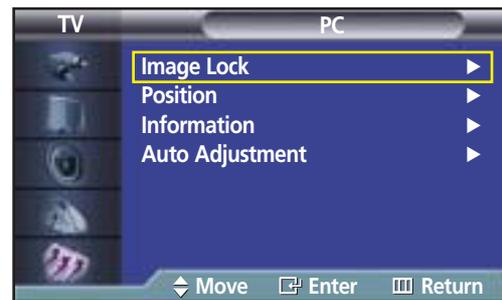
### Preset:

- Press the TV/VIDEO button to select "PC".

1 Press the MENU button. Press the ▲ or ▼ button to select "Setup", then press the ENTER button.



2 Press the ▲ or ▼ button to select "PC", then press the ENTER button.



3 Press the ▲ or ▼ button to select "Auto Adjustment", then press the ENTER button. The message "Auto Adjustment in progress." appears on the screen and the picture adjustments are automatically activated.



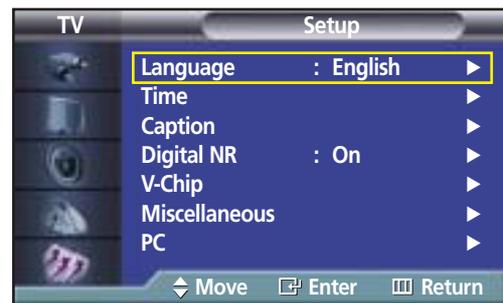
4 Press the MENU button to exit.

## Coarse Adjustment

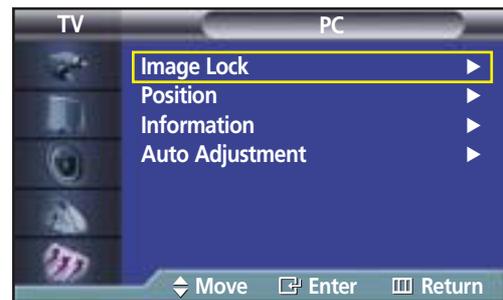
### Preset:

- Press the TV/VIDEO button to select "PC".

1 Press the MENU button. Press the ▲ or ▼ button to select "Setup", then press the ENTER button.



2 Press the ▲ or ▼ button to select "PC", then press the ENTER button.



3 Press the ▲ or ▼ button to select "Image Lock", then press the ENTER button.



4 Press the ENTER button to select "Coarse".  
Remove picture noise (vertical stripes) on the screen by pressing the ◀ or ▶ button. (If Coarse is not set properly, vertical stripes will appear on the screen.)



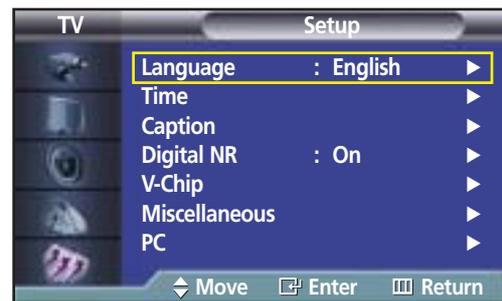
5 Press the MENU button to exit.

## Fine Tuning (Fine)

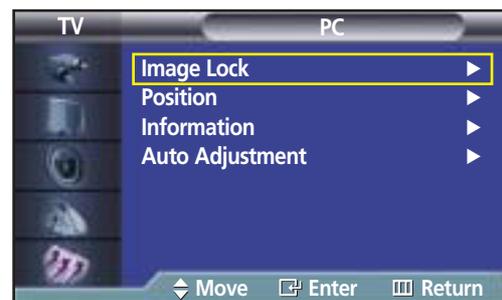
### Preset:

- Press the TV/VIDEO button to select "PC".

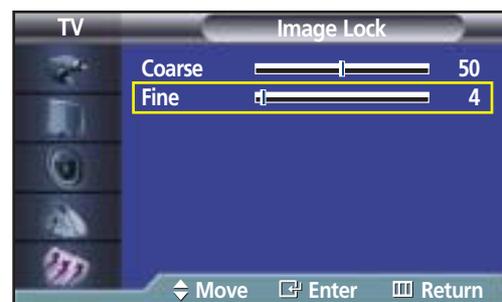
1 Press the MENU button. Press the ▲ or ▼ button to select "Setup", then press the ENTER button.



2 Press the ▲ or ▼ button to select "PC", then press the ENTER button.



3 Press the ▲ or ▼ button to select "Image Lock", then press the ENTER button.



4 Press the ▲ or ▼ button to select "Fine", then press the ENTER button. Remove picture noise on the screen by pressing the ◀ or ▶ button. (If Fine is not set properly, noise will appear on the screen.)



5 Press the MENU button to exit.

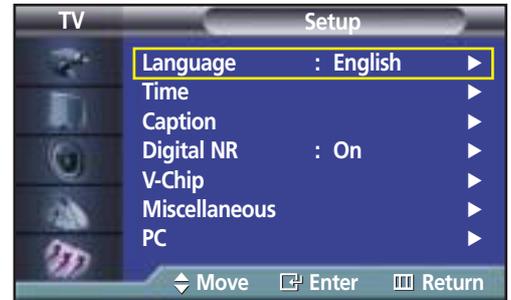


## Information

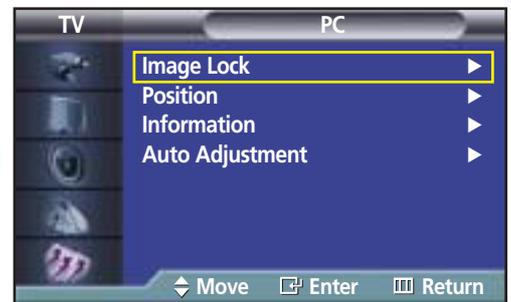
### Preset:

- Press the TV/VIDEO button to select "PC".

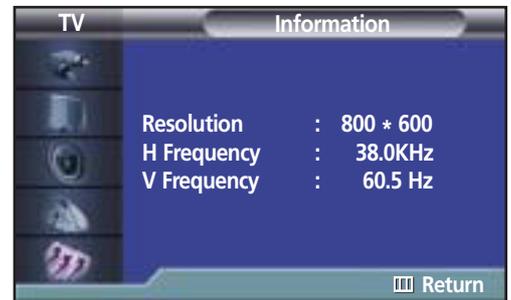
**1** Press the MENU button. Press the ▲ or ▼ button to select "Setup", then press the ENTER button.



**2** Press the ▲ or ▼ button to select "PC", then press the ENTER button.



**3** Press the ▲ or ▼ button to select "Information", then press the ENTER button. The vertical, horizontal frequencies and resolution appear.



**4** Press the MENU button to exit.

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P L A S M A   D I S P L A Y   P A N E L

# Time Setting

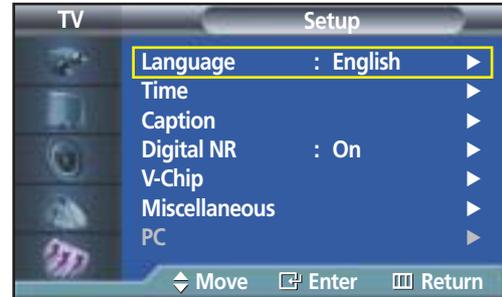


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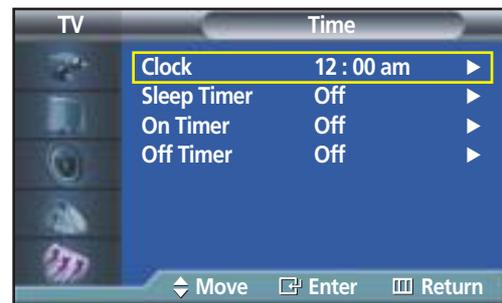


# Setting the Clock

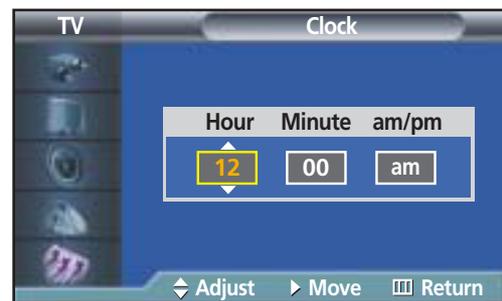
1 Press the MENU button. Press the ▲ or ▼ button to select "Setup", then press the ENTER button.



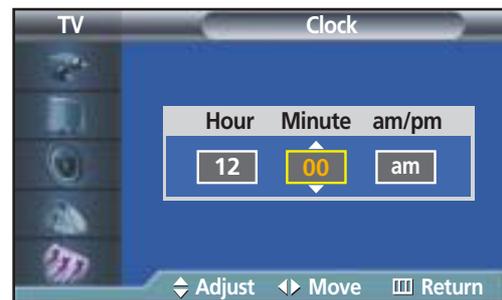
2 Press the ▲ or ▼ button to select "Time", then press the ENTER button.



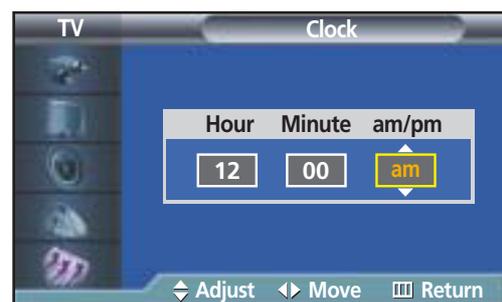
3 Press the ENTER button to select "Clock". Press the ENTER button to select "Hour", then press the ▲ or ▼ button to select correct hour.



4 Press the ► button to select "Minute", then press the ▲ or ▼ button to select correct minute.



5 Press the ► button to select "am/pm", then press the ▲ or ▼ button to select the proper time of day (am or pm).



6 Press the MENU button to exit.

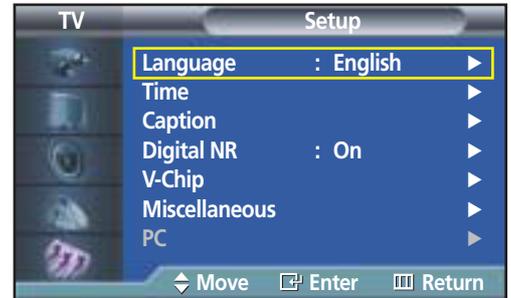


## Setting the Sleep Timer

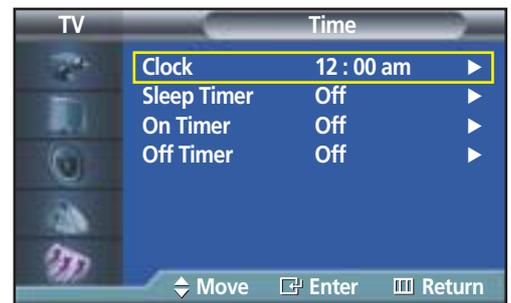
You can set your PDP to automatically turn off after a preset interval.

- 1 Press the MENU button. Press the ▲ or ▼ button to select "Setup", then press the ENTER button.

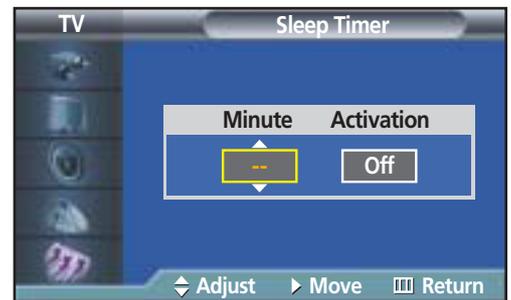
➤ Quick way to access the sleep timer setting: Just press the "SLEEP" button on the remote control.



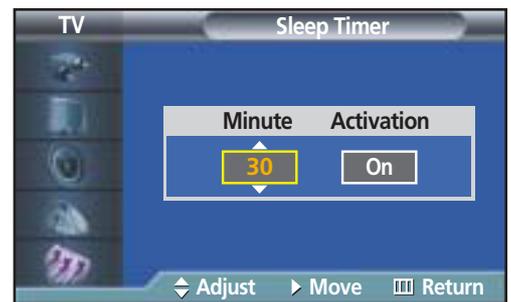
- 2 Press the ▲ or ▼ button to select "Time", then press the ENTER button.



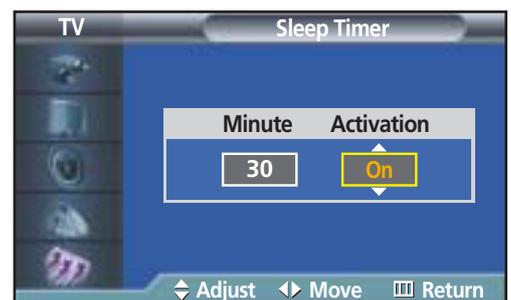
- 3 Press the ▲ or ▼ button to select "Sleep Timer", then press the ENTER button.



- 4 Press the ▲ or ▼ button to select the time interval for the PDP to stay on. The interval ranges from 30 to 180 minutes.



- 5 Press the ► button to select "Activation", then press the ▲ or ▼ button to select "On" or "Off".



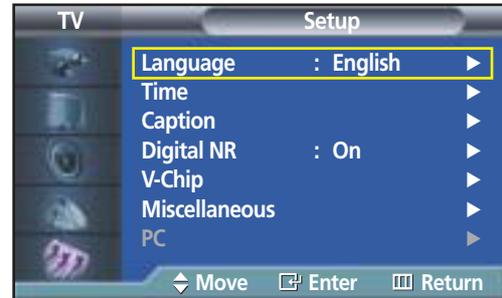
- 6 Press the MENU button to exit.



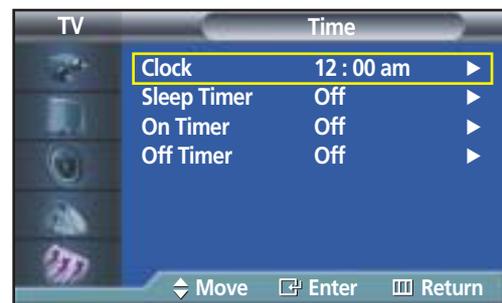
# Setting the Timers

This PDP can be set to turn on or off automatically at specific times that you choose. Before using the timers, you must set the PDP's clock, as described previously.

- 1 Press the MENU button. Press the ▲ or ▼ button to select "Setup", then press the ENTER button.



- 2 Press the ▲ or ▼ button to select "Time", then press the ENTER button.



- 3 Press the ▲ or ▼ button to select "On Timer". Press the ENTER button to select "Hour", then press the ▲ or ▼ button to select correct hour.



- 4 Press the ► button to select "Minute", then press the ▲ or ▼ button to select correct minute.



- 5 Press the ► button to select "am/pm", then press the ▲ or ▼ button to select the proper time of day (am or pm).



- 
- 6 Press the ► button to select "Channel", then press the ▲ or ▼ button to select the channel you want when PDP turns on.



- 
- 7 Press the ► button to select "Volume", then press the ▲ or ▼ button to select the volume level you want when PDP turns on.



- 
- 8 Press the ► button to select "Activation", then press the ▲ or ▼ button to select "On" or "Off".



- 
- 9 If you want to set Off Time, press the ▲ or ▼ button to select "Off Time". Set the "Off Time" just as you set "On Time".

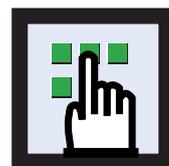
- 
- 10 Press the MENU button to exit.

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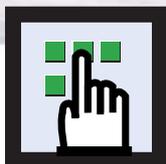
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P L A S M A   D I S P L A Y   P A N E L

## Function Description

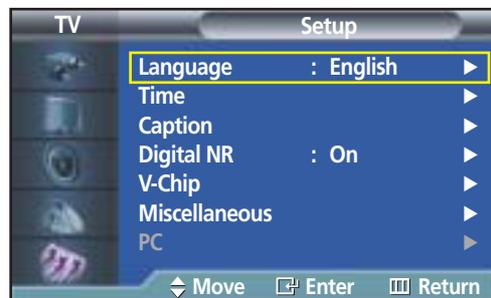


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# Selecting a Menu Language

1 Press the MENU button. Press the ▲ or ▼ button to select "Setup", then press the ENTER button.



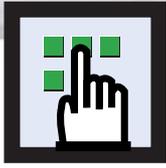
2 Press the ENTER button to select "Language".



3 Press the ▲ or ▼ button to select the appropriate language: "English", "Français" or "Español".



4 Press the MENU button to exit.



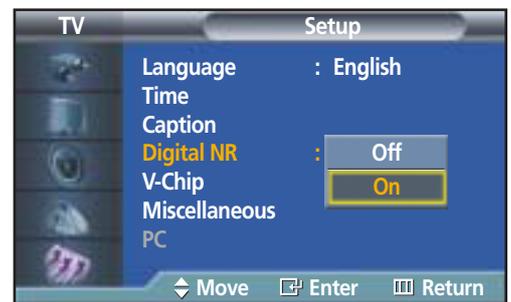
## Digital Noise Reduction

If the broadcast signal received by your TV is weak, you can activate the Digital Noise Reduction feature to help reduce any static and ghosting that may appear on the screen.

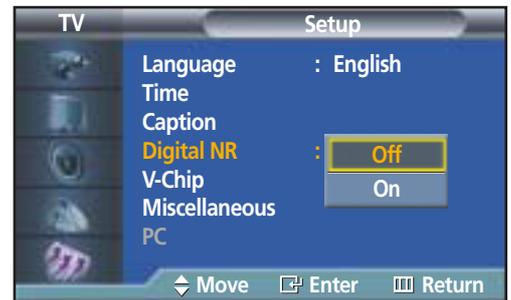
- 1 Press the MENU button. Press the ▲ or ▼ button to select "Setup", then press the ENTER button.



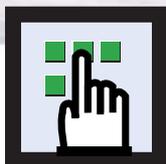
- 2 Press the ▲ or ▼ button to select "Digital NR", then press the ENTER button.



- 3 Press the ▲ or ▼ button to select "On" or "Off", then press the ENTER button.



- 4 Press the MENU button to exit.

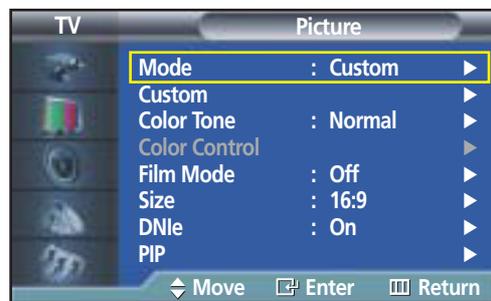


# Selecting the Film Mode

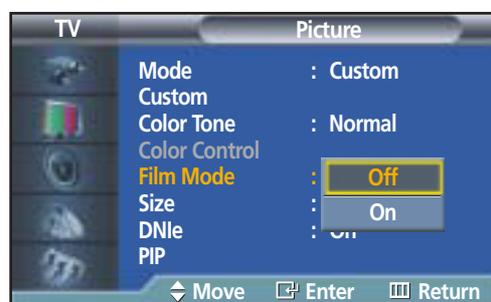
On: Automatically senses and processes film signals from all sources and adjusts the picture for optimum quality.

Off: Switches off the Film mode.

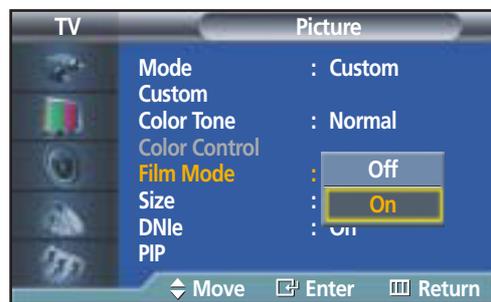
- 1 Press the MENU button. Press the ▲ or ▼ button to select "Picture", then press the ENTER button.



- 2 Press the ▲ or ▼ button to select "Film Mode", then press the ENTER button.



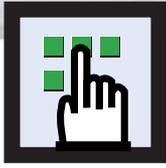
- 3 Press the ▲ or ▼ button to select "On" or "Off", then press the ENTER button.



- 4 Press the MENU button to exit.

## **Note**

- Film mode is supported in TV, VIDEO, S-VIDEO and COMPONENT 480i.



## Setting the Melody Sound

You can hear clear melody sound when the television is powered on or off.

- 1 Press the MENU button. Press the ▲ or ▼ button to select "Setup", then press the ENTER button.



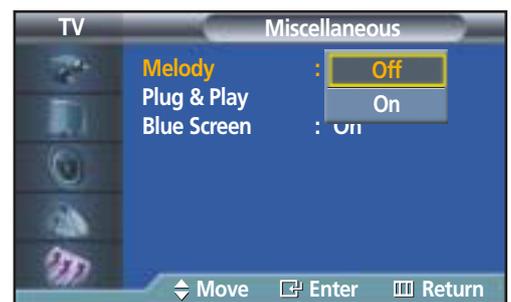
- 2 Press the ▲ or ▼ button to select "Miscellaneous", then press the ENTER button.

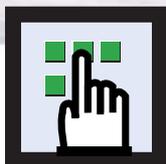


- 3 Press the ▲ or ▼ button to select "Melody", press the ENTER button.



- 4 Press the ▲ or ▼ button to change the setting. (On or Off).

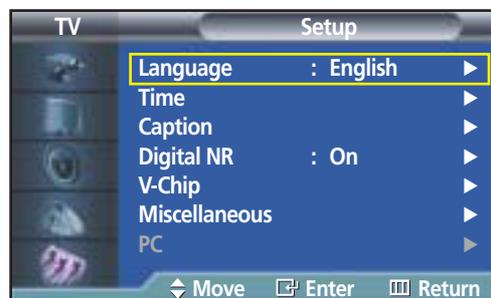




# Setting the Blue Screen

If no signal is being received or the signal is very weak, a blue screen automatically replaces the noisy picture background. If you wish to continue viewing the poor picture, you must set the "Blue Screen" mode to "Off".

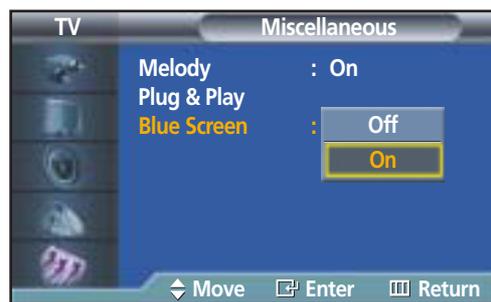
- 1 Press the MENU button. Press the ▲ or ▼ button to select "Setup", then press the ENTER button.



- 2 Press the ▲ or ▼ button to select "Miscellaneous", then press the ENTER button.



- 3 Press the ▲ or ▼ button to select "Blue Screen", Press the ENTER button.



- 4 Press the ▲ or ▼ button to change the setting. (On or Off).

➤ Blue Screen is displayed when there is no signal from an external device in the External Mode, regardless of the Blue Screen Setting.



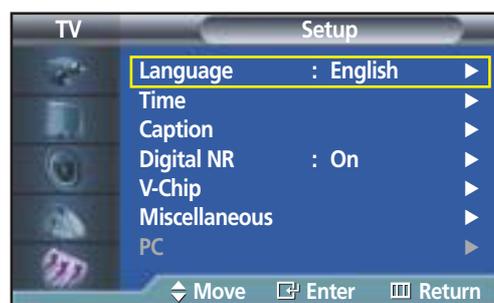


## Viewing Closed Captions

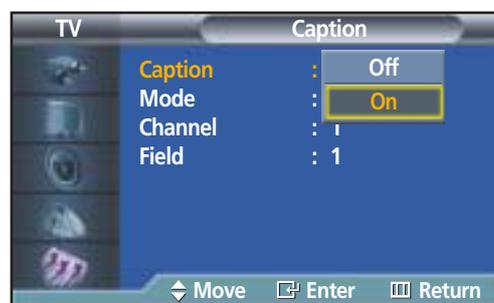
Your TV decodes and displays the closed captions that are broadcast with certain TV shows. These captions are usually subtitles for the hearing impaired or foreign language translations. All VCRs record the closed caption signal from television programs, so home-recorded video tapes also provide closed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

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

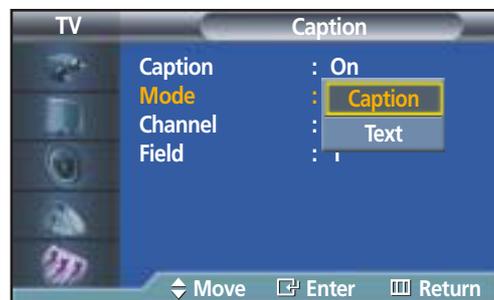
- 1 Press the MENU button. Press the ▲ or ▼ button to select "Setup", then press the ENTER button. Press the ▲ or ▼ button to select "Caption", then press the ENTER button.



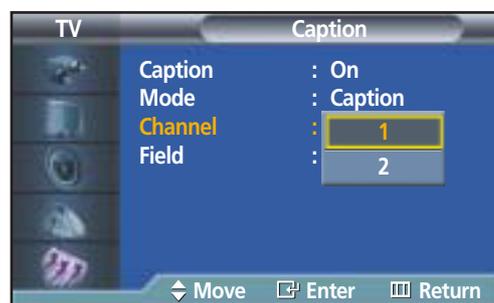
- 2 Press the ENTER button to select "Caption". Press the ▲ or ▼ button to turn closed caption on/off, then press the ENTER button.



- 3 Press the ▲ or ▼ button to select "Mode", then press the ENTER button. Press the ▲ or ▼ button to select "Text" or "Caption", then press the ENTER button.



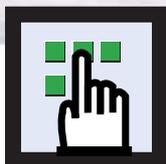
- 4 Depending on the particular broadcast, it might be necessary to make changes to "Channel" and "Field": Press the ▲ / ▼ / ◀ / ▶ button to make the changes. (Follow the same procedure as in steps 3 above.)



- 5 Press the MENU button to exit.

### Note

- Different channels and fields display different information: Field 2 carries additional information that supplements the information in Field 1. (For example, Channel 1 may have subtitles in English, while Channel 2 has subtitles in Spanish.)



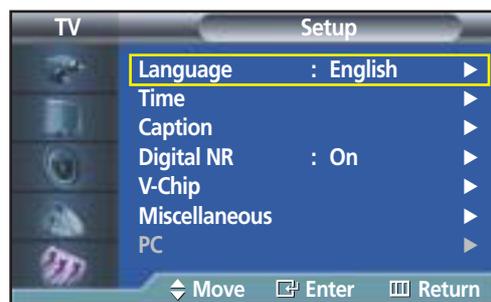
# Using the V-Chip

The V-Chip feature automatically locks out programs that are deemed inappropriate for children. The user must enter a PIN (personal ID number) before any of the V-Chip restrictions are set up or changed.

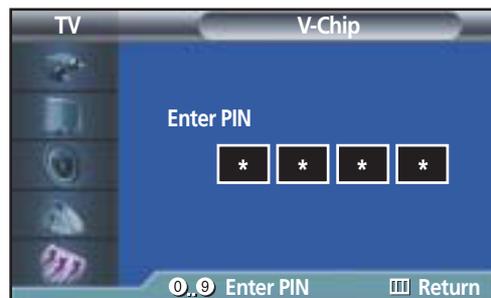
Note: When the V-chip feature is activated, the PIP and auto channel program features do not function.

## Setting Up Your Personal ID Number (PIN)

1 Press the MENU button. Press the ▲ or ▼ button to select "Setup", then press the ENTER button.

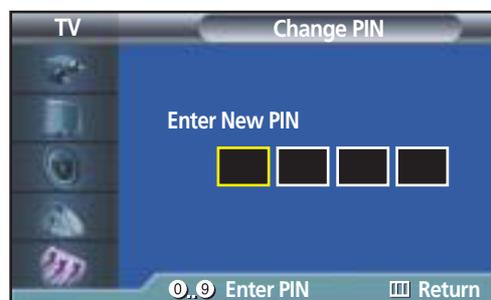


2 Press the ▲ or ▼ button to select "V-Chip", then press the ENTER button. The message "Enter PIN" will appear. Enter your 4 digit PIN number.

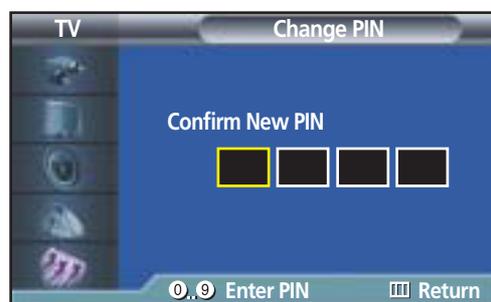


Note: The default PIN number of a new TV set is "0-0-0-0".

3 The "V-Chip" screen will appear. Press the ▲ or ▼ button to select "Change PIN", then press the ENTER button.



4 The Change PIN screen will appear. Choose any 4 digits for your PIN and enter them. As soon as the 4 digits are entered, the "Confirm New PIN" screen appears. Re-enter the same 4 digits. When the Confirm screen disappears, your PIN has been memorized.



5 Press the MENU button to exit.

### Note

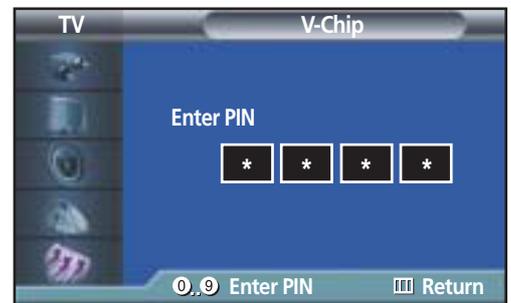
- If you forget the PIN, press the remote-control buttons in the following sequence, which resets the pin to 0-0-0-0 : Power Off. → Mute → 8 → 2 → 4 → Power On.

## How to Enable/Disable the V-Chip

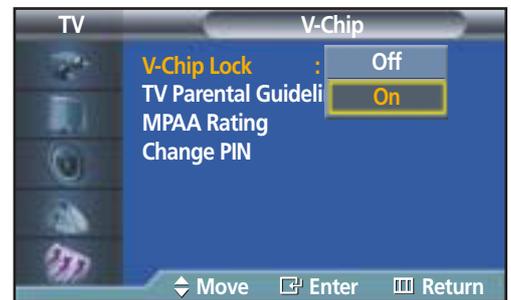
- 1 Press the MENU button. Press the ▲ or ▼ button to select "Setup", then press the ENTER button.



- 2 Press the ▲ or ▼ button to select "V-Chip", then press the ENTER button. The message "Enter PIN" will appear. Enter your 4 digit PIN number.



- 3 The "V-Chip" screen will appear. To enable the V-Chip feature, press the ENTER button so that the "V-Chip Lock" field is "On". (Pressing the ▲ or ▼ button will alternate between "On" and "Off".)

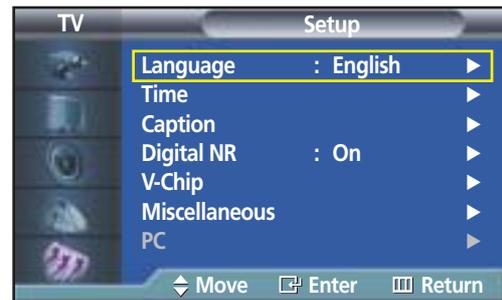


- 4 Press the MENU button to exit.

## How to Set up Restrictions using the "TV guidelines"

First, set up a personal identification number (PIN), and enable the V-Chip. (See previous section.) Parental restrictions can be set up using either of two methods: The TV guidelines or the MPAA rating.

- 1 Press the MENU button. Press the ▲ or ▼ button to select "Setup", then press the ENTER button.



- 2 Press the ▲ or ▼ button to select "V-Chip", then press the ENTER button. The message "Enter PIN" will appear. Enter your 4-digit PIN number.



- 3 The "V-Chip" screen will appear. Press the ▲ or ▼ button to select "TV Parental Guidelines", then press the ENTER button.



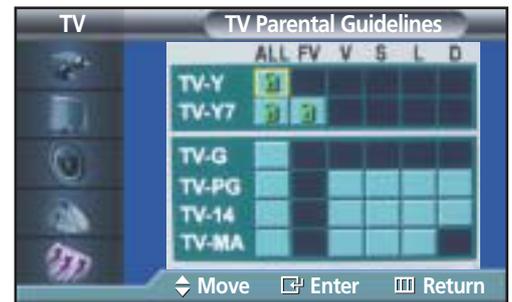
- 4 The "TV Parental Guidelines" screen will appear. Press the ▲ or ▼ button to select one of the six ages based categories:

TV-Y	Young children
TV-Y7	Children 7 and over
-----	
TV-G	General audience
TV-PG	Parental guidance
TV-14	Viewers 14 and over
TV-MA	Mature audience



- 5** At this point, one of the TV-Ratings is selected. Press the ENTER button. Depending on your existing setup, a symbol  will be selected. (Blank = Unblocked,  = Blocked)

While "" is selected, press the ▲ or ▼ button to block the category. To select a different TV-Rating, press the ▲ or ▼ button and then repeat the process.



Note 1: The TV-Y7, TV-PG, TV-14 and TV-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

Note 2: The V-Chip will automatically block certain categories that are "more restrictive". For example, if you block "TV-Y" category, then TV-Y7 will automatically be blocked. Similarly, if you block the TV-G category, then all the categories in the "young adult" group will be blocked (TV-G, TV-PG, TV-14 and TV-MA). The sub-ratings (D, L, S, V) work together similarly. (See next section.)

- 6** How to set the FV, D, L, S and V sub-ratings. First, select one of these TV-Ratings: TV-Y7, TV-PG, TV-14 or TV-MA (See Step 4, on previous page). Next, while the TV-Rating is selected, repeatedly press the ENTER button. This will cycle through the available sub-ratings (FV, L, S, D or V). A symbol "" will be displayed for each sub-rating. While "" is selected, press the ▲, ▼, ◀, or ▶ button to change the sub-rating. To select a different TV-Rating, press the ▲ or ▼ 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 TV-PG, then the "L" sub-ratings in TV-14 and TV-MA will automatically be blocked.

- 7** Press the MENU button to clear all the screens. (Or proceed to the next section, and set up additional restrictions based on the MPAA codes).

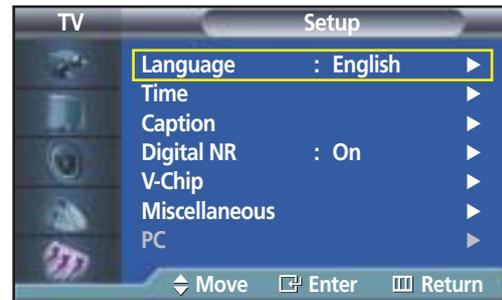
**Note**

- These categories consist of two separate groups: TV-Y and TV-Y7 (young children through age 7), and TV-G through TV-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. (See next step.)

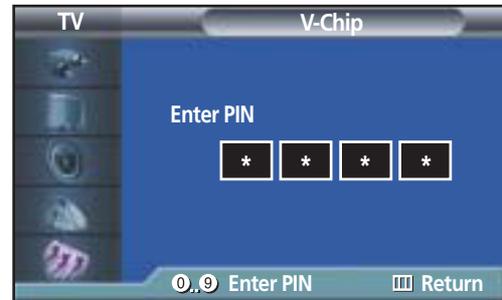
# How to Set up Restrictions using the MPAA Ratings: G, PG, PG-13, R, NC-17, X

The 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 MPAA or TV-Ratings).

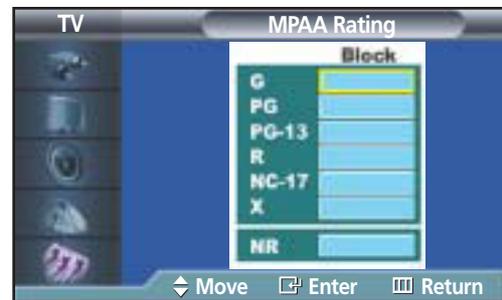
- 1 Press the MENU button. Press the ▲ or ▼ button to select "Setup", then press the ENTER button.



- 2 Press the ▲ or ▼ button to select "V-Chip", then press the ENTER button. The message "Enter PIN" will appear. Enter your 4 digit PIN number.

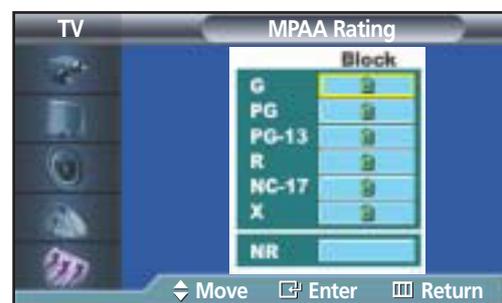


- 3 The "V-Chip" screen will appear. Press the ▲ or ▼ button to select "MPAA Rating", then press the ENTER button.



- 4 The "MPAA Rating" screen will appear. Repeatedly press the ▲ or ▼ button to select a particular MPAA category. Pressing the ▲ or ▼ button will cycle through the MPAA categories:

<b>G</b>	General audience (no restrictions).
<b>PG</b>	Parental guidance suggested.
<b>PG-13</b>	PG-13 (Parents strongly cautioned).
<b>R</b>	R (Restricted. Children under 17 should be accompanied by an adult).
<b>NC-17</b>	No children under age 17.
<b>X</b>	X (Adults only).
<b>NR</b>	Not rated.



While a particular category is selected, press the ▲ or ▼ button to activate it. A selected symbol "🔒" will be displayed. Press the ▲ or ▼ button to select "🔒".

Note: 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.

## How to Reset the TV after the V-Chip Blocks a Channel ("Emergency Escape")

If the TV is tuned to a restricted channel, the V-Chip will block it. The screen will go blank and the following message will appear: "Excessive rating".

To resume normal viewing, tune to a different channel using the number buttons. Under certain conditions (depending on the rating of the local TV programs) the V-Chip might lock out all the channels. In this case, use the V-Chip function for an "emergency escape":

- **1** Press the MENU button. Press the ▲ or ▼ button to select "Setup", then press the ENTER button.
- **2** Press the ▲ or ▼ button to select "V-Chip", then press the ENTER button.
- **3** Enter your PIN number, and press the ► button to temporarily disable the V-Chip Lock.

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S  
V  
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P L A S M A   D I S P L A Y   P A N E L

# Appendix

Troubleshooting.....	100
Care and Maintenance .....	101
Specifications .....	102



# Troubleshooting

Before you call a service technician, please scan this list of problems and possible solutions. It may save you time and money.

Problem	Possible Solution
Poor picture.	Check all wire connections.
Your Remote control does not operate the PDP.	Press the "MODE" button to put your remote control in the "TV" mode.
The PDP won't turn on.	Check if the power plug is connected.
There is no screen image.	Check to see that both the PDP and the source are plugged in and turned on.
The image is too light or too dark.	Adjust the Brightness or Contrast settings.
The image is too large or too small.	Adjust the Size settings.



## Care and Maintenance

With proper care, your PDP will give you many years of service. Please follow these guidelines to get the maximum performance from your PDP.

### Identifying Problems

- Do not put the PDP near extremely hot, cold, humid or dusty places.
- Do not put the PDP near appliances that create magnetic fields.
- Keep the ventilation openings clear.
- Do not place the PDP on a rough and slanted surface, such as cloth or paper.

### Liquids

- Do not place liquids near or on the PDP.

### Cabinet

- Never open the cabinet or touch the parts inside.
- Wipe your PDP with a clean, dry cloth. Never use water, cleaning fluids, wax, or chemicals.
- Do not put heavy objects on top of the cabinet.

### Temperature

- If your PDP is suddenly moved from a cold to a warm place, unplug the power cord for at least two hours so that moisture that may have formed inside the unit can dry completely.



# Specifications

Exterior design and product specifications are subject to change without prior notice to improve the performance of this product.

This PDP operates as a Class B digital device.

(Note: Class B system is for home use.)

This PDP has been registered for residential use with regards to EMI.

Type No	MZ42S4	
Model	SPP4251	
Dimensions	Display	1050 (W) X 86 (D) X 755 (H) mm
	Remote Control	59 (W) X 22 (D) X 209 (H) mm
Weight	Display	36kg ; 79lbs
	Remote Control	164g ; 0.36lbs (including batteries)
Voltage	120V~, 60Hz	
Power Consumption	330 W	
Number of Pixels	852(H) x 480(V)	
Screen Size	107 Cm/42 inches	
ANTENNA input	VHF, UHF (75Ω unbalanced)	
VIDEO input	AV1 AV2 AV3(SIDE) S-VIDEO 1 S-VIDEO 2 (SIDE) COMPONENT 1 - 480i / 480p / 720p / 1080i COMPONENT 2 - 480i / 480p / 720p / 1080i RGB : PC DSUB 15P DVI	
AUDIO input	AV1 AV2/ S-VIDEO 1 AV3 (SIDE) / S-VIDEO 2 (SIDE) COMPONENT 1 - 480i / 480p / 720p / 1080i COMPONENT 2 - 480i / 480p / 720p / 1080i PC DVI	
Monitor Output	VIDEO, AUDIO(L/R)	
Speaker Output	15W+15W (8 Ω) - Internal Speaker	



**1-800-SAMSUNG (1-800-726-7864)**

**Samsung Electronics America  
Service Division**

400 Valley Road, Suite 201  
Mount Arlington, NJ 07856  
[www.samsungusa.com](http://www.samsungusa.com)

**Samsung Electronics Canada Inc.  
Samsung Customer Care**

7037 Financial Drive  
Mississauga, Ontario  
L5N 6R3  
[www.samsung.ca](http://www.samsung.ca)

**SAMSUNG**

## **Warning! Important Safety Instructions**

(Please read the appropriate section that corresponds to the marking on your Samsung product before attempting to install the product.)

### **CAUTION**

#### **RISK OF ELECTRIC SHOCK DO NOT OPEN**

CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER (OR BACK). THERE ARE NO USER SERVICEABLE PARTS INSIDE. REFER ALL SERVICING TO QUALIFIED PERSONNEL.



This symbol indicates high voltage is present inside. It is dangerous to make any kind of contact with any inside part of this product.



This symbol alerts you that important literature concerning operation and maintenance has been included with this product.

- The slots and openings in the cabinet and in the back or bottom are provided for necessary ventilation. To ensure reliable operation of this apparatus, and to protect it from overheating, these slots and openings must never be blocked or covered.
  - Do not cover the slots and openings with a cloth or other materials.
  - Do not block the slots and openings by placing this apparatus on a bed, sofa, rug or other similar surface.
  - Do not place this apparatus in a confined space, such as a bookcase, or built-in cabinet, unless proper ventilations is provided.
- Do not place this apparatus near or over a radiator or heat register, or where it is exposed to direct sunlight.
- Do not place the sources of heat on this apparatus, such as a candle, ash tray, incense or other similar material.
- Do not place a water containing vessel on this apparatus, as this can result in a risk of fire or electric shock.
- Do not expose this apparatus to rain or place it near water (near a bathtub, washbowl, kitchen sink, or laundry tub, in a wet basement, or near a swimming pool etc.). If this apparatus accidentally gets wet, unplug it and contact an authorized dealer immediately.

You can clean this apparatus with damp cloth when necessary, but be sure to unplug the apparatus first.
- Do not expose this apparatus set to extreme temperature conditions or to extreme humidity conditions.
- This apparatus use batteries. In your community there might be regulations that require you to dispose these batteries properly under environmental considerations. Please contact your local authorities for disposal or recycling information.
- To cut off the power source, unplug this apparatus from the wall outlet.
- Do not overload wall outlets, extension cords or convenience receptacles beyond their capacity, since this can result in fire or electric shock.
- Power-supply cords should be routed so that they are not likely to be walked on or pinched by items placed upon or against them, paying particular attention to cords at plugs, convenience receptacles, and the point where they exit from the appliance.
- To protect this apparatus from a lightning storm, or when it is left unattended and unused for long periods of time, unplug it from the wall outlet and disconnect the antenna or cable system. This will prevent damage to the set due to lightning and power line surges.
- Before connecting the AC power cord to the DC adapter outlet, make sure the voltage designation of the DC adapter corresponds to the local electrical supply.
- Never insert anything metallic into this apparatus openings. Doing so may create the danger of electric shock.
- To avoid electric shock, never touch the inside of this apparatus. Only a qualified technician should open this apparatus's case.
- Be sure to hold the plug, not the cord, when disconnecting this apparatus from an electric socket.
- Locate this apparatus near an easily accessible AC outlet.
- If this apparatus does not operate normally - in particular, if there are any unusual sounds or smells coming from it - unplug it immediately and contact an authorized dealer or service center.
- Unplug this apparatus from the AC outlet before any service.
- Be sure to pull the power plug out of the outlet if the TV is to remain unused or you are to leave the house for an extended period of time (especially when children, elderly or disabled people will be left alone in the house).
  - Accumulated dust can cause an electric shock, an electric leakage or a fire by causing the power cord to generate sparks and heat or deteriorating the insulation.

# Regulatory Compliance Statements

## Your Samsung product is marked to indicate its compliance class

- Federal Communications Commission (FCC) - USA
- Industry Canada Equipment Standard for Digital Equipment (ICES-003) - Canada
- Voluntary Control Council for Interference (VCCI) - Japan
- Bureau of Standards Metrology and Inspection (BSMI) - Taiwan
- Ministry of Information and Communication (MIC) - Republic of Korea
- Italian Post Ministry (Homologation) - Italy

### FCC Class A Notice

***This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:***

1. This device may not cause harmful interference, and
2. This device must accept any interference received, including interference that may cause undesired operation.

**NOTE:**

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

### FCC Class B Notice

***This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:***

1. This device may not cause harmful interference, and
2. This device must accept any interference received, including interference that may cause undesired operation.

**NOTE:**

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

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

### User Information

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment. If necessary, consult with your dealer or an experienced radio/television technician for additional suggestions. You may find the booklet called How to Identify and Resolve Radio/TV Interference Problems helpful. This booklet was prepared by the Federal Communications Commission. It is available from the U.S. Government Printing Office, Washington, DC 20402, Stock Number 004-000-00345-4.

### The party responsible for product compliance:

SAMSUNG ELECTRONICS CO., LTD.  
America QA Lab of Samsung  
3351 Michelson Drive  
Suite #290, Irvine, CA92612 USA

### Warning

User must use shielded signal interface cables to maintain FCC compliance for the product.

Provided with this monitor is a detachable power supply cord with IEC320 style terminations.

It may be suitable for connection to any UL Listed personal computer with similar configuration.

Before making the connection, make sure the voltage rating of the computer convenience outlet is the same as the monitor and that the ampere rating of the computer convenience outlet is equal or exceeds the monitor voltage rating.

For 120 Volt applications, use only UL Listed detachable power cord with NEMA configuration 5-15P type(parallel blades) plug cap. For 240 Volt applications use only UL Listed detachable power supply cord with NEMA configuration 6015P type(tandem blades) plug cap.

This television receiver provides display of television closed captioning in accordance with Section 15.119 of the FCC rules.(TV broadcast receivers with picture screens 13 inches or larger in diameter models only)

### **ICES-003 Class A Notice - Avis NMB-003, Classe A**

This Class A digital apparatus complies with Canadian ICES-003.  
Cet appareil numérique de la classe A est conforme à la norme NMB-003 du Canada.

### **ICES-003 Class B Notice - Avis NMB-003, Classe B**

This Class B digital apparatus complies with Canadian ICES-003.  
Cet appareil numérique de la classe B est conforme à la norme NMB-003 du Canada.

### **VCCI Class A Notice**

この装置は、情報処理装置等電波障害自主規制協議会(VCCI)の基準に基づくクラスA情報技術装置です。  
この装置を家庭環境で使用すると電波妨害を引き起こすことがあります。  
この場合には使用者が適切な対策を講ずるよう要求されることがあります。

### **VCCI Class B Notice**

この装置は、情報処理装置等電波障害自主規制協議会(VCCI)の基準に基づくクラスB情報技術装置です。  
この装置は、家庭環境で使用することを目的としていますが、この装置がラジオやテレビジョン受信機に接続して使用されると、受信障害を引き起こすことがあります。  
取扱説明書に従って正しい取り扱いをしてください。

### **BSMI Class A Notice**

The following statement is applicable to products shipped to Taiwan and marked as Class A on the product compliance label.

警告使用者:  
這是甲類資訊類產品,在居住環境中使用時,可能會造成射頻干擾,在這種情況下,  
使用者會被要求採取某些適當的對策。



### **European Notice(Europe Only)**

Products with the CE marking comply with the EMC Directive(89/336/EEC), (92/31/EEC), (93/68/EEC) and the Low Voltage Directive(73/23/EEC) issued by the Commission of the European Community.

Compliance with these directives implies conformity to the following European Norms:

- EN55022: Radio Frequency Interference
- EN55024: Electromagnetic Immunity of Information Technology Equipment
- EN61000-3-2: Power Line Harmonics
- EN61000-3-3: Voltage Fluctuations
- EN55013: Radio disturbance characteristics of broadcast receivers and associated equipments
- EN55020: Electromagnetic immunity of broadcast receivers and associated equipments

### **European Class A Warning**

This is a class A product. In a domestic environment this product may cause radio interference in which case the user may be required to take adequate measures.(Class A product only)

### **정보통신기기 A급기기 (MIC Class A Notice)**



이 기기는 업무용으로 전자파적합등록을 한 기기이오니 판매자 또는 사용자는 이 점을 주의하시기 바라며  
반약 잘못 판매 또는 구입하였을 때에는 가정용으로 교환하시기 바랍니다 .

### **정보통신기기 B급기기 (MIC Class B Notice)**

이 기기는 가정용으로 전자파적합등록을 한 기기로서 주거지역에서는 물론 모든 지역에서 사용할 수 있습니다 .

### **Italian Homologation Notice**

Questo apparecchio e fabbricato in conformita al D.M.28.08.95 n.548  
ed in particolare a quanto specificato nell Art.2, comma 1.  
Questo apparecchio e fabbricato nella U.E. in conformita al D.M.28.08.95 n.548  
Art.2, comma 1 ed al D.M.26.03.92 Art.1  
-. For products produced in countries except European Community  
Questo apparecchio e fabbricato in conformita al D.M.28.08.95 n.548  
ed in particolare a quanto specificato nell Art.2, comma 1.  
-. For products produced in European Community  
Questo apparecchio e fabbricato nella U.E. in conformita al D.M.28.08.95 n.548  
Art.2, comma 1 ed al D.M.26.03.92 Art.1

## Important Safety Instructions(UL Only)

- 1) Read these instructions.
- 2) Keep these instructions.
- 3) Heed all warnings.
- 4) Follow all instructions.
- 5) Do not use this apparatus near water.
- 6) Clean only with dry cloth.
- 7) Do not block any ventilation openings, Install in accordance with the manufacturer's instructions.
- 8) Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
- 9) Do not defeat the safety purpose of the polarized or grounding-type plug. A polarized plug has two blades with one wider than the other. A grounding type plug has two blades and a third grounding prong. The wide blade or the third prong are provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.
- 10) Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.
- 11) Only use attachments/accessories specified by the manufacturer.
- 12) Use only with cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with the apparatus. When a cart is used, use caution when moving the cart/apparatus combination to avoid injury from tip-over.
- 13) Unplug this apparatus during lightning storms or when unused for long periods of time.
- 14) Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.



**WARNING: To prevent damage which may result in fire or electric shock hazard, do not expose this appliance to rain or moisture.**

• **Optional** .....

1. Do not place the apparatus in a rack or bookcase. Ensure that there is adequate ventilation and that you've followed that manufacturer's instructions for mounting.(For PDP or Projection TV apparatus)
2. If you place the apparatus in a rack or bookcase, ensure that there is adequate ventilation and that you've followed the manufacturer's instructions.

# How to assemble the PDP Stand

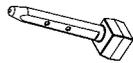
## Parts



8 Screws  
For securing the Stand Pegs  
(6006-001112)



4 Screws  
For securing the Stand Pegs and  
the Monitor(6009-001432)



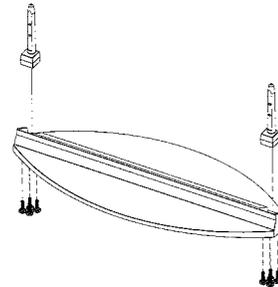
2 Stand Pegs  
(BN61-00779A)



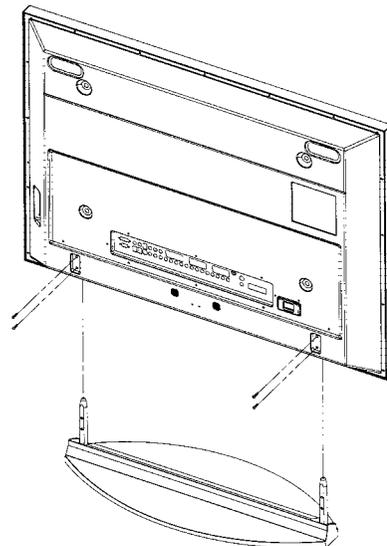
1 Stand Base

## Methods

- 1** Using the 8 screws for securing the Stand Pegs, firmly attach the 2 Stand Pegs to the Stand Base.



- 2** Using the 4 screws for securing the Stand Pegs and the Monitor, firmly attach the Monitor to the Stand Pegs.

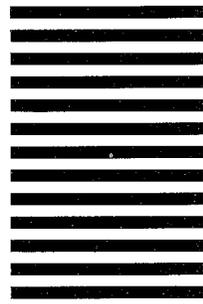




NO POSTAGE  
NECESSARY  
IF MAILED  
IN THE  
UNITED STATES



**BUSINESS REPLY MAIL**  
FIRST-CLASS MAIL      PERMIT NO. 415      MT ARLINGTON NJ



POSTAGE WILL BE PAID BY ADDRESSEE

**ATTN: CUSTOMER CARE CENTER  
SAMSUNG ELECTRONICS**

**PO BOX 415  
MT ARLINGTON NJ 07856-9986**



**Free Warranty Extension**

Yes, 3 months warranty extension FREE !  
Simply fill out and return this survey within 10 days of  
purchase and we will extend the warranty by 3 months.

We would like to thank you for purchasing this Samsung  
product. Because what you think is very important to us,  
we invite you to fill out this survey. We promise to respect  
your privacy. All of your answers will be kept confidential.

If you have any questions, please call 1-800-SAMSUNG.

AA68-03262A

For your convenience, you may fill out this information at [www.SamsungUSA.com](http://www.SamsungUSA.com).



Failure to complete and return this card does not diminish your warranty rights

First Name \_\_\_\_\_ Last Name \_\_\_\_\_  
 Street Address \_\_\_\_\_  
 City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_  
 Telephone \_\_\_\_\_ E-mail \_\_\_\_\_  
 Marital Status  Single  Married  Male  Female  
 Date of Birth \_\_\_\_\_ Age  Under 18  18-24  25-34  35-44  45-54  55-64  Over 65  
 Model Number \_\_\_\_\_ Date Purchased \_\_\_\_\_  
 Store Name \_\_\_\_\_ City \_\_\_\_\_ State \_\_\_\_\_  
 Residence Type  Apartment  House  Condo  Own  Rent  
 Household Income  Less than 30K  30-39K  40-59K  60-79K  80-99K  100-149K  More than 150K

- Which is the most important factor in purchasing electronic products?
  - Prior experience  Brand reputation
  - Price  Features  Design
- How would you rate Samsung products overall?
  - Excellent  Very good  Good
  - Average  Below average  Don't know
- Which of the following best describes the primary reason for purchasing this Samsung product?
  - Color  Size  Design  Ease of use  Price
  - New features  Many features  Brand reputation
- Did you consider any other brands before purchasing this product? If so, please choose two.
  - Ericsson  GE  HP  Mitsubishi
  - Motorola  NEC  Nokia  Panasonic
  - Philips  RCA  Sharp  Sony
  - Toshiba  Viewsonic
  - Other \_\_\_\_\_
- What is the primary language spoken in your household?
  - English  Spanish  Chinese
  - German  French  Other \_\_\_\_\_
- What is your main source of information about electronic products?
  - Magazine  Newspaper  TV
  - Radio  Direct mail/Catalog  Store display
  - Salesperson  Family/Friends  Internet
- How did you first become aware of this Samsung product?
  - Magazine  Newspaper  TV
  - Radio  Direct mail/Catalog  Store display
  - Salesperson  Family/Friends  Samsung website
- When do you buy new electronic products?
  - Whenever new products are available
  - When products become affordable
- When do you make a purchase decision?
  - Before visiting the store  At the store
- How many hours do you spend daily on the Internet at home?
  - Less than 1 hour  1-2 hours  More than 2 hours
- Would you consider purchasing electronic products online in the future? If Yes, please provide the reason why.
  - Yes  Convenience  Time saving
  - No  24-hours accessibility  Price

	How long have you owned?			Is it a Samsung product?	Do you plan to buy any in the next 6 months?
	less than 1 year	1-3 years	over 3 years		
Camcorder	<input type="checkbox"/>				
Computer Monitor	<input type="checkbox"/>				
Digital Camera	<input type="checkbox"/>				
DVD	<input type="checkbox"/>				
Microwave	<input type="checkbox"/>				
Mobile Phone	<input type="checkbox"/>				
MP3	<input type="checkbox"/>				
Printer/Fax	<input type="checkbox"/>				
Surround System	<input type="checkbox"/>				
TV 20" & smaller	<input type="checkbox"/>				
25"-29"	<input type="checkbox"/>				
30"-36"	<input type="checkbox"/>				
Projection	<input type="checkbox"/>				
HDTV 36" & smaller	<input type="checkbox"/>				
Larger than 36"	<input type="checkbox"/>				
VCR	<input type="checkbox"/>				

MODEL NO. SP - P4251

**SAMSUNG**

ELECTRONICS

# **SAMSUNG ELECTRONICS**

## **NORTH AMERICAN LIMITED WARRANTY STATEMENT**

Subject to the requirements, conditions, exclusions and limitations of the Original Limited Warranty supplied with Samsung Electronics (SAMSUNG) products, and the requirements, conditions, exclusions and limitations contained herein, SAMSUNG will additionally provide Warranty Repair Service in the United States on SAMSUNG products purchased in Canada, and in Canada on SAMSUNG products purchased in the United States, for the warranty period originally specified, and to the Original Purchaser only.

The above described warranty repairs must be performed by a SAMSUNG Authorized Service Center. Along with this Statement, the Original Limited Warranty Statement and a dated Bill of Sale as Proof of Purchase must be presented to the Service Center. Transportation to and from the Service Center is the responsibility of the purchaser.

Conditions covered are limited only to manufacturing defects in material or workmanship, and only those encountered in normal use of the product.

Excluded, but not limited to, are any originally specified provisions for, in-home or on-site services, minimum or maximum repair times, exchanges or replacements, accessories, options, upgrades, or consumables.

For the location of a SAMSUNG Authorized Service Center, please call toll-free:

**In the United States: 1-800-SAMSUNG (1-800-726-7864)**

**In Canada: 1-800-SAMSUNG**

# **SAMSUNG COLOR TELEVISION & PROJECTION TELEVISION**

## **LIMITED WARRANTY TO ORIGINAL PURCHASER**

This SAMSUNG brand product, as supplied and distributed by SAMSUNG and delivered new, in the original carton to the original consumer purchaser, is warranted by SAMSUNG against manufacturing defects in materials and workmanship for a limited warranty period of:

**Color Television: One (1) Year Parts and Labor, except Two (2) Years Parts Warranty for Picture Tube (CRT)\***

**Projection Television: One (1) Year Parts and Labor, including Picture Tubes (CRT)\***

**LCD TV: One (1) Year Parts and Labor, including Display Panels**

**Plasma Display: Two (2) Year Parts and Labor, including Display Panels**

**DLP Projection TV: One (1) Year Parts and Labor, including Display Panels**

**(\*90 Days Parts and Labor for Commercial Use)**

This limited warranty begins on the original date of purchase, and is valid only on products purchased and used in the United States. To receive warranty service, the purchaser must contact SAMSUNG for problem determination and service procedures. Warranty service can only be performed by a SAMSUNG authorized service center. The original dated bill of sale must be presented upon request as proof of purchase to SAMSUNG or SAMSUNG's authorized service center.

SAMSUNG will repair or replace this product, at our option and at no charge as stipulated herein, with new or reconditioned parts or products if found to be defective during the limited warranty period specified above. All replaced parts and products become the property of SAMSUNG and must be returned to SAMSUNG. Replacement parts and products assume the remaining original warranty, or ninety (90) days, whichever is longer.

For 26" and larger televisions, in-home service will be provided during the warranty labor period subject to availability within the contiguous United States. In-home service is not available in all areas. To receive in-home service, the product must be unobstructed and accessible to service personnel. If during in-home service repair can not be completed, it may be necessary to remove, repair and return the product. If in-home service is unavailable, SAMSUNG may elect, at our option, to provide for transportation of our choice to and from a SAMSUNG authorized service center. Otherwise, and for 25" and smaller televisions, transportation to and from the SAMSUNG authorized service center is the responsibility of the purchaser.

This limited warranty covers manufacturing defects in materials and workmanship encountered in normal, and except to the extent otherwise expressly provided for in this statement, noncommercial use of this product, and shall not apply to the following, including, but not limited to: damage which occurs in shipment; delivery and installation; applications and uses for which this product was not intended; altered product or serial numbers; cosmetic damage or exterior finish; accidents, abuse, neglect, fire, water, lightning or other acts of nature; use of products, equipment, systems, utilities, services, parts, supplies, accessories, applications, installations, repairs, external wiring or connectors not supplied or authorized by SAMSUNG which damage this product or result in service problems; incorrect electrical line voltage, fluctuations and surges; customer adjustments and failure to follow operating instructions, cleaning, maintenance and environmental instructions that are covered and prescribed in the instruction book; reception problems and distortion related to noise, echo, interference or other signal transmission and delivery problems; picture tube (CRT) brightness related to normal aging, or burned-in images. SAMSUNG does not warrant uninterrupted or error-free operation of the product.

THERE ARE NO EXPRESS WARRANTIES OTHER THAN THOSE LISTED AND DESCRIBED ABOVE, AND NO WARRANTIES WHETHER EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, SHALL APPLY AFTER THE EXPRESS WARRANTY PERIODS STATED ABOVE, AND NO OTHER EXPRESS WARRANTY OR GUARANTY GIVEN BY ANY PERSON, FIRM OR CORPORATION WITH RESPECT TO THIS PRODUCT SHALL BE BINDING ON SAMSUNG. SAMSUNG SHALL NOT BE LIABLE FOR LOSS OF REVENUE OR PROFITS, FAILURE TO REALIZE SAVINGS OR OTHER BENEFITS, OR ANY OTHER SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES CAUSED BY THE USE, MISUSE OR INABILITY TO USE THIS PRODUCT, REGARDLESS OF THE LEGAL THEORY ON WHICH THE CLAIM IS BASED, AND EVEN IF SAMSUNG HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES. NOR SHALL RECOVERY OF ANY KIND AGAINST SAMSUNG BE GREATER IN AMOUNT THAN THE PURCHASE PRICE OF THE PRODUCT SOLD BY SAMSUNG AND CAUSING THE ALLEGED DAMAGE. WITHOUT LIMITING THE FOREGOING, PURCHASER ASSUMES ALL RISK AND LIABILITY FOR LOSS, DAMAGE OR INJURY TO PURCHASER AND PURCHASER'S PROPERTY AND TO OTHERS AND THEIR PROPERTY ARISING OUT OF THE USE, MISUSE OR INABILITY TO USE THIS PRODUCT SOLD BY SAMSUNG NOT CAUSED DIRECTLY BY THE NEGLIGENCE OF SAMSUNG. THIS LIMITED WARRANTY SHALL NOT EXTEND TO ANYONE OTHER THAN THE ORIGINAL PURCHASER OF THIS PRODUCT, IS NONTRANSFERABLE AND STATES YOUR EXCLUSIVE REMEDY.

Some states do not allow limitations on how long an implied warranty lasts, or the exclusion or limitation of incidental or consequential damages, so the above limitations or exclusions may not apply to you. This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

To obtain warranty service, please contact SAMSUNG at:

**SAMSUNG ELECTRONICS AMERICA, INC. – CONSUMER ELECTRONICS CUSTOMER SERVICE**

**400 Valley Road, Suite 201, Mt. Arlington, NJ 07856**

**Tel: 973-601-6000, Fax: 973-601-6001**

**1-800-SAMSUNG (1-800-726-7864) – WWW.SAMSUNGUSA.COM**

## **IMPORTANT WARRANTY INFORMATION REGARDING TELEVISION FORMAT VIEWING**

**Standard screen format televisions (4:3, the aspect ratio of the screen width to height) are primarily designed to view standard format full-motion video.** The images displayed on them should primarily be in the standard 4:3 ratio format and constantly moving. Displaying stationary graphics and images on screen, such as the dark top and bottom letterbox bars (wide screen pictures), should be limited to no more than 15% of the total television viewing per week.

**Wide screen format televisions (16:9, the aspect ratio of the screen width to height) are primarily designed to view wide screen format full-motion video.** The images displayed on them should primarily be in the wide screen 16:9 ratio format, or expanded to fill the screen if your model offers this feature, and constantly moving. Displaying stationary graphics and images on screen, such as the dark side-bars on non-expanded standard format television video and programming, should be limited to no more than 15% of the total television viewing per week.

Additionally, viewing other stationary images and text such as stock market reports, video game displays, station logos, web sites or computer graphics and patterns, should be limited as described above for all televisions. Displaying any stationary images that exceed the above guidelines can cause uneven aging of picture tubes (CRTs) or Plasma Display Panels that leave subtle, but permanent burned-in ghost images in the television picture. To avoid this, vary the programming and images, and primarily display full screen moving images, not stationary patterns or dark bars. On television models that offer picture sizing features, use these controls to view the different formats as a full screen picture.

**Be careful in the selection and duration of television formats used for viewing. Uneven CRT or Plasma Display Panels aging as a result of format selection and use, as well as other burned-in images, is not covered by your Samsung limited warranty.**