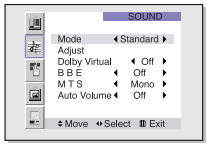
Special Features

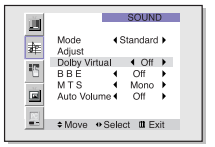
Dolby Virtual

This feature allows the TV's L/R speakers to provide a home Theater-like Dolby effect.
The center and surround sounds are mixed into the L/R speakers.

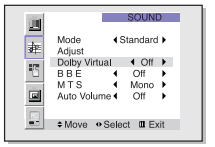
1 Press the Menu button. Move the joystick down to select SOUND, then press the joystick to enter.



2 Move the joystick down to select Dolby Virtual.



3 Move the joystick to the right or left to select "Virtual"or "Off".



4 Press the Menu button to exit.

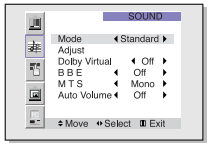
NOTE

- Dolby Virtual and BBE can't be set ON at the same time.

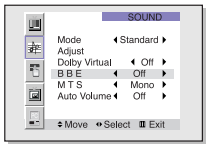
BBE

BBE is a built-in effect that adds clarity, punch and dynamics to the sound.

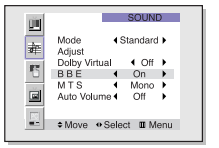
1 Press the Menu button. Move the joystick down to select SOUND, then press the joystick to enter.



2 Move the joystick down to select BBE.



3 Move the joystick to the right or left to select "On"or "Off".



4 Press the Menu button to exit.

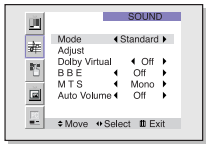
NOTE

- Dolby Virtual and BBE can't be set ON at the same time.

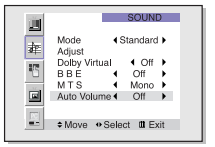
Auto Volume

Each broadcasting station has its own signal conditions, and it is inconvenient to adjust the volume every time the channel is changed. "Auto volume" automatically adjusts 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.

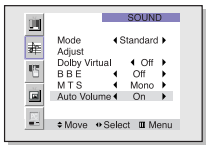
1 Press the Menu button. Move the joystick down to select SOUND, then press the joystick to enter.



2 Move the joystick down to select Auto Volume.



3 Move the joystick to the right or left to select "On"or "Off".



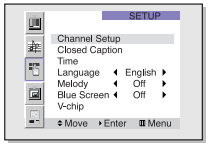
4 Press the Menu button to exit.

Viewing Closed Caption Information

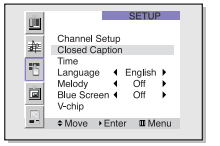
Your TV decodes and displays the closed captions information that is broadcast along with some television shows. These captions are usually subtitles for the hearing impaired or translations into other languages. All VCRs record the closed caption signal from television programs, so pre-recorded video tapes can also deliver closed-caption information. Check for the closed caption symbol (CC) on the tape's package or your TV program-schedule.

Closed Captions

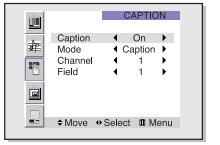
1 Press the Menu button. Move the joystick down to select SETUP, then press the joystick to enter.



2 Move the joystick down to select Closed Caption, then press the joystick to enter.



3 Move the joystick right or left to turn closed captioning on/off. Misspelling and unusual characters sometimes occur in closed caption transmissions, especially those of live events. There may be a small delay before captions appear when you change channels. (These do not indicate the TV is malfunctioning.) Move the joystick down to select the "Mode". Move the joystick right or left to choose "Caption" or "Text." In caption mode, captions appear at the bottom of the screen, and they usually cover only a small portion of the picture. In text mode, information unrelated to the program, such as news or weather, is displayed. Text often covers a large portion of the screen.



4 If you wish, use the joystick button to change the captioning channel or field. Then, press Menu to return to normal viewing. Different channels and fields display different information. For example, Channel 1 may have subtitles in English, while Channel 2 has subtitles in Spanish.

NOTE

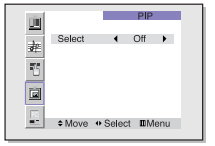
- The Caption function doesn't operate in Zoom1, Zoom2.

Viewing Picture-in-Picture

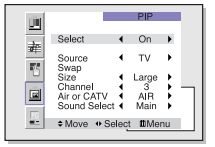
One of the most best features of your TV is the Picture-in-Picture (PIP) feature. The advanced PIP system allows you to watch two different pictures at once, even if you don't have a VCR connected to your TV.

Selecting a PIP Screen

1 Press the Menu button. Move the joystick down to select PIP, then press the joystick to enter.
Quick way to access PIP: Just press "PIP" on the remote control.



2 Move the joystick right to select PIP "On". The PIP image will appear in the corner of the screen.



3 Press Menu to exit.

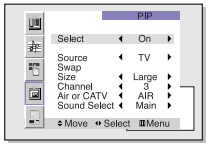
NOTES

- Picture-in-Picture doesn't function when the V-chip is active.
- If you turn the TV off while watching and turn it on again, then the mode will return to normal video.
- Screen size can't be changed in the PIP mode.

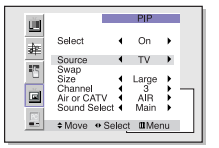
Selecting an External Signal

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

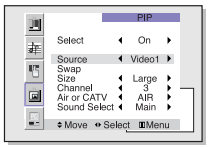
1 Press the Menu button. Move the joystick down to select PIP, then press the joystick to enter. Quick way to access PIP source: Just press "Source" on the remote control.



2 Move the joystick down to select "Source".



3 Move the joystick right or left to select an external signal. You can choose between "TV", "Video 1~3", or "S-Video 1~3".



The signal from these inputs will not appear if you have not connected any equipment to the TV's input jacks. For more information about external signals, see "Viewing an External Signal Source" (See page 41).
If you select "TV." the PIP image is the same as the main image.

4 Press Menu to exit.

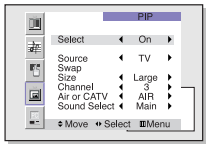
NOTE

- The PIP subscreen doesn't support ANT-B, Component1, Component2, Component3, PC, and DVI.

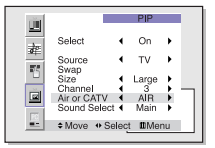
Selecting a Signal Source (Antenna or Cable) for PIP

If the PIP source is TV during PIP ON, you can select the broadcasting source of PIP picture separately from the main picture. (If the main picture is ANT-B and the broadcasting sources are different, making adjustments is necessary.)

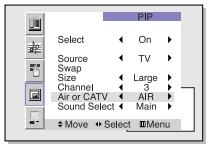
1 Press the Menu button. Move the joystick down to select PIP, then press the joystick to enter.



2 Move the joystick down to select "Air or CATV".



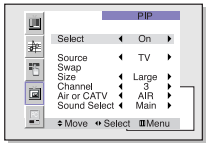
3 If an antenna is connected, the setting is "AIR." If a Cable TV system is providing the signal, move the joystick to the left or right until the appropriate type of cable system is displayed ("STD," "HRC," or "IRC").



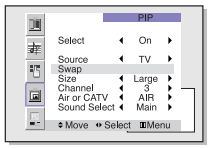
4 Press Menu to exit.

Swapping the Contents of the PIP and Main image

1 Press the Menu button. Move the joystick down to select PIP, then press the joystick to enter. Quick way to access PIP Swap: Just press "Swap" on the remote control.



2 Move the joystick down to select "Swap".



3 Move the joystick to the right or left.
The channel in the PIP image will appear in the main image, and vice versa.

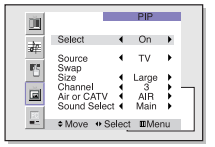
4 Press Menu to exit.

NOTE

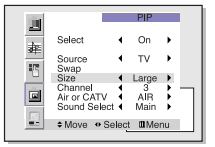
- When ANT-B, Component mode, PC, or DVI is selected, the PIP Swap function doesn't work.

Changing the Size of the PIP image

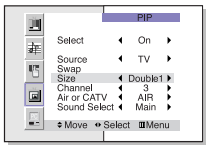
1 Press the Menu button. Move the joystick down to select PIP, then press the joystick to enter. Quick way to access PIP Size: Just press "Size" on the remote control.



2 Move the joystick down to select "Size".



3 Move the joystick to the right or left to select "Large", "Double1", "Double2" or "Small".
Note: Double function doesn't operate In the Component, PC, DVI mode.

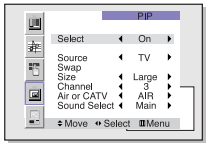


4 Press Menu to exit.

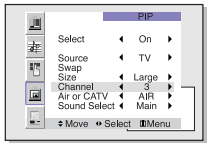
Changing the Picture-in-Picture Channel

After you set the PIP signal source (antenna or cable), it is easy to change channels.

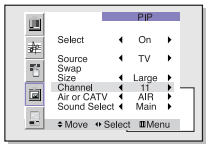
1 Press the Menu button. Move the joystick down to select PIP, then press the joystick to enter. Quick way to access PIP channel: Just press "PIP CH (▲,▼)" on the remote control.



2 Move the joystick down to select "Channel".



3 Move the joystick to the right or left to change the channel of the PIP image.



4 Press Menu to exit.

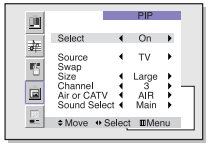
NOTE

- The PIP channels are not available when RF is set to ANT-B. (The PIP channels link to ANT-A).

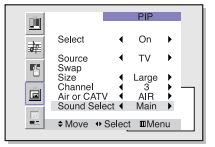
Selecting the Sound Source

You can use this feature to hear sound from the Main or PIP screen.

1 Press the Menu button. Move the joystick down to select PIP, then press the joystick to enter.



2 Move the joystick down to select "Sound Select".

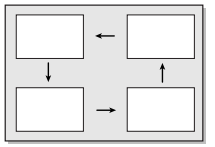


3 Move the joystick to the right or left to switch Main or Sub audio source. Main is for the main TV picture audio, and Sub is for the PIP picture audio.

4 Press Menu to exit.

Changing the Location of the PIP image

Press the Locate button repeatedly to move the PIP image from corner to corner on the screen.

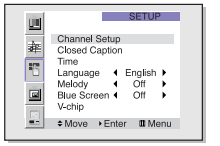


Using the V-Chip

The V-Chip feature automatically locks out programming that is deemed inappropriate for children.
The user must first enter a PIN (personal ID number) before any of the V-Chip restrictions can be set up or changed.
Note: The V-chip doesn't function when the Picture-in-Picture is active.

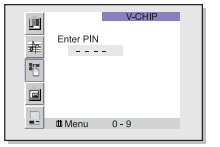
Setting Up Your Personal ID Number (PIN)

1 Press the Menu button. Move the joystick down to select SETUP, then press the joystick to enter.
Quick way to access the V-chip: Just press "V-chip" on the remote control.

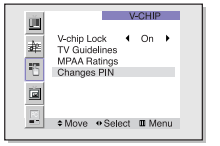


2 Move the joystick down to select V-chip, then press the joystick to enter.

The "Enter PIN" screen will appear. Enter your 4-digit PIN number.
Note: The default PIN number for a new TV set is "0-0-0-0."



3 After entering a valid PIN number, the "V-chip" screen will appear.
Move the joystick down to select "Change PIN", then press the joystick to enter. 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.
Press MENU to exit.



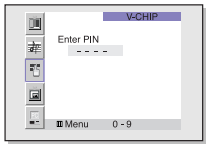
NOTE

- If you forget the PIN, press the remote-control keys in the following sequence, which resets the pin to 0-0-0-0: POWER OFF → Mute → 8 → 2 → 4 → POWER ON.

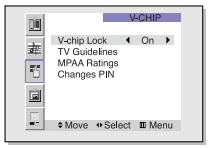
How to Enable/Disable the V-Chip

1 Press the Menu button. Move the joystick down to select SETUP, then press the joystick to enter.

Move the joystick down to select V-chip, then press the joystick to enter. The "Enter PIN" screen will appear. Enter your 4-digit PIN number.



2 The "V-Chip" screen will appear, and "V-Chip Lock" will be selected.
To enable the V-Chip feature, move the joystick right so that the "V-Chip Lock" field is On. (Moving the joystick to the right or left will alternate between On and Off.)

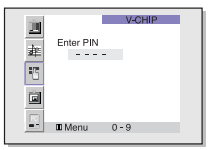


How to Set up Restrictions Using the "TV guidelines"

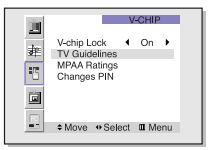
First, set up a personal identification number (PIN), and enable the V-Chip. (See previous section.) Parental restrictions can be set up using either of two methods: The TV guidelines or the MPAA rating.

1 Press the Menu button. Move the joystick down to select SETUP, then press the joystick to enter.

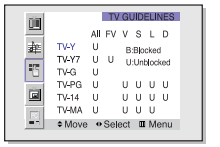
Move the joystick down to select V-chip, then press the joystick to enter.
The "Enter PIN" screen will appear.
Enter your 4-digit PIN number.



2 The "V-Chip mode" screen will appear. Move the joystick down to select "TV guidelines", then press the joystick to enter.



3 The "TV guidelines" screen will appear. Move the joystick up or down to highlight one of the six age-based categories:

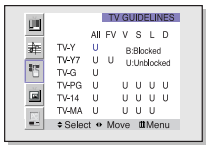


TV-Y	Young children
TV-Y7	Children 7 and over
TV-G	General audience
TV-PG	Parental guidance
TV-14	Viewers 14 and over
TV-MA	Mature audience

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.)

4 At this point, one of the TV-Ratings is selected. Move the joystick right: Depending on your existing setup, a letter "U" or "B" will be selected. (U: Unblocked, B: Blocked).

Move the joystick down or up to block or unblock the category. Move the joystick to the right. To select a different TV-Rating, move the joystick down or up and then repeat the process.



Note 1: 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:Dialog, L: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.)

Continued...

5 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 move the joystick right.
This will cycle through the available sub-ratings (FV, L, S, D or V). A letter ("U" or "B") will be displayed for each sub-rating. While the "U" or "B" is selected, move the joystick down or up to change the sub-rating.

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.

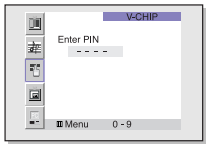
6 Press the Menu button to clear all the screens. (Or proceed to the next section, and set up additional restrictions based on the MPAA codes).

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

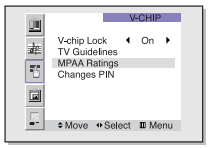
The MPAA rating system uses the Motion Picture Association of America (MPAA) system, and its main application is for movies. (Eventually, movie videocassettes will be encoded with MPAA ratings.) When the V-Chip lock is on, the TV will automatically block any programs that are coded with objectionable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

1 Press the Menu button. Move the joystick down to select SETUP, then press the joystick to enter.

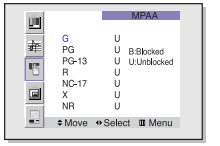
Move the joystick down to select the V-chip, then press the joystick to enter.
The "Enter PIN" screen will appear.
Enter your 4-digit PIN number.



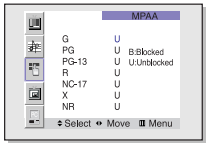
2 The "V-Chip" screen will appear. Move the joystick down to select "MPAA rating", then press the joystick to enter.



3 The "MPAA Ratings" screen will appear.



4 Repeatedly move the joystick down to highlight a particular MPAA category.
The MPAA categories are as follows.



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

While a particular category is highlighted, move the joystick to the right to activate it.
A letter ("U" or "B") will be displayed. Move the joystick down or up to select "U" or "B".
Press Menu button to save the settings and to clear all screens.

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 button for an "emergency escape":

Press the Menu button. Move the joystick down to select "SETUP", then press the joystick to enter. Move the joystick down to select "V-chip", then press the joystick to enter. Enter your PIN number, and move the joystick right to temporarily disable the V-Chip Lock.

SAMSUNG

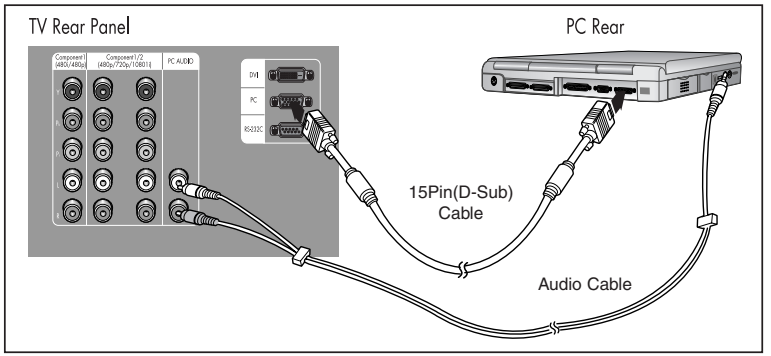
PC Display

PC Display

Using Your TV as a Computer (PC) Display

How to connect Your PC to the TV

Note: This figure shows the Standard Connector-jack panel. The actual configuration on your TV may be different, depending on the model.



NOTE

Jack RS232C is for repair and software upgrade.

How to Set up Your PC Software (Windows only)

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

First, click on "Settings" on the Windows start menu.

While "Settings" is highlighted, move the cursor so that "control panel" is highlighted.

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

Navigate to the "Settings" tab on the display dialog-box.

The two key variables that apply to the TV-PC interface are "resolution" and "colors." The correct settings for these two variables are:

* Screen area (sometimes called "resolution"): 1024 x 768 pixels

* Color: "24-bit" color (might also be expressed as "16 million colors"). 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...

PC Display

Display Modes

Mode	Resolution	Total	Hor. Freq	Polarity	Ver. Freq	Polarity	Pixel Clock	Sep	Com	SOG
VGA	640x350	800x449	31.47 kHz	P	70.00 Hz	N	25.175 MHz	0	0	x
	720x400	900x449	31.47 kHz	N	70.00 Hz		28.322 MHz	0	0	x
	720x400	936x446	37.93 kHz	N	85.00 Hz	P	35.5 MHz	0	0	x
	640x480	800x525	31.47 kHz	N	60.00 Hz	P	25.175 MHz	0	0	x
	640x480	864x525	35.00 kHz	N	66.70 Hz	N	30.24 MHz	0	0	x
	640x480	832x520	37.86 kHz	N	72.80 Hz	N	31.5 MHz	0	0	x
	640x480	840x500	37.50 kHz	N	75.00 Hz	N	31.5 MHz	0	0	x
	640x480	832x509	43.27 kHz	N	85.00 Hz	N	36 MHz	0	0	x
SVGA	800x600	1024x625	35.16 kHz	N/P	56.30 Hz	N	36 MHz	0	0	x
	800x600	1056x628	37.88 kHz	P	60.30 Hz	N/P	40 MHz	0	0	x
	800x600	1040x666	48.08 kHz	P	72.20 Hz	P	50 MHz	0	0	x
	800x600	1056x625	46.87 kHz	P	75.00 Hz	P	49.5 MHz	0	0	x
	800x600	1048x6321	53.67 kHz	P	85.10 Hz	P	56.25 MHz	0	0	x
	832x624	1152x667	49.73 kHz	N	74.60 Hz	P	57.284 MHz	0	0	x
XGA	1024x768	1344x806	48.36 kHz	N	60.00 Hz	N	65 MHz	0	0	x
	1024x768	1328x806	56.40 kHz	N	70.10 Hz	N	75 MHz	0	0	x
	1024x768	1312x800	60.02 kHz	P	75.00 Hz	N	78.75 MHz	0	0	x
DTV	1920x1080i	2200x1125	33.75 kHz	X	60.00 Hz	P	74.25 MHz	0	x	x
	1280x720p	1650x750	45.00 kHz	X	60.00 Hz	X	74.25 MHz	0	x	x
	720x483p	858x525	31.47 kHz	X	60.00 Hz	X	27 MHz	0	x	x

NOTE

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

* The interlace mode is not supported.
* The TV will operate abnormally if a non-standard video format is selected.

NOTES

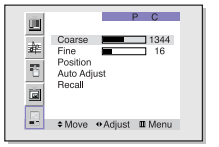
- When this TV is used as a PC display, 32-bit color is supported (over 16 million colors).
- Your PC display screen might appear different, depending on the manufacturer (and depending on your particular version of Windows). Check your PC instruction book for information about connecting your PC to a TV display-monitor.
- Same modes as PC are supported for the signal input to the DVI jack. Only a separate sync signal is supported.

How to Set up Your TV as a PC display

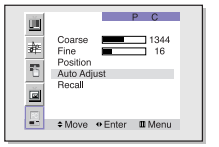
"Auto Adjust" allows the TV to self-adjust to the incoming video signal. The values of fine, coarse and position are adjusted automatically.

1 Press TV/VIDEO on the remote control.
Move the joystick up or down to select PC, then press the joystick to enter.

2 Press the Menu button.
Move the joystick down to select "PC", then press the joystick to enter.



2 Move the joystick down to select "Auto Adjust".



3 Press the joystick to enter.

PC Display

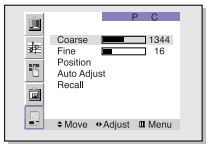
Picture Quality Adjustment

The purpose of picture quality adjustment is to remove or reduce picture noise.
If the noise is not removed by fine tuning alone, then do the frequency adjustments to the utmost and fine tune again. After the noise has been reduced, re-adjust the picture so that it is aligned on the center of screen.

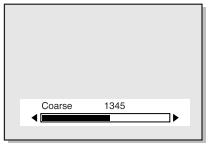
Frequency Adjustment

1 Press TV/VIDEO on the remote control.
Move the joystick up or down to select PC, then press the joystick to enter.

2 Press the Menu button.
Move the joystick down to select "PC", then press the joystick to enter.



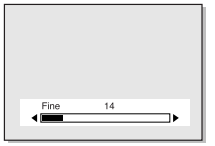
3 Move the joystick down to select "Coarse".
Remove picture noise (vertical stripes) on the screen by moving the joystick right or left.
(If frequency is not set properly, then vertical stripes will appear on the screen).



Fine tuning

4 Move the joystick down to select "Fine".
Remove picture noise (vertical stripes) on the screen by moving the joystick right or left.
(If phase is not set properly, the picture may be blurry.)

Press the Menu to exit.

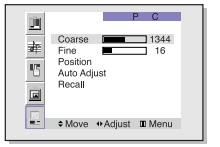


Changing the Position of the Image (Moving left, right, up and down)

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

1 Press TV/VIDEO on the remote control.
Move the joystick up or down to select PC, then press the joystick to enter.

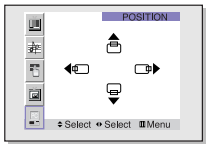
2 Press the Menu button.
Move the joystick down to select "PC", then press the joystick to enter.



3 Move the joystick down to select "Position", then press the joystick to enter.

Adjust the position of screen by using the joystick button.

Press the Menu to exit.

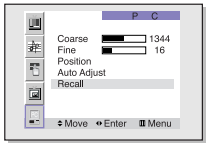


NOTE

- If a PC signal is input to DVI, you can't adjust the quality and position of picture.

To Initialize the Screen Position and Picture Quality Adjustment

After steps 1~2 above are completed, move the joystick down to select Recall. Press the joystick to initialize the screen position and picture quality.



NOTE

- When 'Recall' is active, the TV screen will become black and return to the original view about five seconds later. (This is a normal operation.)

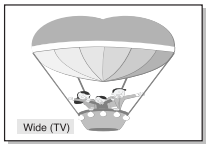
PC Display

Changing the Screen Size (PC mode)

When you press the ASPECT button on the remote control, the TV's screen mode choices appear in sequence. The screen displays in this order: Wide(TV), Wide(PC),Expand, Normal.
The name of the screen mode will be displayed at the bottom of the TV screen.

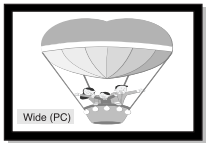
Wide (TV)

Scales the picture to the size of the TV screen regardless of the aspect ratio of the input source.



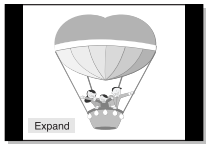
Wide (PC)

Scales the picture to 92% of the screen regardless of the aspect ratio of the input source.



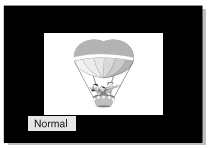
Expand

Scales the picture to the aspect ratio of the input source.



Normal

Displays the picture as it is without changing the aspect ratio of input source.



Aspect Supported settings

Source (PC/DVI)	Aspect
1920 x 1080i	Wide(TV)
1280 x 720	Wide(TV) → Wide(PC)
1024 x 768	Wide(TV) → Wide(PC) → Expand
720 x 483 (480p)	Wide(TV) → Wide(PC) → Normal
Others	Wide(TV) → Wide(PC) → Expand → Normal

NOTES

- In VGA (640x480) and SVGA (800x600) modes, the Wide(TV), Wide (PC), Expand and Normal screen modes are available.
- In XGA (1024x768) mode, the Wide (TV), Wide (PC) and Expand screen modes are available.

SAMSUNG

Appendix

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 quality.	Try another channel. Adjust the antenna. Check all wire connections.
Poor sound quality or no sound.	Try another channel. Adjust the antenna. Make sure the "Mute" button is off.
No picture or sound.	Try another channel. Press the TV/Video button. Make sure the TV is plugged in. Check the antenna connections.
No color or wrong colors.	Make sure the program is broadcasted in color. Adjust the picture settings.
Picture rolls vertically.	Adjust the antenna. Check all wire connections. If you are using a VCR, check the tracking.
Erratic operation, or intermittent failure.	Unplug the TV for 30 seconds, then try again.
Remote control failure.	Press the "Mode" button to put your remote control into "TV" mode. Make sure the remote has batteries.
TV won't switch on.	Make sure the wall outlet is working. Make sure the remote has batteries.

- The display panel used for the DLP Projection TV is composed of many tiny pixels. These, pixels may occasionally appear on the screen.

Care and Maintenance

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

Placement

- Do not put the TV near extremely hot, cold, humid or dusty places.
- Do not put the TV near appliances that create magnetic fields.
- Keep the ventilation openings clear.
- Do not place the TV on a rough and slanted surface, such as cloth or paper. (The screen top might be cut off or the screen center might be tilted.)

Liquids

- Do not handle liquids near or on the TV.

Cabinet

- Never open the cabinet or touch the parts inside.
- Wipe your TV with a clean, dry cloth. Never use water, cleaning fluids, wax, or chemicals.
- Do not put heavy objects on top of the cabinet.
- This DLP Projection TV projects the image onto a large screen by applying an optical system. If you place the TV set face down, it might cause a problem because dirt, or some other contaminant may become attached to the inside of the TV set.

Temperature

- If your TV 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.

Using the TV in Another Country

If you plan to take your TV to a foreign country, please be aware of the different television systems that are in use around the world. A TV designed for one system may not work properly with another system due to differences in the TV channel frequencies.

Specifications

Model	HLN4365W/HLN437W	HLN5065W/HLN507W	HLN617W	HLN467W	HLN567W
Voltage	AC 120V	AC 120V	AC 120V	AC 120V	AC 120V
Frequency of Operation	60Hz	60Hz	60Hz	60Hz	60Hz
Power Consumption	200 watts	200 watts	200 watts	200 watts	200 watts
Dimension (W x D x H)	1029 x 399 x 755 mm 40.5 x 15.7 x 29.7 inches	1184 x 444 x 859 mm 46.6 x 17.5 x 33.8 inches	1436 x 489 x 1021mm 56.5 x 19.3 x 40.2 inches	1047 x 399 x 779 mm 41.2 x 15.7 x 30.6inches	1268 x 461 x 924mm 49.9 x 18.1 x 36.4 inches
Weight	30.5 Kg / 67.2 lbs	35.2 Kg / 77.6 lbs	46.2 Kg / 101.9 lbs	33.5 Kg / 73.8 lbs	41.5 Kg / 91.5lbs

Memo