

Picture Control

Using the remote, you can change the contrast, brightness, tint, color, and sharpness settings of the TV.

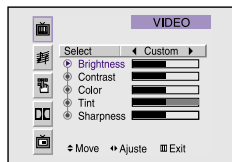


Customizing the Picture

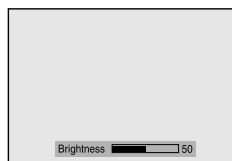
- 1 Press the Menu button.
Press the joystick to enter.
Move joystick left or right to select "Custom".
You will see the items "Brightness," "Contrast," "Color," "Tint," and "Sharpness."



- 2 Move the joystick down to select the item you want to change.



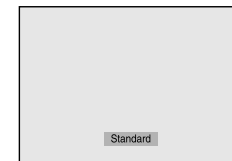
- 3 Move the joystick right or left to raise or lower the value of the item.



When you are finished adjusting an item, wait a moment. The level indicator will disappear and the Video menu will return. You can continue to make adjustments, or press the Menu button to exit.

Using Automatic ("Standard") Picture Settings

- 1 Press the P.Mode button on the remote control to change the picture settings.



- 2 Press P.Mode repeatedly to select the "Standard," "Mild," or "Custom" picture setting.

Guide to Automatic Picture Settings

- Choose Standard to set the TV to operate at top performance according to your TV's specifications.
- Choose Mild when viewing the TV in low light, or when playing video games.
- Choose Custom if you want to adjust the settings yourself.

Setting the Clock

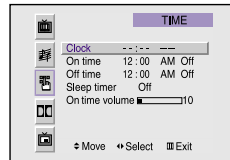
This TV has a built-in clock that will appear on screen when you press the Display button on the remote control. Setting this clock also allows you to use it to automatically turn the TV on or off.



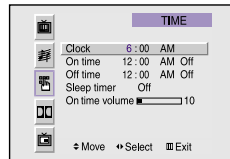
- 1 Press the Menu button. Move the joystick down to select SETUP, then press the joystick to enter.



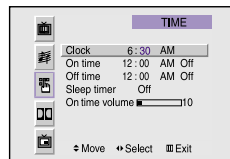
- 2 Move the joystick down to select Time, then press the joystick to enter.



- 3 Move the joystick right to select the hour. Move the joystick up or down to select the correct hour.



- 4 Move the joystick right to select the minute. Move the joystick up or down to select the correct minute. Move the joystick to the right to select AM, then move the joystick up or down to select AM or PM.



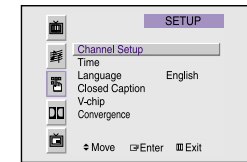
- 5 Press Menu to exit the menus.

Setting the Timers

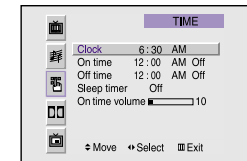
This TV can be set to turn on or off automatically at specific times that you choose. Before using the timers, you must set the TV's clock, as described previously.

Setting the On / Off Timer

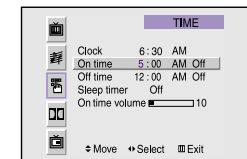
- 1 Press the Menu button. Move the joystick down to select SETUP, then press the joystick to enter.



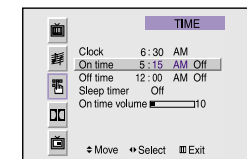
- 2 Move the joystick down to select Time, then press the joystick to enter.



- 3 Move the joystick down to select the "On time". Move the joystick right to select the hour, then Move the joystick up or down to adjust the hour for the TV to turn on.

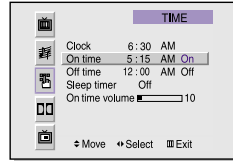


- 4 Move the joystick right to select the minute. Move the joystick up or down to adjust the minute. Move the joystick right to select AM, then move the joystick up or down to select AM or PM.



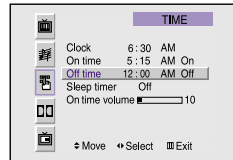
Continued...

- 5 Move the joystick right to select Off, then move the joystick up or down to select "On".



- 6 When you are finished, move the joystick right.

- 7 If you want to set the Off time, move the joystick down to select the "Off time". Set the "Off time" just as you set the "On time".



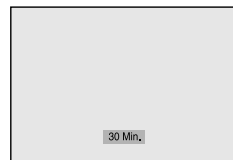
- 8 If you want to set the volume level when the TV turns on, move the joystick down to select "On time volume". Move the joystick right to set the volume level you want when the TV turns on. Press the Menu button to return to normal viewing.

Setting the Sleep Timer

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

- 1 Press the Sleep button on the remote control.

- 2 You'll see "Off" at the bottom of the screen. Press the Sleep button to select the time interval for the TV to stay on. The interval ranges from 10 to 360 minutes.



Setting Up Your Remote Control

This TV'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, or DVD. Pressing the corresponding button on the remote control allows you to switch between these modes, and control whichever piece of equipment you choose.



Setting Up the Remote to Operate Your VCR

- 1 Turn off your VCR.
- 2 Press the MODE button and make sure that the VCR LED is illuminated.
- 3 Press the Set button on your TV's remote control.
- 4 Using the number buttons on your remote control, enter both digits of the VCR code listed on page 46 of this manual for your brand of VCR. Make sure you enter both 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 should turn on if your remote is set up correctly.

If your VCR does not turn on after set up, repeat steps 2, 3, and 4, but try one of the other codes listed for your brand of VCR. If no other codes are listed, try each VCR code, 00 through 72.

Notes on Using Remote Control Modes: VCR, Cable, DVD and TV

- When your remote control is in "VCR" mode, the volume buttons still control your TV's volume.
- When your remote is in "TV" mode, the VCR control buttons (PLAY, PAUSE, etc.) still operate your VCR.
- When your remote control is in "CABLE" or "DVD" mode, the volume buttons still control your TV's volume, and the VCR control buttons (PLAY, PAUSE, etc.) still operate your VCR.

Setting Up the Remote to Operate Your Cable Box



- 1 Turn off your cable box.
- 2 Press the MODE button and make sure that the Cable LED is illuminated.
- 3 Press the SET button on your TV's remote control.
- 4 Using the number buttons on your remote control, enter both digits of the cable box code listed on page 46 of this manual for your brand of cable box. Make sure you enter both digits of the code, even if the first digit is a "0." If there is more than one code listed, try the first one.
- 5 Press the Power button on the remote control. Your cable box should turn on if your remote is set up correctly.

If your cable box does not turn on after set up, repeat steps 2, 3, and 4, but try one of the other codes listed for your brand of cable box. If no other codes are listed, try each code, 00 through 35.

Notes on Using Remote Control Modes: VCR, Cable, DVD and TV

- When your remote control is in "VCR" mode, the volume buttons still control your TV's volume.
- When your remote is in "TV" mode, the VCR control buttons (PLAY, PAUSE, etc.) still operate your VCR.
- When your remote control is in "CABLE" or "DVD" mode, the volume buttons still control your TV's volume, and the VCR control buttons (PLAY, PAUSE, etc.) still operate your VCR.

Setting Up the Remote to Operate Your DVD



- 1 Turn off your DVD.
- 2 Press the MODE button and make sure that the DVD LED is illuminated.
- 3 Press the SET button on your TV's remote control.
- 4 Using the number buttons on your remote control, enter both digits of the DVD code listed on page 46 of this manual for your brand of DVD. Make sure you enter three - digits of the code, even if the first digit is a "0." If there is more than one code listed, try the first one.
- 5 Press the Power button on the remote control. Your DVD should turn on if your remote is set up correctly.

If your DVD does not turn on after set up, repeat steps 2, 3, and 4, but try one of the other codes listed for your brand of DVD. If no other codes are listed, try each code, 078 through 087.

Notes on Using Remote Control Modes: VCR, Cable, DVD and TV

- When your remote control is in "VCR" mode, the volume buttons still control your TV's volume.
- When your remote is in "TV" mode, the VCR control buttons (PLAY, PAUSE, etc.) still operate your VCR.
- When your remote control is in "CABLE" or "DVD" mode, the volume buttons still control your TV's volume, and the VCR control buttons (PLAY, PAUSE, etc.) still operate your VCR.

Remote Control Codes

VCR Codes

Aiwa	00	Memorex	00, 09, 11	Sanyo	19, 20, 43
Akai	15, 22, 26, 30, 45, 66		13, 20, 21, 43	Scott	47, 53, 58, 60
Anam	71, 72	MGA	17, 30	Sears	09, 11, 16, 19
Broksonic	47, 53, 59	Minolta	16, 44		20, 27, 33, 43, 44
Capehart	05	Mitsubishi	30, 37, 52, 61, 66	Sharp	21, 31
Canon/ Curtis Mathes	09	Mitsubishi (Unified)	17	Shintom	36
Craig	20, 65, 67	MTC	00, 65	Sony	02, 06, 07, 08, 09
Daewoo	03, 05, 18, 39, 68, 70	Multitech	00, 36	STS	16
Daytron	05	NAD	28	Sylvania	09, 17, 46
Dynatech	00, 21	NEC	12, 14, 15, 23, 34	Symphonic	00
Emerson	00, 01, 10, 11, 30, 35	Optonica	21, 31	Tandy	00, 43
	40, 47, 53, 56, 57, 59, 60	Panasonic	09, 63	Tatung	15
Fisher	20, 27, 33, 43	Pennney	09, 12, 14, 16, 65	Teac	00, 15
Funai	00	Pentax	16, 32, 44	Technics	09
GE	09, 29, 32	Philco	09	Teknika	00, 09, 11, 25
LG	04, 11, 12	Philips	09, 31, 38, 46	TMK	10
Harman/Kardon	12, 37	Pilot	11	Totevision	11, 65
Hitachi	00, 15, 16, 32, 44, 51, 64	Pioneer Unified	28, 34	Toshiba	17, 18, 33, 58, 60
JCL	09	Portland	05	Unitech	65
Jensen	15	Pulsar	13	Vector Research	12, 14
JVC	15, 34, 55	Quartz	19, 49	Victor	34
Kenwood	15, 19, 34	Quasar	09, 41	Video Concepts	14, 30, 62
Lloyd	00	RCA	09, 16, 32, 44, 48, 54	Videasonic	65
Logik	36	RCA (Unified)	29	Wards	00, 09, 16, 20, 21
LXI	11	Realistic	00, 09, 11, 19, 20		31, 36, 48, 60, 65
Magnavox	09, 38, 42, 46, 48		21, 31, 33, 43, 65	Yamaha	12, 15
Marantz	09, 12, 38, 50	Ricoh	08	Zenith	07, 08
Marta	11	Samsung	18, 24, 26, 65	Zenith (Unified)	13
MEI	09	Sansui	15, 34, 67		

Cable Box Codes

ABC	0, 07, 09, 12	Paragon	00	Starcom	02, 11, 19, 23
Antronix	26	Pioneer	16, 25, 31	Stargate	11, 18
Archer	26	Pulsar	00	Tandy	29
Comtronics	18	RCA	15	TeleCaption	27
Eagle Comtronics	18	Realistic	26	Texscan	22
Eastern	01	Regal	14, 30, 32, 34	Tocom	08, 09, 21
Gemini	11	Regency	01	Toshiba	00
General Instruments	07	Samsung	18, 25	Unika	26
Hamlin	06, 14, 30, 32	Scientific Atlanta	03, 05, 12, 33	United Artists	04
Hitachi	07	Signal	18	United Cable	02
Jerrold	02, 07, 10, 11, 19, 23	Signature	07	Universal	26
Memorex	00	SL Marx	18	Viewstar	29
Oak	04, 13, 28	Sprucer	15, 35	Zenith	00, 20
Panasonic	15, 24				

DVD Codes

Philips	078	Panasonic	087
Proscan	083	Sony	080
RCA	083	Samsung	079
Toshiba	086		

Viewing a VCR, DVD or Camcorder Tape

Selecting the Signal Source

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



1 Make sure that the remote control is controlling the TV set. Press the MODE button and make sure that the "TV" LED is illuminated.

2 Press TV/VIDEO on the remote control, and the following on-screen menu will appear:

Antenna A	11
Video 1	Connected
Video 2	Not connected
Video 3	Not connected
S-Video 1	Not connected
S-Video 2	Not connected
Component	Not connected
HD Component	Not connected
PC	Not connected
Move	Select
Exit	

3 Move the joystick up or down to select a particular signal source, and then press the joystick to activate it.

When you connect equipment to the TV, you can choose between the following sets of jacks: Video 1, Video 2, S-video 1, Component, or HD Component on the TV's rear panel, and Video 3, S-Video 2, or PC on the TV's side panel.

Remote Control VCR Buttons

Flip the cover of the remote control up to access buttons that can control the tape functions of a connected VCR, including Rewind, Play, Fast Forward, Stop and Pause.

1 Flip the cover of your remote control unit for access to the tape function controls. Press the appropriate buttons to control your VCR.



Special Features

SAMSUNG

Special Video Features

This TV's special video features can help you get a clearer broadcast picture.

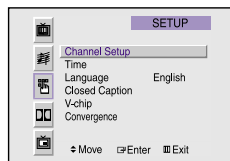
Fine Tuning Channels

Fine tuning lets you manually adjust the TV's tuner if you have difficulty tuning in a channel.

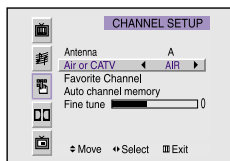


1 Using the number buttons on the remote control, select the channel you want to fine tune.

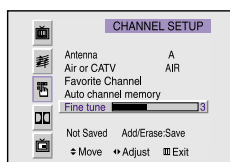
2 Press the Menu button on the remote control. Move the joystick down to select "SETUP", then press the joystick to enter.



3 Press the joystick to enter in the Channel setup menu.



4 Move the joystick down to select the Fine tune, then Move the joystick right or left to adjust the fine tuning. Press Add/Erase to memorize. (The Add and Erase features are repeated when the Add/Erase button is pressed.)



5 Press the Menu button to return to normal viewing.

Special Audio Options: Dolby Surround, MTS

Depending on the particular type of audio that is being broadcast, you can listen to any of three modes: Mono, Stereo and SAP (Secondary Audio Programming, which is typically a foreign-language translation).

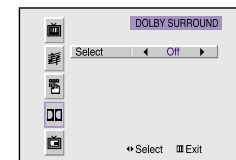
The Dolby Surround options (Virtual and Dolby On) simulate the ambience of a stadium or movie theater.

Dolby Pro Logic

Your TV can create a surround effect such that the sound seems to come from all directions.

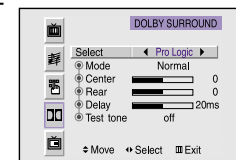


1 Press the Menu button on the remote control. Move the joystick down to select the "DOLBY SURROUND" menu, then press the joystick to enter.



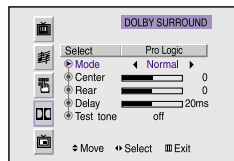
Quick way to access Dolby Surround:
Just press "Surround" on the remote control.

2 Move the joystick to the right to select the appropriate surround system ("Off", "Virtual", "Pro Logic").



- **Virtual:** This mode 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.

- 3 If Pro Logic is selected, follow the instructions below.



Select the mode: Move the joystick down to select "Mode". Next, move the joystick to the right repeatedly until the appropriate mode appears ("Wide", "Phantom", "Normal"). Some recommended settings:

Phantom: Selected when the center speaker is either not present or not used. In Phantom Mode, the center sound is output through both left and right speakers.

Normal: Selected when the center speaker is smaller than the main TV speakers. In Normal Mode, the sound of the center channel is output through both left and right speakers.

Wide: Selected when the center speaker is larger than the TV speaker. In Wide Mode, the sound of center channel is output through only the center speaker.

After selecting the mode, move the joystick down to select "Center". Next, move the joystick right or left and depending on personal preference, fine tune the volume by selecting any value between -10 and +10. Follow a similar procedure for "Rear". Move the joystick down to select "Delay". Next, move the joystick right or left and, depending on personal preference, select any value between 15ms and 30ms. (Some trial-and-error experimenting is necessary to find the optimal setting, which will vary according to individual preference).

After entering values for "Center", "Rear", and "Delay", use the joystick button to activate "Test tone". During "Test tone", a tone will cycle through the speakers so you can hear the surround effect and make additional changes as needed. Press Menu to exit.

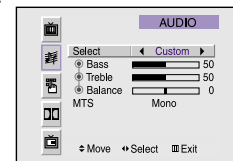
*Manufactured under license from Dolby Laboratories Licensing corporation.
DOLBY, the double-D symbol  and "PRO LOGIC" are trademarks of Dolby Laboratories Licensing Corporation.*

MTS Settings: Choosing a Soundtrack

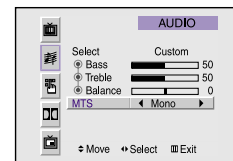
Depending on the particular program being broadcast, you can listen to stereo, mono, or a Separate Audio Program. (SAP audio is usually a foreign-language translation. Sometimes SAP has unrelated information like news or weather.)



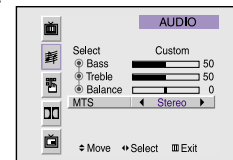
- 1 Press the Menu button. Move the joystick down to select AUDIO, then press the joystick to enter. Quick way to access the MTS: Just press "MTS" on the remote control.



- 2 Move the joystick down to select MTS.



- 3 Press joystick right repeatedly to select "Mono", "SAP", or "Stereo".



- 4 Press Menu to exit.

Guide to MTS Settings

- Choose Mono if the channel is broadcasting in mono, or if you are having difficulty receiving a stereo signal.
- Choose Stereo for channels broadcasting in stereo.
- Choose SAP when you want to listen to the Secondary Audio Program, which is usually a soundtrack in another language.

Viewing Closed Caption Information

Your TV decodes and displays the closed-caption 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 () on the tape's package or your TV program-schedule.



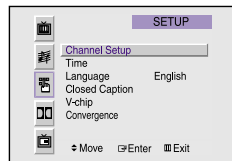
NOTE

When Zoom1, Zoom2, or Stretch is selected in PIP mode, both PIP and Caption functions are switched OFF.

Closed Captions

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

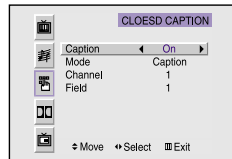
Quick way to access the Caption: Just press "Caption" on the remote control.



- 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.

Changing the Screen Size

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, Panorama, Zoom1, Zoom2, Stretch, 4:3. The name of the screen mode will be displayed at the bottom of the TV screen.



Wide

Sets the picture to 16:9 wide mode.

Note: If you watch a still image or the screen in the 16:9 aspect ratio format for a long time, some images may be burned onto the screen.



Panorama

Use this mode for the wide aspect ratio of a panoramic picture.



Zoom1

Magnifies the size of the picture on screen.



Zoom2

Magnifies the size of the picture more than Zoom1.



You can also move the picture on screen using the "Scroll" function. Move the joystick up and down to scroll the picture.

Stretch

The Stretch feature lets you view a 16:9 widescreen picture on the entire screen. If the screen is cut off on the top and bottom while you are watching a DVD player, then switch to the Stretch mode.



You can also move the picture on screen using the "Scroll" function. Move the joystick up and down to scroll the picture.

4:3

Sets the picture to 4:3 normal mode. This is a standard TV screen size.



NOTE

When Zoom1, Zoom2, or Stretch is selected in PIP mode, both PIP and Caption functions are switched OFF. The 4:3 aspect ratio format is not supported in HD-Component mode. Only "Full" aspect ratio format is supported in PC mode.

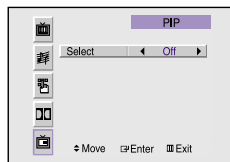
Viewing Picture-in-Picture

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.

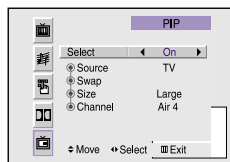


Selecting a PIP Screen

- 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.

NOTE

When the cable box output is connected to ANT-B, it cannot be viewed in the PIP window.

The PIP feature doesn't work when the V-chip is activated or the TV is in HD Component mode.

If you turn the TV off while watching and turn it on again, then the mode will return to normal video.

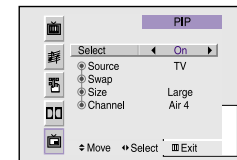
When the PIP function is activated in Zoom1, Zoom2, Stretch mode, the screen mode is automatically changed to 'Wide' mode.

Selecting an External Signal

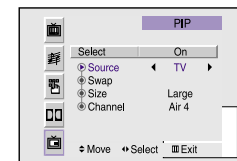
You can use PIP to view a signal from an external source, such as a VCR.



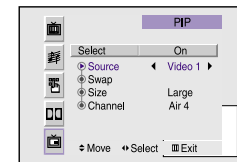
- 1 Press the Menu button. Move the joystick down to select PIP, then press the joystick to enter.



- 2 Move the joystick down to select to "Source".



- 3 Move the joystick right or left to select an external signal. You can choose between "TV", Video 1", "Video 2", "Video 3", or "S-Video 1", "S-Video 2".
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 a VCR, DVD or Camcorder Tape". If you select "TV," the PIP image is the same as the main image.



NOTE

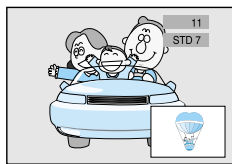
You can watch DVD on the PIP screen in the PC mode.

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 PIP CH▲ or CH▼ to change the channel of the PIP image.



- 2 The PIP channel will appear in the upper right corner of the screen, above the main image.

NOTE

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

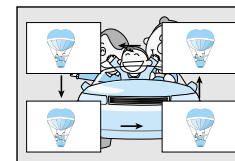
Swapping the Contents of the PIP Image and Main image

Press the Swap button. The channel in the PIP image will appear in the main image, and vice versa.

Note: When ANT-B or the Component mode is selected, the PIP SWAP function doesn't work.

Changing the Location of the PIP image

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



Changing the Size of the PIP image

Press the Size button repeatedly to change the size of the PIP image. You can choose between a small size(shown), and a large size.



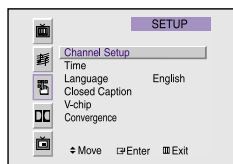
Using the V-Chip

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.

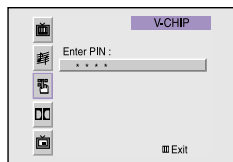
Setting Up Your Personal ID Number (PIN)



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



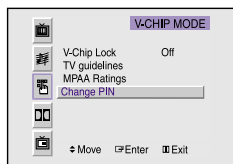
- 2 Move the joystick down to select V-chip, then press the joystick to enter.



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 mode" screen will appear. Move the joystick down to select "Change pin", then press the joystick to enter. The Change pin screen will appear.

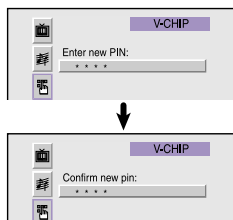


Choose any 4-digits for your PIN and enter them.

As soon as the 4 digits are entered, the "Confirm new pin" screen appears. Re-enter the same 4 digits.

When the Confirm screen disappears, your PIN has been memorized.

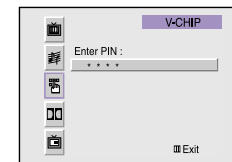
Press MENU to exit.



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.

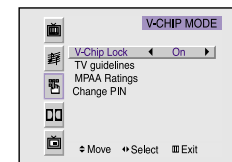
How to Enable / Disable the V-Chip

- 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.

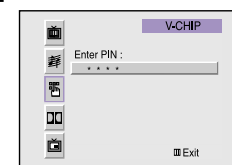
- 2 The "V-Chip mode" screen will appear, and "V-Chip Lock" will be selected. To enable the V-Chip feature, move the joystick right so that the "V-Chip Lock" field is On. (Moving the joystick to the right will alternate between On and Off.)



How to Set up Restrictions Using the "TV guidelines"

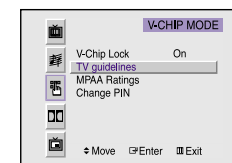
First, set up a personal identification number (PIN), and enable the V-Chip. (See previous section.) Parental restrictions can be set up using either of two methods: The TV guidelines or the MPA rating.

- 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.



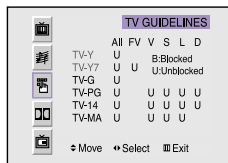
Continued...



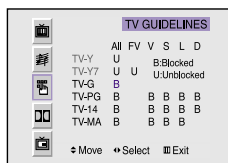
- 3 The "TV guidelines" screen will appear. Move the joystick up or down to highlight one of the six age-based categories:

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 highlighted (Blue color). Move the joystick right: Depending on your existing setup, a letter "U" or "B" will be highlighted. (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.)

- 5 How to set the FV, D, L, S and V sub-ratings: First, highlight 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 highlighted (BLUE), 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 highlighted, move the joystick down or up to change the sub-rating.

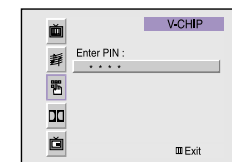
Note: The V-chip will automatically block certain categories that are "More restrictive". For example, if you block "L" sub-rating in TV-PG, then the "L" sub-ratings in TV-14 and TV-MA will automatically be blocked.

- 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

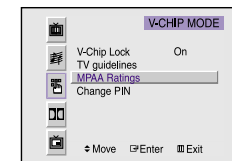
The MPAA rating system uses the Motion Picture Association of America (MPAA) system, and its main application is for movies. (Eventually, movie videocassettes will be encoded with MPAA ratings.) When the V-Chip lock is on, the TV will automatically block any programs that are coded with objectionable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

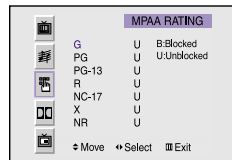
- 2 The "V-Chip mode" screen will appear. Move the joystick down to select "MPAA rating", then press the joystick to enter.



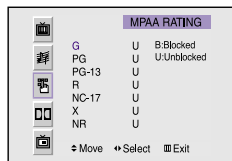
Continued...



3 The "MPAA Ratings" screen will appear.



4 Repeatedly move the joystick down to highlight a particular MPAA category. (When a category is highlighted, its color changes to blue.) 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":

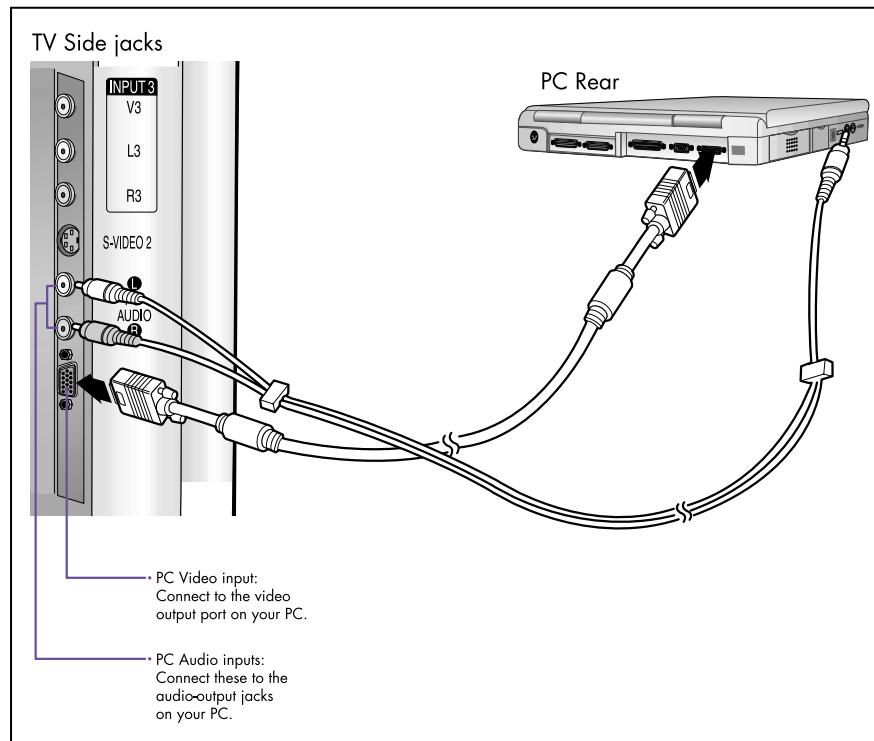
Press the Menu button. Move the joystick down to select "SETUP", then press the joystick to enter. Move the joystick down to select "V-chip", then press the joystick to enter. Enter your PIN number, and move the joystick right to temporarily disable the V-Chip Lock.

PC Display

SAMSUNG

Using Your TV as a Computer (PC) Display

How to connect Your PC to the TV



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...

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:

Resolution	Horizontal frequency (kHz)	Vertical frequency (Hz)	Clock frequency (MHz)	Polarity(H/V)
VGA, (640 X 350)	31.47	70.00	25.175	(+/-)
VGA, (640 X 350)	37.86	85.00	31.500	(+/-)
VGA, (720 X 400)	31.47	70.00	28.322	(-/+)
VGA, (720 X 400)	37.93	85.00	35.500	(-/+)
VGA, (640 X 480)	31.47	60.00	25.175	(-/-)
VGA, (640 X 480)	35.00	66.70	30.240	(-/-)
VGA, (640 X 480)	37.86	72.80	31.500	(-/-)
VGA, (640 X 480)	37.50	75.00	31.500	(-/-)
VGA, (640 X 480)	43.27	85.00	36.000	(-/-)
VGA, (640 X 480)	45.00	90.00	36.000	(+/+)
SVGA, (800 X 600)	35.16	56.30	36.000	(-,+/-,+)
SVGA, (800 X 600)	37.88	60.30	40.000	(+/+)
SVGA, (800 X 600)	48.08	72.20	50.000	(+/+)
SVGA, (800 X 600)	46.87	75.00	49.500	(+/+)
SVGA, (800 X 600)	53.67	85.10	56.200	(+/+)
SVGA, (800 X 600)	56.25	90.00	58.500	(+/+)
SVGA, (832 X 624)	49.73	74.60	57.290	(-/-)
XGA, (1024 X 768)	48.36	60.00	65.000	(-/-)
XGA, (1024 X 768)	56.48	70.07	75.000	(-/-)
XGA, (1024 X 768)	60.02	75.00	78.750	(+/+)
XGA, (1024 X 768)	68.67	85.00	94.500	(+/+)
XGA, (1024 X 768)	48.78	60.00	64.000	(-/-)
XGA, (1024 X 768)	60.24	74.93	80.000	(-/-)
GTF, (1152 X 864)	53.70	60.00	81.624	(-,+/-,+)
GTF, (1152 X 864)	63.00	70.00	96.768	(-,+/-,+)

* The interlace mode is not supported.

* The TV will operate abnormally if a non-standard video format is selected.

NOTES

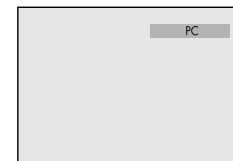
- When this TV is used as a PC display, 24-bit color is supported (over 16 million colors).
- Your PC display screen might appear different, depending on the manufacturer (and depending on your particular version of Windows). Check your PC instruction book for information about connecting your PC to a TV display-monitor.
- 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/PC button to enter the TV mode. Also, make sure that the PC is connected.

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

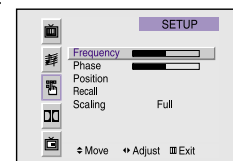
After connecting the TV to your PC, adjust the position of screen if it is not well-aligned.



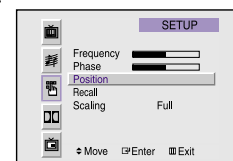
- 1 Press the TV/PC button to switch to the PC mode.



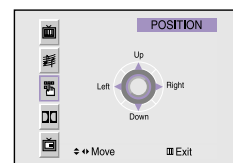
- 2 Press the Menu button. Move the joystick down to select "SETUP", then press the joystick to enter.



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



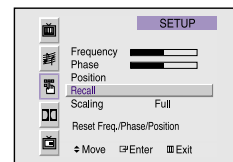
- 4 Adjust the position of screen by using the joystick button. Press the Menu to exit.



To initialize the frequency adjustment value (or phase, position)

After steps 1~2 above are completed, use the joystick on the remote control to move to 'Recall'. Press the joystick to initialize the frequency adjustment value (or phase, position).

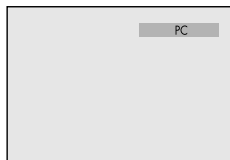
Note: When 'Recall' is active, the TV screen will become black and return to the original view about five seconds later. (This is a normal operation.)



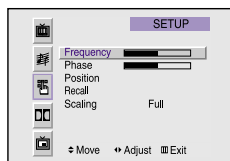
Changing the Size of the Image



- 1 Press the TV/PC button to switch to the PC mode.

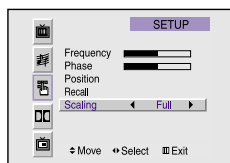


- 2 Press the Menu button. Move the joystick down to select "SETUP", then press the joystick to enter.



- 3 Move the joystick down to select "Scaling".

Move the joystick right to select the "Full" or "Aspect".



- 4 Press the Menu button to exit.

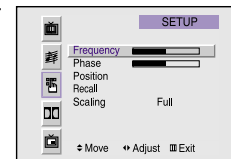
Picture Quality Adjustment

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

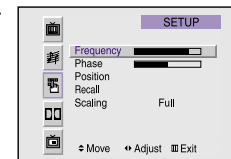
- 1 Press the TV/PC button to switch to the PC mode.



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

- 2 Move the joystick down to select "Frequency".

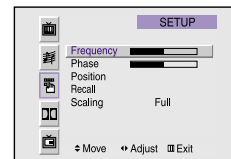
Remove picture noise (vertical stripes) on the screen by moving the joystick right or left. (If frequency is not set properly, then vertical stripes will appear on the screen).



Fine tuning

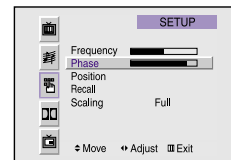
- 1 Press the TV/PC button to switch to the PC mode.

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



- 2 Move the joystick down to select "Phase".

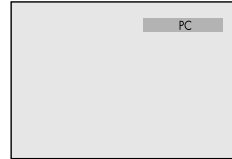
Remove picture noise (vertical stripes) on the screen by moving the joystick right or left. (If phase is not set properly, the picture may be blurry.)



Screen Adjustment in PC mode



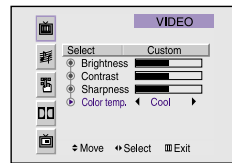
1 Press the TV/PC button to switch to the PC mode.



2 Press the Menu button, then press the joystick to enter.



3 Move the joystick down to select "Color Temp.". Move the joystick right or left to select your desired color set. (Every time the joystick is moved right or left, Medium, Cool, or Warm will be selected.)



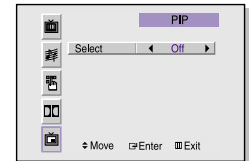
4 Press the Menu button to exit.

Selecting Sound Source in the PC mode

You can select the speaker sound source when PIP is operated. When Main is selected, you will hear the PC input sound. When Sub is selected, you will hear the PIP sound.

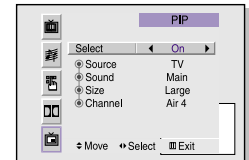


1 Press the TV/PC button to switch to the PC mode.

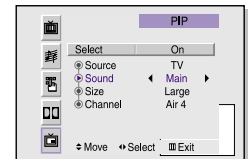


Press the Menu button. Move the joystick down to select "PIP", then press the joystick to enter.

2 Move the joystick right to select PIP "On".



3 Move the joystick down to select "Sound", then move the joystick right or left to select "Main" or "Sub".



4 Press the Menu button to exit.

Appendix

SAMSUNG

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.

Note: If you watch a still image or the screen in the 16:9 aspect ratio format for a long time, some images may be burned onto 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 FLCD 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.

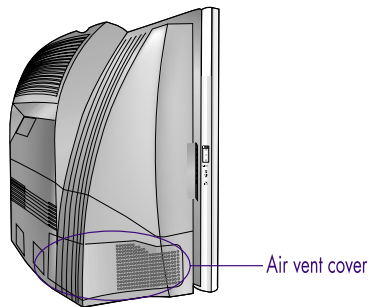
Specifications

Model	HLK436W	HLK506W
Voltage	AC 120V	
Frequency of Operation	60Hz	
Power Consumption	180 watts	
Dimension	1075(W) x 399(D) x 755(H) mm / 42.3(W) x 15.7(D) x 29.7(H) inches	1230(W) x 450(D) x 859(H) mm / 48.4(W) x 17.7(D) x 33.8(H) inches
Weight	33 Kg / 72.8 lbs	38 Kg / 83.8 lbs

Rear Panel Air Vent

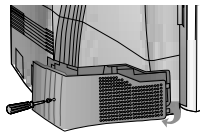
It is important to clean the panel that covers the rear vent of your projection TV every six months to keep the unit from overheating.

(The TV illustration shown does not necessary match the design of your TV set.)

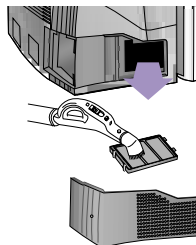


1 Turn the TV off and unplug it.

2 Remove the screw and take off the cover.



3 Remove the dust from the vent cover using a vacuum cleaner (with nozzle attachment).



4 Replace the cover and the screw.

Memo

Memo