

SERVICE DIVISION

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LTM295W LTM405W

LCD TELEVISION

Owner's Instructions

Warning! Important Safety Instructions



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

Note to CATV system installer: This reminder is provided to call CATV system installer's attention to Article 820-40 of the National Electrical Code (Section 54 of Canadian Electrical Code, Part I), that provides guidelines for proper grounding and, in particular, specifies that the cable ground shall be connected to the grounding system of the building as close to the point of cable entry as practical.

Caution: FCC/CSA regulations state that any unauthorized changes or modifications to this equipment may void the user's authority to operate it.

Caution: To prevent electric shock, match the wide blade of plug to the wide slot, and fully insert the plug.

Attention: pour eviter les chocs electriques, introduire la lame le plus large de la fiche dans la borne correspondante de la prise et pousser jusqu'au fond.

Important: One Federal Court has held that unauthorized recording of copyrighted TV programs is an infringement of U.S. copyright laws. Certain Canadian programs may also be copyrighted and any unauthorized recording in whole or in part may be in violation of these rights.

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

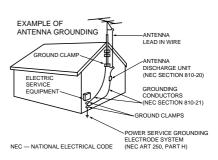
Thank You for Choosing Samsung

Thank you for choosing Samsung! Your new Samsung TV represents the latest in television technology. We designed it with easy-to-use on-screen menus and closed captioning capabilities, making it one of the best products in its class. We are proud to offer you a product that will provide convenient, dependable service and enjoyment for years to come.

Important Safety Information

- Always be careful when using your TV receiver. To reduce the risk of fire, electrical shock, and other injuries, keep these safety precautions in mind when installing, using, and maintaining your machine.
- Read all safety and operating instructions before operating your TV.
- Keep the safety and operating instructions for future reference.
- Heed all warnings on the TV receiver and in the operating instructions.
- Follow all operating and use instructions.
- Unplug the TV receiver from the wall outlet before cleaning. Use a damp cloth; do not use liquid or aerosol cleaners.
- Never add any attachments and/or equipment without approval of the manufacturer. Such additions can increase the risk of fire, electric shock, or other personal injury.
- Do not use the TV receiver where contact with or immersion in water is a possibility, such as near bath tubs, sinks, washing machines, swimming pools, etc.
- Do not place the TV on an unstable cart, stand, tripod, bracket, or table where it can fall. A falling TV can cause serious injury to a child or adult, and serious damage to the appliance. Use only with a cart, stand, tripod, bracket, or table recommended by the manufacturer or sold with the TV. Follow the manufacturer's instructions when mounting the unit, and use a mounting accessory recommended by the manufacturer. Move the TV and cart with care. Quick stops, excessive force, and uneven surfaces can make the unit and cart unsteady and likely to overturn.
- Provide ventilation for the TV receiver. The unit is designed with slots in the cabinet for ventilation to protect it from overheating. Do not block these openings with any object, and do not place the TV receiver on a bed, sofa, rug, or other similar surface. Do not place it near a radiator or heat register. If you place the TV receiver on a rack or bookcase, ensure that there is adequate ventilation and that you've followed the manufacturer's instructions for mounting.
- Operate your TV receiver only from the type of power source indicated on the marking label. If you are not sure of the type of power supplied to your home, consult your appliance dealer or local power company.
- Use only a grounded or polarized outlet. For your safety, this TV is equipped with a polarized alternating current line plug having one blade wider than the other. This plug will fit into the power outlet only one way. If you are unable to insert the plug fully into the outlet, try reversing the plug. If the plug still does not fit, contact your electrician to replace your outlet.

- Protect the power cord. Power supply cords should be routed so that they won't be walked on or pinched by objects placed on or against them. Pay particular attention to cords at plugs, convenience receptacles, and the point where they exit from the unit.
- Unplug the TV from the wall outlet and disconnect the antenna or cable system during a lightning storm or when left unattended and unused for long periods of time. This will prevent damage to the unit due to lightning and power-line surges.
- Avoid overhead power lines. An outside antenna system should not be placed in the vicinity of overhead power lines or other electric light or power circuits or where it can fall into such power lines or circuits. When installing an outside antenna system, be extremely careful to keep from touching the power lines or circuits. Contact with such lines can be fatal.
- Do not overload the wall outlet or extension cords. Overloading can result in fire or electric shock.
- Do not insert anything through the openings in the unit, where they can touch dangerous voltage points or damage parts. Never spill liquid of any kind on the TV.
- Ground outdoor antennas. If an outside antenna or cable system is connected to the TV, be sure the antenna or cable system is grounded so as to provide some protection against voltage surges and built-up static charges. Section 810 of the National Electrical Code, ANSI/NFPA No.70-1984, provides information about proper grounding of the mast and supporting structure, grounding of the lead-in wire to an antenna discharge unit, size of grounding conductors, location of antenna discharge unit, connection to grounding electrodes, and requirements for the grounding electrode



- Do not attempt to service the TV yourself. Refer all servicing to qualified service personnel. Unplug the unit from the wall outlet and refer servicing to qualified service personnel under the following conditions:
 - when the power-supply cord or plug is damaged
 - if liquid has been spilled on the unit or if objects have fallen into the unit
 - if the TV has been exposed to rain or water
 - if the TV does not operate normally by following the operating instructions
 - if the TV has been dropped or the cabinet has been damaged
 - when the TV exhibits a distinct change in performance
- If you make adjustments yourself, adjust only those controls that are covered by the operating instructions. Adjusting other controls may result in damage and will often require extensive work by a qualified technician to restore the TV to normal.
- When replacement parts are required, be sure the service technician uses replacement parts specified by the manufacturer or those that have the same characteristics as the original part. Unauthorized substitutions may result in additional damage to the unit.
- Upon completion of any service or repairs to this TV, ask the service technician to perform safety checks to determine that the TV is in a safe operating condition.

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 that may cause undesired operation.

This television receiver provides display of television closed captioning in accordance with §15.119 of the FCC rules.

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Chapter 1

Your New TV

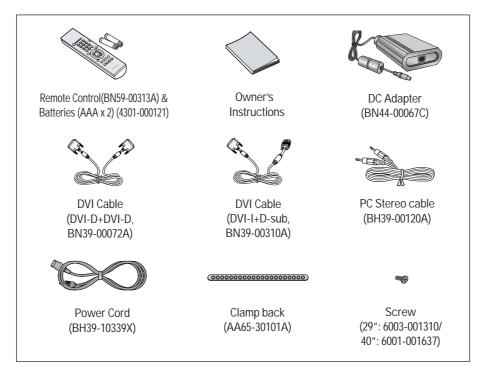
List of Features

Your TV was designed with the latest technology. This TV is a high-performance unit that includes the following special features:

- Easy-to-use remote control
- Easy-to-use on-screen menu system
- Adjustable picture and sound settings that can be stored in the TV's memory
- Automatic channel tuning for up to 181 channels (ANT: 69, STD: 125)
- A special filter to reduce or eliminate reception problems
- Fine tuning control for the sharpest picture possible
- A built-in multi-channel sound decoder for stereo and bilingual listening
- Dual channel speakers
- · A special sleep timer
- Headphone jack for private listening

Accessories

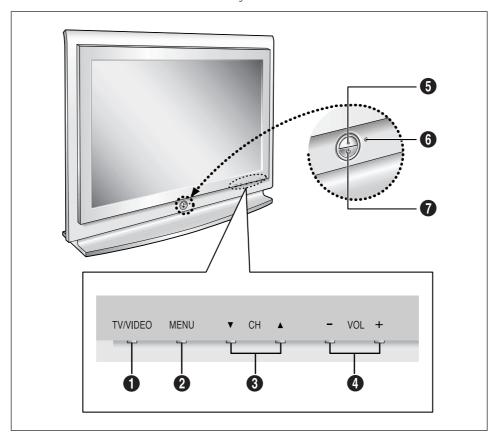
Please make sure the following items are included with your LCD TV. If any items are missing, contact your dealer.



Familiarizing Yourself with The TV

Front Panel Buttons

The buttons on the front panel control your TV's basic features, including the on-screen menu. To use the more advanced features, you must use the remote control.



1 TV/VIDEO

Press to display all of the available video sources.

9 MENU

Press to see an on-screen menu of your TV's features.

3 CH ▼ and CH ▲

Press to change channels. Also press to highlight various items on the on-screen menu.

4 VOL(VOLUME) - , +

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

6 Indicator

Yellow: Normal operation. Yellow, Blinking: Disconnected signal cable.

Remote Control Sensor

Aim the remote control towards this spot on the TV.

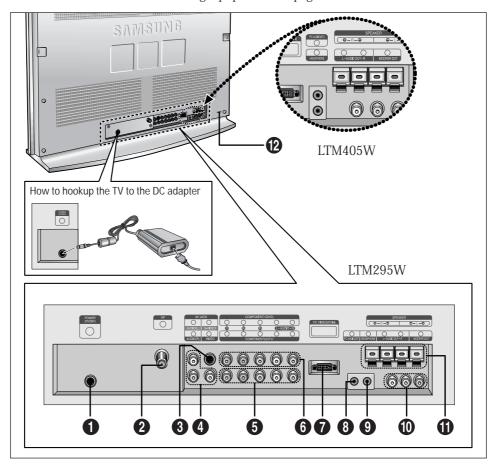
7 POWER

Press to turn the TV on and off.

Rear Panel Jacks

Use the rear panel jacks to connect an A/V component that will be connected continuously, such as a VCR or a DVD player.

For more information on connecting equipment, see pages 2.1 - 2.9.



- **1** POWER INPUT
- **Q** RF Connect to an antenna or to a cable TV system.
- 3 SUPER VIDEO INPUT
 Connects S-Video signal from a camcorder or
- VIDEO/AUDIO INPUT Connects Video/Audio signal from a camcorder or VCR.
- 6 COMPONENT 2 (DTV)
 Connects component Video/Audio from a Set-Top
- COMPONENT 1 (DVD)
 Connects component Video/Audio from a DVD player.

- PC VIDEO INPUT (DVI-I) Connect to the video output port on your PC.
- **8 PC AUDIO INPUT**Connect to the audio output jacks on your PC.
- HEADPHONE Connect a set of external headphones to this jack for private listening.
- L,R AUDIO/WOOFER OUT-PUT
 - Connect to the speaker input jack.
 - · Connect to the Sub-woofer speaker input jack.
- **⑤** SPEAKER OUTPUT Connect to the speaker input jack.
- Kensington lock (See page A.4)

Your New TV

Remote Control

You can use the remote control up to about 23 feet from the TV. When using the remote, always point it directly at the TV.

You can also use your remote control to operate your VCR and cable box. See page 4.1 for details.

O POWER

Turns the TV on and off.

Number buttons

Press to select channels directly on the TV.

+100

Press to select channels over 100. For example, to select channel 121, press "+100," then press "2" and "1."

3 TV/VIDEO

Press to display all of the available video sources.

4 VOL -, VOL +

Press to increase or decrease the volume. (Also used to make selections on the on-screen menus.)

CH▲ and CH▼ (Channel Up/Down)

Press CH▲ or CH▼ to change channels. (Also used to highlight selections on the on-screen menus.)

6 MUTE

Press to temporarily cut off the sound.

6 P.SIZE

Press to change the screen size.

1 DISPLAY

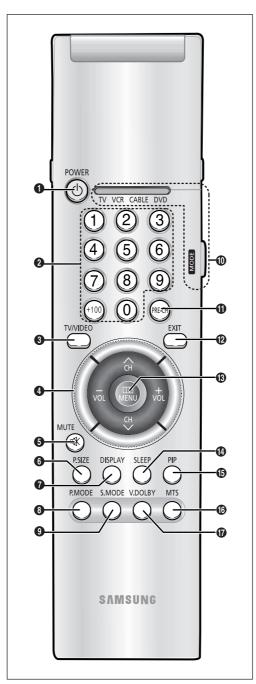
Press to display the current channel and the audio-video settings.

9 P.MODE

Adjust the TV picture by selecting one of the preset factory settings (or select your personal, customized picture settings).

9 S.MODE

Adjust the TV sound by selecting one of the preset factory settings (or select your personal, customized sound settings).



0 MODE

Selects a target device to be controlled by the Samsung remote control (i.e., TV, VCR, Cable box, or DVD).

1 PRE-CH

Tunes to the previous channel.

1 EXIT

Press the menu to exit.

® MENU

Displays the main on-screen menu

SLEEP

Press to select a preset time interval for automatic shutoff.

PIP

Press this button to control the PIP window.

MTS (Multichannel Television Stereo)

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

1 V.DOLBY

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.

Your New TV

Remote Control

RESET

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.

CAPTION

Press to set caption on/off.

@ AUTO

Press to self-adjust to the incoming PC signal. The values of fine, coarse and position are adjusted automatically.

VCR Controls

Stop

Press this button to stop a tape during play, record, rewind or fast forward. If the button is pressed during Full-Automatic play, the function will be cancelled.

REW (Rewind)

Press to rewind a tape in your VCR.

Play/Pause

Press the Play/Pausebutton to play back prerecorded tapes or pause the tape.

FF

Press to fast forward the tape in your VCR.



SET

Use this button when you are setting up your remote control to operate your VCR, Cable box, or DVD).

8 SCAN

Press to memorize (scan) the available channels.

4 ADD/ERASE

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

PIP Controls

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 small, large, double screen or stock ticker window.

LOCATE

Press to move the PIP window to any of the four corners of the TV screen.

STILL

Press to stop the action during a particular scene. Press again to resume normal video.

CH

Displays the available channels in sequence (These buttons change channels in the PIP window only).

Chapter 2

Installation

Connecting VHF and UHF Antennas

If your antenna has a set of leads that look like this, see "Antennas with 300-ohm Flat Twin Leads," below.



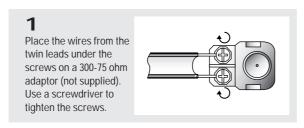
If your antenna has one lead that looks like this, see "Antennas with 75-ohm Round Leads," on page 2.2.

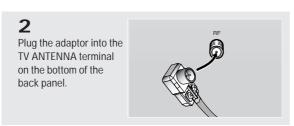


If you have two antennas, see "Separate VHF and UHF Antennas," on page 2.2.

Antennas with 300-ohm Flat Twin Leads

If you are using an off-air antenna (such as a roof antenna or "rabbit ears") that has 300-ohm twin flat leads, follow the directions below.



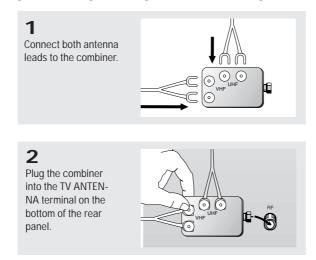


Antennas with 75-ohm Round Leads



Separate VHF and UHF Antennas

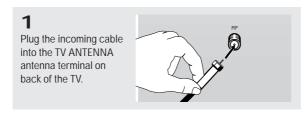
If you have two separate antennas for your TV (one VHF and one UHF), you must combine the two antenna signals before connecting the antennas to the TV. This procedure requires an optional combiner-adaptor (available at most electronics shops).



Connecting Cable TV

To connect to a cable TV system, follow the instructions below.

Cable without a Cable Box

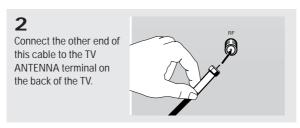


■ Because this TV is cable-ready, you do not need a cable box to view unscrambled cable channels.

Connecting to a Cable Box that Descrambles All Channels

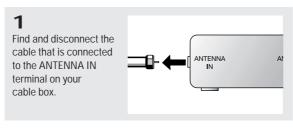


■ This terminal might be labeled "ANT OUT," "VHF OUT," or simply, "OUT."

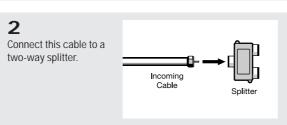


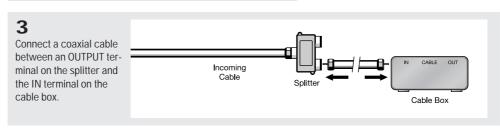
Connecting to a Cable Box that Descrambles Some Channels

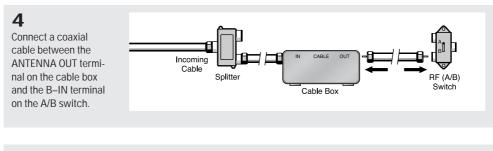
If your cable box descrambles only some channels (such as premium channels), follow the instructions below. You will need a two-way splitter, an RF (A/B) switch, and four lengths of coaxial cable. (These items are available at most electronics stores.)

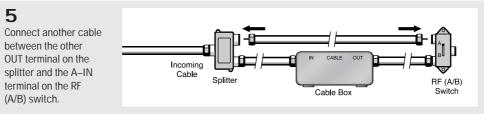


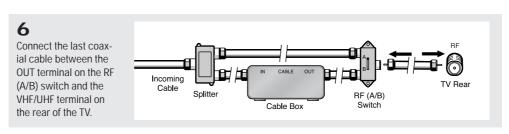
→ This terminal might be labeled "ANT IN," "VHF IN," or simply,
"IN."







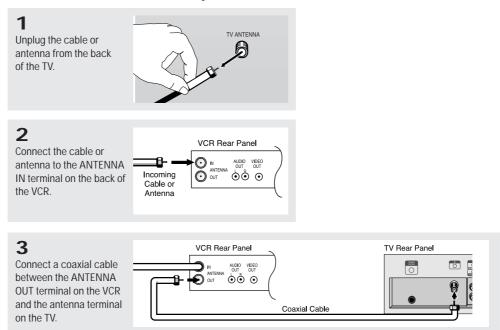




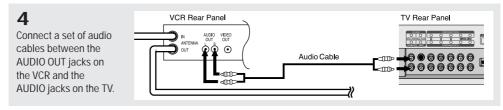
After you've made this connection, set the A/B switch to the "A" position for normal viewing. Set the A/B switch to the "B" position to view scrambled channels. (When you set the A/B switch to "B," you will need to tune your TV to the cable box's output channel, which is usually channel 3 or 4.)

Connecting a VCR

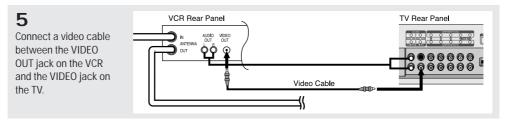
These instructions assume that you have already connected your TV to an antenna or a cable TV system (according to the instructions on pages 2.1-2.3). Skip step **1** if you have not yet connected to an antenna or a cable system.



A coaxial cable is usually included with a VCR. (If not, check your local electronics store).



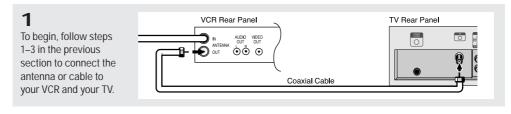
If you have a "mono" (non-stereo) VCR, use the Y-connector (not supplied) to hook up to the left and right audio input jacks of the TV. If your VCR is stereo, you must connect two cables.

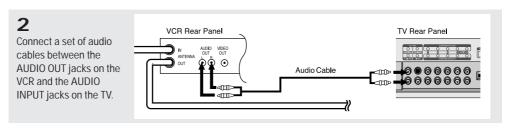


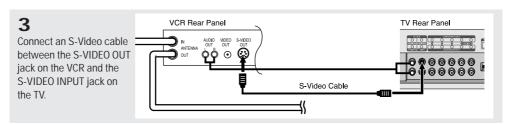
Follow the instructions in "Viewing a VCR or Camcorder Tape" to view your VCR tape.

Connecting an S-VHS VCR

Your Samsung TV can be connected to an S-Video signal from an S-VHS VCR. (This connection delivers a better picture as compared to a standard VHS VCR.)



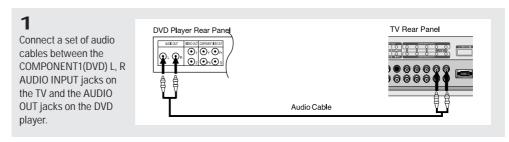


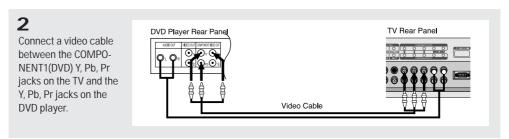


An S-video cable is usually included with an S-VHS VCR. (If not, check your local electronics store.)

Connecting a DVD Player (480i, 480p)

The rear panel jacks on your TV make it easy to connect a DVD player to your TV.

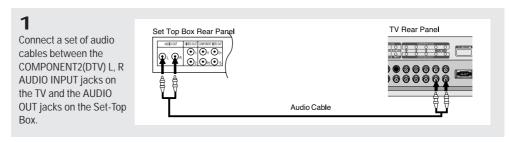


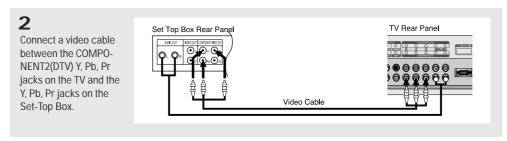


Note: For an explanation of Component video, see your DVD player owner's manual.

Connecting a Digital TV Set-Top Box (480p, 720p, 1080i)

The connections for a typical set-top box are shown below.

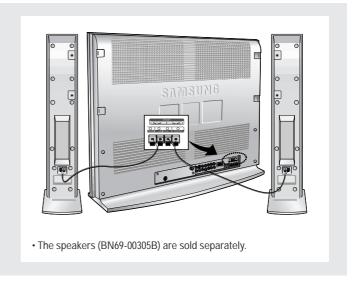




Note: For an explanation of Component video, see your Set-Top Box owner's manual.

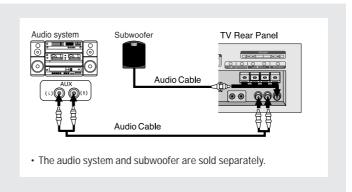
Connecting Speakers

Connect the Left, Right audio speaker cable to the external speaker output jacks on the rear of the TV, matching the red "+" and the black "-" ends of the cable with the diagram on the TV.



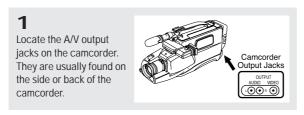
Connecting to an Audio System and Subwoofer

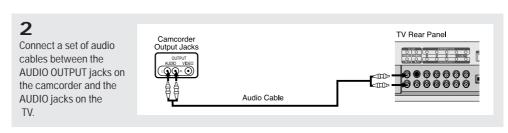
Connect a set of audio cables between the AUX L, R jacks on the AUDIO SYSTEM and the AUDIO OUTPUT L, R jacks on the TV.
Connect an audio cable between the INPUT jack on an active(powered) Sub woofer and the WOOFER OUT jack on the TV.

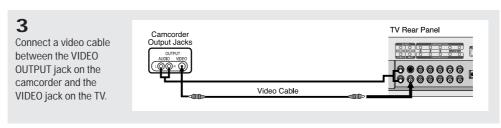


Connecting a Camcorder

The jacks on your TV make it easy to connect a camcorder. They allow you to view the camcorder tapes without using a VCR. (Also see "Viewing a VCR or Camcorder Tape" on page 3.17)







The audio-video cables shown here are usually included with a Camcorder. (If not, check your local electronics store.) If your camcorder is stereo, you need to connect a set of two cables

Installing Batteries in the Remote Control





■ Make sure to match the "+" and "–" ends of the batteries with the diagram inside the compartment.



→ Remove the batteries and store them in a cool, dry place if you won't be using the remote control for a long time.

The remote control can be used up to about 23 feet from the TV.

(Assuming typical TV usage, the batteries last for about one year.)

Chapter 3

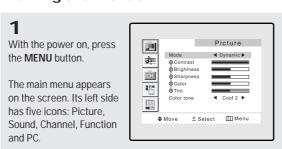
OPERATION

Turning the TV On and Off

Press the **POWER** button on the remote control. You can also use the Power button on the top panel.

Viewing the Menus and On-Screen Displays

Viewing the Menus



■ The on-screen menus disappear from the screen after about thirty seconds.

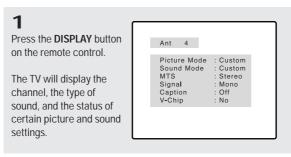
2
Use the CH▲ and CH▼ buttons to select one of the 5 icons.
Then press the VOL+ button to access the icon's sub-menu.

3
Press the MENU button to exit the menu.

✓ You can also use the MENU, CHANNEL, and VOLUME buttons on the control panel of the TV to make selections.

Viewing the Display

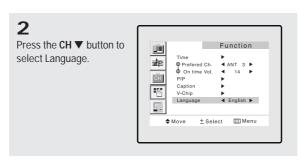
The display identifies the current channel and the status of certain audio-video settings.

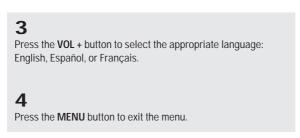


■ The on-screen displays disappear after about ten seconds.

Selecting a Menu Language

Terss the MENU button to display the menu. Press the CH ▼ button to select "Function", then press the VOL + button. Press the VOL + button.



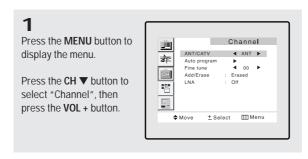


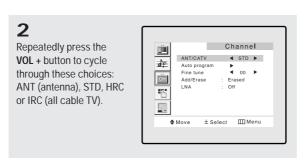
Memorizing the Channels

Your TV 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 \blacktriangle and CH \blacktriangledown 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 TV (i.e., an antenna or a cable system).



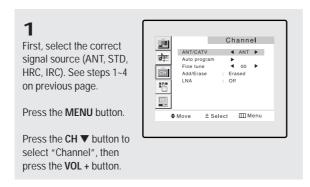


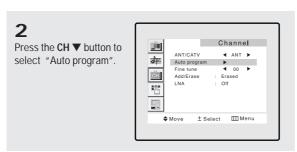
Note: STD, HRC and IRC identify various types of cable TV systems. Contact your local cable company to identify the type of cable system that exists in your particular area.

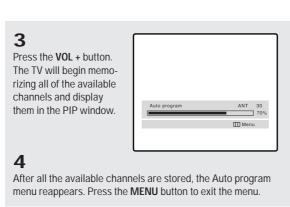
At this point the signal source has been selected. Proceed to "Storing Channels in Memory" (next page).

OPERATION

Storing Channels in Memory (Automatic Method)







→ The TV automatically cycles through all of the available channels and stores them in memory. This takes about one to two minutes.
Press VOL+ at any time to interrupt the memorization process and return to the CHANNEL menu.

Adding and Erasing Channels (Manual Method)

1

Use the number buttons to directly select the channel that will be added or erased.

2

Press the ADD/ERASE button.

Repeatedly pressing this button will alternate between "Added" and "Erased."

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

Changing Channels

Using the Channel Buttons

1

Press the CH ▲ or CH ▼ buttons to change channels.

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

Directly Accessing Channels

Use the number buttons to quickly tune to any channel.

1

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 select a channel over 100, press the +100 button. (For channel 122, press "+100," then "2," then "2.")

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

1

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

1

Press the **VOL** + or **VOL** – buttons to increase or decrease the volume.

Using Mute

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

1

Press **MUTE** and the sound cuts off.

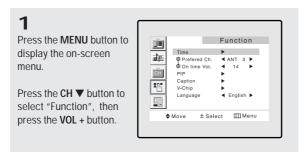
The word "Mute" will appear in the lower-right corner of the screen.

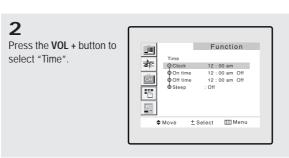
2

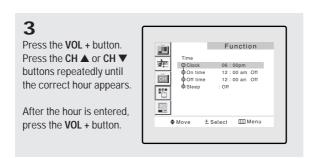
To turn mute off, press the MUTE button again, or simply press either the ${
m VOL}$ + or ${
m VOL}$ – button.

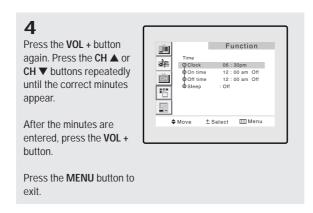
Setting the Clock

Setting the clock is necessary in order to use the various timer features of the TV. Also, you can check the time while watching the TV. (Just press DISPLAY.)









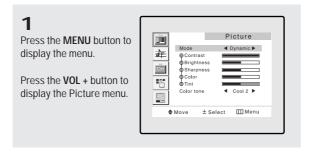
■ When selecting the hours, be sure to select the proper time of day (AM or PM).

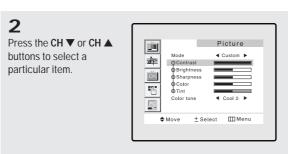
You can change the hours by pressing the $\mathbf{CH} \blacktriangle \mathbf{or} \mathbf{CH} \blacktriangledown \mathbf{buttons}$ repeatedly (or by holding down either of these buttons).

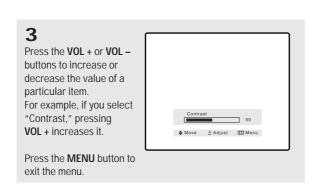
The time will appear every time you press the Display button.

Customizing the Picture

You can use the on-screen menus to change the contrast, brightness, sharpness, color, tint and color tone according to personal preference. (Alternatively, you can use one of the "automatic" settings. See next page.)



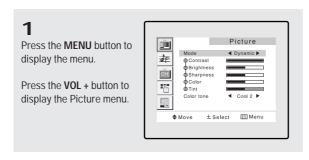


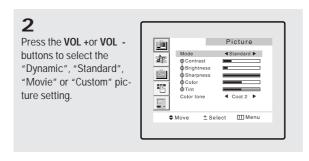


Using Automatic Picture Settings

Your TV has four automatic picture settings ("Dynamic", "Standard", "Movie" and "Custom") that are preset at the factory. You can activate either Dynamic, Standard or Movie by pressing P.STD (or by making a selection from the menu). Or, you can select "Custom" which automatically recalls your personalized picture settings.

Note: This function operates only in the TV, Video and S-Video modes.





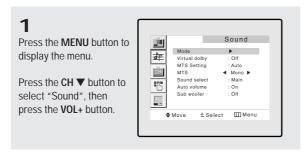
Alternate method:

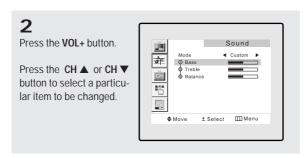
Simply press the **P.MODE** button on the remote control to select one of the standard picture settings.

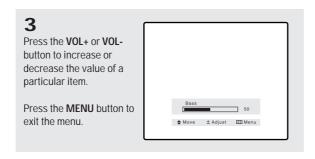
- Choose *Dynamic* for viewing the TV during the day or when there is brightlight in the room.
- Choose Standard for the standard factory settings.
- Choose Movie when viewing the movie.
- Choose *Custom* if you want to adjust the settings accordings to personal preference (see "Customizing the Picture, page 3.8).

Customizing the Sound

The sound settings can be adjusted to suit your personal preference. (Alternatively, you can use one of the "automatic" settings. See next page.)

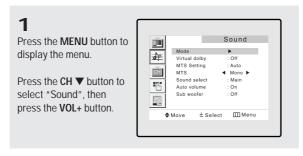


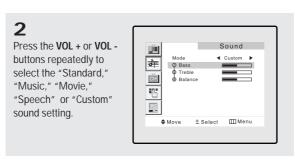




Using Automatic Sound Settings

Your TV has four automatic sound settings ("Standard," "Music," "Movie" and "Speech") that are preset at the factory. You can activate any of them by pressing the S.STD button (or by making a selection from the on-screen menu).



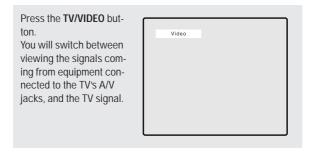


Alternate method: Simply press the the **S.MODE** button on the remote control to select one of the standard sound settings.

- Choose Standard for the standard factory settings.
- Choose *Music* when watching music videos or concerts.
- Choose Movie when watching movies.
- Choose *Speech* when watching a show that is mostly dialogue (i.e., news).
- Choose *Custom* to recall your personalized settings.

Viewing an External Signal Source

You must select the appropriate mode in order to view the external signal on the TV.



Chapter 4

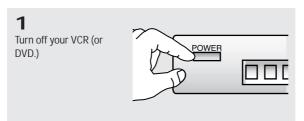
SPECIAL FEATURES

Customizing Your Remote Control

Your TV comes equipped with a "universal" remote control. In addition to controlling the TV, the universal remote can also operate a VCR, DVD and a cable box (even if your VCR and cable box are made by manufacturers other than Samsung).

Note: The remote control might not be compatible with all DVD Players, VCRs and Cable boxes.

Setting Up Your Remote Control to Operate Your VCR (or DVD)



2

Press the \mathbf{MODE} button and make sure that the \mathbf{VCR} (or \mathbf{DVD}) LED is illuminated.

■ The remote control has four "modes": "TV," "VCR", "Cable" and "DVD." Press the "MODE" button to switch the remote control to the "VCR" (or DVD) mode.

3

On your Samsung remote control, press the **SET** button.

4

Enter 3 digits of the VCR (or DVD) code listed on the next page for your brand of VCR (or DVD).

■ Make sure you enter 3 digits of the code, even if the first digit is a "0." If more than one code listed, try the first one.

5

Press the **POWER** button on the remote control. Your VCR (or DVD) should turn on. If your VCR (or DVD) turns on, your remote control is now set correctly.

■ If your VCR (or DVD) does not turn on, repeat steps 2, 3, and 4, but try one of the other codes listed for the brand of your particular VCR (or DVD).

If no other codes are listed, try each code, 000 through 089.

■ When your remote control is in the "VCR" (or DVD) mode, the volume buttons still control your TV's volume.

When your remote is in the "TV" mode, the VCR control buttons (PLAY, PAUSE, etc.) will still operate your VCR.

6

Once your remote control is set up, press the **MODE** button any time you want to use the remote to operate your VCR (or DVD).

SPECIAL FEATURES

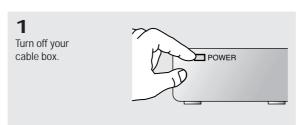
VCR Codes

11 1 2 22 272		272	D.C.1	222 227 227 222 222
Admiral 006, 079	KLH	073	RCA	000, 005, 007, 008, 028,
Aiwa 015	LG	009, 014, 046, 060		035, 037, 054, 069
Akai 017, 022, 023, 027, 030	Lloyd	015	Samsung	007, 013, 022, 032, 042, 077
Audio Dynamics 014, 016	Logik	031	Sansui	016
Bell & Howell 002	LXI	015	Sanyo	002, 012
Broksonic 010	Magnavox	008, 029, 053, 056	Scott	013, 041, 049, 068
Candle 007, 009, 013, 045, 046, 052	Marantz	002, 008, 014, 016,	Sears	002, 005, 009, 012, 018,
Cannon 008, 053		029, 030, 046, 061		019, 035, 043, 048
Citizen 007, 009, 013, 045, 046, 052	Marta	009	Sharp	006, 027, 039, 045
Colortyme 014	MEI	008	Shintom	017, 026, 031, 055
Craig 007, 012	Memorex	008, 009, 012, 015	Signature	015
Curtis-Mathes 000, 007, 008, 014,	MGA	027	Sony	017, 026, 038
015, 046, 053, 064, 067	Midland	032	Sylvania	008, 015, 029, 053, 056
Daewoo 013, 045, 076	Minota	005, 035	Symphoni	
DBX 014, 016	Mitsubishi	005, 027, 035, 040	Tandy	002, 015
Dimensia 000	Montgomery wa		Tashiko	009
Dynatech 015	MTC	007, 015	Tatung	030
Electrohome 027	Multitech	007, 015, 031, 032	Teac	015, 030, 069
Emerson 008, 009, 010, 013, 015, 020, 023, 027,	NEC 002, 014, 0	16, 030, 046, 061, 064	Technics	008
034, 041, 042, 047, 049, 057, 062, 065, 067, 068, 070	Optimus	006	Ternika	008, 009, 015, 021
Fisher 002, 012, 018, 019, 043, 048, 058	Panasonic	008, 053, 075, 077	TMK	067
Funai 015	Pentax	005, 035	Toshiba	005, 013, 019, 048, 049
GE 000, 007, 008, 032, 053	Pentex Reserch+	046	Totevision	007, 009
Go Video 007	Philco	008, 029, 053, 056	Unitech	007
Harman Kardon 014	Philips	008, 029	Vector Res	search 014, 016
Hitachi 005, 015, 035, 036	Pioneer	005, 016, 033, 050	Victor	016
Instant Replay 008	Portland	044, 045, 052	Video Cor	ncepts 014, 016
JC Penney 002, 005, 007, 008, 014,	ProScan	000	Videosoni	c 007
016, 030, 035, 051, 053	Quartz	002	Wards	005, 006, 007, 008, 009,
JCL 008, 002, 014, 016, 030, 046	Quasar	008, 053		012, 013, 015, 027, 031, 035
JVC 002, 014, 088, 089	Radio Shack/Rea	list 002, 006, 008,	Yamaha	002, 014, 016, 030, 046
Kenwood 002, 014, 016, 030, 046	009, 012, 01	5, 019, 027, 045, 053	Zenith	011, 017, 026, 079

DVD Codes

Philips	001
Proscan	002
RCA	002
Toshiba	003
Panasonic	004
Sony	008
Samsung	000

Setting Up Your Remote Control to Operate Your Cable Box



2

Press the **MODE** button and make sure that the **CABLE** LED is illuminated.

3

On your Samsung remote control, press the **SET** button.

→ The remote control has four "modes": "TV," "VCR," "Cable" and "DVD."

Press the "MODE" button to switch the remote control to the "Cable" mode.

4

Enter 3 digits of the cable box code listed below for your brand of cable box.

■ Make sure you enter 3 digits of the code, even if the first digit is a "0." (If more than one code listed, try the first one.)

5

Press the **POWER** button. Your cable box should turn on. If your cable box turns on, your remote control is now "set up" correctly.

✓ If your cable box does not turn on, repeat steps 2, 3, and 4, but try one of the other codes listed for your particular brand of cable box. (If no other codes are listed, try each cable box code, 000 through 077.)

6

Once your remote control is set up, press the **MODE** button any time you want to use the remote to operate your cable box.

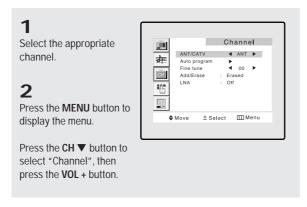
■ When your remote control is in the "CABLE" mode, the volume buttons still control your TV's volume. Also, the VCR control buttons (PLAY, PAUSE, etc.) will still operate your VCR.

Cable Box Codes

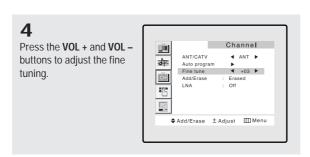
Anvision 007, 008	NSC 009	Signature 046
Cablestar 007, 008	Oak 016, 038	Sprucer 027
Eagle 007, 008	Osk Sigma 016	Starcom 046
Eastern Int. 002	Panasonic 003, 027, 039, 061,	Stargate 2000 058
General Instrument 046	073, 074	Sylvania 011, 059
GI 004, 005, 015, 023, 024,	Philips 007, 008, 019, 021, 026,	Texscan 011, 059
025, 030, 036, 067, 068, 069	028, 029, 032, 033, 040, 041	Tocom 017, 021, 049, 050, 055, 073
Hamlin 003, 012, 013, 034, 048	Pioneer 018, 020, 044, 074, 077	Unika 031, 032, 041
Hitachi 037, 043, 046	Randtek 007, 008	Universal 051, 052
Jerroid 004, 005, 015, 023, 024,	RCA 000, 027, 066	Viewster 007, 008, 019, 021, 026,
025, 030, 036, 046, 062, 065	Regal 003, 012, 013	028, 029, 032, 033, 040, 041
Macom 037, 043	Regency 002, 033	Warner Amex 044
Magnavox 007, 008, 019, 021,	SA 070, 071, 072	Zenith 014, 042, 057, 061,
026, 028, 029, 032, 033, 040, 041	Samsung 044, 003, 022, 063, 064	075, 076

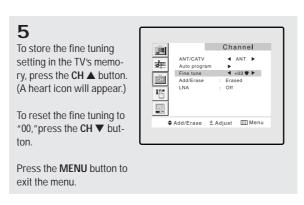
Fine Tuning Channels

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





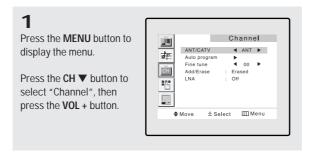


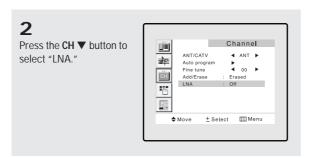


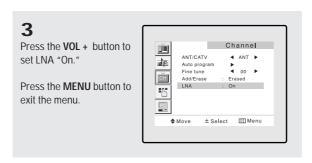
→ After you adjust the fine tuning, the "heart icon" will appear when you press Display while watching this channel.

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).

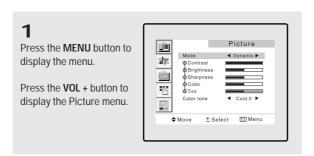


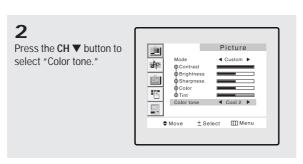


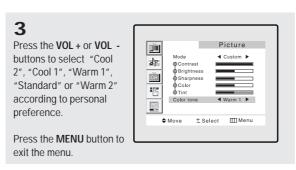


■ Pressing VOL - or VOL + will alternate between "On" and "Off."

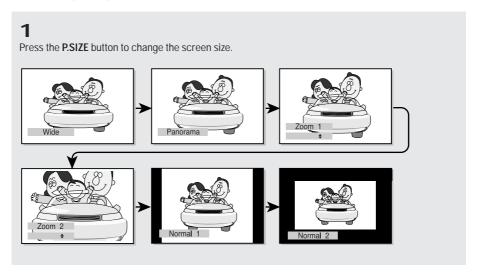
Selecting the Color Tone







Changing the Screen Size



- Wide: Sets the picture to 16:9 wide mode.
- Panorama: Use this mode for the wide aspect ratio of a panoramic picture.
- Zoom 1: Expands the picture with a 4:3 aspect ratio. Use the Channel Up/Down buttons to move the screen
- Zoom 2: Expands the Zoom 1 format picture. Use the Channel Up/Down buttons to move the screen.
- Normal 1: Set the picture to 4:3(16:9 for DTV) normal mode. This is standard TV(DTV) screen size.
- Normal 2: Original screen size.

Note: The screen format depends on the input signal.

- When TV, VIDEO, S-VIDEO, DVD (480i) signal is input, the following screen formats are available:
 - Wide \rightarrow Panorama \rightarrow Zoom 1 \rightarrow Zoom 2 \rightarrow Normal 1 \rightarrow Normal 2.
- When DTV signal is input: Wide → Normal 1 → Normal 2.
- When PC signal is input: Full → Normal → Standard.
- When DVD (480p) signal is input: Wide \rightarrow Zoom 1 \rightarrow Zoom 2 \rightarrow Normal 1 \rightarrow Normal 2.

Freezing the Picture

1

Press the **STILL** button to freeze the main picture.

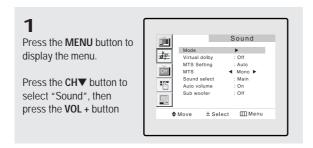
- Not available if V-Chip is turned on.
- Normal sound will still be heard.

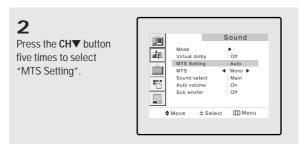
Press again to cancel.

Special Sound Options

Setting a Multichannel Television Stereo (MTS) Soundtrack

When MTS is set to "Auto", MTS will be set automatically to "Mono" or "Stereo", according to the signal transmitted from the broadcasting company. If a channel is selected in an area where reception is poor, the sound might be distorted. When this occurs, set MTS Setting to "Manual" and MTS to "Mono".

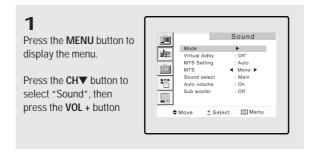




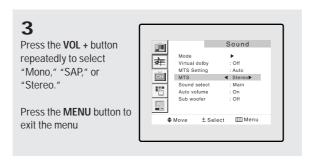


Choosing a Multichannel Television Stereo (MTS) Soundtrack

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.)







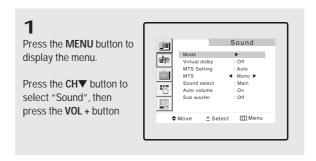
■ The text at the bottom of the menu tells you if the incoming audio is stereo, SAP, or mono.

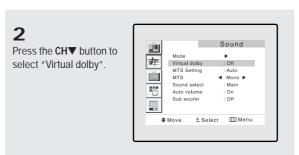
- Choose Stereo for channels that are broadcasting in stereo.
- Choose *Mono* for channels that are broadcasting in mono, or if you are having difficulty receiving a stereo signal.
- Choose *SAP* to listen to the Separate Audio Program, which is usually a foreign-language translation.

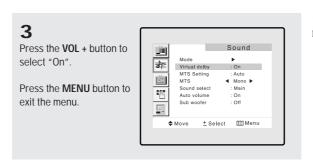
You can also change the MTS setting by pressing the "MTS" button on the remote control. (When you change channels, MTS is set to "Stereo" automatically. To listen in 'SAP' or 'Mono,' change the MTS setting.)

Virtual Dolby

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.







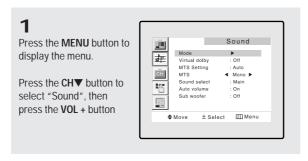
■ Pressing VOL - or VOL + will alternate between "On" and "Off."

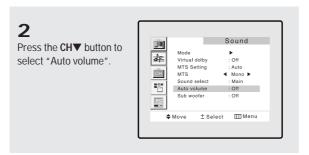
Alternate method:

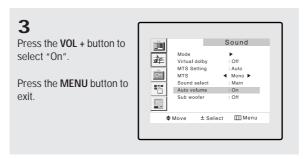
Press the $\mbox{V.DOLBY}$ button to alternate between "On" and "Off".

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.



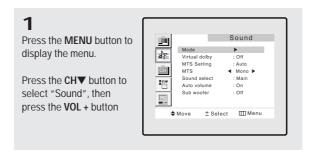


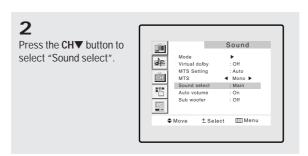


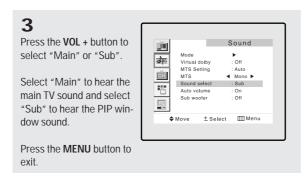
■ Pressing VOL - or VOL + will alternate between "On" and "Off."

Selecting the Sound Source

You can select either Main or Sub when PIP is On.



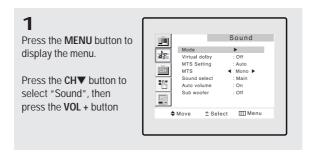


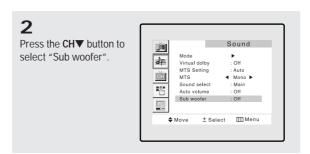


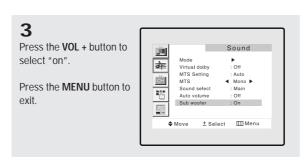
Note: Sound Select can also be used to select the Main or Sub sound over the speakers.

Subwoofer

An attached subwoofer can be turned on or off in the menu.

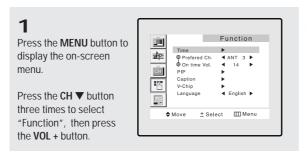




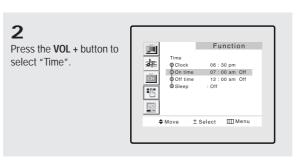


■ Pressing VOL - or VOL + will alternate between "On" and "Off."

Setting the On/Off Timer

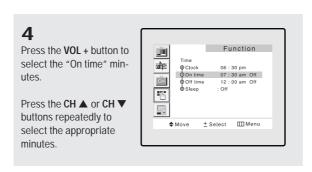


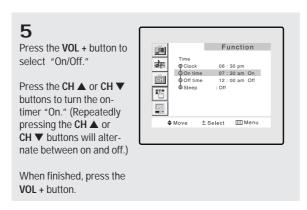
■ Before using the timer, you must set the TV's clock. (See "Setting the Clock" on page 3.7)



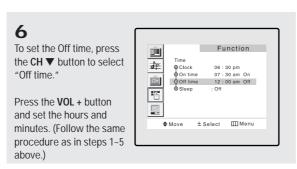
Press the CH ▼ button to Function select "On time", then đР © Clock
On time
Off time 06:30 pm 07:00 am Off 12:00 am Off : Off press the VOL + button. ČŤ Press the CH ▲ or CH ▼ buttons repeatedly to select the appropriate ± Select Ⅲ Menu **♦** Move hours (i.e., the hour when the TV will turn on.)

■ When you set the hours, make sure the correct time of day (AM or PM) appears to the left of the hour.





■ To deactivate the "On time," select "Off" during this step.



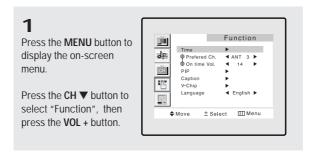
7

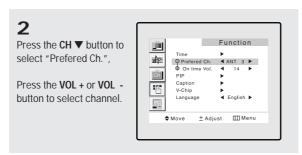
When finished setting the timer, press the $\mbox{\bf MENU}$ button to exit.

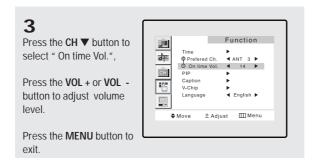
Setting the Preferred Channel Volume Level

When the timer automatically turns on the TV, the preferred channel and volume can be set as you want.

Note: PIP must be off to perform this function.

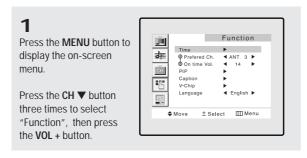


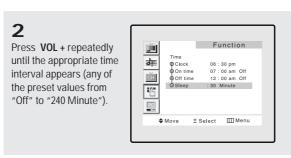




Setting the Sleep Timer

The sleep timer automatically shuts off the TV after a preset time (from $10\ \text{to}\ 240\ \text{minutes}$).





Alternate method:

Press the **SLEEP** button repeatedly until the appropriate time interval appears (any of the preset values from "Off" to "240 Minute").

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 pre-recorded commercial video tapes provide closed captions as well. Check for the closed caption symbol in your television schedule and on the tape's packaging: CC .

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



Press the $\mathbf{CH} \ \nabla$ button to select "Function", then press the $\mathbf{VOL} +$ button.



■ Quick way to access Caption: Simply press CAPTION button on the remote control.

Press the CH ▼ button to

Press the **CH** ▼ button to select "Caption", then press the **VOL**+ button.



3

Press the **VOL**+ or **VOL** – buttons to turn closed captioning on/off.



4

Press the **CH** ▼ button to select "Mode."

Press the **VOL** + or **VOL** – buttons to select "Caption" or "Text."



5

Depending on the particular broadcast, it might be necessary to make changes to "Channels" and "Field":

Use the CH ▲, CH ▼, VOL + and VOL - buttons to make the changes. (Follow the same procedure as in steps 3-4 above.)

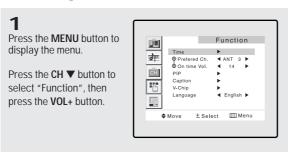
Press the MENU button to exit the menu.

■ 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.) Note: If you select PIP fuction, the caption will disappear

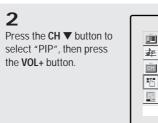
Viewing Picture-in-Picture

You can use the PIP feature to simultaneously watch two video sources. Note: While V-Chip is in operation, PIP function cannot be used.

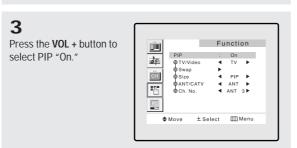
Activating Picture-in-Picture



→ Quick way to access PIP: Simply press PIP button on the remote control.







◄ If you turn the TV off while watching and turn it on again, the PIP window will disappear.

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

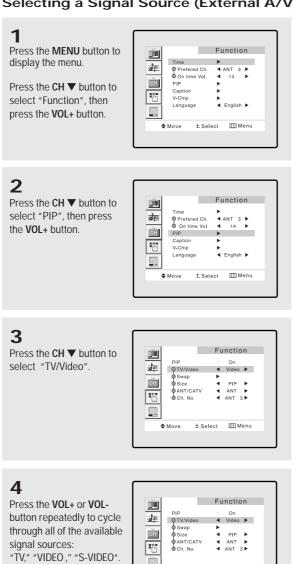
PIP Settings

X : PIP doesn't operate

DVD DTV

Main picture	PC Analog	PC Digital	Antenna	VIDEO	S-VIDEO	DVD	DTV
PC Analog	х	x	0	0	0	0	0
PC Digital	х	x	0	0	0	0	0
Antenna	х	х	0 (LTM405W)	0	0	х	х
VIDEO	х	x	0	х	0	х	x
S-VIDEO	x	x	0	0	Х	х	x
DVD	х	x	х	х	х	х	х
DTV	х	х	х	х	х	х	х

Selecting a Signal Source (External A/V) for PIP

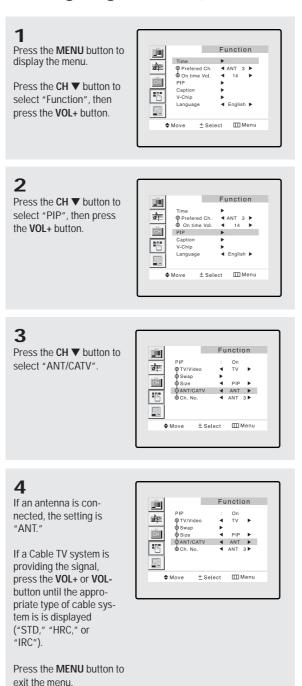


Press the **MENU** button to

exit the menu.

± Select Ⅲ Menu

Selecting a Signal Source (Antenna or Cable) for PIP



Changing the PIP Channel (LTM405W)

Press the PIP $CH \triangle$ or $CH \nabla$ button to change the channel that appears in the PIP window.

Changing the Location of the PIP Window

When you press the **LOCATE** button repeatedly, the PIP window moves from corner to corner on the TV screen.

Changing the Size of the PIP Window

Press the **SIZE** button to alternate between a PIP, Double screen1, Double screen2 window.

Note: The Double screen2 window doesn't work in the PC mode.

Swapping the Contents of the PIP image and Main image (TV, VIDEO and S-VIDEO mode only)

When you press the **SWAP** button, the image in the PIP window will appear on the main screen, and vice versa.

Using the V-Chip

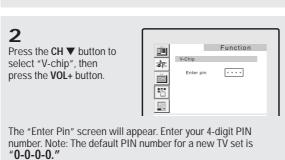
The V-Chip feature automatically locks out programming that is deemed inappropriate for children. The user must first enter a PIN (personal ID number) before any of the V-Chip restrictions can be set up or changed.

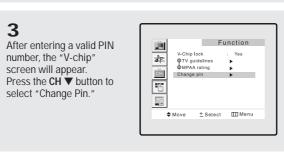
Note: While V-Chip is in operation, PIP function cannot be used.

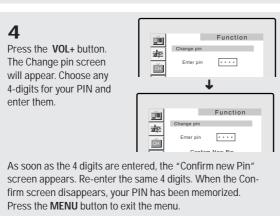
If PIP does not operate, please check whether V-chip is in operation.

Setting Up Your Personal ID Number (PIN)





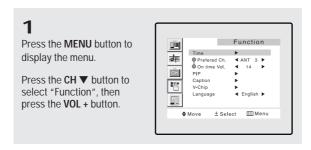


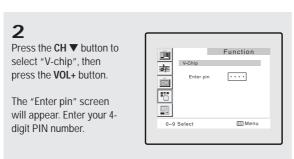


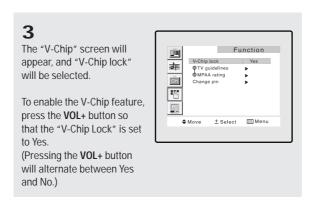
Note: If you forget the PIN, press the remote-control buttons in the following sequence, which resets the pin to 0-0-0-0: POWER OFF → MUTE → 8 → 2 →

POWER OFF \rightarrow MUTE \rightarrow 8 \rightarrow 2 \rightarrow 4 \rightarrow POWER ON.

How to Enable/Disable the V-Chip

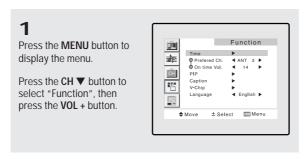






How to Set up Restrictions Using the "TV guidelines"

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.



2

Press the **CH** ▼ button to select "V-chip", then press the **VOL+** button.

The "Enter pin" screen will appear. Enter your 4-digit PIN number.



3

Press the **CH** ▼ button, to select "TV Guidelines", then press the **VOL**+ button.



4

The "TV guidelines" screen will appear.
Press the the CH ▲, CH ▼ buttons to select 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.)

5

At this point, one of the TV-Ratings is selected.

Press the **VOL**+ button: Depending on your existing setup, a letter "U" or "B" will be highlighted. (U= Unblocked, B= Blocked)

While the "U" or "B" is highlighted, press the CH ▲ or CH ▼ buttons to block or unblock the category.

Press the **MENU** button once to save the TV guidelines. To menu this screen, press the **MENU** again. To select a different TV-Rating, press the $\mathbf{CH} \blacktriangle \mathbf{or} \mathbf{CH} \blacktriangledown \mathbf{buttons}$ 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: Sexual 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, 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 selected, repeatedly press the **VOL+** button. 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, press the CH ▲ or CH ▼ buttons to change the sub-rating.

Press **MENU** once to save the TV guidelines. To menu this screen, press the **MENU** button again. To select a different TV-Rating, press the **CH** \triangle or **CH** ∇ buttons and then repeat the process.

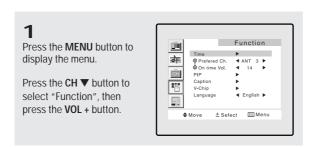
Note: The V-chip will automatically block certain categories that are "More restrictive". For example, if you block "L" sub-rating in TV-PG, then the "L" sub-ratings in TV-14 and TV-MA will automatically be blocked.

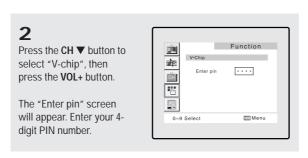
7

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).

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).







Repeatedly press the CH
▼ button to select a particular MPAA category.
(When a category is selected, its color changes to blue.) Pressing the CH ▼ button will cycle through the MPAA categories:

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

While a particular category is highlighted, press the VOL+ button to activate it. A letter ("U" or "B") will be displayed. Press the CH ▲ or CH ▼ buttons to select "U" or "B".

Press the MENU button three times 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 V.chip button on the remote control. Enter your PIN number, and press the **VOL** + button to temporarily disable the V-Chip Lock.

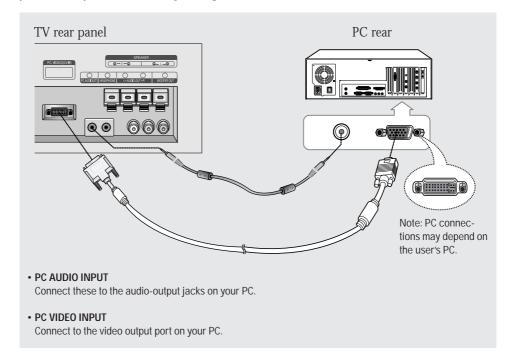
Chapter 5

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.



How to Set up Your PC display

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

Press the TV/VIDEO button on the remote control to select the PC Analog mode.

1

Press the **AUTO** button on the remote control or top panel. (refer to pages 5.3~5.4).

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 look different, depending upon your particular version of Windows and your particular video card. Even if your actual screens look different, the same, basic set-up information will apply in most 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 the TV-PC interface are "resolution" and "colors." The correct settings for these two variables are:

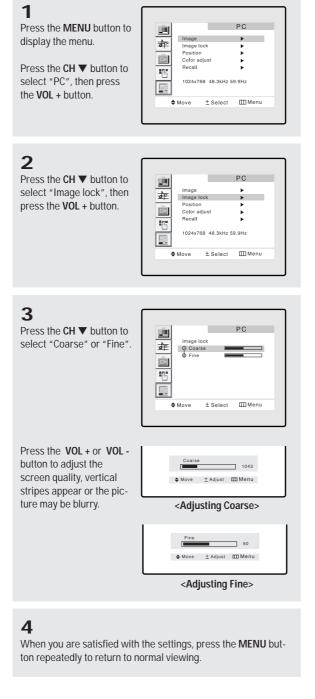
• Size (sometimes called "resolution"): 1280 x 768 pixels.

If a vertical-frequency option exists on your display settings dialog box, the correct value is "75" or "75 Hz." Otherwise, just click "OK" and exit the dialog box.

Adjusting the Screen Quality

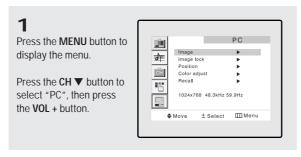
The purpose of picture quality adjustment is to remove or reduce picture noise. If the noise is not removed by fine tuning alone, then do the frequency adjustments to the utmost and fine tune again. After the noise has been reduced, re-adjust the picture so that it is aligned on the center of screen.

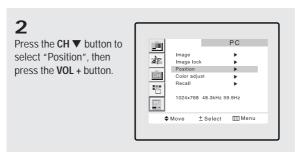
Press the TV/VIDEO button on the remote control to select the PC Analog mode.

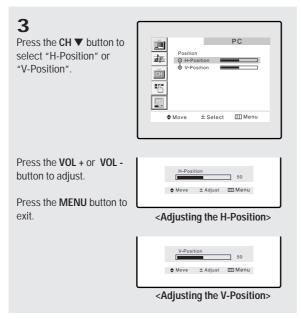


Changing the Screen Position

Press the TV/VIDEO button on the remote control to select the PC Analog mode.

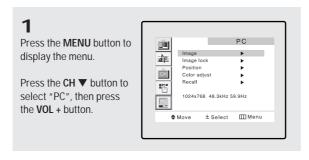




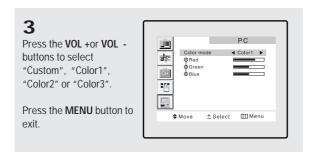


Changing the Screen Color Standard

Press the TV/VIDEO button on the remote control to select the PC Analog mode.

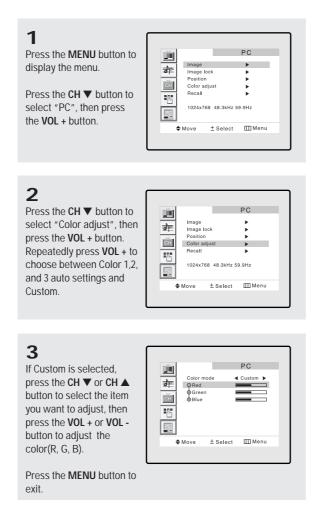






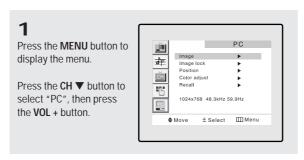
Adjusting the Screen Color Settings

Press the TV/VIDEO button on the remote control to select the PC Analog mode.

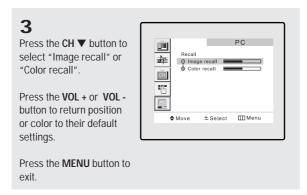


PC DISPLAY

To Initialize the Screen Position or Color Settings







Chapter 6

Troubleshooting

If the TV seems to have a problem, first try this list of possible problems and solutions. If none of these troubleshooting tips apply, call your nearest Samsung authorized service center.

Identifying Problems

Problem	Possible Solution		
Poor picture	Try another channel.		
	Adjust the antenna.		
	Check all wire connections.		
Poor sound quality.	Try another channel.		
	Adjust the antenna.		
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, wrong colors or	Make sure the program is broadcast in color.		
tints.	Adjust the picture settings.		
	If the set is moved or turned in a different direction, the		
	power should be OFF for at least 30 minutes.		
	Adjust the antenna.		
Picture rolls vertically.	Check all wire connections.		
The TV operates erratically.	Unplug the TV for 30 seconds, then try operating it		
	again.		
The TV won't turn on.	Make sure the wall outlet is working.		
Blurred or snowy picture,	Check the direction, location and connections of your		
distorted sound	antenna.		
	This interference is often due to the use of an indoor		
	antenna.		
Remote control malfunctions	Replace the remote control batteries.		
	Clean the upper edge of the remote control		
	(transmission window).		
	Check the battery terminals.		
"Check Signal Cable"	Ensure that the signal cable is firmly connected to the		
message.	PC or video sources.		
	Ensure that the PC or video sources are turned on.		

TROUBLESHOOTING

Problem	Possible Solution		
"Not Supported Mode!" mes-	Check the maximum resolution and the frequency of		
sage.	the video Adapter.		
	Compare these values with the data in the Display		
	Modes Timing Chart.		
The image is too light or too	Adjust the Brightness and Contrast.		
dark.	Adjust the Fine function.		
Horizontal bars appear to	Adjust the Coarse function and then adjust the Fine		
flicker, jitter or shimmer on	function.		
the image.			
Vertical bars appear to flicker,	The TV is using its power management system.		
jitter or shimmer on the	Move the computer's mouse or press a key on the		
image.	keyboard.		
Screen is black and power	Check that the display resolution and frequency from		
indicator light blinks steadily.	your PC or video board is an available mode for your		
	TV. On your computer, check: Control Panel, Display,		
	Settings.		
Image is not stable and may	If the setting is not correct, use your computer utility		
appear to vibrate.	program to change the display settings.		
	NOTE: Your TV supports multiscan display functions		
	within the following frequency domain:		
	• Horizontal frequency: 30kHz ~ 60kHz		
	• Vertical frequency: 56 Hz ~ 75 Hz		
	• Maximum refresh rate: 1280 x 768 @ 75Hz		
Image is not centered on the	Adjust the horizontal and vertical position.		
screen.			

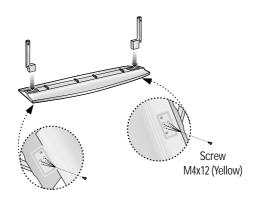
APPENDIX

Setting the Stand

Note: The LTM295W TV is shipped with the stand attached. The stand for the LTM405W is sold separately and must be assembled in the following steps.

1

Fasten the stand support top onto both ends of the stand-swivel using screws (M4x12, yellow).



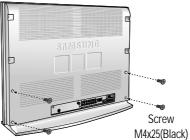
2

Fit the stand to the TV set by facing the arrow mark on the stand forward (LCD panel).

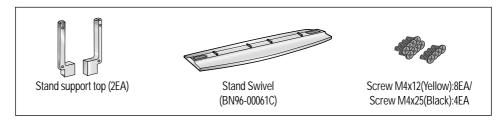


3

Fasten the stand onto the TV set using screws (Mx25, black).

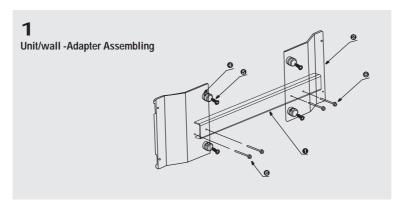


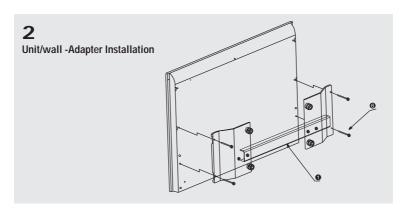
Stand Accessories

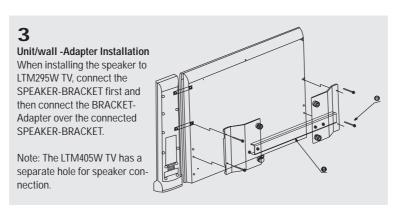


Wall Installation Instructions

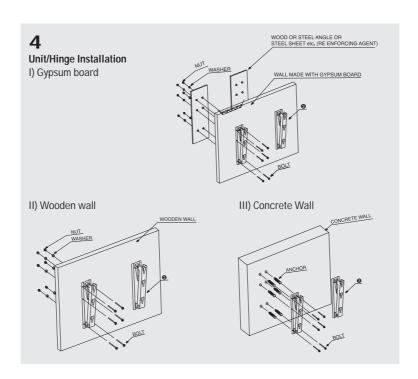
Contact a professional installer if you are unsure about wall mount installation, as unskilled installation may cause injury or damage to the set.

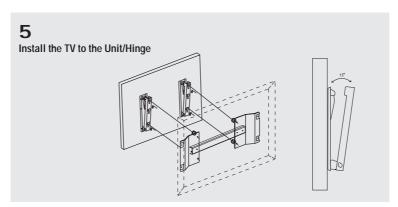




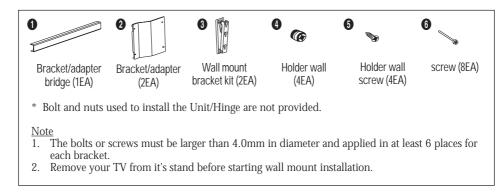


APPENDIX

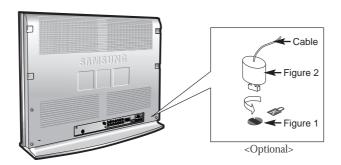




Wall Mount Accessories (Wall Mount kit is sold separately)



Using the Anti-Theft Kensington Lock



The Kensington lock is a device used to physically fix the system when using it in a public place. The locking device has to be purchased separately. The appearance and locking method may differ from the illustration depending on the manufacturer. Please refer to the manual provided with the Kensington lock for proper use.

1

Insert the locking device into the Kensington slot on the LCD TV(figure 1), and turn it in the locking direction(figure 2).

2

Connect the Kensington lock cable.

3

Fix the Kensington lock to a desk or a heavy stationary object.

APPENDIX

Pin Assignments

Pin D-Sub Connection

PIN	Separate H/V	Composite H/V	
1	Red	Red	
2	Green	Green	
3	Blue	Blue	
4	GND	GND	
5	GND (DDC Return)	GND (DDC Return)	
6	GND-Red	GND-Red	
7	GND-Green	GND-Green	
8	GND-Blue	GND-Blue	
9	No Connection	No Connection	
10	GND-Sync/Self Test	GND-Sync/Self Test	
11	GND	GND	
12	DDC-SDA	DDC-SDA	
13	H_Sync	H/V_Sync	
14	V_Sync	Not used	
15	DDC-SCL	DDC-SCL	

Display Modes

If the signal from the system equals the standard signal mode, the screen is adjusted automatically. If the signal from the system doesn't equal the standard signal mode, adjust the mode by referring to your Videocard user guide; otherwise there may be no video. For the display modes listed below, the screen image has been optimized during manufacture.

Preset timing modes

Mode	Resolution	Horizontal Frequency (kHz)	Vertical Frequency (Hz)	Pixel Clock Frequency (MHz)	Sync Polarity (H/V)
MAC	640 X 480	31.469	59.940	25.175	-/-
MAC	640 X 480	35.000	66.667	30.240	-/-
VESA	640 X 480	37.861	72.809	31.500	-/-
VESA	640 X 480	37.500	75.000	31.500	-/-
IBM	720 X 400	31.469	70.087	28.322	-/+
VESA	800 X 600	37.879	60.317	40.000	+/+
VESA	800 X 600	48.077	72.188	50.000	+/+
VESA	800 X 600	46.875	75.000	49.500	+/+
MAC	832 X 624	49.726	74.551	57.284	-/-
VESA	1024 X 768	48.363	60.004	65.000	-/-
VESA	1024 X 768	56.476	70.069	75.000	-/-
VESA	1024 X 768	60.023	75.029	78.750	+/+
GTF	1280 X 768	47.700	60.000	80.136	-/-

NTSC Broadcasting Systems

Color System	Sound System	Stereo System	Channel System	Countries	
		A2	US	Korea	
				USA, Canada, Chile,	
				Venezuela, Cuba, Colombia,	
NTSC	М	M *BTSC (SAP) US Jamaica, Me	Jamaica, Mexico, Panama,		
				Peru, Philippines, Puerto-Rico,	
				Taiwan	
		EIAJ	Japan	Japan	

^{*} Note : This Model is set up for BTSC (SAP).

Cleaning and Maintaining Your TV

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

Placement

- Do not place the TV near extremely hot, cold, humid or dusty places.
- Do not place the TV near appliances with electric motors that create magnetic fields, such as vacuum cleaners.
- Keep the ventilation openings clear; do not place the TV on a soft surface, such as cloth or paper.
- Place the TV in a vertical position only.

Liquids

Do not handle liquids near or on the TV.
 Liquids that spill into it can cause serious damage.

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.

Temperature

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

Using Your TV in Another Country

If you plan to take your TV with you 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

		LTM295W	LTM405W	
Panel	Size	29.0" Diagonal	40.0" Diagonal	
	Pixel Pitch	0.4935(H) X 0.4935(V)mm	0.6735(H) X 0.6735(V)mm	
	Туре	a-si TFT active matrix	a-si TFT active matrix	
	Display area	631.68(H) X 397.01(V)mm	862.080(H) x 517.248(V)mm	
	Viewing Angle	85/85/85/85 (L/R/U/D)	85/85/85/85 (L/R/U/D)	
*Frequency	Horizontal	30~60 kHz	30~60 kHz	
	Vertical	56~75 Hz	56~75 Hz	
Display	Display Color	16,777,216 color	16,777,216 color	
Resolution	Optimum Mode	1024 X 768 @ 75 Hz	1024 X 768 @ 75 Hz	
	Maximum Mode	1280 X 768 @ 75 Hz	1280 X 768 @ 75 Hz	
Input Signal	Sync.	H/V Separate, TTL, P. or N.	H/V Separate, TTL, P. or N.	
	Video signal	0.7 Vp-p @ 75 ohm	0.7 Vp-p @ 75 ohm	
Video	Color system	NTSC	NTSC	
	Video system	CVBS, S-VHS, RGB	CVBS, S-VHS, RGB	
Component	Video In	1.0 Vp-p @ 75 ohm	1.0 Vp-p @ 75 ohm	
	Audio In	500mVrms	500mVrms	
Power Supply	Input	AC 90~264 V, 1.0~0.5A (50/60Hz)	AC 90~264 V, 1.0~0.5A (50/60Hz)	
	Output	DC 28 V/8A	DC 28 V/8A	
Power	Maximum	160W	220 W	
Consumption	Power Saving	< 7 W	< 7 W	
Dimensions/	Unit (WxDxH):	29.9 x 7.7 x 22.3 inches/39.7 lbs	39.6 X 11.8 X 29.4 inches/61.7 lbs	
Weight	TV body	(759.6 x 195.0 x 568.5 mm/18.0 kg)	(1006.0 X 300.0 X 746.5 mm/28.0 kg)	
	With speakers	37.8 x 7.7 x 22.4 inches	49.1 x 11.8 x 29.4 inches	
		(961.2 x 195.0 x 568.5 mm)	(1247.6 x 300.0 x 746.5 mm)	
Environmental	Operating Temperature	50 °F to 104 °F (10 °C to 40 °C)	50 °F to 104 °F (10 °C to 40 °C)	
Considerations	Operating Humidity	10% to 80%	10% to 80%	
	Storage Temperature	-13 °F to 113 °F (-25 °C to 45 °C)	-13 °F to 113 °F (-25 °C to 45 °C)	
	Storage Humidity	5% to 95%	5% to 95%	
Audio	Audio Input 1	RCA Jack Red(R) White(L), 0.5Vrms (-9dB)	RCA Jack Red(R) White(L), 0.5Vrms (-9dB)	
Characteristics	Audio Input 2	3.5ø Stereo Jack, 0.5Vrms (-9dB)	3.5ø Stereo Jack, 0.5Vrms (-9dB)	
	DVD	RCA Jack Red(R) White(L), 0.5Vrms (-9dB)	RCA Jack Red(R) White(L), 0.5Vrms (-9dB)	
	DTV	RCA Jack Red(R) White(L), 0.5Vrms (-9dB)	RCA Jack Red(R) White(L), 0.5Vrms (-9dB)	
	Headphone out	Max. 10mW Output (3.5ø Stereo Jack 32)	Max. 10mW Output (3.5ø Stereo Jack 32)	
	Frequency	RF: 80Hz ~ 15kHz (at- 3dB)	RF: 80Hz ~ 15kHz (at- 3dB)	
	Response	A/V: 80Hz ~ 20kHz (at - 3dB)	A/V: 80Hz ~ 20kHz (at - 3dB)	

 $^{^{\}ast}$ Referring to Preset timing modes, page A.6