SAMSUNG ELECTRONICS

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BN68-00275D-00

SAMSUNG

LTM295W
LTM405W

LCD TELEVISION

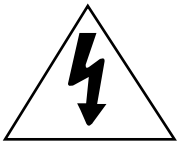
Owner's Instructions

Warning! Important Safety Instructions

CAUTION

RISK OF ELECTRIC SHOCK
DO NOT OPEN

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.

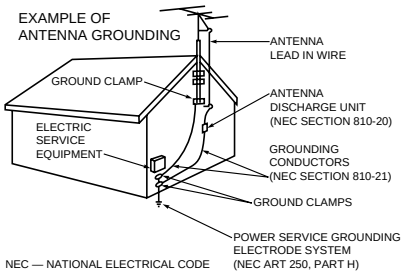
- Unplug the TV from the wall outlet and disconnect the antenna or cable system during a lightning storm or when left unattended and unused for long periods of time. This will prevent damage to the unit due to lightning and power-line surges.

- 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

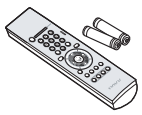
List of Features

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

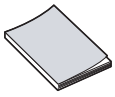
- Easy-to-use remote control
- Easy-to-use on-screen menu system
- Adjustable picture and sound settings that can be stored in the TV's memory
- Automatic channel tuning for up to 181 channels
- A special filter to reduce or eliminate reception problems
- Fine tuning control for the sharpest picture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

Accessories

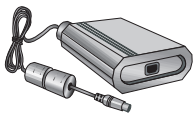
Please make sure the following items are included with your LCD TV. If any items are missing, contact your dealer.



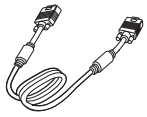
Remote Control(BN59-00000A) & Batteries (AAA x 2) (4301-000121)



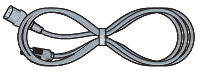
Owner's Instructions (BN68-00000A)



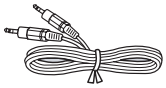
DC Adapter (BN44-00000A)



DVI Cable (DVI-D+DVI-D, DVI-I+D-sub) (BN39-00000A)



Power Cord (BH39-10339X)

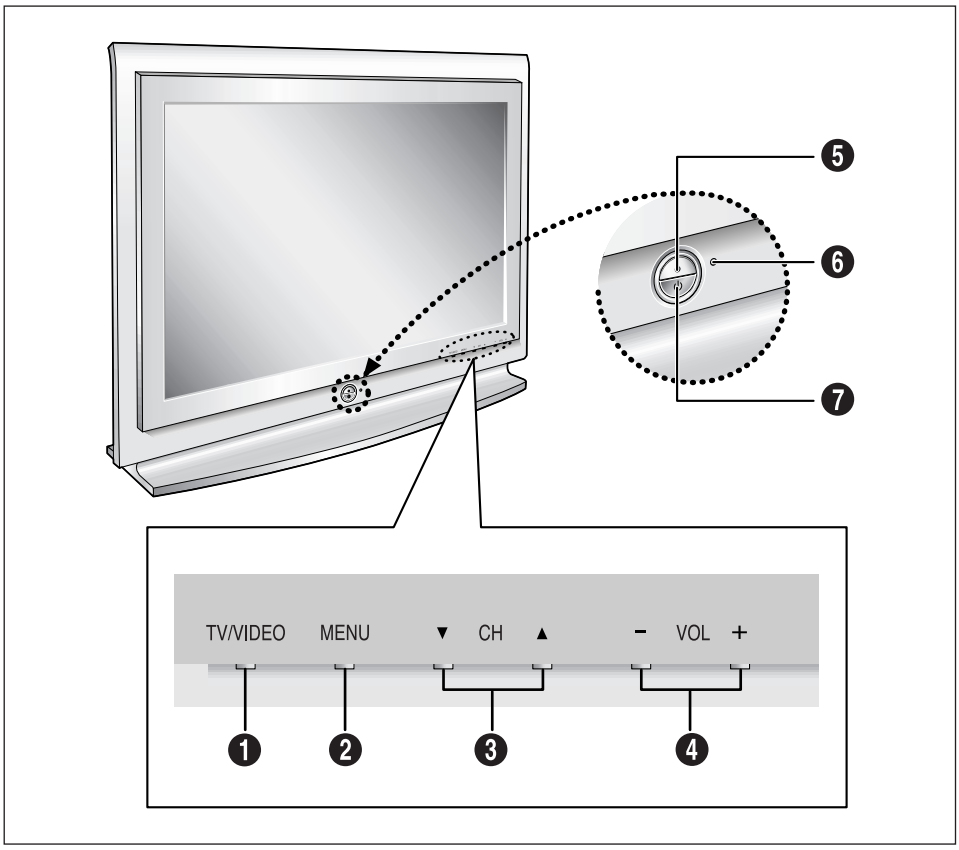


PC Stereo cable (BH39-00000))

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.



❶ **TV/VIDEO**
Press to display all of the available video sources.

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

❸ **VOL(VOLUME) – , +**
Press to increase or decrease the volume. Also used to select items on the on-screen menu.

❹ **CH ▼ and CH ▲**
Press to change channels. Also press to high-light various items on the on-screen menu.

❺ **Indicator**
Yellow: Normal operation.
Yellow, Blinking: Disconnected signal cable.

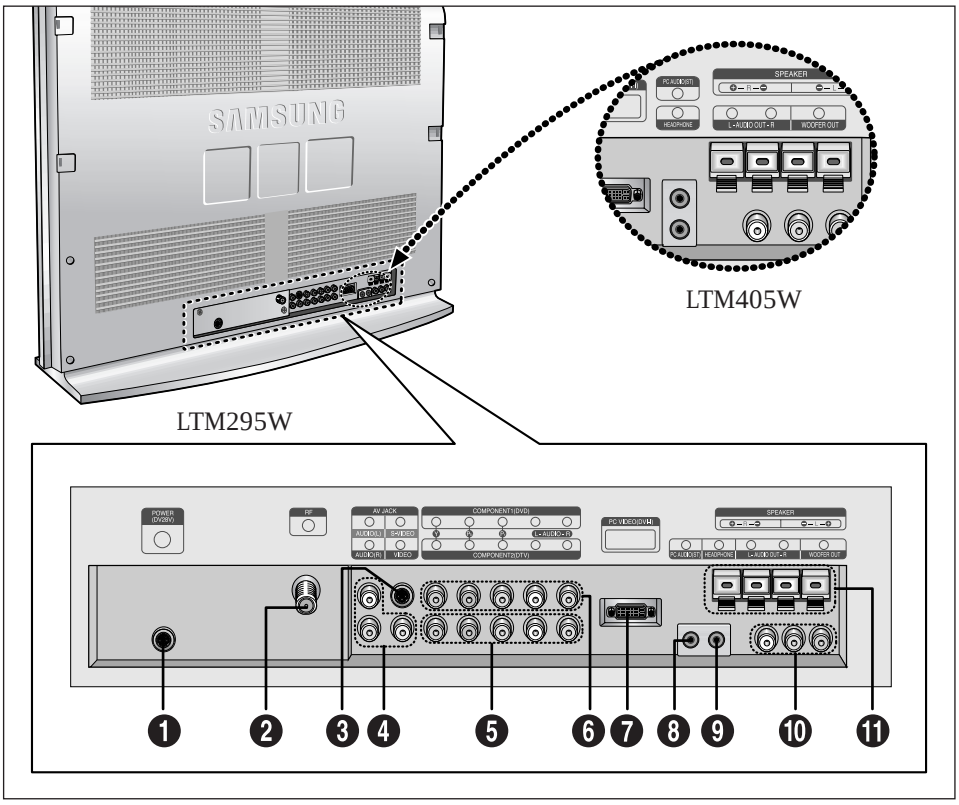
❻ **Remote Control Sensor**
Aim the remote control towards this spot on the TV.

❾ **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.



❶ **POWER INPUT**

❷ **RF**
Connect to an antenna or to a cable TV system.

❸ **SUPER VIDEO INPUT**
Connects S-Video signal from a camcorder or VCR.

❹ **VIDEO/AUDIO INPUT**
Connects Video/Audio signal from a camcorder or VCR.

❺ **COMPONENT 2 (DTV)**
Connects component Video/Audio from a Set-Top Box.

❻ **COMPONENT 1 (DVD)**
Connects component Video/Audio from a DVD player.

❼ **PCVIDEO INPUT (DVI-I)**
Connect to the video output port on your PC.

❽ **PC AUDIO INPUT**
Connect to the audio output jacks on your PC.

❾ **HEADPHONE**
Connect a set of external headphones to this jack for private listening.

❿ **AUDIO/WOOFER OUTPUT**
- Connect to the speaker (amp built-in) input jack.
- Connect to the Sub-woofer speaker input jack.

⓫ **SPEAKER OUTPUT**
Connect to the speaker (amp built-in) input jack.

⓬ **Kensington lock**
(See page A.2)

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.

❶ **POWER**
Turns the TV on and off.

❷ **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."

❸ **TV/VIDEO**
Press to display all of the available video sources.

❹ **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.)

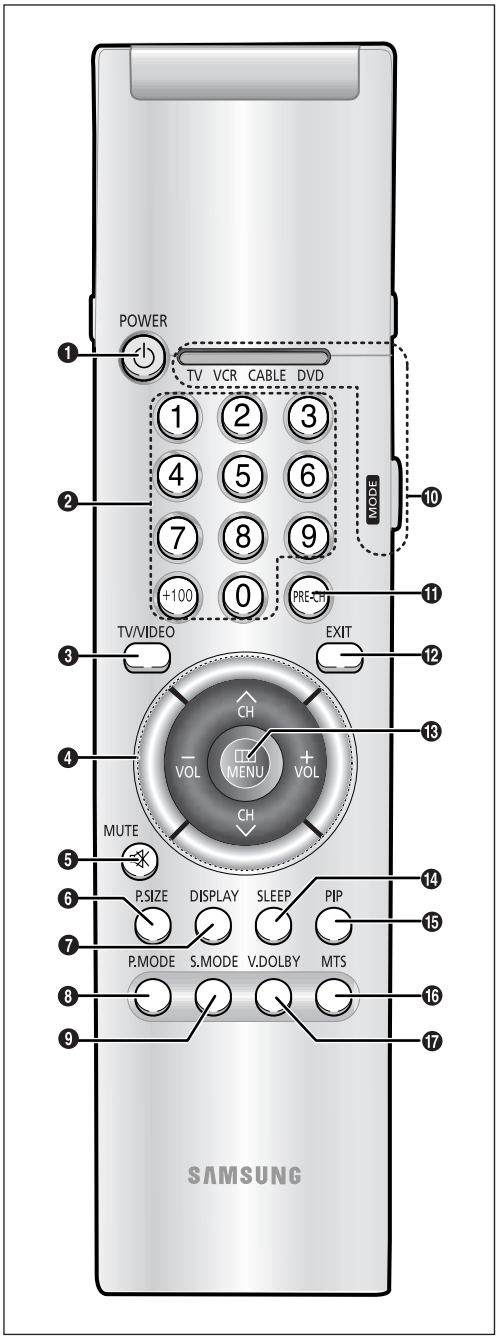
❺ **MUTE**
Press to temporarily cut off the sound.

❻ **P.SIZE**
Press to change the screen size.

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

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

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



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

⓫ **PRE-CH**
Tunes to the previous channel.

⓬ **EXIT**
Press the menu to exit.

⓭ **MENU**
Displays the main on-screen menu.

⓮ **SLEEP**
Press to select a preset time interval for automatic shutoff.

⓯ **PIP**
Press this button to control the PIP window.

⓰ **MTS (Multichannel Television Stereo)**
Press to choose stereo, mono or Separate Audio Program (SAP broadcast).

⓱ **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.

Remote Control

⓲ 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.

⓳ CAPTION
Press to set caption on/off.

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

㉑ 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.

㉒ SET
Use this button when you are setting up your remote control to operate your VCR, Cable box, or DVD).

㉓ CH.SCAN
Press to memorize (scan) the available channels.

㉔ ADD/ERASE
Press to add or erase channels in the TV's memory.

㉕ 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.

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

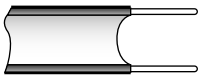
㉖ STILL
Press to stop the action during a particular scene. Press again to resume normal video.
Note: The still function doesn't operate in Component 1, 2 mode.

Chapter 2

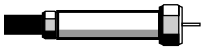
INSTALLATION

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.



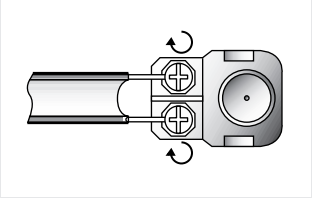
If you have two antennas, see “Separate VHF and UHF Antennas,” on page 2.2.

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.

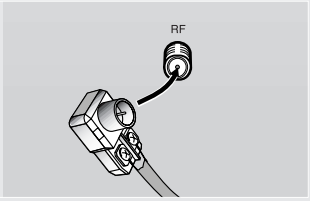
1

Place the wires from the twin leads under the screws on a 300-75 ohm adaptor (not supplied). Use a screwdriver to tighten the screws.



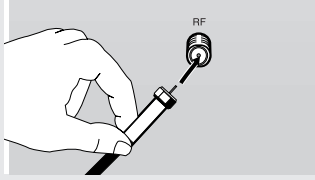
2

Plug the adaptor into the TV ANTENNA terminal on the bottom of the back panel.



Antennas with 75-ohm Round Leads

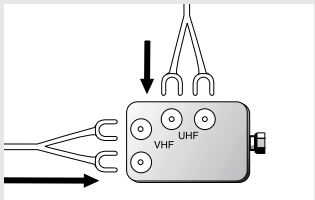
1
Plug the antenna lead into the TV ANTENNA terminal on the bottom of the back panel.



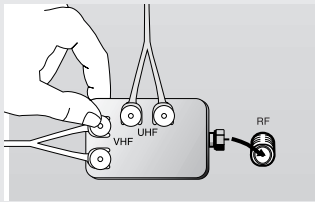
Separate VHF and UHF Antennas

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).

1
Connect both antenna leads to the combiner.



2
Plug the combiner into the TV ANTENNA terminal on the bottom of the rear panel.

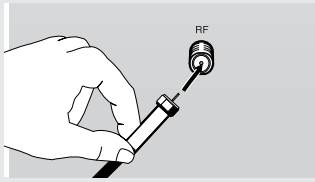


Connecting Cable TV

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

Cable without a Cable Box

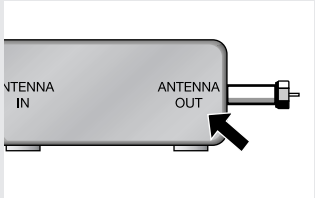
1
Plug the incoming cable into the TV ANTENNA antenna terminal on back of the TV.



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

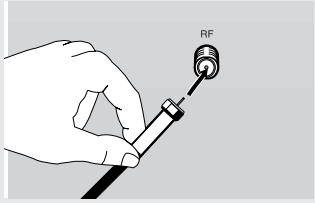
Connecting to a Cable Box that Descrambles All Channels

1
Find the cable that is connected to the ANTENNA OUT terminal on your cable box.



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

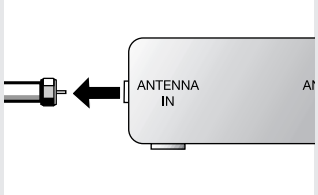
2
Connect the other end of this cable to the TV ANTENNA terminal on the back of the TV.



Connecting to a Cable Box that Descrambles Some Channels

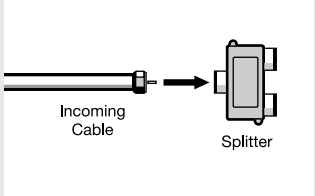
If your cable box descrambles only some channels (such as premium channels), follow the instructions below. You will need a two-way splitter, an RF (A/B) switch, and four lengths of coaxial cable. (These items are available at most electronics stores.)

1
Find and disconnect the cable that is connected to the ANTENNA IN terminal on your cable box.

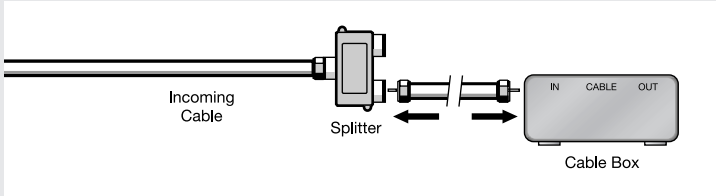


◄ This terminal might be labeled "ANT IN," "VHF IN," or simply, "IN."

2
Connect this cable to a two-way splitter.

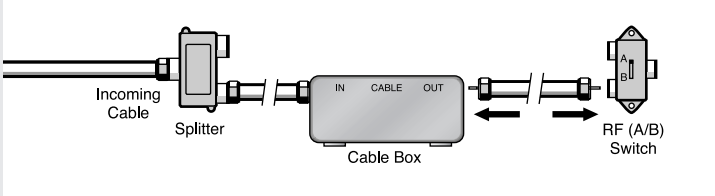


3
Connect a coaxial cable between an OUTPUT terminal on the splitter and the IN terminal on the cable box.



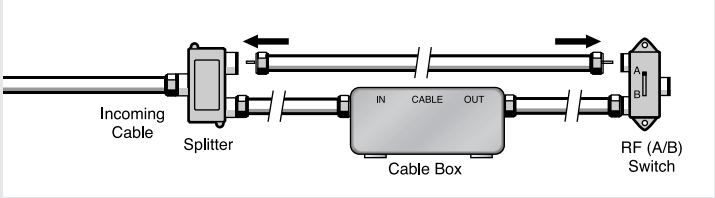
4

Connect a coaxial cable between the ANTENNA OUT terminal on the cable box and the B–IN terminal on the A/B switch.



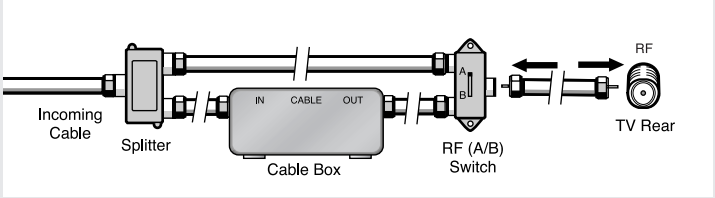
5

Connect another cable between the other OUT terminal on the splitter and the A–IN terminal on the RF (A/B) switch.



6

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

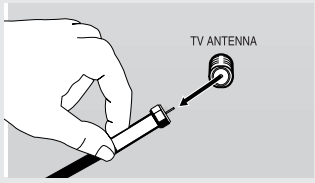


After you've made this connection, set the A/B switch to the "A" position for normal viewing. Set the A/B switch to the "B" position to view scrambled channels. (When you set the A/B switch to "B," you will need to tune your TV to the cable box's output channel, which is usually channel 3 or 4.)

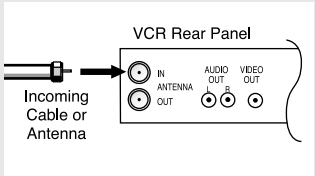
Connecting a VCR

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.

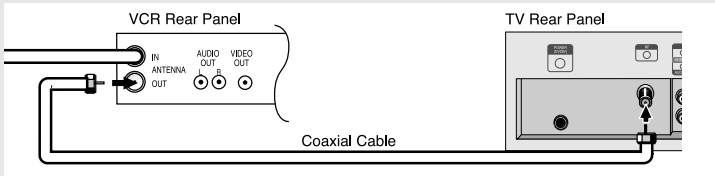
1
Unplug the cable or antenna from the back of the TV.



2
Connect the cable or antenna to the ANTENNA IN terminal on the back of the VCR.

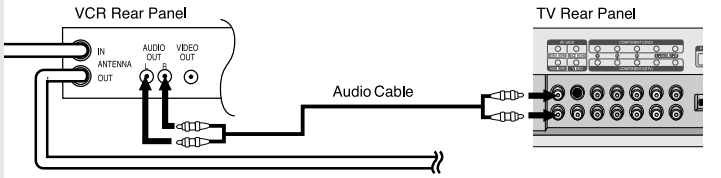


3
Connect a coaxial cable between the ANTENNA OUT terminal on the VCR and the antenna terminal on the TV.



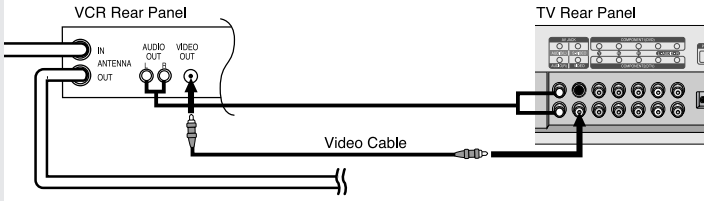
A coaxial cable is usually included with a VCR. (If not, check your local electronics store).

4
Connect a set of audio cables between the AUDIO OUT jacks on the VCR and the AUDIO jacks on the TV.



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.

5
Connect a video cable between the VIDEO OUT jack on the VCR and the VIDEO jack on the TV.



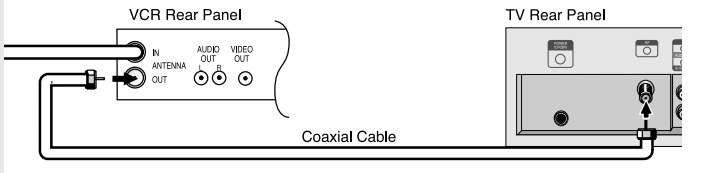
Follow the instructions in “Viewing a VCR or Camcorder Tape” to view your VCR tape.

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.)

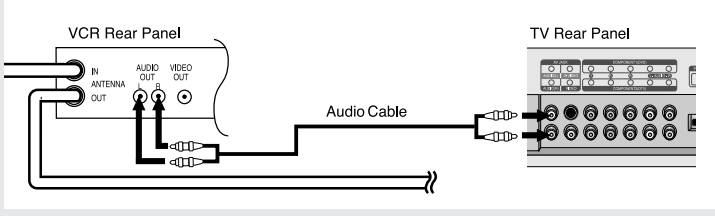
1

To begin, follow steps 1–3 in the previous section to connect the antenna or cable to your VCR and your TV.



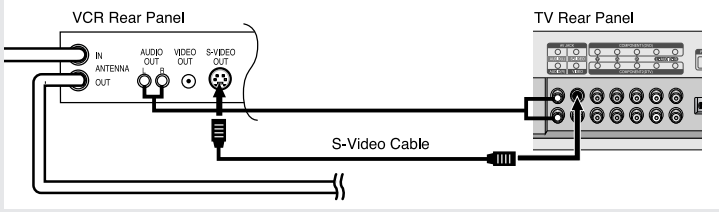
2

Connect a set of audio cables between the AUDIO OUT jacks on the VCR and the AUDIO INPUT jacks on the TV.



3

Connect an S-Video cable between the S-VIDEO OUT jack on the VCR and the S-VIDEO INPUT jack on the TV.



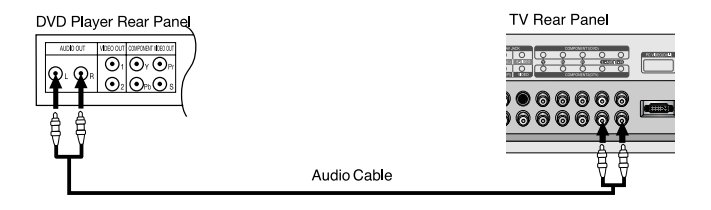
An S-video cable is usually included with an S-VHS VCR. (If not, check your local electronics store.)

Connecting a DVD Player (480i, 480p)

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

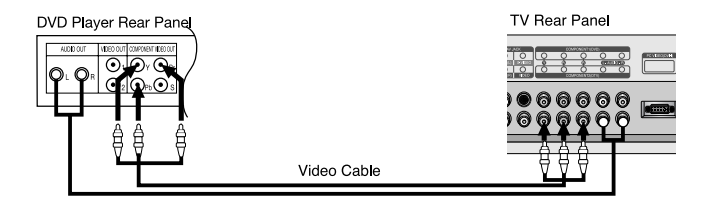
1

Connect a set of audio cables between the COMPONENT1(DVD) L, R AUDIO INPUT jacks on the TV and the AUDIO OUT jacks on the DVD player.



2

Connect a video cable between the COMPONENT1(DVD) Y, Pb, Pr jacks on the TV and the Y, Pb, Pr jacks on the DVD player.



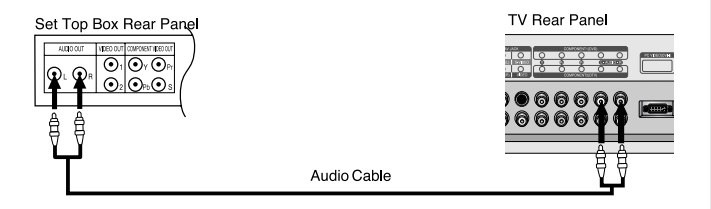
Note: For an explanation of Component video, see your DVD player owner's manual.

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

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

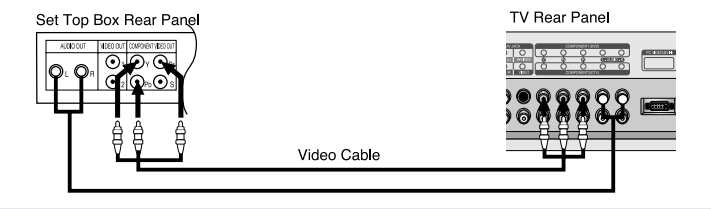
1

Connect a set of audio cables between the COMPONENT2(DTV) L, R AUDIOINPUT jacks on the TV and the AUDIO OUT jacks on the Set-Top Box.



2

Connect a video cable between the COMPONENT2(DTV) Y, Pb, Pr jacks on the TV and the Y, Pb, Pr jacks on the Set-Top Box.

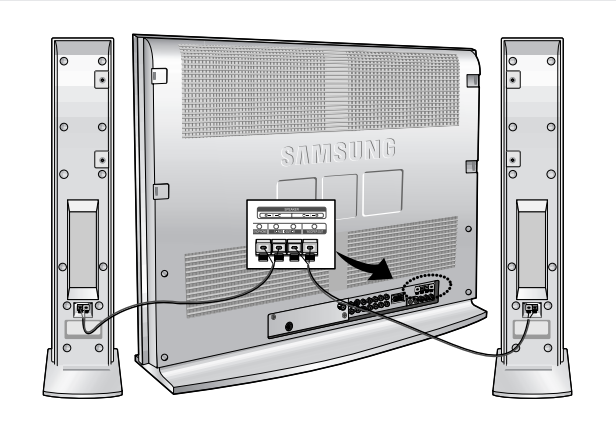


Note: For an explanation of Component video, see your Set-Top Box owner's manual.

Connecting Speakers

Connecting 1

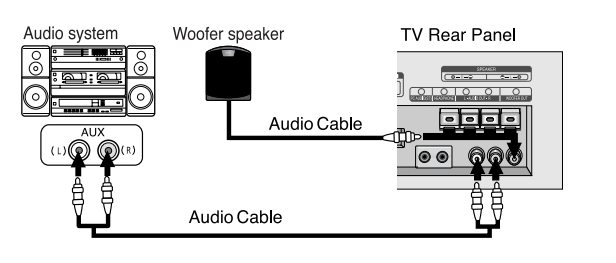
Connect the speaker audio cable to the external speaker output jack on the rear of the TV matching the "+" and "-" ends of the cable with the diagram on the TV.



Connecting 2

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 a audio cable between the INPUT jack on the WOOFER SPEAKER and the WOOFER OUT jack on the TV.

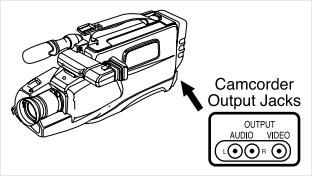


Connecting a Camcorder

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)

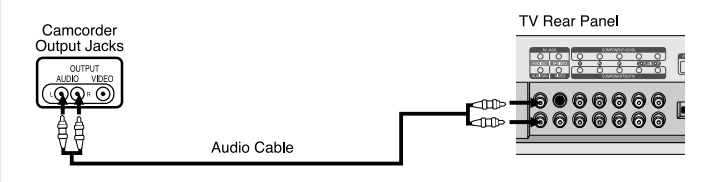
1

Locate the A/V output jacks on the camcorder. They are usually found on the side or back of the camcorder.



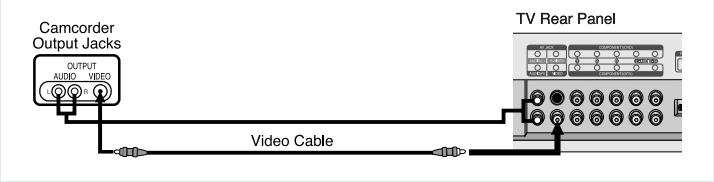
2

Connect a set of audio cables between the AUDIO OUTPUT jacks on the camcorder and the AUDIO jacks on the TV.



3

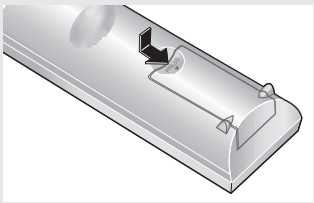
Connect a video cable between the VIDEO OUTPUT jack on the camcorder and the VIDEO jack on the TV.



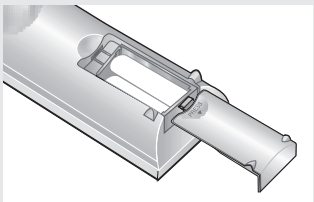
The audio-video cables shown here are usually included with a Camcorder. (If not, check your local electronics store.) If your camcorder is stereo, you need to connect a set of two cables.

Installing Batteries in the Remote Control

1
Slide the cover out completely.

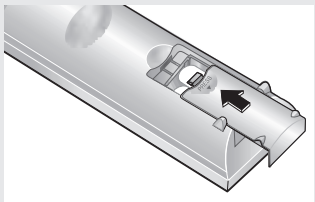


2
Install two AAA size batteries.



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

3
Replace the cover.



◄ 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

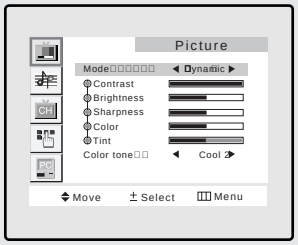
Press the **POWER** button on the remote control.
You can also use the Power button on the top panel.

Viewing the Menus and On-Screen Displays

Viewing the Menus

1
With the power on, press the **MENU** button.

The main menu appears on the screen. Its left side has five icons: Picture, Sound, Channel, Function and PC.



◄ 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.

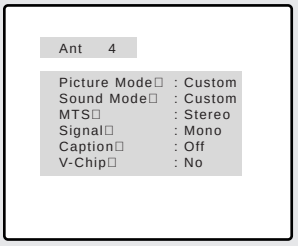
◄ You can also use the MENU, CHANNEL, and VOLUME buttons on the control panel of the TV to make selections.

Viewing the Display

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

1
Press the **DISPLAY** button on the remote control.

The TV will display the channel, the type of sound, and the status of certain picture and sound settings.



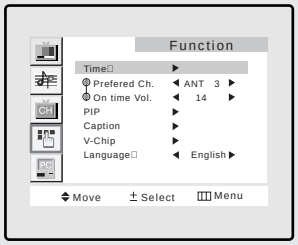
◄ The on-screen displays disappear after about ten seconds.

Selecting a Menu Language

1

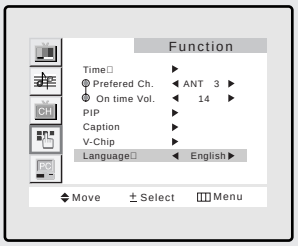
Press the **MENU** button to display the menu.

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



2

Press the **CH ▼** button to select Language.



3

Press the **VOL +** button to select the appropriate language: English, Español, or Français.

4

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

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 ▲ and CH ▼ 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).

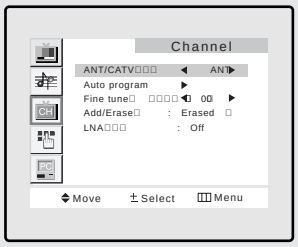
Selecting the Video Signal-source

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).

1

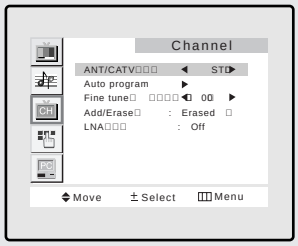
Press the **MENU** button to display the menu.

Press the **CH ▼** button to select “Channel”, then press the **VOL +** button.



2

Repeatedly press the **VOL +** button to cycle through these choices: ANT (antenna), STD, HRC or IRC (all cable TV).



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

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

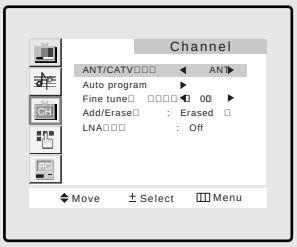
Storing Channels in Memory (Automatic Method)

1

First, select the correct signal source (ANT, STD, HRC, IRC). See steps 1~4 on previous page.

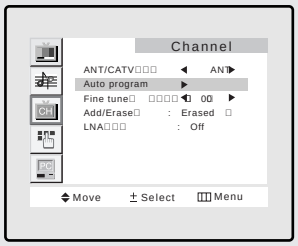
Press the **MENU** button.

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



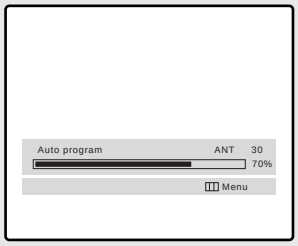
2

Press the **CH ▼** button to select "Auto program".



3

Press the **VOL +** button. The TV will begin memorizing all of the available channels and display them in the PIP window.



4

After all the available channels are stored, the Auto program menu reappears. Press the **MENU** button to exit the menu.

◄ 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 ▲ or CH ▼ 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 **VOL +** or **VOL –** button.

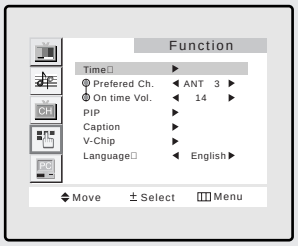
Setting the Clock

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.)

1

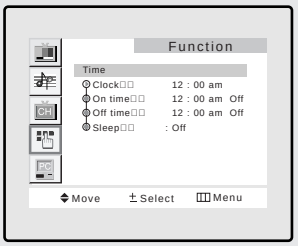
Press the **MENU** button to display the on-screen menu.

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



2

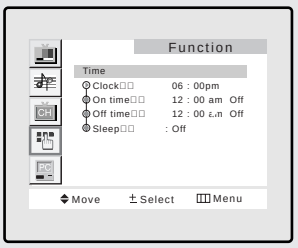
Press the **VOL +** button to select "Time".



3

Press the **VOL +** button. Press the **CH ▲** or **CH ▼** buttons repeatedly until the correct hour appears.

After the hour is entered, press the **VOL +** button.

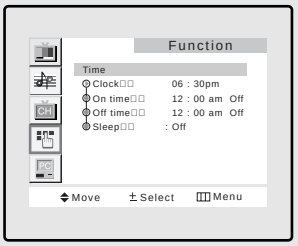


4

Press the **VOL +** button again. Press the **CH ▲** or **CH ▼** buttons repeatedly until the correct minutes appear.

After the minutes are entered, press the **VOL +** button.

Press the **MENU** button to exit.



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

You can change the hours by pressing the CH ▲ or CH ▼ buttons repeatedly (or by holding down either of these buttons).

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

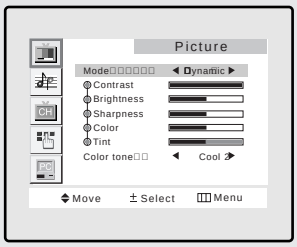
Customizing the Picture

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.)

1

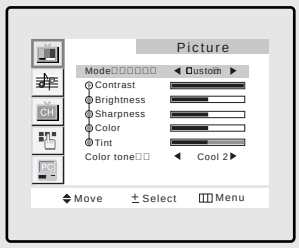
Press the **MENU** button to display the menu.

Press the **VOL +** button to display the Picture menu.



2

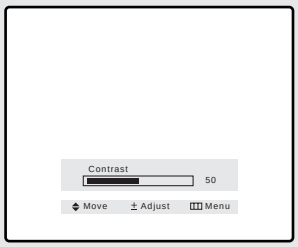
Press the **CH ▼** or **CH ▲** buttons to select a particular item.



3

Press the **VOL +** or **VOL –** buttons to increase or decrease the value of a particular item.
For example, if you select “Contrast,” pressing **VOL +** increases it.

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



Note : When in Component 1(480p) or Component 2 mode, only Brightness, Contrast, and Color can be operated.

Using Automatic Picture Settings

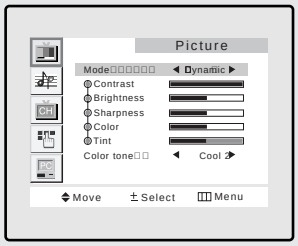
Your TV has four automatic picture settings (“Dynamic”, “Standard”, “Movie” and “Custom”) that are preset at the factory. You can activate either Dynamic, Standard or Movie by pressing P.STD (or by making a selection from the menu). Or, you can select “Custom” which automatically recalls your personalized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

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

1

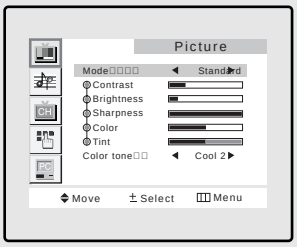
Press the **MENU** button to display the menu.

Press the **VOL +** button to display the Picture menu.



2

Press the **VOL +**or **VOL -** buttons to select the “Dynamic”, “Standard”, “Movie” or “Custom” picture setting.



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 bright-light 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 3.7).

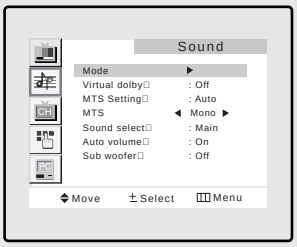
Customizing the Sound

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

1

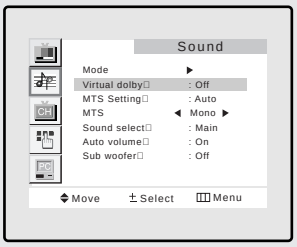
Press the **MENU** button to display the menu.

Press the **CH ▼** button to select “Sound”, then press the **VOL+** button.



2

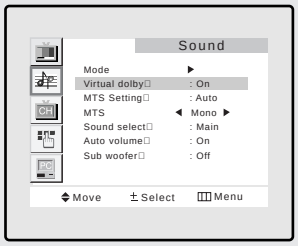
Press the **CH ▲** or **CH ▼** button to select a particular item to be changed.



3

Press the **VOL+** or **VOL-** button to increase or decrease the value of a particular item.

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



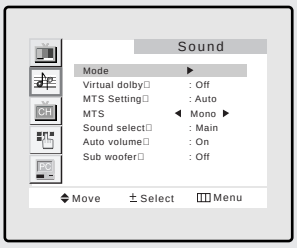
Using Automatic Sound Settings

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).

1

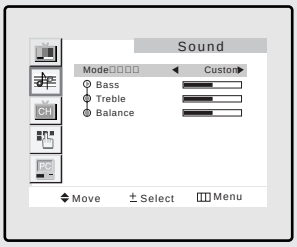
Press the **MENU** button to display the menu.

Press the **CH ▼** button to select “Sound”, then press the **VOL+** button.



2

Press the **VOL +** or **VOL -** buttons repeatedly to select the “Standard,” “Music,” “Movie,” “Speech” or “Custom” sound setting.



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.

Press the **TV/VIDEO** button.
You will switch between viewing the signals coming from equipment connected to the TV's A/V jacks, and the TV signal.

Chapter 4

SPECIAL FEATURES

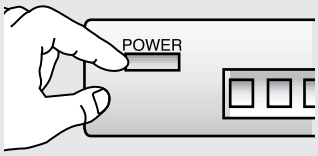
Customizing Your Remote Control

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)

1
Turn off your VCR (or DVD.)



2
Press the **MODE** button and make sure that the **VCR (or 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.

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).

◄ 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.

VCR Codes

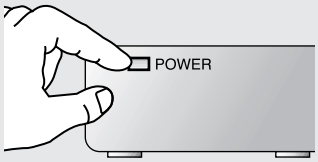
Admiral	006, 079	KLH	073	RCA	000, 005, 007, 008, 028, 035, 037, 054, 069
Aiwa	015	LG	009, 014, 046, 060	Samsung	007, 013, 022, 032, 042, 077
Akai	017, 022, 023, 027, 030	Lloyd	015	Sansui	016
Audio Dynamics	014, 016	Logik	031	Sanyo	002, 012
Bell & Howell	002	LXI	015	Scott	013, 041, 049, 068
Broksonic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

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

1
Turn off your cable box.



2
Press the **MODE** button and make sure that the **CABLE** 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 "Cable" mode.

3
On your Samsung remote control, press the **SET** button.

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, 073, 074	Stargate 2000	058
General Instrument	046			Sylvania	011, 059
GI	004, 005, 015, 023, 024, 025, 030, 036, 067, 068, 069	Philips	007, 008, 019, 021, 026, 028, 029, 032, 033, 040, 041	Texscan	011, 059
				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, 025, 030, 036, 046, 062, 065	RCA	000, 027, 066	Viewster	007, 008, 019, 021, 026, 028, 029, 032, 033, 040, 041
		Regal	003, 012, 013		
Macom	037, 043	Regency	002, 033	Warner Amex	044
Magnavox	007, 008, 019, 021, 026, 028, 029, 032, 033, 040, 041	SA	070, 071, 072	Zenith	014, 042, 057, 061, 075, 076
		Samsung	044, 003, 022, 063, 064		

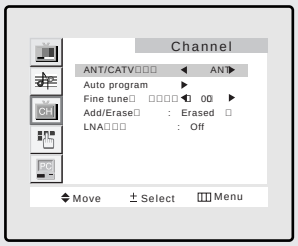
Fine Tuning Channels

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

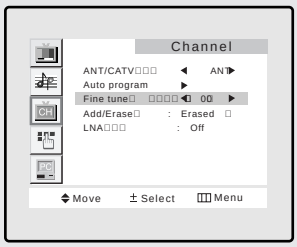
1
Select the appropriate channel.

2
Press the **MENU** button to display the menu.

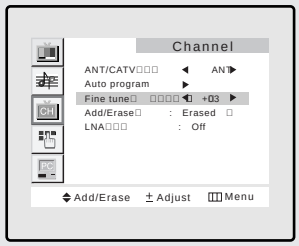
Press the **CH ▼** button to select "Channel", then press the **VOL +** button.



3
Press the **CH ▼** button to select "Fine tune."



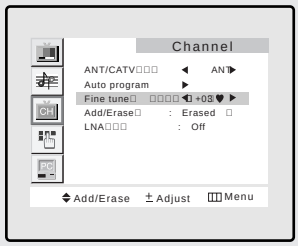
4
Press the **VOL +** and **VOL –** buttons to adjust the fine tuning.



5
To store the fine tuning setting in the TV's memory, press the **CH ▲** button. (A heart icon will appear.)

To reset the fine tuning to "00," press the **CH ▼** button.

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



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

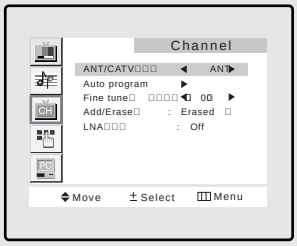
LNA (Low Noise Amplifier)

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).

1

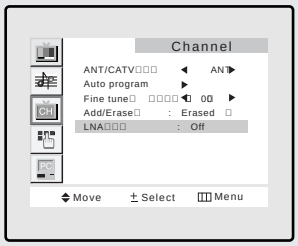
Press the **MENU** button to display the menu.

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



2

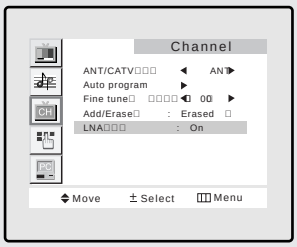
Press the **CH ▼** button to select "LNA."



3

Press the **VOL +** button to set LNA "On."

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



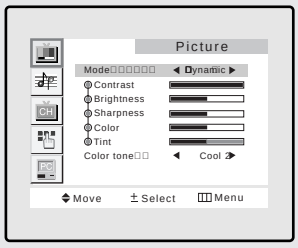
◄ Pressing VOL - or VOL + will alternate between "On" and "Off."

Selecting the Color Tone

1

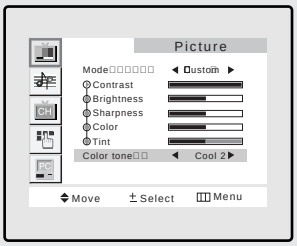
Press the **MENU** button to display the menu.

Press the **VOL +** button to display the Picture menu.



2

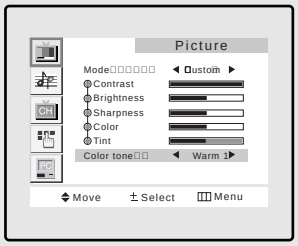
Press the **CH ▼** button to select "Color tone."



3

Press the **VOL +** or **VOL -** buttons to select "Cool 2", "Cool 1", "Warm 1", "Standard" or "Warm 2" according to personal preference.

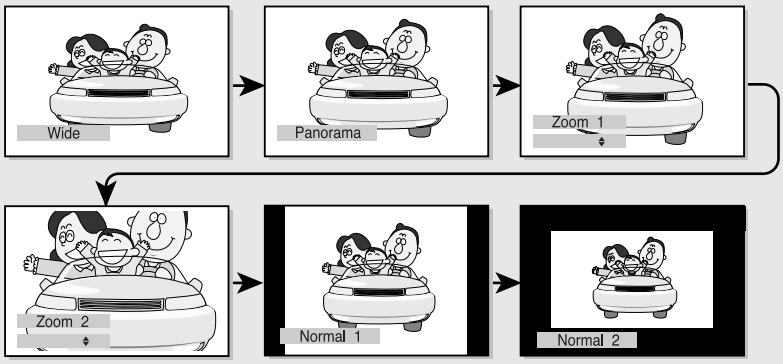
Press the **MENU** button to exit the menu.



Changing the Screen Size

1

Press the **P.SIZE** button to change 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 → Panorama → Zoom 1 → Zoom 2 → Normal 1 → Normal 2.
- When DTV signal is input: Wide → Normal 1 → Normal 2.
- When PC signal is input: Zoom 1 → Zoom 2 → Normal.
- When DVD (480p) signal is input: Wide → Zoom 1 → Zoom 2 → Normal 1 → 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

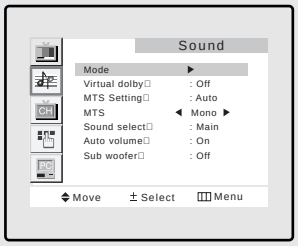
Setting a Multichannel Television Stereo (MTS) Soundtrack

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".

1

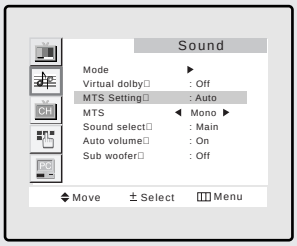
Press the **MENU** button to display the menu.

Press the **CH▼** button to select “Sound”, then press the **VOL +** button



2

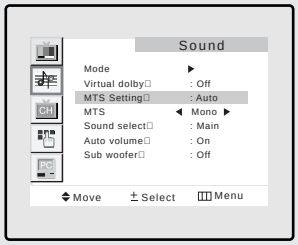
Press the **CH▼** button five times to select “MTS Setting”.



3

Press the **VOL +** button repeatedly to select “Manual” or “Auto.”

Press the **MENU** button to exit.



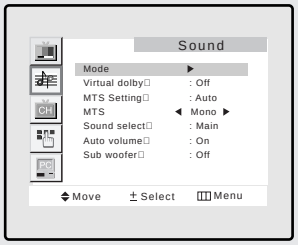
Choosing a Multichannel Television Stereo (MTS) Soundtrack

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.)

1

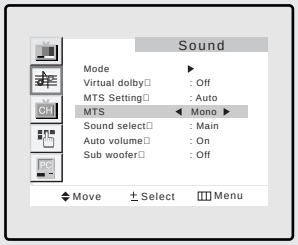
Press the **MENU** button to display the menu.

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



2

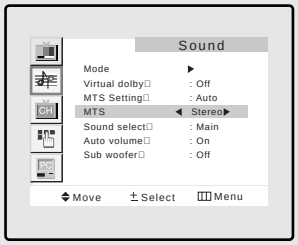
Press the **CH▼** button four times to select "MTS".



3

Press the **VOL +** button repeatedly to select "Mono," "SAP," or "Stereo."

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



◄ 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.)

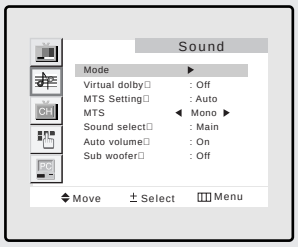
Virtual Dolby

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.

1

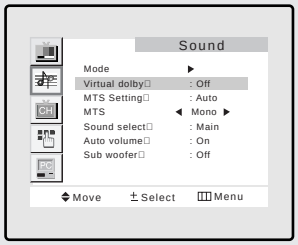
Press the **MENU** button to display the menu.

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



2

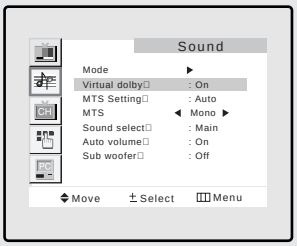
Press the **CH▼** button to select "Virtual dolby".



3

Press the **VOL +** button to select "On".

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



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

Alternate method:

Press the **V.DOLBY** button to alternate between "On" and "Off".

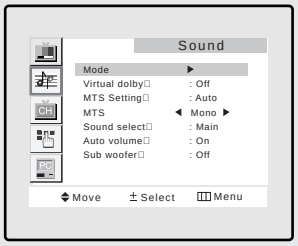
Auto Volume

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.

1

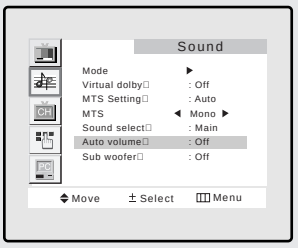
Press the **MENU** button to display the menu.

Press the **CH▼** button to select “Sound”, then press the **VOL +** button



2

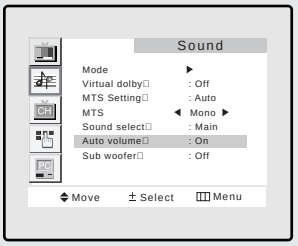
Press the **CH▼** button to select “Auto volume”.



3

Press the **VOL +** button to select “On”.

Press the **MENU** button to exit.



◄ Pressing VOL - or VOL + will alternate between “On” and “Off.”

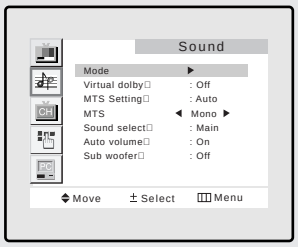
Selecting the Sound Source

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

1

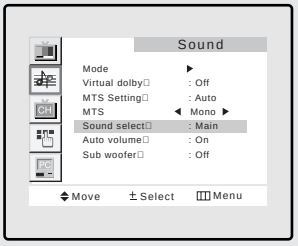
Press the **MENU** button to display the menu.

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



2

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

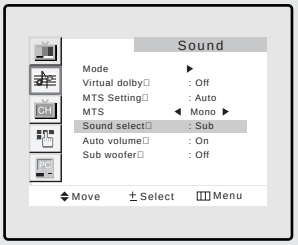


3

Press the **VOL +** button to select "Main" or "Sub".

Select "Main" to hear the main TV sound and select "Sub" to hear the PIP window sound.

Press the **MENU** button to exit.



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

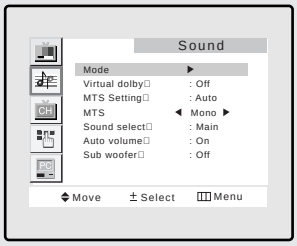
Subwoofer

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

1

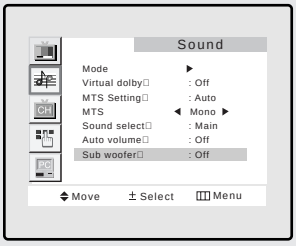
Press the **MENU** button to display the menu.

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



2

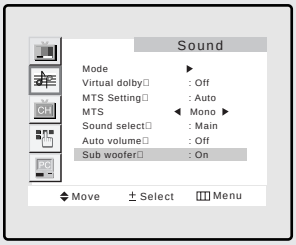
Press the **CH▼** button to select "Sub woofer".



3

Press the **VOL +** button to select "on".

Press the **MENU** button to exit.



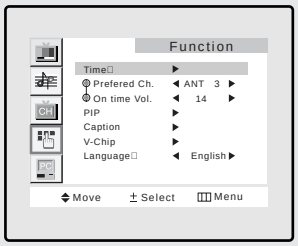
◄ Pressing VOL - or VOL + will alternate between "On" and "Off."

Setting the On/Off Timer

1

Press the **MENU** button to display the on-screen menu.

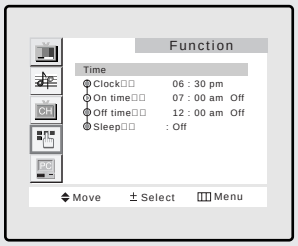
Press the **CH ▼** button three times to select "Function", then press the **VOL +** button.



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

2

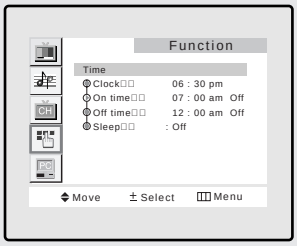
Press the **VOL +** button to select "Time".



3

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

Press the **CH ▲** or **CH ▼** buttons repeatedly to select the appropriate hours (i.e., the hour when the TV will turn on.)

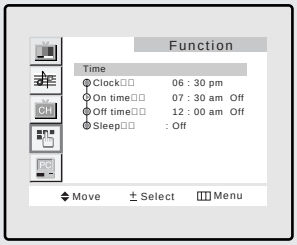


◄ When you set the hours, make sure the correct time of day (AM or PM) appears to the left of the hour.

4

Press the **VOL +** button to select the "On time" minutes.

Press the **CH ▲** or **CH ▼** buttons repeatedly to select the appropriate minutes.

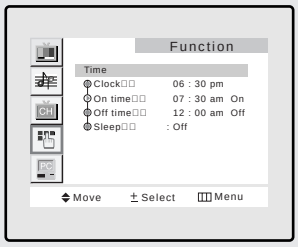


5

Press the **VOL +** button to select "On/Off."

Press the **CH ▲** or **CH ▼** buttons to turn the on-timer "On." (Repeatedly pressing the **CH ▲** or **CH ▼** buttons will alternate between on and off.)

When finished, press the **VOL +** button.

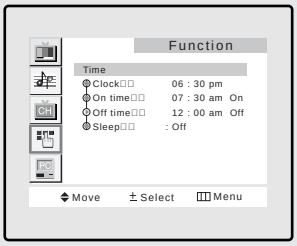


◄ To deactivate the "On time," select "Off" during this step.

6

To set the Off time, press the **CH ▼** button to select "Off time."

Press the **VOL +** button and set the hours and minutes. (Follow the same procedure as in steps 1~5 above.)



7

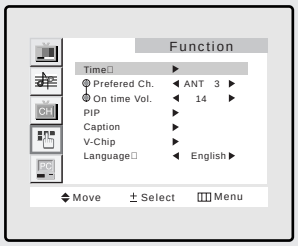
When finished setting the timer, press the **MENU** button to exit.

Setting the Preferred Channel Volume Level

1

Press the **MENU** button to display the on-screen menu.

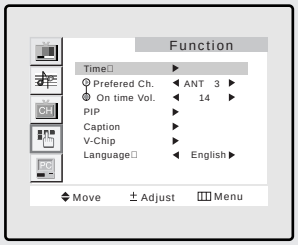
Press the **CH ▼** button to select "Function", then press the **VOL +** button.



2

Press the **CH ▼** button to select "Prefered Ch.",

Press the **VOL +** or **VOL -** button to select channel.

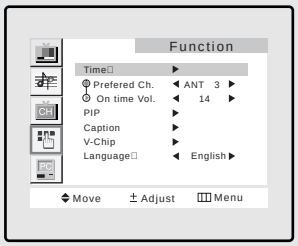


3

Press the **CH ▼** button to select " On time Vol.",

Press the **VOL +** or **VOL -** button to adjust volume level.

Press the **MENU** button to exit.



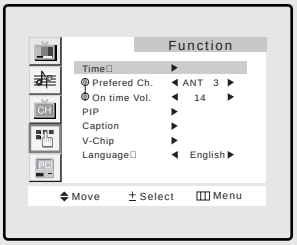
Setting the Sleep Timer

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

1

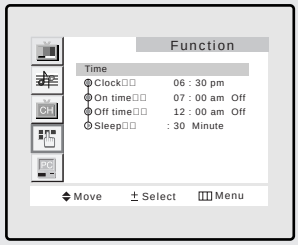
Press the **MENU** button to display the on-screen menu.

Press the **CH ▼** button three times to select "Function", then press the **VOL +** button.



2

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



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

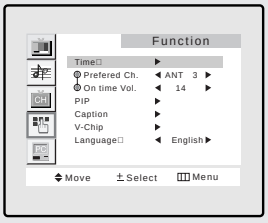
Your TV decodes and displays the closed captions that are broadcast with certain TV shows. These captions are usually subtitles for the hearing impaired or foreign-language translations. All VCRs record the closed caption signal from television programs, so home-recorded video tapes also provide closed 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.

1

Press the **MENU** button to display the menu.

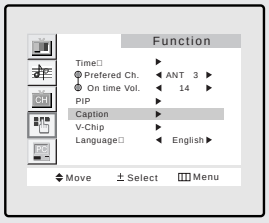
Press the **CH ▼** button to select "Function", then press the **VOL+** button.



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

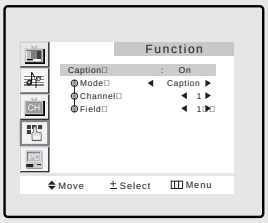
2

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



3

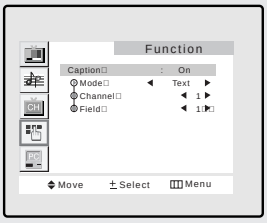
Press the **VOL**+ or **VOL** – buttons to turn closed captioning on/off.



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

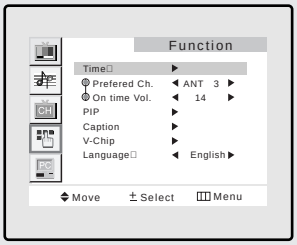
Viewing Picture-in-Picture

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

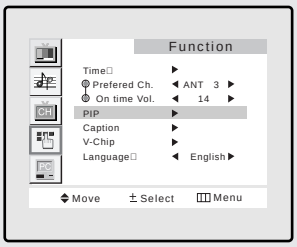
1
Press the **MENU** button to display the menu.

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

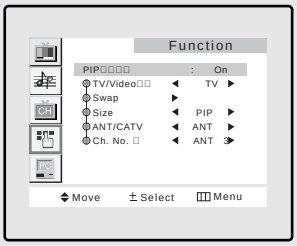


◄ Quick way to access PIP: Simply press PIP button on the remote control.

2
Press the **CH ▼** button to select "PIP", then press the **VOL+** button.



3
Press the **VOL +** button to select PIP "On."



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

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

PIP Settings

O : PIP operates
X : PIP doesn't operate

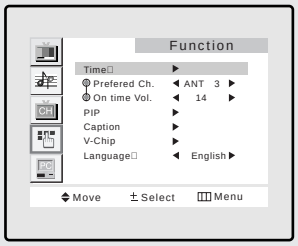
Main picture \ Sub picture	PC Analog	PC Digital	Antenna	VIDEO	S-VIDEO	DVD	DTV
PC Analog	X	X	O	O	O	O	O
PC Digital	X	X	O	O	O	O	O
Antenna	X	X	O (LTM405)	O	O	X	X
VIDEO	X	X	O	X	O	X	X
S-VIDEO	X	X	O	O	X	X	X
DVD	X	X	X	X	X	X	X
DTV	X	X	X	X	X	X	X

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

1

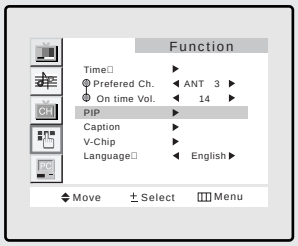
Press the **MENU** button to display the menu.

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



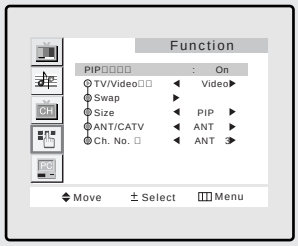
2

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



3

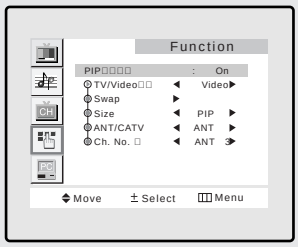
Press the **CH ▼** button to select "TV/Video".



4

Press the **VOL+** or **VOL-** button repeatedly to cycle through all of the available signal sources: "TV," "VIDEO ," "S-VIDEO".

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

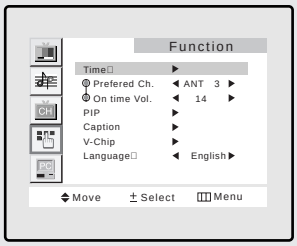


Selecting a Signal Source (Antenna or Cable) for PIP

1

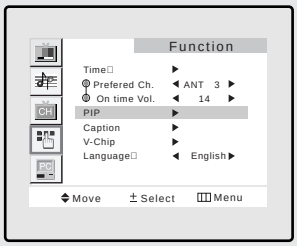
Press the **MENU** button to display the menu.

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



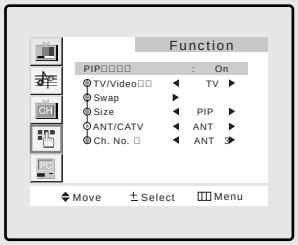
2

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



3

Press the **CH ▼** button to select "ANT/CATV".

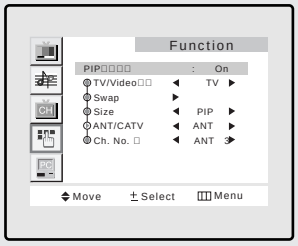


4

If an antenna is connected, the setting is "ANT."

If a Cable TV system is providing the signal, press the **VOL+** or **VOL-** button until the appropriate type of cable system is is displayed ("STD," "HRC," or "IRC").

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



Changing the PIP Channel (LTM405W)

Press the PIP **CH▲** or **CH▼** 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.

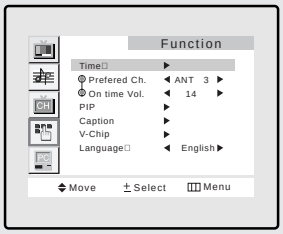
Note: While V-Chip is in operation, PIP function cannot be used.
If PIP does not operate, please check whether V-chip is in operation.

Setting Up Your Personal ID Number (PIN)

1

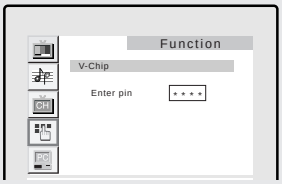
Press the **MENU** button to display the menu.

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



2

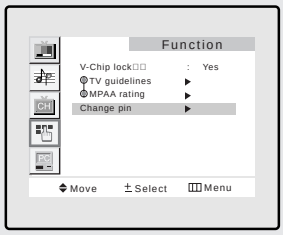
Press the **CH ▼** button to select "V-chip", then press the **VOL+** button.



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

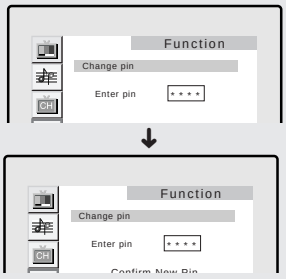
3

After entering a valid PIN number, the "V-chip" screen will appear.
Press the **CH ▼** button to select "Change Pin."



4

Press the **VOL+** button. 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 the **MENU** button to exit the menu.

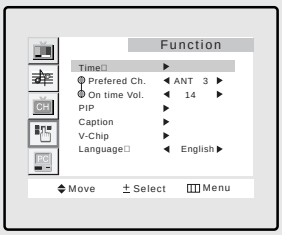
◄ If you forget the PIN, press the remote-control's EXIT button while 5 seconds which resets the pin to 0-0-0-0.

How to Enable/Disable the V-Chip

1

Press the **MENU** button to display the menu.

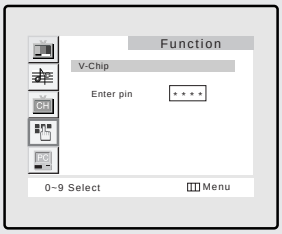
Press the **CH ▼** button to select "Function", then press the **VOL +** button.



2

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

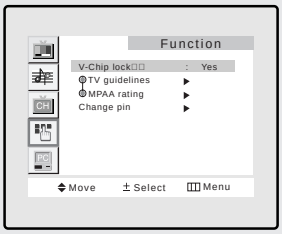
The "Enter pin" screen will appear. Enter your 4-digit PIN number.



3

The "V-Chip" screen will appear, and "V-Chip lock" will be selected.

To enable the V-Chip feature, press the **VOL+** button so that the "V-Chip Lock" is set to Yes.
(Pressing the **VOL+** button will alternate between Yes and No.)



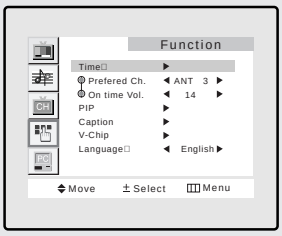
How to Set up Restrictions Using the "TV guidelines"

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

1

Press the **MENU** button to display the menu.

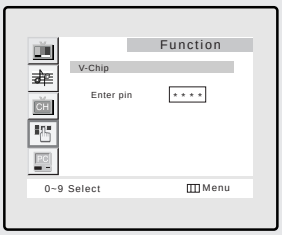
Press the **CH ▼** button to select "Function", then press the **VOL +** button.



2

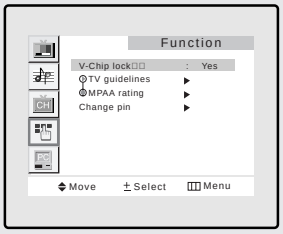
Press the **CH ▼** button to select "V-chip", then press the **VOL+** button.

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



3

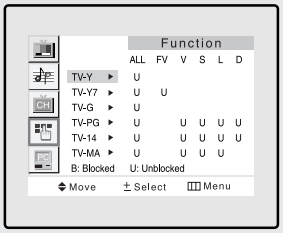
Press the **CH ▼** button, to select "TV Guidelines", then press the **VOL+** button.



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 **CH ▲** or **CH ▼** 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 ▲** 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).

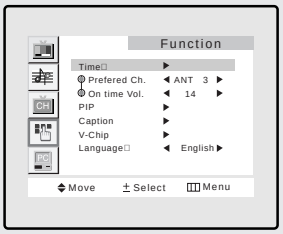
How to Set up Restrictions using the MPAA Ratings: G, PG, PG-13, R, NC-17, X

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).

1

Press the **MENU** button to display the menu.

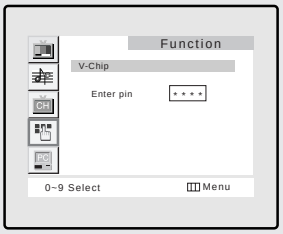
Press the **CH ▼** button to select "Function", then press the **VOL +** button.



2

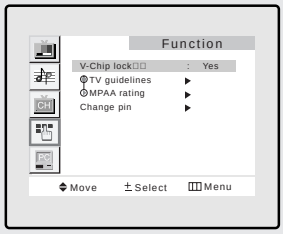
Press the **CH ▼** button to select "V-chip", then press the **VOL+** button.

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



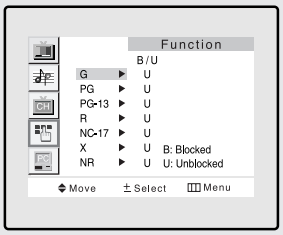
3

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



4

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.

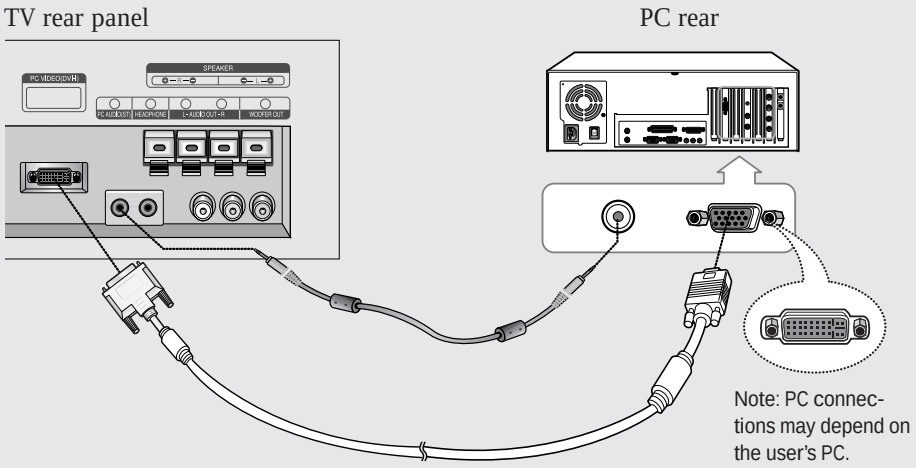
Chapter 5

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.



- **PC AUDIO INPUT**
  Connect these to the audio-output jacks on your PC.

- **PC VIDEO INPUT**
  Connect to the video output port on your PC.

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).

Note: When a PC digital signal is input, Contrast, Picture Adjustment, Position Adjustment, Color Adjustment, Setting Default in PC screen setting will not operate.

How to Set up Your PC Software (Windows only)

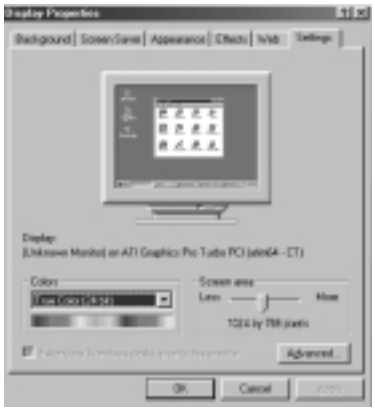
The Windows display-settings for a typical computer are shown below. However, the actual screens on your PC will probably look different, depending upon your particular version of Windows and your particular video card. Even if your actual screens look different, the same, basic set-up information will 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

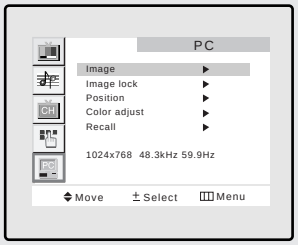
The purpose of picture quality adjustment is to remove or reduce picture noise.
If the noise is not removed by fine tuning alone, then do the frequency adjustments to the utmost and fine tune again. After the noise has been reduced, re-adjust the picture so that it is aligned on the center of screen.

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

1

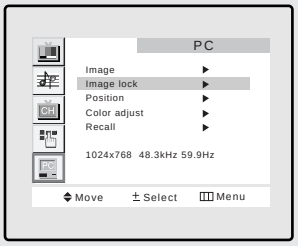
Press the **MENU** button to display the menu.

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



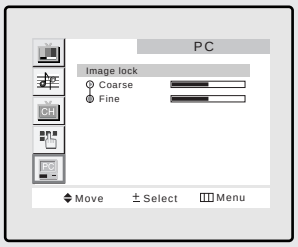
2

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

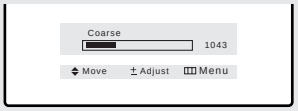


3

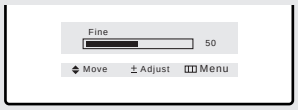
Press the **CH ▼** button to select "Coarse" or "Fine".



Press the **VOL +** or **VOL -** button to adjust the screen quality, vertical stripes appear or the picture may be blurry.



<Adjusting Coarse>



<Adjusting Fine>

4

When you are satisfied with the settings, press the **MENU** button repeatedly to return to normal viewing.

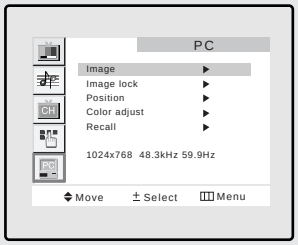
Changing the Screen Position

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

1

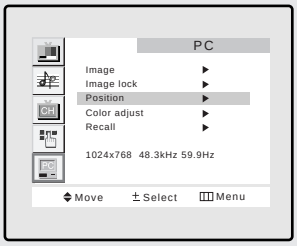
Press the **MENU** button to display the menu.

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



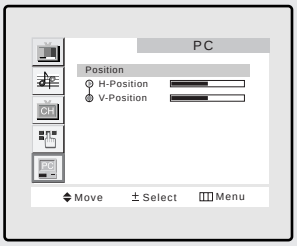
2

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



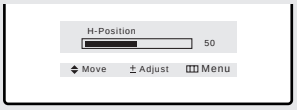
3

Press the **CH ▼** button to select "H-Position" or "V-Position".

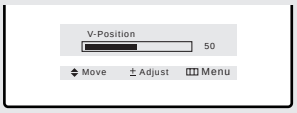


Press the **VOL +** or **VOL -** button to adjust.

Press the **MENU** button to exit.



<Adjusting the H-Position>



<Adjusting the V-Position>

Note: When a PC digital signal is input, Contrast, Picture Adjustment, Position Adjustment, Color Adjustment, Setting Default in PC screen setting will not operate.

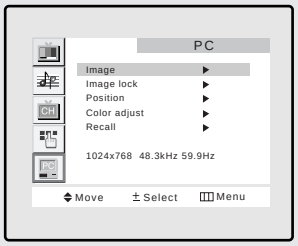
Changing the Screen Color Standard

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

1

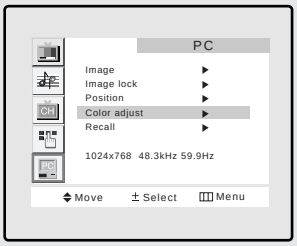
Press the **MENU** button to display the menu.

Press the **CH ▼** button to select “PC”, then press the **VOL +** button.



2

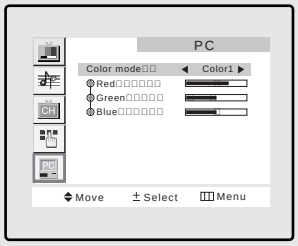
Press the **CH ▼** button to select “Color adjust”.



3

Press the **VOL +**or **VOL -** buttons to select “Custom”, “Color1”, “Color2” or “Color3”.

Press the **MENU** button to exit.



Note: When a PC digital signal is input, Contrast, Picture Adjustment, Position Adjustment, Color Adjustment, Setting Default in PC screen setting will not operate.

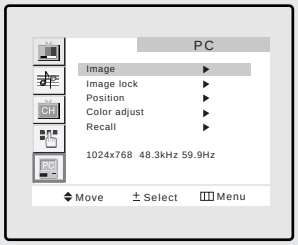
Adjusting the Screen Color Settings

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

1

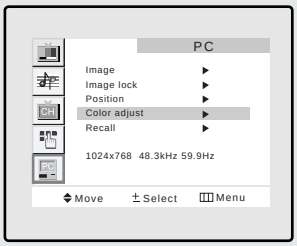
Press the **MENU** button to display the menu.

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



2

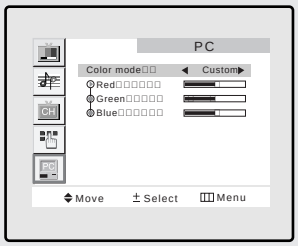
Press the **CH ▼** button to select "Color adjust", then press the **VOL +** button. Repeatedly press **VOL +** to choose between Color 1,2, and 3 auto settings and Custom.



3

If Custom is selected, press the **CH ▼** or **CH ▲** button to select the item you want to adjust, then press the **VOL +** or **VOL -** button to adjust the color(R, G, B).

Press the **MENU** button to exit.



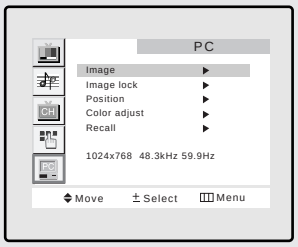
Note: When a PC digital signal is input, Contrast, Picture Adjustment, Position Adjustment, Color Adjustment, Setting Default in PC screen setting will not operate.

To Initialize the Screen Position or Color Settings

1

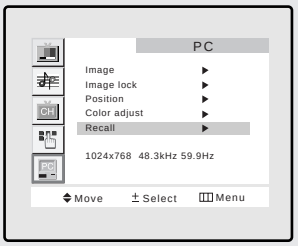
Press the **MENU** button to display the menu.

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



2

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

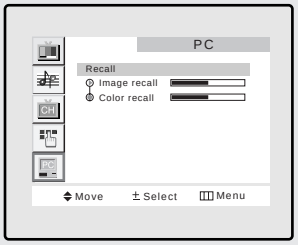


3

Press the **CH ▼** button to select "Image recall" or "Color recall".

Press the **VOL +** or **VOL -** button to return position or color to their default settings.

Press the **MENU** button to exit.



Note: When a PC digital signal is input, Contrast, Picture Adjustment, Position Adjustment, Color Adjustment, Setting Default in PC screen setting will not operate.

Chapter Six

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 tints.	Make sure the program is broadcast in color. 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, distorted sound	Check the direction, location and connections of your 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" message.	Ensure that the signal cable is firmly connected to the PC or video sources. Ensure that the PC or video sources are turned on.

TROUBLESHOOTING

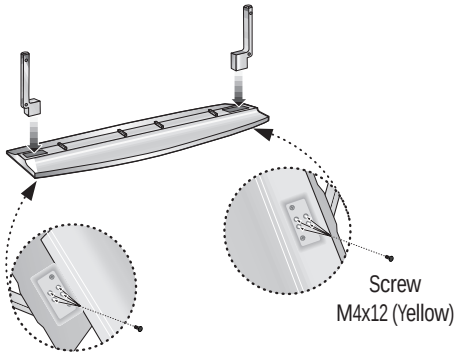
Problem	Possible Solution
"Not Supported Mode!" message.	Check the maximum resolution and the frequency of the video Adapter. Compare these values with the data in the Display Modes Timing Chart.
The image is too light or too dark.	Adjust the Brightness and Contrast. Adjust the Fine function.
Horizontal bars appear to flicker, jitter or shimmer on the image.	Adjust the Coarse function and then adjust the Fine function.
Vertical bars appear to flicker, jitter or shimmer on the image.	The TV is using its power management system. Move the computer's mouse or press a key on the keyboard.
Screen is black and power indicator light blinks steadily.	Check that the display resolution and frequency from 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 appear to vibrate.	If the setting is not correct, use your computer utility 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 screen.	Adjust the horizontal and vertical position.
You need the Monitor driver software.	Download the driver from WWW pages: http://www.samsungusa.com/monitor http://www.samsung-monitor.com

Setting the Stand

Note: A 29-inch TV set will be shipped with a stand attached, and a 40-inch TV set will be shipped with a stand detached. For 40-inch TV sets, assemble the stand in the following steps.

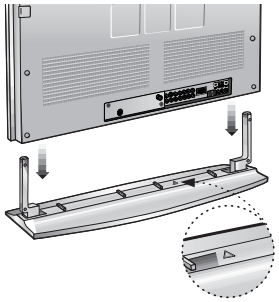
1

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



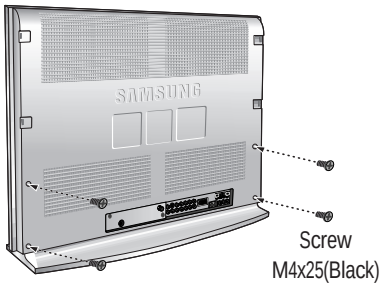
2

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

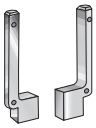


3

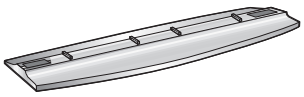
Fasten the stand into the TV set using screws (Mx25, black).



Stand accessories



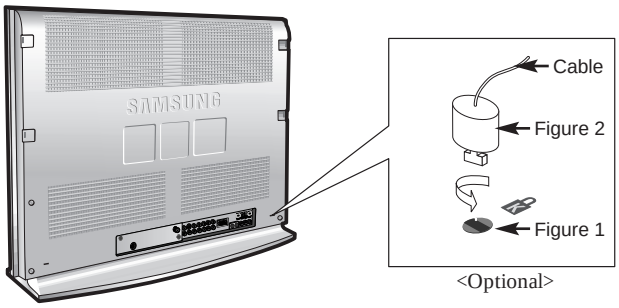
Stand support top (2EA)



Stand Swivel

Screw M4x12(Yellow):8EA/
Screw M4x25(Black):4EA

Using the Anti-Theft Kensington Lock



<Optional>

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.

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
NTSC	M	A2	US	Korea
		*BTSC (SAP)	US	USA, Canada, Chile, Venezuela, Cuba, Colombia, 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

		LTM295	LTM405
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
	Type	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 Consumption	Maximum	160W	220 W
	Power Saving	< 7 W	< 7 W
Dimensions/ Weight	Unit (WxDxH) : TV body	29.9 x 7.7 x 22.3 inches/39.7 lbs	39.6 X 11.8 X 29.4 inches/61.7 lbs
		(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 speaker	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 Considerations	Operating Temperature	50 °F to 104 °F (10 °C to 40 °C)	50 °F to 104 °F (10 °C to 40 °C)
	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 Characteristics	Audio Input 1	RCA Jack Red(R) White(L), 0.5Vrms (-9dB)	RCA Jack Red(R) White(L), 0.5Vrms (-9dB)
	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)

* Referring to Preset timing modes, page A.4

FCC Information

User Instructions

The Federal Communications Commission Radio Frequency Interference Statement includes the following warning:
NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation .

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

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

User Information

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

The party responsible for product compliance:
SAMSUNG ELECTRONICS CO., LTD
America QA Lab of Samsung
3351 Michelson Drive,
Suite #290, Irvine, CA92612 USA
Tel) 949-975-7310
Fax) 949-922-8301

Warning

User must use shielded signal interface cables to maintain FCC compliance for the product.
Provided with this monitor is a detachable power supply cord with IEC320 style terminations.
It may be suitable for connection to any UL Listed personal computer with similar configuration. Before making the connection, make sure the voltage rating of the computer convenience outlet is the same as the monitor and that the ampere rating of the computer convenience outlet is equal to or exceeds the monitor voltage rating.
For 120 Volt applications, use only UL Listed detachable power cord with NEMA configuration 5-15P type (parallel blades) plug cap. For 240 Volt applications use only UL Listed Detachable power supply cord with NEMA configuration 6015P type (tandem blades) plug cap.

IC Compliance Notice

This Class B digital apparatus meets all requirements of the Canadian Interference-Causing Equipment Regulations of ICES-003.

Cet appareil Numérique de classe B respecte toutes les exigences du Règlemont NMB-03 sur les équipements produisant des interférences au Canada.

Notice de Conformité IC

Cet appareil numérique de classe B respecte toutes les exigences du Règlement ICES-003 sur les équipements produisant des interférences au Canada.

VCCI

This is a Class B product based on the standard of the Voluntary Control Council for Interference by Information Technology Equipment (VCCI). If this is used near a radio or television receiver in a domestic environment, it may cause radio interference. Install and use the equipment according to the instruction manual.