



# **TFT-LCD TELEVISION**

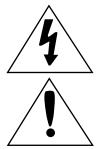


# Warning! Important Safety Instructions

# CAUTION

RISK OF ELECTRIC SHOCK

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.

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

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**

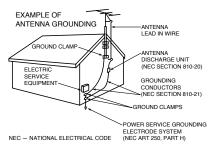
Always be careful when using your TV receiver. To reduce the risk of fire, electrical shock, and other injuries, keep these safety precautions in mind when installing, using, and maintaining your machine.

- 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.
- Keep all power adaptors apart. Possible fire hazard.
- Keep the power adaptor away from any other heater. Possible fire hazard.
- Remove and discard the plastic cover from the power adaptor before use. Possible fire hazard.
- Always keep the power adaptor in a well-ventilated area.

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# Chapter 1

Your New TV

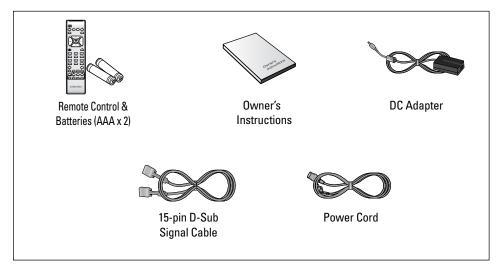
# **List of Features**

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

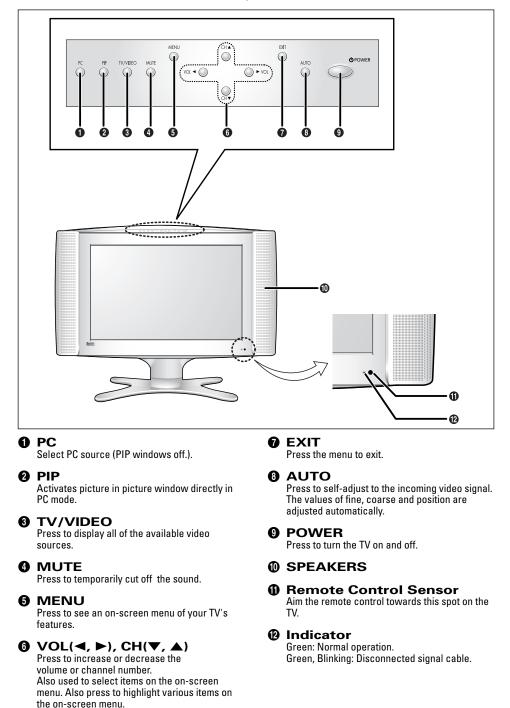
Please make sure the following items are included with your LCD TV. If any items are missing, contact your dealer.



# Familiarizing Yourself with The TV

### **Top Panel Buttons**

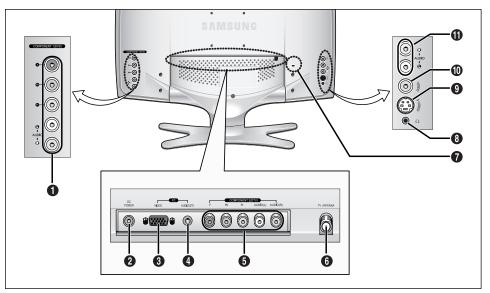
The buttons on the top panel control your TV's basic features, including the on-screen menu. To use the more advanced features, you must use the remote control.



### **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.



# COMPONENT 1(DVD) Connects component video/audio from a DVD

connects component video/audio from a DVD player.

### **0** POWER INPUT CONNECTOR

- **OPENDITIES OF A CONTECT OF A CONTECT OF A CONTECT OF A CONTECT OF A CONTENT OF A CONTENTA OF A**
- PC AUDIO INPUT Connect to the audio-output jacks on your PC.

### COMPONENT 2(DTV)

Connects component video/audio from a Set-Top Box.

### **6** TV ANTENNA

Connect to an antenna or to a cable TV system.

Kensington lock (See page A.4)

#### HEADPHONE

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

### **O** SUPER VIDEO INPUT

Connects S-Video signal from a camcorder or VCR.

### **VIDEO INPUT**

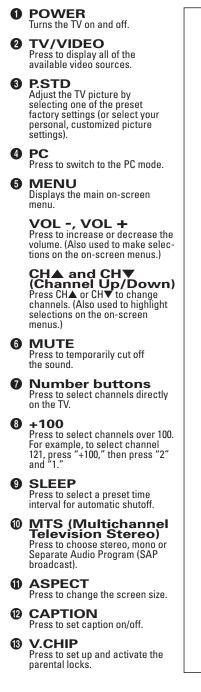
Connects video signal from a camcorder or VCR.

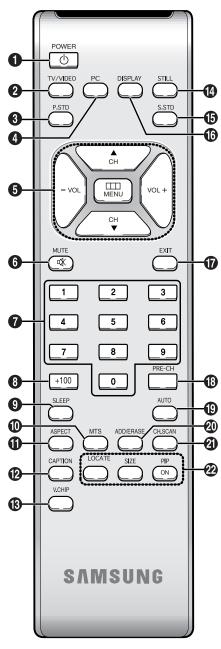
### AUDIO INPUT

Connects audio signal from a camcorder or VCR.

### **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.





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

#### S.STD

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

#### **DISPLAY**

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

**Ø** EXIT

Press the menu to exit.

PRE-CH Tunes to the previous channel.

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

ADD/ERASE
 Press to add or erase channels in

the TV's memory.

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

PIP controls

#### LOCATE

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

<u>SIZE</u>

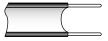
Press to make the PIP window double, large or small.

#### PIP ON

Activates picture in picture window directly in PC mode. 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.



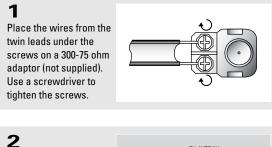
If your antenna has one lead that looks like this, see "Antennas with 75-ohm Round Leads," on page 2.2.



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.



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

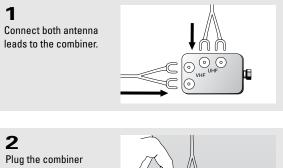


### Antennas with 75-ohm Round Leads



### Separate VHF and UHF Antennas

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



Plug the combiner into the TV ANTEN-NA terminal on the bottom of the rear panel.



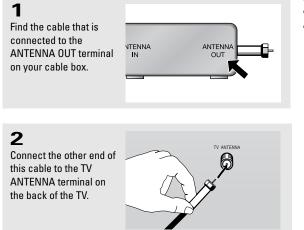
To connect to a cable TV system, follow the instructions below.

### **Cable without a Cable Box**



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

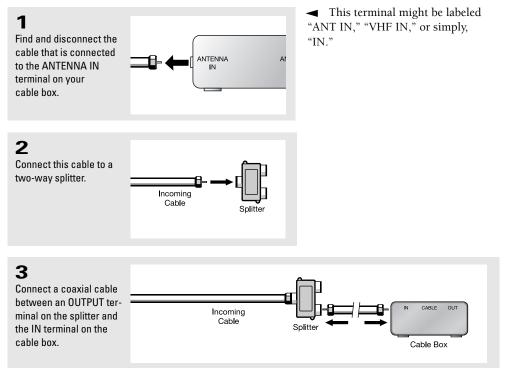
### Connecting to a Cable Box that Descrambles All Channels

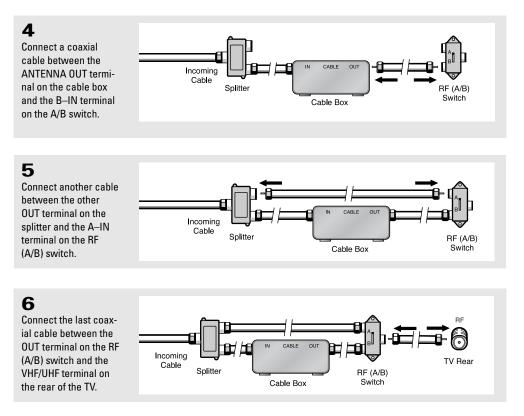


 This terminal might be labeled "ANT OUT," "VHF OUT," or simply, "OUT."

### Connecting to a Cable Box that Descrambles Some Channels

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



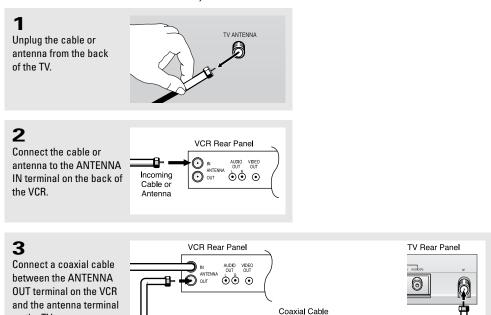


After you've made this connection, set the A/B switch to the "A" position for normal viewing. Set the A/B switch to the "B" position to view scrambled channels. (When you set the A/B switch to "B," you will need to tune your TV to the cable box's output channel, which is usually channel 3 or 4.)

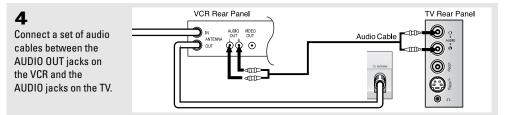
on the TV.

# **Connecting a VCR**

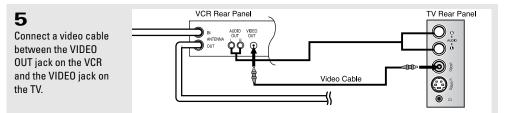
These instructions assume that you have already connected your TV to an antenna or a cable TV system (according to the instructions on pages 2.1-2.3). Skip step **1** if you have not yet connected to an antenna or a cable system.



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



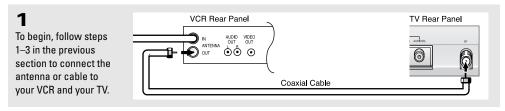
If you have a "mono" (non-stereo) VCR, use the Y-connector (not supplied) to hook up to the left and right audio input jacks of the TV. If your VCR is stereo, you must connect two cables.

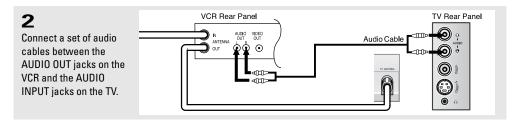


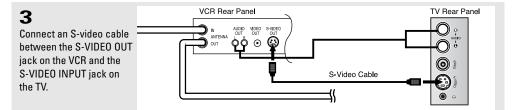
Follow the instructions in "Viewing a VCR or Camcorder Tape" to view your VCR tape.

### **Connecting an S-VHS VCR**

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



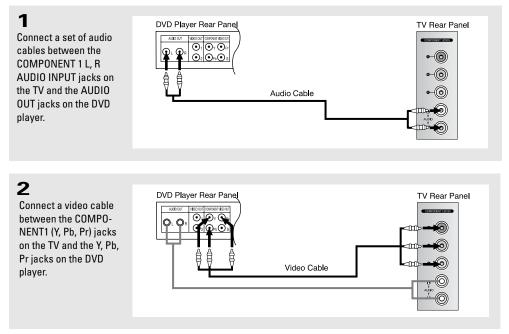




An S-video cable is usually included with an S-VHS VCR. (If not, check your local electronics store.)

# **Connecting a DVD Player**

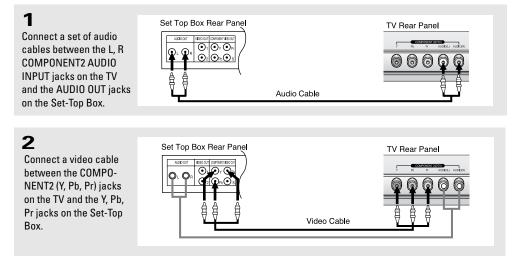
The rear panel jacks on your TV make it easy to connect a DVD player to your TV.



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

# **Connecting a Digital TV Set-Top Box**

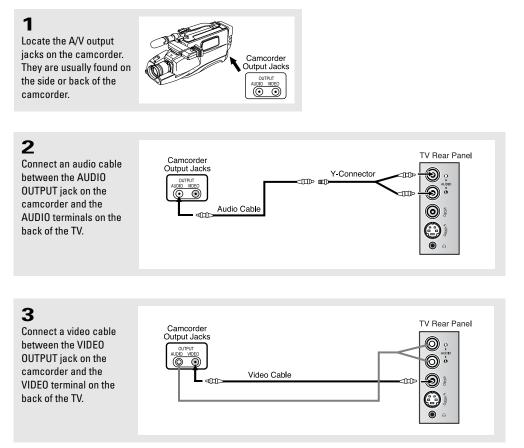
The connections for a typical set-top box are shown below.



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

# **Connecting 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 3.11)



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.



 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

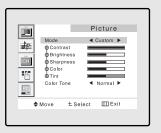
Press the **POWER** button on the remote control. You can also use the Power button on the top panel.

# Viewing the Menus and On-Screen Displays

#### Viewing the Menus

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

1

Use the  $CH \triangleq$  and  $CH \blacktriangledown$  buttons to select one of the 5 icons. Then press VOL+ to access the icon's sub-menu.

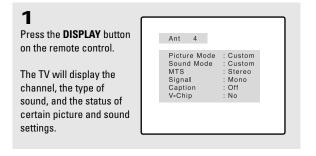
3

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

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

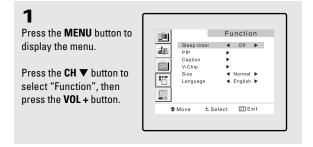
### Viewing the Display

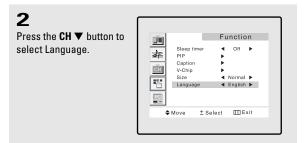
The display identifies the current channel and the status of certain audio-video settings.



 The on-screen displays disappear after about ten seconds.

# Selecting a Menu Language





### 3

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

### 4

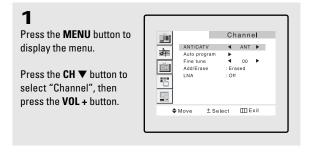
Press the **MENU** button to exit the menu.

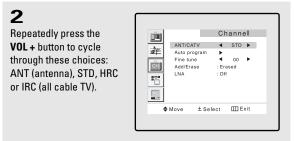
### **Memorizing the Channels**

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  $\blacktriangle$  and CH  $\checkmark$  buttons to scan through the channels. This eliminates the need to change channels by entering the channel digits. There are three steps for memorizing channels: selecting a broadcast source, memorizing the channels (automatic) and adding and deleting channels (manual).

#### Selecting the Video Signal-source

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





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

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

### **Storing Channels in Memory (Automatic Method)**

#### 1 Channel First, select the correct ١<u></u> ANT/CATV Auto program Fine tune Add/Erase STD ► a‡≊ signal source (ANT, STD, ► 00 ► Erased HRC, IRC). See steps 1~4 CH LNA : Off on previous page. 825 PC Press the **MENU** button. Move ± Select III Exit Press the CH **v** button to select "Channel", then press the VOL + button.

2 Press the CH ▼ button to select "Auto program".	ANTICATV ANT
	♦ Move ± Select IIII Exit

### 3

Press the **VOL +** button. The TV will begin memorizing all of the available channels.

Auto program		30
		70%
	III Exit	

### 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)

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

### 2

1

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  $CH \blacktriangle$  or  $CH \blacktriangledown$  buttons to change channels.

When you press the CH  $\blacktriangle$  or CH  $\blacktriangledown$  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.

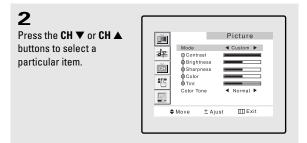
### 2

To turn mute off, press the **MUTE** button again, or simply press either the **VOL +** or **VOL** – button.

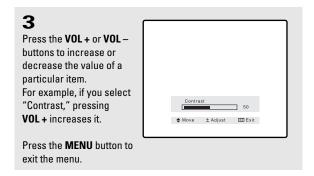
# **Customizing the Picture**

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 <b>MENU</b> button to display the menu.	Mode     € Custom       ● Contrast     ● Brightness       ● Sharpness     ● Sharpness
Press the <b>VOL +</b> button to display the Picture menu.	Color Tone    Normal ►
	♦ Move ± Select III Exit



✓ When Color Tone is selected, you can choose between "Normal", "Warm", or "Cool" according to personal preference.

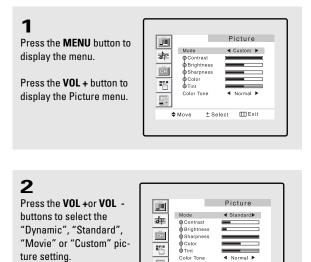


Note : When in Component 1 or Component 2 mode, only Brightness, Contrast, and Color can be operated.

# **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 PSTD (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.



PC Move

Alternate method:

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

Choose Dynamic for viewing the TV during the day or when there is brightlight in the room.

Color Ton

± Select

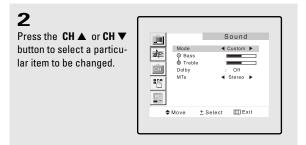
III Exit

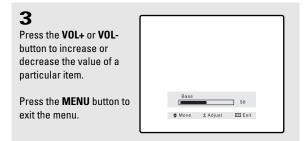
- Choose Standard for the standard factory settings.
- Choose Movie when viewing the movie.
- Choose Custom if you want to adjust the settings accordings to personal . preference (see "Customizing the Picture, page 3.7).

### **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.)

<b>1</b> Press the <b>MENU</b> button to display the menu. Press the <b>CH ▼</b> button to	Mode     Custom ▶       ⊕ Bass     ⊕ Treble       ⊙ Treble     ⊙olby       Othy     Off       MTs     ↓ Stereo ▶
select "Sound", then press the <b>VOL+</b> button.	◆ Move ± Select Ⅲ Exit

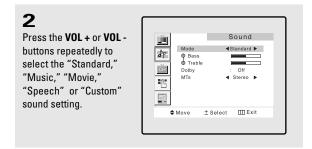




# **Using Automatic Sound Settings**

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 <b>MENU</b> button to display the menu.	Mode
Press the <b>CH</b> ▼ button to select "Sound", then press the <b>VOL+</b> button.	Dolby : Off MTs
	♦ Move ± Select III Exit



Alternate method: Simply press the the **S.STD** 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** but-

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

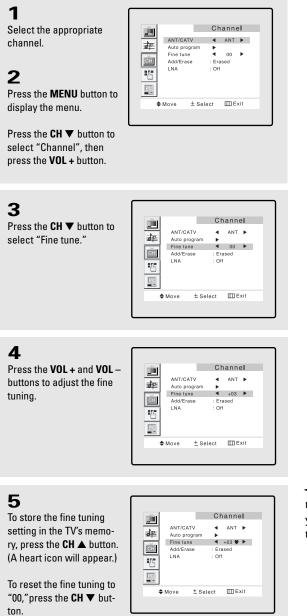


# Chapter 4

Special Features

# **Fine Tuning Channels**

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



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).

press the VOL + button.	1 Press the MENU button to display the menu. Press the CH ▼ button to select "Channel", then press the VOL + button	Channel ANT/CATV ANY Auto program Auto program Auto program Auto program Auto program Context Auto program Context Auto program Context Conte
◆Move ±Select ⅢExit		✦Move ±Select ШExit

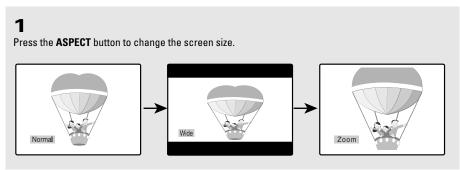
2 Press the CH ▼ button to select "LNA."	Channel ANT/CATV ANT  Auto program Fine tune Add/Erase Cha
	✦Move ±Select ⊞Exit

<b>3</b> Press the <b>VOL +</b> or <b>VOL -</b> button to set LNA "On." Press the <b>MENU</b> button to exit the menu.	ANT/CATV 4 ANT Auto program Auto program 0 0 Addfrase Fine tune 4 00 Addfrase UNA : On
	♦ Move ± Select III Exit

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

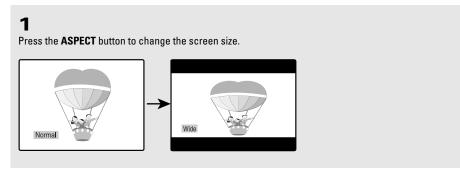
# **Changing the Screen Size**

#### For 480i(DVD, DTV) and TV, Video, S-Video



- Normal: Sets the picture to 4:3 normal mode. This is a standard TV screen size.
- Wide: Sets the picture to 16:9 wide mode.
- Zoom: Magnifies the size of the picture on screen.

### For the DTV and the DVD(480p)



- Normal: Sets the picture to 4:3 normal mode. This is a standard TV screen size.
- Wide: Sets the picture to 16:9 wide mode.

### **Freezing the Picture**

### 1

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

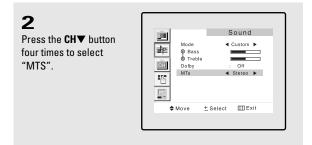
- Not available if V-Chip is turned on.
- Normal sound will still be heard.
- Press again to cancel.

# **Special Sound Options**

### Choosing a Multi-Channel Sound (MTS) Soundtrack

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

1 Press the MENU button to display the menu. Press the CH▼ button to	Mode     Custom ▶       ⊕ Bass     ⊕ Treble       ⊡     Dotby       ms     ✓ Sterce ▶
select "Sound", then press the <b>VOL +</b> button	<pre>Move ±Select ⅢExit</pre>



<b>3</b>	Mode Custom >
Press the <b>VOL +</b> button	P Bass
repeatedly to select	Treble
"Mono," "SAP," or	Dolby : Off
"Stereo."	MTs < SAP >
Press the <b>MENU</b> button to exit the menu	◆ Move ± Select Ⅲ Exit

✓ 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.)

### 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.

<b>1</b> Press the <b>MENU</b> button to display the menu.	Mode     Custom ▶       Bass     Troble       Troble     Off       MTs     Storeo ▶
Press the CH▼ button to select "Sound", then press the VOL + button	

2 Press the CH▼ button to select "Dolby".	Mode     ← Custom ▶       ● Bass     ● Treble       Dolby     Off       MTs     ← Sterse ▶
	♦ Move ± Select Ⅲ Exit

<b>3</b> Press the <b>VOL</b> + button to select "On". Press the <b>MENU</b> button to exit the menu.	Mode     Custom ▶       ● Bass     Treble       ● Dotby     On       ■ Tis     < Stereo ▶
	♦ Move ± Select III Exit

# **Setting the Sleep Timer**

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

<b>1</b> Press the <b>MENU</b> button to display the on-screen menu.	Steep timer     Off       prip     >       Caption     >       V-Chip     >       Size     Normal >       Language     English >
Press the <b>CH ▼</b> button three times to select	► Move ±Select □□Exit
"Function", then press the <b>VOL +</b> button.	◆M078 - Select III CAR

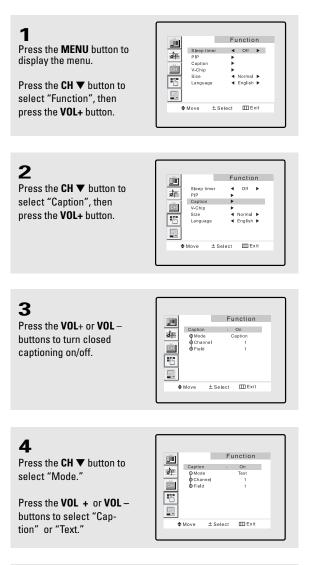
 Quick way to access the Sleep timer : Simply press the SLEEP button on the remote control.

<b>2</b> Press <b>VOL +</b> repeatedly until the appropriate time interval appears (any of the preset values from "Off" to "240").	Function       Sleep timer     30 ▶       PIP     ▶       Gation     ▶       V-Chip     ▶       Size     Normal ▶       Language     ▲ English ▶
	✦Move ±Select ⊞Exit

# **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.



#### 5

Depending on the particular broadcast, it might be necessary to make changes to "Channels" and "Field": Use the CH  $\blacktriangle$ , CH  $\bigtriangledown$ , VOL + and VOL - buttons to make the

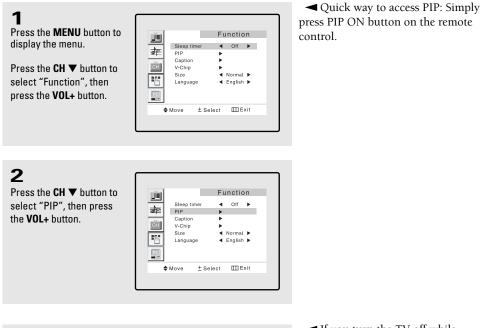
Use the CH ▲, CH ▼, VOL + and VOL - buttons to make the changes. (Follow the same procedure as in steps 3~4 above.) Press the MENU button to exit the menu.

✓ 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.)

## **Viewing Picture-in-Picture**

You can use the PIP feature to simultaneously watch two video sources. Note: PIP function operates only in the PC mode.

#### **Activating Picture-in-Picture**



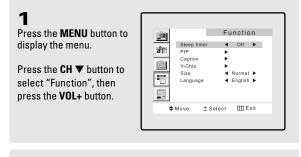


◄ If you turn the TV off while watching and turn it on again, the PIP window will disappear.

## 4

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

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





## 3

Press the **CH**  $\checkmark$  button to select "TV/Video".

<b>U</b> ÚO		Fu	Inction	
	PIP TV/Video Size Locate		On Video 🕨 Small 🕨	
¢	Move ± S	elect	III Exi	t

## 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.

PIP	:	On	Ē.
	deo 🖣	S-Video 🕨	
© Size	e ►	Small 🕨	
12			
PC			
Move	± Select	🖽 Exit	

Function

#### Changing the Location of the PIP Window

niint (

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

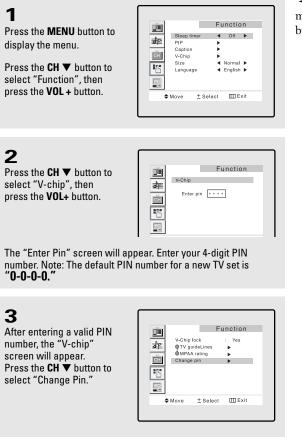
#### Changing the Size of the PIP Window

Press the  $\ensuremath{\text{SIZE}}$  button to alternate between a small, medium and large PIP window.

# Using the V-Chip(US only)

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

#### Setting Up Your Personal ID Number (PIN)



 Quick way to access the V.CHIP menu: Simply press the V.CHIP button on the remote control.

#### 4

Press the **VOL+** button. The Change pin screen will appear. Choose any 4-digits for your PIN and enter them.

i ∎ i	Change pin Enter pin	Function	
道 建 画	Change pin Enter pin	Function	

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 EXIT button on the top panel while 5 seconds which resets the pin to 0-0-0.

#### How to Enable/Disable the V-Chip



## 2

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

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

Enter pin	
0~9 Select Exit	

## 3

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

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.)

Function     Former S     Former S	
♦ Move ± Select III Exit	
	_

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

First, set up a personal identification number (PIN), and enable the V-Chip. (See previous section.) Parental restrictions can be set up using either of two methods: The TV guide-lines 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.	Function       Bleep timer     Off       pip     Capton       V-Chip     Normal       Size     Normal       Language     English
	✦Move ±Select IIIIExit

#### Special Features

#### 2

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

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

	V-Chip Enter pin	Function
0~9	Select	III Exit

## 3

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

1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	V-Chip lock OTV guideLines MPAA rating Change pin	Function : Yes 	
\$1	vlove ± Select	III Exit	

#### 4

The "TV guidelines" Function ш́, screen will appear. AL FV V S L D de: TV-Y 🕨 U U TV-Y TV-G TV-PG TV-PG TV-14 TV-MA υ Press the the  $CH \blacktriangle$ ,  $CH \lor$ CH U U U U U U U U U U U U U U U buttons to select one of 125 the six age-based cate-B: Blocked U: Unblocked gories: ITT Exit ± Select Move 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 start blinking. (U= Unblocked, B= Blocked)

While the "U" or "B" is blinking, press the **CH**  $\blacktriangle$  or **CH**  $\blacktriangledown$  buttons to block or unblock the category.

Press the **MENU** button once to save the TV guidelines. A TV-Rating will be highlighted, and no letters will blink. To menu this screen, press the **MENU** again. To select a different TV-Rating, press the **CH**  $\blacktriangle$  or **CH**  $\checkmark$  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 blinking letter ("U" or "B") will be displayed for each sub-rating. While the "U" or "B" is blinking, press the **CH**  $\blacktriangle$  or **CH**  $\blacktriangledown$  buttons to change the sub-rating.

Press **MENU** once to save the TV guidelines. A TV-Rating will be selected, and no letters will blink. To menu this screen, press the **MENU** button again. To select a different TV-Rating, press the **CH**  $\blacktriangle$  or **CH**  $\checkmark$  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	Function       Step timer     Off       PIP     >       Carlion     >       V-Chip     >       V:2e        Normal     >       Language        English
press the <b>VOL +</b> button.	♦ Move ± Select III Exit

2 Press the CH ▼ button to select "V-chip", then press the VOL+ button. The "Enter pin" screen	Function
will appear. Enter your 4- digit PIN number.	0-9 Select III Exit

#### Special Features

#### 3

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



#### 4 Repeatedly press the CH Function Ш. B/L ▼ button to select a parde 1 G ▶ U PG ► U PG-13 ► U ticular MPAA category. CH ▶ U ▶ U (When a category is R NC-17 125 selected, its color U B: Blocked U U: Unblocked NR changes to blue.) Pressing the CH ▼ button will cycle Move ± Select III Exit 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 blinking letter ("U" or "B") will be displayed. Press the CH  $\blacktriangle$  or CH  $\blacktriangledown$  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."

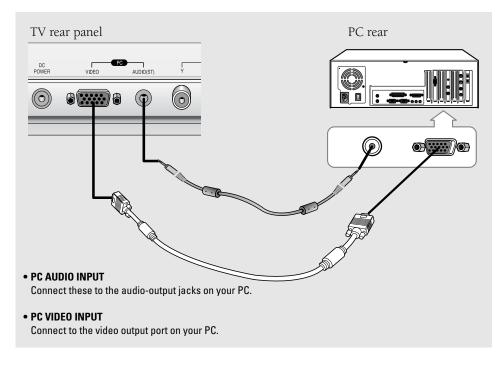
To resume normal viewing, tune to a different channel using the number buttons. Under certain conditions (depending on the rating of the local TV programs) the V-Chip might lock out all the channels. In this case, use the V.Chip button for an "emergency escape":

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.

# Using Your TV as a Computer (PC) Display

#### How to Connect Your PC to the TV

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



#### How to Set up Your PC display

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

Press the PC button on the remote control to select the PC mode

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

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

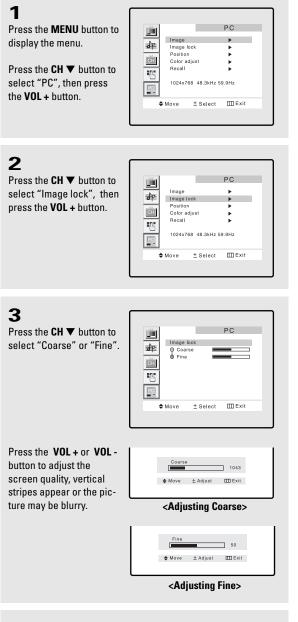
The Windows display-settings for a typical computer are shown below. However, the actual screens on your PC will probably look different, depending upon your particular version of Windows and your particular video card. Even if your actual screens look different, the same, basic set-up information will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

Image: Calcular of the function of	First, click on "Settings" on the Win- dows 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 dis- play dialog-box will appear. Navigate to the "settings" tab on the display dialog-box.
Image: Note of the net o	
Display Properties       Image: Constraint of the section of the sectio	The two key variables that apply the TV- PC interface are "resolution" and "col- ors." The correct settings for these two variables are: * Size (sometimes called "resolution"): 15" - 1024 x 768 pixels 17" - 1280 x 1024 pixels. If a vertical-frequency option exists on your display settings dialog box, the cor- rect value is "60" or "60 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 PC button on the remote control to select the PC mode.

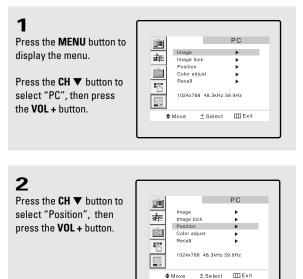


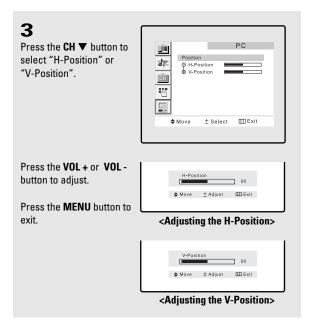
#### 4

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

#### **Changing the Screen Position**

Press the PC button on the remote control to select the PC mode.





#### Changing the Screen Color Standard

Press the PC button on the remote control to select the PC mode.

1 Press the MENU button to display the menu. Press the CH ▼ button to select "PC", then press the VOL + button.	PC     Image bok     Poilion      Poilion     Color adjust     Recall     Poilion     Oldvar86 48.3kHz 59.9Hz     Oldvar86 48.3kHz 59.9Hz     Oldvar86 48.3kHz 59.9Hz
2 Press the CH ▼ button to select "Color Adjust".	PC

e CH 🔻 button to	Ŭ.	PC
Color Adjust".	Image	•
	34年 Image lock	•
	Position	•
	Color adjus	st 🕨
	Recall	•
	1024x768	48.3kHz 59.9Hz
	♦ Move ±	Select Exit

3 Press the VOL +or VOL - buttons to select "Custom", "Color1", "Color2" or "Color3". Press the MENU button to	Color mode Color1 > @Red @Green @Blue
exit.	♦ Move ± Select IIII Exit

#### **Adjusting the Screen Color Settings**

Press the PC button on the remote control to select the PC mode.

<b>1</b> Press the <b>MENU</b> button to display the menu.	Image Image lock
Press the <b>CH</b> ▼ button to select "PC", then press the <b>VOL</b> + button.	Position       Color adjust       Recall       ■       ■       1024x768       48.3kHz       59.9Hz
	✦Move ±Select ⊞Exit

## 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.

			_
Thin 1		PC	
-her	Image	•	
3011	Image lock	•	
- W-	Position	•	
CH	Color adjust	•	
_	Recall	•	
11. T			
	1024x768 48 3kHz 5	0 0H7	
P.C	10248700 40.00012 0	0.0112	
<b>A</b> 1	lovo + Soloot	ITT Exit	
• 1	iove <u>-</u> Select		
	Position Color adjust	9.9Hz	

# 3

If Custom is selected, press the **CH**  $\checkmark$  or **CH**  $\blacktriangle$ button to select the item you want to adjust, then press the **VOL** + or **VOL** button to adjust the color(R, G, B).

Color made Custom > PRed Blue Blue Blue Exit		-	PC	
◆ Move ± Select Ⅲ Exit		© Red © Green		
	<b>•</b>	1ove ± Select	III Exit	

Press the **MENU** button to exit.

#### To Initialize the Screen Position or Color Settings



## 2

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

<b>Think</b>		PC	
ate l	lmage Image lock	t	
	Position		
<u></u>	Color adjust Recall	+	
	1024x768 48.3	Hz 59.9Hz	
\$	Move ± Sele	ect 🖽 Exit	

## 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.

T	PC
	Recall
<b>3</b> 4	O Image recall
CH	U Color recall
-6	
¢1	Move ±Select ⊞Exit

Press the **MENU** button to exit.

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

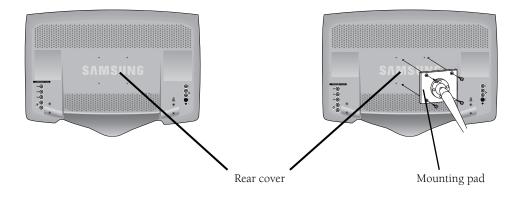
## **Identifying Problems**

Problem	Possible Solution
Poor picture	Try another channel.
	Adjust the antenna.
	Check all wire connections.
Poor sound quality.	Try another channel.
	Adjust the antenna.
No picture or sound.	Try another channel.
	Press the TV/VIDEO button.
	Make sure the TV is plugged in.
	Check the antenna connections.
No color, wrong colors or	Make sure the program is broadcast in color.
tints.	Adjust the picture settings.
	If the set is moved or turned in a different direction, the
	power should be OFF for at least 30 minutes.
	Adjust the antenna.
Picture rolls vertically.	Check all wire connections.
The TV operates erratically.	Unplug the TV for 30 seconds, then try operating it
	again.
The TV won't turn on.	Make sure the wall outlet is working.
Blurred or snowy picture,	Check the direction, location and connections of your
distorted sound	antenna.
	This interference is often due to the use of an indoor
	antenna.
Remote control malfunctions	Replace the remote control batteries.
	Clean the upper edge of the remote control
	(transmission window).
	Check the battery terminals.
"Check Signal Cable"	Ensure that the signal cable is firmly connected to the
message.	PC or video sources.
	Ensure that the PC or video sources are turned on.

Problem	Possible Solution	
"Not Supported Mode!" mes-	Check the maximum resolution and the frequency of	
sage.	the video Adapter.	
	Compare these values with	h the data in the Display
	Modes Timing Chart.	
The image is too light or too	Adjust the Brightness and	Contrast.
dark.	Adjust the Fine function.	
Horizontal bars appear to	Adjust the Coarse function	n and then adjust the Fine
flicker, jitter or shimmer on	function.	
the image.		
Vertical bars appear to flicker,	The TV is using its power	management system.
jitter or shimmer on the	Move the computer's mou	se or press a key on the
image.	keyboard.	
Screen is black and power	Check that the display res	solution and frequency from
indicator light blinks steadily.	your PC or video board is	an available mode for your
	TV. On your computer che	eck: Control Panel, Display,
	Settings.	
Image is not stable and may	If the setting is not correct	t, use your computer utility
appear to vibrate.	program to change the dis	splay settings.
	NOTE: Your TV supports	multiscan display functions
	within the following frequency domain:	
	<ul> <li>Horizontal frequency:</li> </ul>	15": 30 kHz ~ 69 kHz
		17": 30 kHz ~ 81 kHz
	<ul> <li>Vertical frequency:</li> </ul>	56 Hz ~ 75 Hz
	• Maximum refresh rate:	15" : 1024 x 768 @ 75Hz
		17" : 1280 x 1024 @ 75Hz
Image is not centered on the	Adjust the horizontal and	vertical position.
screen.		

# Installing VESA compliant mounting devices

Refer to page A.2 to remove the base.



Align the mounting interface pad with the holes in the rear cover mounting pad and secure it with the four screws that come with the arm-type base, wall mount hanger or other bases.

#### Wall Mount Instructions

The following instructions apply to a hollow sheet-rock wall only. Tools/Hardware needed - Philips screwdriver, four toggle bolts, 5/8in dia. Drill bit and drill. Contact Ergotron at (800) 888-8458 to purchase the triple pivot direct mount adapter and wall mount bracket kit.

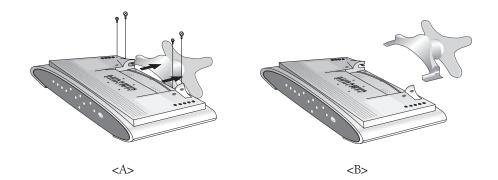
• LTM1555 (15") :	No. 47 - 007 - 099 (Pivot direct mount adapter)
	No. 97 - 101 - 003 (Wall mount bracket kit)
• LTM1755 (17") :	No. 47 - 007 - 099 - 02 (Pivot direct mount adapter)
	No. 97 - 101 - 003 - 00 (Wall mount bracket kit)

Align the wall mount bracket on the wall at the desired height, making sure that the bracket will be mounted between the wall studs. Mark the four corner openings and drill four 5/8-dia. holes.

Assemble the wall mount kit according to the instructions provided with it. Securely attach Ergotron's flat panel, triple pivot direct mount adapter to the back of the TV using the four 4mm, .7 pitch x 10mm screws provided with the arm. Secure the assembly to the wall using four 3/16 by 3-inch long toggle bolts.

## Attaching a Wall or Arm mounting device

The TV supports VESA mounting standard for use with various VESA mounting devices. To install any VESA mounting device, please follow the instructions given.



#### 1

Lay the LCD TV face-down on a flat surface with a cushion or other soft materials to protect the screen.

## 2

Remove all cables connected on the TV.

#### 3

Remove the four screws and then remove the Stand from the LCD TV. (refer to pictures A&B).

## 4

Re-connect all cables you removed in step 2.

#### 5

Now you are ready to install Wall/Arm mounting device .

#### Maintenance of Your LCD TV/Monitor

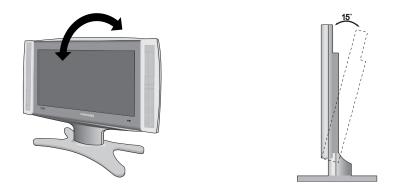
WARNING: To avoid risk of electric shock, do not disassemble the TV cabinet (except for gaining access to the cable connectors as described on page 5). Users cannot service the TV. User maintenance is restricted to cleaning as explained below:

Unplug the monitor from the power outlet before cleaning.

- To clean your flat panel display screen, lightly dampen a soft, clean cloth with water or mild detergent. If possible, use a special screen cleaning tissue or solution suitable for the antistatic coating.
- To clean the monitor cabinet, use a cloth lightly dampened with a mild detergent.
- Never use flammable cleaning material to clean your LCD TV or any other electrical apparatus.

## **Retractable Stand**

Note: The maximum tilt angle is 15 degrees in the backward direction. Please do not tilt the TV outside the specified range. Using excessive force to tilt the TV/Monitor may cause permanent damage to the mechanical part of the stand.



## **Using the Anti-Theft Kensington Lock**



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

## 1

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

## 2

Connect the Kensington lock cable.

## 3

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

Appendix

# **Pin Assignments**

Pin D-Sub Connection

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

## **Display Modes**

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

Preset	timing	modes
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Mode	Resolution	Horizontal Frequency (kHz)	Vertical Frequency (Hz)	Pixel Clock Frequency (MHz)	Sync Polarity (H/V)
	720 x 400	31.469	70.087	28.322	- / +
VGA	640 x 480	31.469	59.940	25.175	- / -
	640 x 480	37.500	75.000	31.500	- / -
SVGA	800 x 600	46.875	75.000	49.500	+/+
XGA	1024 x 768	48.363	60.004	65.000	- / -
AUA	1024 x 768	60.023	75.029	78.750	+/+
SXGA (LTM1755 only)	1280 x 1024	63.981	60.020	108.000	+,-/+,-
	1280 x 1024	79.976	75.025	135.000	+/+

#### **NTSC Broadcasting Systems**

Color System	Sound System	Stereo System	Channel System	Countries
		A2	US	Korea
	М	*BTSC (SAP)	US	USA, Canada, Chile,
NTSC				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

		LTM1555	LTM1755
	Size Display Size	15.0" Diagonal	17.0" Diagonal
Panel	Type Pixel Pitch	304.1(H) X 228.1(V)mm	338(H) X 270(V)mm
	Viewing Angle	a-si TFT active matrix	a-si TFT active matrix
		0.297(H) X 0.297(V)mm	0.264(H) X 0.264(V)mm
		70/70/55/60 (L/R/U/D)	70/70/55/55 (L/R/U/D)
	Horizontal	30~69 kHz	30~81 kHz
*Frequency	Vertical	56~75 Hz	56~75Hz (~XGA)/60~75Hz (SXGA)
	Display Color	16,777,216 color	16,777,216 color
	Optimum Mode	1024 X 768 @ 60 Hz	1280 X 1024 @ 60 Hz
Display	Maximum Mode	1024 X 768 @ 75 Hz	1280 X 1024 @ 75 Hz
Resolution	Sync.	H/V Separate, TTL, P. or N.	H/V Separate, TTL, P. or N.
Input Signal	Video signal	0.7 Vp-p @ 75 ohm	0.7 Vp-p @ 75 ohm
	Color system	NTSC	NTSC
Video	Video system	CVBS, S-VHS, RGB	CVBS, S-VHS, RGB
	Video In	1.0 Vp-p @ 75 ohm	1.0 Vp-p @ 75 ohm
Component	Audio In	500mVrms	500mVrms
	Input	AC 90~264 V, 1.0~0.5A (50/60Hz)	AC 90~264 V, 1.0~0.5A (50/60Hz)
Power Supply	Output	14V/3A	14V/3.5A
	Maximum	48 W	58 W
Power	Power Saving	< 2 W	< 2 W
Consumption	Unit (WxDxH) :	18.6 x 2.0 x 12.4 inches/7.2 lbs	20.8 x 2.2 x 14.4 inches/9.3 lbs
Dimensions/	TV body	(474 x 51 x 317 mm/3.27 kg)	(530 x 57 x 367 mm/4.25kg)
Weight	With stand	18.6 x 8.0 x 15.6 inches/8.75 lbs	20.8 x 8.0 x 17.6 inches/10.9 lbs
		(474 x 204 x 397 mm/3.97 kg)	(530 x 204 x 447 mm/4.95kg)
Environmental	Operating Temperature	50 °F to 104 °F (10 °C to 40 °C)	50 °F to 104 °F (10 °C to 40 °C)
Considerations	Operating Humidity	10% to 80%	10% to 80%
	Storage Temperature	-13 °F to 113 °F (-25 °C to 45 °C)	-13 °F to 113 °F (-25 °C to 45 °C)
	Storage Humidity	5% to 95%	5% to 95%
Audio	Audio Input 1	RCA Jack Red(R) White(L), 0.5Vrms (-9dB)	RCA Jack Red(R) White(L), 0.5Vrms (-9dB)
Characteristics	Audio Input 2	3.5ø Stereo Jack, 0.5Vrms (-9dB)	3.5ø Stereo Jack, 0.5Vrms (-9dB)
	DVD	RCA Jack Red(R) White(L), 0.5Vrms (-9dB)	RCA Jack Red(R) White(L), 0.5Vrms (-9dB)
	DTV	RCA Jack Red(R) White(L), 0.5Vrms (-9dB)	RCA Jack Red(R) White(L), 0.5Vrms (-9dB)
	Headphone out	Max. 10mW Output (3.5ø Stereo Jack 32)	Max. 10mW Output (3.5ø Stereo Jack 32)
	Frequency	RF: 80Hz ~ 15kHz (at- 3dB)	RF: 80Hz ~ 15kHz (at- 3dB)
	Response	A/V: 80Hz ~ 20kHz (at - 3dB)	A/V: 80Hz ~ 20kHz (at - 3dB)

\* Referring to Preset timing modes, page A.5.

