



TFT-LCD TELEVISION



IMPORTADO POR

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EXPORTADO POR

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BN68-00573B-01

Important Safety Instructions

- 1) Read these instructions.
- 2) Keep these instructions.
- 3) Heed all warnings.
- 4) Follow all instructions.
- 5) Do not use this apparatus near water.
- 6) Clean only with dry cloth.
- 7) Do not block any ventilation openings, Install in accordance with the manufacturer's instructions.
- 8) Do not install near any heat sources such as radiators, heat registers, or other apparatus (including amplifiers) that produce heat.
- 9) Do not defeat the safety purpose of the polarized or grounding-type plug. A polarized plug has two blades with one wider than the other. A grounding type plug has two blades and a third grounding prong. The wide blade or the third prong are provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.
- 10) Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.
- 11) Only use attachments/accessories specified by the manufacturer.
- 12) Use only with cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with the apparatus. When a cart is used, use caution when moving the cart/apparatus combination to avoid injury from tip-over.
- 13) Unplug this apparatus during lightning storms or when unused for long periods of time.
- STIESA
- 14) Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.







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.

Do not display a still image (such as on a video game or when hooking up a DVD to this LCD TV) on the Color TFT-LCD (Thin Film Transister Liquid Crystal Display) panel for a long time as it can cause screen image retention. This image retention is also known as "screen burn". To avoid such image retention, reduce the degree of brightness and contrast of this screen when displaying a still image.

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

As an ENERGY STAR Partner.

Samsung Electronics America, Inc. has determined that this product or product model meets the ENERGY STAR guidelines for energy efficiency.

2 SAFETY

FCC Information

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 experi-enced 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 .

Warning

In a domestic environment this product may cause radio interference in which case the user may be required to take adequate measures.

User must use shielded signal interface cables to maintain FCC compliance for the product.

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 interfer ence received, including interference that may cause undesired operation.

The party responsible for product compliance: SAMSUNG ELECTRONICS CO., LTD

America QA Lab of Samsung 3351 Michelson Drive, Suite #290, Irvine, CA 92612, U.S.A

Provided with this TV is a detachable power supply cord with IEC320 style terminations.

For 110 Volt applications, use only UL Listed detachable power cord with NEMA configuration 5-15P type (parallel blades) plug cap. For 230 Volt applications use only UL Listed Detachable power supply cord with NEMA configuration 6015P type (tandem blades) plug cap.

FCC captioning

This television receiver provides display of television closed captioning in accorda nce with Section 15.119 of the FCC rules. CONTENTS

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Chapter One

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
- Automatic timer to turn the TV on and off
- 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
- Headphone jack for private listening

List of Parts

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



Familiarizing Yourself with Your New TV

Top 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.



YOUR NEW TV

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 6-12.





Connect S-Video signal from a camcorder or VCR.

5 TV ANTENNA

Connect to an antenna or to a cable TV system.

Connect component video/audio from a DVD player.(only 480i)

WALL MOUNT HOLES

8 KENSINGTON LOCK

YOUR NEW TV

Remote Control

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



YOUR NEW TV

Installing Batteries in the Remote Control



- ▲ Make sure to match the "+" and "—" ends of the batteries with the diagram inside the compartment.
- Remove the batteries and store them in a cool, dry place if you won't be using the remote control for a long time.

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

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

The remote control doesn't work!

Check the following:

- 1. Is the TV power switch on?
- 2. Are the plus and minus ends of the batteries reversed?
- 3. Did the battery run out?
- 4. Is the power out, or is the power cord unplugged?
- 5. Is there a special fluorescent light or a neon sign nearby?

Chapter Two

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 7.

If you have two antennas, see "Separate VHF and UHF Antennas", on page 7.

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.





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 a an optional combiner-adaptor (available at most electronics shops).



Connecting Cable TV

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

Cable without a Cable Box





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

Connecting to a Cable Box that Descrambles All Channels

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.)



"ANT IN", "VHF IN", or simply, "IN".

2

Connect this cable to a two-way splitter.



3



4



Cable Box

TV ANTENNA

 $\overline{\mathbf{o}}$

TV Rear

6

the RF (A/B) switch.

Connect the last coaxial cable between the OUT terminal on Incoming cable the RF (A/B) switch and the VHF/UHF Splitter RF (A/B) Switch terminal on the rear Cable Box 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 6-8). 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.



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

Each external input source device has a different back panel configuration.

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.)

Each external input source device has a different back panel configuration.

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.

Each external input source device has a different back panel configuration.

Chapter Three

SPECIAL FEATURES

Turning the TV On and Off

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

Changing Channels

Using the Channel Buttons

1

Press the CH \wedge / \vee buttons to change channels.

When you press the **CH** \wedge / \vee 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.

Using the PRE-CH Button to select the Previous Channel



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.

SPECIAL FEATURES

Adjusting the Volume

1

Press the 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-left corner of the screen.

2

To turn mute off, press the **MUTE** button again, or simply press the **VOL +/-** buttons.

Viewing the Display

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

1

Press the **INFO** 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.
- Press the button once more or wait approximately 10 seconds and it disappears automatically.
- ▲ Allows the user to adjust the settings according to his/her preference and shows the current settings.



Chapter Four

OPERATION

Plug & Play Feature

When the TV is initially powered On, two basic customer settings proceed automatically and subsequently: Setting Auto program, Clock.

1

Press the **POWER** button on the remote control.

Plug & Play

Language

The message "Plug & Play" is displayed.

2

Press the UP/DOWN▲▼ buttons to select "Air", then press the ENTER button.

Press the UP/DOWN 🛦 🔻 buttons to select "English", then press the ENTER button.

	English	
-	Français	
	Español	
	Português	
Move	🗲 Enter	III Stop
	Air/CATV	
	Air	
	STD	
	HRC	
	IRC	

3

Press the ENTER I button.The TV will begin memorizing all of the available channels.

Auto Program Antenna Input Check Start Exit 🗲 Enter []] Clock

Press the ENTER I button to stop.



Clock

Min am/pm

4

Press the Hour LEFT/RIGHT 12 05 am buttons to move to the hour or minute. e 🜲 Adjust 🛄 Stop Set the hour or minute by pressing the **UP/DOWN** ▲ ▼ buttons.

Press the ENTER button.

5

The message "Enjoy your watching." is displayed.

Enjoy your Watching

English-15

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 \checkmark and CH \land 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 UP/DOWN▲▼ buttons to select "Channel", then press the ENTER œ button.

TV		Channel
Input	Air/CATV : Air	· •
Picture	Auto Program Add/Delete	*
Sound	Fine Tune	•
Y Channel		
နံရဲန် Setup		
A Move	Enter	III Return

2

Repeatedly press the **ENTER** I button to cycle through these choices: Air, STD, HRC or IRC (all cable TV).



Press the UP/DOWN▲▼

buttons to select the Video signal source, then press the ENTER I button.

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).



After all the available channels are stored, the Auto Program menu reappears. Press the EXIT button.

To check the channels stored in memory

Press the CH(\checkmark/\land)button.

• Only the channels stored in memory are selected.

To select channels over 100

Ex) Press $\bigcirc \rightarrow \bigcirc \rightarrow \bigcirc$ to select channel 108.

◀ The TV automatically cycles through all of the available channels and stores them in memory. This takes about one to

Press **ENTER** at any time to interrupt the memorization process and return to the CHANNEL menu.



ADD and DEL Channels (Manual Method)

1

Use the number buttons to directly select the channel to Add or Delete.

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

Press the UP/DOWN ▲ ▼ buttons to select "Add/Delete". Press the ENTER I button.

Press the LEFT/RIGHT ◀► buttons to select "Add" or "Delete". Press the ENTER ☞ button. Press the EXIT button.

😋 Input	Air/CATV	: Air	+
III Picture	Auto Program Add/Delete		•
) Sound	Fine Tune		•
K Channel			
ရှိခဲ့ Setup			
Move	Ente	er	🛄 Return
	Add/Dele	ete	
Air 22	Not in Memor	v	
		,	
	Add	Return	
≎ CH Ch	ange 🔹 🚸 Mov	re (Add 🕞
	Add/Dele	te	
41-00			
Air 22	in Memory		
	Delete	Return	
	Delete	Return	
^ (H (h	ango Ab Moy	(n)	

2(Alternate method)

Press the ADD/DEL button.

Repeatedly pressing ENTER
→ will alternate between "Add"and"Delete". Press the LEFT/RIGHT → buttons to select Exit, then press ENTER → to exit.

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

To Select TV/Input

Use to select TV or other external input sources connected to the TV. Use to select the screen of your choice.

1	TV		Input
•	😳 Input	TV/Video : TV	
Press the MENU	Picture	Edit Name	· · ·
button to display the on-screen menu.) Sound		
on-screen menu.	Channel		
Press the ENTER	မြံမှိ Setup		
button.	Move	e 🗲 Enter	III Return

2

Press the ENTER button to select "TV", then press the ENTER button.

TV			Input
De Input	TV		
-	VIDEO	:	
Picture	S-VIDEO	:	
Sound	Component	:	
K Channel			
နံရဲ့ Setup			
Move	📢 En	ter	III Return

3

Press the UP/DOWN▲▼ buttons to select the Input source, then press ENTER ☞ .



To Edit the Input Source Name

Name the input device connected to the input jacks to make your input source selection easier.

1 Press the MENU	ту		Input
button to display the on-screen menu.	Input Picture	TV/Video : TV Edit Name	<u>►</u>
Press ENTER	Channel		
	\$ Move	e 🚭 Enter	III Return

2

Press the UP/DOWN ▲ ▼ buttons to select "Edit Name", then press the ENTER I button.

TV		Input
📴 Input		TV 🕨
Picture	Edit Name	Þ
Sound (
Channel		
ho Setup		
🗢 Move	e 🖶 Enter	🛄 Return

Press the	TV			Edit Name
UP/DOWN 🛦 🔻	en Input	VIDEO	:	۲
buttons to select	III Picture	S-VIDEO Component		*
"Video", "S-Video" or	Sound			
"Component", depending on	Channel			
what you have connected.	다. 아이 Setup			
Press the ENTER I button.	\$ Move	e 🚭 Ent	ter	III Return

3

Press the UP/DOWN ▲ ▼ buttons repeatedly to select the correct input source name, then press ENTER ⊡ .

TV		Edit Name
enput	VIDEO	VCR
Picture	S-VIDEO Component	VCR DVD
Sound		Cable STB HD STB
K Channel		Satellite STB AV Receiver
နဲဂိုနဲ့ Setup		AV Receiver
Move	Enter	∏] Return
4 more		
•		Lines -
TV		Edit Name
•	VIDEO	:
TV	VIDEO S-VIDEO Component	Edit Name EDVD Receiver Game
TV	S-VIDEO	► DVD Receiver
TV Input Picture	S-VIDEO	: A DVD Receiver : Game Camcorder Combo DHR
TV Input Picture	S-VIDEO	: A DVD Receiver Game Camcorder Combo

Using Automatic Picture Settings

Your TV has five automatic picture settings ("Dynamic", "Standard", "Movie", "Custom"and "Auto") that are preset at the factory. You can activate either Dynamic, Standard, or Movie by pressing P.MODE (or by making a selection from the menu).

Or, you can select "Custom" which automatically recalls your personalized picture settings.



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

- Choose *Dynamic* to increase the clarity and sharpness of the picture.
- Choose *Standard* for the standard factory settings.
- Choose *Movie* when viewing the movie.
- Choose *Custom* if you want to adjust the settings according to personal preference (see "Customizing the Picture, page 21).
- Choose *Auto* if you want to automatically change contrast and brightness according to channel variety.

Customizing the Picture

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

1

Press the UP/DOWN ▲ ▼

Press the **MENU** button to display the men

	τv			Р	icture
	Input	Picture Mode	;	Dynamic	►
u.		Custom Picture			+
	Picture	Color Tone	:	Cool	•
	Sound (Size	:	Normal	•
	💕 Channel				
	နီရီ Setup				
,	A Move	e 🗲 Enter		111 R	eturn

buttons to select "Picture" then press the ENTER button.

Press the UP/DOWN▲▼ buttons to select "Custom picture", then press the ENTER ⊡

TV			Pie	cture
nput	Picture Mode	:	Dynamic	•
_	Custom Picture			•
Picture	Color Tone	:	Cool	•
) Sound	Size	:	Normal	۲
Channel				
Setup				
Move	🗲 Ente	r	III Re	turn

2

button.

Press the UP/DOWN▲▼ buttons to select a particular item, then press ENTER ⊡.

TV	Custom Picture
Input	Contrast 100 Brightness 50 Sharpness 50
Sound	Color
Channel	
Move	Enter 🔣 Return

3

Press the LEFT/RIGHT

buttons to increase or decrease the value of a particular item.

For example, if you select "Contrast", pressing **RIGHT** ► increases it.

Press the **MENU** button to exit.



Using Automatic Sound Settings

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



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

- Choose *Standard* for the standard factory settings.
- Choose Speech when watching a show that is mostly dialogue (i.e., news).

Selecting a Menu Language

1

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

Press the UP/DOWN▲▼ buttons to select "Setup", then press the ENTER œ button.

TV				Setup
Input	Time			►
- V	Plug&Play			+
III Picture	V-Chip			•
) Sound	Caption			•
" Sound	Language	:	English	•
K Channel	Blue Screen	:	Off	•
Setup				
A Move	🗲 En	ter	III Re	eturn

2

Press the UP/DOWN▲▼ buttons to select Language.

TV			Setup
nput	Time		•
_	Plug&Play		•
Picture	V-Chip		•
) Sound	Caption		•
	Language	: English	•
Channel	Blue Screen	: Off	•
Setup			
Move	e 🗣 Ent	er 🛄 F	leturn

3

Press the UP/DOWN ▲ ▼ buttons to select Language; English, Français, Español or Português.

Press the **MENU** button to exit.

TV		Setup
Picture Picture O) Sound Channel	Time Plug&Play V-Chip Caption Language Blue Screen	English Français Español Português
Setup		
Move	🗲 Enter	III Return

Setting the Blue Screen Mode

If no signal is being received or the signal is very weak, a blue screen automatically replaces the noisy picture background.

If you wish to continue viewing the poor picture, you must set the "Blue screen" mode to "Off".

1

Press the MENU button to display the menu.

Press the UP/DOWN▲▼ buttons to select "Setup", then press the ENTER button.



2

3

Press the UP/DOWN▲▼ buttons to select "Blue Screen", then press the ENTER I button.

τv				Setup
Input	Time			•
	Plug&Play			•
Picture	V-Chip			•
() Sound	Caption			•
- V Sound	Language	÷	English	•
💕 Channel	Blue Screen	:	Off	•
Setup				
Move	🗲 Enter		Ш	Return

Setup



\blacktriangleleft Pressing the UP/DOWN $\blacktriangle \blacktriangledown$ buttons will alternate between "On" and "Off".

Fine Tuning Channels

TV

III Picture

) Sound

Channel

\$ M

Setup

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

Air/CATV Auto Prog

Add/Delet

🗲 🖬 Ente

Channel

III Ref

1

Select the appropriate channel.

2

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

Press the UP/DOWN ▲ ▼ buttons twice to select "Channel", then press the ENTER ⊕ button.



3

Press the UP/DOWN ▲ ▼ buttons to select "Fine Tune" then press the ENTER ☞ button.



Fine Tune

Adjust

Return

] 0

Store

Air 22

🗘 CH Change

Reset

4

Press the LEFT/RIGHT ◀▶ buttons to adjust the "Fine tuning" and press the ENTER button.

Press the **MENU** button to exit.

If you do not store the channel in memory, adjustments to the settings are applied before you change the channel but are not saved. Therefore they return to the original settings once you move to another channel. User-adjusted channels are marked with an asterisk " * " on the right-hand side of the channel number in the channel banner.





Changing the Screen Size

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

Zoom : Magnifies the size of the picture on screen.

Freezing the Picture

1

- Press the **STILL** button to freeze a moving picture.
- Not available if V-Chip is turned on.
- Normal sound will still be heard.

Press again to cancel.

Adjusting the Color Tone

You can change the color of the entire screen according to your preference.

1				
Press the MENU	TV			Picture
button to display the menu.	Input	Picture Mode	: Dynamic	Þ
button to display the menu.	rinn i	Custom Picture		•
	Picture	Color Tone	: Cool	•
Press the	Sound	Size	: Normal	•
UP/DOWN A	Channel			
buttons to select	မြိုမှီ Setup			
"Picture", then press the	Move	e 🖶 Enter	Ш]Return



3

Press the UP/DOWN ▲▼ buttons to select Color Tone.

Press the **MENU** button to exit.



◀ You can select

"Normal", "Warm", and "Cool" color tones according to personal preference.

To select the Sound option

If you live in an area that has poor reception, you may hear noise and experience poor sound quality when watching a program in Stereo. If this occurs, press the MTS button and select "Mono".

1

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

Press the UP/DOWN ▲▼ buttons to select "Sound Mode", then press the ENTER I button.



2

Press the UP/DOWN ▲▼ buttons to select "MTS", then press the ENTER ↔ button.

TV				Sound
Input	Sound Mode	:	Standard	•
Picture	MTS	:	Mono	•
Sound				
💕 Channel				
ရှိရှိ Setup				
A Move	e 🚭 Enter		Ш	Return

3

Press the UP/DOWN ▲ ▼ buttons to select "Mono", "Stereo" or "SAP", then press the ENTER ⊡ button.



- Choose *Mono* for channels that are broadcasting in mono, or if you are having difficulty receiving a stereo signal.
- Choose *Stereo* for channels that are broadcasting in stereo.
- 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.)

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 the INFO button.)

1

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

Press the UP/DOWN ▲ ▼ buttons three times to select "Setup", then press the ENTER œ¹ button.



2

Press the ENTER I button to select "Clock" and press the ENTER I button.

TV			Time
Input	Clock	12:05 am	►
	Sleep	Off	•
III Picture	On Time	Off	•
Sound	Off Time	Off	•
💕 Channel			
Setup			
A Move	Enter	III Re	turn

3

Press the **UP/DOWN ▲ ▼** buttons repeatedly until the correct hour appears.

Press the LEFT/ RIGHT **I** buttons to select "Minute".

Press the

UP/DOWN ▲ ▼ buttons until the correct minute appears. Press the LEFT/ RIGHT ◀▶ buttons to select AM/PM and adjust with the UP/DOWN ▲ ▼ buttons. Press MENU to exit.

- TV
 Clock

 Input
 Hour
 Minute
 am/pm

 III
 Picture
 12
 05
 am

 IV
 Sound
 I
 05
 am

 IV
 Channel
 I
 I
 I

 IV
 Sound
 I
 I
 I
- Note : You can also set the time using the numeric buttons on the remote.

Setting the On/Off Timer

1

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

Press the UP/DOWN▲▼ buttons to select "Setup", then press the ENTER button twice.

τv			Setup
Input	Time		Þ
<u>v</u>	Plug&Play		•
III Picture	V-Chip		•
Sound (Caption		•
	Language	: English	•
Channel	Blue Screen	: Off	•
Setup			
Move	🖶 Ent	ter 🎹 🖩	eturn

Before using the timer, you must set the TV's clock.
(See "Setting the Clock" on page 29)

2

Press the UP/DOWN ▲ ▼ buttons to select "On Time" or "Off Time", then press the ENTER
→ button.

τv			Time
B Input	Clock	12:05 am	•
	Sleep	Off	•
Picture	On Time	Off	•
) Sound	Off Time	Off	•
Channel			
နံရဲ့ Setup			
Move	e 🗲 Enter	III R	eturn

• When you set the hours, make sure the correct time of day (am or pm) appears to the right of the time.

3

Press the UP/DOWN ▲ ▼ buttons repeatedly to select the appropriate hour.

TV			On Time
input	Hour	Minute	am/pm
Picture	12	05	am
	Channel	Volume	Setup
) Sound	3	10	Off
Channel			
👯 Setup			
♦ Move		≜ ∆diust	III Return

Press the LEFT/ RIGHT

buttons repeatedly to select the appropriate minute (i.e., the time when the TV will turn on).
4

Press the LEFT/ RIGHT ◀▶ buttons to select Setup. T١

Inpu

III Pictur

Sound

K Chanr

Setup

♦ Mo

Press the UP/DOWN▲▼

buttons to on-timer "On". (Repeatedly pressing the **UP/DOWN** ▲ ▼ buttons will alternate between on and off.)

When finished, press the **ENTER** I button.

5

To set the Off time, press the UP/DOWN ▲ ▼ buttons to select "Off Time".

Press the ENTER button and set the hours and minutes. (Follow the same procedure as in steps 1~4 above.)

τv				Time
Input	Clock		12:05 am	•
	Sleep		Off	•
Picture	On Time		Off	•
Sound (Off Time		Off	Þ
Channel				
နံရဲ့ Setup				
Move	ŧ	H Enter	<u> </u>	Return
	٠	J ^J Enter		
TV				Return Off Time
TV	Hour	Minute	am/pm	
TV				
TV	Hour 12	Minute	am/pm	
TV	Hour 12 V Setup	Minute	am/pm	
TV Input Picture Sound	Hour 12	Minute	am/pm	

On Time

am/pr

am

Setup

Off

III Ret

Minute

05

Volum

Adjust

3 10

12

Channe

6

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

Auto Power Off

When you set the timer on, your television will be turned off if you do not operate any controls for 3 hours after the TV has been turned on with the 'Timer On function. 'Auto power off' operates only when the TV has been turned on by the 'Timer on' function. To deactivate the "On time," select "Off" during this step.

UP/DOWN 🛦 🔻

huttone to coloct

Setting the Sleep Timer

Set the timer for the TV to turn off at the preset time automatically.

Setting the On/Off Timer Using the Menu

Press the MENU	TV	Setup
button to display the on-screen menu. Press the UP/DOWN▲▼ buttons to select "Setup", then press the ENTER I button twice.	Input Picture 아 Sound 오 Channel 상유 Setup 수 Move	ish ->
2		

Clock Sleep 12:05 am

•

The time must be set before using the Sleep timer. See page 29.

Sleep", then press the ENTER [™] button.		On Time Off Time (+) Enter	Off Off Return
3 Press the UP/DOWN ▲ ▼ buttons repeatedly until the correct time appears. Press the MENU button to exit.	TV Picture Picture) Sound Channel \$\$\$ Setup + Move	Time Setup Time Off Adjust	Sleep

Easy Way to Set the Sleep Timer
Press the
 button on the remote.
The number on the screen changes from
Off • 30 • 60 • 90 • 120 • 150 • 180

Using the V-Chip

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

Setting Up Your Personal ID Number (Pin)

1	TV	[V–Chip
Press the MENU button to display the menu.	Input	Time Plug&Play V-Chip	+ +
Press the UP/DOWN ▲ ▼ buttons to select	 Sound Channel Channel 		► English ► Off ►
"Setup", then press the ENTER	\$ Move	e 🗲 Enter	III Return

2

Press the UP/DOWN A buttons to select "V-Chip", then press the **ENTER** button.

TV		V-Chip
Input		
III Picture	Enter Pin	
) Sound		
Channel		
နံရံန Setup		
	0-9 Select	III Return

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."

3

Press the UP/DOWN▲▼ buttons to select "Change Pin."

After entering a valid PIN number, the "V-Chip" screen will appear.

τv			V-C	hip
Input	V-Chip Lock	•	On	٠
Picture	TV GuideLines MPAA Rating			*
Sound	Change Pin			۲
K Channel				
Setup				
\$ Move	e 🕂 Enter		III Retu	rn

4

Input Press the **RIGHT** Picture Enter New Pin button. The Change pin) Sound screen will appear. Choose any 4-digits for TV V-Chip your Pin and enter them. nput III Picture Confirm New Pin) Sound

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.

▲ Note: If you forget the Pin, press the remote-control buttons in the following sequence, which resets the pin to 0-0-0-0: POWER OFF → MUTE → $8 \rightarrow 2 \rightarrow 4 \rightarrow POWER ON.$

How to Enable/Disable the V-Chip

Note: V-Chip cannot be used during PIP operation.

1

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

Press the UP/DOWN▲▼ buttons to select "Setup", then press the ENTER ⊕ button.

TV			Setup
Input	Time		Þ
	Plug&Play		•
Picture	V-Chip		•
Sound	Caption		•
	Language	: Eng l i	sh 🕨
💕 Channel	Blue Screen	: Off	•
Setup			
A Move	🗲 i En	ter	III Return

V-Chip

+

•

•

2

Press the UP/DOWN▲▼ buttons to select "V-Chip", then press the ENTER ⊕ button.

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

	Plug&Play		
III Picture	V-Chip		
Sound	Caption		
	Language	÷	English
Channel	Blue Screen	÷	Off
နံရဲ Setup			
Move	e 🚭 Enter		III Reti

Time

τv

eee Input

3

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

To enable the V-Chip feature, ENTER button and press the UP/DOWN ▲ ▼ buttons to select On. (Pressing the

UP/DOWN ▲ ▼ buttons will alternate between On and Off.)

TV		V-Chip
📴 Input	V-Chip Lock	On
III Picture	TV GuideLines MPAA Rating	Off
Sound	Change Pin	
K Channel		
ŞîŞ Setup		
Move	Enter	III Return

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				
•	TV			Setup
Press the MENU	Input	Time		
button to display the menu.		Plug&Play		•
	III Picture	V-Chip		- →
Deces the) Sound	Caption		· - ▶
Press the	- V Sound	Language	: English	· •
UP/DOWN 🔺 🔻	💕 Channel	Blue Screen	: Off	· ·
buttons to select	Setup			
"Setup", then press the	\$ Move	e 🚭 Enter	Ш	Return
ENTER I button.				

2

Press the UP/DOWN ▲ ▼ buttons to select "V-chip", then press the ENTER ⊕ button.

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

2	
э	

Press the UP/DOWN▲▼ buttons to select "TV Guidelines", then press the ENTER [™] button.

TV			V-0	Chip
Input	V-Chip Lock	•	On	•
Picture	TV GuideLines MPAA Rating			•
Sound	Change Pin			۲
K Channel				
Setup				
Move	Enter		III Reti	urn

ALL

🖶 Enter

т∨-ү7 ▶ В В

TV-G

TV-PG

TV-14

TV-MA

B : Blocked

Enter

III Re

TV GuideLines

0 0

υu

III Ret

υυυ

U : Unblocked

D

TV Inpu

III Pictur

) Sound

💕 Chann हेईदे Setup

\$ M

Inpu

III Pictur

)) So

A c

Setup

₽ме

Time

Plug&F

V-Chip

4

The "TV guidelines" screen will appear. Press the **UP/DOWN ▲ ▼** 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 **RIGHT** ▶ button: Depending on your existing setup, a letter "U" or "B" will be highlighted. (U= Unblocked, B= Blocked)

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 **RIGHT** ▶ button. This will cycle through the available sub-ratings (FV,L, S, D or V).

A highlighted letter ("U" or "B") will be displayed for each sub-rating. While the "U" or "B" is highlighted, press the **ENTER** buttons to change the sub-rating.

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

7

Press the **MENU** button three times 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 UP/DOWN▲▼ buttons to select

"Setup", then press the ENTER button.
 TV
 V-Chip

 Imput
 Time

 Plug&Play
 >

 Imput
 Caption

 Language
 : English

 Blue Screen
 : Off

 \$Move
 Enter

Press the UP/DOWN ▲ ▼ buttons to select "V-Chip", then press the

ENTER [■] button.

2

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



3

Press the UP/DOWN ▲ ▼ buttons to select "MPAA rating", then press the ENTER button.

TV			V-0	Chip
Input	V-Chip Lock TV GuideLines	٩	On	*
Picture	MPAA Rating			►
Sound (Change Pin			•
💕 Channel				
Setup				
A Move	🗲 Enter		III Reti	urn

4

Repeatedly press the UP/DOWN ▲ ▼ buttons to select a particular MPAA category. (When a category is selected, its color changes to blue.) Pressing the UP/DOWN ▲ ▼ buttons will cycle through the MPAA categories:

TV				MPAA Rating
Input	G	►	U	
	PG	•	U	
Picture	PG-13	•	U	
Sound	R	•	U	
- V Sound	NC-17	•	U	
Channel	Y	•	U	
	NR	•	U	
Setup	B : Bloc	ked	U : Unt	ocked
Move		€	Enter	🛄 Return

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.
Х	X (Adults only).
NR	Not rated.

Press the **UP/DOWN** \checkmark **v** buttons to select a category.

Press the **ENTER** \blacksquare button 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 Menu button for an "emergency escape":

Select the V-Chip on the Menu. Enter your PIN number, and press the **ENTER** I button to temporarily disable the V-Chip Lock.

Chapter Five

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 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 sound or sound is too low	First, check the volume of units connected to your TV	
at maximum volume.	(digital broadcasting receiver, DTV, DVD, cable	
	broadcasting receiver, VCR, etc.).	
	Then, adjust the TV volume accordingly.	
No color, wrong colors or tints.	Make sure the program is broadcast in color.	
	Adjust the picture settings.	
	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	
distorted sound.	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.	



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

WARNING: To avoid risk of electric shock, do not disassemble the TV cabinet. 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.

Installing VESA compliant mounting devices

Refer to page 39 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.

• LTN1535 (15") :	No. 47 - 007 - 099 (Pivot direct mount adapter)
	No. 97 - 101 - 003 (Wall mount bracket kit)
• LTN1735 (17") :	No. 47 - 007 - 099 (Pivot direct mount adapter)
	No. 97 - 101 - 003 (Wall mount bracket kit)
• LTP2035 (20") :	No. 47 - 007 - 099 (Pivot direct mount adapter)
	No. 97 - 101 - 003 (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.



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.

Using the Anti-Theft Kensington Lock

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.

Retractable Stand

Note: The maximum tilt angle is 13 degrees in the backward direction.

Please do not tilt the TV outside the specified range. Using excessive force to tilt the TV may cause permanent damage to the mechanical part of the stand.





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

Model	LTN1535	LTN1735	LTP2035
Panel			
Size	15" Diagonal	17" Diagonal	20.1" Diagonal
Display Size Type	304.1 (H) x 228.1 (V) mm TN	344.64 (H) x 258.48 (V)mm PVA	408 (H) x 306 (V) mm TN
Pixel Pitch	0.297(H) x 0.297(V) mm	0.5385(H) x 0.5385(V) mm	0.6375 (H) x 0.6375 (V) mm
Viewing Angle	140/115 (H/V)	170/170 (H/V)	160/140 (H/V)
Power Supply			
Input	AC 100 ~ 250V (50/60 Hz)	AC 100 ~ 250V (50/60 Hz)	AC 100 ~ 240V (50/60 Hz)
Power Consumption			
Normal	40 W	62 W	60 W
Stand-By	< 2 W	< 2 W	< 3 W
Dimensions (W x D x H) / Weight			
TV Body	470.0 x 57.0 x 313.7 mm 18.50 x 2.24 x 12.35 inch	520.0 x 61.5 x 359.0 mm 20.47 x 2.42 x 14.13 inch	594.0 x 90.0 x 427.0 mm 23.39 x 3.54 x 16.81 inch
With Stand	470.0 x 182.2 x 367.8 mm / 4.0kg 18.50 x 7.17 x 14.48 inch / 8.8lbs	520.0 x 182.2 x 409.5 mm / 5.0kg 20.47 x 7.18 x 16.12 inch / 11.0lbs	594.0 x 252.0 x 489.5 mm / 9.81kg 23.39 x 9.92 x 19.27 inch / 21.62lbs
Environmental Considerations			
Operating Temperature	50 °F to 104 °F (10 °C to 40 °C)		
Operating Humidity	10% to 80%		
Storage Temperature	-13 °F to 113 °F (-25 °C to 45 °C)		
Storage Humidity	5% to 95%		