SAMSUNG

LN23R41B
LN23R51B
LN26R51B
LN32R51B

TFT-LCD TELEVISION

SAMSUNG
ELECTRONICS
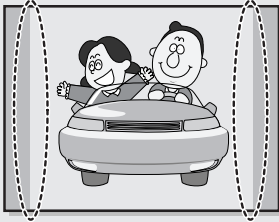
Owner's Instructions

This device is a Class B digital apparatus.
Register your product at www.samsung.com/global/register

Precautions When Displaying a Still Image

A still image may cause permanent damage to the TV screen.

- Digital Ready TV: When you select the regular screen (4:3) mode to watch an SD-grade digital broadcast (and the set-top box output is 480p).

- Digital Ready TV: When you select the wide screen (16:9) mode to watch an SD-grade digital broadcast (and the set-top box output is 1080i).
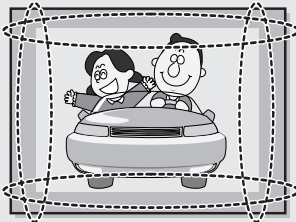
Although digital broadcasting must be in the wide screen (16:9) HD format, broadcasters sometimes show programs made originally in the regular screen format (4:3) by converting the signals into digital form, in which case the left and right side edges of the screen are cropped.
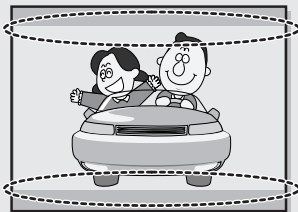
Note: If the borders at the left, right and the center of the screen remain fixed for an extended period of time, the amount of light transmission will also remain varied and as a result the borders may leave traces.

Do not leave the screen in pause mode for extended periods of time as you may experience temporary or permanent image burn.

- Digital Ready TV: When the TV receives HD-grade signals (and the set-top box output is 1080i).

When you watch a digital HD-grade broadcast on a regular (4:3) TV with the screen size "16:9" or "Panorama" selected, you will be able to watch the program but the top and bottom edges of the screen will be cropped.

Note: If the borders at the top, bottom and the center of the screen remain fixed for an extended period of time, the amount of light transmission will also remain varied and as a result the borders may leave traces.

Do not leave the screen in pause mode for extended periods of time as you may experience temporary or permanent image burn.

- Integrated Digital TV (Wide-screen): When the TV receives SD-grade (regular) broadcasting signals (receives 480p regular signals).

- Digital Ready TV (wide-screen): digital TV: When the TV receives SD-grade (regular) broadcasting signals (with a set-top box).

- When you watch an analog (regular) broadcast on a wide-screen TV (with the 4:3 screen mode selected).

Although digital broadcasting must be in the wide screen (16:9) HD format, broadcasters sometimes show programs made originally in the regular screen format (4:3) by converting the signals into digital form, in which case the left and right side edges of the screen are cropped.

Note: If the borders at the left, right and the center of the screen remain fixed for an extended period of time, the amount of light transmission will also remain varied and as a result the borders may leave traces.
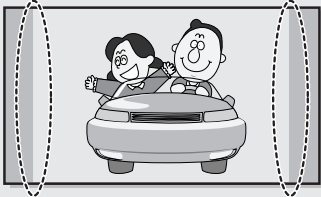
Do not leave the screen in pause mode for extended periods of time as you may experience temporary or permanent image burn.

- When you watch a DVD, CD or a video in wide-screen (21:9) format on a wide-screen (16:9) TV.

- When you connect a computer or a game console to the TV and select the 4:3 screen mode.

If you connect a DVD player, computer or a game console to the wide-screen TV and watch a movie or play a game in regular (4:3) or wide (21:9) screen mode, the left and right side edges, or the top and bottom edges of the screen will be cropped.
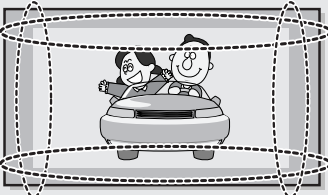
Note: If the borders at the left, right and the center of the screen remain fixed for an extended period of time, the amount of light transmission will also remain varied and as a result the borders may leave traces.

Do not leave the screen in pause mode for extended periods of time as you may experience temporary or permanent image burn.

Chapter 1: General Information

Chapter 2: Connections

Chapter 3: Operation

Chapter 4: Picture Control

Chapter 1

List of Features

- Excellent Picture Quality
  - DNIe technology provides life-like clear images.
  - My Color Control: Colors can be set to your preference by adjusting pink, blue and green.
  - Dynamic Contrast: Automatically detects the input visual signal and adjusts to create optimum contrast.
  - Brightness Sensor: Adjusts the screen brightness automatically depending on the brightness of the surrounding environment.

- SRS TruSurround XT
  - SRS TruSurround XT provides a virtual Dolby surround system.

- Convenience
  - The TV utilizes the HDMI system to implement perfect digital sound and picture quality.
  - The Anynet system enables you to easily control Samsung audio-video (AV) devices from this TV.

List of Parts

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

Remote Control
(BN59-00455A)
& Batteries (AAA x 2)

Power Cord
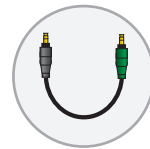
Anynet Cable
(BN39-00518B)
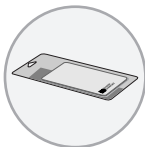
Cleaning Cloth
(BN63-01798A)

Owner's
Instructions
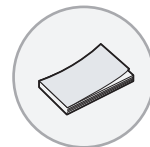
Anynet AV
Owner's
Instructions

M4 X L16

Stand Screw
(6002-001294) x 4

Cover-Bottom
(BN63-01674A)

Stand
(23", 26" BN96-01727A)
(32" BN96-01733A)

Familiarizing Yourself with Your New TV

Buttons on the Lower-Right Part of the Panel

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

- LN23R51B
- LN26R51B
- LN32R51B

- LN23R41B

Note: The product color may vary depending on the model.
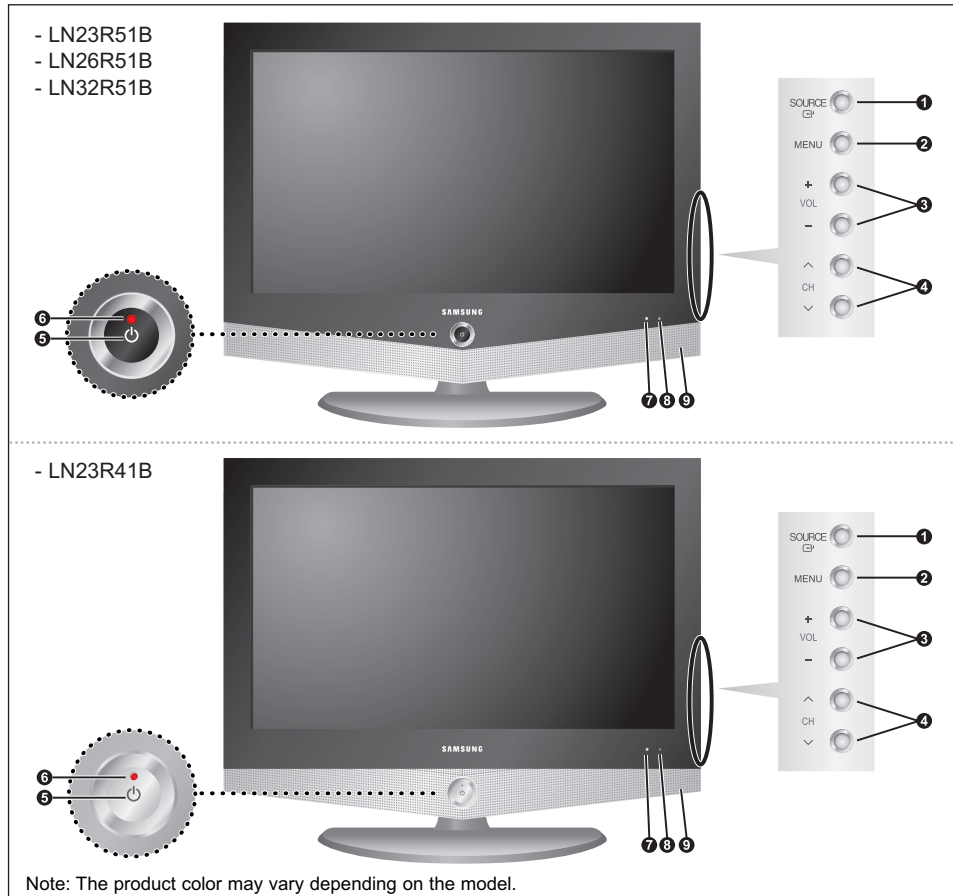
❶ **SOURCE** ⊞
Displays a menu of all of the available input sources (TV, AV1, AV2, S-Video, Component 1, Component 2, PC, HDMI). In the on-screen menu, use this button as you use the **ENTER** ⊞ button on the remote control.

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

❸ − **VOL** +
Press to decrease or increase the volume. In the on-screen menu, use the − **VOL** + buttons as you use the ◀ and ▶ buttons on the remote control.

❹ ∨ **CH** ∧
Press to change channels. In the on-screen menu, use the ∨ **CH** ∧ buttons as you use the ▼ and ▲ buttons on the remote control. (Without the Remote Control, You can turn on TV by using the Channel buttons.)

❺ ⏻ **(POWER)**
Press to turn the TV on and off.

❻ **POWER INDICATOR**
Blinks and turns off when the power is on and lights up in stand-by mode.

❼ **LIGHT DETECTING SENSOR**
Adjusts the brightness of the screen automatically by detecting brightness of the surrounding environment. This sensor works when the Brightness Sensor is on.

❽ **REMOTE CONTROL SENSOR**
Aim the remote control towards this spot on the TV.

❾ **SPEAKERS**

English-2

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 7-18.
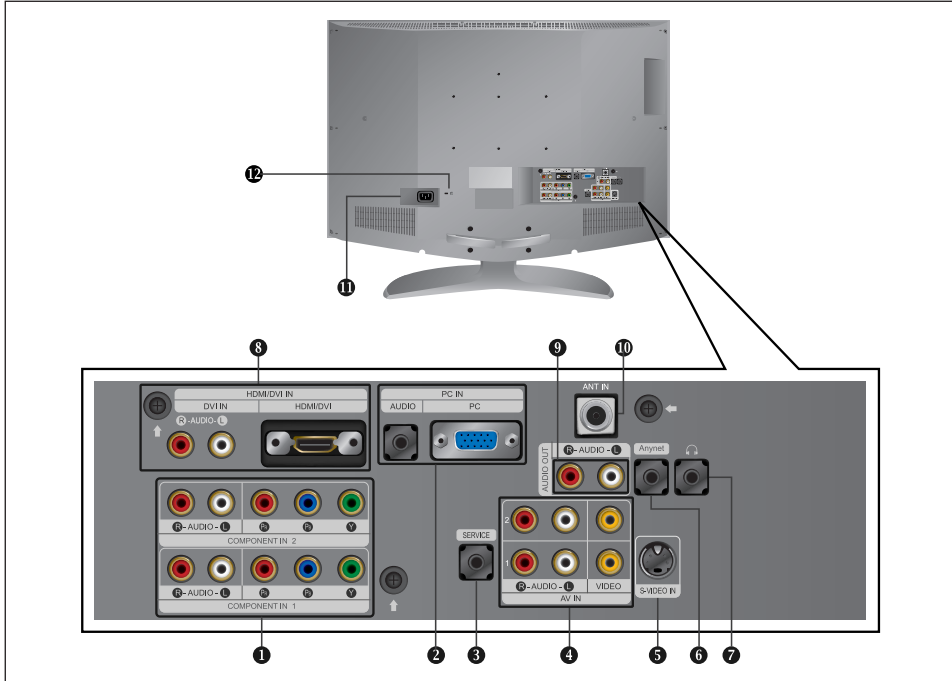
❶ **COMPONENT IN 1, 2**
Connect component video/audio from a DVD/Set-top box.

❷ **PC IN**
Connect to the video and audio output jack on your PC.

❸ **SERVICE**
Connector for service only.

❹ **AV IN**
Video and audio inputs for external devices, such as a camcorder or VCR.

❺ **S-VIDEO IN**
Video inputs for external devices with an S-Video output, such as a camcorder or VCR.

❻ **Anynet**
Refer to "Anynet AV Owner's Instructions".

❼ **HEADPHONE JACK**
Connect a set of external headphones for private listening.

❽ **HDMI/DVI IN**
Connect to the HDMI jack of a device with HDMI output.
Use the HDMI/DVI terminal for DVI connection to an external device. You should use the DVI-to-HDMI cable or DVI-HDMI Adaptor for the connection, and the 'R -AUDIO -L' terminal on DVI-IN for sound output.
(HDMI/DVI IN terminal does not support PC.)

❾ **AUDIO OUT**
Connect to the audio input jack on your amplifier.

❿ **ANT IN**
Connect to an antenna or to a cable TV system.

⓫ **POWER INPUT**
Connect the supplied power cord.

⓬ **KENSINGTON LOCK**
Refer to "Using the Anti-Theft Kensington Lock" on page 70.

	Speaker			Audio Out		
	RF	AV, S-Video	Component, PC, HDMI	RF	AV, S-VIDEO	Component, PC, HDMI
Internal Mute Off	Speaker Output	Speaker Output	Speaker Output	Sound Output	Sound Output	Sound Output
Internal Mute On	Mute	Mute	Mute	Sound Output	Sound Output	Sound Output
Video No Signal	Mute	Mute	Mute	Mute	Sound Output	Sound Output

English-3

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.
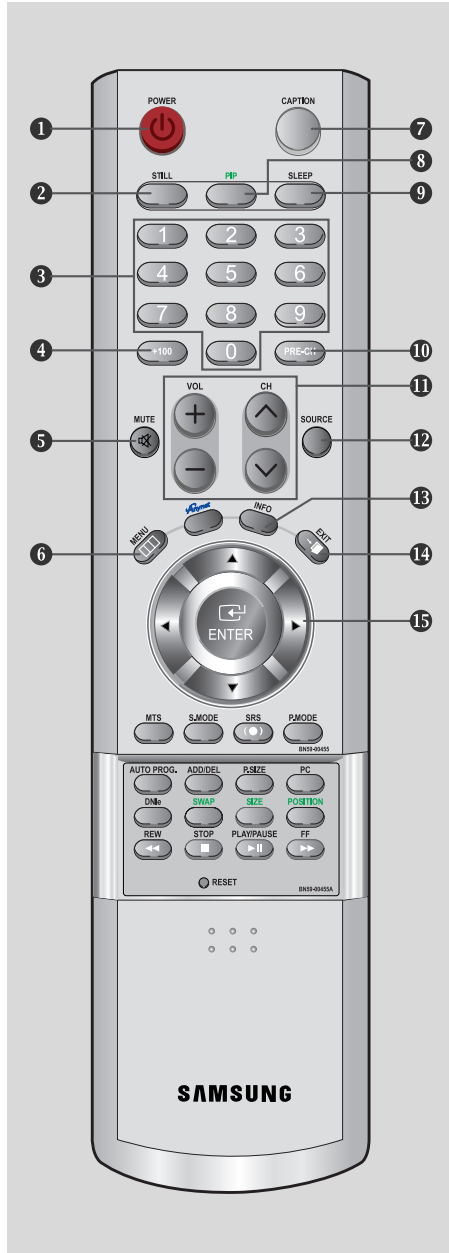
❶ **POWER** ⏻
Turns the TV on and off. (See page 19)

❷ **STILL**
Press to stop the action during a particular scene.
Press again to resume normal video. (See page 34)

❸ **NUMBER BUTTONS**
Press to change the channel.

❹ **+100**
Press to select channels over 100. For example,
to select channel 121, press "+100", then press "2"
and "1". (See page 19)

❺ **MUTE**
Press to temporarily cut off the sound. (See page 20)

❻ **MENU** ▥
Displays the main on-screen menu. (See page 21)

❼ **CAPTION**
Controls the caption decoder. (See page 61)

❽ **PIP**
Picture-in-Picture ON/OFF. (See page 40)

❾ **SLEEP**
Press to select a time for the TV to turn off
automatically. (See page 57)

❿ **PRE-CH**
Tunes to the previous channel. (See page 19)

⓫ **CH∧ and CH∨ (Channel UP/Down)**
Press CH∧ or CH∨ to change channels.
(See page 19)

VOL + and VOL -
Press to increase or decrease the volume.
(See page 20)

⓬ **SOURCE**
Press to display all of the available video sources.
(See page 27)

⓭ **INFO**
Use to see information on the current broadcast.
(See page 21)

⓮ **EXIT**
Press to exit the menu.

⓯ **UP / DOWN / LEFT / RIGHT / ENTER**
Use to select on-screen menu items and change menu
values.
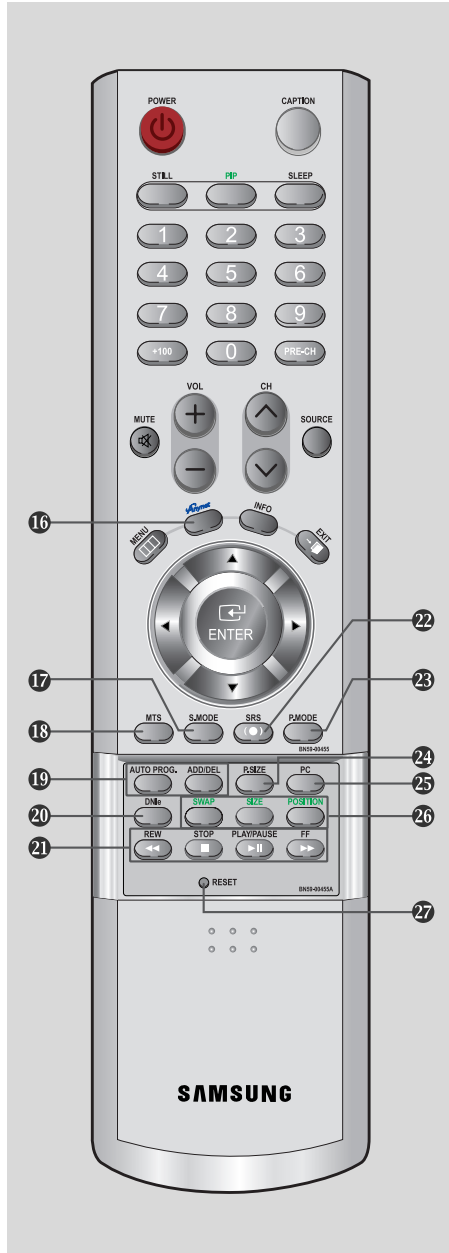
⑯ **Anynet**
Press the Anynet button to bring up the Anynet menu.
(Refer to "Anynet AV Owner's Instructions".)

⑰ **S.MODE**
Adjusts the TV sound by selecting one of the preset
factory settings (or selects your personal, customized
sound settings). (See page 43)

⑱ **MTS**
(Multi channel Television Stereo)
Press to choose stereo, mono or Separate Audio
Program (SAP broadcast). (See page 46)

⑲ **AUTO PROG.**
Press to automatically store selected TV/Cable channels.
(See page 25)

ADD/DEL
Use to store and delete channels to/from memory.
(See page 26)

⑳ **DNIe**
DNIe Demo On/Off.
Off : DNIe Demo mode is deactivated.
On : The right-hand side of the screen shows the improved
DNIe image.
The left-hand side of the screen shows the original
image.(See page 35)

㉑ **VCR/DVD Functions (Anynet mode only)**
- Rewind　　　　　　- Stop
- Play/Pause　　　　- Fast Forward

㉒ **SRS**
Selects TruSurround XT mode. (See page 45)

㉓ **P.MODE**
Adjusts the TV picture by selecting one of the preset
factory settings. (See page 29)

㉔ **P.SIZE**
Press to change the screen size. (See page 33)

㉕ **PC**
Press to switch to the PC mode. (See pages 52~55)

㉖ **SWAP**
Press to interchange the main picture and the sub (PIP)
picture. (See page 41)

SIZE
Press to make the PIP window small, double1, double2.
(See page 42)

POSITION
Press to select the position of sub (PIP) picture.
(See page 42)

㉗ **RESET**
When your remote does not work, change the batteries
and press the RESET button for 2-3 seconds before use.

Installing Batteries in the Remote Control

1

Slide the cover out
completely.
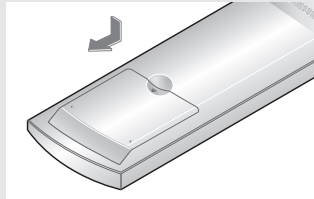
2

Install two AAA size
batteries.
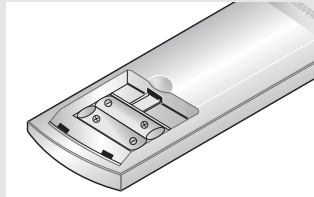
◀ Make sure to match the "**+**" and
"**−**" ends of the batteries with the
diagram inside the compartment.

3

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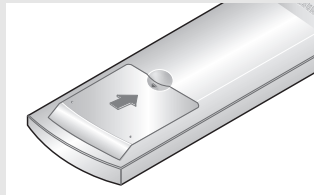
◀ Remove the batteries and store them
in a cool, dry place if you won't be
using the remote control for a long
time.

The remote control can be used
up to about 23 feet from the TV.
(Assuming typical TV usage,
the batteries last for about one year.)

If the remote control doesn't work

Check the following:

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

Chapter 2

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.
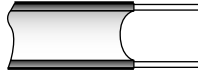
If your antenna has one lead that looks like this, see "Antennas with 75-ohm Round Leads" on page 8.

If you have two antennas, see "Separate VHF and UHF Antennas" on page 8.

Antennas with 300-ohm Flat Twin Leads

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

1

Place the wires from the twin leads under the screws on a 300-75 ohm adaptor (not supplied). Use a screwdriver to tighten the screws.
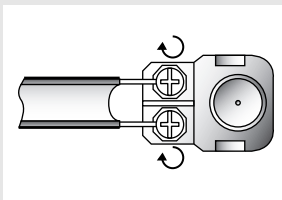
2

Plug the adaptor into the ANT IN terminal on the back of the TV.
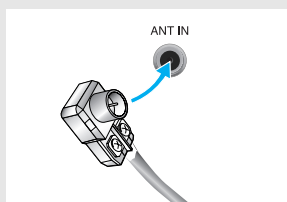
ANT IN

Antennas with 75-ohm Round Leads

1

Plug the antenna lead into the ANT IN terminal on the back of the TV.

ANT IN
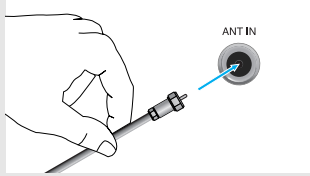
Separate VHF and UHF Antennas

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

1

Connect both antenna leads to the combiner.

UHF
VHF
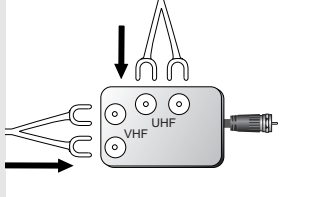
2

Plug the combiner into the ANT IN terminal on the back of the TV.

UHF
VHF
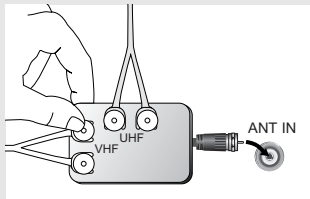
ANT IN

Connecting Cable TV

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

Cable without a Cable Box

1

Plug the incoming cable into the ANT IN terminal on back of the TV.
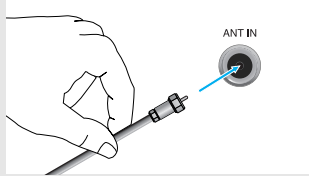
◀ Because this TV is cable-ready, you do not need a cable box to view unscrambled cable channels.

Connecting to a Cable Box that Descrambles All Channels

1

Find the cable that is connected to the ANT OUT terminal on your cable box.
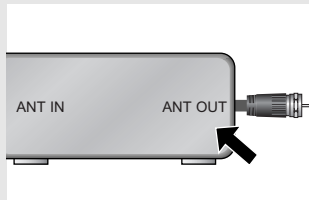
◀ This terminal might be labeled "ANT OUT", "VHF OUT" or simply, "OUT".

2

Connect the other end of this cable to the ANT IN terminal on the back of the TV.
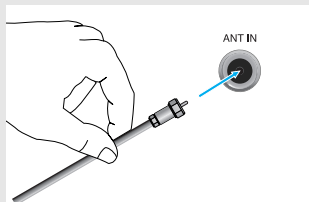
Connecting to a Cable Box that Descrambles Some Channels

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 RF cable. (These items are available at most electronics stores.)

1

Find and disconnect the cable that is connected to the ANT IN terminal on your cable box.
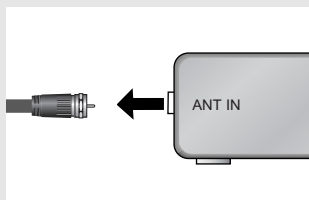
◀ This terminal might be labeled "ANT IN", "VHF IN" or simply, "IN".

2

Connect this cable to a two-way splitter.

Incoming cable

Splitter

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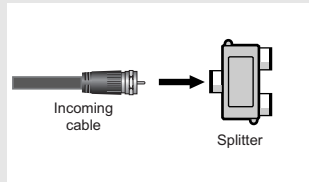
Connect an RF cable between an OUTPUT terminal on the splitter and the IN terminal on the cable box.

Incoming cable

Splitter

IN   CABLE   OUT
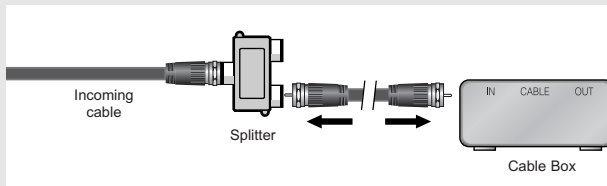
Cable Box

4

Connect an RF cable between the ANT OUT terminal on the cable box and the B–IN terminal on the A/B switch.

Incoming cable

Splitter

IN   CABLE   OUT

Cable Box

A
B
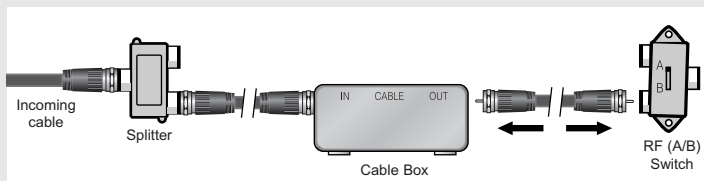
RF (A/B) Switch

5

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

Incoming cable

Splitter

IN   CABLE   OUT

Cable Box

A
B
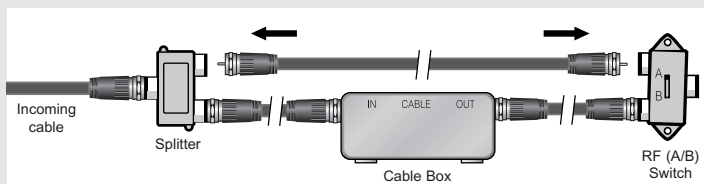
RF (A/B) Switch

6

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

Incoming cable

Splitter

IN   CABLE   OUT

Cable Box

A
B

RF (A/B) Switch

ANT IN

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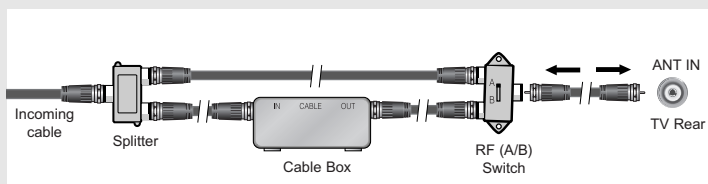
After you've made this connection, set the A/B switch to the "A" position for normal viewing. Set the A/B switch to the "B" position to view scrambled channels.
(When you set the A/B switch to "B", you will need to tune your TV to the cable box's output channel, which is usually channel 3 or 4.)

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 7-10).
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.
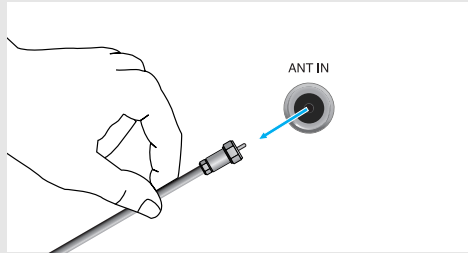
ANT IN

2

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

VCR Rear Panel

ANT IN   ANT OUT
S-VIDEO OUT VIDEO OUT   L   AUDIO OUT   R

Incoming Cable or Antenna

3
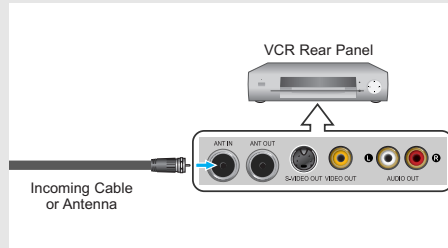
Connect an RF cable between the ANT OUT terminal on the VCR and the ANT IN terminal on the TV.
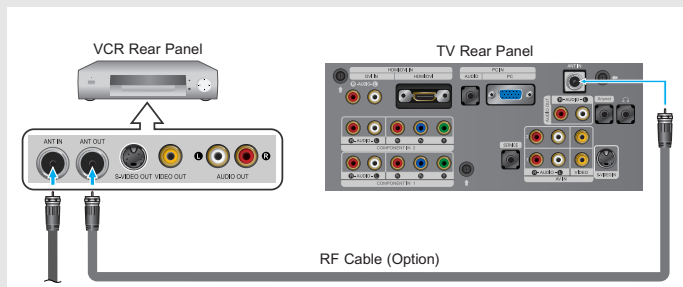
VCR Rear Panel

TV Rear Panel

ANT IN   ANT OUT
S-VIDEO OUT VIDEO OUT   AUDIO OUT

RF Cable (Option)

4

Connect an audio cable between the AUDIO OUT jacks on the VCR and the AV IN [R-AUDIO-L] jacks on the TV.

VCR Rear Panel

TV Rear Panel

Audio Cable (Option)

RF Cable (Option)
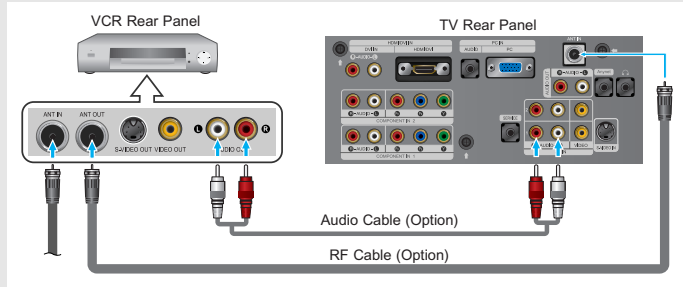
If you have a "mono" (non-stereo) VCR, use the Y-connector (not supplied) to hook up to the left and right audio input jacks of the TV.

5

Connect a video cable between the VIDEO OUT jack on the VCR and the AV IN [VIDEO] jack on the TV.

VCR Rear Panel

TV Rear Panel

Audio Cable (Option)

Video Cable (Option)

RF Cable (Option)
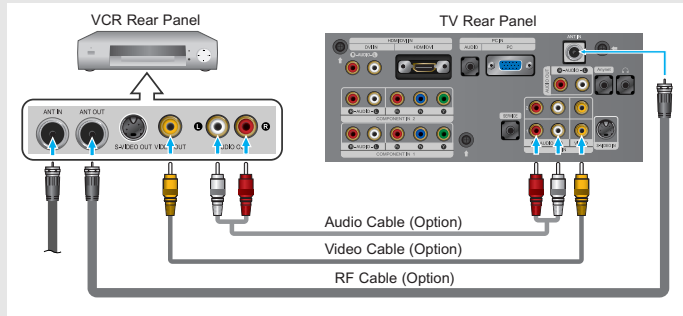
Follow the instructions in "Viewing a VCR or Camcorder Tape" to view your VCR tape.

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

* When connecting an external device, match the color of the connection terminal to the cable.

Connecting an S-VHS VCR

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

1

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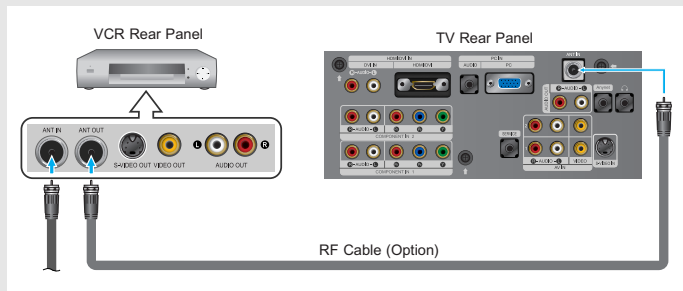
VCR Rear Panel

TV Rear Panel

RF Cable (Option)

2

Connect an audio cable between the AUDIO OUT jacks on the VCR and the AV IN [R-AUDIO-L] jacks on the TV.

VCR Rear Panel

TV Rear Panel

Audio Cable (Option)

RF Cable (Option)
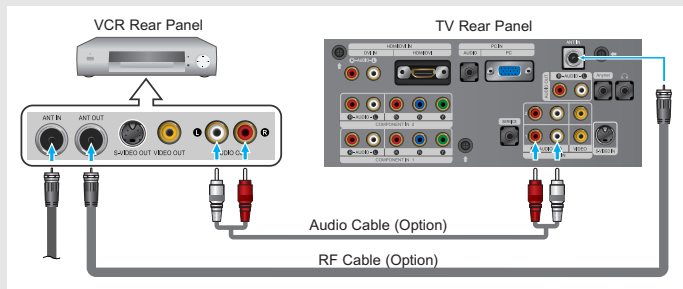
3

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

VCR Rear Panel

TV Rear Panel

Audio Cable (Option)

S-Video Cable (Option)

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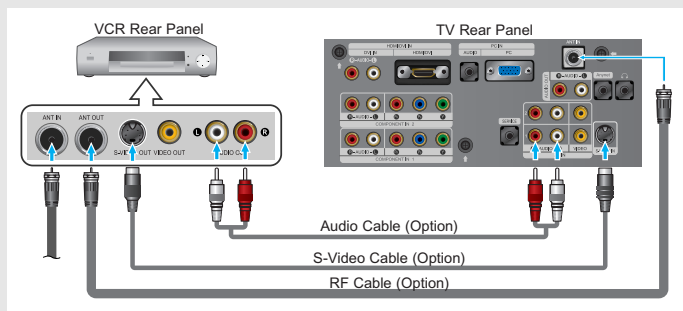
An S-Video cable is usually included with an S-VHS VCR.
(If not, check your local electronics store.)

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

* When connecting an external device, match the color of the connection terminal to the cable.

Connecting a DVD Player

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

1

Connect an audio cable between the COMPONENT IN 1 or COMPONENT IN 2 [R-AUDIO-L] jacks on the TV and the AUDIO OUT jacks on the DVD player.

DVD Player Rear Panel

TV Rear Panel

Audio Cable (Option)

2

Connect a component cable between the COMPONENT IN 1 or COMPONENT IN 2 [P$_R$, P$_B$, Y] jacks on the TV and the COMPONENT [Y, P$_B$, P$_R$] jacks on the DVD player.

DVD Player Rear Panel

TV Rear Panel

Audio Cable (Option)
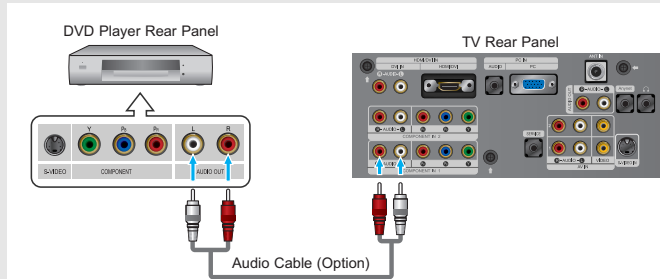
Component Cable (Option)
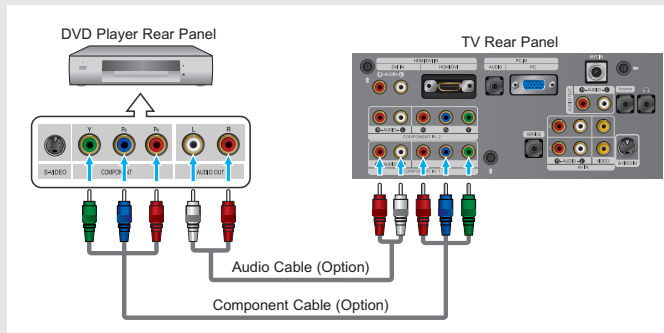
Note: For an explanation of Component video, see your DVD player owner's manual. Be sure to match the component video and audio connections. For example, if connecting the video cable to Component In 1, connect the audio cable to Component In 1 also.

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

* When connecting an external device, match the color of the connection terminal to the cable.

Connecting a Digital TV Set-top box

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

1

Connect an audio cable between the COMPONENT IN 1 or COMPONENT IN 2 [R-AUDIO-L] jacks on the TV and the AUDIO OUT jacks on the Set-top box.
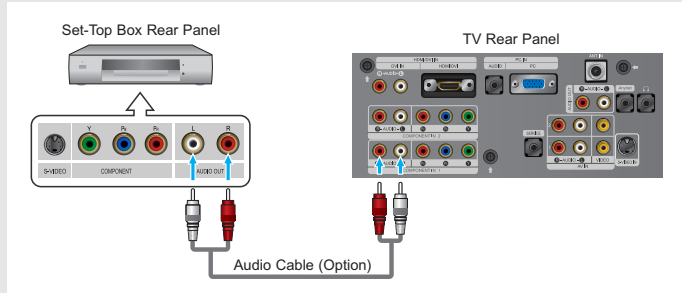
Set-Top Box Rear Panel

TV Rear Panel

Audio Cable (Option)

2

Connect a component cable between the COMPONENT IN 1 or COMPONENT IN 2 [P$_R$, P$_B$, Y] jacks on the TV and the COMPONENT [Y, P$_B$, P$_R$] jacks on the Set-top box.

Set-Top Box Rear Panel

TV Rear Panel

Audio Cable (Option)

Component Cable (Option)
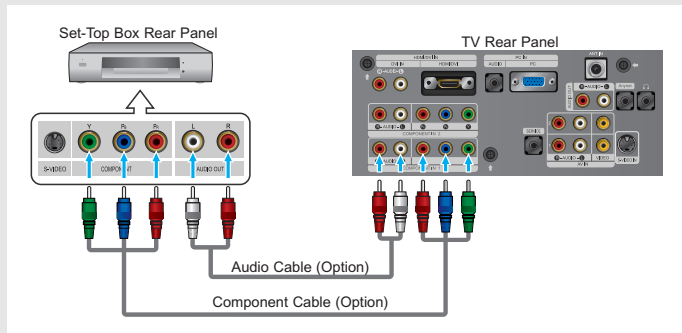
Note: For an explanation of Component video, see your Set-top box owner's manual.

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

∗ When connecting an external device, match the color of the connection terminal to the cable.

Connecting an Amplifier/DVD Home Theater

1

Connect an audio cable between the AUDIO OUT [R-AUDIO-L] jacks on the TV and the AUDIO IN jacks on the Amplifier/ DVD Home Theater.
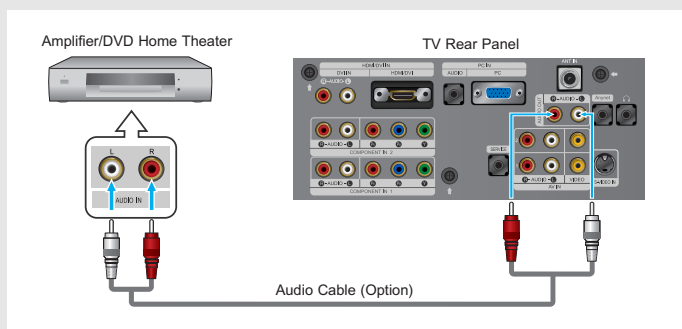
Amplifier/DVD Home Theater

TV Rear Panel

Audio Cable (Option)

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

∗ When connecting an external device, match the color of the connection terminal to the cable.

Connecting a DVD/Set-top box via DVI

This can be applied only if there is the DVI Output connector on the external device.

1

Connect a DVI-to-HDMI cable or DVI-HDMI adaptor between the HDMI/DVI connector on the TV and the DVI connector on the DVD player/Set-top box.

DVD Player Rear Panel

TV Rear Panel

DVI-to-HDMI Cable (Option)

2
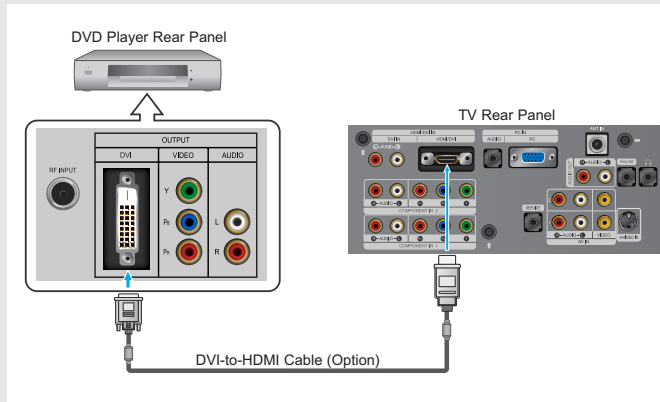
Connect an audio cable between the DVI IN [R-AUDIO-L] jack on the TV and the AUDIO OUT jacks on the DVD player/Set-top box.
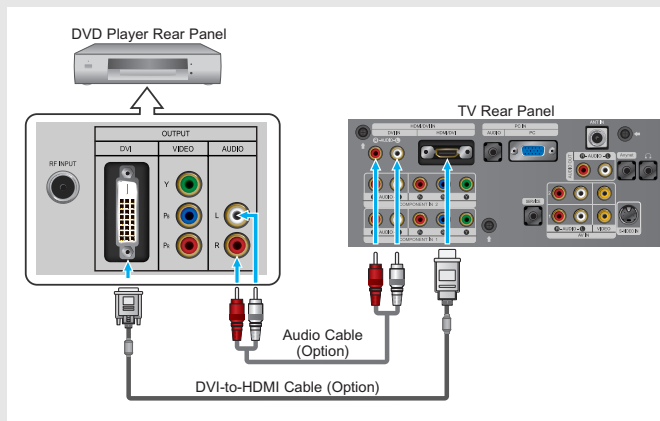
DVD Player Rear Panel

TV Rear Panel

Audio Cable
(Option)

DVI-to-HDMI Cable (Option)

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

∗ When connecting an external device, match the color of the connection terminal to the cable.

Connecting a DVD/Set-top box via HDMI

This can be applied only if there is the HDMI Output connector on the external device.

1

Connect an HDMI cable between the HDMI/DVI connector on the TV and the HDMI connector on the DVD player/Set-top box.

DVD Player Rear Panel

TV Rear Panel

HDMI Cable (Option)
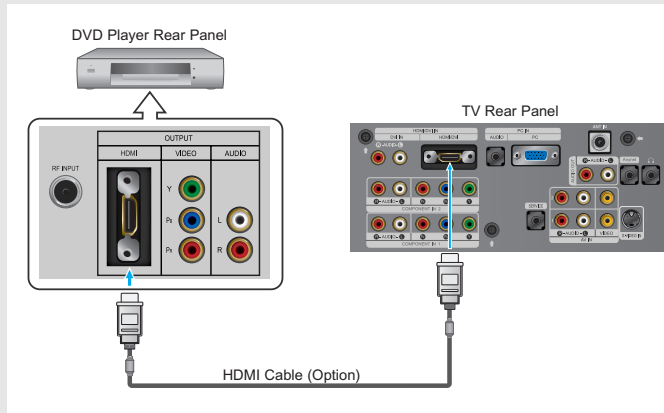
Note: No sound connection is needed for an HDMI to HDMI connection.

What is HDMI?

• HDMI, or high-definition multimedia interface, is a next-generation interface that enables the transmission of digital audio and video signals using a single cable without compression.

• "Multimedia interface" is a more accurate name for it especially because it allows multiple channels of digital audio (5.1 channels).The difference between HDMI and DVI is that the HDMI device is smaller in size, has the HDCP (High Bandwidth Digital Copy Protection) coding feature installed, and supports multi-channel digital audio.

Connecting a PC

1

Connect a PC video cable(D-Sub) between PC IN [PC] connector on the TV and the PC output connector on your computer.

TV Rear Panel

PC Video Cable (Option)
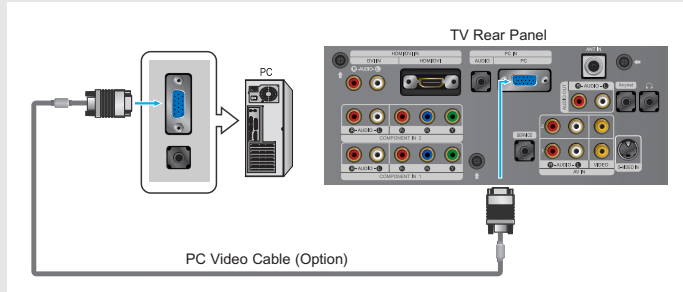
2

Connect a PC audio cable between PC IN [AUDIO] on the TV and the Audio Out of the sound card on your computer.

TV Rear Panel

PC Audio Cable (Option)

PC Video Cable (Option)
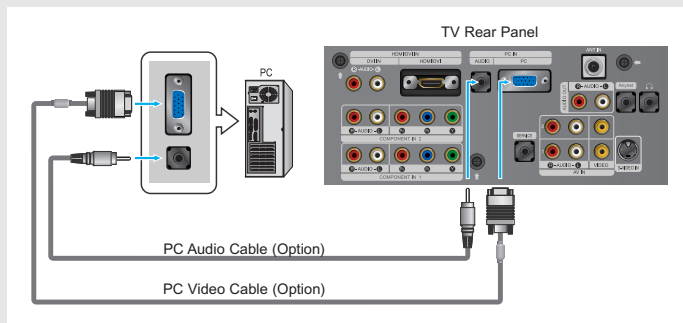
Chapter 3

OPERATION

Turning the TV On and Off

1

Press the **POWER**⏻ button
on the remote.
You can also use the **POWER**⏻
button on the front of the panel.
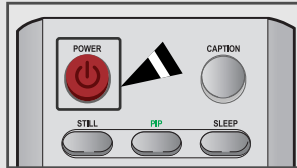
Changing Channels

Using the Channel Buttons

1

Press the **CH** ⌃/⌄ buttons to
change channels.
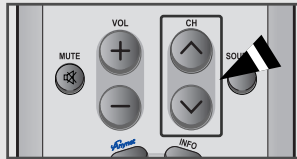
When you press the **CH** ⌃/⌄ buttons, the TV changes channels in sequence.
You will see all the channels that the TV has memorized. (The TV must have
memorized at least three channels). You will not see channels that were either
erased or not memorized. See pages 24-25 to memorize channels.

Using the Number Buttons

1

Press the number buttons to go directly to a channel.
ex) To select channel 27, press " ② " → " ⑦ ".
    To select channel 108, press " +100 " → " ⓪ " → " ⑧ ".

When you use the number buttons, you can directly select channels that were
either erased or not memorized. 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.
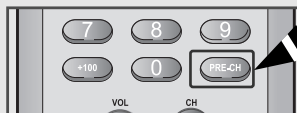
To quickly switch between two channels that are far apart, tune to one channel,
then use the number button to select the second channel. Then use the PRE-CH
button to quickly alternate between them.

Adjusting the Volume

1

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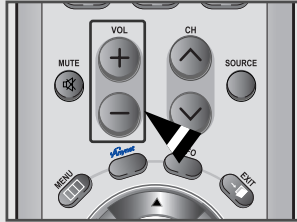
Using Mute

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 +** and **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.

Air   3
Mono

Picture   : Dynamic
Sound   : Custom
MTS   : Stereo
SRS TSXT   : Off
-- : -- am
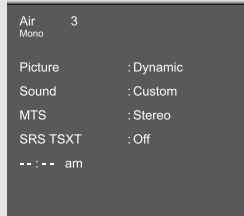
◀ Press the INFO button once more or wait approximately 10 seconds and it disappears automatically.

◀ Allows the user to adjust the settings according to his/her preference and shows the current settings.

Viewing the Menus

1

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

The main menu appears on the screen.

It's left side has five icons: Input, Picture, Sound, Channel, Setup.

TV	Input
Input	Source List : TV ▸
Picture	Edit Name ▸
Sound	Anynet ▸
Channel	
Setup	♦ Move ⏎ Enter ▥ Exit

◀The on-screen menus disappear from the screen after about two minutes.

2

Use the **UP/DOWN ▲▼** buttons to select one of the 5 icons.
Then press the **ENTER** button to access the icon's sub-menu.

3

Press the **EXIT** button to exit.

Plug & Play Feature

When the TV is initially powered on, several basic customer settings proceed automatically and subsequently.

1

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

The message "Start Plug & Play" is displayed with "OK" selected.

> Plug & Play
> Start Plug & Play
> OK
> ⏎ Enter   ▥ Exit
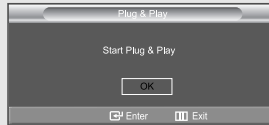
2

Select the appropriate language by pressing the **UP/DOWN** ▲▼ buttons.

Press the **ENTER**⏎ button to confirm your choice.

> Plug & Play
> Language   English
>   Français
>   Español
>   Português
> ⬍ Move   ⏎ Enter   ▥ Skip
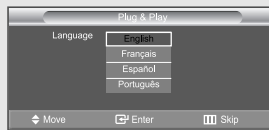
3

The message "Check antenna input." is displayed with "OK" selected.

Press the **ENTER**⏎ button.

> Plug & Play
> Check antenna input.
> OK
> ⏎ Enter   ▥ Skip

4
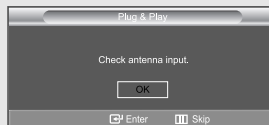
Press the **UP/DOWN** ▲▼ buttons to select "Air", "STD", "HRC", or "IRC", then press the **ENTER**⏎ button.
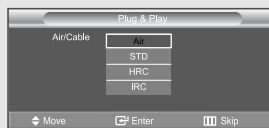
> Plug & Play
> Air/Cable   Air
>   STD
>   HRC
>   IRC
> ⬍ Move   ⏎ Enter   ▥ Skip

5

Press the **ENTER** button to select "Start".

The TV will begin memorizing all of the available channels.

Plug & Play
Air 3
Start
Enter Skip

Plug & Play
Air 15
Stop
Enter Skip
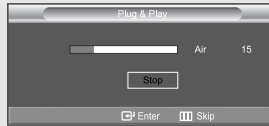
◀ To stop the search before it has finished, press the **ENTER** button with "Stop" selected.

6

Press the **ENTER** button.

Press the **LEFT/RIGHT** ◀▶ buttons to move to the "Hour", "Minute" or "am/pm".

Set the "Hour", "Minute" or "am/pm" by pressing the **UP/DOWN** ▲▼ buttons. (Refer to "Setting the Clock" on page 56.)

Plug & Play
Hour Minute am/pm
Clock Set -- -- am
Enter Skip

Plug & Play
Hour Minute am/pm
Clock Set 12 : 00 am
Adjust Move Enter Skip
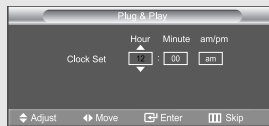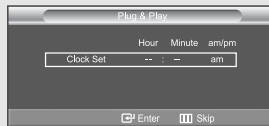
7

Press the **MENU** button to confirm your setting.

The message "Enjoy your watching." is displayed.

Enjoy your watching.
OK
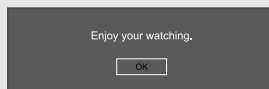
Memorizing the Channels

Your TV can memorize and store all of the available channels for both "off-air" (antenna) and cable channels. After the available channels are memorized, use the CH ⌃ and CH ⌄ buttons to scan through the channels. This eliminates the need to change channels by entering the channel digits. There are three steps for memorizing channels: selecting a broadcast source, memorizing the channels (automatic) and adding and deleting channels (manual).

Selecting the Video Signal-source

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

1

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

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

T V	Channel
Input	Air/Cable : Air ▸
Picture	Auto Program ▸
Sound	Add/Delete ▸
Channel	Fine Tune ▸
Setup	♦ Move ↵ Enter ▥ Return

2

Press the **ENTER** button.

Repeatedly press the **UP/DOWN ▲▼** buttons to cycle through these choices: "Air", "STD", "HRC", or "IRC" (all cable TV).

Press the **EXIT** button to exit.

T V	Channel
Input	Air/Cable : Air
Picture	Auto Program STD
Sound	Add/Delete HRC
Channel	Fine Tune IRC
Setup	♦ Move ↵ Enter ▥ Return
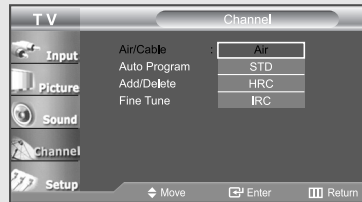
Note: STD, HRC and IRC identify various types of cable TV systems. Contact your local cable company to identify the type of cable system that exists in your particular area.
At this point, the signal source has been selected.
Proceed to "Storing Channels in Memory" (next page).

Storing Channels in Memory (Automatic Method)

1

First, select the correct signal source (Air, STD, HRC, or IRC).
See steps 1~2 on the previous page.

2
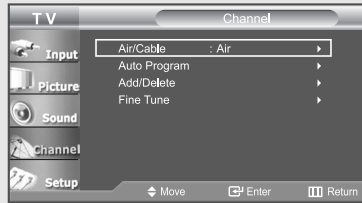
Press the **UP/DOWN** ▲▼ buttons to select "Auto Program".

Press the **ENTER** button.
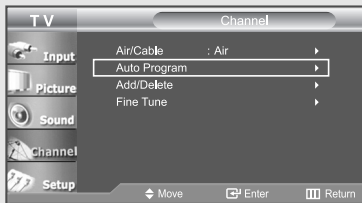
3

Press the **ENTER** button to select "Start".
The TV will begin memorizing all of the available channels.

◀ The TV automatically cycles through all of the available channels and stores them in memory. This takes about one to two minutes.
Press the **ENTER** button at any time to interrupt the memorization process and return to the "Channel" menu.
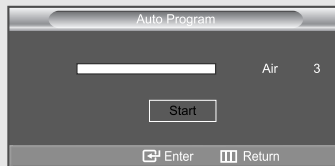
4

After all the available channels are stored, the "Channel" menu reappears.

Press the **EXIT** button to exit.

◀ To stop the search before it has finished, press the **ENTER** button with "Stop" selected.
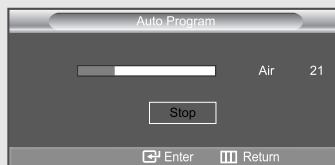
Alternate method:

Press the **AUTO PROG.** button under the remote's cover.

English-25

Adding and Erasing Channels (Manual Method)

1

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

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

Press the **UP/DOWN** ▲▼ buttons to select "Add/Delete".

Press the **ENTER** button.

Press the **CH** ∧ or **CH** ∨ button to select channel that you wish to add or delete.

Press the **ENTER** button to select "Add" or "Delete" (Pressing the **ENTER** button toggles between the two).

Press the **EXIT** button to exit.

TV	Channel
Input	Air/Cable : Air ▶
Picture	Auto Program ▶
Sound	Add/Delete ▶
Channel	Fine Tune ▶
Setup	
	◆ Move ⏎ Enter ▥ Return

TV	Channel
Input	Air/Cable : Air ▶
Picture	Auto Program ▶
Sound	Add/Delete ▶
Channel	Fine Tune ▶
Setup	
	◆ Move ⏎ Enter ▥ Return

Add/Delete

Air   3   Not in Memory

Add

◇ CH Change   ⏎ Enter   ▥ Return

Add/Delete

Air   3   In Memory

Delete

◇ CH Change   ⏎ Enter   ▥ Return

Alternate method:

Use the number buttons to directly select the channel that will be added or erased. Press the **ADD/DEL** button under the remote's cover.

Repeatedly pressing the **ENTER** button will alternate between "Add" and "Delete". Press the **EXIT** button to exit.
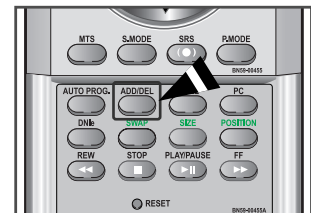
You can view any channel (including an erased channel) by using the number buttons on the remote control.

To Select the Source

Use to select TV or another external input source connected to the TV.
Use to select the input source of your choice.

1

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

Press the **ENTER** button to select "Input".

TV	Input	
Input	Source List : TV	▶
Picture	Edit Name	▶
Sound	Anynet	▶
Channel		
Setup		

◆ Move   Enter   Return

2

Press the **ENTER** button.

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

TV	Sourcr List	
Input	TV	
Picture	AV1 : —	
	AV2 : —	
Sound	S-Video : —	
	Component1 : —	
	Component2 : —	
Channel	PC : —	
Setup	HDMI : —	

◆ Move   Enter   Return

Alternate method:

Press the **SOURCE** button on the remote control to view an external signal source.

To Edit the Input Source Name

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

1

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

Press the **ENTER** button to select "Input".

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

TV	Input	
Input	Source List	: TV ▶
Picture	Edit Name	▶
Sound	Anynet	▶
Channel		
Setup	◆ Move ⏎ Enter ▥ Return	

TV	Input	
Input	Source List	: TV ▶
Picture	Edit Name	▶
Sound	Anynet	▶
Channel		
Setup	◆ Move ⏎ Enter ▥ Return	

2
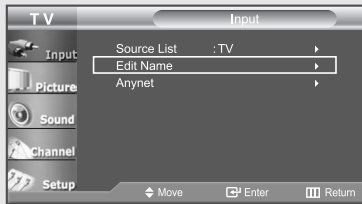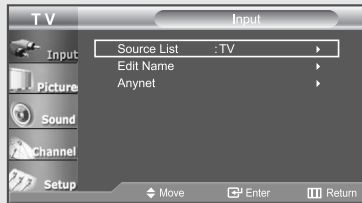
Press the **UP/DOWN** ▲▼ buttons to select "AV1", "AV2", "S-Video", "Component1", "Component2", "PC", or "HDMI" input jack, then press the **ENTER** button.

TV	Edit Name	
Input	AV1	: ---- ▶
Picture	AV2	: ---- ▶
Sound	S-Video	: ---- ▶
Channel	Component1	: ---- ▶
Setup	Component2	: ---- ▶
	PC	: ---- ▶
	HDMI	: ---- ▶
	◆ Move ⏎ Enter ▥ Return	

3
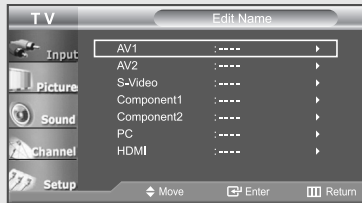
Press the **UP/DOWN** ▲▼ buttons to select "VCR", "DVD", "D-VHS", "Cable STB", "HD STB", "Satellite STB", "AV Receiver", "DVD Receiver", "Game", "Camcorder", "DVD Combo", "DHR (DVD HDD Recoder)", or "PC" input source, then press the **ENTER** button.

Press the **EXIT** button to exit.

TV	Edit Name	
Input	AV1	: ----
Picture	AV2	: VCR
Sound	S-Video	: DVD
Channel	Component1	: D-VHS
Setup	Component2	: Cable STB
	PC	: HD STB
	HDMI	: Satellite STB ▼
	◆ Move ⏎ Enter ▥ Return	

TV	Edit Name	
Input	AV1	: ▲
Picture	AV2	: AV Receiver
Sound	S-Video	: DVD Receiver
Channel	Component1	: Game
Setup	Component2	: Camcorder
	PC	: DVD Combo
	HDMI	: DHR PC
	◆ Move ⏎ Enter ▥ Return	
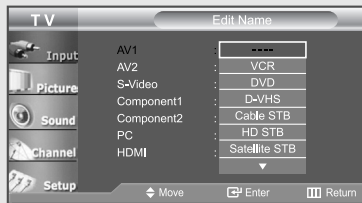
Using Automatic Picture Settings

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

1

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

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

TV	Picture	
Input	Mode	: Dynamic ▸
	Size	: Wide ▸
Picture	Digital NR	: On ▸
	DNIe Demo	: Off ▸
Sound	My Color Control	▸
	Dynamic Contrast	: On ▸
Channel	Brightness Sensor	: Off ▸
	PIP	▸
Setup		
	⬍ Move	⊡ Enter ▥ Return

2

Press the **ENTER** ⊡ button.

TV	Mode	
Input	Mode	: Dynamic ▸
	Contrast	100
Picture	Brightness	50
	Sharpness	75
Sound	Color	55
	Tint	G 50 ⎯ R 50
Channel	Color Tone	: Cool1 ▸
	Reset	▸
Setup		
	⬍ Move	⊡ Enter ▥ Return

3
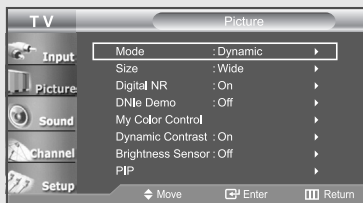
Press the **ENTER** ⊡ button again to select "Mode ".

Press the **UP/DOWN** ▲▼ buttons to select "Dynamic", "Standard", "Movie", or Custom".

Press the **ENTER** ⊡ button.

Press the **EXIT** button to exit.

TV	Mode	
Input	Mode	Dynamic
	Contrast	Standard 100
Picture	Brightness	Movie 50
	Sharpness	Custom 75
Sound	Color	55
	Tint	G 50 ⎯ R 50
Channel	Color Tone	: Cool1
	Reset	
Setup		
	⬍ Move	⊡ Enter ▥ Return

Alternate method:

Simply press the **P.MODE** button on the remote control to select one of the standard picture settings.
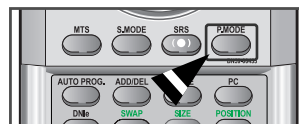
- Choose *Dynamic* to increase the clarity and sharpness of the picture.
- Choose *Standard* for the standard factory settings.
- Choose *Movie* when watching movies.
- Choose *Custom* if you want to adjust the settings according to personal preference (see "Customizing the Picture, page 30).

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 the previous page.)

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

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

TV		Picture	
Input	Mode	: Dynamic	▶
	Size	: Wide	▶
Picture	Digital NR	: On	▶
	DNIe Demo	: Off	▶
Sound	My Color Control		▶
	Dynamic Contrast	: On	▶
Channel	Brightness Sensor	: Off	▶
	PIP		▶
Setup	♦ Move	↵ Enter	Ⅲ Return

2
Press the **ENTER** button.

TV		Mode	
Input	Mode	: Dynamic ▶	
	Contrast		100
Picture	Brightness		50
	Sharpness		75
Sound	Color		55
	Tint	G 50 ━━━R	50
Channel	Color Tone	: Cool1 ▶	
	Reset	▶	
Setup	♦ Move	↵ Enter	Ⅲ Return
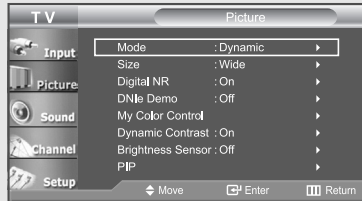
3
Press the **UP/DOWN** ▲▼ button to select a particular item (Contrast, Brightness, Sharpness, Color, or Tint), then press the **ENTER** button.

TV		Mode	
Input	Mode	: Dynamic ▶	
	Contrast		100
Picture	Brightness		50
	Sharpness		75
Sound	Color		55
	Tint	G 50 ━━━R	50
Channel	Color Tone	: Cool1 ▶	
	Reset	▶	
Setup	♦ Move	↵ Enter	Ⅲ Return

◀ The adjusted values are stored according to the selected Picture mode.

4
Press the **LEFT/RIGHT** ◀▶ buttons to decrease or increase the value of a particular item.

For example, if you select "Contrast", pressing the **RIGHT** ▶ button increases it.

Press the **EXIT** button to exit.

△		
Contrast		100
▽		

◀ You can select the option (Contrast, Brightness, Sharpness, Color, or Tint) to be adjusted by pressing the **UP/DOWN** ▲▼ button.

Adjusting the Color Tone

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

1

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

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

TV	Picture	
Input	Mode	: Dynamic ▶
	Size	: Wide ▶
Picture	Digital NR	: On ▶
	DNIe Demo	: Off ▶
Sound	My Color Control	▶
	Dynamic Contrast	: On ▶
Channel	Brightness Sensor	: Off ▶
	PIP	▶
Setup		

♦ Move 🖪 Enter 🎞 Return

2

Press the **ENTER** button.

TV	Mode	
Input	Mode	: Dynamic ▶
	Contrast	100
Picture	Brightness	50
	Sharpness	75
Sound	Color	55
	Tint	G 50 R 50
Channel	Color Tone	: Cool1 ▶
	Reset	▶
Setup		

♦ Move 🖪 Enter 🎞 Return

3
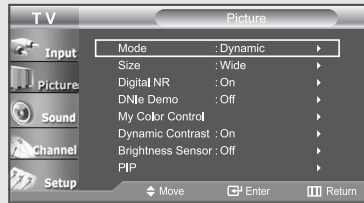
Press the **UP/DOWN** ▲▼ button to select "Color Tone", then press the **ENTER** button.

TV	Mode	
Input	Mode	: Dynamic ▶
	Contrast	100
Picture	Brightness	50
	Sharpness	75
Sound	Color	55
	Tint	G 50 R 50
Channel	Color Tone	: Cool1 ▶
	Reset	▶
Setup		

♦ Move 🖪 Enter 🎞 Return

4

Press the **UP/DOWN** ▲▼ buttons to select "Cool2", "Cool1", "Normal", "Warm1", or "Warm2".

Press the **ENTER** button.

Press the **EXIT** button to exit.

TV	Mode	
Input	Mode	: Dynamic ▶
	Contrast	100
Picture	Brightness	50
	Sharpness	Cool2 75
Sound	Color	Cool1 55
	Tint	G 5 Nomal R 50
Channel	Color Tone	Warm1
	Reset	Warm2
Setup		

♦ Move 🖪 Enter 🎞 Return

◀ Choose from the following Color Tone settings: "Cool2", "Cool1","Normal", "Warm1", "Warm2" according to personal preference.

◀ The adjusted values are stored according to the selected Picture mode.

◀ The "Reset" will be set for each picture mode.

Resetting the Picture Settings to the Factory Defaults

Press the **ENTER** button again to select "Mode ".

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

| TV	Mode	
Input	Mode	: Dynamic ▶
	Contrast	100
Picture	Brightness	50
	Sharpness	75
Sound	Color	55
	Tint	G 50 R 50
Channel	Color Tone	: Cool1 ▶
	Reset	▶
Setup		

♦ Move 🖪 Enter 🎞 Return

Changing the Screen Size

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

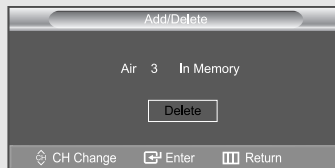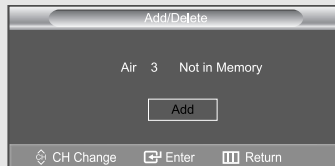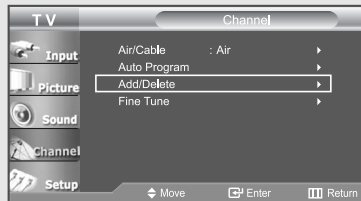Press the **UP/DOWN** ▲▼ buttons to select "Picture", then press the **ENTER** button.
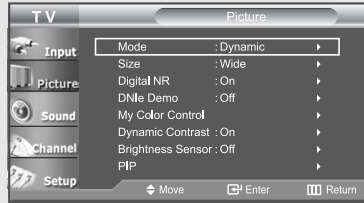
◀ Only the wide and 4:3 sizes can be selected when the Source is PC.

TV		Picture
Input	Mode	: Dynamic ▶
Picture	Size	: Wide ▶
Sound	Digital NR	: On ▶
	DNIe Demo	: Off ▶
	My Color Control	▶
Channel	Dynamic Contrast	: On ▶
	Brightness Sensor	: Off ▶
Setup	PIP	▶
	♦ Move	Enter Return

2
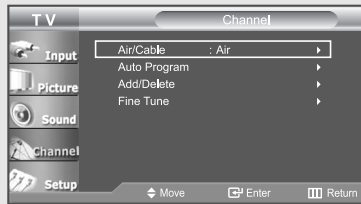Press the **UP/DOWN** ▲▼ buttons to select "Size" then press the **ENTER** button.

TV		Picture
Input	Mode	: Dynamic ▶
Picture	Size	: Wide ▶
Sound	Digital NR	: On ▶
	DNIe Demo	: Off ▶
	My Color Control	▶
Channel	Dynamic Contrast	: On ▶
	Brightness Sensor	: Off ▶
Setup	PIP	▶
	♦ Move	Enter Return
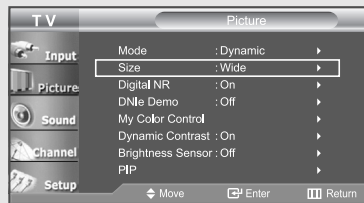
3
Press the **UP/DOWN** ▲▼ buttons to select "Wide", "Panorama", "Zoom" or "4:3".

Press the **EXIT** button to exit.
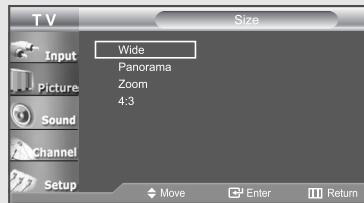
◀ Supported screen resolution modes may differ depending on the model of the product.

TV	Size
Input	Wide
Picture	Panorama
Sound	Zoom
	4:3
Channel	
Setup	
	♦ Move Enter Return

- Wide : Sets the picture to 16:9 wide mode.

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

- Zoom : Magnifies the size of the picture on the screen.

   [Positioning and Sizing the screen using Zoom]
   • Resizing the screen using the Zoom enables the positioning and sizing of the screen to up/down direction using the
      ▲ or ▼ button as well as the screen size.
   • Move the screen up/down using the ▲ or ▼ button after selecting the 🔲 by pressing the ◀ or ▶ button.
   • Resize the screen vertically using the ▲ or ▼ button after selecting the 🔲 by pressing the ◀ or ▶ button. (Pressing the ▲ button extends it upward and pressing the ▼ button extends it downward.)

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

Zoom

1

Press the **UP/DOWN**▲▼ buttons to select "Zoom".

T V	Size
Input	Wide
Picture	Panorama
	Zoom
Sound	4:3
Channel	
Setup	◆ Move ◯ Enter ▥ Return
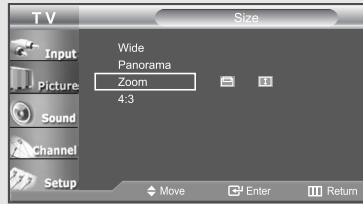
2

Select ▤ by pressing the **LEFT/RIGHT**◀▶ buttons. Use the **UP/DOWN**▲▼ button to move the picture up and down.

T V	Size
Input	Wide
Picture	Panorama
	Zoom
Sound	4:3
Channel	
Setup	◆ Move ◆ Adjust ▥ Return
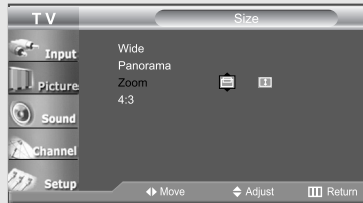
3

After selecting ▤, use the **UP/DOWN** ▲▼ button to magnify or reduce the picture size in a vertical direction.

Press the **EXIT** button to exit.

T V	Size
Input	Wide
Picture	Panorama
	Zoom
Sound	4:3
Channel	
Setup	◆ Move ◆ Adjust ▥ Return
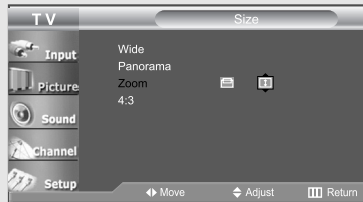
Alternate method:

Press the **P.SIZE** button under the remote's cover to change the screen size.
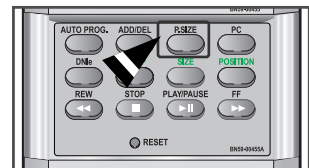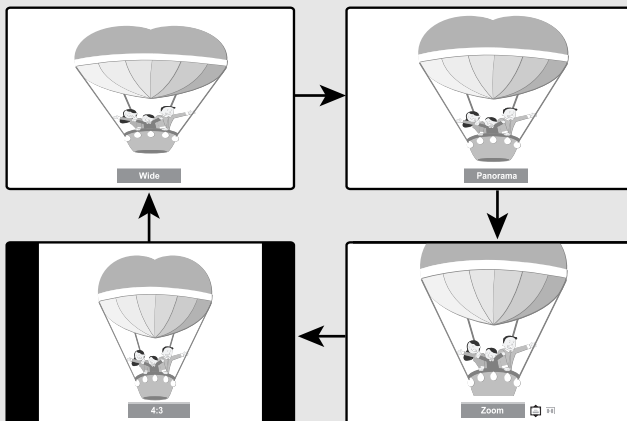
Freezing the Picture
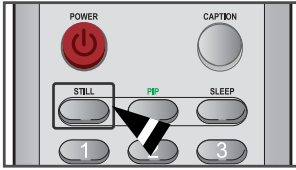
1
Press the **STILL** button to freeze a moving picture.
• Normal sound will still be heard.
  Press again to cancel.

Digital Noise Reduction

If the broadcast signal received by your TV is weak, you can activate the Digital Noise Reduction feature to help reduce any static and ghosting that may appear on the screen.

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

Press the **UP/DOWN** ▲▼ buttons to select "Picture", then press the **ENTER** button.
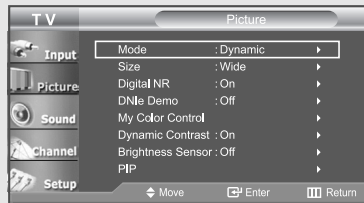
2
Press the **UP/DOWN** ▲▼ buttons to select "Digital NR", then press the **ENTER** button.

3
Press the **UP/DOWN** ▲▼ buttons to select "Off".
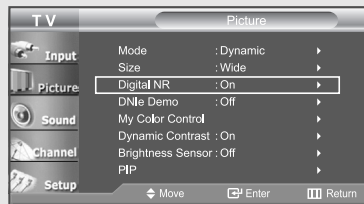
Press the **EXIT** button to exit.

DNIe (Digital Natural Image engine)

Samsung's new technology brings you more detailed images with contrast, white enhancement and 3D noise reduction.
You can see how DNIe improves the picture by setting DNIe demo mode to On.

1

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

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

TV	Picture	
Input	Mode	: Dynamic ▶
Picture	Size	: Wide ▶
	Digital NR	: On ▶
	DNIe Demo	: Off ▶
Sound	My Color Control	▶
	Dynamic Contrast	: On ▶
Channel	Brightness Sensor	: Off ▶
Setup	PIP	▶
	◆ Move	↵ Enter |||| Return

◀ This function doesn't work when Source is in PC mode.

2
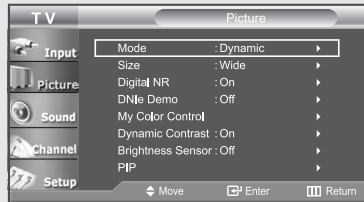
Press the **UP/DOWN** ▲▼ buttons to select "DNIe Demo", then press the **ENTER** button.

TV	Picture	
Input	Mode	: Dynamic ▶
Picture	Size	: Wide ▶
	Digital NR	: On ▶
	DNIe Demo	: Off ▶
Sound	My Color Control	▶
	Dynamic Contrast	: On ▶
Channel	Brightness Sensor	: Off ▶
Setup	PIP	▶
	◆ Move	↵ Enter |||| Return

3

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

Press the **EXIT** button to exit.

TV	Picture	
Input	Mode	: Dynamic
Picture	Size	: Wide
	Digital NR	: On
	DNIe Demo	Off
Sound	My Color Control	On
	Dynamic Contrast	: On
Channel	Brightness Sensor	: Off
Setup	PIP	
	◆ Move	↵ Enter |||| Return
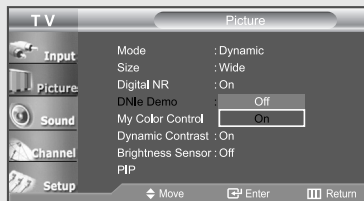
Alternate method:

Press the **DNIe** button under the remote's cover to change the DNIe Demo mode.

- DNIe Demo: Off
  DNIe Demo mode is deactivated.

- DNIe Demo: On
  The right-hand side of the screen shows the improved DNIe image.
  The left-hand side of the screen shows the original image.

- The "DNIe Demo" is designed to show the difference between the regular and DNIe pictures.

- By default, the product displays the picture with DNIe applied.

My Color Control

My Color Control allows users to adjust colors to their preference by adjusting
Pink, Blue and Green using the predefined settings (Blue, Green, Pink, Standard,
and Custom) without affecting other colors on the screen.

Easy Control

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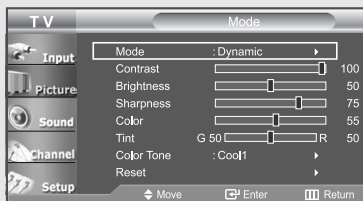
Press the **MENU** button
to display the menu.

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

Press the **UP/DOWN** ▲▼
buttons to select
"My Color Control", then
press the **ENTER** button.

2
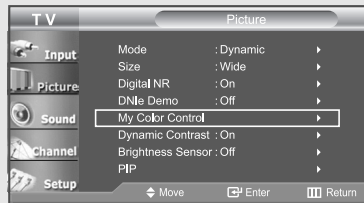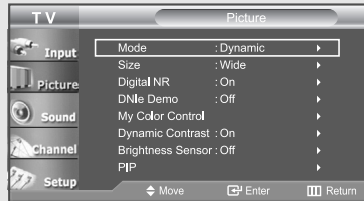
Press the **UP/DOWN** ▲▼
buttons to select
"Easy Control", then press
the **ENTER** button.

◄ This function doesn't work
when the Source is in PC mode
or PIP is set to on.

3

Press the **LEFT/RIGHT** ◄►
buttons to select the desired
"My Color Control" color,
then press the **ENTER**
button.

Press the **EXIT** button
to exit.

◄ This captures the current screen
in a still image to adjust the color.

◄ The Original picture (before
adjustment) is shown on the left
side, while the selected mode is
shown on the right side.

∗ The sources are displayed in the following order: Blue-Green-Pink-Standard-Custom

Detail Control

1

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

Press the **UP/DOWN** ▲▼ buttons to select "Picture", then press the **ENTER** button.
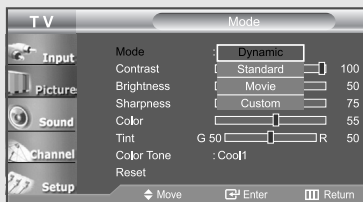
Press the **UP/DOWN** ▲▼ buttons to select "My Color Control", then press the **ENTER** button.

	TV		Picture	
	Input	Mode	: Dynamic	▶
		Size	: Wide	▶
	Picture	Digital NR	: On	▶
		DNIe Demo	: Off	▶
	Sound	My Color Control		▶
		Dynamic Contrast	: On	▶
	Channel	Brightness Sensor	: Off	▶
		PIP		▶
	Setup	♦ Move	Enter	Return

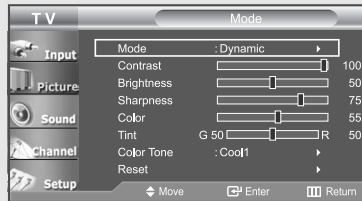|	TV		Picture	
	Input	Mode	: Dynamic	▶
		Size	: Wide	▶
	Picture	Digital NR	: On	▶
		DNIe Demo	: Off	▶
	Sound	My Color Control		▶
		Dynamic Contrast	: On	▶
	Channel	Brightness Sensor	: Off	▶
		PIP		▶
	Setup	♦ Move	Enter	Return

2
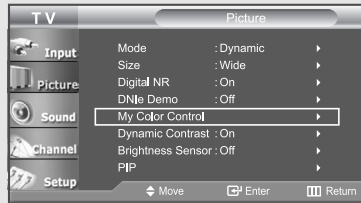
Press the **UP/DOWN** ▲▼ buttons to select "Detail Control", then press the **ENTER** button.

	TV	My Color Control	
	Input	Easy Control : Custom	▶
	Picture	Detail Control	▶
	Sound		
	Channel		
	Setup	♦ Move Enter Return	

◀ This function doesn't work when the Source is in PC mode or PIP is set to on.

3

Press the **UP/DOWN** ▲▼ buttons to select the desired "My Color Control" color, then press the **ENTER** button.

Press the **LEFT/RIGHT** ◀▶ buttons to increase or decrease the value of a particular item.

Press the **EXIT** button to exit.

	TV	Detail Control	
	Input	Pink	50
	Picture	Green	50
		Blue	50
	Sound	Reset	
	Channel		
	Setup	♦ Move Enter Return	

Original   Adjusted

Pink   50

Pink   50

◀ This captures the current screen in a still image to adjust the color.

◀ To reset the "Detail Control", select "Reset" by pressing the **UP/DOWN** ▲▼ button and then press the **ENTER** button.

∗ The sources are displayed in the following order: Pink-Green-Blue-Reset

Dynamic Contrast

Dynamic Contrast detects the visual signal input and adjusts to create optimum contrast.

1

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

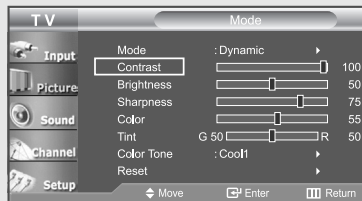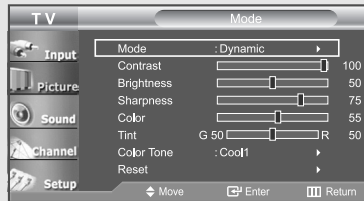Press the **UP/DOWN** ▲▼ buttons to select "Picture", then press the **ENTER** button.

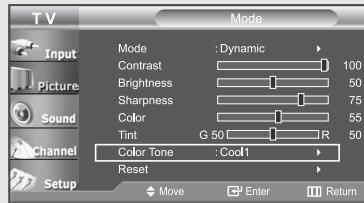| T V	Picture
Input	Mode : Dynamic ▶
	Size : Wide ▶
Picture	Digital NR : On ▶
	DNIe Demo : Off ▶
Sound	My Color Control ▶
	Dynamic Contrast : On ▶
Channel	Brightness Sensor : Off ▶
	PIP ▶
Setup	◆ Move ⬚ Enter ▥ Return

◀ This function doesn't work when the Source is in PC mode or PIP is set to on.

2
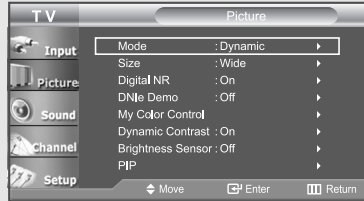
Press the **UP/DOWN** ▲▼ buttons to select "Dynamic Contrast", then press the **ENTER** button.

T V	Picture
Input	Mode : Dynamic ▶
	Size : Wide ▶
Picture	Digital NR : On ▶
	DNIe Demo : Off ▶
Sound	My Color Control ▶
	Dynamic Contrast : On ▶
Channel	Brightness Sensor : Off ▶
	PIP ▶
Setup	◆ Move ⬚ Enter ▥ Return

3

Press the **UP/DOWN** ▲▼ buttons to select "Off".

Press the **EXIT** button to exit.

T V	Picture
Input	Mode : Dynamic
	Size : Wide
Picture	Digital NR : On
	DNIe Demo : Off
Sound	My Color Control
	Dynamic Contrast : Off
Channel	Brightness Sensor : On
	PIP
Setup	◆ Move ⬚ Enter ▥ Return

Brightness Sensor

The Brightness Sensor adjusts the screen brightness automatically by using a light detecting sensor.

1

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

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

TV	Picture
Input	Mode : Dynamic ▶
	Size : Wide ▶
Picture	Digital NR : On ▶
	DNIe Demo : Off ▶
Sound	My Color Control ▶
	Dynamic Contrast : On ▶
Channel	Brightness Sensor : Off ▶
	PIP ▶
Setup	
	◆ Move Enter Return

2
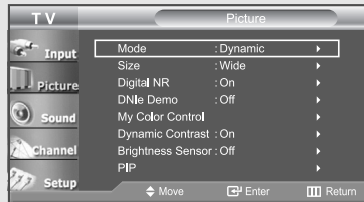
Press the **UP/DOWN** ▲▼ buttons to select "Brightness Sensor", then press the **ENTER** button.

TV	Picture
Input	Mode : Dynamic ▶
	Size : Wide ▶
Picture	Digital NR : On ▶
	DNIe Demo : Off ▶
Sound	My Color Control ▶
	Dynamic Contrast : On ▶
Channel	Brightness Sensor : Off ▶
	PIP ▶
Setup	
	◆ Move Enter Return

◀ This function doesn't work when the Source is in PC mode.

3

Press the **LEFT/RIGHT** ◀▶ buttons to select "On".

Press the **EXIT** button to exit.

Brightness Sensor	
Off	On
◆ Move Enter Return	

Brightness Sensor	
Off	On
◆ Move Enter Return	
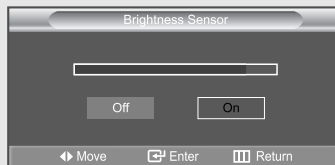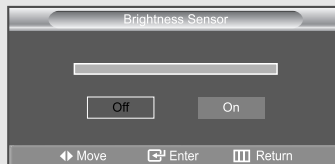
◀ Screen brightness is adjusted automatically depending on the brightness of the surrounding environment.

Viewing Picture-in-Picture

This product has one built-in tuner, which does not allow PIP to function in the same mode. For example, you cannot watch one TV channel in the main screen, and a different one in the PIP screen. Please see 'PIP Settings' below for details.

You can use the PIP feature to simultaneously watch two video sources.

Activating Picture-in-Picture

1

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

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

Press the **UP/DOWN** ▲▼ buttons to select "PIP", then press the **ENTER** button.
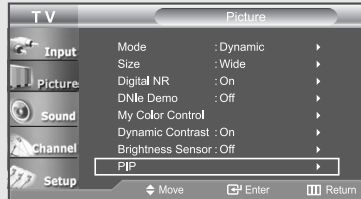
TV	Picture	
Input	Mode	: Dynamic	▶
Picture	Size	: Wide	▶
Sound	Digital NR	: On	▶
	DNIe Demo	: Off	▶
	My Color Control		▶
Channel	Dynamic Contrast	: On	▶
Setup	Brightness Sensor	: Off	▶
	PIP		▶
	◆ Move	↵ Enter	▥ Return

2

Press the **ENTER** button.

Press the **UP/DOWN** ▲▼ buttons to select "On".

Press the **ENTER** button.

TV	PIP	
Input	PIP	:	Off
Picture	Source		On
Sound	Swap		
	Size	⬛	
Channel	Position	⬛	
Setup	Channel	: Air 3	
	◆ Move	↵ Enter	▥ Return

TV	PIP	
Input	PIP	: On	▶
Picture	Source	: HDMI	▶
Sound	Swap		▶
	Size	⬛	▶
Channel	Position	⬛	▶
Setup	Channel	: Air 3	
	◆ Move	↵ Enter	▥ Return
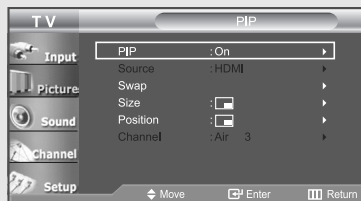
◀ If you turn the TV off while watching in PIP mode and turn it on again, the PIP window will disappear.

Alternate method:

Press the **PIP** button on the remote control repeatedly to activate or deactivate the PIP.
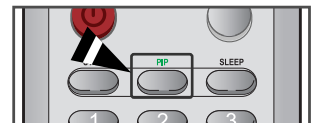
Selecting a Signal Source (External A/V) for PIP

3

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

Select the source of the sub picture (PIP) by pressing the **UP/DOWN**▲▼ buttons and press the **ENTER**⏎ button.

[PC/HDMI modes only]

TV		PIP
Input	PIP	: On
	Source	TV
Picture	Swap	AV1
Sound	Size	: AV2
	Position	: S-Video
Channel	Channel	: Component1
Setup		Component2

◆ Move   ⏎ Enter   ▥ Return
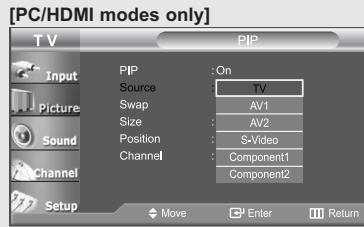
◀ When the main picture is set to TV/ AV1/AV2/S-Video/Component1/ Component2, only HDMI can be selected and when the main picture is set to PC/HDMI, only TV/AV1/ AV2/S-Video/Component1/ Component2 can be selected.

◀ Source selection is possible only when PC or HDMI is connected.

Swapping the Contents of the PIP and Main image

4

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

TV		PIP
Input	PIP	: On ▶
	Source	: HDMI ▶
Picture	Swap	▶
Sound	Size	▶
	Position	▶
Channel	Channel	: Air 3 ▶
Setup		

◆ Move   ⏎ Enter   ▥ Return
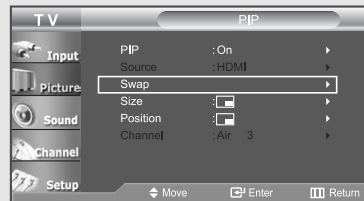
◀ If main picture is in PC Mode, "Swap" is not available.

Alternate method:

Press the **SWAP** button under the remote's cover.

Changing the PIP Channel

5
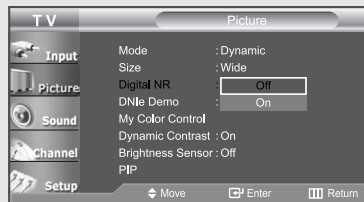
Press the **UP/DOWN**▲▼ buttons to select "Channel", then press the **ENTER**⏎ button.
Press the **UP/DOWN**▲▼ buttons to select the desired channel in the PIP window.

[PC/HDMI modes only]

TV		PIP
Input	PIP	: On
	Source	: TV
Picture	Swap	
Sound	Size	
	Position	▲
Channel	Channel	Air 3
Setup		▼

◆ Adjust   ⏎ Enter   ▥ Return

English-41
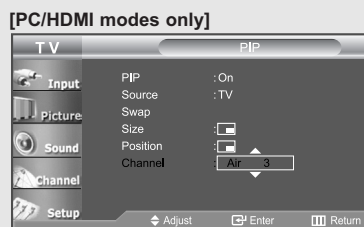
Changing the Size of the PIP Window

6

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

Press the **UP/DOWN ▲▼** buttons to select the desired size of the PIP window.

Press the **ENTER** button.
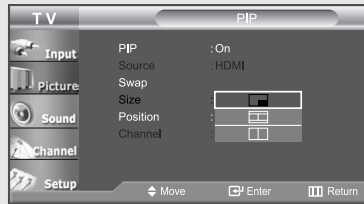
◀ If main picture is in PC Mode, "Size" is not available.

TV		PIP
Input	PIP	:On
Picture	Source	:HDMI
Sound	Swap	
	Size	
Channel	Position	:
Setup	Channel	
	♦ Move	↵ Enter Ⅲ Return

Alternate method:

Press the **SIZE** button under the remote's cover.
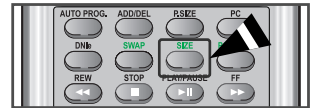
Changing the Position of the PIP Window

7

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

Press the **UP/DOWN ▲▼** buttons to select the desired PIP window position.

Press the **ENTER** button.

Press the **EXIT** button to exit.

TV		PIP
Input	PIP	:On
Picture	Source	:HDMI
Sound	Swap	
	Size	
Channel	Position	:
Setup	Channel	
	♦ Move	↵ Enter Ⅲ Return
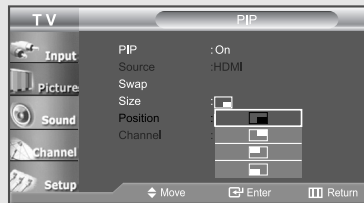
Alternate method:

Press the **POSITION** button under the remote's cover.

PIP Settings

O : PIP operates
X : PIP doesn't operate

Sub Picture / Main Picture	TV	AV1	AV2	S-Video	Component1	Component2	PC	HDMI
TV	X	X	X	X	X	X	X	O
AV1	X	X	X	X	X	X	X	O
AV2	X	X	X	X	X	X	X	O
S-Video	X	X	X	X	X	X	X	O
Component1	X	X	X	X	X	X	X	O
Component2	X	X	X	X	X	X	X	O
PC	O	O	O	O	O	O	X	X
HDMI	O	O	O	O	O	O	X	X

• When the PC is in energy saving mode, you cannot choose the PIP option.
• You may notice that the picture in the PIP window becomes slightly unnatural when you use the main screen to view a game or karaoke.
• You can adjust picture position only by using the ▭ size menu.

English-42

Using Automatic Sound Settings

Your TV has five automatic sound settings ("Standard", "Music", "Movie", "Speech", and "Custom") 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).
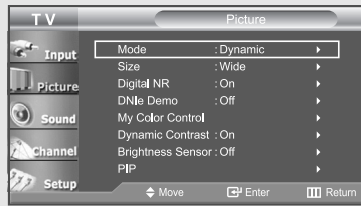Or, you can select "Custom", which automatically recalls your personalized sound settings.

1

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

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

Press the **ENTER** button.

T V		Sound	
Input	Mode	: Custom	▶
	Equalizer		▶
Picture	SRS TSXT	: Off	▶
	MTS	: Stereo	▶
Sound	Auto Volume	: Off	▶
	Internal Mute	: Off	▶
Channel	Sound Select	: Main	▶
Setup			
	◆ Move	Enter	Return

2
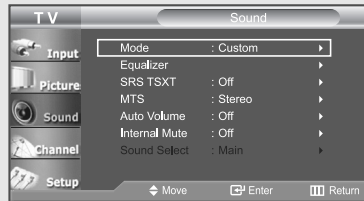
Press the **UP/DOWN** ▲▼ buttons repeatedly to select the "Standard", "Music", "Movie", "Speech", or "Custom" sound settings.

Press the **EXIT** button to exit.

T V		Sound	
Input	Mode	:	Standard
	Equalizer		Music
Picture	SRS TSXT	:	Movie
	MTS	:	Speech
Sound	Auto Volume	:	Custom
	Internal Mute	: Off	
Channel	Sound Select	: Main	
Setup			
	◆ Move	Enter	Return

Alternate method:

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

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

Customizing the Sound

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

1

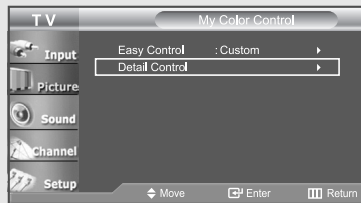Press the **MENU** button to display the menu.

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

2
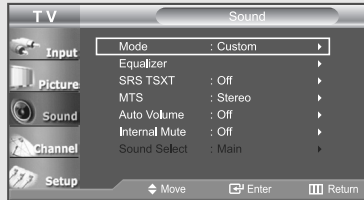
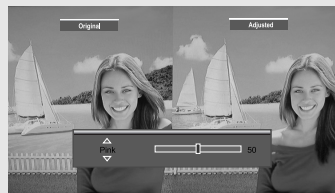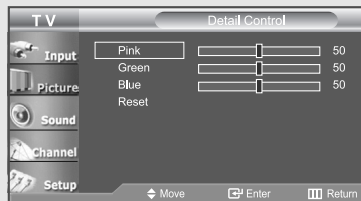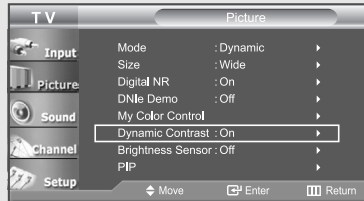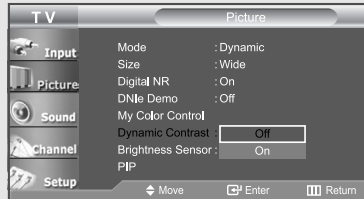Press the **UP/DOWN** ▲▼ buttons to select "Equalizer", then press the **ENTER** button.

3
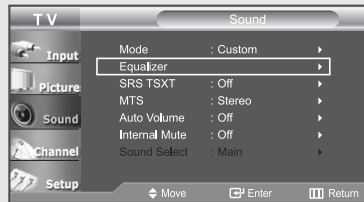
Press the **LEFT/RIGHT** ◄► buttons to select a particular frequency to be changed.

Press the **UP/DOWN** ▲▼ buttons to increase or decrease the value of a particular item.

Press the **EXIT** button to exit.
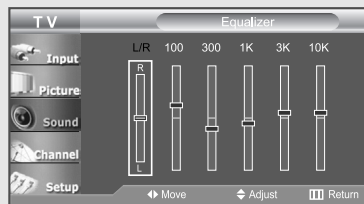
◄ If you make any changes to these settings, the Sound Mode is automatically switched to "Custom".

Note: The Custom setting allows you to adjust frequencies to your preference.
The lowest frequency is 100 and 10K is the highest.

Setting the TruSurround XT (SRS TSXT)

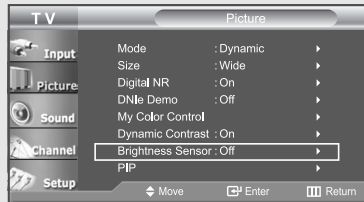Emphasizes midrange and bass and provides a simulated surround-sound experience.

1

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

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

T V	Sound	
Input	Mode	: Custom ►
	Equalizer	►
Picture	SRS TSXT	: Off ►
Sound	MTS	: Stereo ►
	Auto Volume	: Off ►
Channel	Internal Mute	: Off ►
	Sound Select	: Main ►
Setup		
	◆ Move	Enter Return

2
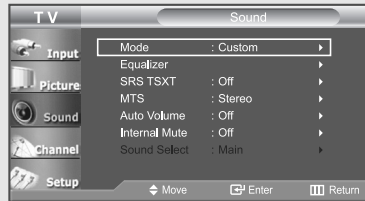
Press the **UP/DOWN** ▲▼ buttons to select "SRS TSXT", then press the **ENTER** button.

T V	Sound	
Input	Mode	: Custom ►
	Equalizer	►
Picture	SRS TSXT	: Off ►
Sound	MTS	: Stereo ►
	Auto Volume	: Off ►
Channel	Internal Mute	: Off ►
	Sound Select	: Main ►
Setup		
	◆ Move	Enter Return

3

Press the **UP/DOWN** ▲▼ buttons to select "Off", "3D Mono" or "Stereo" than Press the **ENTER** button.

Press the **EXIT** button to exit.

T V	Sound	
Input	Mode	: Custom
	Equalizer	
Picture	SRS TSXT	Off
Sound	MTS	: 3D Mono
	Auto Volume	: Stereo
Channel	Internal Mute	: Off
	Sound Select	: Main
Setup		
	◆ Move	Enter Return

Alternate method:

Simply press the **SRS** button on the remote control to change the "SRS TSXT" settings.

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TruSurround XT TruSurround XT, SRS and ◉ symbol are trademarks of SRS Labs, Inc. TruSurround XT technology is incorporated under license from SRS Labs, Inc.

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

TV	Sound
Input	Mode : Custom ▶
	Equalizer ▶
Picture	SRS TSXT : Off ▶
	MTS : Stereo ▶
Sound	Auto Volume : Off ▶
	Internal Mute : Off ▶
Channel	Sound Select : Main ▶
Setup	◆ Move ↵ Enter Ⅲ Return

2
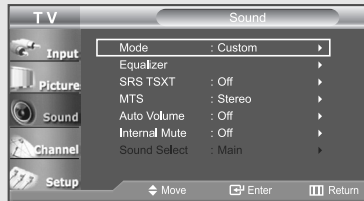
Press the **UP/DOWN** ▲▼ buttons to select "MTS", then press the **ENTER** button.

TV	Sound
Input	Mode : Custom ▶
	Equalizer ▶
Picture	SRS TSXT : Off ▶
	MTS : Stereo ▶
Sound	Auto Volume : Off ▶
	Internal Mute : Off ▶
Channel	Sound Select : Main ▶
Setup	◆ Move ↵ Enter Ⅲ Return

3

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

Press the **EXIT** button to exit.

TV	Sound
Input	Mode : Custom
	Equalizer
Picture	SRS TSXT : Off
	MTS : Mono
Sound	Auto Volume Stereo
	Internal Mute SAP
Channel	Sound Select : Main
Setup	◆ Move ↵ Enter Ⅲ Return

◀ When you change channels, MTS is set to "Stereo" automatically.

Alternate method:

Simply press the **MTS** button on the remote control to change the MTS settings.

- 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.

Automatic volume control

Reduces the differences in volume level among broadcasters.

1

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

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

TV	Sound	
Input	Mode	: Custom ▶
Picture	Equalizer	▶
	SRS TSXT	: Off ▶
Sound	MTS	: Stereo ▶
	Auto Volume	: Off ▶
Channel	Internal Mute	: Off ▶
Setup	Sound Select	: Main ▶
	◆ Move	Enter Return

2
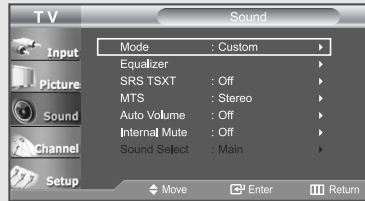
Press the **UP/DOWN** ▲▼ buttons to select "Auto Volume", then press the **ENTER** button.

TV	Sound	
Input	Mode	: Custom ▶
Picture	Equalizer	▶
	SRS TSXT	: Off ▶
Sound	MTS	: Mono ▶
	Auto Volume	: Off ▶
Channel	Internal Mute	: Off ▶
Setup	Sound Select	: Main ▶
	◆ Move	Enter Return

3

Press the **UP/DOWN** ▲▼ buttons to set Auto Volume "On".

Press the **EXIT** button to exit.

TV	Sound	
Input	Mode	: Custom
Picture	Equalizer	
	SRS TSXT	: Off
Sound	MTS	: Stereo
	Auto Volume	: Off
Channel	Internal Mute	: On
Setup	Sound Select	: Main
	◆ Move	Enter Return

Selecting the Internal Mute

Sound output from the TV speakers is muted.

1

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

Press the **UP/DOWN** buttons to select "Sound", then press the **ENTER** button.

T V		Sound	
Input	Mode	: Custom	▶
	Equalizer		▶
Picture	SRS TSXT	: Off	▶
	MTS	: Stereo	▶
Sound	Auto Volume	: Off	▶
	Internal Mute	: Off	▶
Channel	Sound Select	: Main	▶
Setup			
	◆ Move	Enter	Return

2
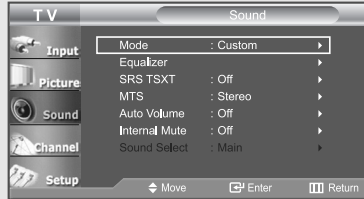
Press the **UP/DOWN** buttons to select "Internal Mute", then press the **ENTER** button.

T V		Sound	
Input	Mode	: Custom	▶
	Equalizer		▶
Picture	SRS TSXT	: Off	▶
	MTS	: Stereo	▶
Sound	Auto Volume	: Off	▶
	Internal Mute	: Off	▶
Channel	Sound Select	: Main	▶
Setup			
	◆ Move	Enter	Return

3

Press the **UP/DOWN** buttons to select "On", Then Press the **ENTER** button.

Press the **EXIT** button to exit.

T V		Sound	
Input	Mode	: Custom	
	Equalizer		
Picture	SRS TSXT	: Off	
	MTS	: Stereo	
Sound	Auto Volume	: Off	
	Internal Mute	: Off	
Channel	Sound Select	On	
Setup			
	◆ Move	Enter	Return

◀ When "Internal mute" is set to "On", Sound menus except "MTS" and "Sound Select" cannot be adjusted.

Selecting the Main or Sub (PIP) Sound

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

1

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

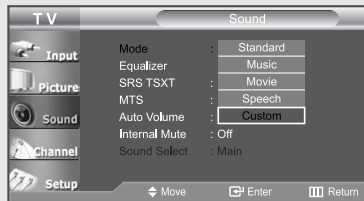Press the **UP/DOWN** ▲▼ buttons to select "Sound", then press the **ENTER** button.

T V		Sound	
Input	Mode	: Custom	▶
	Equalizer		▶
Picture	SRS TSXT	: Off	▶
	MTS	: Stereo	▶
Sound	Auto Volume	: Off	▶
	Internal Mute	: Off	▶
Channel	Sound Select	: Main	▶
Setup			
	◆ Move	Enter	Return

2
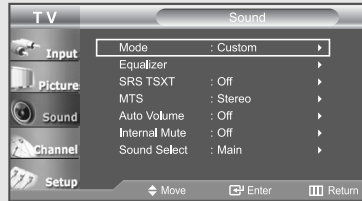
Press the **UP/DOWN** ▲▼ buttons to select "Sound Select", then press the **ENTER** button.

T V		Sound	
Input	Mode	: Custom	▶
	Equalizer		▶
Picture	SRS TSXT	: Off	▶
	MTS	: Stereo	▶
Sound	Auto Volume	: Off	▶
	Internal Mute	: Off	▶
Channel	Sound Select	: Main	▶
Setup			
	◆ Move	Enter	Return

3

Press the **UP/DOWN** ▲▼ buttons to select "Main" or "Sub".
Select "Main" to hear the main TV sound and select "Sub" to hear the PIP window sound.

Press the **EXIT** button to exit.

T V		Sound	
Input	Mode	: Custom	
	Equalizer		
Picture	SRS TSXT	: Off	
	MTS	: Stereo	
Sound	Auto Volume	: Off	
	Internal Mute	: Off	
Channel	Sound Select	:	Main
Setup			Sub
	◆ Move	Enter	Return

Fine Tuning Channels

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

1

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

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

T V	Channel
Input	Air/Cable : Air ▶
Picture	Auto Program ▶
Sound	Add/Delete ▶
Channel	Fine Tune ▶
Setup	◆ Move Enter Return

2

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

T V	Channel
Input	Air/Cable : Air ▶
Picture	Auto Program ▶
Sound	Add/Delete ▶
Channel	Fine Tune ▶
Setup	◆ Move Enter Return

3

Press the **LEFT/RIGHT** ◀▶ buttons to adjust the fine tuning.

Fine Tune
Air 3
⬚ 0
Reset
◆ Move ◀▶ Adjust Save

◀ If you do not store the fine-tuned channel in memory, adjustments are not saved.

4

To store the fine tuning setting in the TV's memory, press the **ENTER** button.

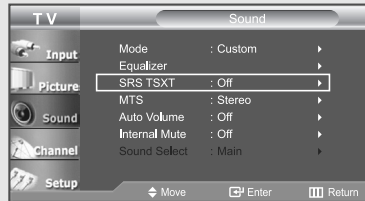Press the **EXIT** button to exit.

Fine Tune
Air 3 *
⬚ 22
Reset
◆ Move ◀▶ Adjust Save

Fine Tune
Air 3
⬚ 0
Reset
◆ Move Enter Return
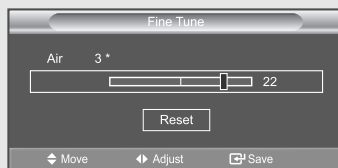
◀ Fine tuned channels that have been saved are marked with an asterisk "*" on the right-hand side of the channel number in the channel banner.

Air 3*
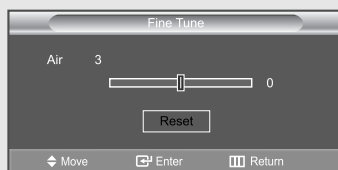
◀ Press the **UP/DOWN** ▲▼ button to select "Reset", than press the **ENTER** button.

Using Your TV as a Computer (PC) Display

Setting Up Your PC Software (Based on Windows XP)

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

1 First, click on "**Control Panel**" on the Windows start menu.
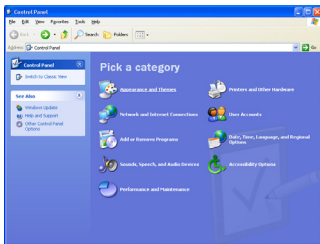
2 When the control panel window appears, click on "**Appearance and Themes**" and a display dialog-box will appear.
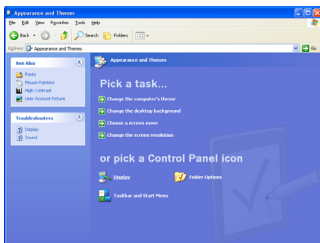
3 When the control panel window appears, click on "**Display**" and a display dialog-box will appear.
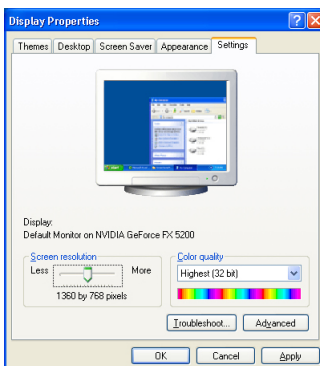
4 Navigate to the "**Settings**" tab on the display dialog-box.

The correct size setting (resolution)
- Optimum: 1360 x 768 pixels
(∗ LN23R41B: 1280 x 720 pixels)

If a vertical-frequency option exists on your display settings dialog box, the correct value is "**60**" or "**60 Hz**". Otherwise, just click "**OK**" and exit the dialog box.

∗ See "Display Modes" on page 73.

How to Auto Adjust

Use the Auto Adjust function to have the TV set automatically adjust the video signals the monitor receives. The function also automatically fine-tunes the settings and adjusts the frequency values and positions.

Press the PC button under the remote's cover to select the PC mode.

1

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

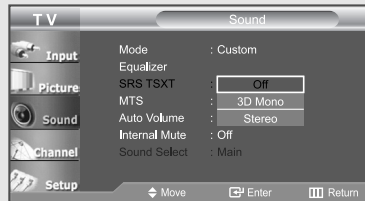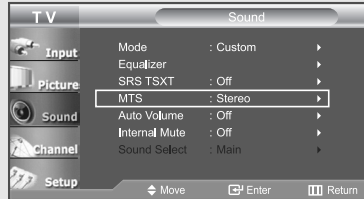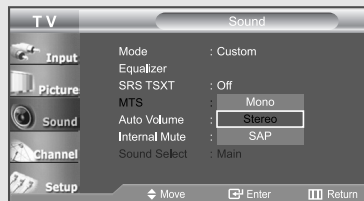Press the **UP/DOWN** ▲▼ buttons to select "Setup", then press the **ENTER** button.

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

T V	Setup	
Input	Plug & Play	▶
	Language : English	▶
Picture	Time	▶
	V-Chip	▶
Sound	Caption	▶
	Blue Screen : Off	▶
Channel	Melody : Off	▶
	PC	▶
Setup	♦ Move ⏎ Enter ▥ Return	

T V	Setup	
Input	Plug & Play	▶
	Language : English	▶
Picture	Time	▶
	V-Chip	▶
Sound	Caption	▶
	Blue Screen : Off	▶
Channel	Melody : Off	▶
	PC	▶
Setup	♦ Move ⏎ Enter ▥ Return	

2
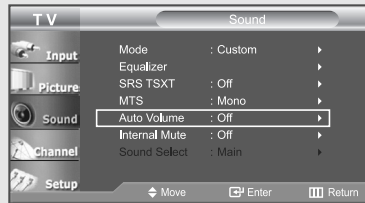
Press the **UP/DOWN** ▲▼ buttons to select "Auto Adjustment", then press the **ENTER** button.

Press the **EXIT** button to exit.

T V	PC	
Input	Image Lock	▶
	Position	▶
Picture	Auto Adjustment	▶
	Image Reset	▶
Sound		
Channel		
Setup	♦ Move ⏎ Enter ▥ Return	

Auto Adjustment in progress.
Please wait.

Adjusting the Screen Quality

The purpose of the 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 under the remote's cover to select the PC mode.

1

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

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

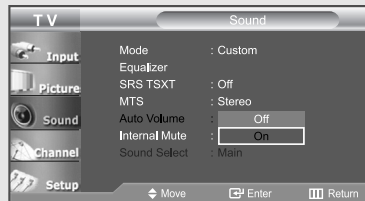Press the **UP/DOWN ▲▼**
buttons to select "PC" then
press the **ENTER** button.

2

Press the **ENTER** button
to select "Image Lock".

3
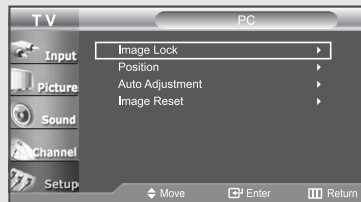
Press the **UP/DOWN ▲▼**
buttons to select "Coarse"
or "Fine", then press the
ENTER button.

Press the **LEFT/RIGHT ◀▶**
buttons to adjust the screen
quality. Vertical stripes may
appear or the picture may
be blurry.

Press the **EXIT** button to exit.

<Adjusting Coarse>

<Adjusting Fine>
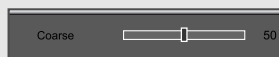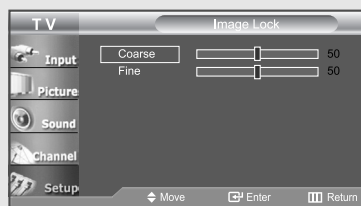
Changing the Screen Position

Press the PC button under the remote's cover to select the PC mode.

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	Plug & Play ▶
	Language : English ▶
Picture	Time ▶
	V-Chip ▶
Sound	Caption ▶
	Blue Screen : Off ▶
Channel	Melody : Off ▶
	PC ▶
Setup	◆ Move Enter Return

2

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

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

TV	Setup
Input	Plug & Play ▶
	Language : English ▶
Picture	Time ▶
	V-Chip ▶
Sound	Caption ▶
	Blue Screen : Off ▶
Channel	Melody : Off ▶
	PC ▶
Setup	◆ Move Enter Return

TV	PC
Input	Image Lock ▶
	Position ▶
Picture	Auto Adjustment ▶
	Image Reset ▶
Sound	
Channel	
Setup	◆ Move Enter Return

3

Press the **UP/DOWN ▲▼** buttons to adjust the V-Position.

Press the **LEFT/RIGHT ◄►** buttons to adjust the H-Position.

Press the **EXIT** button to exit.

TV	Position
Input	
Picture	
Sound	
Channel	
Setup	◆ Move Enter Return

TV	Position
Input	
Picture	
Sound	
Channel	
Setup	◆ Move Enter Return

Initializing the Screen Position or Color Settings

Press the PC button under the remote's cover to select the PC mode.

1

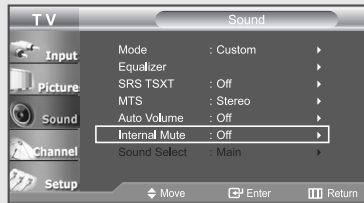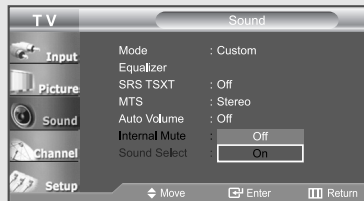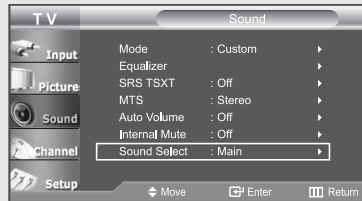Press the **MENU** button to display the menu.

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

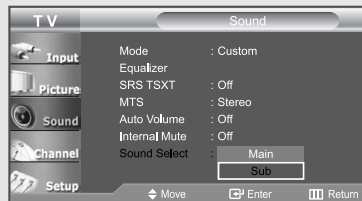Press the **UP/DOWN** buttons to select "PC", then press the **ENTER** button.

TV	Setup	
Input	Plug & Play	▶
	Language : English	▶
Picture	Time	▶
	V-Chip	▶
Sound	Caption	▶
	Blue Screen : Off	▶
Channel	Melody : Off	▶
	PC	▶
Setup	♦ Move ↵ Enter Ⅲ Return	

TV	Setup	
Input	Plug & Play	▶
	Language : English	▶
Picture	Time	▶
	V-Chip	▶
Sound	Caption	▶
	Blue Screen : Off	▶
Channel	Melody : Off	▶
	PC	▶
Setup	♦ Move ↵ Enter Ⅲ Return	

2

Press the **UP/DOWN** buttons to select "Image Reset", then press the **ENTER** button.

Press the **EXIT** button to exit.

TV	PC	
Input	Image Lock	▶
	Position	▶
Picture	Auto Adjustment	▶
	Image Reset	▶
Sound		
Channel		
Setup	♦ Move ↵ Enter Ⅲ Return	

Image reset is completed.

Return

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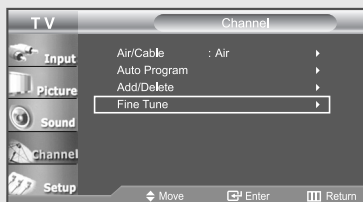
Press the **MENU** button to display the menu.

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

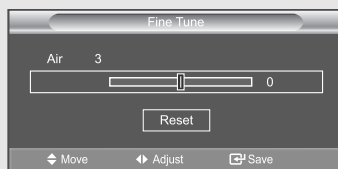Press the **UP/DOWN** ▲▼ buttons to select "Time", then press the **ENTER** button.

TV	Setup
Input	Plug & Play ▶
Picture	Language : English ▶
	Time ▶
Sound	V-Chip ▶
	Caption ▶
Channel	Blue Screen : Off ▶
	Melody : Off ▶
Setup	PC ▶
	♦ Move Enter Return

TV	Setup
Input	Plug & Play ▶
Picture	Language : English ▶
	Time ▶
Sound	V-Chip ▶
	Caption ▶
Channel	Blue Screen : Off ▶
	Melody : Off ▶
Setup	PC ▶
	♦ Move Enter Return

2

Press the **ENTER** button to select "Time", then press the **ENTER** button to select "Clock Set".

TV	Time
Input	Clock Set : -- : -- am ▶
Picture	Sleep Timer : Off ▶
	On Timer : 12 : 00 am Off ▶
Sound	Off Timer : 12 : 00 am Off ▶
Channel	
Setup	♦ Move Enter Return

3

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

After the hour is entered, press the **LEFT/RIGHT** ◀▶ 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 the **EXIT** button to exit.

TV	Clock Set
Input	Hour Minute am/pm
Picture	▲
	12 00 am
Sound	▼
Channel	
Setup	◀▶ Move ♦ Adjust Return

◀ You can also set the time using the number buttons on the remote.

Setting the Sleep Timer

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

Sleep timer

1

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

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

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

TV	Setup	
Input	Plug & Play	▶
	Language : English	▶
Picture	Time	▶
	V-Chip	▶
Sound	Caption	▶
	Blue Screen : Off	▶
Channel	Melody : Off	▶
Setup	PC	▶
	⬥ Move 🔁 Enter 🔲 Return	

TV	Setup	
Input	Plug & Play	▶
	Language : English	▶
Picture	Time	▶
	V-Chip	▶
Sound	Caption	▶
	Blue Screen : Off	▶
Channel	Melody : Off	▶
Setup	PC	▶
	⬥ Move 🔁 Enter 🔲 Return	

2

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

TV	Time	
Input	Clock Set : 12 : 00 am	▶
	Sleep Timer : Off	▶
Picture	On Timer : 12 : 00 am Off	▶
	Off Timer : 12 : 00 am Off	▶
Sound		
Channel		
Setup		
	⬥ Move 🔁 Enter 🔲 Return	

3
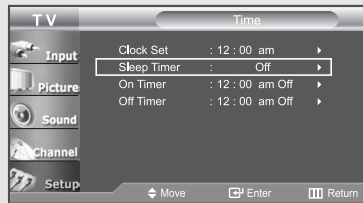
Press the **UP/DOWN** ▲▼ buttons repeatedly until the correct time appears.

Press the **EXIT** button to exit.

TV	Time	
Input	Clock Set : 12 : 00 am	
	Sleep Timer : Off	
Picture	On Timer : 30	
	Off Timer : 60	
Sound	90	
	120	
Channel	150	
Setup	180	
	⬥ Move 🔁 Enter 🔲 Return	

Alternate method:

Press the **SLEEP** button on the remote. The number on the screen changes from Off • 30 • 60 • 90 • 120 • 150 • 180

Setting the On/Off Timer

1

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

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

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

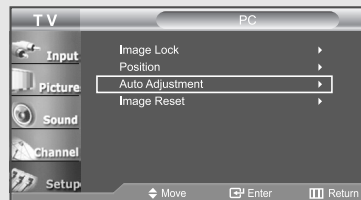| T V	Setup	
Input	Plug & Play	▶
Picture	Language : English	▶
Sound	Time	▶
	V-Chip	▶
Channel	Caption	▶
	Blue Screen : Off	▶
Setup	Melody : Off	▶
	PC	▶
	◆ Move ← Enter III Return	

T V	Setup	
Input	Plug & Play	▶
Picture	Language : English	▶
	Time	▶
Sound	V-Chip	▶
	Caption	▶
Channel	Blue Screen : Off	▶
	Melody : Off	▶
Setup	PC	▶
	◆ Move ← Enter III Return	

◀ Before using the timer, you must set the TV's clock.

2

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

Press the **UP/DOWN** ▲▼ buttons repeatedly to select the appropriate "Hour".

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

Press the **UP/DOWN** ▲▼ buttons repeatedly to select the appropriate "Minute".

Set other items using the same method as above.

T V	Time	
Input	Clock Set : 12 : 00 am	▶
Picture	Sleep Timer : Off	▶
	On Timer : 12 : 00 am Off	▶
Sound	Off Timer : 12 : 00 am Off	▶
Channel		
Setup		
	◆ Move ← Enter III Return	

T V	Time	
Input	Clock Set : 12 : 00 am	▶
Picture	Sleep Timer : Off	▶
	On Timer : 12 : 00 am Off	▶
Sound	Off Timer : 12 : 00 am Off	▶
Channel		
Setup		
	◆ Move ← Enter III Return	

T V	On Timer	
Input	Hour Minute am/pm	
Picture	12 00 am	
Sound	Channel 03	
Channel	Volume Activation	
Setup	10 No	
	◀▶ Move ◆ Adjust III Return	

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

◀ You can also set the time using the number buttons on the remote.

3

Press the **LEFT/RIGHT** ◀▶ buttons to select "Activation". Press the **UP/DOWN** ▲▼ buttons to set the On Time "Yes".

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

TV	On Timer
Input	Hour Minute am/pm
Picture	12 00 am
Sound	Channel
	03
Channel	Volume Activation
Setup	10 Yes
	◀▶ Move ◆ Adjust ▥ Return
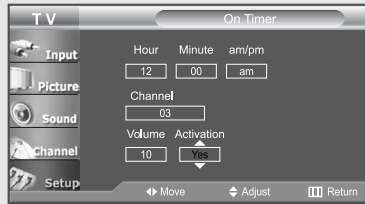
◀ To deactivate the "On Timer," select "No" during this step.

◀ Repeatedly pressing the UP/DOWN ▲▼ buttons will alternate between "Yes" and "No".

4

To set the Off time, press the **UP/DOWN** ▲▼ buttons to select "Off Timer". Press the **ENTER** button and set the hours and minutes. (Follow the same procedure as in steps 2 and 3 above).

TV	Time
Input	Clock Set : 12 : 00 am ▶
Picture	Sleep Timer : Off ▶
	On Timer : 12 : 00 am On ▶
Sound	Off Timer : 12 : 00 am Off ▶
Channel	
Setup	
	◆ Move ⏎ Enter ▥ Return

TV	Off Timer
Input	Hour Minute am/pm
Picture	12 00 am
Sound	Activation
	No
Channel	
Setup	
	◀▶ Move ◆ Adjust ▥ Return
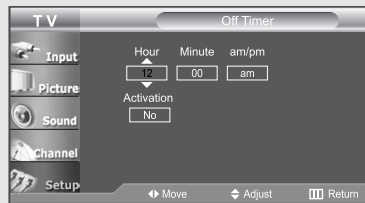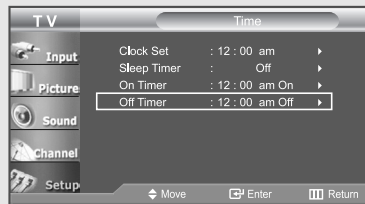
◀ You can also set the time using the number buttons on the remote.

5

When finished setting the timer, press the **EXIT** 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.

Chapter 9

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** button.

2

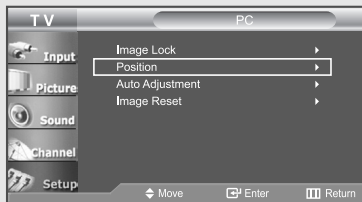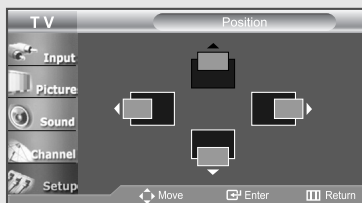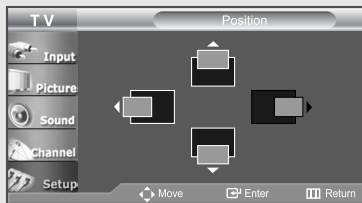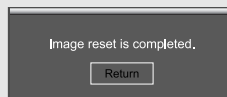Press the **UP/DOWN** ▲▼ buttons to select "Language". Press the **ENTER** button.

3

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

Press the **EXIT** button to 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 .

1

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

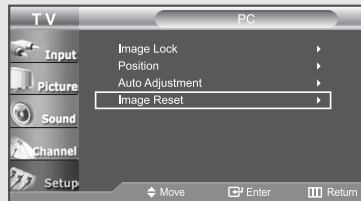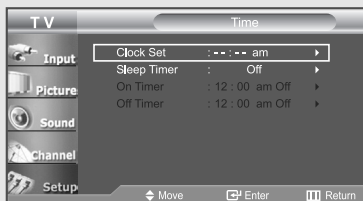Press the **UP/DOWN** ▲▼ buttons to select "Setup", then press the **ENTER** button.

TV		Setup	
Input	Plug & Play		▶
	Language	: English	▶
Picture	Time		▶
	V-Chip		
Sound	Caption		▶
	Blue Screen	: Off	▶
Channel	Melody	: Off	▶
Setup	PC		▶
	♦ Move	Enter	Return

◀ The Caption feature does not work with DVD or Set-top box signals.

2

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

TV		Setup	
Input	Plug & Play		▶
	Language	: English	▶
Picture	Time		▶
	V-Chip		
Sound	Caption		▶
	Blue Screen	: Off	▶
Channel	Melody	: Off	▶
Setup	PC		▶
	♦ Move	Enter	Return

3
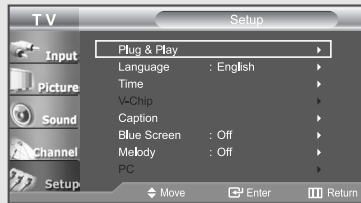
Press the **ENTER** button to select "Caption".

Press the **UP/DOWN** ▲▼ buttons to set the Caption "On", then press the **ENTER** button.

TV		Caption	
Input	Caption	: Off	▶
	Mode	: Caption	▶
Picture	Channel	: 1	▶
	Field	: 1	▶
Sound			
Channel			
Setup			
	♦ Move	Enter	Return

TV		Caption	
Input	Caption	:	Off
	Mode		On
Picture	Channel	: 1	
	Field	: 1	
Sound			
Channel			
Setup			
	♦ Move	Enter	Return

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).

4

Depending on the particular broadcast, it might be necessary to alter the settings to "Channel" and "Field".

Alternate method:
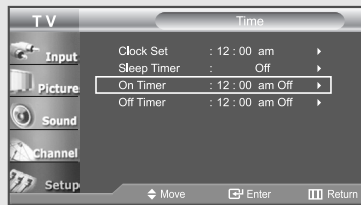
Press the **CAPTION** button on the remote control.

5

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

Press the **UP/DOWN ▲▼** buttons to set "Caption" or "Text", then press the **ENTER** button.
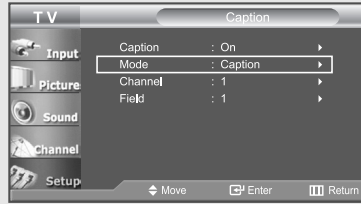
T V	Caption		
Input	Caption	: On	▶
Picture	Mode	: Caption	▶
Sound	Channel	: 1	▶
Channel	Field	: 1	▶
Setup			
	⬍ Move	☐ Enter	▥ Return

T V	Caption		
Input	Caption	: On	
Picture	Mode	: Caption	
Sound	Channel	: Text	
Channel	Field	: 1	
Setup			
	⬍ Move	☐ Enter	▥ Return

6

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

Press the **UP/DOWN ▲▼** buttons to select "1" or "2", then press the **ENTER** button.

T V	Caption		
Input	Caption	: On	▶
Picture	Mode	: Caption	▶
Sound	Channel	: 1	▶
Channel	Field	: 1	▶
Setup			
	⬍ Move	☐ Enter	▥ Return

T V	Caption		
Input	Caption	: On	
Picture	Mode	: Caption	
Sound	Channel	: 1	
Channel	Field	: 2	
Setup			
	⬍ Move	☐ Enter	▥ Return

7
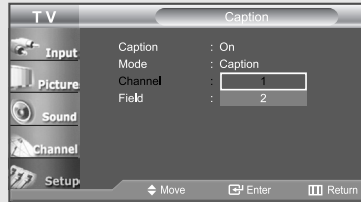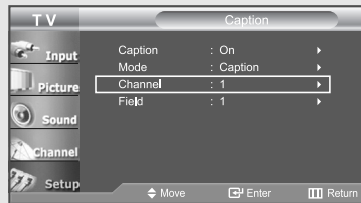
Press the **UP/DOWN ▲▼** buttons to select "Field", then press the **ENTER** button.

Press the **UP/DOWN ▲▼** buttons to select "1" or "2", then press the **ENTER** button.

Press the **EXIT** button to exit.

T V	Caption		
Input	Caption	: On	▶
Picture	Mode	: Caption	▶
Sound	Channel	: 1	▶
Channel	Field	: 1	▶
Setup			
	⬍ Move	☐ Enter	▥ Return

T V	Caption		
Input	Caption	: On	
Picture	Mode	: Caption	
Sound	Channel	: 1	
Channel	Field	: 1	
Setup		2	
	⬍ Move	☐ Enter	▥ Return
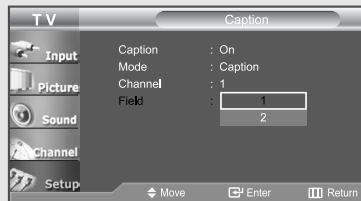
Setting the Blue Screen Mode

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.

TV	Setup	
Input	Plug & Play	▶
Picture	Language : English	▶
	Time	▶
	V-Chip	
Sound	Caption	▶
	Blue Screen : Off	▶
Channel	Melody : Off	▶
	PC	▶
Setup	◆ Move ⊡ Enter ▥ Return	

2

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

TV	Setup	
Input	Plug & Play	▶
Picture	Language : English	▶
	Time	▶
	V-Chip	
Sound	Caption	▶
	Blue Screen : Off	▶
Channel	Melody : Off	▶
	PC	▶
Setup	◆ Move ⊡ Enter ▥ Return	

3
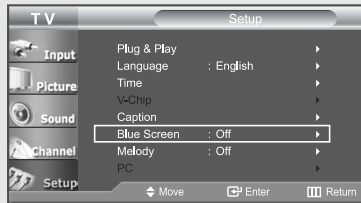
Press the **UP/DOWN** ▲▼ buttons to set Blue Screen "On".

Press the **EXIT** button to exit.

TV	Setup	
Input	Plug & Play	
Picture	Language : English	
	Time	
	V-Chip	
Sound	Caption	
	Blue Screen : Off	
Channel	Melody : On	
	PC	
Setup	◆ Move ⊡ Enter ▥ Return	

Selecting the Melody

You can hear a melody sound when the television is powered on or off.

1

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

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

T V		Setup	
Input	Plug & Play		▶
	Language	: English	▶
Picture	Time		▶
	V-Chip		▶
Sound	Caption		▶
	Blue Screen	: Off	▶
Channel	Melody	: Off	▶
Setup	PC		▶
	◆ Move	Enter	Return

2
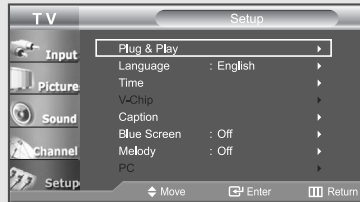
Press the **UP/DOWN** ▲▼ buttons to select "Melody", then press the **ENTER** button.
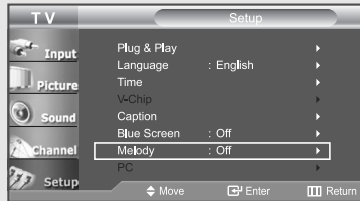
T V		Setup	
Input	Plug & Play		▶
	Language	: English	▶
Picture	Time		▶
	V-Chip		▶
Sound	Caption		▶
	Blue Screen	: Off	▶
Channel	Melody	: Off	▶
Setup	PC		▶
	◆ Move	Enter	Return

3

Press the **UP/DOWN** ▲▼ buttons to select "On".

Press the **EXIT** button to exit.

T V		Setup	
Input	Plug & Play		
	Language	: English	
Picture	Time		
	V-Chip		
Sound	Caption		
	Blue Screen	: Off	
Channel	Melody	: Off	
Setup	PC	On	
	◆ Move	Enter	Return
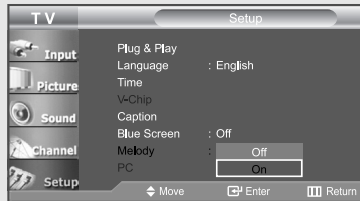
Chapter 10

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 SOURCE button. Make sure the TV is plugged in. Check the antenna connections.
No sound or sound is too low at maximum volume.	First, check the volume of units connected to your TV (digital broadcasting receiver, DTV, DVD, cable broadcasting receiver, VCR, etc.). Then, adjust the TV volume accordingly. Check if "Internal Mute" is off.
Picture rolls vertically.	Check all wire connections.
The TV operates erratically.	Unplug the TV for 30 seconds, then try operating it again.
Remote control malfunctions	Replace the remote control batteries. Clean the upper edge of the remote control (transmission window). Check the battery terminals.
"Check signal cable" message.	Ensure that the signal cable is firmly connected to the PC sources.
"Not Supported Mode" message.	Check the maximum resolution and the frequency of the Video Adaptor. Compare these values with the data in the Display Modes.
The image is too light or too dark.	Adjust the Brightness and Contrast. Adjust the Fine tuning.
Horizontal bars appear to flicker, jitter or shimmer on the image.	Adjust the Coarse tuning and then adjust the Fine tuning.

Problem	Possible Solution
Vertical bars appear to flicker, jitter or shimmer on the image.	Adjust the Coarse tuning and then adjust the Fine tuning.
Screen is black and power indicator light blinks steadily.	On your computer check: Power, Signal Cable. The TV is using its power management system. Move the computer's mouse or press any key on the keyboard.
Image is not stable and may appear to vibrate when you have a computer connected to the PC input.	If the setting is not correct, use your computer utility program to change the display settings. NOTE: Your TV supports multiscan display functions within the following frequency domain:
Image is not centered on the screen.	Adjust the horizontal and vertical position. The screen position must be adjusted on the output source (i.e. STB) with a digital signal.
If a still image is displayed for an extended period of time, residual images or blurring may appear.	When you need to leave the monitor unused for an extended period of time, adjust the settings so that the monitor automatically goes into energy saving mode or activates the screen saver to display moving images.

Horizontal frequency (kHz)	**30~61**
Vertical frequency (Hz)	**60~75**
Maximum refresh rate (at 60Hz)	**1360 x 768 (* LN23R41B: 1280 x 720)**

The TFT LCD panel uses a panel consisting of sub pixels [3,147,264 (LN23R41B: 2,764,800)] which require sophisticated technology to produce. However, there may be few bright or dark pixels on the screen. These pixels will have no impact on the performance of the product.

Installing the stand

1. Place the TV faced down on a soft cloth or cushion on a table.
2. Attach the stand to the TV set as shown in the picture.
3. Use the four screws to tightly fix the stand.

Disconnecting the stand

1. Place the TV faced down on a soft cloth or cushion on a table.
2. Remove four screws from the back of the TV.
3. Separate the stand from the TV.
4. Cover the bottom hole with a cap.

English-67
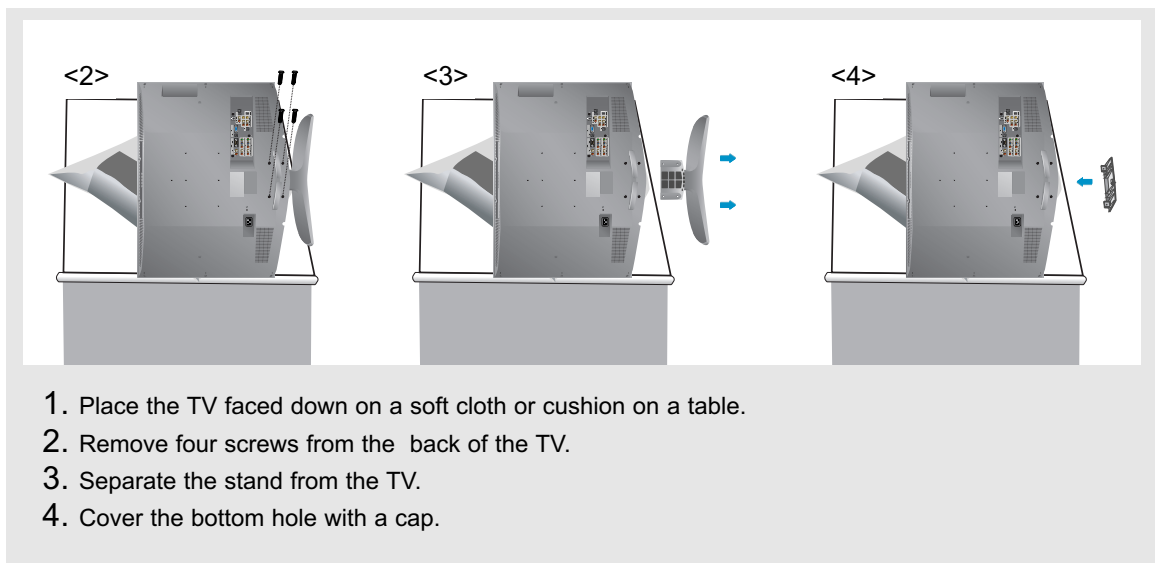
Installing the Wall Mount Kit
(LN23R41B / LN23R51B / LN26R51B)

Note: This installation is to be used when attaching the wall mount to a concrete wall.
When attaching to other building materials, please contact your nearest dealer.

Components (Sold separately)

		M4 X L12	M4 X L20		
ⓐ Wall-Bracket	ⓑ Set-Bracket	ⓒ Screw: 8EA	ⓓ Wood Screw: 4EA	ⓔ Anchor: 4EA	ⓕ Installation Guide

How to assemble the Wall Mount Bracket

1 ① Mark the location on the wall where the hole will be drilled.
   ② Drill a hole of 35mm depth on the marked location.
   ③ Fix anchors ⓔ on each hole on the wall.
   ④ Connect wall-bracket ⓐ to the wall with wood screws ⓓ after fitting
   anchors ⓔ into the wall-bracket ⓐ .

   Note: If the bracket is not firmly fixed to the wall, LCD TV can fall off.

2 ① Turn the power off and unplug the power cord from the outlet.
   ② Place the TV faced down on a soft cloth or cushion on a table.
   ③ Attach the set-bracket ⓑ onto the rear side of the TV set and secure the screws ⓒ .

3 ① Insert three Hangers of the set-bracket ⓑ into the grooves of the wall-bracket ⓐ .
   ② Fix set-bracket ⓑ and wall-bracket ⓐ with screws ⓒ .
   Note: Before installing the set on the wall, connect the cables to the set first.

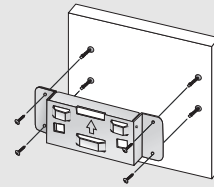# Installing the Wall Mount Kit (LN32R51B)

Note: This installation is to be used when attaching the wall mount to a concrete wall.
When attaching to other building materials, please contact your nearest dealer.

Components (Sold separately)

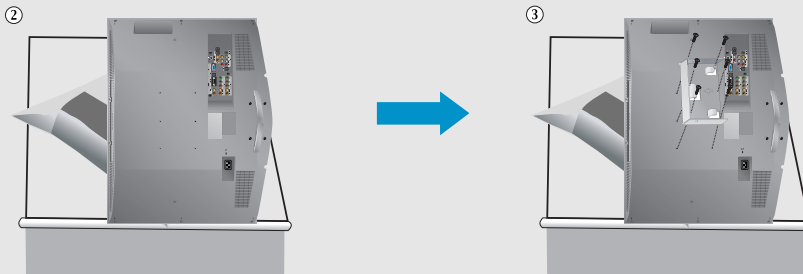|		M6 X L14	M4 X L25		M4 X L8	
ⓐ Wall-Bracket	ⓑ Set-Bracket	ⓒ Screw: 8EA	ⓓ Wood Screw: 7EA	ⓔ Anchor: 7EA	ⓕ Screw: 3EA	ⓖ Installation Guide

How to assemble the Wall Mount Bracket

1 ① Mark the location on the wall where the hole will be drilled.
② Drill a hole of 35mm depth on the marked location.
③ Fix anchors ⓔ on each hole on the wall.
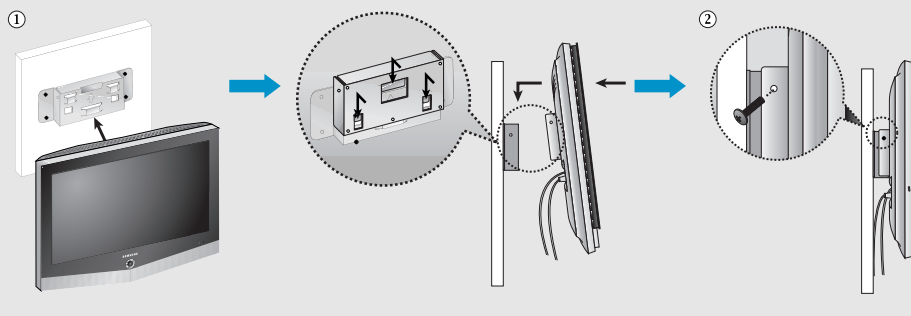④ Connect wall-bracket ⓐ to the wall with wood screws ⓓ after fitting anchors ⓔ into the wall-bracket ⓐ .

Note: If the bracket is not firmly fixed to the wall, LCD TV can fall off.

2 ① Turn the power off and unplug the power cord from the outlet.
② Place the TV faced down on a soft cloth or cushion on a table.
③ Attach the set-bracket ⓑ onto the rear side of the TV set and secure the screws ⓒ .

3 ① Insert three Hangers of the set-bracket ⓑ into the grooves of the wall-bracket ⓐ .
② Fix set-bracket ⓑ and wall-bracket ⓐ with screws ⓕ .
Note: Before installing the set on the wall, connect the cables to the set first.

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.

Cable

Figure 2

Figure 1

<Optional>
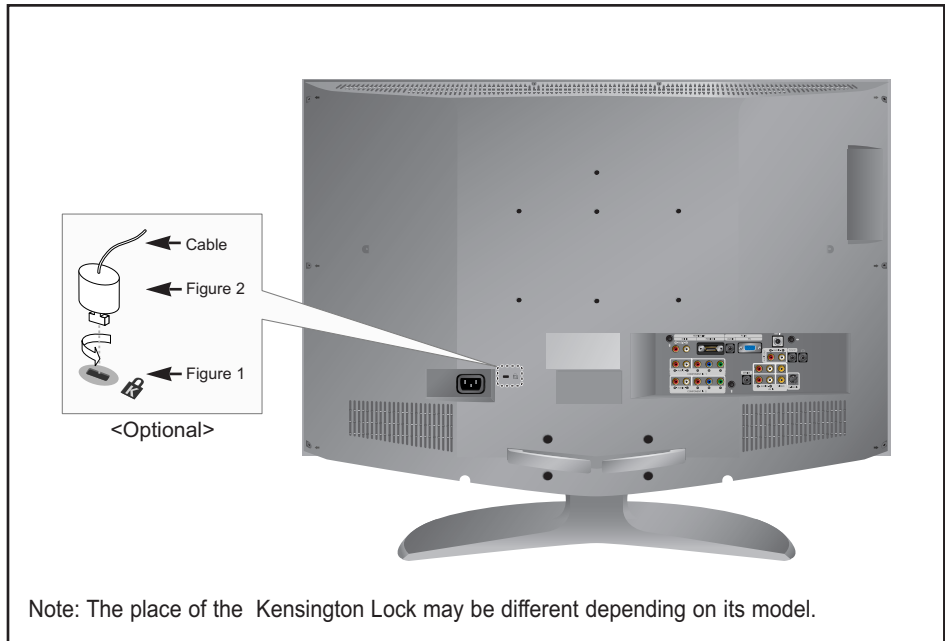
Note: The place of the Kensington Lock may be different depending on its model.

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.

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 Name	LN23R41B	LN23R51B	LN26R51B	LN32R51B
Panel				
Size	23" Diagonal (16:9)	23" Diagonal (16:9)	26" Diagonal (16:9)	32" Diagonal (16:9)
Display Size	20.10 (H) x 11.31 (V) inches	20.00 (H) x 11.25 (V) inches	22.67 (H) x 12.74 (V) inches	27.47 (H) x 15.44 (V) inches
	(510.72 (H) x 287.28 (V) mm)	(508.125 (H) x 285.696 (V) mm)	(575.77 (H) x 323.71 (V) mm)	(697.68 (H) x 392.26 (V) mm)
Type	a-si TFT active matrix	a-si TFT active matrix	a-si TFT active matrix	a-si TFT active matrix
Pixel Pitch	0.005 (H) x 0.016 (V) inches	0.015 (H) x 0.015 (V) inches	0.017 (H) x 0.017 (V) inches	0.020 (H) x 0.020 (V) inches
	(0.1330 (H) x 0.3990 (V) mm)	(0.372 (H) x 0.372 (V) mm)	(0.511 (H) x 0.511 (V) mm)	(0.511 (H) x 0.511 (V) mm)
Viewing Angle	176/176 (H/V)	170/170 (H/V)	170/170 (H/V)	170/170 (H/V)
Resolution	1280 (H) x 720 (V)	1366 (H) x 768 (V)	1366 (H) x 768 (V)	1366 (H) x 768 (V)
Frequency				
Horizontal	30 ~ 61 kHz	30 ~ 61 kHz	30 ~ 61 kHz	30 ~ 61 kHz
Vertical	60 ~ 75 Hz	60 ~ 75 Hz	60 ~ 75 Hz	60 ~ 75 Hz
Display Color	16,777,216 colors	16,777,216 colors	16,777,216 colors	16,777,216 colors
PC Resolution				
Maximum Mode	1280 x 720 @ 60 Hz	1360 x 768 @ 60 Hz	1360 x 768 @ 60 Hz	1360 x 768 @ 60 Hz
Optimum Mode	1280 x 720 @ 60 Hz	1360 x 768 @ 60 Hz	1360 x 768 @ 60 Hz	1360 x 768 @ 60 Hz
Input Signal				
Sync.	H/V Separate, TTL, P. or N.	H/V Separate, TTL, P. or N.	H/V Separate, TTL, P. or N.	H/V Separate, TTL, P. or N.
Video Signal	0.7 Vp-p @ 75 ohm	0.7 Vp-p @ 75 ohm	0.7 Vp-p @ 75 ohm	0.7 Vp-p @ 75 ohm
TV				
Color System	NTSC	NTSC	NTSC	NTSC
Sound System	STEREO	STEREO	STEREO	STEREO
Video				
Color System	NTSC	NTSC	NTSC	NTSC
Video System	CVBS, S-VHS	CVBS, S-VHS	CVBS, S-VHS	CVBS, S-VHS
Component				
Video In	1.0 Vp-p @ 75 ohm	1.0Vp-p @ 75 ohm	1.0Vp-p @ 75 ohm	1.0Vp-p @ 75 ohm
Audio In	500 mVrms	500 mVrms	500 mVrms	500 mVrms
Power Supply				
Input	AC 110~120 V, 60 Hz	AC 110~240 V, 50/60 Hz	AC 110~240 V, 50/60 Hz	AC 110~240 V, 50/60 Hz
Power Consumption				
Normal	100 W	100 W	140 W	170 W
Power Saving	< 1.5 W	< 1.5 W	< 1.5 W	< 1.5 W
Dimension (W x D x H)				
Body	22.95 x 3.54 x 17.44 inches	22.95 x 3.54 x 17.44 inches	26.06 x 3.70 x 19.60 inches	31.38 x 3.898 x 23.31 inches
	(583.0 x 90.0 x 443.0 mm)	(583.0 x 90.0 x 443.0 mm)	(662.0 x 94.0 x 497.8 mm)	(797.0 x 99.0 x 592.0 mm)
With stand	22.95 x 8.11 x 19.10 inches	22.95 x 8.11 x 19.10 inches	26.06 x 8.11 x 21.22 inches	31.38 x 9.80 x 25.62 inches
	(583.0 x 206.0 x 484.7 mm)	(583.0 x 206.0 x 484.7 mm)	(662.0 x 206.0 x 539.0 mm)	(797.0 x 249.0 x 650.7 mm)

Model Name	LN23R41B	LN23R51B	LN26R51B	LN32R51B
Weight With Stand	18.96 lbs (8.6 kg)	18.96 lbs (8.6 kg)	33.07 lbs (15.0 kg)	39.02 lbs (17.7 kg)
Environmental Considerations Operating Temperature Operating Humidity Storage Temperature Storage Humidity	50 °F to 104 °F (10 °C to 40 °C) 10 % to 80 %, non-condensing -4 °F to 113 °F (-20 °C to 45 °C) 5 % to 95 %, non-condensing	50 °F to 104 °F (10 °C to 40 °C) 10 % to 80 %, non-condensing -4 °F to 113 °F (-20 °C to 45 °C) 5 % to 95 %, non-condensing	50 °F to 104 °F (10 °C to 40 °C) 10 % to 80 %, non-condensing -4 °F to 113 °F (-20 °C to 45 °C) 5 % to 95 %, non-condensing	50 °F to 104 °F (10 °C to 40 °C) 10 % to 80 %, non-condensing -4 °F to 113 °F (-20 °C to 45 °C) 5 % to 95 %, non-condensing
Audio Characteristics Audio Input Audio Input (PC) Headphone Output Frequency Response	RCA Jack (L, R), 0.5 Vrms (-9 dB) 3.5 ø Stereo Jack, 0.5 Vrms (-9 dB) Max. 10 mW Output (3.5 ø Stereo Jack, 32 Ω) RF: 80 Hz ~ 15 kHz (at -3 dB) AV: 80 Hz ~ 20 kHz (at -3 dB)	RCA Jack (L, R), 0.5 Vrms (-9 dB) 3.5 ø Stereo Jack, 0.5 Vrms (-9 dB) Max. 10 mW Output (3.5 ø Stereo Jack, 32 Ω) RF: 80 Hz ~ 15 kHz (at -3 dB) AV: 80 Hz ~ 20 kHz (at -3 dB)	RCA Jack (L, R), 0.5 Vrms (-9 dB) 3.5 ø Stereo Jack, 0.5 Vrms (-9 dB) Max. 10 mW Output (3.5 ø Stereo Jack, 32 Ω) RF: 80 Hz ~ 15 kHz (at -3 dB) AV: 80 Hz ~ 20 kHz (at -3 dB)	RCA Jack (L, R), 0.5 Vrms (-9 dB) 3.5 ø Stereo Jack, 0.5 Vrms (-9 dB) Max. 10 mW Output (3.5 ø Stereo Jack, 32 Ω) RF: 80 Hz ~ 15 kHz (at -3 dB) AV: 80 Hz ~ 20 kHz (at -3 dB)

∗ Referring to Display Modes, page 73.

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 video card user guide; otherwise there may be no video. For the display modes listed below, the screen image has been optimized during manufacture.

Mode	Resolution	Horizontal Frequency (kHz)	Vertical Frequency (Hz)	Pixel Clock Frequency (MHz)	Sync Polarity (H/V)
IBM	640 X 480	31.469	59.940	25.175	- / -
	720 X 400	31.469	70.087	28.322	- / +
VESA	640 X 480	37.861	72.809	31.500	- / -
	640 X 480	37.500	75.000	31.500	- / -
	800 X 600	37.879	60.317	40.000	+ / +
	800 X 600	48.077	72.188	50.000	+ / +
	800 X 600	46.875	75.000	49.500	+ / +
	1024 X 768	48.364	60.000	65.000	- / -
	1024 X 768	56.476	70.069	75.000	- / -
	1024 X 768	60.023	75.029	78.750	+ / +
	1360 X 768	47.712	60.015	85.800	+ / +
VESA (LN23R41B)	1280 X 720	45.000	60.000	74.250	+ / +

∗ The interlace mode is not supported.

∗ The set might operate abnormally if a non-standard video format is selected.

∗ DVI dose not support PC function.