user's guide

RCA | LCD FLAT PANEL HDTV

For use with models: L19HDF10

contents

Need assistance?
visit our website at www.rca.com/tv
or call 1-877-794-7977

Important Information

CAUTION

RISK OF ELECTRIC SHOCK.
DO NOT OPEN

This symbol indicates that this product incorporates double insulation between hazardous main voltage and user accessible parts. When servicing, use only identical replacement parts.

Caution: To reduce the risk of electric shock, do not remove cover (or back). No user serviceable parts inside. Refer servicing to qualified service personnel.

This symbol indicates "dangerous voltage" inside the product that presents a risk of electric shock or personal injury.

This symbol indicates important instructions accompanying the product.

WARNING

To reduce the risk of fire or electric shock, do not expose this product to rain or moisture. This product should not be exposed to dripping or splashing. No objects filled with liquids, such as vases, should be placed on the component.

WARNING

The TV is unstable if it is not properly attached to the base or mounted to the wall. Please follow the base or wall mounting instructions provided in the User's Guide to ensure your safety.

Hg This symbol indicates that this product contains mercury. Special disposal of this product for environmental reasons may be required under the laws applicable to your jurisdiction. For disposal or recycling information, please contact your local authorities or the Electronic Industries Alliance: www.eiae.org.

Refer to the identification/rating label located on the back panel of your product for its proper operating voltage.

FCC regulations state that changes or modifications to this unit not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

Cable TV Installer: This reminder is provided to call your attention to Article 820-40 of the National Electrical Code (Section 54 of the Canadian Electrical Code, Part 1) which provides guidelines for proper grounding and, in particular, specifies that the cable ground should be connected to the grounding system of the building as close to the point of cable entry as practical.

Important: This television is a table model and is designed to sit on a firm, flat surface. Don't place the TV on soft carpeting or a similar surface, as the ventilation slots on the bottom of the unit may be blocked, resulting in reduced lifetime from overheating. To assure adequate ventilation for this product, maintain a spacing of 4 inches from the top and sides of the TV receiver and 2 inches from the rear of the TV receiver and other surfaces. Also, make sure the surface or stand is of adequate size and strength to prevent the TV from being accidentally tipped over, pushed off, or pulled off. This could cause personal injury and/or damage to the TV. Refer to the Important Safety Instructions on the next page.

The power button (followed by the power symbol) on this TV and your remote control puts the TV into a very low-power standby mode but will not completely shut the power off. In order to shut the power off, you will need to disconnect the power cord from your outlet. Therefore, you should make sure the TV is installed in a way that allows you to disconnect the power cord when desired.

Product Registration

Please fill out the product registration card (packed separately) and return it immediately. For US customers: Your RCA Consumer Electronics product may also be registered at www.rca.com/television. Registering this product allows us to contact you if needed.

Product Information

Keep your sales receipt to obtain warranty parts and service and for proof of purchase. Attach it here and record the serial and model numbers in case you need them. These numbers are located on the product.

Model No. _____   Serial No._____

Purchase Date _____   Dealer/Address/Phone _____

Important Safety Instructions

1. Read and follow all instructions.
2. Do not block any ventilation openings. Install in accordance with the manufacturer's instructions.
3. Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers)that produce heat.
4. Do not negate the safety purpose of the polarized or grounding-type plug. A polarized plug has two blades with one wider than the other. A grounding type plug has two blades and a third grounding prong. The wide blade or the third prong is provided for your safety. If the provided plug does not fit your outlet, consult an electrician for replacement of the obsolete outlet.
5. Protect the power cord from being walked on or pinched particularly at plugs, receptacles, and the point where it exits from the component.
6. Do not use this component near water.
7. Only use the attachments/accessories specified by the manufacturer.
8. Clean only with dry cloth.
9. Use only with the cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with the component. When the TV is placed on a cart, use caution when moving the cart to avoid injury from tip-over.
10. Unplug this component during lightning storms or when unused for long periods of time.
11. Refer all servicing to qualified service personnel. Service is required when the component is damaged in any way, such as power supply cord or plug damage, liquid spilled on or objects falling onto the component, rain or moisture exposure, abnormal operation, or if the component has been dropped.
12. If an outside antenna or cable system is connected to the product, be sure the antenna or cable system is grounded so as to provide some protection against voltage surges and built-up static charges. Section 810 of the National Electrical Code, ANSI/NFPA No. 70-1984 (Section 54 of Canadian Electrical Code, Part 1) provides information with respect to proper grounding of the mast and supporting structure, grounding of the lead-in wire to an antenna-discharge unit, size of grounding conductors, location of antenna-discharge unit, connection to grounding electrodes, and requirements for the grounding electrode. See following example:

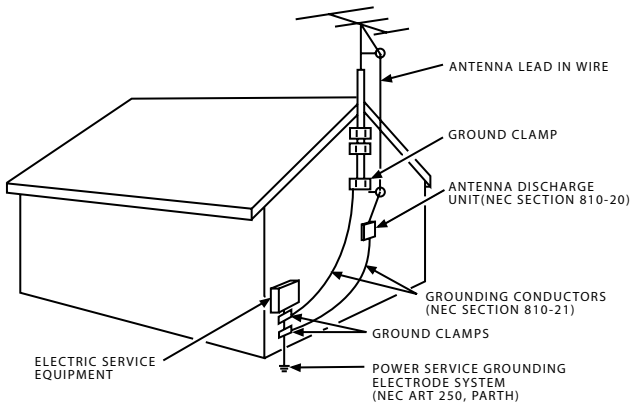ANTENNA LEAD IN WIRE

GROUND CLAMP

ANTENNA DISCHARGE
UNIT(NEC SECTION 810-20)

GROUNDING CONDUCTORS
(NEC SECTION 810-21)

GROUND CLAMPS

ELECTRIC SERVICE
EQUIPMENT

POWER SERVICE GROUNDING
ELECTRODE SYSTEM
(NEC ART 250, PARTH)

Table of Contents

Chapter 1 Connections and Setup

Before Initial Setup

Protect Against Power Surges
- Connect all components before you plug any power cords into the wall outlet or power strip. NEVER plug your TV into an outlet that is controlled by a wall switch.
- Turn off the TV before you connect or disconnect any cables.
- Make sure all antennas and cables are properly grounded. Refer to the Important Safety Instructions.

Safety Information
- Protect components from overheating.
- Don't block ventilation holes on any of the components. Arrange the components so that air can circulate freely.
- Don't stack components.
- If you place the component in a stand, make sure you allow adequate ventilation.
- If you connect an audio receiver or amplifier, place it on the top shelf so the heated air from it won't harm other components.

Avoid Audio Interference
- Position cables properly; insert each cable firmly into the designated jack.
- If you place components above the TV, route all cables down one side of the back of the TV instead of straight down the middle.
- If your antenna uses 300-ohm twin lead cables, do not coil the cables.
- Keep twin lead cables away from audio/video cables.

Avoid Direct Light
Don't place the TV where sunlight or room lighting is directed toward the screen. Use soft or indirect lighting.

Check Supplied Parts
Check that the following parts were packed with your product.

Replacing your remote
*If you need to replace your remote, call **1-800-257-7946**. A shipping and handling fee, and the appropriate sales tax, will be charged upon ordering. Please have your Visa or MasterCard ready.*

2 AAA BATTERIES

CABLE MANAGEMENT

POWER CORD

REMOTE CONTROL PART # RC198
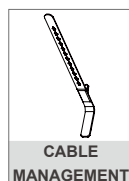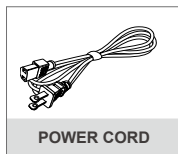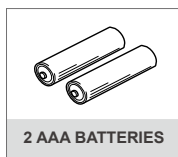
Graphics contained within this publication are presentation only.

5

Removing and Installing the stand

Your TV comes with the table stand attached. If you want to mount your TV to the wall, remove the table stand by following the instructions below:
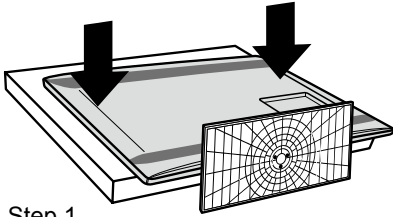
Step 1

Place the plastic bag off the TV and place it on a table or other flat surface. Place the TV set face down on the TV bag.
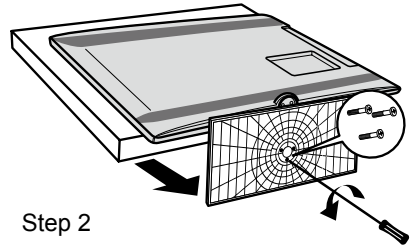
Step 2

Remove the table stand from the TV back cabinet by removing the three size M4 st-screws with a screwdriver.
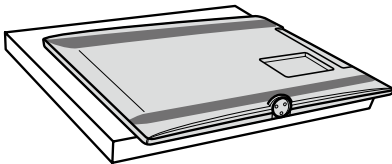
TV without table stand attached.

Mounting Your TV to the Wall

If you want to mount your TV to the wall, first remove the table stand from the TV's back cabinet as shown above:

To mount your TV to the wall, purchase a VESA wall	
Models L19HDF10	**Purchase a VESA 100 x100, Size M4 screw**

The VESA number is the horizontal and vertical measurement of the mounting holes. For example, 100x100 refers to fact that the mounting measurements are 100mm horizontally and 100mm vertically. Follow the directions included with the wall mount to mount the TV to the wall.

Caution: Your wall mount must be able to bear a minimum of five times the TV's net weight to avoid causing damage.

Chapter 1 Connections and Setup

Side Panel Buttons

If you cannot locate your remote, you can use the side panel buttons on your TV to operate many TV features.

CH+/-
Press to select channels stored in the channel list and external input, or move up (▲) or / down (▼) through the menu items.

VOL+/-
Press to increase / decrease the volume, or move right (▶) or / left (◀) through the menu items.

MENU
Brings up the TV Main Menu.

⏻ (POWER)
Turns the TV on and off.

Explanation of Jacks

A. Side Panel

⇞ **(USB)** Allows you to connect a compatible mass storage device with a USB jack

B. Rear Panel
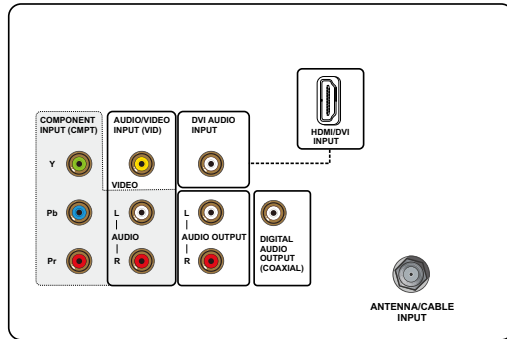
ANTENNA/CABLE INPUT
Lets you connect a coaxial cable to receive the signal from your antenna, cable, or cable box.

AUDIO/VIDEO INPUT (VID)
Lets you connect a component that has composite video jacks, such as a VCR or DVD player.
- **L AUDIO** Provides left audio connection when using the **VIDEO INPUT** jack. The left audio connectors are usually white. For mono audio sources, be sure to use the left AUDIO INPUT.
- **R AUDIO** Provides right audio connection when using the **VIDEO INPUT** jack. The right audio connector is usually red.

COMPONENT INPUT Let you connect a component that has component video jacks, such as a DVD player.
- *CMPT Y Pb Pr (Component Video)* Provides good picture quality because the video is separated into three signals. Use three video-grade or component video cables for the connection.
- When using CMPT Y Pb Pr, make sure you connect left and right audio cables to the L and R AUDIO jacks shared with **AUDIO/VIDEO INPUT (VID).** For mono audio sources, be sure to use the left AUDIO INPUT.

DIGITAL AUDIO OUTPUT (coaxial) Use a digital coaxial cable to connect your TV to a compatible audio receiver.

HDMI/DVI INPUT (High-Definition Multimedia Interface/Digital Visual Interface) Provides an uncompressed digital connection that carries both video and audio data by way of an integrated mini-plug cable. Since HDMI technology is based on Digital Visual Interface (DVI), the jack on the back of your TV is also compatible with DVI components.
- **DVI AUDIO INPUT** (used for DVI only) Provides audio connection when using the **HDMI/DVI INPUT** jack for   DVI.

Note: If using a DVI component, remember to connect the audio cable because the DVI cable carries only the picture signal, not the sound.

Chapter 1 Connections and Setup

Remote Control Buttons

1. **MEDIA** (P29)
   Press to enter USB menu directly.
2. **Number Buttons** (P18)
   Press to select channel.
   the dot "•"
   Press the dot "•" to shift the subchannel from the main channel.
3. **MENU**
   Press to display the main menu.
4. **Arrows (▲ / ▼ / ◄ / ►)**
   Use the four arrows to highlight different items in the TV menu and to adjust the menu controls.
5. **FORMAT** (P19)
   Press to select aspect ratio available for the TV screen.
6. **MUTE**
   Reduces the TV volume to its minimum level. Press again to restore the volume.
7. **VOL+/-**
   Press to adjust the volume.
8. **FAV**
   Press to browse the channels in your favorite list. Use ▲/▼ to highlight options, and press **OK** to select. Or press the FAV button repeatedly to cycle through your favorite channels.
9. **GUIDE**
   Press to display the program guide.
10. ⏻
    Press to turn the TV on or off.
11. **INPUT** (P18)
    Press to open the **Input** list, then press ▲/▼ to highlight options, and press OK to confirm. Or press **INPUT** repeatedly to cycle through the available input sources.
12. **CLEAR**
    Removes any menu or display from the screen and returns you to normal viewing.
13. **OK**
    When in the menu system, pressing the OK button confirm your selection.
14. **GO BACK**
    Returns to the previous channel.
15. **CH + or CH -**
    Press to select channels and external input mode.
16. **INFO** (P19)
    If no menus are on-screen, displays the Channel Banner; press again to show upcoming program information, if available. Pressing three times clears the screen.
17. These button can be used for playing music in USB menu.
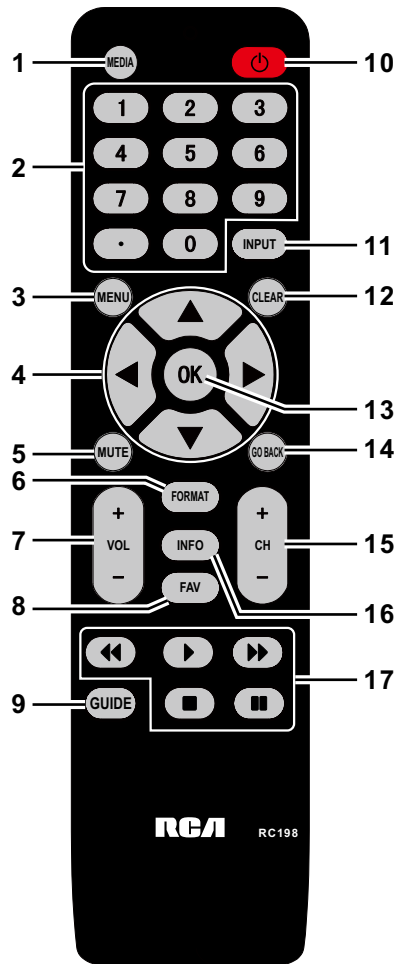
Remote control part number RC198

Note:This TV utilizes new remote control signal codes and may not be compatible with your existing universal remote (e.g. satellite box remotes, cable box remotes, generic universal remotes, etc.). Over time, newer universal remote controls that become available should pick up the new TV codes.

Antenna/Cable Connection

The first step in connecting your TV is obtaining the signal. The back panel of your TV allows you to receive analog and/or digital channels by using the **ANTENNA/CABLE INPUT.**
Before you connect your TV, you have to determine whether you will be using an antenna or a cable service to obtain the signal.

What You Need

Antenna (Rabbit Ears) or Outdoor Antenna with Coaxial Cable

Plug the antenna or coaxial cable from the wall outlet into the **ANTENNA/CABLE INPUT** on the back of the TV. You are ready to receive off-air local digital and analog channels.

Cable Service

Plug the coaxial cable from the wall outlet into the **ANTENNA/CABLE INPUT** on the back of the TV. You are ready to receive your cable channels.

Set-Top Box

If you have a set-top box, you may need to call your cable company or satellite service provider. They may recommend special cables to allow you to view digital channels.

What You Need to Know

- Visit www.antennaweb.org for help in deciding what type of antenna to use in order to receive the local digital channels available to you. Enter your location, and the program will list local analog and digital stations available using your antenna.
- When you watch TV, the Channel Banner displays the type of channel currently viewed. (P19)
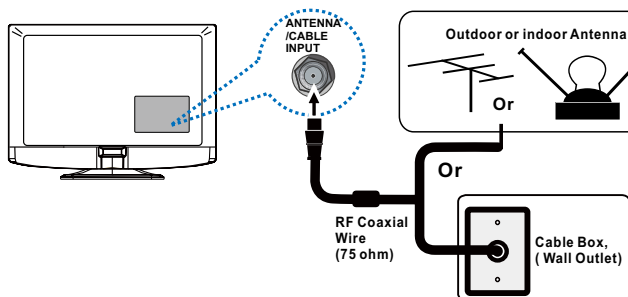
Connect the RF coaxial cable on your home outlet to the **ANTENNA/CABLE INPUT** jack of this unit.
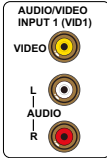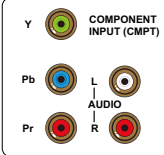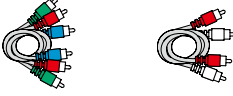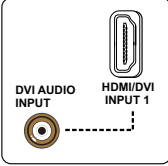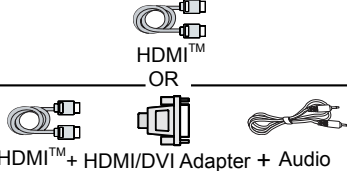
Once connection are completed, turn on the unit and begin intial setup. Channel scnanning for the unit to memorized all available channels in your area. (P16)

Chapter 1 Connections and Setup

External Component Connection

There are several ways to connect components, such as DVD players and setup boxes, to your TV. Please use the following chart to determine which connections are best for you. Proceed to the appropriate pages to connect your components.

No suppplied cables are used in this connection;
Please purchase the necessary cables at your local store.
High Speed HDMI cable is reconmmended for the better compatibility.

Jacks Used	Cable Needed	Go to...
AUDIO/VIDEO INPUT 1 (VID1) VIDEO L AUDIO R	Audio/Video	page 14
COMPONENT INPUT (CMPT) Y Pb L AUDIO R Pr	Component Video Audio	pages 14
DVI AUDIO INPUT HDMI/DVI INPUT 1	HDMI™ OR HDMI™ + HDMI/DVI Adapter + Audio	pages 13

HDMI, the HDMI logo, and High-Definition Multimedia Interface are trademarks or registered trademarks of HDMI Licensing LLC.

Input	Signal Compatability
Ant/Cable	**480i, 480p, 720p, 1080i (NTSC, ATSC, and QAM formats)**
Composite Video	**480i**
Component Video	**480i, 480p, 720p/60Hz, 1080i/60Hz, 1080p**
PC	**VGA, SVGA, XGA**
HDMI	**480i, 480p, 720p/60Hz, 1080i/60Hz, 1080p/60Hz**

Customer Support
For additional assistance in using your RCA product, please visit www.rca.com/customersupport.

A. HDMI Connection (Best)

High-Definition Multimedia Interface (HDMI) technology is an uncompressed digital connection that carries both video and audio data by way of an integrated mini-plug cable.

Example: Component with HDMI jack:

1. Connect an HDMI cable to the **HDMI/DVI INPUT 1** jack and to the HDMI output jack of the device.
2. Turn on your TV, then turn on the component.
3. Press **INPUT** to open the **Input** list, then press **INPUT** repeatedly to select **HDMI**.
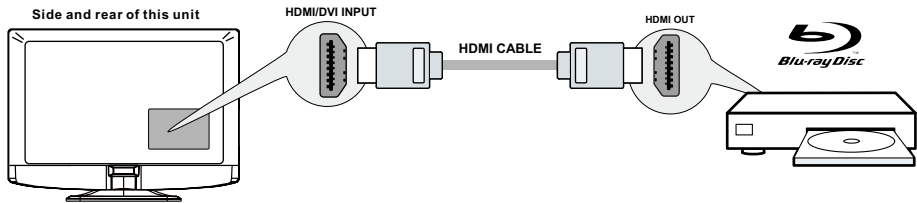
B. HDMI/DVI Connection

Since HDMI technology is based on Digital Visual Interface (DVI), the jack on the back of your TV is also compatible with components that have a DVI output jack.

e.g. Conneted to the device (E.g. PC) with the DVI out jack

To connect an HDMI cable and an HDMI/DVI adapter:

1. Connect an HDMI cable to the **HDMI/DVI INPUT** jack on the back of the TV.
2. Attach an HDMI/DVI adapter to the end of the HDMI cable; then connect the adapter to the DVI output jack on the PC.
3. Since you're using an HDMI/DVI adapter, you need to connect separate audio cables to the **DVI AUDIO INPUT** jack on the back of the TV and to the audio jack on the back of the PC.
4. Turn on your TV, then turn on the PC.
5. Press **INPUT** to open the **Input** list, then press **INPUT** repeatedly to select **HDMI.**
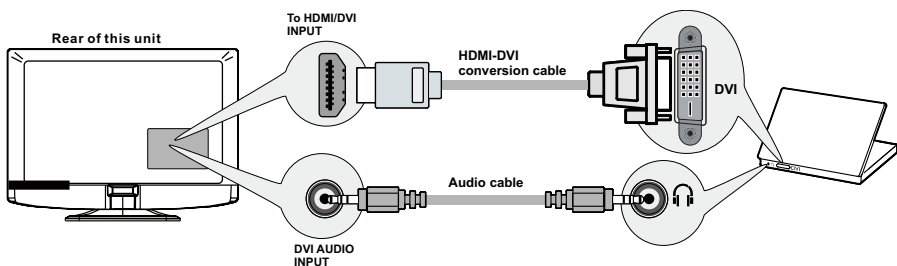
C. Component Video Connnection (Better)

Component video connection offers better picture quality for video devices connected to the unit.To connect a component that has Y Pb Pr jacks, such as a DVD player, follow these steps:

Example: DVD Player

1. Connect three video cables or special Y Pb Pr cables to the **COMPONENT INPUT (CMPT) Y Pb Pr** jacks on the back of the TV and to the Y Pb Pr outputs on the DVD player.
2. Connect your red and white audio cables to the **COMPONENT INPUT (CMPT)** right and left AUDIO jacks (shared with the composite **AUDIO/VIDEO INPUT(VID)**) on the back of the TV and to the audio output jacks on the DVD player.
3. Turn on your TV, then turn on the DVD Player.
4. Press **INPUT** to open the **Input** list, then press **INPUT** repeatedly to select **CMPT.**
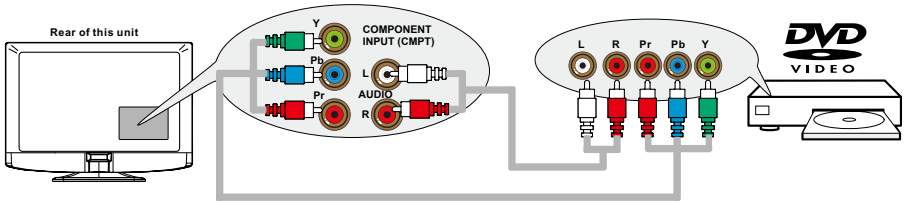
D. Composite Video Connection (Good)

To connect a component with a video output jack, such as a DVD player, follow these steps:

Example: DVD Player

1. Connect the yellow video cable to the **(VID) VIDEO** jack on the back of the TV and to the video output jack on the DVD player.
2. Connect the red and white audio cables to the **(VID)** right and left audio jacks on the back of the TV and to the audio output jacks on the DVD player.
3. Turn on your TV, then turn on the DVD Player.
4. Press **INPUT** to open the **Input** list, then press **INPUT** repeatedly to select **VID.**
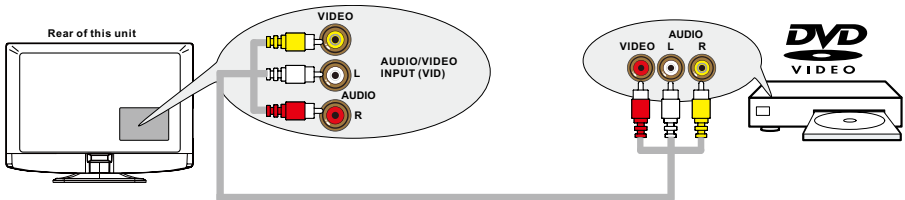
Plugging In the AC Power Cord

Make sure that the AC power cord must be plugged to an AC outlet after all the neccessary connections are completed.
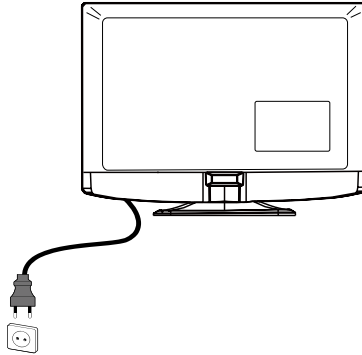
Putting Batteries in the Remote

- Remove the battery compartment cover from the back of the remote control by pushing the tab and lifting off the cover.
- Insert 2 AAA batteries, making sure the polarities (+ and -) are aligned correctly.
- Replace the cover.

Chapter 1 Connections and Setup

Completing the Initial Setup

The first time you turn on your TV, the Initial Setup Wizard opens, which guides you through setting up basic settings including the **language, TV loacation, Time zone, Tuner** and **channel scan.**

A. Turning on the unit

Press ⏻ to turn on the unit after making sure that you have:

• Installed the remote control batteries.

• Connected an antenna, cable TV, or Satellite TV.

• Connected the power cord.

B. Selecting Lanuguage

The Language choice screen opens. press ▲/▼ to select the on-screen language from the choices on the right of the TV screen (**English / Español / Français**).

• Initial Setup menu on step 3 will be diaplayed in the selected language after you press **OK** or ▶.

Initial Setup	Language
Please select your language:	**English**
	Español
	Français
◀▶ Select	OK▶ Next

C. Setting TV Location

Press ▲/▼ to select the desired location settings (**Home / Retail**), then press **OK** or ▶.

• Choosing **Home** for the TV Location assigns the optimal picture settings for most home environments. This is also the most energy-efficient setting.

• Choosing **Retail**, which is not Energy Star compliant, the unit will be set up with predefined setting for retail display. In this setting, the power consumption may possibly exceed the limited requirement of the ENERGY STAR® qualification.

Initial Setup	TV Location
TV Location	**Home**
	Retail
◀Back ▲▶◀Select OK▶Next CLEAR Exit	
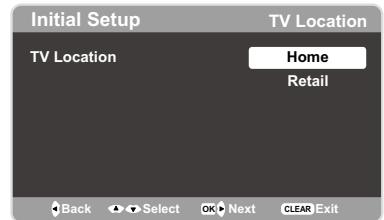
D. Setting Time Zone

Press ▲/▼ to select the current local time, then press **OK** or ▶ to go to the next screen.

Initial Setup	Time Zone
Please select your time zone:	Hawaii
	Alaska
	Pacific
	Mountain
	Central
	Eastern
	Atlantic
	Newfoudland
◀Back ▲▶◀Select OK▶Next CLEAR Exit	
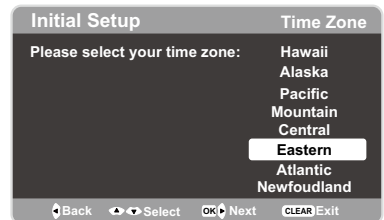
E. Auto Channle Scan

1. The **Tuner** screen will be displayed; default choice is **Antenna**. If you are using Cable (No Box) Service, press ▼ to highlight **Cable**.

   press **OK** or ▶ to go to the next screen.

Initial Setup	Tuner
Please select your tuner mode:	**Antenna**
	Cable
◊Back ⬥⬥Select OK▷Next CLEAR Exit	

2. The **Channel Scan** screen will be displayed; default choice is **Scan**. Press ▶ to commence the search for available channels to be stored into memory.

   Note: If you do not want to scan for channels at this time, press CLEAR to stop scanning.

Initial Setup	Channel Scan
First, please connect antenna or cable.	**Scan**
	Skipscan
Start channel scan now?	
If you skip this step, the channel scan could be performed by going to the Setup menu later.	
◊Back ⬥⬥Select OK▷Next CLEAR Exit	

3. The screen will be change to show the progress if the search for Analog (NTSC) and Digital (ATSC) channels.

4. When finished, the Complete screen will be displayed to inform you that the unit has completed the Initial Setup.

   Press **CLEAR** to exit and begin watching TV.

Initial Setup	Complete
Congratulations!	
Completed Initial Setup.	
Please press [OK] to exit the Initial Setup Menu.	
◊Back	CLEAR Exit

Note:
• If you select to skip this step by chosing **Skip Scan,** or by pressing **CLEAR** to stop scanning during Auto Scanning, next time that you decied to complete this procedure, you'll need to select the TV as input (through **INPUT** key) and then go through the Menu option to select the Signal Type to get the option of scanning the channels again.
• If you are using a satellite or cable set-top box, you do not need to complete Channel Search.

After an intial setup is completed:
• You want to scan the channels automatically again, refer to page 23;
• You can add the desired channels unmemorized by Channel Skip (P23);
• If you wang to change to another language, refer to page 29;
• If you want to set the time zone, refer to page 25.
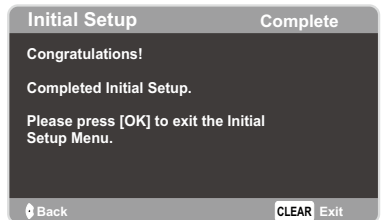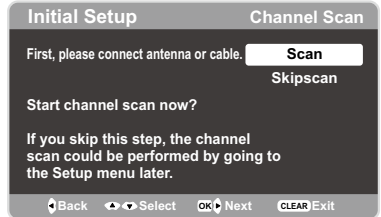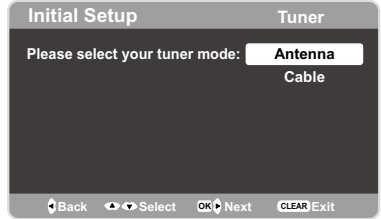
Chapter 2 Understanding the basics

Turning your TV on or off

1. Plug the power cord into an AC power outlet.

2. Press ⏻ to turn on your TV.

3. Press ⏻ again to turn off your TV. When you turn off the TV, it goes into standby mode.

Warning: When your TV is in standby mode, it is still receiving power. To completely disconnect power, unplug the power cord.

Selecting the video input source

1. Turn on your TV, then press **INPUT** on the remote. The **Input** list opens.

2. To selelct an input source, press **INPUT** repeatedly, or press ▲/▼ to highlight the video source, then press **OK**.

Input	
TV	
VID	No Lable
CMPT	No Lable
HDMI	No Lable
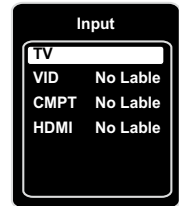
Selecting a channel

A. Select Channel by using **CH+/-** or **the number buttons.**

• Selelct the memorized channels, use **CH+/-** or **the number buttons.**

• Selelct the non-memorized channels, use **the number buttons.**

B. To use **the number buttons:**

e.g. **Analog TV channel** -When selecting channel **12**, press **1,** press **2**, then press **OK.**

e.g. **DTV channel**-When selecting digital channel **12.3**, be sure to press the dot (•) before entering the subchannel number. press**1,** press **2**, press the dot (•), press 3, then press **OK.**

C. Press **GO BACK** to return to the previously viewed channel.

What is the subchannel

By using high compression techknology, digital broadcasting offers a service that enables multiple signals to sent simultaneously. Therefore, you can select more than one program per main channel since digital broadcasting technology distinguish between multiple channels by a single network.

Adjusting the Volume

This section describes how to adjust the volume. The mute function, which turns the sound off and on, is also described.

A. use **VOL+/-** to adjust volume.

The volume bar will be displayed at the bottom of the TV screen when adjusting the volume.

• The volume bar will automatically disappear in a few seconds.

B. Press **MUTE** to turn off and on the sound.

Mute mark is diaplayed on the TV screen for a few seconds.

Press **MUTE** again or **VOL +/-** to recover the orignal volume.

Screen Formats

Screen format refers to the way the picture is displayed on your TV. Press the **FORMAT** button on your remote to see if a different format is available for the video you are viewing. The format changes as you press the **FORMAT** button, and the format type is displayed at the top left of the screen.

Analog video is sent in a 4/3 format, which your TV displays in a 16/9 format. Most digital video is sent in a 16/9 format which fills your screen, but it sometimes is sent in 4/3, which does not fill your screen. It depends on how the station or component connected to your TV is formatting the video. If there are bars on the screen, press the FORMAT button to try a different format that may eliminate the bars. Some bars can't be removed because of the way the format is sent by the broadcaster.
Press FORMAT repeatedly to cycle through the available display formats. Options include:

Note: For HD Video, press FORMAT to choose from Full, Expand, Cinerama and Zoom. For VGA signal, choose from Normal, Full, and Dot By Dot. For HDMI and CMPT inputs, there is also a No Overscan format.
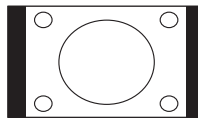
Normal
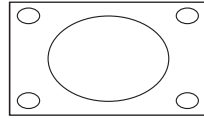
Full
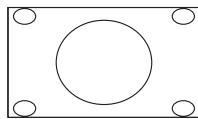
Cinerama
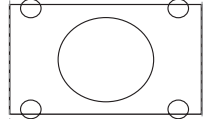
Zoom

Channel Banner

There are several indicators that may appear when you press the **INFO** button on the remote control. This display is called the Channel Banner. The following list describes the items on the Channel Banner screen.

1 — (No program details.)		
2 — (No program title.)		2.1 — 10
	English Stereo	RFHF — 9
3 — No rated cc	720p HD 12:35 PM	Cable — 8
4	5 6 7	8
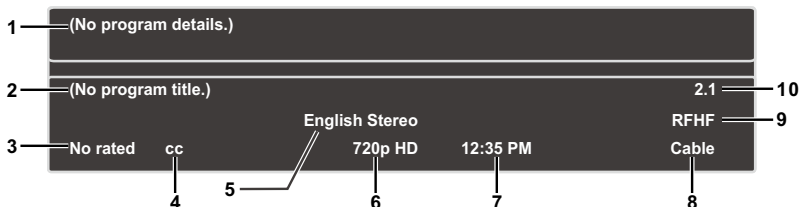
1. program guide - "No program details" is displayed when the program guide is not provided.
2. program title
3. rating information of the current program
4. Closed Captioning is available on the current channel.
5. audio language

6. effective scanning lines and scan mode(720p) and digital TV fomat (HD)
7. current time
8. signal type
9. channel name, if avaible
10. channel number

Chapter 3 Using the TV menu

Using the Menu System

This section explores the menus of your TV. Each menu is outlined and detailed to help you get the most from your TV. To access the menu system, follow these steps :

1. Press **MENU** to open the main menu.
2. Press ▲/▼ to highlight an option within the main menu and press ◄/► to enter its sub-menu.
3. Press ▲/▼ to highlight a item, then press ◄/► to adjust the slected items, or press ◄/► to enter the next screen.
4. Press **OK** to confirm your selections.
5. Press **MENU** to reuturn to the previous screen, or press **CLEAR** to close the menu.

Note:
• use the text at the bottom of each screen for help.
• Descriptions of each menu are discussed in the order they appear.

Picture Menu

The **Picture** menu contains menus and controls to configure the way the picture appears. The **Picture** menu options apply to the video for the main TV and VIDEO INPUT selections. All picture options can be applied to each input - *VID , CMPT, HDMI inputs.*

Press **MENU** on the remote to open the main menu, press ▲/▼ to select **Picture**, press **OK** or ► to display options:

Picture Preset - Allows you to select one of the preset picture settings: **Natural***,* **Vibrant***,* **Cinematic***,* **Sports***,* **ECO** *or* **Personal**. Choose the setting that is best for your viewing environment.

Brightness - Controls the overall brilliance of the screen, use ◄/► to adjust the brightness of the picture.

Sharpness - Use ◄/► to adjust the crispness of the edges in the picture.

Expert Settings

   Contrast -Use ◄/► to adjust the difference between the light and dark areas of the picture.
   Black Level -Use ◄/► to adjust the black level.
   Color - Use the right or left arrow to adjust the richness of the color.
   Tint - This option adjusts the balance between the red and green levels.
   Color Temperature - Use ◄/► to to adjust the value of color temperature directly from cool to warm. Cool for a bluer palette of picture colors; Warm for a redder palette of color.

20
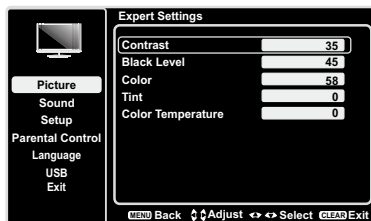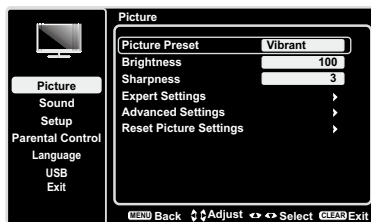
Advanced Picture Settings:

Light Sensor - When activated, this feature monitors the ambient light conditions in the room and adjusts the TV's backlight for optimum viewing. It also serves as an energy-saving feature by lowering the backlight power level when appropriate (typically in darker room conditions).

Dynamic Backlight - Turn on this option to automatically adjust the brightness of the backlight according to the content of the incoming signal. This optimizes the picture quality and decreases power consumption.

Noise Reduction - This setting reduces picture "static" or any type of interference. This feature is especially useful for providing a clearer picture in weak analog signal conditions. Press the right arrow to choose between these options:

Low for a softer, smoother picture that retains picture sharpness and detail.

Middle for a slightly softer picture than the *Low* setting.

High for an even softer, smoother picture than the other settings (the picture detail is somewhat decreased).

Auto adjust this function automatically.

Reset Picture Settins - Allows you to reset all the picture setting to the factory default.
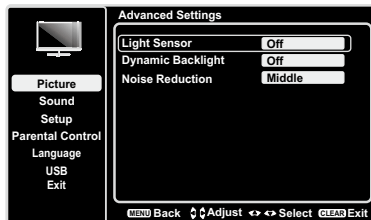
Sound Menu

The **Sound** menu lets you adjust audio output. To access the **Sound** menu, press **MENU** on the remote to open the main menu, press ▲/▼ to select **Sound***,* then press **OK** or ▶ to display options:

Equalizer - The five-band graphic equalizer allows you to adjust the audio frequency settings. You can select one of the five-band equalizer presets or create your own personal preset.

• **Sound Preset** - Allows you to choose a specific Sound Preset. Press ◀/▶ to cycle through the options: **Standard, Movie, Voice, Music** and **Personal**.

• **Frequency Range -** Displays the different graphic equalizer bands set for each Sound Preset option. Choose a band and make adjustments. When you make adjustments, the Sound Preset option automatically changes to **Personal**. Press ◄/► to select the frequency (100Hz, 300Hz, 1KHz, 3KHz, 10KHz) you want to adjust. Use the ▲/▼ to adjust the level. When you are done adjusting the levels, press the **MENU** button to exit.

Balance Press ◄/► to adjust the level of audio sent to the left and right speakers.

Surround On/Off

Speaker On/Off. When you select **Off**, the sound speaker of TV will be turned off.

SPDIF TYPE Press ◄/► to selecy SPIDF type.

Auto Volume Level Reduces the annoying blasts in volume during commercial breaks, and also amplifies softer sounds in program material. Eliminates the need to constantly adjust the volume.

Sound	
Equalizer	►
Balance	0
Surround	On
Speaker	On
SPDIF Type	Dolby Digital
Auto Volume Control	Off
Analog TV Sound	Stereo

Picture / Sound / Setup / Parental Control / Language / USB / Exit

MENU Back ▲▼Adjust ◄► ◄►Select CLEAR Exit

Auto Volume Control Reduces the annoying blasts in volume during commercial breaks, and also amplifies softer sounds in program material. Eliminates the need to constantly adjust the volume.

Analog TV Sound Controls the manner in which the sound comes through the speakers. The available options vary according to the input selected.

Mono (available for regular TV viewing only) - This option plays the sound in mono only. Use this setting when receiving broadcasts with weak stereo signals.

Stereo - This option splits the incoming stereo audio signal into left and right channels. Most TV programs and recorded materials have stereo audio. The word "Stereo" appears in the Channel Banner when you tune to a program that is broadcast in stereo.

Secondary Audio Program (SAP) Plays the program's audio in a second language, if one is available. The letters SAP appear in the channel banner when a program is broadcast with SAP information. SAP audio is broadcast in mono. SAP is also used to broadcast an audio description for the program for the visually impaired.

Second Audio Program (SAP) Plays the program's audio in a second language, if one is available. The letters SAP appear in the channel banner when you tune to a program that is broadcast with SAP information. SAP audio is broadcast in mono. SAP is also used to broadcast a program's audio with descriptions of the video for the visually impaired.
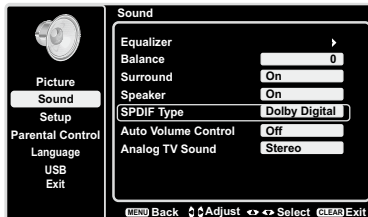
Setup Menu

The **Setup** menu allows you to configure the TV with your preferences. Press **MENU** on the remote to open the main menu, press ▲/▼ to select **Setup**, then press **OK** or ► to display options:

Setup	
Signal Type	Cable
Channel Scan	►
Channel Skip	►
Channel Edit	►
Input Skip	►
Input Labels	►
Closed Caption	►
Time Setup	►
Reset All	►

Picture / Sound / Setup / Parental Control / Language / USB / Exit

MENU Back ▲▼Adjust ◄► ◄►Select CLEAR Exit

A. Signal Type

Choose the type of signal (**Cable** / **Antenna**) you have connected to the ANTENNA/CABLE INPUT.
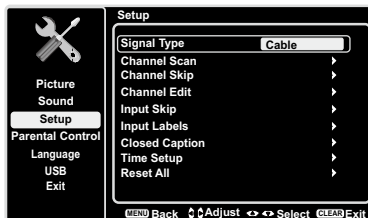
B. Channel Scan

When you scan channels, your TV searches for channels
with signals and store the channel information in the
channel list. When you press **CH+** or **CH-**, your TV goes to
the next or previous channel in the channnle list and skips
the channels that do not have signals.
If the TV signal source changes, for example you change
from an outdoor antenna to cable TV (no box), you need to
scan for channels.
To automatically scan for channels:
1. After chosing the signal type, press ▲/▼ to highlight
   Channel Scan.
2. Press ▶ to start the scan. You can see the search
   progress and how many channels are found in the
   on-screen menu. After the scan is complete, the menu
   closes and your TV tunes to the first channel in the list.
   • You can press **CLEAR** to stop the search.
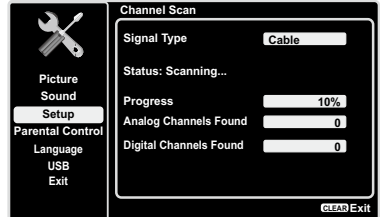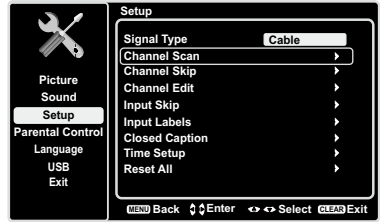
C. Channel SKip

You can hide channels in the channel list. When you press
CH+ / CH-, your TV will skip the hidden channels. You can
still tune to the hidden channel by pressing the number
buttons for the channel.
To hide channels:
1. In the **Setup** menu screen, press ▲/▼ to highlight
   Channel Skip.
2. press ◀/▶ to open the channel lists screen.
3. press ▲/▼ to highlight the channel you want to hide,
   then press **OK** to check the highlighted channel. You
   can add a channel by highlighting a channel and
   unchecking it.
4. Repeat Step3 to hide additional channels.
5. Press **MENU** to return to the previous menu, or press
   CLEAR to close the menu.
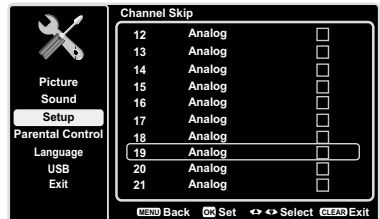
D. Channel Edit

This enables you to add or change a channel label only for
analog channels, for Digital channels, you can just see the
name and can not change it:
1. In the **Setup** menu screen, press ▲/▼ to highlight
   Channel Edit.
2. press ◀/▶ to open the channel lists screen.
3. press ▲/▼ to highlight the channel you want to add a
   label to or change the label for, then press ◀/▶ to enter
   the **Channel Edit** screen.
4. **Channel Name** is highlighted, use **the number buttons**
   to enter the name for the channel.
5. Press **OK** to confirm and save the lable.
6. Press **MENU** to return to the previous menu, or press
   CLEAR to close the menu.

E. Input Skip

You can hide video inputs in the channel list. When you press **CH+ / CH-**, or when you press **INPUT**, your TV will skip the hidden inputs.
To hide Inputs:
1. In the **Setup** menu screen, press ▲/▼ to highlight **Input Skip**.
2. press ◄/► to open the input lists screen.
3. press ▲/▼ to highlight the video input you want to hide, then press **OK** to check the highlighted input. You can add an input by highlighting an input and unchecking it.
4. Repeat Step3 to hide additional input.
5. Press **MENU** to return to the previous menu, or press **CLEAR** to close the menu.
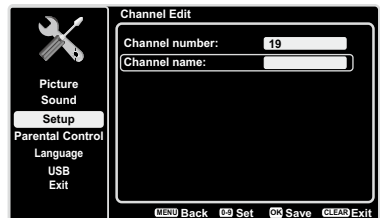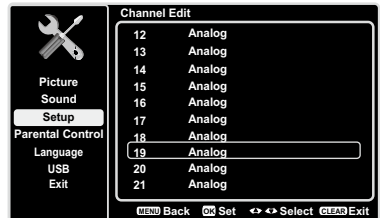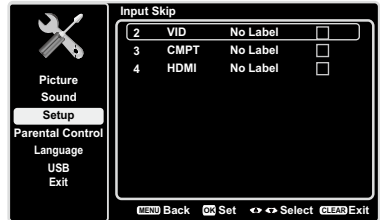
F. Input Labels

To add a label to an input source to make it easier to identify:
1. In the **Setup** menu screen, press ▲/▼ to highlight **Input Labels**.
2. Press ◄/► to open the **Input Lables** screen.
3. Press ▲/▼ to highlight the input source you want to add a label for, then press ◄/► to select a label for this source.
4. Press **MENU** to return to the previous menu, or press **CLEAR** to close the menu.
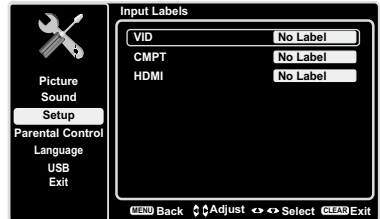
G. Closed Caption

Many programs are encoded with closed captioning information, which lets you display the audio portion of a program as text on the TV screen.
Note: Closed caption settings are not available for HDMI, CMPT INPUTS. These settings must be set in the connected component's menu. Closed captioning is not available on all channels at all times. Only specific programs are encoded with closed captioning information. When a program is closed captioned, CC is displayed in the Channel Banner. See page 19 for more information about the Channel Banner.

The Closed Caption options are:

CC Setting
Allows you to choose the way closed captioning information appears on the screen.
   Off No captioning information displayed.
   On always Captioning information shown always, when available.
   On when muted Displays captioning information, when available, whenever the TV's sound is muted by pressing the MUTE button. The captioning information is not displayed when the sound is not muted.

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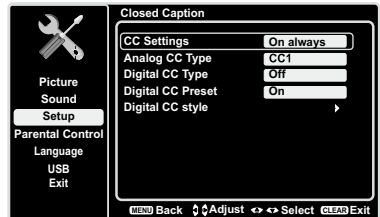
Analog CC Type If available, this option allows you to select the captioning mode used for displaying captioning information. If you are unsure of the differences among the modes, you may prefer to leave the closed captioning mode set to CC1, which displays complete text of the program in the primary language in your area.

Digital CC Type If available, this allows you to select a closed caption service mode (1-6) for digital channels.

Digital CC Preset If available, this allows you to select between **Default** and **Custom** options. **Custom** changes according to what you set for the options below.

Digital CC Style If available, this allows you to customize the following display options:

    Caption Style Allows you to select between **As Broadcaster** and **Custom** options. Custom changes according to what you set for the options below.
    Digital CC Size Allows you to set the size of the digital closed caption text: *Middle, Large* or *Small*.
    Digital CC Font Allows you to select a character design for the digital closed caption text. A font is a complete assortment of letters, numbers, punctuation marks, etc, in a given design. Choose from a variety of fonts.
    Digital CC Color Allows you to choose the color of the digital closed caption text: *White, Green, Blue*, *Red, Cyan* , *Yellow, Magenta* or *Black*.
    Digital CC Opacity Allows you to set the appearance of the digital closed caption text: *Solid, Translucent*, *Transparent*, or *Flashing*.
    Digital CC Background Color Allows you to choose the color of the area of the screen behind the digital closed caption text: *White, Green, Blue*, *Red, Cyan* , *Yellow, Magenta* or *Black*.
    Digital CC Background Opacity Allows you to set the appearance of the space behind the digital closed caption text: *Solid, Transparent*, *Translucent* or *Flashing*.
    Window Color   Allows you to choose the color of the window: *White, Green, Blue*, *Red, Cyan* , *Yellow, Magenta* or *Black*.
    Window Opacity Allows you to set the appearance of the spaceof the window: *Solid, Transparent*, *Translucent* or *Flashing*.
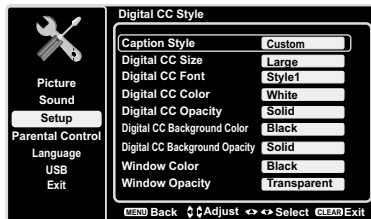
H. TIME SETUP

Time Zone
Select the current local time among **Eastern, Atlantic, Newfoundland, Hawaii, Alaska, Pacific, Mountain** and **Central.**

1. Highlight **Time Zone** in the **Time Setup** menu, then press ◄/► to go to next screen.
2. Press ◄/► to select the time zone for your area.
3. Press **MENU** to go back to the previous screen or press **CLEAR** to close the menu.

Time
Highlight **Time** in the **Time Setup** menu, then press ◄/► to enter **Time** submenu.

Auto Synchronization - Press ◄/► to choose **On** to acquire time automatically from digital channels.

Date -use t**he number buttons** to set the date.

Time - If you want to set the time manually, use t**he number buttons** to set the hours and minutes. Press **OK** to select **AM** or **PM**.

Power OnTimer - Select **On** and **Off**.

Power On Time - Lets you set the time you want the TV to turn itself on.

Power Off Timer - Select **On** and **Off**.

Power Off Time - Lets you set the time you want the TV to turn itself off.

Sleep Timer - Press ◄/► to set the TV to turn off after a given amount of time.
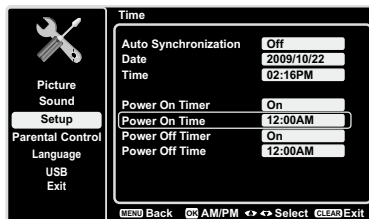
I. Reset All

Resets all except parental controls settings to the factory defaults. When you select this option, a confirmation box opens. Press ◄/► to select **OK** or **Cancel**, then press **OK** to confirm.

Parental Controls and V-Chip

The choices in the US V-Chip and Canada V-Chip menus involve software inside your TV, referred to as V-Chip, which allows you to block TV programs and movies. TV programs can be blocked by age-based ratings, such as TV-MA (See page 22). If available, TV programs can also be blocked by content, such as adult language (L) (See page 22). Movies can only be blocked by age-based ratings (See page 23). Once you block programs, you can unblock them by entering a password. By default, the software inside your TV is turned off or unlocked. For instructions to lock V-Chip, see page 21.

V-Chip - US and Canada

V-Chip reads the program's age-based rating (*TV-MA, TV-14*, etc.) and content themes (Violence (*V*), Adult Language (*L*), etc.). If you have blocked the rating and/or content themes that the program contains, you receive a message that the channel is currently blocked. Change the channel or press OK to enter your password and temporarily deactivate the parental controls.

Broadcasters are not required to provide content themes, so programs received with no content themes are blocked only if you block their age-based rating. You can also block programs that have been given an Exempt rating, and programs that are considered unrated. See page 34 for the US and Canada ratings explanations.

A. Enter V-Chip Password

1. Press **MENU** to display main menu.
2. Press ▲/▼ to highlight **Parental Conrtrol**.
3. Press ► to display Password screen.
4. Use **the number buttons** to enter the 4-digit numbers for the password.
• If you have not setup your PIN Code, enter 1234.
• When the PIN Code is correct, **Parental** submenu is displayed.

26
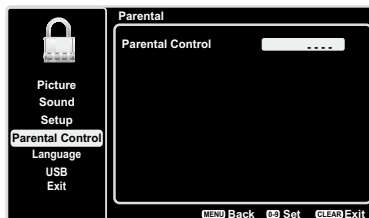
B. Channel Block

1. Press ▲/▼ to highlight **Channle Lock** in the **Parental** menu.
2. Press ◄/► to display channle list screen.
3. Press ▲/▼ to select the channel you want to block.
4. Press **OK** to place a checkmark in the box to block the channel. When you tune to that channel, you'll need to enter a password to view the channel.

Channel Block

1	Analog	☐
2	Analog	☐
3	Analog	☐
4	Analog	☐
5	Analog	☐
6	Analog	☐
7	Analog	☐
8	Analog	☐
9	Analog	☐
10	Analog	☐

Picture / Sound / Setup / Parental Control / Language / USB / Exit

MENU Back OK Set ◄► ◄► Select CLEAR Exit
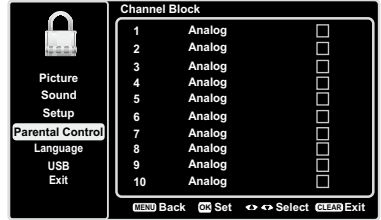
C. Button Block

Select this option to block (disable) or unblock (enable) the TV's side panel buttons so that they can't be used. The remote still tunes to any channel. If you're using this to keep children from changing channels, remove access to any remote that is capable of operating the television while you have the side panel blocked.

Parental

Channel Block ►
Button Block   Off
V-Chip ►
Input Block ►
Change Password ►

Picture / Sound / Setup / Parental Control / Language / USB / Exit

MENU Back ↕ Adjust ◄► ◄► Select CLEAR Exit
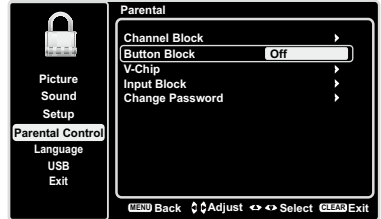
D. V-Chip

Rating Enable

You must remember to set **Rating Enable** to **On** mode for the follwoing V-Chip rating limits to take effect.

V-Chip

Rating Enable   On
US V-Chip ►
Canada V-Chip ►
Open V-Chip ►
Unrated/Exempt Ratings   View
Reset Downloadable Data ►

Picture / Sound / Setup / Parental Control / Language / USB / Exit

MENU Back ↕ Adjust ◄► ◄► Select CLEAR Exit
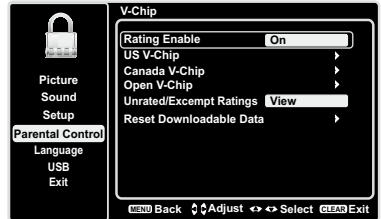
V-Chip Rating Screen

The following graphic details where items are located within the TV Ratings option with the US V-Chip menu.

Rating Status Field
Lets you select whether the status of the age-based rating to the left limit is view or block.

Content Themes
Lists the content themes you can blockor view.

Rating Field
Lets you select from a list of age-based ratings you can block or view.

Content Status Fields
Lets you select which content themes to view for the selected rating, and whether the status of the content theme is currently unlocked or locked.

U. S. TV Ratings

A D L S V FV

TV-Y
TV-Y7
TV-G
TV-PG
TV-14
TV-MA

☐ Allowed Rating 🔒 Blocked Rating

Picture / Sound / Setup / Parental Control / Language / USB / Exit

MENU Back OK Set ◄► ◄► Select CLEAR Exit

Rating	Category	
TV-Y	Appropriate for all children	**Lower**
TV-Y7	Appropriate for all children 7 and older	
TV-G	General audience	
TV-PG	Parental guidance suggested	
TV-14	Unsuitable for children under 14	
TY-MA	Mature audience only	**Higher**

Sub Rating	Category	Rating
D	Suggested Dialogue	TV-PG
		TV-14
L	Coarse Language	TV-PG
S	Sexual Situation	TV-14
V	Violence	TY-MA
FV	Fantasy Violence	TV-Y7

Chapter 3 Using the TV menu

US V-Chip

U.S. V-Chip TV Ratings

Blocking Age-Based Ratings

You can automatically block all program ratings above a specified age-based rating level.

1. Press ▲/▼ to select **V-Chip** in the **Parental** menu, then press ◄/► to enter next screen.
2. Press ▲/▼ to select **US V-Chip**, then press ◄/► to enter next screen.
3. **U.S. TV Ratings** is highlighted, press ◄/► .
4. Use ▲/▼/ to select the desired rating, then press **OK** repeatedly to switch between (View) and (Block).
   Blocking Specific Content Themes
   • As for TV-MA, TV-14, TV-PG, or TV-Y7, you can further set the sub ratings to block specific contents of programming. To set the sub ratings, follow the step below.
   • Use ▲/▼/◄/► to select the desired rating, then press **OK** repeatedly to switch between (View) and (Block).
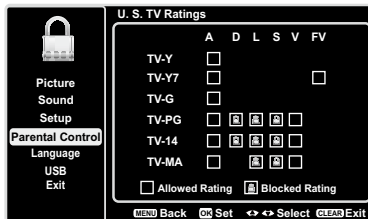
U.S. V-Chip Movie Ratings

Set movie rating limits by blocking movies rated above a specified level. To access the Movie Rating Limit Menu, follow these steps:

1. Press ▲/▼ to select **V-Chip** in the **Parental** Menu, then press ◄/► enter next screen.
2. Press ▲/▼ to select **US V-Chip**, then press ◄/► to enter next screen.
3. Press ▲/▼ to select **U.S. Movie Ratings**, then press ◄/► .
4. Use ▲/▼ to select the desired rating, then press **OK** repeatedly to switch between (View) and (Block).

Rating	Category
G	General audience
PG	Parental guidance suggested
PG-13	Unsuitable for children under 13
R	Restricted; under 17 requires accompanying parent or adult guardian
NC-17	No one under 17 admitted
X	Mature audience only

Blocking Canada V-Chip Ratings

If you receive Canadian programs, you can block Canadian English and French V-Chip by ratings only. When you block a particular rating, you automatically block the higher-rated programs as well. To block Canadian English and French program ratings, follow these steps:

1. Press ▲/▼ to select **V-Chip** in the **Parental** Menu, then press ◄/► enter next screen.
2. Press ▲/▼ to select **Canada V-Chip**, then press ◄/► to enter next screen.
3. Press ▲/▼ to select **Canadian Enlish Ratings** or **Canadian French Ratings**, then press ► .
4. Use ▲/▼ to select the desired rating, then press **OK** repeatedly to switch between (View) and (Block).
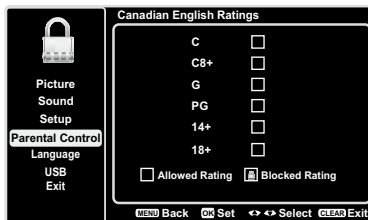
Open V-Chip- allows you to select the downloadable rating level.

Blocking Unrated/Exempt Programs

The Unrated/Exempt Ratings option lets you decide if programs that the V-Chip recognizes as unrated or exempt can be viewed. Unrated TV programs may include news, sports, political, religious, local and weather programs, emergency bulletins, public announcements, and programs without ratings. The Exempt option applies to both US and Canadian unrated programs and Canadian programs rated E. Press the down arrow to highlight Unrated/Exempt Ratings. Then press the OK button or the right arrow to toggle between View and Block.

   View   All unrated programs are available.
   Block All unrated programs are not available.

Reset Downloadable Data

When you select this option, a confirmation box opens. Press ◀/▶ to select **OK**, press OK to reset downloadable rating data, if present.

E. Input Block

1. Press ▲/▼ to highlight **Input Block** in the **Parental** menu.
2. Press ◀/▶ to display input source list screen.
3. Press ▲/▼ to select the video input you want to block.
4. Press **OK** to place a checkmark in the box to block the input. When you tune to that input, you'll need to enter a password to view the channel.
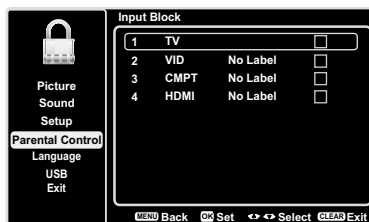
F. Change Password

This option allows you to set a new V-Chip password. From the Parental Control Menu, highlight **Change Password**, then press ◀/▶ to enter **Change Password** screen. Using the digit keys, enter a new password and press **OK**.
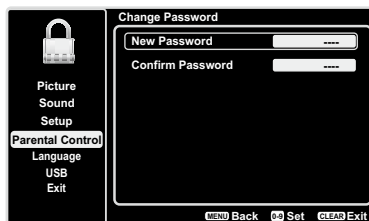
G. Reset Password

If you change your password, then forget it later. you can follow the steps below to reset your password:

1. Highlight **Expert Settings** in the **Picture** menu, press **OK** or ▶ to the next screen.
2. **Contrast** is Highlighted, enter 2458 using the number buttons.
3. Then you can go to **Parental Control** menu to change the password again.
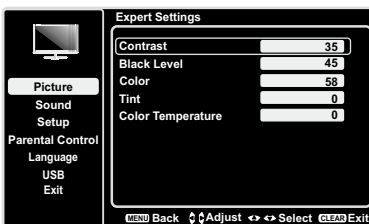
Language Menu

Select the preferred language for the menus: **English**, **Español / Français**.

1. Press **MENU** to open the main menu.
2. Press ▲/▼ to select **Language**.
3. Press ▶ to display **Language** screen.
4. Press ▲/▼ to select your preferred language for the menu.
2. Press ▲/▼ to select **On** or **Off**.

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USB Menu

The USB feature allows to play audio files (format supported: MP3) or display pictures (format supported: JEPG).

1. Select **USB** in the Main Menu, then press **OK** or ▶ to enter the USB screen. Or you can press **MEDIA** on the remote to display USB screen directly.

2. Press ◀/▶ to select file or folder on your USB device connected to your TV, and press **OK** to confirm or playback. Or you press **MENU** to use the menu option:

Media Type

Photo-If you have photos on your USB device connected to your TV, this menu allows you to view the photos individually by pressing ◀/▶ to highlight the picture. For slideshow options, go to the Playback Options menu.

Note: *To play a slideshow of all the pictures available on your device, highlight a folder and press PLAY.*

Music- If you have mp3 audio files on your USB device connected to your TV, this menu allows you to play files individually by pressing the ◀/▶ to highlight the song. For slideshow options, go to the Playback Options menu. Note: To play a slideshow of all the music files available on *on your device, highlight a folder and press PLAY.*

Thumbnail Size - You can select to display the files or folders on your USB device in Small, middle or large size.

USB Connection

Connecting a device with USB or a USB flash drive.

This connection allows you to insert a USB flash drive directly or connect to a compatible mass storage device with USB, such as a digital camera, multi-format card reader, or mp3 player.

If you have a USB flash drive, plug in the drive directly.

If you have a device with USB, connect one end of the USB cable to the USB device and the other end to the USB jack on the side of TV.

• To access and adjust the options of the USB device, refer to page 30

Side of this unit

Or

USB
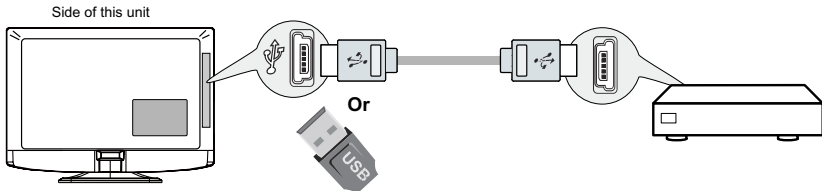
Chapter 4 Other Information

Frequently Asked Questions (FAQs)

What's the quickest way to view High Definition (HD) video?
Connect an off-air antenna to the ANTENNA/CABLE Input to view free local digital channels. You may need to purchase an antenna. (See page 11 for more information).
Visit www.antennaweb.org for assistance in deciding what type of antenna to use to receive the local digital channels available to you. By entering your location, this mapping program tells you which local analog and digital stations are available using a certain antenna.

Are there other ways to view High Definition (HD) video?
Besides using an off-air antenna as mentioned above, you can also use a set-top box to receive digital video. Contact your cable company or satellite provider to purchase digital programming and have them connect the box to ensure you are viewing channels the best way.

How do I tell an analog channel from a digital channel?
Press the INFO button to display the Channel Banner. Look the channel number at the bottom right corner of the screen. The dot "•" is displayed for a for a digital channel, if no dot, its for an analog channel.(P18)

Why are there bars on my screen, and can I get rid of them?
Most digital video is sent in a 16/9 format which fills your screen, but is sometimes sent in 4/3 which does not fill your screen. It depends on how the station or device connected to your TV is formatting the video. If there are bars on the screen, press the FORMAT button to try a different format that may eliminate the bars. Some bars can't be removed because of the way the format is sent by the broadcaster. The format changes as you press the FORMAT button and the format type is displayed at the bottom of the screen. For more information on screen formats, go to page 19.

Why does channel search find a lot of channels, but when I try to tune to them, there's nothing there?
Some channels enabled by the cable company don't carry programming, such as video ondemand. When channels are unavailable, your TV screen is blank or appears like snow. You probably want to remove these channels from your channel list. Remove these in the Channel Skipt Menu. Go to page 23 for more information.

Why does the first channel search take a long time?
If you have both analog and digital channels, the TV is looking for all available channels in the channel list. If you do have digital channels, the TV is also searching for scrambled channels, non-scrambled channels, and each sub-channel of that digital channel.

Troubleshooting

Most problems you encounter with your TV can be corrected by consulting the following troubleshooting list.

TV Problems
The TV won't turn on.
- Make sure the TV is plugged in.
- Check the wall receptacle (or extension cord) to make sure it is "live" by plugging in another device.
- The side panel controls may be locked (disabled). Use the remote control to unlock the side panel controls.
- Select the *Button Block* feature on the Parental Control Menu and press OK to uncheck the box.

There is no picture and no sound but the TV is on.
- You may be tuned to an input with no component connected to it. If you're trying to view a connected component, press INPUT until the picture from that component appears.
- The S*ignal Type* option may be set incorrectly. Go to page 22 for detailed instructions.
- The channel may be blank. Try changing channels.
- If you're watching your VCR and it's connected with coaxial cable to the ANTENNA/CABLE jack, tune the TV to channel 3 or 4 (whichever channel is selected on the 3/4 switch on the back of your VCR). Also make sure the TV/VCR button on the VCR is in the correct mode (press the TV/ VCR button on your VCR).

The sound is fine, but the picture is poor quality.
- If you're getting a black and white picture from a component you've connected to your TV, you might have your video cables connected to the wrong jacks. A yellow video cable connects to the yellow VIDEO INPUT jack on the side or back of your TV; three video cables or bundled component video cables (red, blue, and green) connect to the corresponding COMPONENT INPUT jacks on the back of your TV.
- Check the antenna connections. Make sure all of the cables are firmly connected to the jacks.
- Try adjusting the sharpness function to improve weak signals. Go to page 20 for more instructions.

There is no sound, but the picture is fine.
- The sound might be muted. Try pressing the volume up button to restore sound.
- If using DVIor Y, PB, PR, remember to also connect the device's left and right audio output jacks to the TV's L and R AUDIO INPUT jacks.
- The sound settings may not be set correctly. Go to page 21 for more information.
- If your audio source has only one jack or is a (mono) audio source, make sure you have plugged the connection into the Left AUDIO INPUT jack on the TV.

The screen is blank.
- Check your connections. If you used yellow, red, and white cables to connect, make sure they're connected to the yellow, red, and white VIDEO INPUT jacks on the side or back of the TV.
- If you're trying to watch something that's playing on a component connected to the TV (like a DVD), press INPUT until you get to the correct video input channel.
- Make sure the component connected to the TV is turned on.
- Try another channel.

Chapter 4 Other Information

The buttons on the side panel don't work.
- The side panel controls may be locked (disabled). Use the remote control to unlock the side panel controls by selecting the *Button Block* feature in the Parental Control Menu and press OK to uncheck the box.
- Unplug the TV for 10 minutes and then plug it back in. Turn the TV on and try again.

The TV turns off unexpectedly.
- The electronic protection circuit may have been activated because of a power surge. Wait 30 seconds and then turn the TV on again. If this happens frequently, the voltage in your house may be abnormally high or low.
- Unplug. Wait 10 minutes. Plug in again.

You can't select a certain channel.
- The channel may be blocked or not approved in the Parental Control Menu.
- If using a VCR, check to make sure the TV/VCR button on the VCR is in the correct mode (press the TV/VCR button on your VCR).
- Press the TV button and then try to change channels.

The stereo reception is noisy.
- It may be a weak station. Use the Sound Menu and Analog TV Sound to choose *Mono*.

A black box appears on the screen.
- Closed captioning might be on. Check *Closed Caption* in the Setup menu. Go to page 24 for more instructions.

You are having problems with the HDMI Connection.
- Make sure the HDMI or DVI component is turned on and the cables are firmly connected. If problems still occur, turn off your component and reconnect it. Reset the power by unplugging the power cord and plugging it back in.
- If you are tuned to the HDMI input and you're receiving an *Unusable Signal* message onscreen, press the INFO button on the remote. If *Acquiring Channel* appears in the Channel Banner, the HDMI or DVI device isn't responding. Contact the manufacturer of the HDMI or DVI device for further assistance.
- If you tune to the HDMI input and you see snow, the video goes in and out, or the video takes a long time to appear, your HDMI or DVI component is having trouble sending video information to the TV. Re-connect your device. Reset the power by unplugging the power cord and plugging it back in. If problems persist, try connecting the Y Pb Pr jacks if they are available or contact the manufacturer of the HDMI or DVI component for further assistance.
- If you have black bars on each side of your picture, the component you connected might have a switch or a menu option allowing you to change the picture quality output that will fix this. Choose either *720p* or *1080i*.

The Remote control doesn't work.

• Something might be between the remote and the remote light sensor on the front of the TV. Make sure there is a clear path.
• The remote may not be aimed directly at the TV.
• The batteries in the remote may be weak, dead, or installed incorrectly. Put new batteries in the remote.

The Universal Remote control doesn't work.

• This TV utilizes new remote control signal codes and may not be compatible with your existing universal remote (e.g. satellite box remotes, cable box remotes, generic universal remotes, etc.). Over time, newer universal remote controls that become available should pick up the new TV codes.

You are experiencing problems with V-Chip/Parental Controls.

• If the rating limits don't work, you must lock the settings. Slect V-Chip in the Parental Control Menu, then press ◄/► to go to next screen. "Rating Enable" is highlighted, press ◄/► to select On mode to have the rating limits take effect.

The V-Chip won't let me watch a program, even though it's not rated as violent.

• Maybe the movie was given an NR (Not Rated) status. After you block movie ratings, you must set NR to *View Separately* in order to view movies with an NR rating.

What else can I do?

If you've been through the Troubleshooting section and nothing has fixed your problem, try rebooting your TV. Note that after a reboot, you may need to run your TV through the setup process again. To reboot, unplug the power cord from the wall outlet or power strip. Keep your TV unplugged for about 5 minutes. Then plug in the TV and turn it on. See if the problem is fixed. If the problem remains, then please click on the Customer Support Menu at www.rca.com/television for updated FAQs or contact RCA Customer Support at the support number provided in your Warranty under *How To Get Service.*

Chapter 4 Other Information

V-Chip Rating Explanations

US V-Chip Rating System

TV-MA (Mature Audience Only) Specifically designed to be viewed by adults and may be unsuitable for children under 17. It contains one or more of the following content themes: crude indecent language (L), explicit sexual activity (S), or graphic violence (V).

TV-14 (Parents Strongly Cautioned) Contains some material that many parents would find unsuitable for children under 14. Parents are strongly urged to exercise greater care in monitoring this program and are cautioned against letting children under the age of 14 watch unattended. This program contains one or more of the following content themes: intensely suggestive dialogue (D), strong coarse language (L), intense sexual situations (S), or intense violence (V).

TV-PG (Parental Guidance Suggested) Contains material that parents may find unsuitable for younger children. Many parents may want to watch it with their younger children. The program contains one or more of the following content themes: some suggestive dialogue (D), infrequent coarse language (L), some sexual situations (S), or moderate violence (V).

TV-G (Parental Audience) Most parents would find this program suitable for all ages. It contains little or no sexual dialogue (D) or situations (S), no strong language (L), and little or no violence (V).

TV-Y7 (Directed to Children 7 years and older) Designed for children ages 7 and above. It may be more appropriate for children who have acquired the developmental skills needed to distinguish between make believe and reality. Themes and elements in this program may include mild fantasy violence (FV) or comedic violence, or may frighten children under the age of 7.

TV-Y (All Children) Themes and elements in this program are designed for a young audience, including children ages 2-6. It is not expected to frighten younger children.

Canadian English V-Chip Rating System

18+ (Adult) Programming intended for adults 18 and older. It may contain elements of violence, language, and sexual content which could make it unsuitable for viewers under 18. Violence Guidelines: May contain violence integral to the development of the plot, character or theme, intended for adult audiences. Other Content Guidelines: May contain graphic language and explicit portrayals of nudity and/or sex.

14+ (Viewer 14 and over) Programming contains themes or content which may not be suitable for viewers under the age of 14. Parents are strongly cautioned to exercise discretion in permitting viewing by pre-teens and early teens. Violence Guidelines: May contain intense scenes of violence. Could deal with mature themes and societal issues in a realistic fashion. Other Content Guidelines: May contain scenes of nudity and/or sexual activity. There could be frequent use of profanity.

PG (Parental Guidance) Programming intended for a general audience but which may not be suitable for younger children (under the age of 8). Parents may consider some content inappropriate for unsupervised viewing by children aged 8-13. Violence Guidelines: Depictions of conflict and/or aggression will be limited and moderate; may include physical, fantasy, or supernatural violence. Other Content Guidelines: May contain infrequent mild profanity, or mildly suggestive language. Could also contain brief scenes of nudity.

G (General Audience) Programming considered acceptable for all ages groups. While not designed specifically for children, it is understood younger viewers may be part of the audience. Violence Guidelines: Will contain very little violence, either physical or verbal or emotional. Will be sensitive to themes which could frighten a younger child, will not depict realistic scenes of violence which minimize or gloss over the effects of violent acts. Other Content Guidelines: There may be some inoffensive slang, no profanity and no nudity.

C8+ (Children 8 and older) Programming generally considered acceptable for children 8 years and over to watch on their own. Violence Guidelines: Violence will not be portrayed as the preferred, acceptable, or only way to resolve conflict or encourage children to imitate dangerous acts which they may see on television. Any realistic depictions of violence will be infrequent, discreet, of low intensity and will show the consequences of the acts. Other Content Guidelines: There will be no profanity, nudity or sexual content.

C (Children) Programming intended for children under age 8. Violence Guidelines: Careful attention is paid to themes which could threaten children's sense of security and well being. There will be no realistic scenes of violence. Depictions of aggressive behavior will be infrequent and limited to portrayals that are clearly imaginary, comedic or unrealistic in nature. Other Content Guidelines: There will be no offensive language, nudity or sexual content.

Canadian French V-Chip Rating System

18+ (Adult) Programming is for adults only. This program contains sustained violence or extremely violent scenes.

16+ (Viewer 16 and over) Programming is not suitable for those under age 16. This program contains frequent scenes of violence or intensely violent scenes.

13+ (Viewer 13 and over) Programming may not be suitable for children under the age of 13. This program either contains several violent scenes or one or more scenes that are violent enough to affect them. Viewing in the company of an adult is therefore strongly recommended for children under the age of 13.

8+ (Viewer 8 and over) Not recommended for young children. This program is suitable for most audiences, but it contains mild or occasional violence that could upset young children. Viewing in the company of an adult is therefore recommended for young children (under the age of 8) who do not distinguish between reality and imagination.

G (General Audience) This program is suitable for audiences of all ages. It contains no violence, or any violence that it does contain is either minimal or is presented in a humorous manner, as a caricature, or in an unrealistic way.

Television Specification

Broadcasting system	US System NTSC-M
	ATSC standard (8VSB), QAM
Receiving Channels	VHF2-13
	UHF14-69
	CATV 14-36 (A)-(W)
	37-59 (AA)-(WW)
	60-85 (AAA)-(ZZZ)
	86-94 (86)-(94)95-99 (A-5)-(A-1)
	100-135 (100)-(135)
	01 (4A)
Tuner type	Frequency synthesized

TTE Technology, Inc. ("TTE") Limited Warranty

All LCD Models
EXCEPT TO THE EXTENT PROHIBITED BY APPLICABLE LAW, THIS WARRANTY DOES NOT COVER, AND AS DESCRIBED BELOW TTE EXPRESSLY DISCLAIMS, ALL ACTUAL AND IMPLIED WARRANTIES WITH RESPECT TO ANY PRODUCT USED FOR INSTITUTIONAL OR OTHER COMMERCIAL PURPOSES (INCLUDING BUT NOT LIMITED TO RENTAL PURPOSES).

What your warranty covers: Defects in materials or workmanship to the original owner

New LCD Televisions - Screen Sizes 32" and smaller:
For how long after your purchase:
- Ninety (90) days from date of purchase for labor charges. After ninety (90) days, labor charges will be at owner expense.
- One (1) year from date of purchase for parts.

What we will do:
- At TTE's discretion, pay an Authorized RCA Service Center for both labor charges and parts to repair your television, or replace your television with a new or refurbished/remanufactured unit. See "How to get service".

New LCD Televisions - screen sizes 33" through 47":
For how long after your purchase:
- One (1) year from the date of purchase for labor charges.
- One (1) year from the date of purchase for parts.

What we will do:
- At TTE's discretion, pay an Authorized RCA Service Center for labor charges and parts to repair your television, or replace your television with a new or refurbished/remanufactured unit. See "How to get service".

All Remanufactured/Refurbished LCD Televisions:
For how long after your purchase:
- Ninety (90) days from date of purchase for labor charges.
- Ninety (90) days from date of purchase for parts.

What we will do:
- At TTE's discretion, pay an Authorized RCA Service Center for both labor charges and parts to repair your television, or replace your television with a refurbished/remanufactured unit. See "How to get service".

How to get service:
- Call 1-800-951-9582. Please have your unit's date of purchase and model/serial number ready. The model/serial number information can be found on the back of your unit.
- A representative will troubleshoot your problem over the phone.
- If it is determined that your unit requires service, the service location will be at the sole discretion of TTE based upon the TTE Limited Warranty statement.
- At the sole discretion of TTE, television screen sizes 32" and smaller is either consumer carry-in to an Authorized RCA Service Center or directly exchanged for a new or refurbished/remanufactured unit.
- At the sole discretion of TTE, television screen sizes 33" through 47" is either consumer carry-in to an Authorized RCA Service Center or directly exchanged for a new or refurbished/remanufacture unit.
- Proof of purchase in the form of a bill of sale or receipted invoice from an Authorized Dealer which is evidence that the product is within the warranty period must be presented to obtain warranty service.

What your warranty does not cover:
- Customer instruction. (Your Owner's Manual describes how to install, adjust, and operate your unit. Any additional information should be obtained from your dealer.)
- Installation and related adjustments.
- Damage resulting from non-approved installation methods.
- Signal reception problems not caused by your unit.
- Damage from misuse or neglect.
- Batteries.
- A television that has been modified or incorporated into other products or is used for institutional or other commercial purposes (including but not limited to rental purposes).
- A unit purchased or serviced outside the USA.
- Acts of nature, such as but not limited to lightning damage.
- Special, incidental or consequential damages.

Product Registration:
Please complete and mail the Product Registration Card packed with your unit or register on-line at www.rca.com/tv. It will make it easier to contact you should it ever be necessary. The return of the card is not required for warranty coverage.

Limitation of Warranty:
- **THE WARRANTY STATED ABOVE IS THE ONLY WARRANTY APPLICABLE TO THIS PRODUCT. NO VERBAL OR WRITTEN INFORMATION GIVEN BY TTE TECHNOLOGY, INC., ITS AGENTS OR EMPLOYEES SHALL CREATE A GUARANTY OR IN ANY WAY INCREASE OR MODIFY THE SCOPE OF THIS WARRANTY.**
- **REPAIR OR REPLACEMENT AS PROVIDED UNDER THIS WARRANTY IS THE EXCLUSIVE REMEDY OF THE CONSUMER. TTE TECHNOLOGY, INC. SHALL NOT BE LIABLE FOR SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES RESULTING FROM THE USE OF THIS PRODUCT OR ARISING OUT OF ANY BREACH OF ANY EXPRESS OR IMPLIED WARRANTY ON THIS PRODUCT. THIS DISCLAIMER OF WARRANTIES AND LIMITED WARRANTY ARE GOVERNED BY THE LAWS OF THE STATE OF INDIANA. EXCEPT TO THE EXTENT PROHIBITED BY APPLICABLE LAW, ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE ON THIS PRODUCT IS LIMITED TO THE APPLICABLE WARRANTY AND WARRANTY PERIOD SET FORTH ABOVE.**

How State Law relates to this warranty:
- Some states do not allow the exclusion nor limitation of incidental or consequential damages, or limitations on how long an implied warranty lasts, so the above limitations or exclusions may not apply to you.
- This warranty gives you specific legal rights, and you also may have other rights that vary from state to state.

If you purchased your unit outside the United States or seek warranty coverage outside the United States:
This warranty does not apply. Contact your dealer for warranty information.

Service calls which do not involve defective materials or workmanship are not covered by this warranty. Costs of such service calls are the sole responsibility of the purchaser.

TTE Technology Canada Ltd. ("TTE") Limited Warranty

Limited Warranty
EXCEPT TO THE EXTENT PROHIBITED BY APPLICABLE LAW, THIS WARRANTY DOES NOT COVER, AND AS DESCRIBED BELOW TTE EXPRESSLY DISCLAIMS, ALL ACTUAL AND IMPLIED WARRANTIES AND CONDITIONS WITH RESPECT TO ANY PRODUCT USED FOR INSTITUTIONAL OR OTHER COMMERCIAL PURPOSES (INCLUDING BUT NOT LIMITED TO RENTAL PURPOSES).

What your warranty covers:
• Defects in materials or workmanship to the original purchaser.

For how long after purchase:
• All RCA televisions: One year parts and labour.
• All RCA Scenium televisions: One year parts and labour.

What TTE Technology Canada Ltd. will do:
At TTE's discretion, pay an Authorized RCA Service Centre for both labor charges and parts to repair your television, or replace your television with a new or refurbished/remanufactured unit. See "How to get service".

How to get service:
• Call 1-800-951-9582. Please have your unit's date of purchase and model/serial number ready. The model/serial number information can be found on the back of your unit.
• A representative will troubleshoot your problem over the phone.
• If it is determined that your unit requires service, the service location will be at the sole discretion of TTE based upon the TTE Limited Warranty statement.
• At the sole discretion of TTE, RCA CRT DV televisions are either consumer carry-in to an Authorized RCA Service Centre or directly exchanged for a new or refurbished/remanufactured unit.
• At the sole discretion of TTE, RCA LCD televisions are either consumer carry-in to an Authorized RCA Service Centre, directly exchanged for a new or refurbished/remanufacture unit or provided in-home service.
• At the sole discretion of TTE, RCA Scenium LCD televisions are either consumer carry-in to an Authorized RCA Service Centre, directly exchanged for a new or refurbished/remanufacture unit or provided in-home service.
• Proof of purchase in the form of an original bill of sale or receipted invoice from an Authorized Dealer which is evidence that the product is within the warranty period must be presented to obtain warranty service.

Your warranty does not cover damages which are caused by:
• Fire, accident, lightening, flood and/or other acts of God;
• Faulty installation, set-up adjustments, improper antenna, inadequate signal reception, adjustment of consumer controls and/or improper maintenance; and/or
• Failure which results from misuse, abuse, neglect, mishandling, misapplication, and/or alteration.

What your warranty does not cover:

• Customer instruction (Your Owner's Manual describes how to install, adjust, and operate your unit. Any additional information should be obtained from your dealer);
• Transportation cost to and from the Service Centre (Unless you have made other arrangements with your dealer at the time of purchase whereby he undertakes this responsibility);
• Installation and set-up service adjustments;
• Products connected otherwise than as outlined in the Owner's Manual;
• Products on which the serial number has been altered or removed;
• External antenna or cable systems;
• Remote control batteries;
• A television that has been modified or incorporated into other products or is used for institutional or other commercial purposes (including but not limited to rental purposes);
• A unit purchased or serviced outside Canada;
• Special, incidental or consequential damages; and/or
• Normal wear or cosmetic damage.

How Provincial law relates to this warranty:

This warranty gives you specific legal rights, which are in addition to statutory warranties, which may vary from Province to Province and which take precedence over the terms of this warranty.

If you purchased your unit outside of Canada:

This warranty does not apply. Contact your dealer for warranty information.

• 2010 TTE Technology Canada Ltd.
   6605 Hurontario Street, Mississauga, Ontario L5T 0A3

Care and Cleaning

Caution: Turn OFF your TV before cleaning.
You can clean the TV as required, using a soft lint-free cloth. Be sure to occasionally dust the ventilation slots in the cabinet to help assure adequate ventilation.
IMPORTANT: Never use strong cleaning agents, such as ammonia-based cleaners, or abrasive powder. These types of cleaners will damage the TV. The TV's screen may be cleaned with a soft, lint-free cloth as well. Take care not to scratch or mar the screen. If necessary, you may use a cloth dampened with warm water. While cleaning, do not spray liquid directly on the screen, or allow liquid to run down the screen and inside the TV. Also, never place drinks or vases with water on top of the TV. This could increase the risk of fire, shock hazard or damage to the TV.

FCC Information

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

• Reorient or relocate the receiving antenna.
• Increase the separation between the equipment and receiver.
• Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
• Consult the dealer or an experienced radio/TV technician for help.
This Class B digital apparatus complies with Canadian ICES-003.

For assistance, visit the RCA website at www.rca.com/tv or call 1-877-794-7977.
Please do not send any products to the Indianapolis address listed in this manual or on the carton. This will only add delays in service for your product.