

SAMSUNG LED TV user manual

SERIES 5003

Figures and illustrations in this User Manual are provided for reference only and may differ from actual product appearance. Product design and specifications may be changed without notice.

Important Warranty Information Regarding Television Format Viewing

Wide screen format LED Displays with aspect ratios of 16:9 (the ratio of the screen width to screen height) are primarily designed to display wide screen format full-motion video. The images displayed on them should primarily be in the wide screen 16:9 ratio format, or expanded to fill the screen if your model offers this feature and the images are constantly moving. Displaying stationary graphics and images on screen, such as the dark sidebars on non-expanded standard format television video and programming, should be limited to no more than 2% of the total television viewing per week. Additionally, viewing other stationary images and text such as stock market crawls, video game displays, station logos, web sites or computer graphics and patterns, should be limited as described above for all televisions. Displaying stationary images that exceed the above guidelines can cause uneven aging of LED Displays that leave subtle, but permanent burned-in ghost images in the LED picture. To avoid this, vary the programming and images, and primarily display full screen moving images, not stationary patterns or dark bars. On LED models that offer picture sizing features, use these controls to view different formats as a full screen picture. Be careful in the selection and duration of television formats you use for viewing. Uneven LED aging as a result of format selection and use, as well as burned-in images, are not covered by your Samsung limited warranty.

SAMSUNG ELECTRONICS NORTH AMERICAN LIMITED WARRANTY STATEMENT

Subject to the requirements, conditions, exclusions and limitations of the original Limited Warranty supplied with Samsung Electronics (SAMSUNG) products, and the requirements, conditions, exclusions and limitations contained herein, SAMSUNG will additionally provide Warranty Repair Service in the United States on SAMSUNG products purchased in Canada, and in Canada on SAMSUNG products purchased in the United States, for the warranty period originally specified, and to the Original Purchaser only.

The above described warranty repairs must be performed by a SAMSUNG Authorized Service Center. Along with this Statement and the Original Limited Warranty Statement, a dated Bill of Sale as Proof of Purchase must be presented to the Service Center. Transportation to and from the Service Center is the responsibility of the purchaser. Conditions covered are limited only to materials defects in materials or workmanship, and only those encountered in normal use of the product. Exclusions include, but are not limited to, any originally specified provisions for in-home or on-site services, minimum or maximum repair times, exchanges or replacements, accessories, options, upgrades, or consumables.

For the location of a SAMSUNG Authorized Service Center, please call toll-free: In the United States: 1-800-SAMSUNG (1-800-726-7864) In Canada: 1-800-SAMSUNG



BN98-05829Q-01

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Warning! Important Safety Instructions

Please read the safety instructions below before installing and using the product.

CAUTION
RISK OF ELECTRIC SHOCK. DO NOT OPEN.

CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER (OR BACK). THERE ARE NO USER SERVICEABLE PARTS INSIDE. REFER ALL SERVICING TO QUALIFIED PERSONNEL.

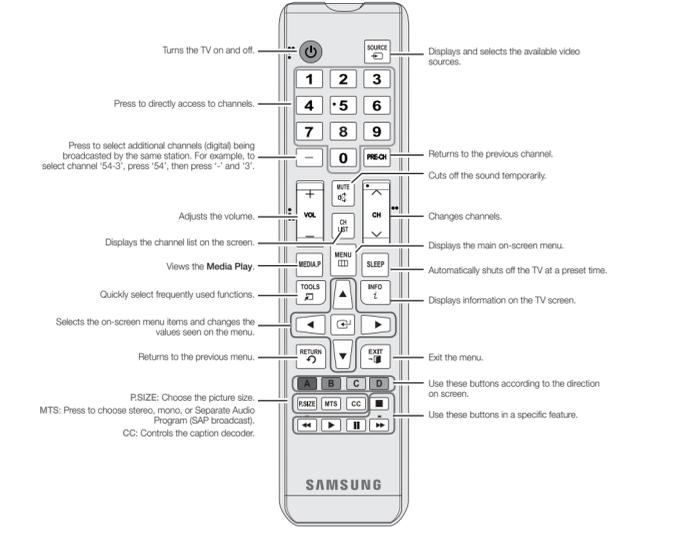
This symbol indicates that high voltage is present inside. It is dangerous to make any kind of contact with any internal part of this product.

This symbol indicates that important literature concerning operation and maintenance has been included with this product.

- The slots and openings in the cabinet and in the back or bottom are provided for necessary ventilation. To ensure reliable operation of this apparatus, and to protect it from overheating, these slots and openings must never be blocked or covered.
 - Do not cover the slots and openings with a cloth or other materials.
 - Do not block the slots and openings by placing this apparatus on a bed, sofa, rug or other similar surface.
 - Do not place this apparatus in a confined space, such as a bookcase or built-in cabinet, unless proper ventilation is provided.
- Do not place this apparatus near or over a radiator or heat register, or where it is exposed to direct sunlight.
- Do not place a vessel containing water (vases etc.) on this apparatus, as this can result in a risk of fire or electric shock.
- Do not expose this apparatus to rain or place it near water (near a bathtub, washbowl, kitchen sink, or laundry tub, in a wet basement, or near a swimming pool etc.). If this apparatus accidentally gets wet, unplug it and contact an authorized dealer immediately.
- Make sure to pull out the power cord from the outlet before cleaning.
- The apparatus uses batteries. In your community, there might be regulations that require you to dispose of these batteries properly to protect the environment. Please contact your local authorities for disposal or recycling information.
- Do not overload wall outlets, extension cords, or adaptors beyond their capacity, since this can result in fire or electric shock.
- Power-supply cords should be routed so that they are not likely to be walked on or pinched by items placed upon or against them. Pay particular attention to cords at the plug end, where connected to adaptors, and at the point where they exit from the apparatus.
- To protect this apparatus from a lightning storm, or when it is left unattended and unused for long periods of time, unplug it from the wall outlet and disconnect the antenna or cable system. This will prevent damage to the set due to lightning and power line surges.
- Before connecting the AC power cord to the DC adaptor outlet, make sure the voltage designation of the DC adaptor corresponds to the local electrical supply. (Depending on the model)
- Never insert anything metallic into the open parts of this apparatus. Doing so may create a danger of electric shock.
- To avoid electric shock, never touch the inside of this apparatus. Only a qualified technician should open this apparatus.
- Make sure to plug the power cord in until it is firmly inserted. Pull on the plug, not the cord, when removing the power cord from the outlet. Do not touch the power cord with wet hands.
- This apparatus does not operate normally - in particular, if there are any unusual sounds or smells coming from it - unplug it immediately and contact an authorized dealer or service center.
- Be sure to pull the power plug out of the outlet if the TV is to remain unused or if you are to leave the house for an extended period of time (especially when children, elderly or disabled people will be left alone in the house).
 - Accumulated dust can cause an electric shock, an electric leakage, or a fire by causing the power cord to generate sparks and heat, or cause the insulation to deteriorate.
- Be sure to contact an authorized service center, when installing your set in a location with heavy dust, high or low temperatures, high humidity, chemical substances or where it will operate for 24 hours a day such as in an airport, a train station, etc. Failure to do so may cause serious damage to your set.
- Use only a properly grounded plug and receptacle.
 - An improper ground may cause electric shock or equipment damage. (Class I Equipment only)
- To turn off the apparatus completely, you must pull the power plug out of the wall socket. Consequently, the power plug should be readily accessible at all times.
- Do not allow children to hang onto the product.
- Store the accessories (batteries, etc.) in a location safely out of the reach of children.
- Do not install the product in an unstable location such as a shaky shelf, or a location exposed to vibration.
- Do not drop or impart a shock to the product. If the product is damaged, disconnect the power cord and contact a service center.
- To clean the product, unplug the power cord from the power outlet and wipe the product using a soft cloth dipped in a small amount of water. Do not use any chemicals such as wax, benzene, alcohol, thinners, insecticide, air freshener, lubricant or detergent. This may damage the appearance or erase the printing on the product.
- Do not expose the apparatus to dripping or splashing.
- Do not dispose of batteries in a fire.
- Do not short circuit, disassemble, or overheat the batteries.
- There is a danger of explosion if you replace the batteries with the wrong type of battery. Replace only with the same or equivalent type.
- WARNING - TO PREVENT THE SPREAD OF FIRE, KEEP CANDLES OR OTHER OPEN FLAMES AWAY FROM THIS PRODUCT AT ALL TIMES.**

Remote Control

This remote control has Braille points on the Power, Channel, and Volume buttons and can be used by visually impaired persons.

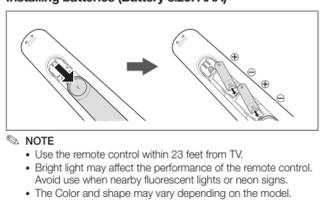


Display Modes (HDMI/DVI Input)

Optimal resolution: 1920 x 1080@60Hz

| Mode | Resolution | Horizontal Frequency (Hz) | Vertical Frequency (Hz) | Pixel Clock Frequency (MHz) | Sync Polarity (P/N) |
|------|-----------------|---------------------------|-------------------------|-----------------------------|---------------------|
| IBM | 720 x 400 | 31.469 | 70.087 | 28.322 | +/+ |
| | 640 x 480 | 35.000 | 60.667 | 30.240 | +/+ |
| | 624 x 480 | 35.750 | 60.000 | 30.240 | +/+ |
| MAC | 1152 x 870 | 66.661 | 75.062 | 100.000 | -/- |
| | 640 x 480 | 31.469 | 59.940 | 28.175 | +/+ |
| | 640 x 480 | 37.861 | 72.800 | 31.500 | +/+ |
| | 640 x 480 | 37.500 | 75.000 | 31.500 | +/+ |
| | 800 x 600 | 37.879 | 60.317 | 40.000 | +/+ |
| | 800 x 600 | 49.077 | 72.168 | 50.000 | +/+ |
| | 800 x 600 | 48.875 | 75.000 | 49.500 | +/+ |
| | 1024 x 768 | 48.363 | 60.024 | 60.000 | +/+ |
| | 1024 x 768 | 64.716 | 75.069 | 75.000 | +/+ |
| | 1024 x 768 | 60.053 | 75.029 | 78.750 | +/+ |
| | 1152 x 864 | 67.500 | 75.000 | 108.000 | +/+ |
| | 1280 x 720 | 45.000 | 60.000 | 74.250 | +/+ |
| | 1280 x 800 | 49.702 | 49.702 | 83.500 | +/+ |
| | 1280 x 1024 | 63.981 | 60.000 | 108.000 | +/+ |
| | 1280 x 1024 | 79.976 | 75.025 | 135.000 | +/+ |
| | 1366 x 768 | 47.712 | 59.790 | 85.500 | +/+ |
| | 1440 x 900 | 56.250 | 59.967 | 108.000 | +/+ |
| | 1600 x 900P/960 | 60.000 | 60.000 | 108.000 | +/+ |
| | 1680 x 1050 | 65.290 | 59.954 | 148.250 | +/+ |
| | 1920 x 1080 | 67.500 | 60.000 | 148.500 | +/+ |

Installing batteries (Battery size: AAA)



Channel Menu

Seeing Channels

- Channel List**
- Add, delete or set Favorite channels and use the program guide for digital broadcasts. Select a channel in the **All Channels**, **Added Channels**, **Favorite** or **Programmed** screen by pressing the **▲/▼** buttons, and pressing the **ENTER** button. Then you can watch the selected channel.
- All Channels:** Shows all currently available channels.
 - Added Channels:** Shows all added channels.
 - Favorite:** Shows all favorite channels.
 - Programmed:** Shows all currently reserved programs.
- Using the remote control buttons with the **Channel List**
- Green (Zoom):** Enlarges or shrinks a channel number.
 - Yellow (Select):** Selects multiple channel lists. Select desired channels and press the **Yellow** button to set all the selected channels at the same time. The **✓** mark appears to the left of the selected channels.
 - Tools:** Displays the **Channel List** option menu. (The Options menu may differ depending on the situation.)

- Channel Status Display icons**
- ✓**: A channel selected.
 - ♥**: A channel set as a Favorite.
 - : A reserved program.
 - ⏸**: A program currently being broadcast.

Memorizing channels

Antenna (Switch to Cable / Switch to Air)

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

- Auto Program**
- When selecting the Cable TV system: Selects the cable system. **STD, HRC** and **IRC** identify various types of cable TV systems. Contact your local cable company to identify the type of cable system that exists in your particular area. At this point, the signal source has been selected.
 - After all the available channels are stored, it starts to remove scrambled channels. The **Auto Program** menu then reappears.
 - Press the **ENTER** button to stop the channel store during **Auto Program**.

- How to Stop Auto Programming**
- Press the **ENTER** button.
 - A message will ask **Stop Auto Program?** Select **Yes** by pressing the **▶** button.
 - Press the **ENTER** button.

Other Features

Clear Scrambled Channel

- This function filters out scrambled channels after **Auto Program** is completed. This process may take up to 20-30 minutes.
- Press the **ENTER** button to stop the **Clear Scrambled Channel**.
 - This function is only available in **Cable** mode.

Getting Started

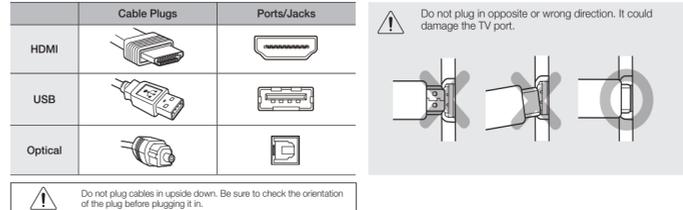
Accessories

- Remote Control & Batteries (AAA x 2)
- Warranty Card / Regulatory Guide
- Owner's Instructions
- Power Cord
- Cable Holder

Input Cables (Sold Separately)

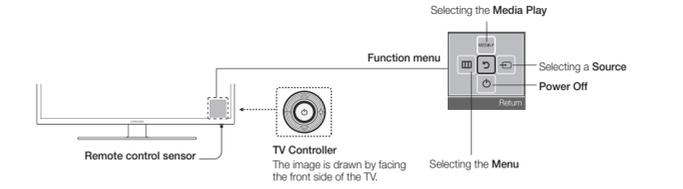
- Audio
- Composite (AV)
- Component
- Coaxial (FF)
- HDMI
- HDMI-DVI

Make sure you have the correct cable before plugging it in. Illustrations of common plugs and jacks are shown below.



TV Controller (Panel Key)

The TV's Controller, a small joystick like button on the bottom right side of the TV, lets you control the TV without the remote control.



- Exits the menu when pressing the controller more than 1 second.
- When selecting the function by moving the controller to the up/down/left/right directions, be sure not to press the controller. If you press it first, you cannot operate it to move the up/down/left/right directions.

Plug & Play (Initial Setup)

When you turn the TV on for the first time, a sequence of screens and on-screen prompts will assist you in configuring the TV's basic settings. Press the **POWER** button. **Plug & Play** is available only when the Input source is set to TV. Set the initial setup following instructions that the TV guides.

- Connecting the power cord and antenna. (refer to "Connections")

Picture Menu

Mode

Select your preferred picture type.

- When connecting a PC, you can only select **Entertain** and **Standard**.
- Dynamic:** Suitable for a bright room.
- Standard:** Suitable for a normal environment.
- Movie:** Suitable for watching movies in a dark room.
- Entertain:** Suitable for watching movies and games.
- Only available when connecting a PC.

Backlight / Contrast / Brightness / Sharpness / Color / Tint (G/R)

Your television has several setting options for picture quality control.

- When connecting a PC, you can only make changes to **Backlight**, **Contrast**, **Brightness** and **Sharpness**.

Picture Options

When connecting a PC, you can only make changes to the **Color Tone**, **Size**, and **HDMI Black Level**.

- Color Tone:** Cool makes the picture bluer (cooler). Warm 1 and Warm 2 make the picture redder (warmer).
- Size:** Your cable box/satellite receiver may have its own set of screen sizes as well. However, we highly recommend you use 16:9 mode most of the time.
- The menu is deactivated, when the H. 264 (1080p) DTV is being played.
- 16:9:** Sets the picture to 16:9 wide mode.
- Zoom1:** Use for moderate magnification.
- Zoom2:** Use for a stronger magnification.
- Wide Fit:** Enlarges the aspect ratio of the picture to fit the entire screen.
- 4:3:** Sets the picture to basic (4:3) mode.
- Do not watch in 4:3 format for a long time. Traces of borders displayed on the left, right and center of the screen may cause image retention (screen burn) which are not covered by the warranty.
- Screen Fit:** (DTV) Displays the full image without any cut-off when HDMI (720p / 1080i / 1080p) or Component (1080i / 1080p) signals are inputted.
- HD (High Definition): 16:9 - 1080i/1080p (1920x1080), 720p (1280x720)
- Settings can be adjusted and stored for each external device you have connected to an input on the TV.
- Picture Sizes available by Input Source:

| Input Source | Picture Size |
|--|---------------------------------|
| ATV, AV, Component (480i, 480p) | 16:9, Zoom1, Zoom2, 4:3 |
| DTV (1080i), Component (1080i, 1080p), HDMI (720p, 1080i, 1080p) | 16:9, Wide Fit, 4:3, Screen Fit |

Digital Clean View

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

- When the signal is weak, try other options until the best picture is displayed.
- HDMI Black Level:** Selects the black level on the screen to adjust the screen depth.
 - Available only in **HDMI** mode (RGB signals).
- Film Mode:** Sets the TV to automatically sense and process film signals from all sources and adjusts the picture for optimum quality.
 - Available in **ATV, DTV (interlace), AV, COMPONENT (480i / 1080i) and HDMI (480i / 1080i).**
- Motion Lighting:** Reduces power consumption by brightness control adapted motion.
 - Available in **Standard** mode only.

Multi-Track Sound

(analog channels only)

- Mono:** Choose for channels that are broadcasting in mono or if you are having difficulty receiving a stereo signal.
- Stereo:** Choose for channels that are broadcasting in stereo.
- SAP:** Choose to listen to the Separate Audio Program, which is usually a foreign-language translation.
 - Depending on the program being broadcast, you can listen to **Mono, Stereo** or **SAP**.

Auto Volume

Automatically adjusts the volume level when you change video sources or content so the level remains the same.

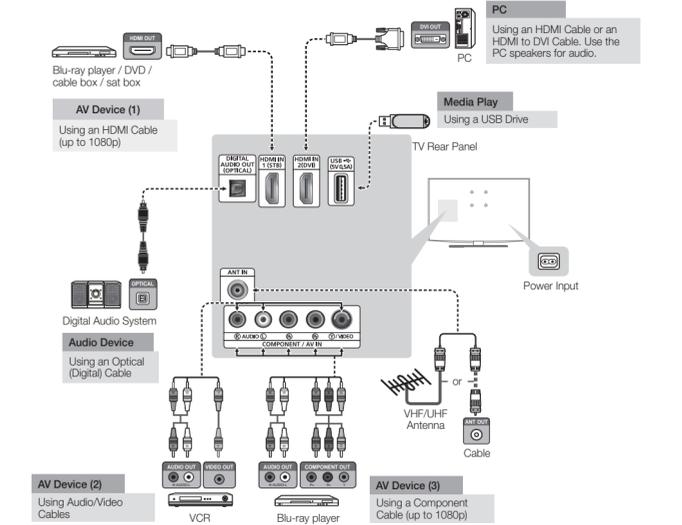
SPDIF Output

The SPDIF (Sony Philips Digital Interface) outputs an uncompressed digital audio signal when you connect the digital audio jack on the back of the TV to a digital audio jack on a receiver or home theater.

- Audio Format:** You can select the Digital Audio output (SPDIF) format. The available Digital Audio output format may differ depending on the input source.
 - By connecting the TV to a receiver or home theater with **Dolby Digital** and 5.1ch speakers and selecting **Dolby Digital**, you can maximize your interactive 3D sound experience.
- Audio Delay:** Lets you correct timing mismatches between the audio track and the video when you are watching the TV and listening to digital audio output from the TV through an external device such as an AV receiver. When you select **Audio Delay**, a slider appears. Use the left and right arrow buttons to adjust the slider. Press **ENTER** when done (15ms ~ 250ms).

Connections

- For the best picture and audio quality, connect digital devices using an HDMI cable.
- If you connect an external device to the TV that uses an older version of HDMI, the video and audio may not work. If this occurs, ask the manufacturer of the device about the HDMI version and, if it is out of date, request an upgrade.
- Be sure to purchase a certified HDMI cable. Otherwise, the picture may not display or a connection error may occur.
- PC/DVI AUDIO IN** input is not supported.
 - The side panel may differ depending on the model.
- For an HDMI to DVI cable connection, you must use the HDMI IN 2 (DVI) port.
- Connecting through the HDMI cable may not be supported depending on the PC.
- If an HDMI to DVI cable is connected to the HDMI IN 2 (DVI) port, the audio does not work.
- For Set-top box connection using HDMI cable, we highly recommend you to connect the HDMI IN 1 (STB) port.



Changing the Input Source

Source List

Use to select TV or an external input source such as a DVD player / Blu-ray player / cable box / STB satellite receiver.

- Press the **SOURCE** button.
 - Select a desired external input source.
 - TV / HDMI1 / HDMI2/DVI / AV / Component**
 - You can only choose external devices that are connected to the TV in the **Source List**; connected inputs will be highlighted.
- When connecting a PC to the HDMI IN 2(DVI) port with HDMI cable, you should set the TV to **PC** mode under **Edit Name**.
- When connecting a PC to the HDMI IN 2(DVI) port with HDMI to DVI cable, you should set the TV to **DVI PC** mode under **Edit Name**.
- When connecting an AV devices to the HDMI IN 2(DVI) port with HDMI to DVI cable, you should set the TV to **DVI** mode under **Edit Name**.

Information

You can see detailed information about the connected external device.

Speaker Select

A sound echo may occur due to a difference in decoding speed between the main speaker and the audio receiver. In this case, set the TV to **External Speaker**.

- When **Speaker Select** is set to **External Speaker**, the volume and MUTE buttons will not operate and the sound settings will be limited.
- When **Speaker Select** is set to **External Speaker**.
 - TV Speaker Off, External Speaker.**
 - When **Speaker Select** is set to **TV Speaker**.
 - TV Speaker On, External Speaker. On**
- If there is no video signal, both speakers will be mute.

Visual Impaired

(digital channels only)

Adds verbal description to the main audio to help the visually impaired.

Dolby Digital Comp

Set Dolby Digital compression mode.

Sound Reset

Reset All: Resets all sound settings to the factory defaults.

Setup Menu

Language

Set the menu language.

- Choose between **English**, **Español**, and **Français**.

Setting the Time

Time

- The current time will appear every time you press the **INFO** button.
- Clock:** Setting the clock is for using various timer features of the TV.
 - If you disconnect the power cord, you have to set the clock again.
 - Clock Mode:** Set the current time manually or automatically.
 - Clock Set:** Set the **Month, Day, Year, Hour, Minute** and **am/pm**.
 - Available only when **Clock Mode** is set to **Manual**.
 - Time Zone:** Select your time zone.
 - DST (Daylight Saving Time):** Switches the DST (Daylight Saving Time) function on or off.
 - SAP:** Choose to listen to the Separate Audio Program, which is usually a foreign-language translation.
 - Depending on the program being broadcast, you can listen to **Mono, Stereo** or **SAP**.
- Sleep Timer:** Automatically shuts off the TV after a preset period of time. (30, 60, 90, 120, 150 and 180 minutes).
- To cancel the **Sleep Timer**, select **Off**.

Timer 1 / Timer 2 / Timer 3

- Three different on / off timer settings can be made. You must set the clock first.
- On Time / Off Time:** Set the hour, minute, am/pm and Activate / Inactivate. (To activate the timer with the setting you have chosen, set to **Activate**).
- Volume:** Set the desired volume level.

Program Rating Lock

The **Program Rating Lock** feature automatically locks out programs that are deemed inappropriate for children. The user must enter a PIN (personal identification number) before any of the Program Rating Lock restrictions are set up or changed.

- Program Rating Lock** is not available in **HDMI** or **Component** mode.
- The default PIN number of a new TV set is "0-0-0-0".
- Program Rating Lock:** You can block rated TV Programs.
- TV Parental Guidelines:** You can block TV programs depending on their rating. This function allows you to control what your children are watching.
- MPPAA Rating:** You can block movies depending on their MPPAA rating. The Motion Picture Association of America (MPAA) has implemented a rating system that provides parents or guardians with advanced information on which films are appropriate for children.
- Canadian English:** You can block TV programs depending on their Anglophone Canadian.
- Canadian French:** You can block TV programs depending on their French Canadian rating.
- Downloadable U.S. Rating:** Parental restriction information can be used while watching DTV channels.
- Change PIN:** The Change PIN screen will appear. Choose any 4 digits for your PIN and enter it in **Enter New PIN**. Re-enter the same 4 digits in **Confirm New PIN**. When the Change PIN screen disappears, press the **OK** button. The TV has memorized your new PIN.
- If you forget the PIN, press the remote-control buttons in the following sequence, which resets the pin to "0-0-0-0" : **POWER** (off) → **MUTE** → **8** → **2** → **4** → **POWER** (on)

