

# VIZIO



**USER MANUAL**  
Model RS65-B2

# Safety & Certification

## THANK YOU FOR CHOOSING VIZIO

And congratulations on your new VIZIO HDTV.

To get the most out of your new VIZIO product, read these instructions before using your product and retain them for future reference. Be sure to inspect the package contents to ensure there are no missing or damaged parts.

## PRODUCT REGISTRATION

To purchase or inquire about accessories and installation services for your VIZIO product, visit our website at [www.VIZIO.com](http://www.VIZIO.com) or call toll free at (877) 878-4946.

We recommend that you register your VIZIO product at [www.VIZIO.com](http://www.VIZIO.com).

## Extended Warranties

For peace of mind, and to protect your investment beyond the standard warranty, VIZIO offers on-site extended warranty service plans. These plans provide additional coverage during the standard warranty period. To purchase an extended warranty service plan, visit [www.VIZIO.com](http://www.VIZIO.com).

## WHEN READING THIS MANUAL




When you see this symbol, please read the accompanying important warning or notice. It is intended to alert you to the presence of important operating instructions.



When you see this symbol, please read the accompanying helpful tip.

## IMPORTANT SAFETY INSTRUCTIONS

Your TV is designed and manufactured to operate within defined design limits. Misuse may result in electric shock or fire. To prevent your TV from being damaged, the following instructions should be observed for the installation, use, and maintenance of your TV. Read the following safety instructions before operating your TV. Keep these instructions in a safe place for future reference.

- To reduce the risk of electric shock or component damage, switch off the power before connecting other components to your TV.
  - Read these instructions.
  - Keep these instructions.
  - Heed all warnings.
  - Follow all instructions.
  - Do not use this apparatus near water.
  - Clean only with dry cloth.
  - Do not block any ventilation openings. Install in accordance with the manufacturer's instructions.
  - Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
  - Do not defeat the safety purpose of the polarized or grounding-type plug. A polarized plug has two blades with one wider than the other. A grounding type plug has two blades and a third grounding prong. The wide blade or the third prong are provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.
  - Protect the power cord from being walked on or pinched, particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.
  - Only use attachments/accessories specified by the manufacturer.
- Use only with the cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with the apparatus. When a cart is used, use caution when moving the cart/apparatus combination to avoid injury from tip-over. 
  - Unplug this apparatus during lightning storms or when unused for long periods of time.
  - Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as when the power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally or has been dropped.
  - Unplug the power cord before cleaning your TV.
  - When moving your TV from an area of low temperature to an area of high temperature, condensation may form in the housing. Wait before turning on your TV to avoid causing fire, electric shock, or component damage.
  - A distance of at least three feet should be maintained between your TV and any heat source, such as a radiator, heater, oven, amplifier etc. Do not install your TV close to smoke. Operating your TV close to smoke or moisture may cause fire or electric shock.
  - Slots and openings in the back and bottom of the cabinet are provided for ventilation. To ensure reliable operation of your TV and to protect it from overheating, be sure these openings are not blocked or covered. Do not place your TV in a bookcase or cabinet unless proper ventilation is provided.
  - Never push any object into the slots and openings on your TV cabinet. Do not place any objects on the top of your TV. Doing so could short circuit parts causing a fire or electric shock. Never spill liquids on your TV.
  - Your TV should be operated only from the type of power source indicated on the label. If you are not sure of the type of power supplied to your home, consult your dealer or local power company.

- Do not apply pressure or throw objects at your TV. This may compromise the integrity of the display. The manufacturer's warranty does not cover user abuse or improper installations.
- The power cord must be replaced when using different voltage than the voltage specified. For more information, contact your dealer.
- When connected to a power outlet, power is always flowing into your TV. To totally disconnect power, unplug the power cord.
- The lightning flash with arrowhead symbol within an equilateral triangle is intended to alert the user to the presence of un-isolated, dangerous voltage within the inside of your TV that may be of sufficient magnitude to constitute a risk of electric shock to persons.
- Do not overload power strips and extension cords. Overloading can result in fire or electric shock.
- The wall socket should be installed near your TV and easily accessible.
- Only power of the marked voltage can be used for your TV. Any other voltage than the specified voltage may cause fire or electric shock.
- Do not touch the power cord during lightning. To avoid electric shock, avoid handling the power cord during electrical storms.
- Unplug your TV during a lightning storm or when it will not be used for long period of time. This will protect your TV from damage due to power surges.
- Do not attempt to repair or service your TV yourself. Opening or removing the back cover may expose you to high voltages, electric shock, and other hazards. If repair is required, contact your dealer and refer all servicing to qualified service personnel.
- **WARNING:** Keep your TV away from moisture. Do not expose your TV to rain or moisture. If water penetrates into your TV, unplug the power cord and contact your dealer. Continuous use in this case may result in fire or electric shock.

- Do not use your TV if any abnormality occurs. If any smoke or odor becomes apparent, unplug the power cord and contact your dealer immediately. Do not try to repair your TV yourself.
- Avoid using dropped or damaged appliances. If your TV is dropped and the housing is damaged, the internal components may function abnormally. Unplug the power cord immediately and contact your dealer for repair. Continued use of your TV may cause fire or electric shock.
- Do not install your TV in an area with heavy dust or high humidity. Operating your TV in environments with heavy dust or high humidity may cause fire or electric shock.
- Follow instructions for moving your TV. Ensure that the power cord and any other cables are unplugged before moving your TV.
- When unplugging your TV, hold the AC/DC power adapter, not the cord. Pulling on the power cord may damage the wires inside the cord and cause fire or electric shock. When your TV will not be used for an extended period of time, unplug the power cord.
- To reduce risk of electric shock, do not touch the connector with wet hands.
- Insert batteries in accordance with instructions. Incorrect polarities may cause the batteries to leak which can damage the remote control or injure the operator. Do not expose batteries to excessive heat such as sunshine, fire or the like.
- If any of the following occurs, contact the dealer:
  - The power cord fails or frays.
  - Liquid sprays or any object drops into your TV.
  - Your TV is exposed to rain or other moisture.
  - Your TV is dropped or damaged in any way.
  - The performance of your TV changes substantially.
- This apparatus shall not be exposed to dripping or splashing and no objects filled with liquids, such as vases, shall be placed on the apparatus.

- The mains plug or appliance coupler is used as the disconnect device, the disconnect device shall remain readily operable.
- **CAUTION** - These servicing instructions are for use by qualified service personnel only. To reduce the risk of electric shock, do not perform any servicing other than that contained in the operating instructions unless you are qualified to do so.

**h** The lightning flash with arrowhead symbol within an equilateral triangle is intended to alert the user to the presence of unisolated DANGEROUS VOLTAGE within the product's enclosure that may be of sufficient magnitude to constitute a risk of electrical shock to persons.

## TELEVISION ANTENNA CONNECTION PROTECTION

If an outside antenna/satellite dish or cable system is to be connected to the TV, make sure that the antenna or cable system is electrically grounded to provide some protection against voltage surges and static charges.

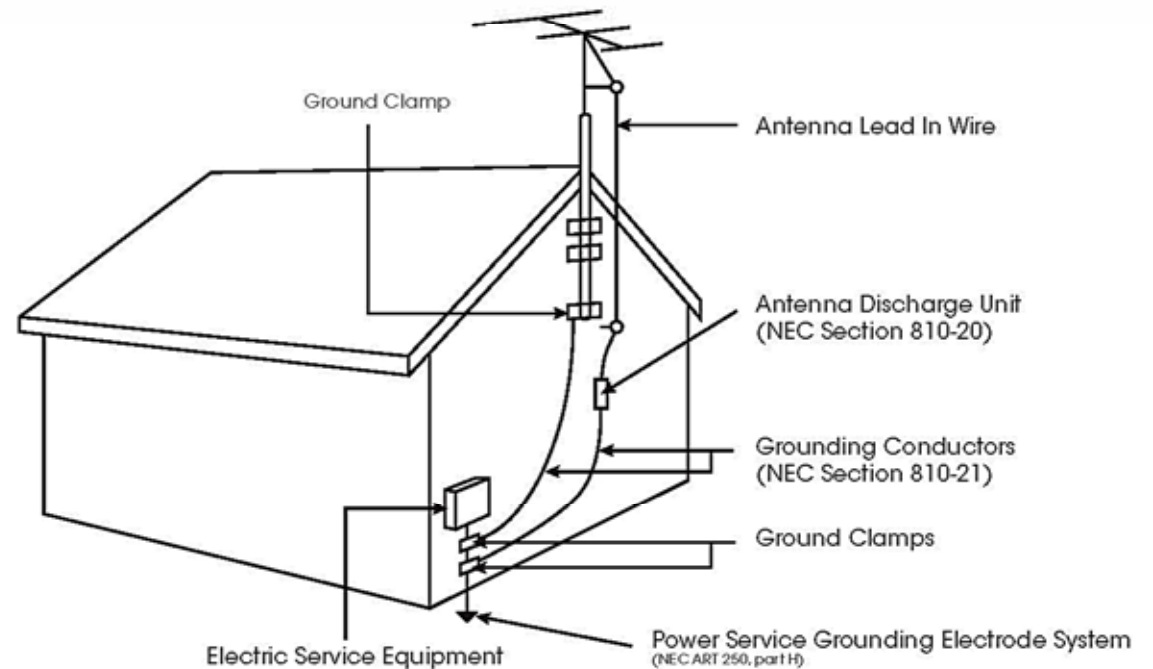
Article 810 of the National Electrical Code, ANSI/NFPA 70, provides information with regard to proper grounding of the mast and supporting structure, grounding of the lead-in wire to an antenna discharge unit, size of the grounding conductors, location of antenna discharge unit, connection to grounding electrodes, and requirements of the grounding electrode.

### Lightning Protection

For added protection of the TV during a lightning storm or when it is left unattended or unused for long periods of time, unplug the TV from the wall outlet and disconnect the antenna or cable system.

### Power Lines

Do not locate the antenna near overhead light or power circuits, or where it could fall into such power lines or circuits. Remember, the screen of the coaxial cable is intended to be connected to earth in the building installation.





For DTS patents, see <http://patents.dts.com>.

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Manufactured under license from Dolby Laboratories. Dolby and the double-D symbol are trademarks of Dolby Laboratories.



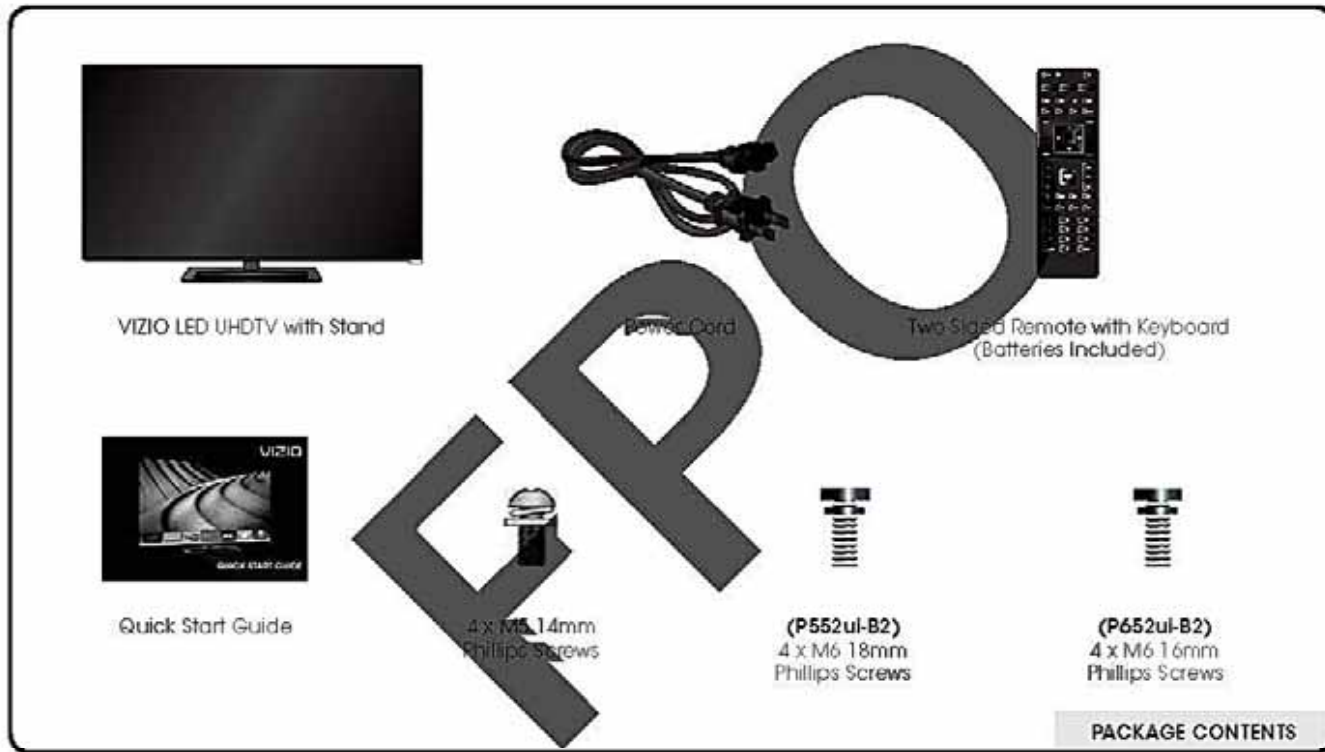
HDMI, the HDMI logo and High-Definition Multimedia Interface are trademarks or registered trademarks of HDMI Licensing LLC.

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## INSPECTING THE PACKAGE CONTENTS

Before installing your new TV, take a moment to inspect the package contents. Use the images below to ensure nothing is missing or damaged.



## INSTALLING THE TV

After removing the TV from the box and inspecting the package contents you can begin installing the TV. Your TV can be installed in two ways:

- On a flat surface, using the included stand
- On a wall, using a VESA-standard wall mount (not included)

### Installing the TV Stand

Your TV includes a stand designed to support the weight of the TV and keep it from falling over. However, the TV can still fall over if:

- It is placed on an uneven, unstable, or non-level surface
- It is pushed, pulled, or otherwise improperly moved
- If an earthquake occurs and the TV is not properly secured

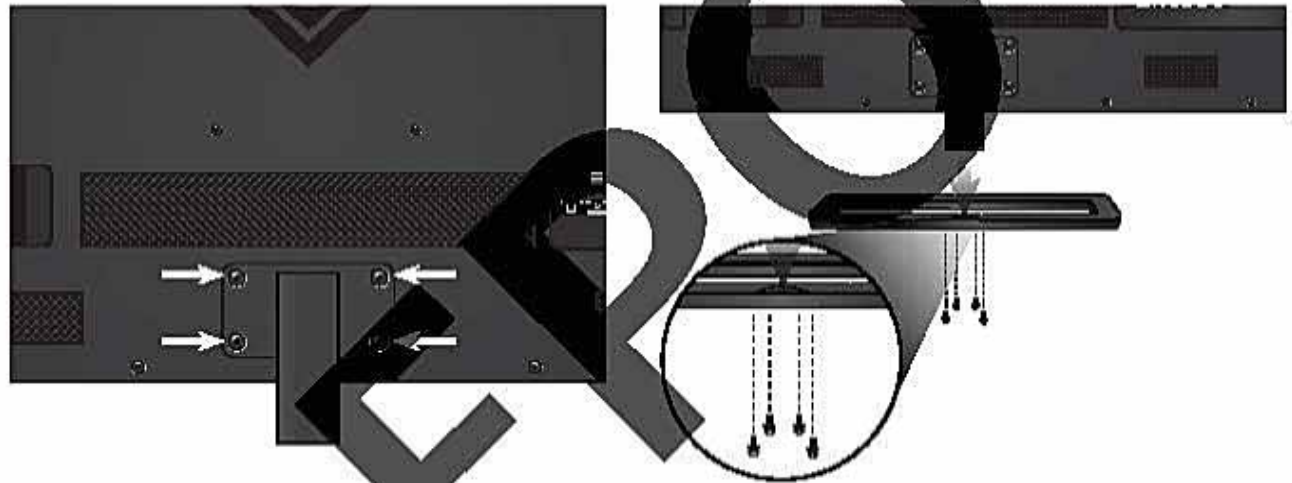


It is recommended that two people take part in the base installation.

Place the TV screen-down on a clean, flat surface. To prevent scratches or damage to the screen, place the TV on a soft surface, such as carpet, rug, or blanket.



To install the base:



1. Align the neck piece with the bottom of the TV and slide it into place.

For P552ui-B2: Insert and tighten four (4) M6 18mm Phillips screws into the back of the TV as shown.

For P552ui-B2: Insert and tighten four (4) M6 16mm Phillips screws into the back of the TV as shown.

2. Align the base with the neck.

Insert and tighten four (4) M6 14mm Phillips screws into the bottom of the base as shown.

3. When you are finished, place the TV on a stable, level surface.



### Installing the TV on a Wall

To mount your TV on a wall, you will need a wall mount. Consult the information below to find the appropriate mount for your TV model:



Installing a TV on a wall requires lifting. To prevent injury or damage to the TV, ask someone to help you.

RS65-B2	
Screw Size:	M6
Hole Pattern:	TBD
Weight w/o Stand:	96.67

Be sure the mount you choose is capable of supporting the weight of the TV. After you have determined that you have the correct mount for your TV, you can begin the installation.

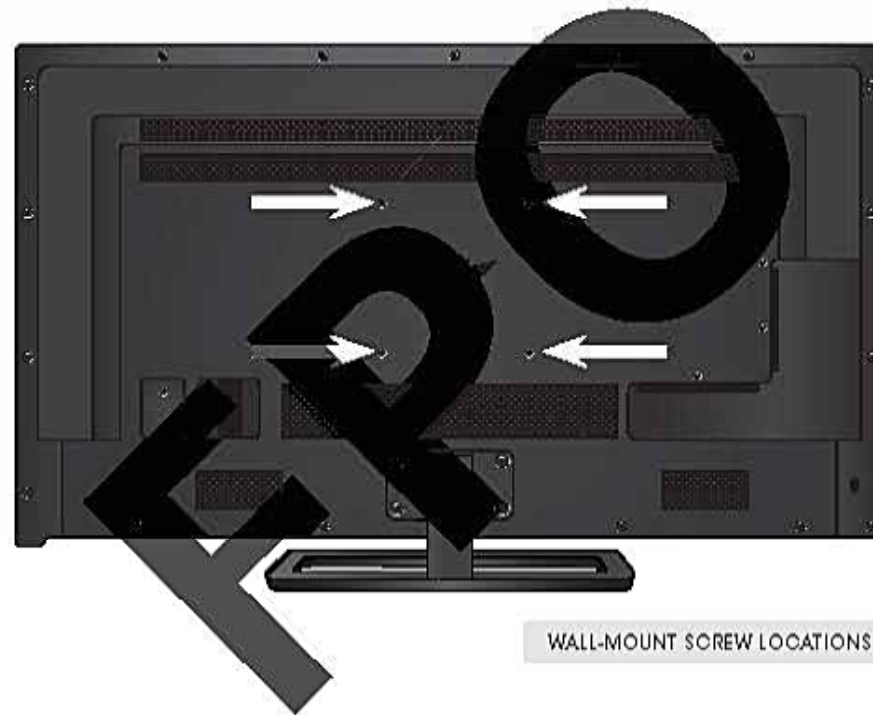
To install your TV on a wall:

1. Disconnect any cables connected to your TV.
2. Place the TV face-down on a clean, flat, stable surface. Be sure the surface is clear of debris that can scratch or damage the TV.
3. Remove the base and neck by loosening and removing the screws.
4. Attach your TV and wall mount to the wall, carefully following the instructions that came with your mount.

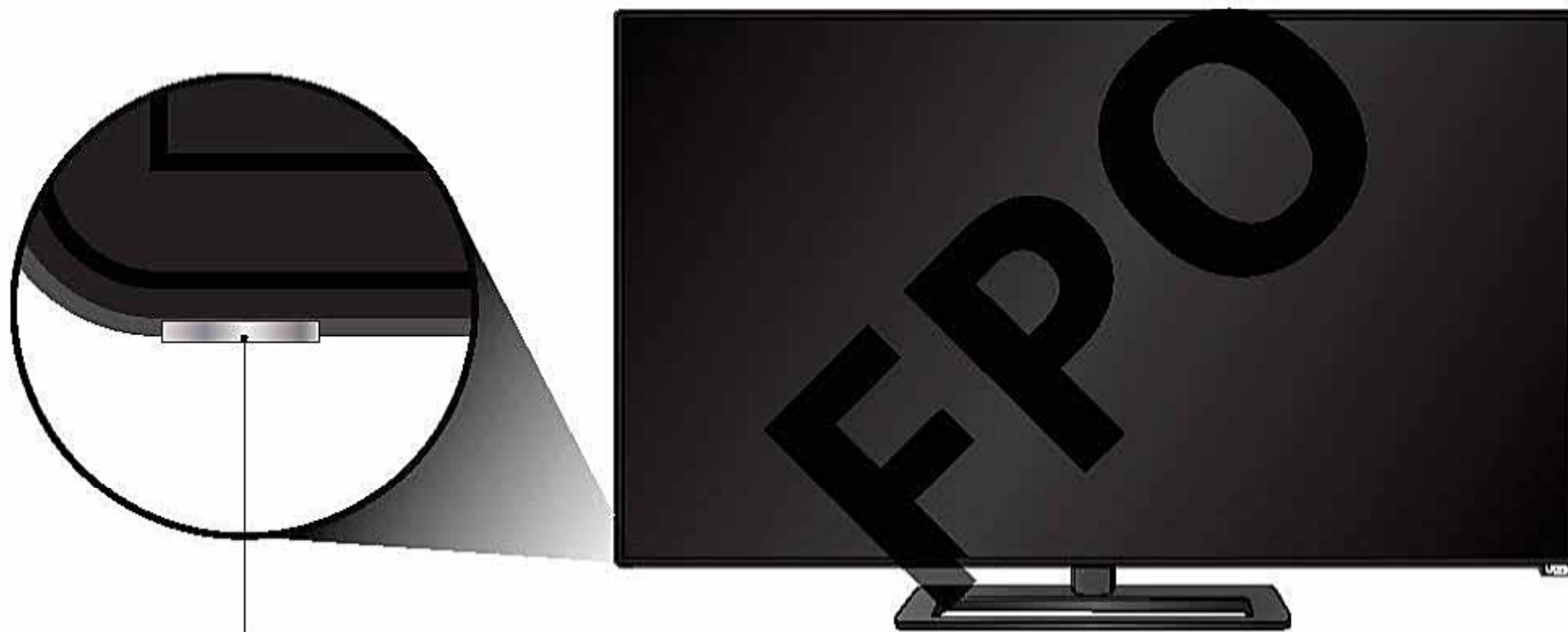
Use only with a UL-listed wall mount bracket rated for the weight/load of this TV.



For some wall mounts, you may want to use cables with right-angle connectors. This allows the TV to rest closer to the wall.



WALL-MOUNT SCREW LOCATIONS

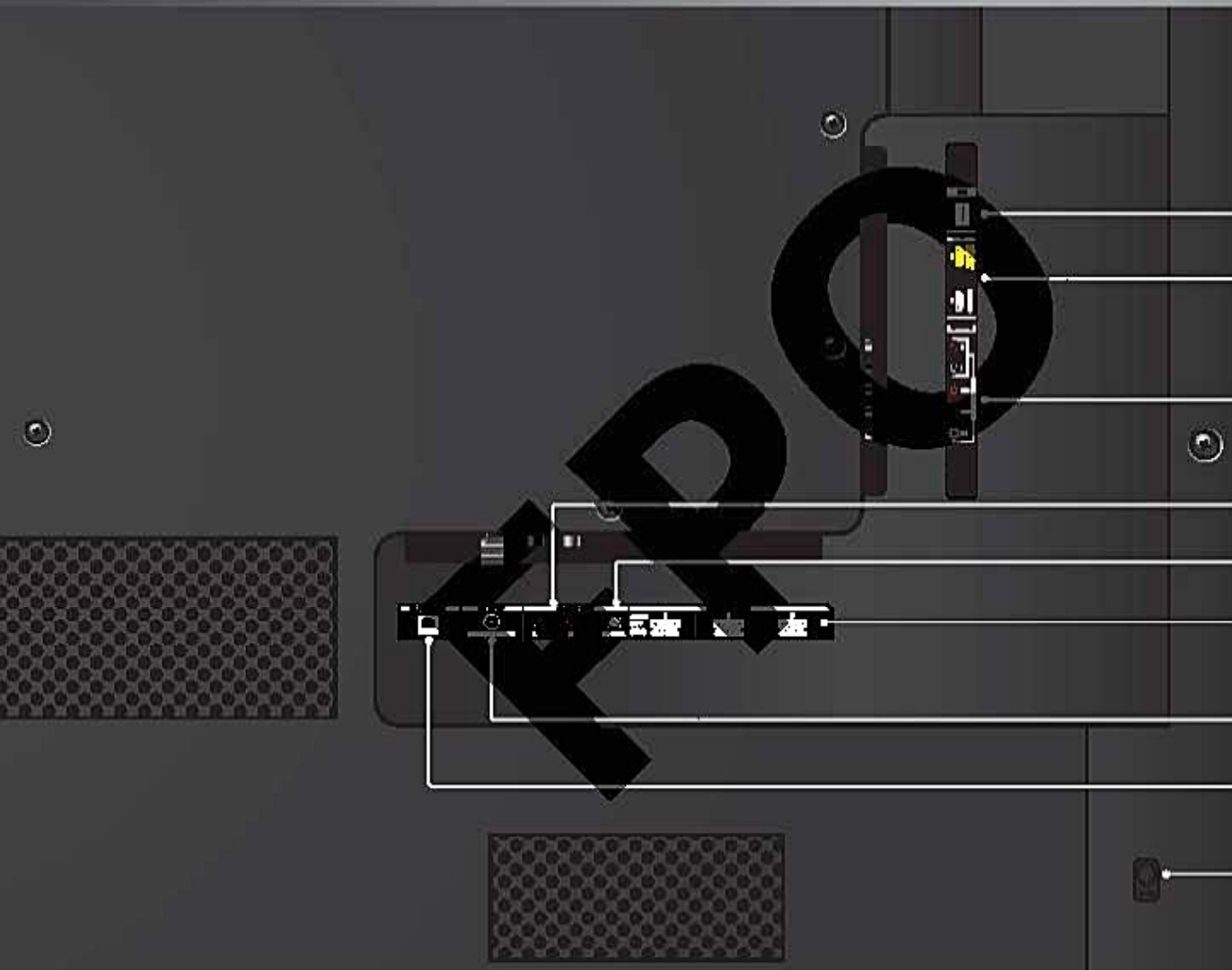


**REMOTE SENSOR & POWER INDICATOR**

When using the remote, aim it directly at this sensor.

The power indicator flashes on when the TV turns on, then goes out after several seconds.

To keep the power indicator on as long as the TV is on, see *Turning the Power Indicator On or Off* on page 46.



USB - Connect USB thumb drive to play photo, music, or video.

HDMI - Connect HDMI device.

Component/Composite - Connect component or composite device.

Stereo Audio Out - Connect RCA audio device, such as sound bar.

Optical Audio Out - Connect optical/SPDIF audio device, such as home audio receiver.

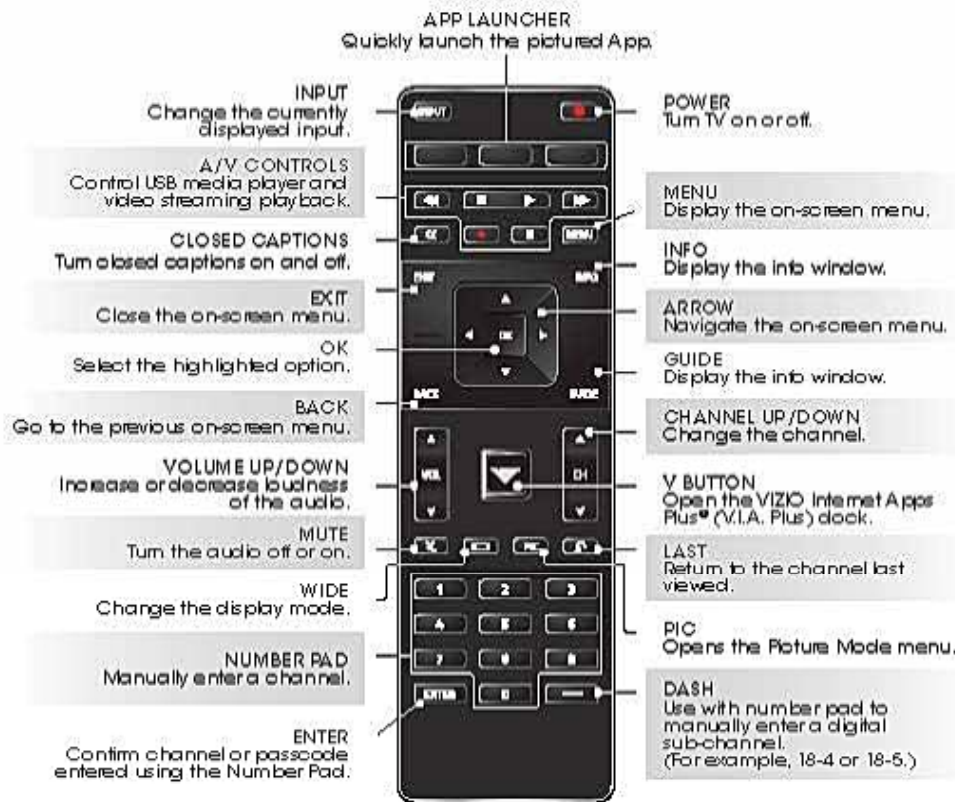
HDMI - Connect HDMI device.

Coaxial - Connect coaxial cable from cable, satellite, or antenna.

Ethernet - Connect Ethernet cable from home network.

Power/Input - Press once to turn on the TV. Press once to access the input menu. Press and hold to turn off the TV.

REAR PANEL



## Replacing the Batteries



1. Press in on the button on the rear of the remote.



2. Remove the battery cover.



3. Insert two AAA batteries into the remote control. Make sure that the (+) and (-) symbols on the batteries match the (+) and (-) symbols inside the battery compartment.

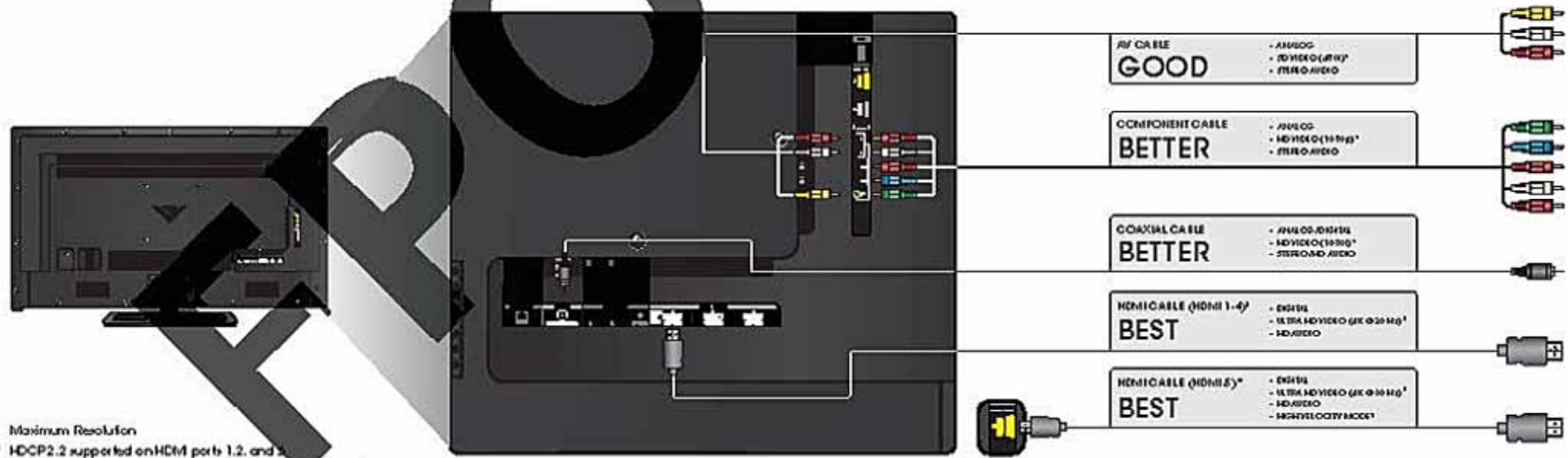


4. Replace the battery cover.

## CONNECTING A DEVICE

Your TV can be used to display output from most devices.

1. Verify that your device has a video port that matches an available port on the TV (HDMI, Component, etc.).
2. Turn the TV and your device off.
3. Connect the appropriate cable (not included) to the TV and the device.
4. Turn the TV and your device on. Set the TV's input to match the connection you used (HDMI-1, HDMI-2, etc.).



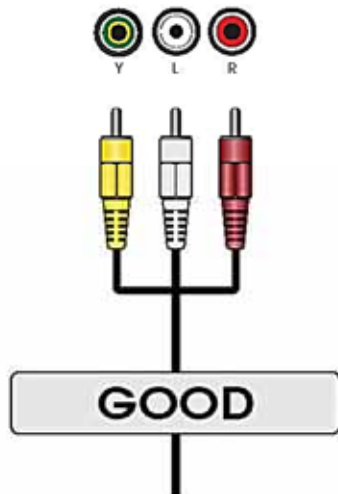
<sup>1</sup> Maximum Resolution  
<sup>2</sup> HDCP2.2 supported on HDMI ports 1.2, and 3  
<sup>3</sup> Recommended for use with high-performance devices only  
<sup>4</sup> Available for compatible gaming systems or high-performance PCs for display of 1080p @ 120fps

## CONNECTING A DEVICE - AUDIO & VIDEO CABLE TYPES

### AV CABLE

AV cables (or Composite cables) are the traditional way of connecting your devices to your TV. Video signals are sent over the yellow connector while audio is sent over the red and white connectors.

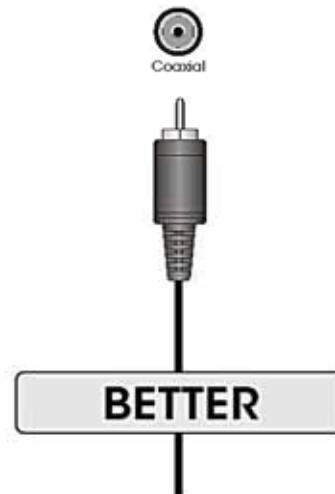
- Video Resolutions up to 480i
- Analog Connection
- Audio and Video Signals



### COAXIAL CABLE

Coaxial cables are the traditional way of connecting antennas and cable television signals to your TV. Coaxial cables carry both audio and video signals through a single connector.

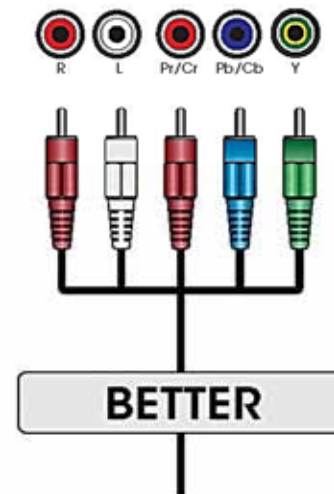
- HD Video Resolutions up to 1080i
- Analog Connection
- Audio and Video Signals



### COMPONENT CABLE

Component cables are designed to carry high definition video signals along with additional audio connections. Colors are delivered with color information split up three different ways over three connectors for video (separated into Red, Blue and Green signals) and the left and right audio connectors (Red and White).

- HD Video Resolutions up to 1080p
- Analog Connection
- Audio and Video Signals



### HDMI CABLE

HDMI is the intelligent, all-digital interface that delivers both dazzling quality and unmatched ease of use. HDMI technology transmits crystal-clear digital video along with multi-channel surround audio. HDMI-connected devices have the ability to automatically adjust themselves for optimal viewing.

- HD Video Resolutions up to UHD\*
- HD Audio
- Digital Connection
- Audio and Video Signals



\* High-Speed HDMI cable required for UHD resolutions

## CONNECTING AN AUDIO DEVICE

Your TV can output sound to an audio device, such as a receiver or sound bar.

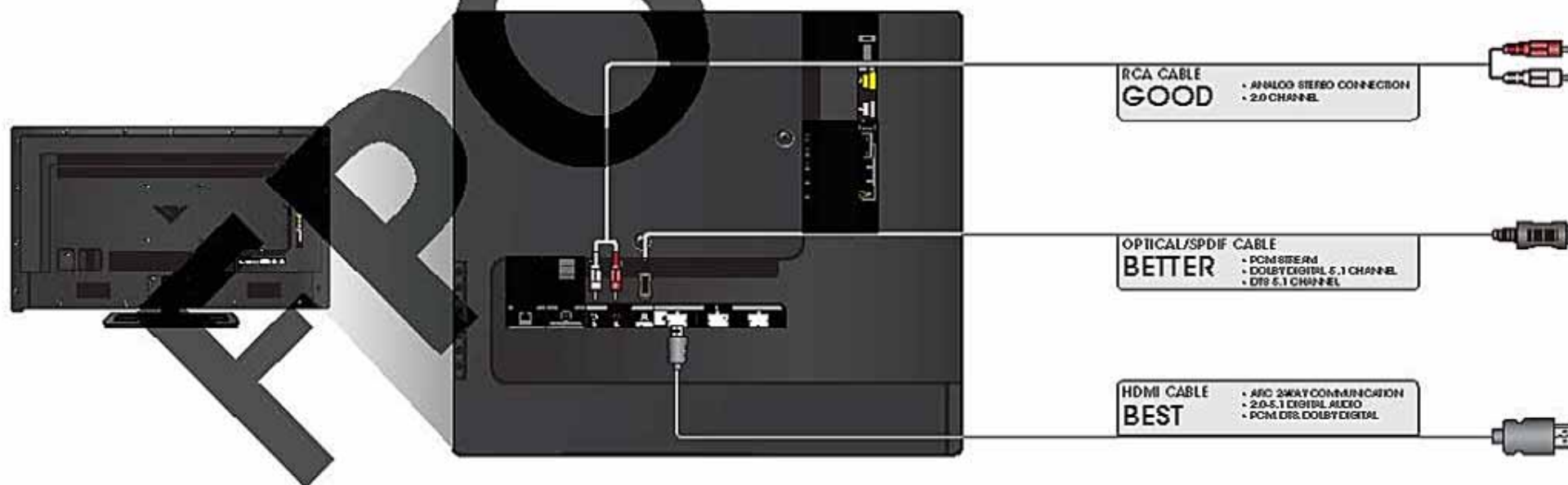
1. Verify that your device has an audio port that matches an available port on the TV (Optical, RCA, etc).
2. Turn the TV and your audio device off.
3. Connect the appropriate cable (not included) to the TV and the device.
4. Turn the TV and your device on.



Home Audio Receiver



VIZIO Sound Bar



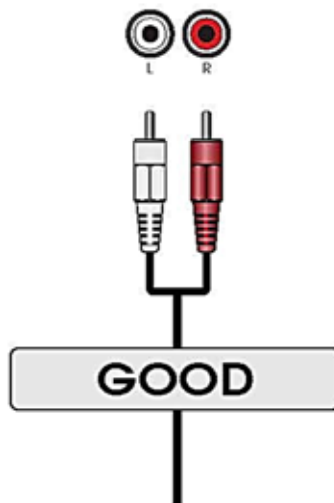


## CONNECTING AN AUDIO DEVICE - AUDIO CABLE TYPES

### RCA CABLE

RCA cables (or Composite cables) are the traditional way of connecting your devices to your audio device. Audio signals are sent over the red and white connectors.

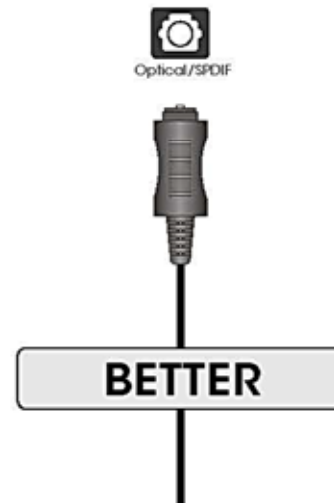
- Quality Stereo Connection
- 2.0 Channel
- Analog Connection
- Audio Signal Only



### OPTICAL/SPDIF CABLE

Optical/SPDIF cables transmit audio signals as pulses of light through a cable made of plastic fibers. Audio signals are digitally transmitted between devices.

- PCM Stream (Lossless)
- Dolby Digital 5.1 Channel
- DTS 5.1 Channel
- Digital Connection
- Audio Signal Only



### HDMI CABLE

HDMI technology transmits crystal-clear digital multi-channel surround audio through a single HDMI cable. Audio Return Channel-enabled (ARC) TVs allow audio to be sent over an already connected HDMI cable, eliminating the need for a separate audio cable. See *Connecting an Audio Device - Arc* on page 18.

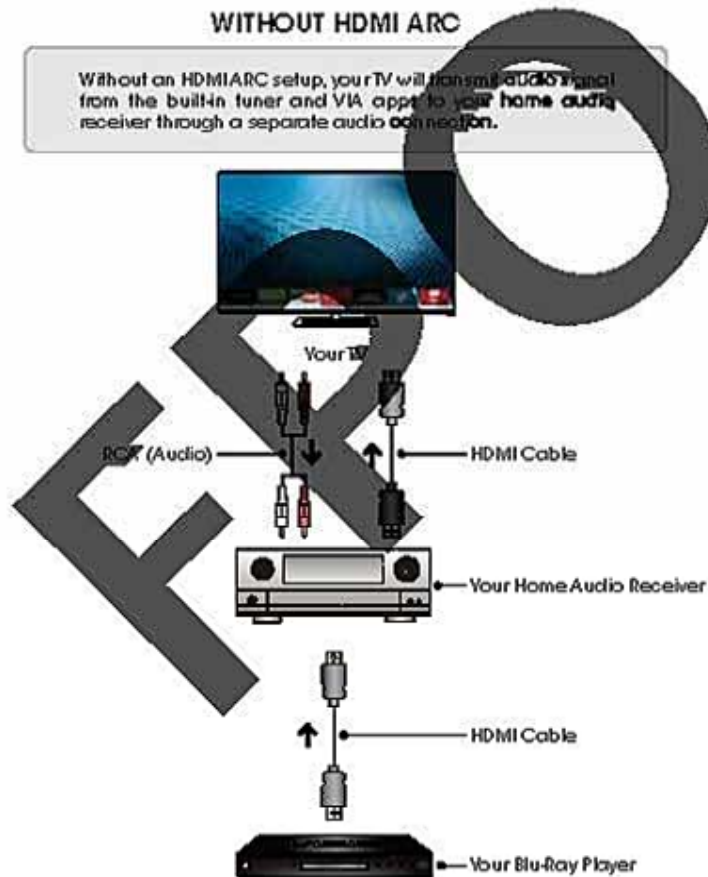
- ARC 2-way Communication (Auto setup)
- PCM, DTS, Dolby Digital
- 2.0 - 5.1 Scalable Lossless Digital Audio Connection
- Audio and Video Signals



## CONNECTING AN AUDIO DEVICE - ARC

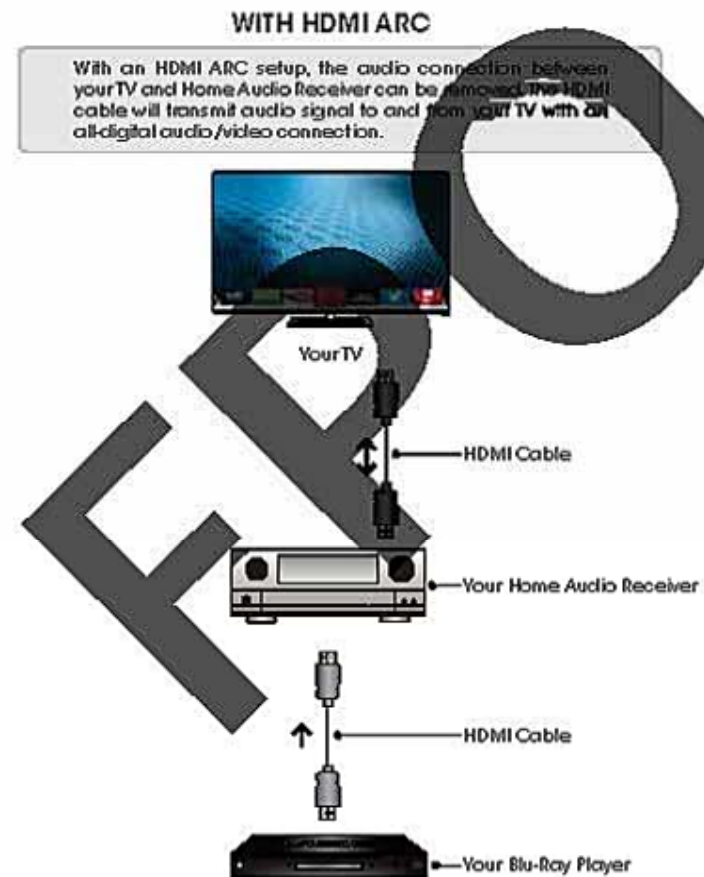
## WITHOUT HDMI ARC

Without an HDMI ARC setup, your TV will transmit audio signal from the built-in tuner and via optical to your home audio receiver through a separate audio connection.



## WITH HDMI ARC

With an HDMI ARC setup, the audio connection between your TV and Home Audio Receiver can be removed. The HDMI cable will transmit audio signal to and from your TV with an all-digital audio/video connection.



## CONNECTING TO YOUR NETWORK

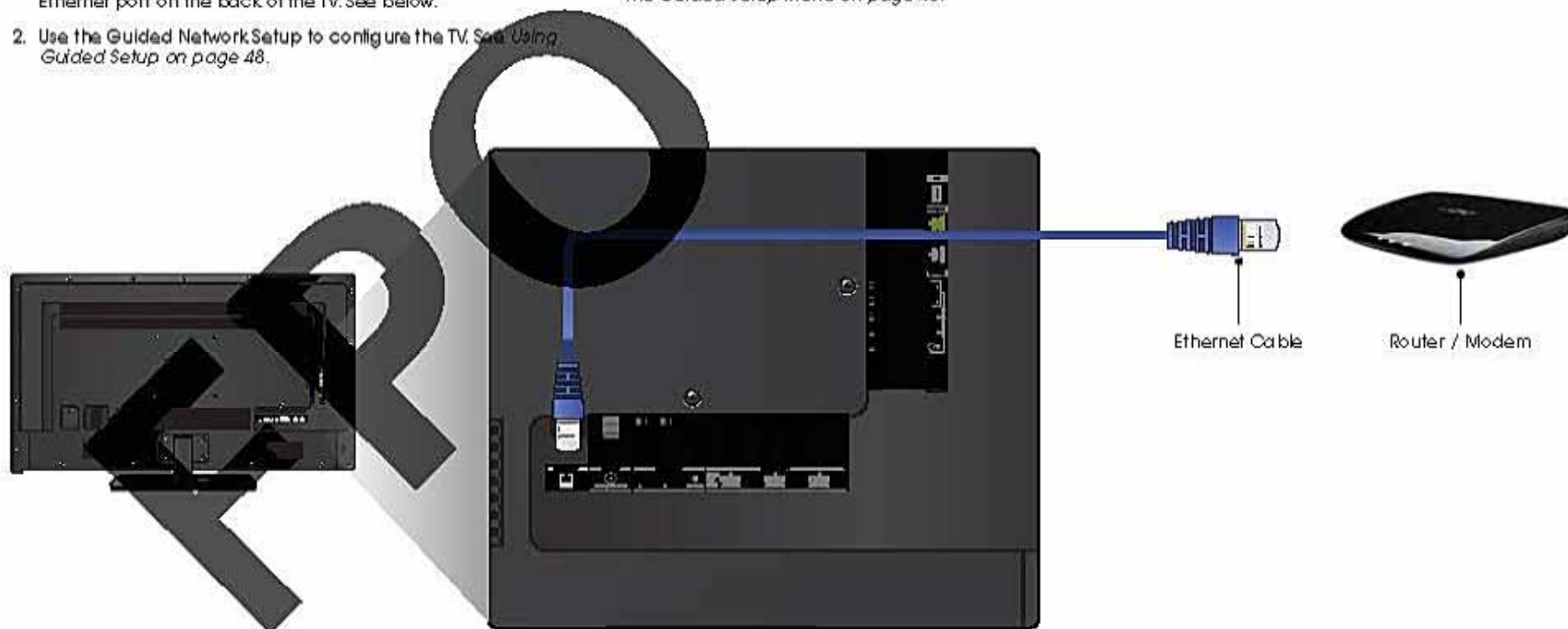
Your TV is Internet-ready. It can be connected to your home network with a Wired or Wireless connection.

### Connecting to a Wired Network (Best)

1. Connect an Ethernet cable to your router and to the Ethernet port on the back of the TV. See below.
2. Use the Guided Network Setup to configure the TV. See *Using Guided Setup* on page 48.

### Connecting to a Wireless Network

1. Ensure you have a router or modem broadcasting as high-speed wireless signal (802.11n recommended).
2. Use the Guided Network Setup to configure the TV. See *Using the Guided Setup Menu* on page 48.



# Completing The First-Time Setup

3

The first time you turn on the TV, the Setup App will guide you through each of the steps necessary to get your TV ready for use.

Before you begin the first-time setup:

- Your TV should be installed and the power cord should be connected to an electrical outlet.
- Your devices should be connected.
- If you have a wireless network, have the network password ready.
- If you are connecting to your network with an Ethernet cable, connect it to the Ethernet port on the TV.

To complete the first-time setup:

1



Press the Power button on the remote. The TV powers on and the Setup App starts.

3



Use the Arrow buttons on the remote to highlight your language of preference and press OK.

2



Use the Arrow buttons on the remote to highlight Home Use and press OK.

4



Use the Arrow buttons on the remote to highlight your country, and then press OK.

5



Select your time zone and press OK.

6



Select the name of your wireless network from the list of available networks and press OK.



Enter the network password using the keyboard on the remote, then highlight Connect and press OK.

7



Use the Arrow and OK buttons on the remote to review the Terms Of Service and Privacy Policy.

When you are finished, highlight I Accept and press OK.

8



Enter your E-mail Address, First Name, Last Name, and Zip Code using the keyboard on the remote.

Highlight Next and press OK.

9



Use the Arrow buttons on the remote to highlight your TV source and press OK.



If you have cable TV, select whether you have a cable box or if you connect the TV directly to a cable from the wall.

10



If the TV Signal channel scan screen appears, the TV will need to scan for channels, which takes several minutes.

Use the arrow buttons on the remote to highlight Begin Scan and press OK.



Note: Number of ports may differ by TV.

Otherwise, use the Arrow and OK buttons on the remote to select the input your TV source is connected to.

When you are finished, the message "Your VIZIO TV is set up." will appear.

The First-Time Setup is complete.

Your TV features an easy-to-use on-screen menu.

To open the on-screen menu, press the MENU button on the remote. You can also open the on-screen menu by pressing the VIA button and selecting HDTV Settings from the VIA Dock, then pressing OK.

From this menu, you can:

- Adjust the Picture settings
- Adjust the Audio settings
- Setting the Sleep Timers
- Adjust the Network settings
- Adjust the Tuner settings
- Set up Closed Captioning
- Name Inputs
- Adjust TV settings
- Access the Guided Setup
- Access the User Manual



## NAVIGATING THE ON-SCREEN MENU

To open the on-screen menu, press the MENU button on the remote.

Use the Arrow buttons to highlight a menu option, and press the OK button to select that option.



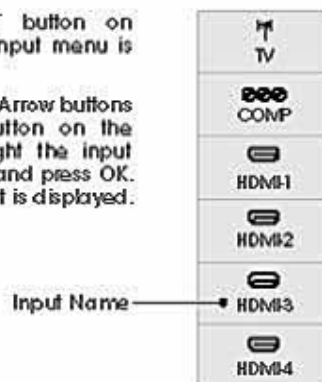
While navigating the on-screen menu, you can press the BACK button at any time to return to the previous menu screen. The EXIT button will close the on-screen menu.

## CHANGING THE INPUT SOURCE

External devices such as DVD players, Blu-ray Players, and video game consoles can be connected to your TV. To use one of these devices with your TV, you must first change the input source using the Input menu.

To change the input source:

1. Press the INPUT button on the remote. The Input menu is displayed.
2. Use the Up/Down Arrow buttons or the INPUT button on the remote to highlight the input you wish to view and press OK. The selected input is displayed.




Note: Input may vary by TV.

You can change the input names that appear on the Input menu to make your devices easy to recognize. See *Renaming Devices on the Input Menu* on page 41 for more information.

## CHANGING THE SCREEN ASPECT RATIO

The TV can display images in five different modes: Normal, Stretch, Panoramic, Wide, and Zoom. Each mode displays the picture differently. See *Adjusting the Wide Mode (Aspect Ratio)* on page 45 for an alternate way of adjusting the screen aspect ratio.

To change the screen aspect ratio:

1. Press the  button on the remote.
2. Use the Arrow buttons to highlight the aspect ratio you wish to view and press OK.



Note: Aspect ratio settings may vary by input source.


- Normal preserves the content's original aspect ratio. Since the 4:3 aspect ratio is not large enough to fill the TV's screen, black bars are added to the left and right of the display image.
- Stretch expands the display image to fill the screen. Images may appear wider than intended. If you are watching widescreen (1.85:1 or 2.35:1) content, black bars will still appear on the top and bottom of the display image. This option is only available when the TV is displaying a 720p/1080i/1080p source.
- Panoramic expands the display image to fill the screen. Images may appear wider than intended. If you are watching widescreen (1.85:1 or 2.35:1) content, black bars will still appear on the top and bottom of the display image. This option is only available when the TV is displaying a 480i/480p source.
- Wide stretches a 4:3 aspect ratio picture to the edges of the screen. Since the picture is being stretched, the display image may appear distorted. If the program is already formatted for widescreen viewing (1.85:1 or 2.35:1), then black bars will appear on the top and bottom of the display image.
- Zoom expands images with black bars to fill the screen.

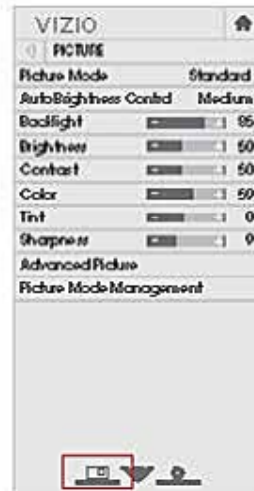
## VIEWING VIDEO WITH THE MENU OPEN

When the on-screen menu opens, it covers the left-hand portion of the picture. The picture can be displayed in three different ways:

- Full-sized and centered on the screen (Overlay) - The left-hand portion of the picture covered by the menu.
- Resized to fit (Viewport) - The entire picture is visible in the space to the right of the menu.
- Full-sized and aligned to the right edge of the menu (Centered Overlay) - The picture extends off of the right side of the screen.

To change the position of the picture while the on-screen menu is displayed:

1. Use the Arrow buttons on the remote to highlight  Resize Video.
2. Press OK to cycle through the three display methods.
3. Press the Up Arrow button on the remote to the menu.
4. See *Changing the View Mode Settings* on page 45 for an alternate method of adjusting the video.



Tip: The aspect ratio cannot be changed for Ultra HD content or for any video content on HDMI-5.



Full-sized and centered (Overlay)



Resized to fit (Viewport)



Full-sized and aligned to right of menu (Centered Overlay)



## ADJUSTING THE PICTURE SETTINGS

Your TV display can be adjusted to suit your preferences and viewing conditions.



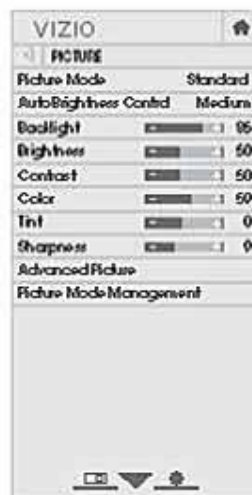
Changes made while on any preset picture mode will add an asterisk on the top right corner of the preset mode (see *Saving a Custom Picture Mode* on page 29).

To adjust the picture settings:

1. Press the MENU button on the remote. The on-screen menu is displayed.
2. Use the Arrow buttons on the remote to highlight Picture and press OK. The PICTURE menu is displayed.

3. Use the Arrow buttons on the remote to highlight Picture Mode, then use the Left/Right Arrow buttons to change the picture mode:

- Standard mode sets the various picture settings to values that meet ENERGY STAR® requirements.
- Calibrated mode sets the picture settings to values ideal for watching TV in a brightly-lit room.
- Calibrated Dark mode sets the picture settings to values ideal for watching TV in a dark room.
- Vivid mode sets the picture settings to values that produce a brighter, more vivid picture.
- Game mode reduces throughput delays and optimizes the picture settings for displaying game console output.
- Computer mode optimizes the picture settings for displaying computer output.

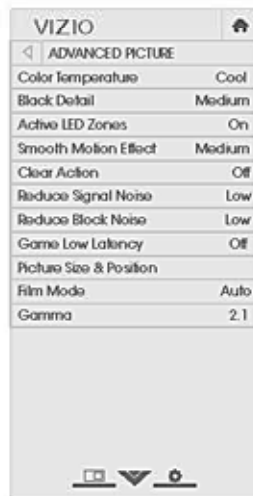


4. To manually change each of the picture settings, use the Up/Down Arrow buttons on the remote to highlight that picture setting, then use the Left/Right Arrow buttons to adjust the setting:
  - Auto Brightness Control - The auto brightness control detects the light level in the room and automatically adjusts the backlight for the best picture. Select Off, Low, Medium, or High.
  - Backlight - Adjusts the LED brightness to affect the overall brilliance of the picture. Backlight cannot be adjusted when starting from some picture modes.
  - Brightness - Adjusts the black level of the picture. When this setting is too low, the picture may be too dark to distinguish details. When this setting is too high, the picture may appear faded or washed out.
  - Contrast - Adjusts the white level of the picture. When this setting is too low, the picture may appear dark. When this setting is too high, the picture may appear faded or washed out. If the setting is too high or too low, detail may be difficult to distinguish in dark or bright areas of the picture.
  - Color - Adjusts the intensity of the picture colors.
  - Tint - Adjusts the hue of the picture. This setting is useful in adjusting the flesh tones in the picture. If flesh appears too orange, reduce the level of color before adjusting tint.
  - Sharpness - Adjusts the edge sharpness of picture elements. It can be used to sharpen non-HD (high definition) content; however, it will not produce detail that does not otherwise exist.
5. When you have finished adjusting the picture settings, press the EXIT button on the remote.

### Adjusting the Advanced Picture Settings\*

To adjust the advanced picture settings:

- From the PICTURE menu, use the **Arrow** buttons to highlight **Advanced Picture**, and then press **OK**.
- Use the **Arrow** buttons to highlight the setting you wish to adjust, then press the **Left/Right Arrow** buttons to change the setting:



- **Color Temperature** - Adjusts the 'warmness' and 'coolness' of the white areas of the picture. Select **Cool**, **Normal**, or **Computer**.
  - **Cool** produces a blue-hued picture.
- **Computer** optimizes the picture for use as a PC monitor.
- **Normal** is optimized for television viewing.
- **Black Detail** - Adjusts the average brightness of the picture to compensate for large areas of brightness. Select **Off**, **Low**, **Medium**, or **High**.
- **Active LED Zones** - Dynamically improves the contrast ratio of the picture by adjusting the backlight. The adjustment is controlled by the content on the screen. Select **On** or **Off**.
- **Smooth Motion Effect** - Activates Smooth Motion motion estimation/motion compensation, which suppresses motion judder, or "stuttering" of the image when the camera moves across a scene horizontally. Select **Off**, **Low**, **Medium**, or **High**.

\* Not available on HDMI input 5

† Only available on customized preset modes.

- **Clear Action** - Reduces blur in scenes with fast action. Some sensitive viewers may notice flicker. Select **On** or **Off**.
  - **Reduce Signal Noise** - Diminishes artifacts in the image caused by the digitizing of image motion content. Select **Off**, **Low**, **Medium**, or **High**.
  - **Reduce Block Noise** - Reduces pixelation and distortion for mpeg files. Select **Off**, **Low**, **Medium**, or **High**.
  - **Game Low Latency** - Select **On** to reduce video delay (lag) when gaming.
  - **Picture Size & Position** - Highlight **Picture Size & Position** and press **OK**. The PICTURE SIZE & POSITION menu is displayed.
    - **Picture Size:** Increase or decrease the vertical and horizontal size of the displayed picture. Use the **Left/Right Arrow** buttons to adjust the horizontal size of the displayed picture. Use the **Up/Down Arrow** buttons to adjust the vertical size of the displayed picture. Press the **OK** button when you are finished.
    - **Picture Position:** Adjust the vertical and horizontal positions of the picture to ensure the image is centered and completely fills the screen. Use the **Left/Right Arrow** buttons to adjust the horizontal position of the displayed picture. Use the **Up/Down Arrow** buttons to adjust the vertical position of the displayed picture. Press the **OK** button when you are finished.
  - **Film Mode** - Optimizes the picture for watching film. Select **Auto** or **Off**.
  - **Gamma** - Set the shape of the Gamma curve. Use lower Gamma values for bright room conditions, and higher values when it's dark.
- When you have finished adjusting the Advanced Picture Settings, press the **EXIT** button on the remote.

### Adjusting the Picture Mode Management Settings\*

Picture Mode Management Settings allow you to make precise adjustments to the picture and to create picture modes to save groups of picture settings.



The Color Tuner, 11 Point White Balance, and test patterns allow technicians to manually calibrate the TV. Calibration requires specialized training, an input with precisely set colors, and a specialized light meter.

To adjust the Picture Mode Management settings:

- From the PICTURE menu, use the **Arrow** buttons to highlight **Picture Mode Management**, and then press **OK**. The PICTURE MODE MANAGEMENT menu is displayed.
- Use the **Arrow** buttons to highlight the setting you wish to adjust, then press **OK** to change the setting:



- **Color Tuner** - Adjust the HSB color and 11-point white balance, and display calibration test patterns.
- **Save Picture Mode†** - Save a custom picture mode.
- **Rename Picture Mode** - Rename a custom picture mode.
- **Lock Picture Mode** - Prevent changes to custom picture modes.
- **Unlock Picture Mode** - Allow changes to custom picture modes.
- **Delete Picture Mode** - Delete a custom picture mode. Inputs assigned to that custom picture mode will be set to Calibrated picture mode.
- **Reset Picture Mode†** - Reset the picture mode settings to factory default values.

### Adjusting the Color Tuner Settings

The Color Tuner settings allow you to adjust the HSB color and 11 point white balance, turn color channels off for testing, and display color bar, flat, and ramp test patterns.

To adjust the HSB color settings:

1. From the PICTURE MODE MANAGEMENT menu, use the **Arrow** buttons to highlight **Color Tuner**, and then press **OK**. The Color Tuner menu is displayed.

Color Tuner						
	Red	Green	Blue	Cyan	Magenta	Yellow
Hue	0	0	0	0	25	-14
Saturation	-1	5	-4	0	-2	0
Brightness	-24	0	-22	0	0	0
Offset	0	0	0			
Gain	0	0	0			

2. Use the **Arrow** buttons on the remote to highlight the **Hue**, **Saturation**, **Brightness**, **Offset**, or **Gain** of the color you wish to adjust. Press the **OK** button.
3. Use the **Left/Right Arrow** buttons to adjust the value. When you are finished press the **OK** button to save the setting.
4. When you are finished adjusting the color tuner settings, press the **EXIT** button.

To turn color channels off and on:

1. From the PICTURE MODE MANAGEMENT menu, use the **Arrow** buttons to highlight **Color Tuner**, and then press **OK**. The Color Tuner menu is displayed.

Color Tuner						
	Red	Green	Blue	Cyan	Magenta	Yellow
Hue	0	0	0	0	25	-14
Saturation	-1	5	-4	0	-2	0
Brightness	-24	0	-22	0	0	0
Offset	0	0	0			
Gain	0	0	0			

2. Use the **Arrow** buttons on the remote to highlight **Red**, **Green**, or **Blue**.
3. Press the **OK** button to turn the color channel off or on. An X appears over a color channel that has been turned off.
4. Use the **Arrow** buttons to highlight another color channel to turn off or on. Only two color channels can be turned off at the same time.
5. When you are finished with the color channels, press the **EXIT** button.

To adjust the 11 Point White Balance settings:

1. From the Color Tuner menu, use the **Arrow** buttons to highlight **Color Tuner**, and then press the **Left/Right Arrow** buttons until the 11 Point White Balance menu is displayed.

11 Point White Balance			
Gain	Red	Green	Blue
5%	0	0	0

2. Use the **Arrow** buttons on the remote to highlight the **Gain** and **Color values** you wish to adjust. Press the **OK** button and use the **Left/Right Arrow** buttons to adjust the value. When you are finished press the **OK** button to save the setting.
3. When you are finished, press the **EXIT** button.

To show or hide the SMPTE Test Pattern:

1. From the Color Tuner menu, use the **Arrow** buttons to highlight **Color Tuner**, and then press the **Left/Right Arrow** buttons until the SMPTE Test Pattern menu is displayed.



2. Use the **Arrow** buttons on the remote to highlight **Off**. Use the **Left/Right Arrow** buttons to highlight **On** to show the SMPTE Pattern.

—or—

To hide the SMPTE Test Pattern, use the **Left/Right Arrow** buttons to highlight **Off**.

3. When you are finished, press the **EXIT** button.

To show or hide the Flat Test Pattern:

1. From the Color Tuner menu, use the **Arrow** buttons to highlight **Color Tuner**, and then press the **Left/Right Arrow** buttons until the Flat Test Pattern menu is displayed.



2. Use the **Arrow** buttons on the remote to highlight **Off**. Use the **Left/Right Arrow** buttons to select the percentage brightness for the flat test pattern. Selecting a percentage immediately shows the flat pattern at that brightness.

—or—

To disable the Flat Test Pattern, use the **Left/Right Arrow** buttons to highlight **Off**.

3. When you are finished, press the **EXIT** button.

To show or hide the Ramp Test Pattern:

1. From the Color Tuner menu, use the **Arrow** buttons to highlight **Color Tuner**, and then press the **Left/Right Arrow** buttons until the Ramp Test Pattern menu is displayed.



2. Use the **Arrow** buttons on the remote to highlight **Off**. Use the **Left/Right Arrow** buttons to select the color for the ramp test pattern. Selecting a color immediately shows that color ramp.

—or—

To hide the Ramp Test Pattern, use the **Left/Right Arrow** buttons to highlight **Off**.

3. When you are finished, press the **EXIT** button.

### Saving a Custom Picture Mode

Custom picture modes allow you to save a group of custom settings for various viewing conditions and video sources.

- Changes made while on any preset picture mode will add an asterisk on the top right corner of the preset mode.
- The custom picture mode is not automatically saved.

To save a custom picture mode:

1. From the PICTURE MODE MANAGEMENT menu, use the **Arrow** buttons to highlight **Save Picture Mode**, and then press **OK**. The SAVE PICTURE MODE menu is displayed.
2. Use either the on-screen keyboard or keyboard on your remote control to enter a name for your custom picture mode.
3. Highlight **Save** and press **OK**.
4. Press the **EXIT** button to exit the menu screens.



### Renaming a Custom Picture Mode

You can only rename a custom picture mode that has been saved from modifying any preset picture modes.

To rename a custom picture mode:

1. Set the Picture Mode to an existing custom setting. See *Adjusting the Picture Settings* on page 25.
2. From the PICTURE MODE MANAGEMENT menu, use the **Arrow** buttons to highlight **Rename Picture Mode**, and then press **OK**. The RENAME PICTURE MODE menu is displayed.
3. Use either the on-screen keyboard or keyboard on your remote control to enter a custom name.
4. Highlight **Done** and press **OK**.
5. Press the **EXIT** button to exit the menu screens.



### Locking/Unlocking a Custom Picture Mode

Custom picture modes can be locked/unlocked with a unique PIN to prevent accidental changes to their settings.

To lock all custom picture modes:

1. From the PICTURE MODE MANAGEMENT menu, use the **Arrow** buttons to highlight **Lock Picture Mode**, and then press **OK**. The LOCK PICTURE MODE menu is displayed.
2. Use the **Number Pad** on your remote to enter a unique 4-digit PIN.
3. Highlight **Save** and press **OK**.
4. Press the **EXIT** button to exit the menu screens.

To unlock all custom picture modes:

1. From the PICTURE MODE MANAGEMENT menu, use the **Arrow** buttons to highlight **Unlock Picture Mode**, and then press **OK**. The UNLOCK PICTURE MODE menu is displayed.
2. Use the **Number Pad** on your remote to enter your 4-digit PIN.
3. Make any desired changes to the picture modes.
4. Relock the picture modes, if desired. You must create a new 4-digit PIN.
5. Press the **EXIT** button to exit the menu screens.



#### Deleting a Custom Picture Mode

Custom picture modes that are no longer needed can be deleted.



Inputs assigned to a deleted custom picture mode become assigned to the *Calibrated* picture mode.

To delete a custom picture mode:

1. From the PICTURE MODE MANAGEMENT menu, use the Arrow buttons to highlight Delete Picture Mode, and then press OK. The DELETE PICTURE MODE window is displayed.
2. Use the Up/Down Arrow buttons to select the custom picture mode that you want to delete and then press OK.
3. Use the Left/Right Arrow buttons to highlight Delete and press OK.
4. Press the EXIT button to exit the menu screens.



#### Resetting Picture Mode

Reset the picture mode settings (for a preset picture mode) to the factory default values.

To reset a customized preset picture mode:

1. From the PICTURE MODE MANAGEMENT menu, use the Arrow buttons to highlight Reset Picture Mode, and then press OK. The RESET PICTURE MODE window is displayed.
2. Use the Up/Down Arrow buttons to select the customized preset picture mode that you want to reset and then press OK.
3. Use the Left/Right Arrow buttons to highlight Reset and press OK.
4. Press the EXIT button to exit the menu screens.




## ADJUSTING THE AUDIO SETTINGS

To adjust the audio settings:

1. Press the MENU button on the remote. The on-screen menu is displayed.
2. Use the Arrow buttons on the remote to highlight Audio and press OK. The AUDIO menu is displayed.
3. Use the Arrow buttons to highlight the setting you wish to adjust, then press Left/Right Arrow buttons to change the setting:



- **TV Speakers** - Turns the built-in speakers on or off.

 When the TV speakers are set to On, DTS signals cannot be passed through digital audio outputs.

- **Surround Sound** - Surround sound uses DTS TruSurround™ to deliver an immersive surround sound experience from the TV's internal speakers. TruSurround completes the entertainment experience by providing deep, rich bass and by delivering crisp details and clear, intelligible dialog. Select On or Off.
- **Volume Leveling** - Volume leveling uses DTS TruVolume™ to maintain consistent volume levels during transitions between program content, AV formats, and input sources. Select On or Off. In a few cases, volume leveling may artificially suppress volume increases, making it difficult to hear dialog or flattening sudden noises. If this occurs, turn volume leveling off.
- **Balance** - Adjusts the loudness of the audio output from the left and right speakers.

- **Lip Sync** - Adjusts the synchronization between the display image and the accompanying audio track.
- **Digital Audio Out** - Changes the type of processing for digital audio out and HDMI ARC output when connected to a home theater audio system. Select PCM or Bitstream.



You must select Bitstream for audio with more than two channels (3.0, 5.0, or 5.1, for example).

- **Analog Audio Out** - Sets the volume control properties for the RCA connector when connected to a home theater audio system. Select Variable if you are controlling the volume with the TV's volume controls, or select Fixed if an external audio device (sound bar or AV receiver) will control the volume.
  - **Equalizer** - Adjusts the boost or attenuation of different frequencies using either preset or custom settings. See *Changing the Equalizer Settings on page 31*.
  - **Delete Audio Mode** - Deletes a custom audio mode created using the Equalizer Settings. See *Deleting the Custom Audio Mode on page 32*.
4. When you have finished adjusting the audio settings, press the EXIT button on the remote.

### Changing the Equalizer Settings

The graphic equalizer has several pre-set modes and allows you to create one custom mode.

To select a preset audio mode:

1. Press the MENU button on the remote. The on-screen menu is displayed.
2. Use the Arrow buttons on the remote to highlight Audio and press OK. The AUDIO menu is displayed.
3. Use the Arrow buttons to highlight Equalizer and press OK. The Audio Mode and equalizer settings screen appears.
4. Use the Left and Right Arrow buttons to select an audio mode. The equalizer bars change to reflect the mode.
5. Press the EXIT button on the remote.

To create, modify, or replace the single custom equalizer setting:

1. Press the **MENU** button on the remote. The on-screen menu is displayed.
2. Use the **Arrow** buttons on the remote to highlight **Audio** and press **OK**. The AUDIO menu is displayed.
3. Use the **Arrow** buttons to highlight **Equalizer** and press **OK**. The Audio Mode and equalizer settings screen appears.
4. Use the **Left** and **Right Arrow** buttons to select any audio mode as a starting point.
5. Use the **Arrow** buttons to highlight a frequency and then press **OK**.
6. Use the **Up** and **Down Arrow** buttons to adjust the boost (up) and attenuation (down) for the frequency.
7. Use the **Left** and **Right Arrow** buttons to select another frequency, if desired, and adjust it.
8. Press the **EXIT** button on the remote.

#### Deleting the Custom Audio Mode

To delete the custom audio mode that has been created:

1. Press the **MENU** button on the remote. The on-screen menu is displayed.
2. Use the **Arrow** buttons on the remote to highlight **Audio** and press **OK**. The AUDIO menu is displayed.
3. Use the **Arrow** buttons to highlight **Delete Audio Mode** and press **OK**. The TV displays, "To delete the user created custom audio mode, select the Delete button."
4. Highlight **Delete** and press **OK**.
5. Press the **EXIT** button on the remote.



## SETTING TIMERS

### Setting the Sleep Timer

When activated, the TV's sleep timer will turn the TV off after a set period of time.

1. Press the MENU button on the remote. The on-screen menu is displayed.
2. Use the Arrow buttons on the remote to highlight Timers and press OK. The TIMERS menu is displayed.
3. Use the Left/Right Arrow buttons on the remote to highlight the period of time after which you want the TV to go to sleep: 30, 60, 90, 120, or 180 minutes. If you don't want the sleep timer to activate, change the setting to Off.
4. When you have finished setting the sleep timer, press the EXIT button on the remote.



### Setting the Auto Power Off Feature

To help save energy, your TV is set by default to turn off after 10 minutes without a video or audio signal. This feature can be deactivated.

To set the Auto Power Off feature:

1. From the TIMERS menu, use the Up/Down Arrow buttons on the remote to highlight Auto Power Off.
2. Use the Left/Right Arrow buttons on the remote to change whether the TV will turn off. If you don't want the TV to turn off when there is no signal, change the setting to Off. Otherwise, select 10 minutes.
3. When you have finished setting the auto power off time, press the EXIT button on the remote.

### Enabling the Screen Saver

If there is no on-screen content or static content when audio is streaming, the backlight is turned off, saving energy. You can set the time before the screen saver begins.

To set the Screen Saver:

1. From the TIMERS menu, use the Up/Down Arrow buttons on the remote to highlight Screen Saver.
2. Use the Left/Right Arrow buttons on the remote to change the time before the screen saver begins. If you don't want the screen saver to be active, change the setting to Off. Otherwise, select 2, 10, or 20 minutes.
3. When you have finished setting the screen saver time, press the EXIT button on the remote.



**To exit the Screen Saver**  
Press any button other than the Volume and Mute buttons on the remote to exit the screen saver.

### Blank Screen Feature

You can blank the screen while there is audio streaming. This feature helps save energy and the life of the screen.

To blank the screen:

1. From the TIMERS menu, use the Up/Down Arrow buttons on the remote to highlight Blank Screen and press OK.



**To exit the Blank Screen**  
Press any button other than the Volume and Mute buttons on the remote to exit the blank screen.

## USING THE NETWORK CONNECTION MENU

Your TV is Internet-ready, featuring both an Ethernet port and built-in high-speed Wireless-N.

### Connecting to a Wireless Network

To connect to a wireless network whose network name (SSID) is being broadcast:



If your TV is connected to a network with an Ethernet cable, you will not see the wireless network connection menu. You must disconnect the Ethernet cable to set up a wireless network connection.

1. Press the **MENU** button on the remote. The on-screen menu is displayed.
2. Use the **Arrow** buttons on the remote to highlight **Network** and press **OK**. The NETWORK menu is displayed.
3. If you do not see your wireless network displayed, highlight **More Access Points** and press **OK**. The WIRELESS ACCESS POINTS menu, which is a list of available wireless networks, is displayed.
4. Highlight the name of your wireless network (this is the network's SSID) and press **OK**.
5. Using the keyboard on the remote, enter your network's password, then highlight **Connect** and press **OK**.
6. Press the **EXIT** button on the remote.



### Changing the Manual Setup Settings

Advanced users can fine-tune the network settings using the Manual Setup feature.

To change advanced network settings:

1. From the NETWORK menu, highlight **Manual Setup** and press **OK**. The MANUAL SETUP menu is displayed.
2. To change the settings manually, use the **Arrow** buttons on the remote to highlight **DHCP** and then use the **Left/Right Arrow** buttons to change the setting to **Off**.
3. Use the **Arrow** and **OK** buttons to adjust each setting:
  - **IP Address** - The IP address assigned to the TV.
  - **Subnet Mask** - The subnet mask.
  - **Default Gateway** - Your network's default gateway address.
  - **Pref. DNS Server** - Your preferred domain name server address.
  - **Alt. DNS Server** - Your alternate domain name server address.
4. Use the **Arrow** buttons on the remote to highlight **Save** and press **OK**.
5. Press the **EXIT** button on the remote.



### Finding MAC Addresses for Network Setup

The security settings on your router may require you to enter the TV's MAC address in the router's settings.

To find the TV's MAC address:

1. From the NETWORK menu, highlight **Manual Setup** and press **OK**. The MANUAL SETUP menu is displayed.
2. Find the MAC address for the TV at the bottom of the list. The MAC addresses for the connections in use are displayed:
  - **RJ45 MAC** - The Ethernet or RJ45 MAC address may be needed to set up your network when you have connected the TV to your network with an Ethernet (Cat 5) cable.
  - **Wireless MAC** - The Wireless (WiFi) MAC address may be needed to connect your TV to your network with WiFi.