User Guide

15"/19"/22"/24" LED-LCD TV

INSIGNIA™

15"/19"/22"/24" LED-LCD TV

NS-15E720A12/NS-19E720A12/NS-22E730A12/NS-24E730A12

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Contents

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iii

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CHILD SAFETY
It makes a difference how and where you use your flat panel display

As you enjoy your new product, keep these safety tips in mind

The issue

The home theater entertainment experience is a growing trend, and larger TVs are popular purchases. However, TVs are not always supported on the proper stands or installed according to the manufacturer's recommendations. We and the consumer electronics industry are committed to making home entertainment enjoyable and safe.

TVs that are inappropriately placed on dressers, bookcases, shelves, desks, speakers, chests, or carts may fall over and cause injury.

Tune into safety

- One size of TV stand does **not** fit all. Use only a TV stand rated for the weight of your TV.
- Carefully read and understand all enclosed instructions for proper use of this product.
- Don't let children climb on or play with entertainment system furniture and TVs.
- Don't place TVs on furniture that can easily be used as steps, such as a crate or chest of drawers.
- Remember that children can become excited while watching a program, especially on a "larger-than-life" TV. Make sure that you place or install the TV where it cannot be pushed, pulled over, or knocked down.
- Make sure that you route all cords and cables so that they cannot be pulled or grabbed by curious children.

Wall mounting

If you decide to wall mount your TV, always remember:

- One size of wall mount does **not** fit all. Use only a wall mount rated for the weight of your TV and that has been recommended by this TV manufacturer, listed in this manual, or otherwise listed by an independent laboratory as suitable for your TV.
- Follow all instructions supplied by the TV and wall mount manufacturers.
- If you have any doubts about your ability to safely wall mount your TV, get help from a professional installer.
- Make sure that the wall where you are mounting the TV is appropriate. Some wall mounts are not designed to be mounted to walls backed with steel studs or cinder blocks. If you are unsure, ask a professional installer.
- TVs can be heavy. At least two people are required for safe wall mount installation.

Important safety instructions

CAUTION
RISK OF ELECTRIC SHOCK
DO NOT OPEN

This symbol indicates that dangerous voltage constituting a risk of electric shock is present within your TV. This label is located on the back of your TV.

This symbol indicates that there are important operating and maintenance instructions in the literature accompanying your TV.

1   Read these instructions.

2   Keep these instructions.

3   Heed all warnings.

4   Follow all instructions.

5   Do not use this apparatus near water.

6   Clean only with a dry cloth.

7   Do not block any ventilation openings. Install in accordance with the manufacturer's instructions.

8   Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.

9   Do not defeat the safety purpose of the polarized or grounding-type plug. A polarized plug has two blades with one wider than the other. A grounding type plug has two blades and a third grounding prong. The wide blade or the third prong are provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.

10 Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.

11 Only use attachments/accessories specified by the manufacturer.

12 Use only with a 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.

S3125A

13 Unplug this apparatus during lightning storms or when unused for long periods of time.

14 Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.

15 The *wall plug* is the disconnecting device. The plug must remain readily operable.

16 An apparatus with three-prong, grounding-type plug is a Class I apparatus. A Class I apparatus needs to be grounded to prevent possible electric shock. Make sure that you connect the Class I apparatus to a grounding-type, three-prong outlet.

17 Remote control batteries should not be exposed to excessive heat such as sunshine, fire, or the like.

18 The apparatus should not be exposed to dripping or splashing, and no objects filled with liquids, such as vases, should be placed on the apparatus.

Warnings

Electric shock hazard

To reduce the risk of fire or electric shock, do not remove any cover or expose the device to rain or moisture. No user-serviceable parts are inside. Refer servicing to qualified service technicians.

Lightning

For added protection for your device receiver during a lightning storm, or when it is left unattended and unused for long periods of time, unplug it from the power outlet and disconnect any antenna or cable system. This helps prevent property damage and personal injury from lightning and power line surges.

Power lines

An outside antenna system should not be located in the vicinity of overhead power lines or other electric light or power circuits, or where it can fall into such power lines or circuits. When installing an outside antenna system, extreme care should be taken to keep from touching such power lines or circuits as contact with them might be fatal.

Handling the LCD panel

- Your TV's screen is made of glass. Do not drop your TV or hit, jolt, or press hard against the LCD panel. If the screen breaks, be careful of broken glass.
- If the LCD panel is broken, make absolutely sure that you do not touch the liquid in the panel. This may cause skin inflammation.
- If the liquid gets in your mouth, immediately gargle, rinse, and consult with your doctor. Also, if the liquid gets in your eyes or touches your skin, consult with your doctor after rinsing for at least 15 minutes or longer in clean water.

Replacement parts

When replacement parts are required, make sure that the service technician uses replacement parts specified by the manufacturer that have the same characteristics as the original part. Unauthorized substitutions may result in fire, electric shock, personal injury, or other hazards.

Safety check

After completing any service or repair to this device, ask the service technician to perform routine safety checks to determine that your TV is in correct operating condition.

Power source

Operate your TV only from the type of power source indicated on the marking label. If you are not sure of the type of power supplied to your home, consult an electrician or your local power company.

Cautions

Damage requiring service

Unplug this TV from the power outlet and refer servicing to qualified service personnel under the following conditions:

- When the power supply cord or plug is damaged or frayed.
- If liquid has been spilled or objects have fallen into your TV.
- If your TV has been exposed to rain or water.
- If your TV does not operate normally by following the operating instructions. Adjust only those controls that are covered by the operating instructions because incorrect adjustment of other controls may result in damage and will often require extensive work by a qualified technician to restore your TV to its normal operation.
- If your TV has been dropped or damaged in any way.
- When your TV exhibits a distinct change in performance.

Outdoor antenna grounding

If an outside antenna or cable system is connected to your TV, make sure that the antenna or cable system is grounded to provide some protection against voltage surges and built-up static charges. Article 810 of the National Electrical Code, ANSI/NFPA No. 70, provides information with respect to correct grounding of the mast and supporting structure, grounding of the lead-in wire to an antenna discharge unit, size of grounding conductors, location of the antenna-discharge unit, connection to grounding electrodes, and requirements for the grounding electrode.
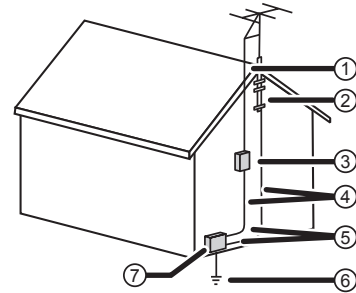
①	Antenna lead-in wire
②	Grounding clamp
③	Antenna discharge unit
④	Grounding conductors
⑤	Ground clamps
⑥	Power service grounding electrode system
⑦	Electric service equipment

Note to CATV system installer

Article 820 of the National Electrical Code, ANSI/NFPA No. 40 provides guidance for correct grounding. Specifically, it states that the cable ground must be connected to the grounding system of the building as close to the point of cable entry as practical.

Condensation

Moisture will form on the TV if the TV is brought from cool surroundings into a warm room or if the temperature of the room rises suddenly. When this happens, the TV's performance may be impaired. To prevent this, let the TV stand in its new surroundings for about an hour before switching it on, or make sure that the room temperature rises gradually.

Condensation may also form during the summer if the TV is exposed to the breeze from an air conditioner. In such cases, change the location of the TV.

Mobile telephone warning

To avoid interference with your TV picture and sound, operating problems, or even damage, keep your cordless and cellular telephones away from the TV.

End of life directives

Your TV contains tin-lead solder and a fluorescent lamp containing a small amount of mercury. Disposal of these materials may be regulated for environmental reasons. Your TV also contains material that can be recycled and reused. For disposal or recycling information, contact your local authorities.

Non-active pixels

The LCD panel contains almost 3 million thin film transistors, which provide exceptionally sharp video quality. Occasionally, a few non-active pixels may appear on the screen as a fixed blue, green, or red point. These non-active pixels do not adversely affect the performance of your TV, and are not considered defects.

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Insignia 15"/19"/22"/24" LED-LCD TV

Introduction

Congratulations on your purchase of a high-quality Insignia product. Your NS-15E720A12, NS-19E720A12, NS-22E730A12, or NS-24E730A12 represents the state of the art in LED-LCD TV design and is designed for reliable and trouble-free performance.

SRS TruSurround HD:

At Insignia, providing you with superior audio quality is just as important as exceptional picture quality. That's why we added SRS TruSurround HD, which provides you with a theater-like surround-sound experience, with the clearer dialog and the enhanced bass sounds that movie viewers and gamers crave.

INlink:

Enjoy the benefit of having HDMI CEC compatible products plug and play! No setup is needed! CEC technology lets different components discover and communicate with each other. (See page 50 for instructions on how to use INlink.)

Installing the stand or wall-mount bracket

Notes
If you plan to wall-mount your TV, do not install the stand.
Store the stand and stand screws in case you decide to use the stand in the future.

Installing the stand

To install the stand:

1 Carefully place your TV screen face-down on a cushioned, clean surface to protect the screen from damages and scratches.
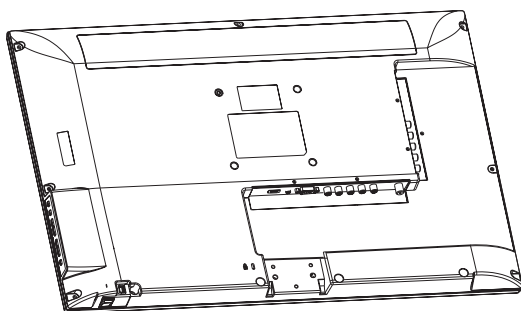
2 Align the locators on the stand column with the locating grooves on the TV back and secure the stand column to your TV with the three provided screws.

Model	Screw type	Screw length
All models	M4 type	14 mm

Locating grooves   Stand column

3 Make sure that the wide portion of the stand base faces the front of your TV, align the base to the stand column, then secure the base to the column with the provided screw.

Model	Screw type	Screw length
All models	M4 type	14 mm

Stand column

Stand base

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Installing a wall-mount bracket

To attach your TV to a wall-mount bracket:

1 Carefully place your TV screen face-down on a cushioned, clean surface to protect the screen from damages and scratches.

2 Remove the three screws that secure the stand column to your TV, then remove the column.

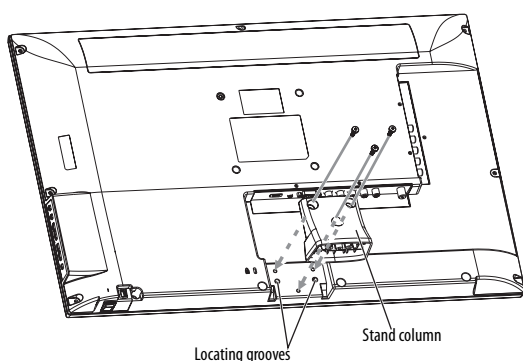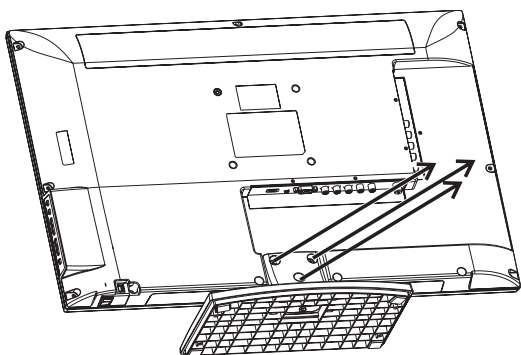3 Attach the wall-mount bracket to your TV using the mounting holes on the back of your TV. See the instructions that came with the wall-mount bracket for information about how to correctly hang your TV.

Note

The length of the wall-mount screws vary depending on the wall-mount bracket you purchased. See the instructions that came with the wall-mount bracket for screw lengths.

NS-15E720A12 (15-inch)

3.94 in. (100 mm)

3.94 in. (100 mm)

Wall mount brackets

NS-19E720A12 (19-inch)

3.94 in. (100 mm)

3.94 in. (100 mm)

Wall mount brackets

NS-22E730A12 (22-inch)

3.94 in. (100 mm)

3.94 in. (100 mm)

Wall mount brackets

NS-24E730A12 (24-inch)

3.94 in. (100 mm)

3.94 in. (100 mm)

Wall mount brackets
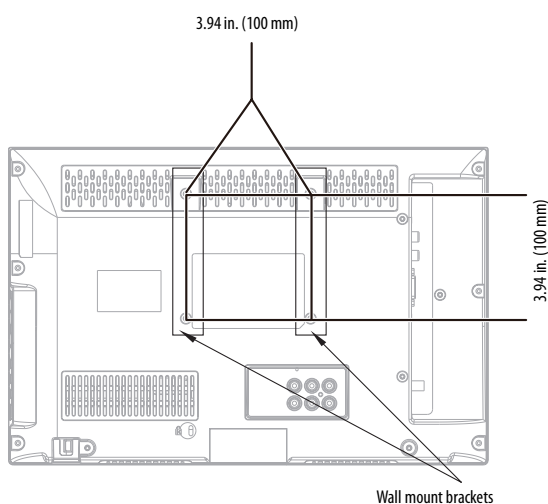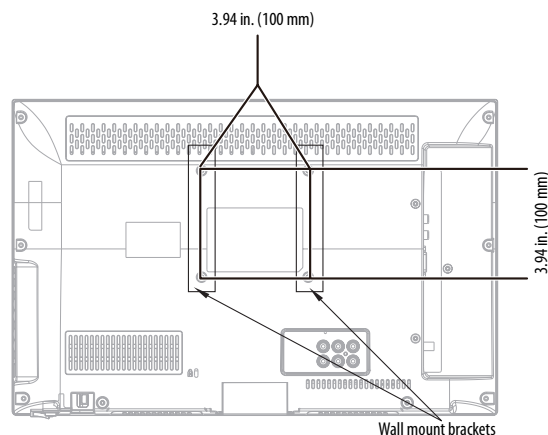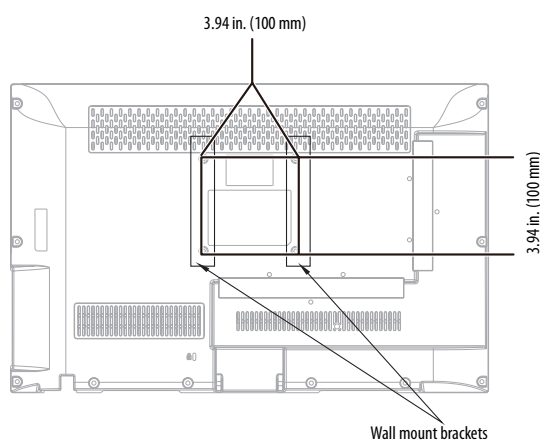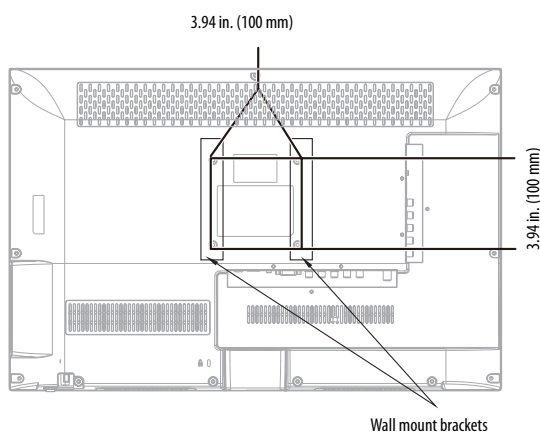
TV components

Package contents

Remote control and batteries (2 AAA)
Stand and stand column with screws
Component video cable
Audio cable
Cleaning cloth
Quick Setup Guide

Front
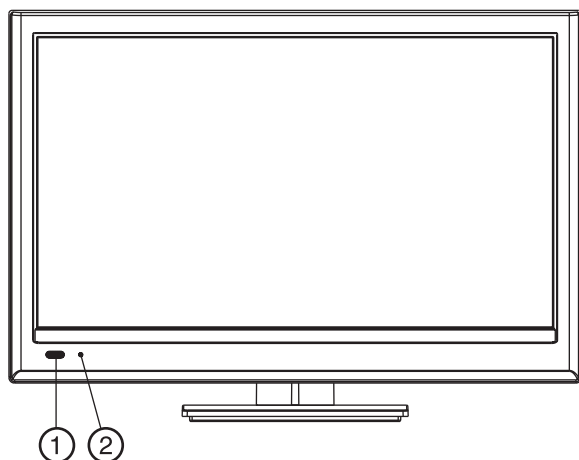
#	Item	Description
1	Remote control sensor	Receives signals from the remote control. Do not block.
2	Power indicator	Lights blue when your TV is turned on. Lights red when your TV is in standby mode. Turns off when the power cord is unplugged.

Side controls
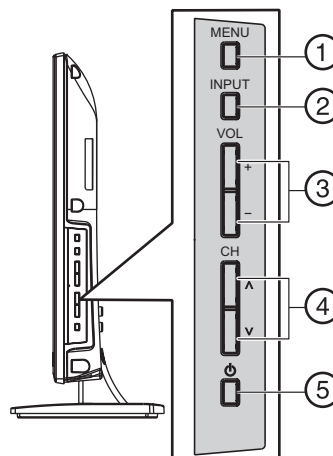
#	Item	Description
1	MENU	Press to open the on-screen menu. For more information, see "Navigating the menus" on page 30.
2	INPUT	Press to open the *INPUT SOURCE* list, then press ▲ or ▼ to select a video input source. In menu mode, press to confirm selections.
3	VOL+/VOL–	Press to increase or decrease the volume.
4	CH ∨/CH ∧	Press to go to the next or previous channel in the channel list. For more information, see "Selecting a channel" on page 31.
5	⏻ (power)	Press to turn your TV on or off (standby mode). When your TV is off, power still flows through it. To disconnect power, unplug the power cord.

Jacks and ports

15-inch and 19-inch models

#	Item	Description
1	USB	Connect a USB flash drive to this jack. For more information, see "Connecting a USB flash drive" on page 24.
2	⌒ (headphone)	Connect headphones to this jack. For more information, see "Connecting headphones" on page 25.
3	L/R AUDIO OUT	Connect an external sound system to these jacks. For more information, see "Using analog audio output" on page 26.
4	PC IN VGA	Connect the video (VGA) for a computer to this jack. For more information, see "Using VGA" on page 23.
5	PC IN AUDIO	Connect the audio for a computer to this jack. For more information, see "Using VGA" on page 23. OR Connect the audio for a DVI device to this jack. For more information, see "Using DVI (same as HDMI but requires a sound connection)" on page 14 or 18.
6	HDMI 1/HDMI 2 ARC	Connect HDMI devices to these jacks. An HDMI cable carries both video and sound. You do not need to make an audio connection for an HDMI device. For more information, see "Using HDMI (best)" on page 13, 17, or 24.
7	ANT/CABLE IN	Connect an antenna or cable TV to this jack. For more information, see "Connecting an antenna or cable TV (no box)" on page 17.
8	L/R AUDIO	The component video jacks (COMPONENT IN Y/PB/PR) share these audio jacks with the composite video jack (AV IN VIDEO). Connect the audio for a component video device to these jacks. For more information, see "Using component video (better)" on page 15 or 19. OR Connect the audio for a composite video device to these jacks. For more information, see "Using composite video (good)" on page 16 or 20.
9	AV IN VIDEO	Connect the video for a composite video device to this jack. For more information, see "Using composite video (good)" on page 16 or 20.
10	COMPONENT IN Y/PB/PR	Connect the video for a component video device to these jacks. For more information, see "Using component video (better)" on page 15 or 19.

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22-inch and 24-inch models

#	Item	Description
1	USB	Connect a USB flash drive to this jack. For more information, see "Connecting a USB flash drive" on page 24.
2	⌒ (headphone)	Connect headphones to this jack. For more information, see "Connecting headphones" on page 25.
3	HDMI 2 ARC	Connect an HDMI device to this jacks. An HDMI cable carries both video and sound. You do not need to make an audio connection for an HDMI device. There is another HDMI jack on the back of your TV. For more information, see "Using HDMI (best)" on page 13, 17, or 24.
4	AV IN L/R AUDIO	Connect the audio for a composite video device to these jacks. For more information, see "Using composite video (good)" on page 16 or 20.
5	AV IN VIDEO	Connect the video for a composite video device to this jack. For more information, see "Using composite video (good)" on page 16 or 20.
6	AUDIO OUT	Connect an external sound system to these jacks. For more information, see "Using analog audio output" on page 26.
7	DIGITAL OUTPUT	Connect an audio amplifier to this jack. For more information, see "Using digital audio output (22-inch and 24-inch only)" on page 25.
8	HDMI 1	Connect an HDMI device to this jack. An HDMI cable carries both video and sound. You do not need to make an audio connection for an HDMI device. There is another HDMI jack on the side of your TV. For more information, see "Using HDMI (best)" on page 13, 17, or 24.
9	PC AUDIO IN	Connect the audio for a computer to this jack. For more information, see "Using VGA" on page 23. OR Connect the audio for a DVI device to this jack. For more information, see "Using DVI (same as HDMI but requires a sound connection)" on page 14 or 18.
10	PC IN VGA	Connect the video (VGA) for a computer to this jack. For more information, see "Using VGA" on page 23.
11	COMPONENT IN Y/P$_B$/P$_R$	Connect the video for a component video device to these jacks. For more information, see "Using component video (better)" on page 15 or 19.
12	COMPONENT IN L/R AUDIO	Connect the audio for a component video device to these jacks. For more information, see "Using component video (better)" on page 15 or 19.
13	ANT/CABLE IN	Connect an antenna or cable TV to this jack. For more information, see "Connecting an antenna or cable TV (no box)" on page 17.

Remote control

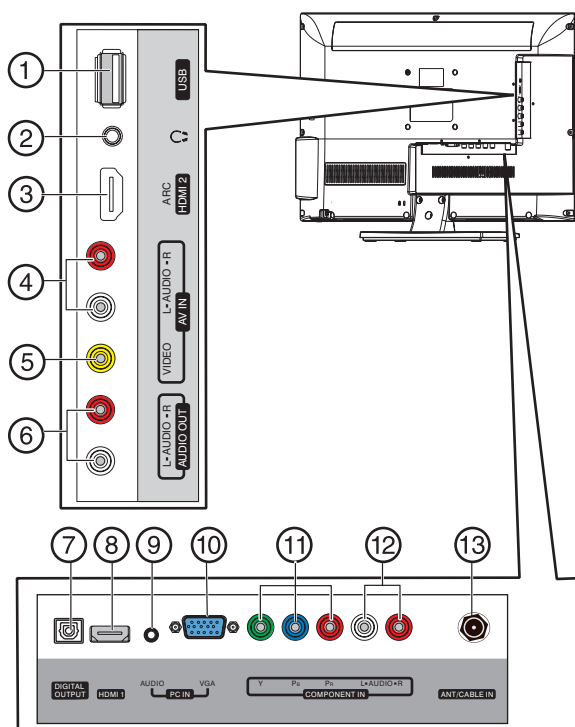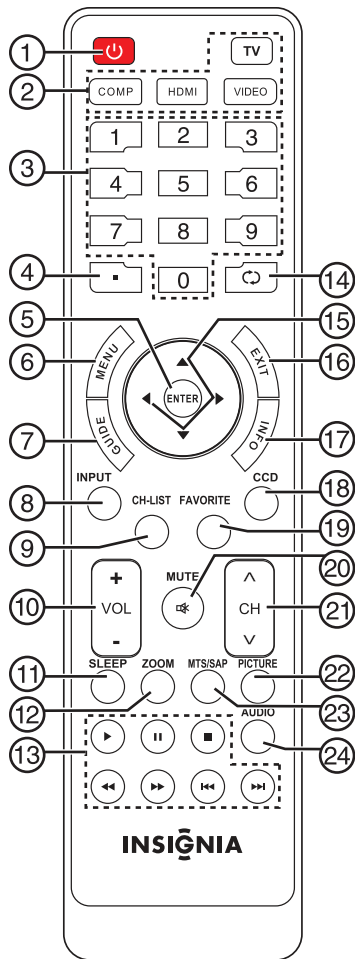| #	Button	Description
1	⏻ (power)	Press to turn your TV on or off (Standby mode). When your TV is off, power still flows through it. To disconnect power, unplug the power cord.
2	Video input	**TV**—Press to select your TV as the input source. **COMP**—Press to select the device connected to the **COMPONENT** video jacks. **HDMI**—Press one or more times to select the device connected to the **HDMI 1** or **HDMI 2** jack. **VIDEO**—Press to select the device connected to the **AV IN-VIDEO** jack.
3	Numbers	Press to enter channel numbers and the parental control password.
4	●	Press to enter a digital sub-channel number. For more information, see "Selecting a channel" on page 31.
5	ENTER	Press to confirm selections or changes.
6	MENU	Press to open the on-screen menu.
7	GUIDE	Press to display the program guide. For more information, see "Viewing channel information" on page 31.
8	INPUT	Press to open the *INPUT SOURCE* list, then press ▲ or ▼ to cycle through the available input sources. For more information, see "Selecting the video input source" on page 29.
9	CH-LIST	Press to open the channel list.
10	VOL+/−	Press to increase or decrease the volume.

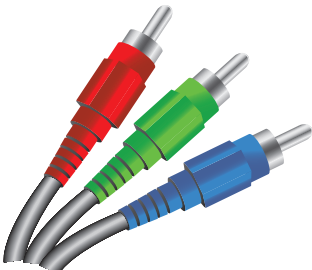| #	Button	Description
11	SLEEP	Press to set the sleep timer. You can select **Off**, **5**, **10**, **15**, **30**, **60**, **90**, **120**, **180**, or **240** minutes. For more information, see "Setting the sleep timer" on page 47.
12	ZOOM	Press to select the aspect ratio. For more information, see "Adjusting the TV picture" on page 32.
13	Media control	Press these buttons to control the playback from an HDMI-CEC compatible device. For more information about HDMI-CEC compatible devices, see "Using INlink" on page 50.
14	◯/RECALL	In TV mode, press to return to the previous channel.
15	▲ ▼ ◄ ►	Press to move up, down, left, or right in on-screen menus.
16	EXIT	Press to close the on-screen menu.
17	INFO	Press to display TV status information, such as the channel number, channel name (if available), or signal source. For more information, see "Viewing channel information" on page 31.
18	CCD	Press to turn closed captioning on or off. You can select **CC Off**, **CC On**, or **CC on When Mute**. For more information, see "Turning closed captioning on or off" on page 44.
19	FAVORITE	Press to open the Favorite Channel list. For more information, see "Setting up a favorite channel list" on page 36 and "Viewing a favorite channel" on page 37.
20	🔇 /MUTE	Press to mute the sound. Press again to restore the sound.
21	CH ∧/∨	Press to change TV channels. For more information, see "Selecting a channel" on page 31.
22	PICTURE	Press to select the picture mode. You can select **Vivid**, **Standard**, **Energy Savings**, **Theater**, or **Custom**. For more information, see "Adjusting the TV picture" on page 32.
23	MTS/SAP	Press to select the audio mode for an analog program. You can select: • **MONO**—Select this option if there is noise or static on weak stereo broadcasts. • **STEREO**—Select this option for programs broadcast in stereo. • **SAP**—Select this option to listen to a secondary audio program, if available.
24	AUDIO	Press to adjust sound mode. For more information, see "Adjusting sound settings" on page 34.
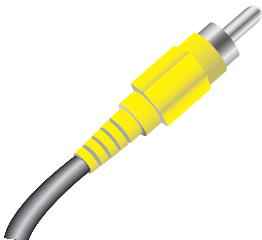
Making connections
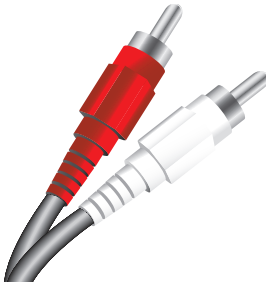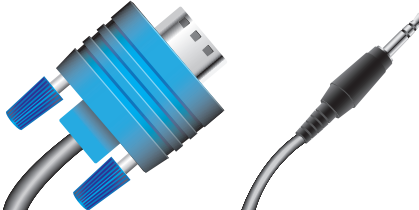
What connection should I use?

Your TV has several connection types for connecting devices to your TV.

For the best video quality, you should connect a device to the best available connection.

Use the following tables to identify cables:

Connection type and jack	Video quality	Cable connector
HDMI video/audio	Best (use this if your devices have HDMI)	
Component video (requires an audio connection)	Better than composite or coaxial	
Composite video (requires an audio connection)	Better than coaxial	
Coaxial video/audio	Good	

Connection type and jack	Cable connectors
Digital optical audio (SPDIF)	
Analog audio	
VGA (computer) video and audio	

You can use the **HDMI** jack on your TV to connect a DVI device to your TV. You need to attach an HDMI-to-DVI adapter to the end of the HDMI cable that connects to the DVI device.

Cautions

- Check the jacks for position and type before making any connections.
- Loose connections can result in image or color problems. Make sure that all connections are tight and secure.
- The external audio/video equipment shown may be different from your equipment. If you have questions, refer to the documentation that came with your equipment.
- Always unplug the power cord when connecting external equipment.

Connecting power

To connect the power:

• Plug the AC power cord into a power outlet.
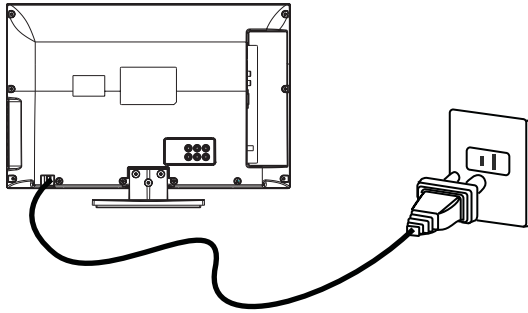
Cautions
• Your TV should only be operated from the power source indicated on the label.
• Always unplug the AC power cord from the power outlet when you will not be using your TV for an extended period of time.
• The AC power cord is permanently attached to the back of your TV. Do not try to pull it out.
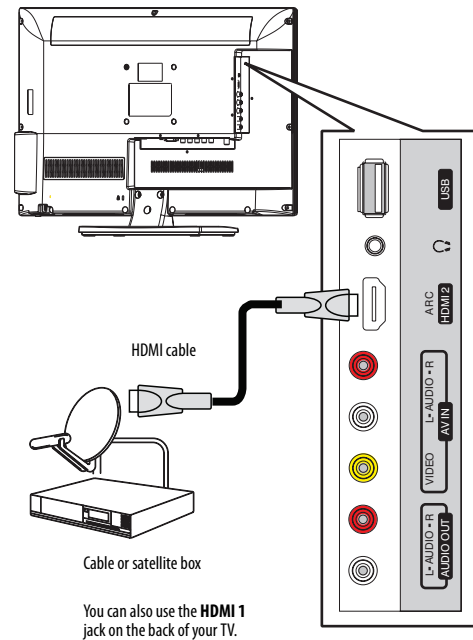
Connecting a cable or satellite box

Many cable or satellite TV boxes have more than one connection type. To get the best video, you should use the best connection type available. For more information, see "What connection should I use?" on page 12.

Using HDMI (best)

To connect a cable or satellite box using HDMI:

1 Make sure that your TV's power cord is unplugged, and all connected equipment is turned off.

2 Connect the incoming cable from the cable wall jack to the cable-in jack on the cable or satellite box.

3 Connect an HDMI cable (not included) to one of the **HDMI** jacks on your TV and to the **HDMI** jack on the cable or satellite box.
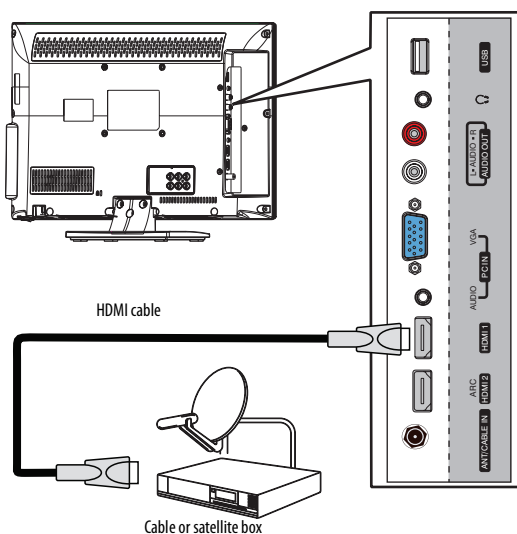
15-inch and 19-inch models

HDMI cable

Cable or satellite box

22-inch and 24-inch models

HDMI cable

Cable or satellite box

You can also use the **HDMI 1** jack on the back of your TV.

4 Plug your TV's power cord into a power outlet, turn on your TV, then turn on the cable or satellite box.

5 Go through the Setup Wizard on page 28.

Note
An HDMI cable carries both audio and video. You do not need to use any audio cables.

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Using DVI (same as HDMI but requires a sound connection)

To connect a cable or satellite box using DVI:

1 Make sure that your TV's power cord is unplugged, and all connected equipment is turned off.

2 Connect the incoming cable from the cable wall jack to the cable-in jack on the cable box.

3 Connect an HDMI-DVI adapter (not included) to one end of an HDMI cable (not included).

4 Connect the HDMI-DVI adapter to an **HDMI** jack on your TV and to the **DVI OUT** jack on the cable or satellite box.

15-inch and 19-inch models

3.5 mm audio cable

HDMI cable with HDMI-DVI adapter

Cable or satellite box

22-inch and 24-inch models

Cable or satellite box

HDMI cable with HDMI-DVI adapter

3.5 mm audio cable

5 Connect a 3.5 mm audio cable (not included) to the **PC AUDIO IN** jack on your TV and to the **AUDIO OUT** jack on the cable or satellite box.

Note

When you connect the audio using the **PC AUDIO IN** jack, the audio output is analog.

6 Plug your TV's power cord into a power outlet, turn on your TV, then turn on the cable or satellite box.

7 Go through the Setup Wizard on page 28.

Using component video (better)

To connect a cable or satellite box using component video:

1 Make sure that your TV's power cord is unplugged, and all connected equipment is turned off.

2 Connect the incoming cable from the cable wall jack to the cable-in jack on the cable box.

3 Connect a component video cable (included) to the **COMPONENT IN Y/P$_B$/P$_R$** video jacks and the **L/R AUDIO** jacks next to the **COMPONENT IN Y/P$_B$/P$_R$** on your TV and the component video and audio out jacks on the cable or satellite box.

15-inch and 19-inch models

Cable or satellite box

Audio cable

VIDEO L•AUDIO•R

AV IN

COMPONENT IN Y P$_B$ P$_R$

Cables are often color-coded to match color-coded jacks.

22-inch and 24-inch models

Cable or satellite box

Audio cable

Component video cable

Cables are often color-coded to match color-coded jacks.

DIGITAL OUTPUT HDMI 1 AUDIO PC IN VGA Y P$_B$ P$_R$ L•AUDIO•R COMPONENT IN ANT/CABLE IN

4 Connect an audio cable (included) to the **AUDIO L/R** next to the **COMPONENT IN** jacks on your TV and to the audio out jacks on the cable or satellite TV box.

Note

When you connect the audio using the **AUDIO L/R** audio jacks, the audio output is analog.

5 Plug your TV's power cord into a power outlet, turn on your TV, then turn on the cable or satellite box.
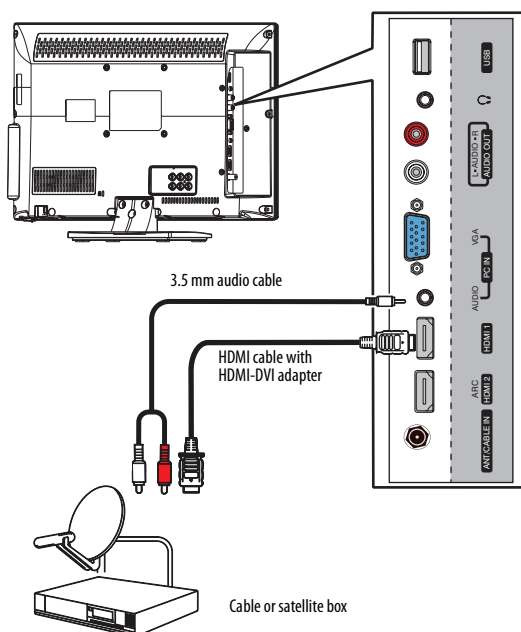
6 Go through the Setup Wizard on page 28.

INSIGNIA™

Using composite video (good)

To connect a cable or satellite box using composite video:

1 Make sure that your TV's power cord is unplugged, and all connected equipment is turned off.

2 Connect the incoming cable from the cable wall jack to the cable-in jack on the cable box.

3 Connect an A/V cable (not included) to the **AV IN VIDEO** jack and **AUDIO L/R** jacks next to the **AV IN VIDEO** jack on your TV and to the composite video and audio out jacks on the cable or satellite box.

15-inch and 19-inch models

4 Plug your TV's power cord into a power outlet, turn on your TV, then turn on the cable or satellite box.

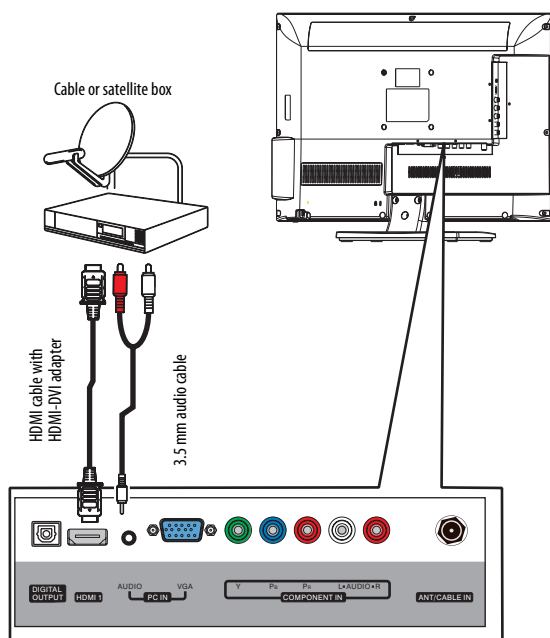5 Go through the Setup Wizard on page 28.

Using coaxial (good)

To connect a cable or satellite box using coaxial:

1 Make sure that your TV's power cord is unplugged, and all connected equipment is turned off.

2 Connect the incoming cable from the cable wall jack to the cable-in jack on the cable or satellite box.

3 Connect a coaxial cable (not included) to the **ANT/CABLE IN** jack on your TV and to the coaxial out jack on the cable or satellite box.
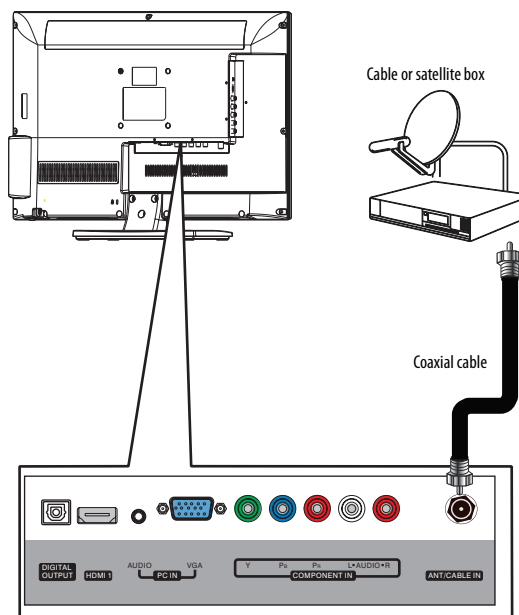
15-inch and 19-inch models

22-inch and 24-inch models

4 Plug your TV's power cord into a power outlet, turn on your TV, then turn on the cable or satellite box.
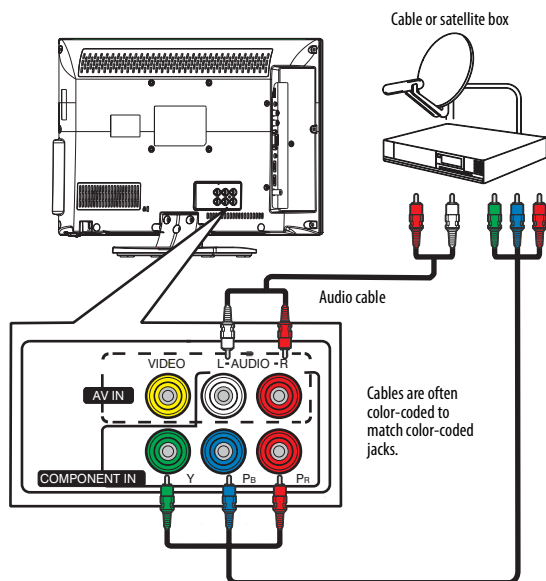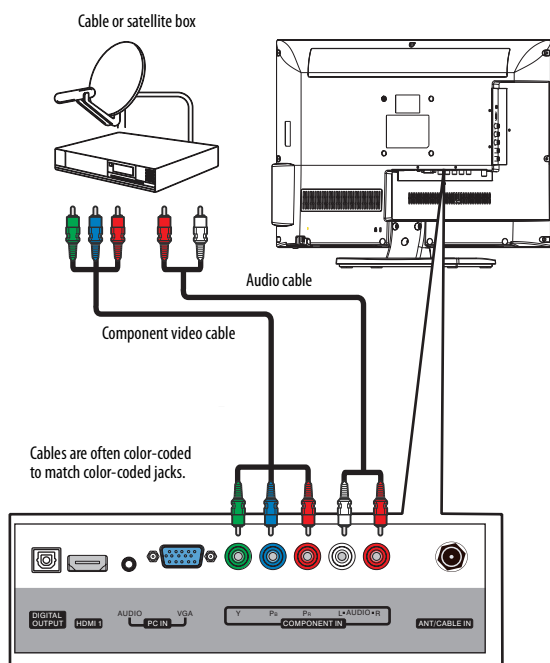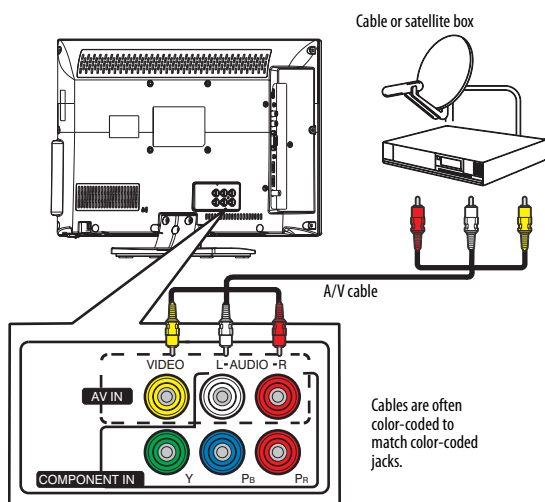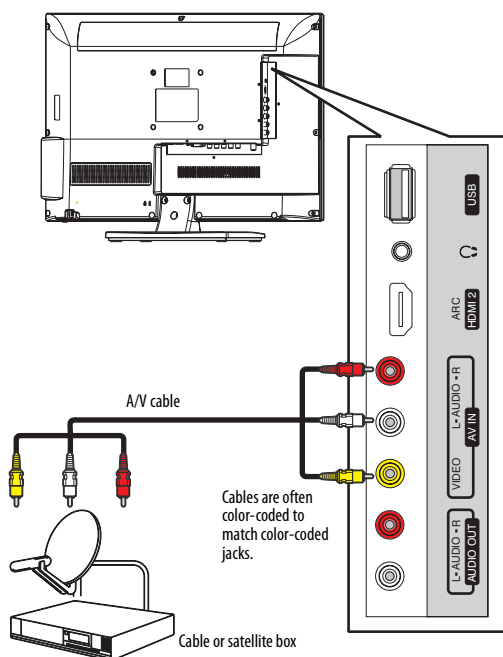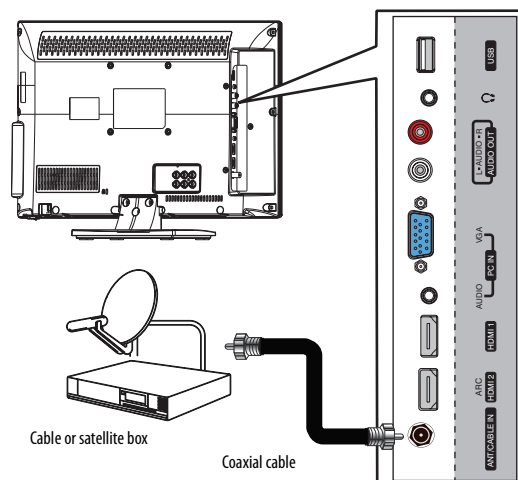
5 Go through the Setup Wizard on page 28.

Notes
• Use a coaxial cable to eliminate interference and noise from radio waves. • Do not bundle the coaxial cable with the power cord or other cables.

Connecting an antenna or cable TV (no box)

To connect an antenna or cable TV (no box):

1   Make sure that your TV's power cord is unplugged, and all connected equipment is turned off.

2   Connect a coaxial cable to the **ANT/CABLE IN** jack on your TV and to the antenna or cable TV wall jack.

15-inch and 19-inch models

Coaxial cable
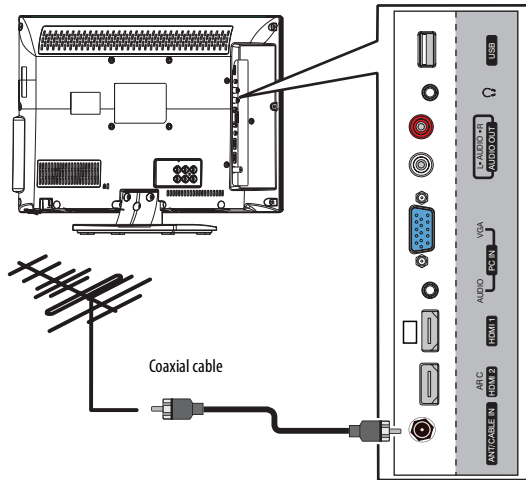
22-inch and 24-inch models
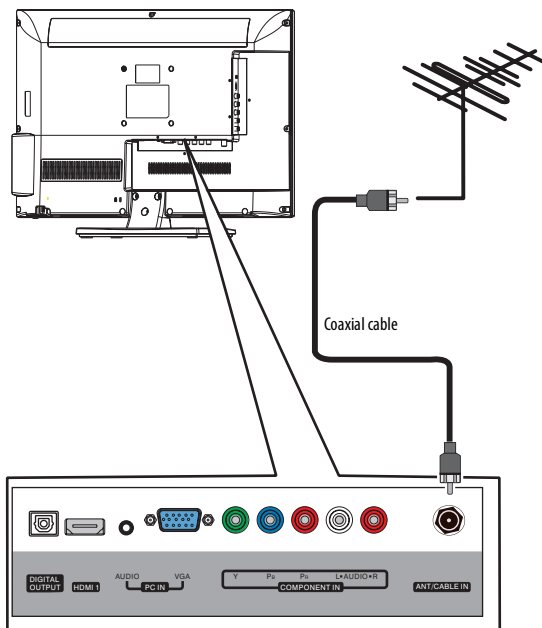
Coaxial cable

3   Plug your TV's power cord into a power outlet, then turn on your TV.

4   Go through the Setup Wizard on page 28.

> **Notes**
> - Use a coaxial cable to eliminate interference and noise from radio waves.
> - Do not bundle the coaxial cable with the power cord or other cables.
> - If the antenna is not installed correctly, contact qualified service personnel to correct the problem.

Connecting a DVD or Blu-ray player

Using HDMI (best)

To connect a DVD or Blu-ray player using HDMI:

1   Make sure that your TV's power cord is unplugged and the DVD or Blu-ray player is turned off.

2   Connect an HDMI cable (not included) to an **HDMI** jack on your TV and to the **HDMI OUT** jack on the DVD or Blu-ray player.
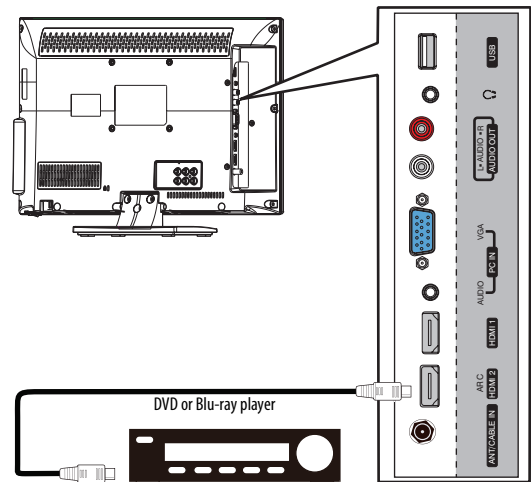
15-inch and 19-inch models

DVD or Blu-ray player

22-inch and 24-inch models

DVD or Blu-ray player

3   Plug your TV's power cord into a power outlet, turn on your TV, then turn on the DVD or Blu-ray player.

4   Press **INPUT** to open the *INPUT SOURCE* list.

5   Press ▲ or ▼ to highlight **HDMI 1** or **HDMI 2**, then press **ENTER**.

> **Note**
> You can also press **HDMI** repeatedly to select the DVD or Blu-ray player.

Using DVI (same as HDMI but requires a sound connection)

To connect a DVD or Blu-ray player using DVI:

1 Make sure that your TV's power cord is unplugged and the DVD or Blu-ray player is turned off.

2 Connect an HDMI-DVI adapter (not included) to one end of an HDMI cable (not included).

3 Connect the HDMI-DVI adapter to an **HDMI** jack on your TV and to the **DVI OUT** jack on the DVD or Blu-ray player.

15-inch and 19-inch models

3.5 mm audio cable

HDMI cable with HDMI-DVI adapter

DVD or Blu-ray player

22-inch and 24-inch models

DVD or Blu-ray player

HDMI cable with HDMI-DVI adapter
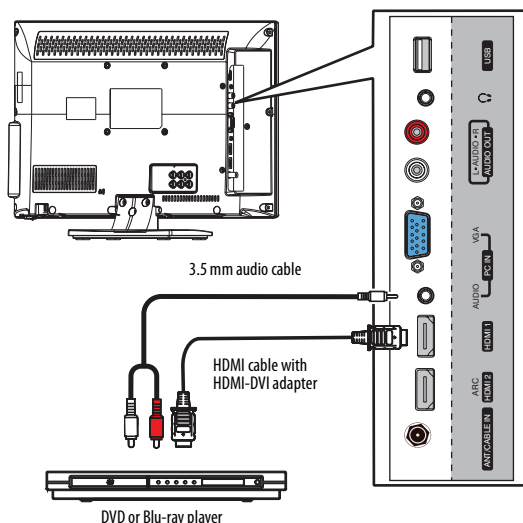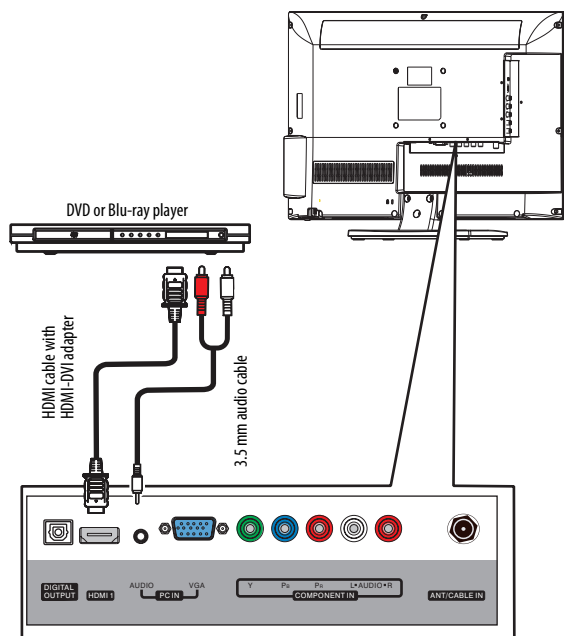
3.5 mm audio cable

4 Connect a 3.5 mm audio cable (not included) to the **PC IN AUDIO** jack on your TV and to the **AUDIO OUT** jack on the DVD or Blu-ray player.

Note
When you connect the audio using the **PC IN AUDIO** jack, the audio output is analog.

5 Plug your TV's power cord into a power outlet, turn on your TV, then turn on the DVD or Blu-ray player.

6 Press **INPUT** to open the *INPUT SOURCE* list.

7 Press ▲ or ▼ to select **HDMI 1** or **HDMI 2**, then press **ENTER**.

Note
You can also press **HDMI** repeatedly to select the **HDMI 1** or **HDMI 2**.

Using component video (better)

To connect a DVD or Blu-ray player using component video:

1 Make sure that your TV's power cord is unplugged and the DVD or Blu-ray player is turned off.

2 Connect a component video cable (provided) to the **COMPONENT IN Y/PB/PR** jacks on your TV and to the **COMPONENT OUT** jacks on the component video device.

15-inch and 19-inch models

Cables are often color-coded to match color-coded jacks.

DVD or Blu-ray player

Audio cable

VIDEO   L•AUDIO•R

AV IN

COMPONENT IN   Y   P_B   P_R

Component video cable

22-inch and 24-inch models

DVD or Blu-ray player

Component video cable

Cables are often color-coded to match color-coded jacks.

Audio cable

DIGITAL OUTPUT   HDMI 1   AUDIO   VGA
PC IN   Y   P_B   P_R   L•AUDIO•R
COMPONENT IN   ANT/CABLE IN
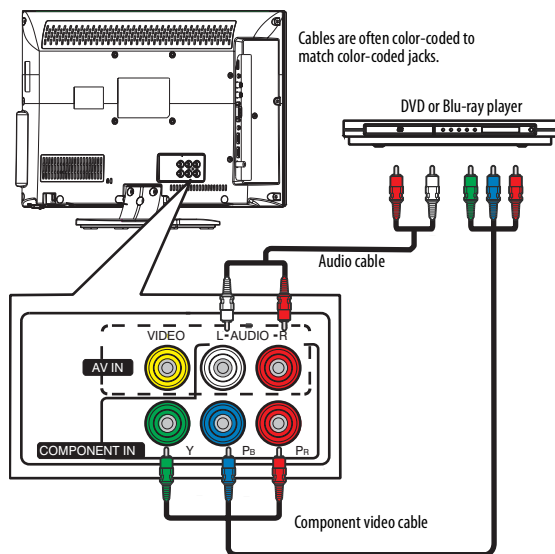
3 Connect an audio cable to the **AUDIO L/R** jacks next to the **COMPONENT IN** jacks on your TV and to the **L/R AUDIO OUT** jacks on the component video device.

Notes

On the 15-inch and 19-inch models, the **COMPONENT IN** jacks share the audio jacks with the **AV IN VIDEO** jack.

When you connect the audio using the **AUDIO L/ R** jacks, the audio output is analog.

4 Plug your TV's power cord into a power outlet, turn on your TV, then turn on the DVD or Blu-ray player.

5 Press **INPUT** to open the *INPUT SOURCE* list.

6 Press ▲ or ▼ to select **Component**, then press **ENTER**.

Note

You can also press **COMP** to select the component DVD or Blu-ray player.
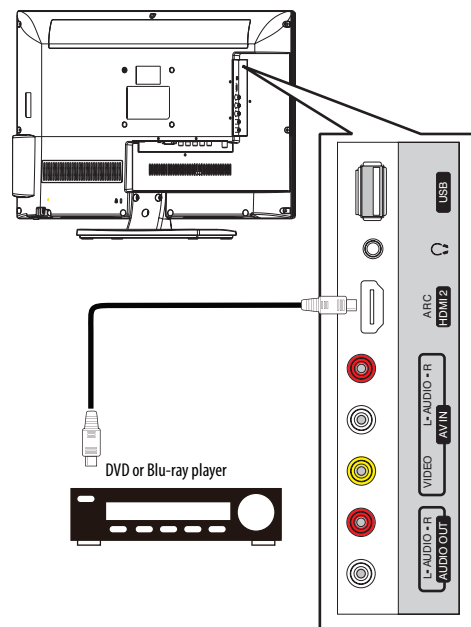
Using composite video (good)

To connect a DVD or Blu-ray player using composite video:

1 Make sure that your TV's power cord is unplugged and the DVD or Blu-ray player is turned off.

2 Connect an AV cable (not provided) to the **AV IN VIDEO** jack and **AUDIO L/R** jacks next to the **AV IN VIDEO** jack on your TV and to the **AV OUT** jacks on the DVD or Blu-ray player.

> **Note**
>
> When you connect the audio using the **AUDIO L/R** audio jacks, the audio output is analog.

15-inch and 19-inch models

DVD or Blu-ray player

AV cable

VIDEO   L - AUDIO - R

AV IN

COMPONENT IN   Y   P_B   P_R

Cables are often color-coded to match color-coded jacks. Connect yellow to yellow, red to red, and white to white.

22-inch and 24-inch models

Cables are often color-coded to match color-coded jacks. Connect yellow to yellow, red to red, and white to white.

AV cable

DVD or Blu-ray player

USB

ARC HDMI 2

L - AUDIO - R   AV IN

VIDEO

L - AUDIO - R   AUDIO OUT

3 Plug your TV's power cord into a power outlet, turn on your TV, then turn on the DVD or Blu-ray player.

4 Press **INPUT** to open the *INPUT SOURCE* list.

5 Press ▲ or ▼ to select **AV**, then press **ENTER**.

> **Notes**
>
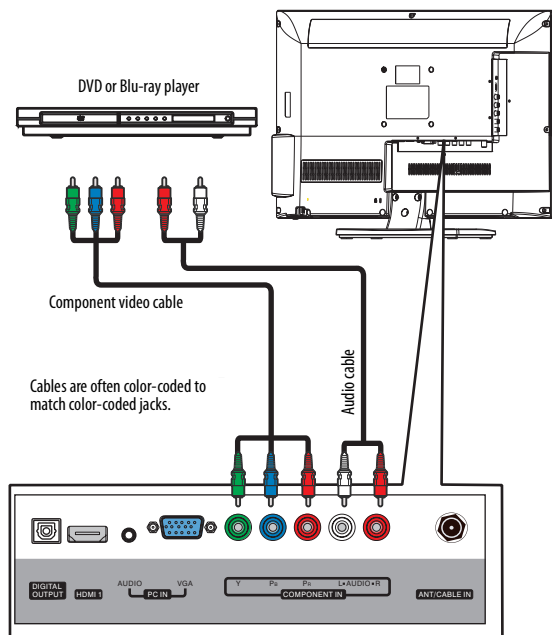> - You can also press **VIDEO** to select the DVD or Blu-ray player.
> - On the 15-inch and 19-inch models, the **AV IN VIDEO** jack share the audio jacks with the **COMPONENT IN** jacks.
> - When you connect the audio using the **AUDIO L/ R** jacks, the audio output is analog.
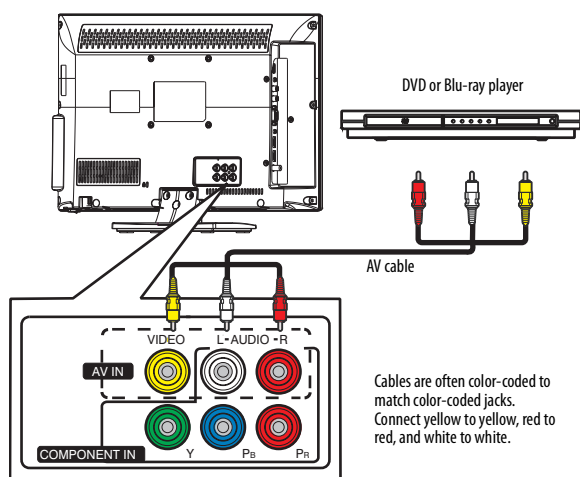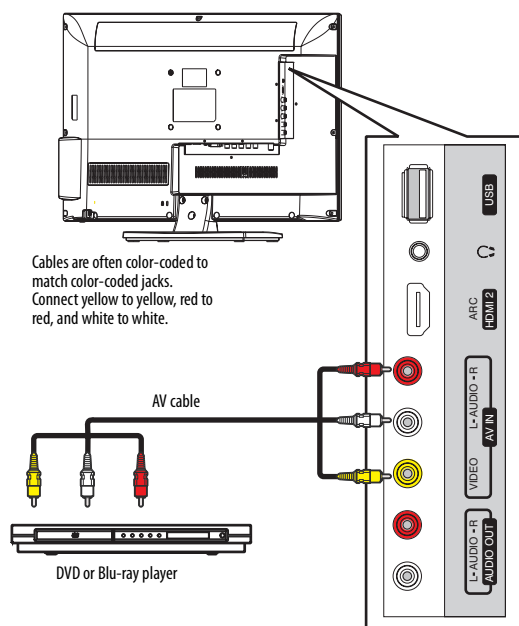
Connecting a VCR

To connect a VCR:

1 Make sure that your TV's power cord is unplugged and the VCR is turned off.

2 Connect an AV cable (not provided) to the **AV IN-VIDEO** and **L/R** (audio in) jacks on your TV and to the **AV OUT** jacks on the VCR.

> **Note**
>
> When you connect the audio using the **AUDIO L/R** jacks, the audio output is analog.

15-inch and 19-inch models

VCR

AV cable

VIDEO   L▪AUDIO▪R

AV IN

COMPONENT IN   Y   PB   PR

Cables are often color-coded to match color-coded jacks. Connect yellow to yellow, red to red, and white to white.

22-inch and 24-inch models

Cables are often color-coded to match color-coded jacks. Connect yellow to yellow, red to red, and white to white.

AV cable

VCR
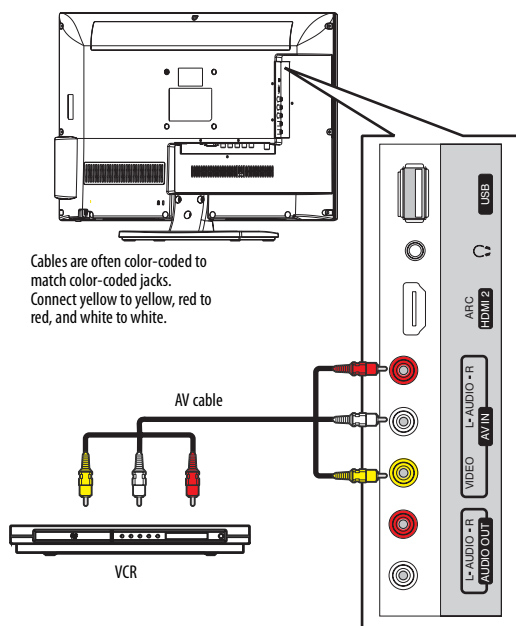
3 Plug your TV's power cord into a power outlet, turn on your TV, then turn on the VCR.

4 Press **INPUT** to open the *INPUT SOURCE* list.

5 Press ▲ or ▼ to select **AV**, then press **ENTER**.

> **Note**
>
> You can also press **VIDEO** to select the VCR.

6 Insert a videotape, then press **PLAY** on the VCR.

> **Note**
>
> On the 15-inch and 19-inch models, the **AV IN VIDEO** jack shares the **AUDIO L/R** jacks with the **COMPONENT IN** video jacks.

Connecting a camcorder or game console

Note

If your camcorder or game console has an HDMI connection, we recommend that you use the HDMI connection to get the best quality possible.

To connect a camcorder or game console:

1 Make sure that your TV's power cord is unplugged and the camcorder or game console is turned off.

2 Connect an AV cable (not provided) to the **AV IN VIDEO** jack and **AUDIO L/R** jacks next to the **AV IN VIDEO** on your TV and to the **AV OUT** jacks on the camcorder or game console.

Note

When you connect the audio using the **L** and **R** audio jacks, the audio output is analog.

15-inch and 19-inch models

Camcorder or game console

AV cable

Cables are often color-coded to match color-coded jacks. Connect yellow to yellow, red to red, and white to white.

22-inch and 24-inch models

Cables are often color-coded to match color-coded jacks. Connect yellow to yellow, red to red, and white to white.

AV cable

Camcorder or game console

3 Plug your TV's power cord into a power outlet, turn on your TV, then turn on the camcorder or game console.

4 Press **INPUT** to open the *INPUT SOURCE* list.

5 Press ▲ or ▼ to select **AV**, then press **ENTER**.

**Notes**

• You can also press **VIDEO** to select the camcorder or game console.
• On the 15-inch and 19-inch models, the **AV IN VIDEO** jack shares the **AUDIO L/R** jacks with the **COMPONENT IN** video jacks.
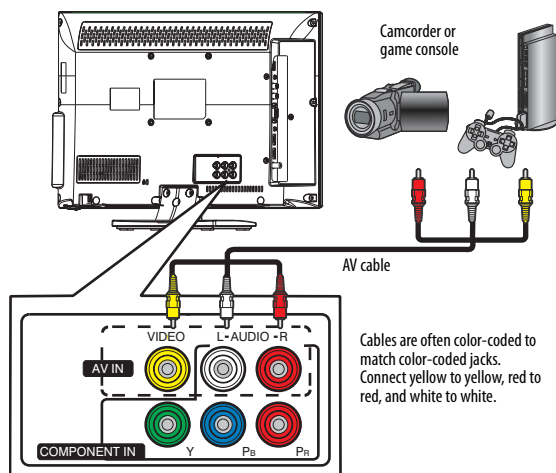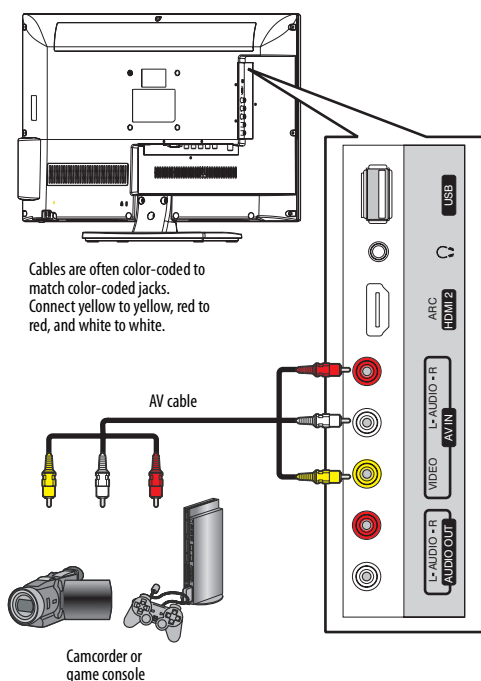
Connecting a computer

> **Tip**
>
> Some computers have an HDMI jack. You can use an HDMI cable to connect the computer for a better picture.

Using VGA

To connect a computer using VGA:
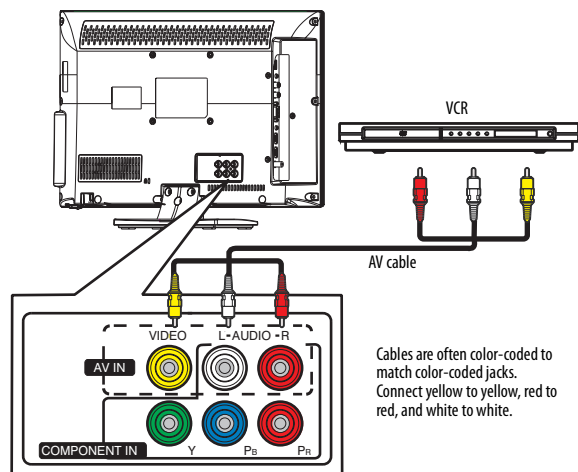
1 Make sure that your TV's power cord is unplugged and the computer is turned off.

2 Connect a VGA cable (not provided) to the **PC IN VGA** jack on your TV and to the **VGA** jack on the computer.

15-inch and 19-inch models

VGA cable

Audio cable with stereo mini plug

22-inch and 24-inch models

Audio cable with stereo mini plug

VGA cable
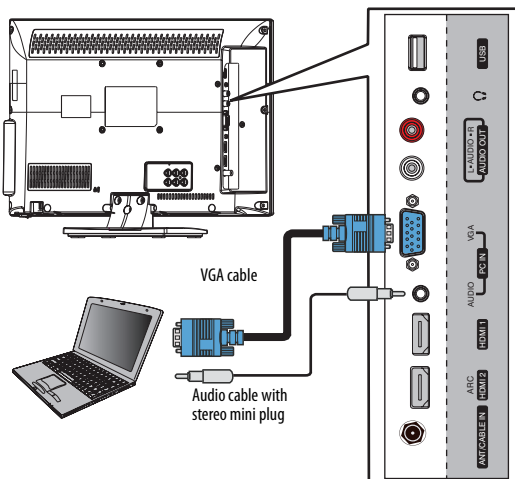
3 Connect an audio cable with stereo mini plug to the **PC IN AUDIO** jack on your TV and to the **LINE OUT** or **AUDIO OUT** jack on the computer.

4 Plug your TV's power cord into a power outlet, turn on your TV, then turn on the computer.

5 Press **INPUT** to open the *INPUT SOURCE* list.

6 Press ▲ or ▼ to select **VGA**, then press **ENTER**.

7 Adjust the display properties on the computer if necessary.

Using HDMI

To connect a computer using HDMI:

1 Make sure that your TV's power cord is unplugged and the computer is turned off.

2 Connect an HDMI cable (not included) to an **HDMI** jack on your TV and to the **HDMI OUT** jack on the computer.

15-inch and 19-inch models

HDMI cable

22-inch and 24-inch models

HDMI cable
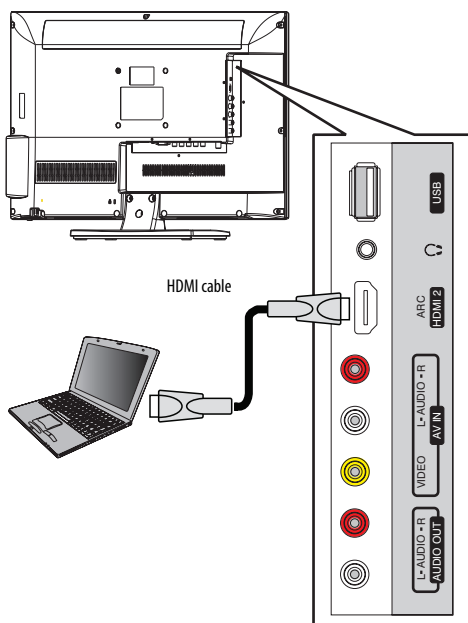
3 Plug your TV's power cord into a power outlet, turn on your TV, then turn on the computer.

4 Press **INPUT** to open the *INPUT SOURCE* list.

5 Press ▲ or ▼ to highlight **HDMI 1** or **HDMI 2**, then press **ENTER**.

> **Note**
>
> You can also press **HDMI** repeatedly to select **HDMI 1** or **HDMI 2**.

Connecting a USB flash drive

To connect a USB flash drive:

• Plug a USB flash drive into the **USB** port on your TV.

15-inch and 19-inch models

USB flash drive

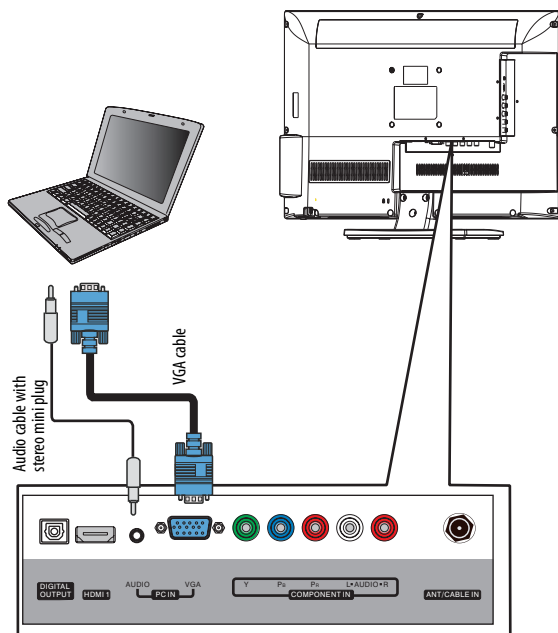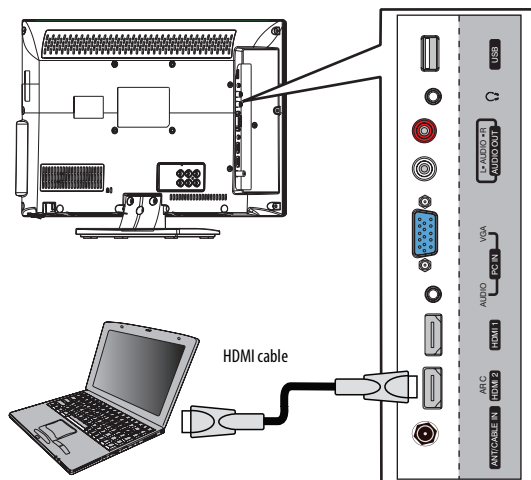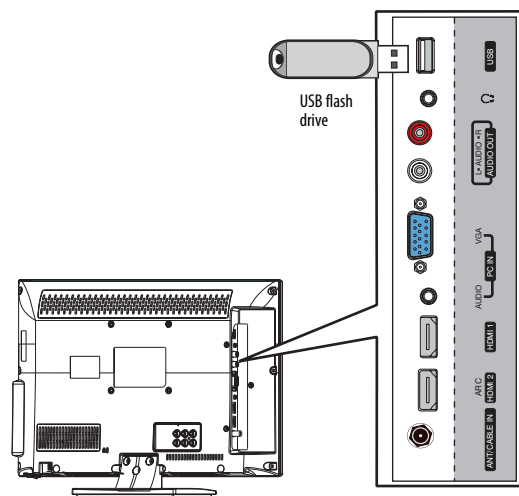**22-inch and 24-inch models**
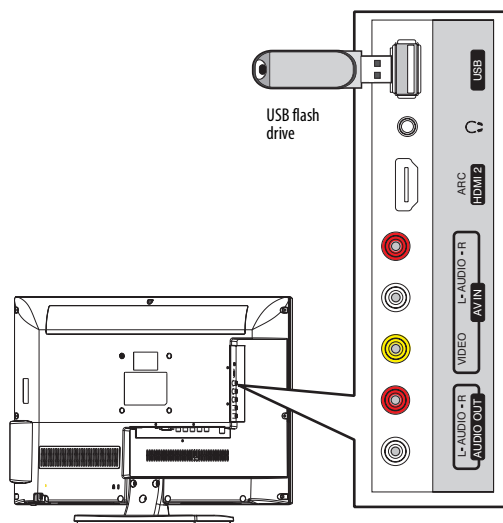
USB flash drive

> **Caution**
>
> Do not remove the USB flash drive or turn off the TV while using the USB flash drive. You may lose data or damage the USB flash drive.

To play from a USB flash drive:

1 Turn on your TV, then press **INPUT** to open the *INPUT SOURCE* list.

2 Press ▲ or ▼ to select **USB**, then press **ENTER**.

> **Notes**
>
> • Never remove the USB flash drive or turn off your TV while viewing JPEG pictures.
> • The JPEG picture viewer only supports JPEG format images (with ".jpg" file extensions) and not all JPEG files are compatible with your TV.
> For more information, see "Using a USB flash drive" on page 55.

Connecting headphones

The TV speakers are muted when headphones are attached.

Warning

Loud noise can damage your hearing. When using headphones, use the lowest volume setting on your headphones that still lets you hear the sound.

To connect headphones:

• Connect headphones to the ⌒ (headphone) jack on your TV.

15-inch and 19-inch models
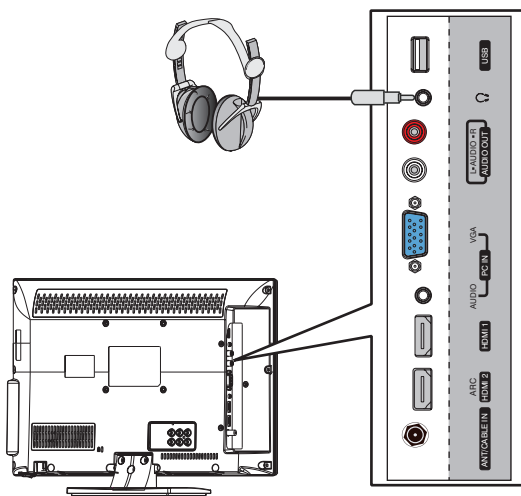
22-inch and 24-inch models
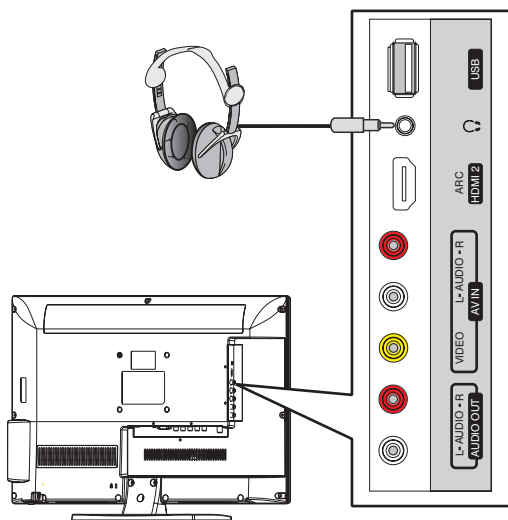
Connecting a basic home theater system

Using digital audio output (22-inch and 24-inch only)

To connect a basic home theater system using digital audio output:

1 Make sure that your TV's power cord is unplugged and the home theater system is turned off.

2 Connect a digital optical audio cable to the **DIGITAL OUTPUT** jack on your TV and to the digital optical audio jack on the digital home theater system.

22-inch and 24-inch models

Home theater system

Digital audio cable
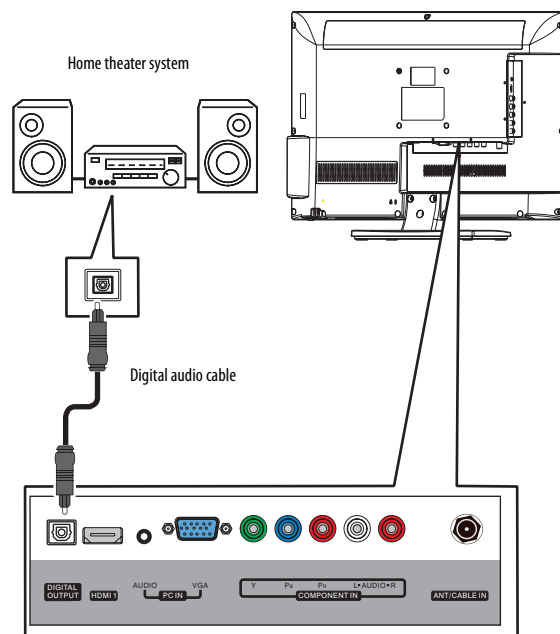
Using analog audio output

To connect a basic home theater system using analog audio output:

1 Make sure that your TV's power cord is unplugged and the home system is turned off.

2 Connect an audio cable to the **L/R AUDIO OUT** jack on your TV and to the **AUDIO IN** jacks on the home theater system.

15-inch and 19-inch models

Analog audio cable

Home theater system

22-inch and 24-inch models

Analog audio cable

Home theater system
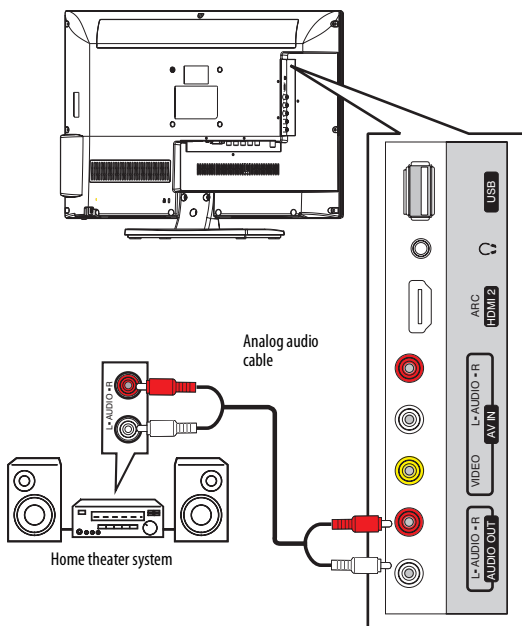
Connecting a home theater system with multiple devices

Notes

When connecting an AV receiver with the ARC function, we recommend that you connect the AV receiver's **HDMI OUT** jack to your TV's **HDMI2 (ARC)** jack by using an HDMI-ARC compliant cable.

In the following situations, the HDMI cable will route Dolby Digital audio to the AV receiver, so you do not need to connect a separate digital audio cable:

• Have a game console connected to one of your TV's **HDMI** jacks.

• When you watch a program through an antenna or cable TV connected to the **ANT/CABLE IN** jack.

Blu-ray player/DVD player/VCR   Cable or satellite TV box

AV receiver

Game console or camera

USB flash drive

Computer

Antenna or cable TV connected directly to the wall jack
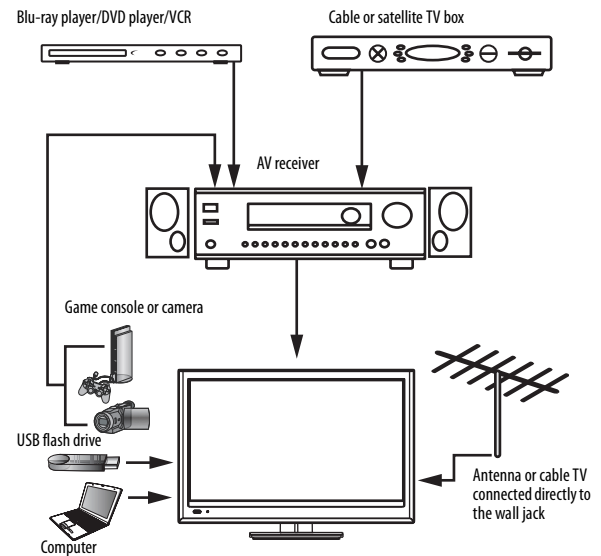
The connections you make depend on the video and audio jacks available on your devices. Refer to the documentation that came with your devices for connection information.

Just remember to use the best connection types available for the best picture and sound. For information about connection types, see "What connection should I use?" on page 12.

Using the remote control

Installing remote control batteries

To install the remote control batteries:

1   While pressing the release latch on the back of the remote control, lift the battery cover off the remote control.
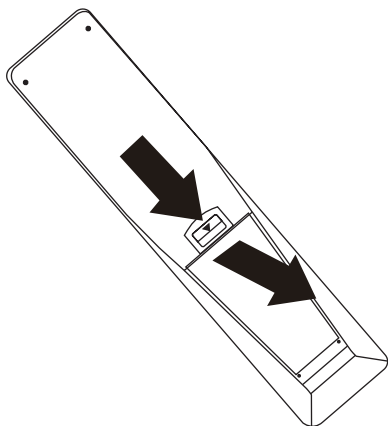
2   Insert two AAA batteries into the battery compartment. Make sure that you match the + and – symbols on the batteries with the + and – symbols in the battery compartment.
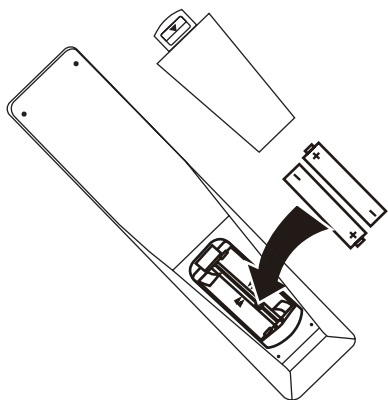
3   Replace the battery cover.

Cautions
•   Batteries should not be exposed to excessive heat, such as sunshine, heat registers, or fire.
•   Battery chemicals can cause a rash. If the batteries leak, clean the battery compartment with a cloth. If chemicals touch your skin, wash immediately.
•   Make sure that batteries are disposed of correctly. Do not burn or incinerate.

Cautions
•   Do not mix batteries of different types.
•   Do not mix old and new batteries.
•   If the remote control is not going to be used for an extended period of time, remove the batteries.

Aiming the remote control

To aim the remote control:

•   Point the remote control towards the remote sensor on the front of your TV.

30°   30°

16.5 ft. (5 m)
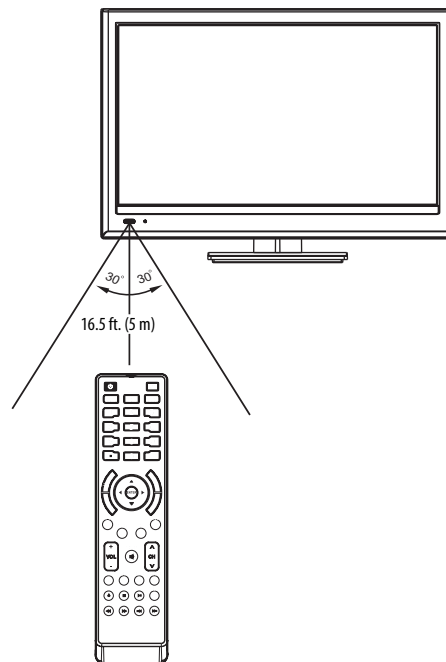
Turning on your TV for the first time

The first time you turn on your TV, the Setup Wizard opens. The Setup Wizard guides you through setting up basic settings including the menu language, time setting, picture mode, TV signal source, and the channel list.

To set up your TV:

1 Make sure that you have:

- Installed the remote control batteries. (See page 27 for details).
- Connected an antenna, cable TV, or satellite TV. (See page 13 or 17 for details.)
- Connected the power cord. (See page 13 for details.)

2 Press ⏻ (power) to turn on your TV. The *Choose Your Menu Language* screen opens.

```
        Choose Your Menu Language

            ✔  English

            ○  Français

            ○  Español

    Move      Select      Previous      Exit
  Set menu language to English, Français or Español
```

3 Press ▲ or ▼ to highlight the language you want, then press **ENTER**. The *Choose Your Time Setting* screen opens.

```
        Choose  Your  Time  Setting
   Mode                         Auto   ▶
   Time Zone                 Atlantic   ▶
   Daylight Savings               On   ▶
   Year                         2011   ▶
   Month                     October   ▶
   Day                            28   ▶
   Time                     08:07 AM   ▶
    Move      Select      Previous      Exit
  If automatic, options are automatically set by TV source
```

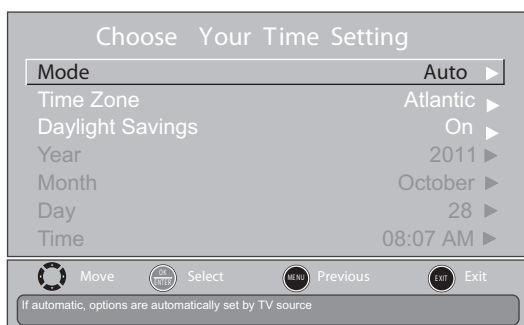4 Press ▲ or ▼ to highlight **Mode**, then press ◄ or ► to select **Manual** (to set the date and time manually) or **Auto** (to set the date and time automatically from a TV signal source based on the time zone you select).

> **Note**
>
> If you select **Auto**, the displayed time will be incorrect until your TV gets the correct time from a TV signal source.

5 Press ▲ or ▼ to highlight **Time Zone**, then press ◄ or ► to select your time zone. You can select **Eastern**, **Central**, **Mountain**, **Pacific**, **Alaska**, **Hawaii**, **Newfoundland**, or **Atlantic**.

6 Press ▲ or ▼ to highlight **Daylight Savings**, then press ◄ or ► to select **On** (if your viewing area observes Daylight Savings Time) or **Off** (if your viewing area does not observe Daylight Savings Time).

7 If you selected **Manual** for **Mode**, set the date by pressing ▲ or ▼ to highlight **Year**, **Month**, or **Day**, then pressing ◄ or ► to adjust the setting.

8 If you selected **Manual** for **Mode**, set the time by pressing ▲ or ▼ to highlight **Time**, then pressing ◄ or ► to select the hour, minute, or AM/PM field. Press ▲ or ▼ to adjust the setting.

9 Press **ENTER**. The *Choose Your Picture Mode* screen opens.

```
        Choose  Your  Picture  Mode


            ✔  Home Mode

            ○  Retail Mode

    Move      Select      Previous      Exit
  Reduces total power consumption
```

10 Press ▲ or ▼ to highlight **Home Mode** or **Retail Mode**, then press **ENTER**.

If you selected **Retail Mode**, a message appears asking "Are you sure you want retail mode? In this mode, ENERGY STAR savings are not realized." Select **Yes** to continue, or select **No** to change your selection.

The *Choose Your TV Source* screen opens.

```
        Choose Your TV Source
   ✔ Antenna            0   Digital Channels
   ○ Cable
   ○ Cable/Satellite Box  0   Analog Channels

   Scan for Channels
     ‖‖‖‖‖‖‖‖‖‖‖‖‖‖‖‖‖‖‖‖‖‖‖‖‖‖‖
    Move      Select      Previous      Exit
  Select Antenna if using an antenna for standard or HD TV
```
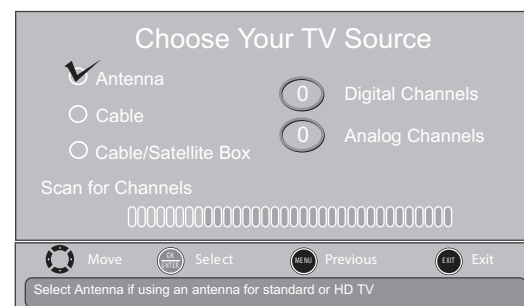
11 Press ▲ or ▼ to highlight **Antenna**, **Cable**, or **Cable/Satellite Box** (if your cable TV uses a box, select **Cable/Satellite Box**), then press **ENTER**. If you chose **Antenna** or **Cable**, your TV automatically starts scanning for channels available in your viewing area. If you chose **Cable/Satellite box**, your TV does not need to scan for channels.

During auto channel search, your TV searches for digital channels first. When the digital channel search is complete, a message appears asking if you want to search for analog channels. Select **Yes** to continue searching for analog channels, or select **No** to stop searching for channels.

> **Note**
>
> You can press **EXIT** to stop the auto channel search, but you will need to run the auto channel search again to create a channel list.

12 To watch TV, press **INPUT**, press ▲ or ▼ to highlight the video input source for your TV in the *INPUT SOURCE* list, then press **ENTER**.

- If your TV is connected to an antenna, cable TV (no box), or cable or satellite TV box using a coaxial cable, select **TV**.
- If your TV is connected to a cable or satellite box using an HDMI cable or HDMI cable with a DVI adapter, select **HDMI1** or **HDMI2**.
- If your TV is connected to a cable or satellite box using a component video cable, select **Component**.
- If your TV is connected to a cable or satellite box using a composite video cable, select **AV**.

Understanding the basics

Turning your TV on or off

To turn your TV on or off:

1 Make sure that the power cord is connected to a power outlet.

2 Press ⏻ (power) to turn on your TV. The power indicator LED turns blue.

3 Press ⏻ (power) again to turn off your TV. Your TV enters standby mode and the power indicator LED turns red.

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

> **Note**
>
> If your TV does not receive an input signal for several minutes, it automatically goes into standby mode.

Selecting the video input source

To select the video input source:

1 Turn on your TV, then press **INPUT**. The *INPUT SOURCE* list opens.

> **Note**
>
> If the **Auto Input Sensing** feature is turned on (default setting), the device connected to the video jack must be turned on to select it in the *Input Source* list.
>
> For more information, see "Turning Auto Input Sensing on or off" on page 48.

```
INPUT   SOURCE

        TV
        AV
     Component
      HDMI1
      HDMI2
       VGA
       USB
```

> **Note**
>
> If your TV is connected to an antenna, cable TV (no box), or cable or satellite box using a coaxial cable, select **TV** to watch TV.
>
> If your TV is connected to a cable or satellite box using a different video connection, select the matching video input source to watch TV.

You can also press a direct input button to select the video input source.

- Press **TV** to select **TV** (if your TV is connected to an antenna, cable TV (no box), or cable or satellite TV using a coaxial cable).
- Press **VIDEO** to select **AV IN VIDEO**.
- Press **COMP** to select **COMPONENT IN**.
- Press **HDMI** once to select **HDMI1**. Press twice to select **HDMI2**.

On-screen menu overview

Notes

- Depending on the signal source selected, you may see different options on your screen. The following menus are shown in TV mode (except the USB menu).
- Menu items that are not selectable are grayed out.
- Menus in this manual are described in TV mode, unless otherwise indicated.
- The screens shown in this manual are for explanation purposes and may vary from the actual screens on your TV.

Picture menu (TV mode)

INSIGNIA™
Picture Audio Channels Settings USB

Picture

Mode	Custom
Brightness	60
Contrast	60
Color	60
Tint	0
Sharpness	50
Advanced Video	
Reset Picture Settings	

Move   Select   Previous   Exit

Adjust settings to affect picture quality

Audio menu (TV mode)

INSIGNIA™
Picture Audio Channels Settings USB

Audio

SRS TruSurround HD	Off
Treble	60
Bass	60
Balance	0
Digital Audio/SPDIF	RAW
Audio Language	English
MTS/SAP	Mono
Reset Audio Settings	

Move   Select   Previous   Exit

Adjust settings to affect sound quality

Channels menu (TV mode)

INSIGNIA™
Picture Audio Channels Settings USB

Channels

Auto Channel Search	
Add/Skip Channels	
Favorites	
Channel Labels	PBS-HD
Channel Strength	
Audio Only	Off
Auto Zoom	On

Move   Select   Previous   Exit

Adjust channel options

Settings menu (TV mode)

INSIGNIA™
Picture Audio Channels Settings USB

Settings

Parental Controls	
Closed Caption	
Time	
Menu Settings	
Auto Input Sensing	Off
Input Labels	
INlink	
Computer Settings	
System Info	
Reset to Default	

Move   Select   Previous   Exit

Set various TV options

USB menu (USB mode)

INSIGNIA™
Picture Audio Channels Settings USB

USB

Photos

Move   Select   Previous   Exit

View files from a USB device that is connected to the TV

Navigating the menus

Press **MENU** to open the on-screen menu.

Press the right or left arrow to move the cursor on the screen or to adjust a selected item.

Press the up or down arrow to select menu options.

Press **ENTER** to confirm a selection or enter a sub-menu.

Press **MENU** to return to the previous menu.

Press **EXIT** to close the menu.

Selecting a channel

To select a channel:

- Press **CH** ⌃ or **CH** ⌄ to go to the next or previous channel on the memorized channel list.
- Press the number buttons to enter the channel number you want, then wait for the channel to change or press **ENTER** to immediately change the channel.
- To select a digital sub-channel, press the number buttons to select the main digital channel, press ● (dot), then press the number button for the sub-channel. Wait for the channel to change, or press **ENTER** to immediately change the channel. For example, to tune to channel 5.1, press **5**, ● (dot), then **1**.

> **Note**
>
> Button presses must be within three seconds of each other.

- Press ○ **RECALL** to go to the last viewed channel.
- Press **CH-LIST** to open the channel list, press ▲ or ▼ to highlight a channel, then press **ENTER**. Hidden channels are grayed and cannot be selected. See "Hiding channels" on page 36.
- Press **FAVORITE** to open the favorite channel list, press ▲ or ▼ to highlight a channel, then press **ENTER**.

> **Note**
>
> If a list has more than one page, press ▲ or ▼ to scroll through the pages.

Adjusting the volume

To adjust the volume:

- Press **VOL +** or **VOL –** to increase or decrease the volume.
- Press **MUTE** to turn off the sound. Press **MUTE** again to turn the sound back on.

Viewing channel information

To view channel information:

- Press **INFO** to view an information banner. The information banner shows the current program information such as channel number, video input source, and resolution.
  - Digital channel information—Displays the channel number, station name, channel label, broadcast program name, TV rating, signal type, audio information, resolution, CC mode, current time, and current program start and end times.
  - Analog channel information—Displays channel number, channel label (if preset), signal type, audio information, and resolution.
- Press **GUIDE** to show the digital program guide, which may show a list of available programs, program times, and program summaries, depending on the information provided by the broadcaster.

Viewing system information

To view system information:

1 Press **MENU**. The on-screen menu opens.

2 Press ◀ or ▶ to highlight **Settings**, then press ▼ or **ENTER**. The *Settings* menu opens.
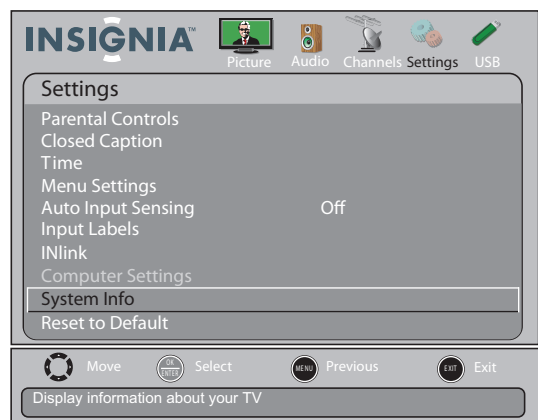
3 Press ▲ or ▼ to highlight **System Info**, then press **ENTER**. A screen opens that displays your TV's *Model Name* and *Firmware Version*.

4 Press **MENU** to return to the previous menu, or press **EXIT** to close the menu.

Adjusting the picture

Adjusting the TV picture

To adjust the TV picture:

1 Press **MENU**. The on-screen menu opens with the *Picture* menu displayed.
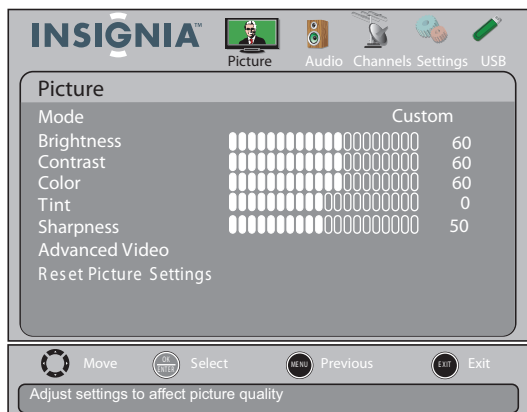
2 Press ▼ or **ENTER** to access the menu.

3 Press ▲ or ▼ to highlight an option, then press **ENTER** to access the option. You can select:

- **Mode**—Selects the picture mode. You can select:
    - **Vivid**—(a bright and vivid picture). Significantly increases the contrast, brightness, and sharpness. This selection is good for video games, animation, and in bright light environments.
    - **Standard**—(a standard picture). Moderately increase the contrast, brightness, and sharpness. This selection is good for standard TV broadcasts.
    - **Theater**—(a finely detailed picture). Adjusts the brightness and contrast and lowers the sharpness for a more realistic picture. This selection is good for watching the highest quality video such as Blu-ray Discs, DVDs, and HDTV.
    - **Energy Savings**—(the backlight brightness is decreased). Your TV has a backlight that provides light for displaying a picture. By reducing the amount of light, your TV uses less energy.
    - **Custom**—(customized picture). Lets you manually adjust picture settings such as brightness, contrast, and sharpness.

> **Note**
>
> You can also press **PICTURE** to select the picture mode.

- **Brightness**—Adjusts the brightness of the dark areas of the picture.
- **Contrast**—Adjusts the brightness of the light areas of the picture.
- **Color**—Adjusts the color intensity of the picture. A low setting may make the color look faded. A high setting may make the color look artificial.

- **Tint**—Adjusts the color balance of the picture. Use this control to make skin tones look more natural.
- **Sharpness**—Adjusts the color detail of images. If you set this control too high, dark images may appear with light or white edges.
- **Advanced Video**—Opens the *Picture-Advanced Video* menu where you can adjust additional video options.
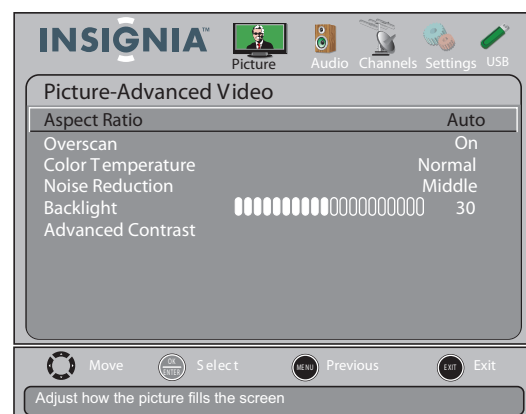
- **Aspect Ratio**—Selects the aspect ratio of the picture.

Aspect ratio option	Example
Normal: Displays the original aspect ratio. If the original aspect ratio is 4:3, the TV image appears with vertical black bars on the left and right of the image.	
Zoom: Expands the image to fill the screen. The top and bottom of the image may be cropped.	
Wide: Use this option to view content recorded in a 16:9 (wide-screen) aspect ratio.	
Cinema: Stretches the image at the edges, but keeps a clear image in the center.	
Auto: Automatically adjusts the image based on the screen size and the TV program. **Note: Auto** is only available when **Auto Zoom** in the *CHANNELS* menu is set to **On**.	

> **Note**
>
> You can also press **ZOOM** to select the aspect ratio.

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- **Overscan**—Adjusts the picture's reproduction rate. You can select **On** or **Off**.
- **Color Temperature**—Selects the color temperature. You can select **Cool** (to enhance the blues), **Normal**, or **Warm** (to enhance the reds).
- **Noise Reduction**—Selects the noise reduction mode to reduce picture noise (snow). You can select **Low**, **Middle**, **High**, or **Off**.
- **Backlight**—Sets the overall brilliance of the screen. When **Dynamic Contrast Ratio** is turned on, you cannot change the backlight setting.
- **Advanced Contrast**—Selects from:
  - **Adaptive Contrast**—Automatically adjusts picture detail and brightness. You can select **On** or **Off**.
  - **Dynamic Contrast Ratio**—Enhances the contrast ratio between light and dark areas of the picture. You can select **On** or **Off**. When this option is turned on, you cannot change the backlight option.
- **Reset Picture Settings**—Resets all picture settings to factory mode.

4 Press ◄ or ► to adjust the option, or press ▲ or ▼ to select a setting.

5 Press **MENU** to return to the previous menu, or press **EXIT** to close the menu.

Adjusting the computer image

To adjust the computer image:

1 Make sure that your TV is in VGA mode. For more information, see "Selecting the video input source" on page 29.

2 Press **MENU**. The on-screen menu opens.
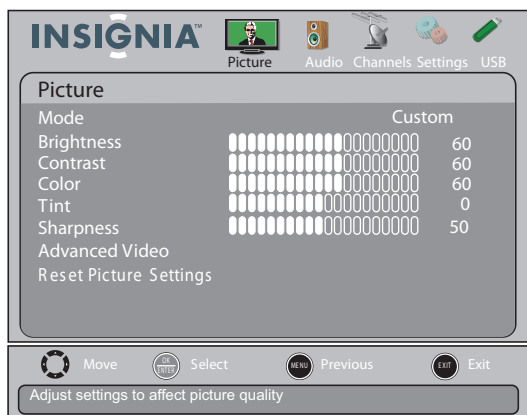
3 Press ◄ or ► to highlight **Settings**, then press ▼ or **ENTER**. The *Settings* menu opens.
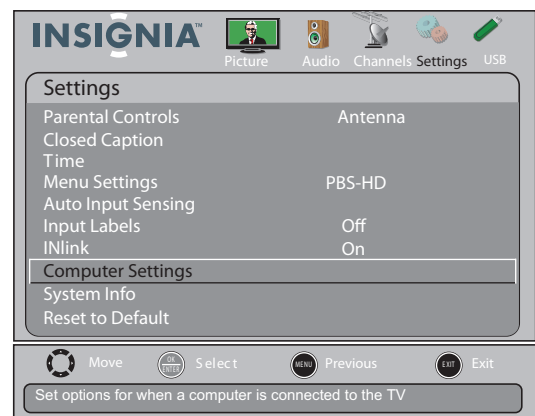
4 Press ▲ or ▼ to highlight **Computer Settings**, then press **ENTER**. The *Settings-Computer Settings* menu opens.
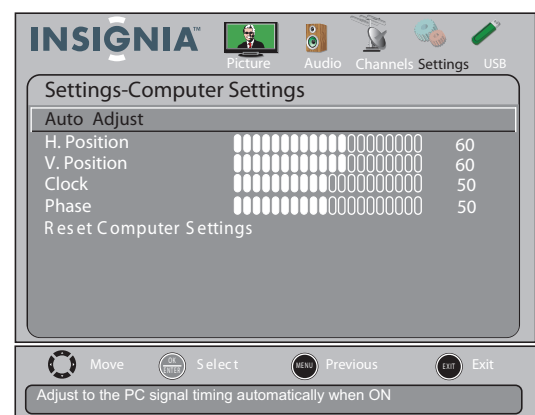
5 Press ▲ or ▼ to highlight an option, then press **ENTER** to access the option. You can select:
- **Auto Adjust**—Automatically adjusts the image settings such as position and phase.
- **H. Position**—Moves the image right or left.
- **V. Position**—Moves the image up or down.
- **Clock**—Adjusts the sample frequency.
- **Phase**—Adjusts the focus of stable images.
- **Reset Computer Settings**—Resets all computer settings to factory mode.

6 Press ◄ or ► to adjust the option, or press ▲ or ▼ to select a setting.

7 Press **MENU** to return to the previous menu, or press **EXIT** to close the menu.

Adjusting the sound

Adjusting sound settings

To adjust sound settings:

1 Press **MENU**. The on-screen menu opens.
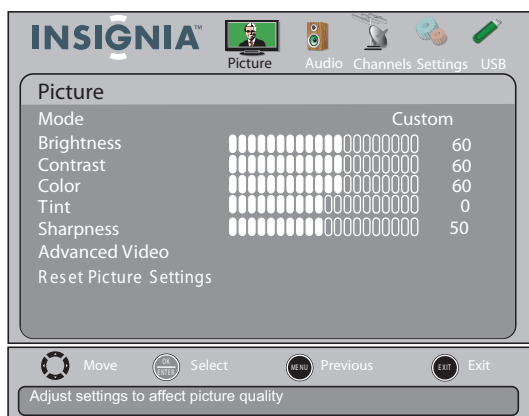
2 Press ◄ or ► to highlight **Audio**, then press ▼ or **ENTER**. The *Audio* menu opens.

3 Press ▲ or ▼ to highlight an option, then press **ENTER** to access the option. You can select:

- **SRS TruSurround HD**—Provides an impressive, feature-rich surround sound experience from two speakers, complete with rich bass, high frequency detail, and clear dialog.
- **Treble**—Adjusts the high sounds.
- **Bass**—Adjusts the low sounds.
- **Balance**—Adjusts the balance between the left and right audio channels.

> **Note**
>
> You can quickly adjust **SRS**, **Treble**, or **Balance** or reset audio settings by using the **AUDIO** and ◄ or ► buttons on the remote control. Press **AUDIO** repeatedly to toggle between the **SRS**, **Bass**, **Treble**, **Balance**, and **Reset Audio Settings** screens, then press ◄ or ► to adjust the option.

- **Digital Audio/SPDIF**—Sends digital audio to an external audio system. You can select **PCM** (to output audio in 2-channel stereo), or **RAW** (to pass through the original digital audio sound).

- **Audio Language**—(Digital channels only) Selects an alternate audio language, if available.
- **MTS/SAP**—(Analog channels only) Selects the audio mode. You can select:
  - **MONO**—Select this option if there is noise or static on weak stereo broadcasts.
  - **STEREO**—Select this option for programs broadcast in stereo.
  - **SAP**—Select this option to listen to a secondary audio program, if available.

> **Note**
>
> You can also press **MTS/SAP** one or more times to select the audio mode.

- **Reset Audio Settings**— Resets all audio settings to factory defaults.

4 Press ◄ or ► to adjust the option, or press ▲ or ▼ to select a setting.

5 Press **MENU** to return to the previous menu, or press **EXIT** to close the menu.

## Playing TV audio only

You can turn off the picture on your TV and listen to the program audio only.

To play TV audio only:

1 Press **MENU**. The on-screen menu opens.
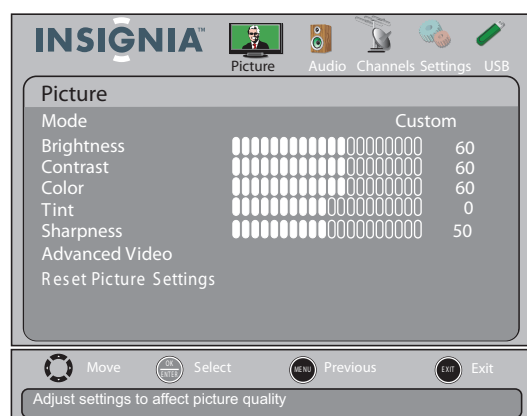
2 Press ◄ or ► to highlight **Channels**, then press ▼ or **ENTER**. The *Channels* menu opens.
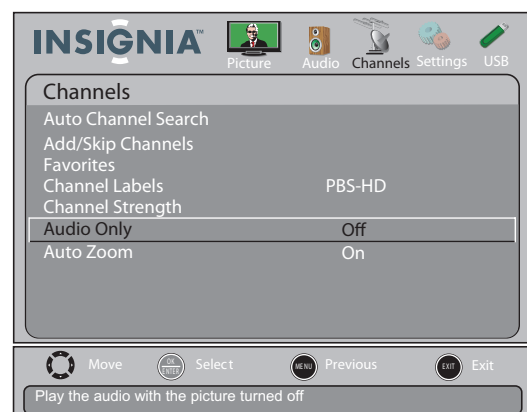
3 Press ▲ or ▼ to highlight **Audio Only**, then press **ENTER**.

4 Press ▲ or ▼ to select **On**.

5 Press **MENU** to return to the previous menu, or press **EXIT** to close the menu.

Notes
• After you close the menu, the picture will turn off in about 10 seconds. • **Audio Only** works only when the input source is TV, and your TV is receiving a broadcast signal. • To exit audio only mode, press any button. When you exit audio only mode, the **Audio Only** option is automatically reset to **Off**.

Changing channel settings

Automatically scanning for channels

When you scan for channels, your TV searches for channels with signals and stores the channel information in the channel list. When you press **CH** ∧ or **CH** ∨, your TV goes to the next or previous channel in the channel list.

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 Press **MENU**. The on-screen menu opens.
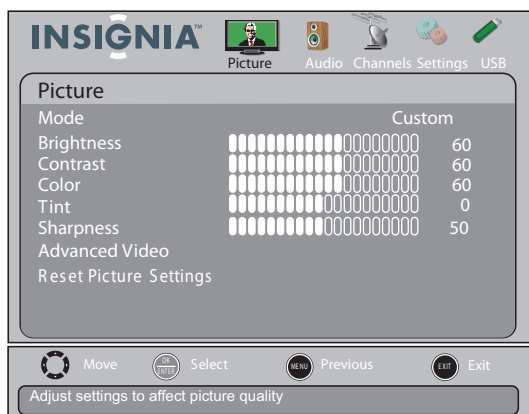
2 Press ◄ or ► to highlight **Channels**, then press ▼ or **ENTER**. The *Channels* menu opens.
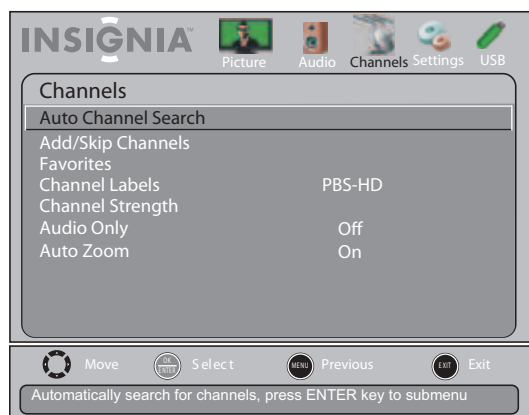
3 Press ▲ or ▼ to highlight **Auto Channel Search**, then press **ENTER**. The *Channels-Auto Channel Search* screen opens.

4 Press ▲ or ▼ to highlight **Antenna**, **Cable**, or **Cable/Satellite Box**, then press **ENTER**.

- If you are using an antenna for a standard or HDTV signal, select **Antenna**.
- If your cable is connected directly to the TV (using no tuner box), select **Cable**.
- If your cable is connected to your TV through a tuner box, select **Cable/Satellite Box**.

If you selected **Antenna** or **Cable**, your TV searches automatically for available channels in your area and stores the channel information in the channel list. This may take several minutes. While searching, the TV displays a progress report.

Or,

If you selected **Cable/Satellite Box**, the channel search is not necessary.

Note
You can press **EXIT** to stop the auto channel search, but you will need to run the auto channel search again to create a channel list.

Hiding channels

You can hide channels in the channel list. When you press **CH** ⋀ or **CH** ⋁, your TV skips the hidden channels. You can still tune to a hidden channel by pressing the number buttons for the channel.

To hide channels:

1 Press **MENU**. The on-screen menu opens.
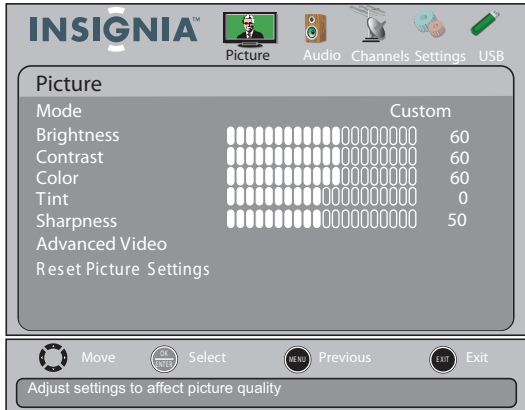
2 Press ◄ or ► to highlight **Channels**, then press ▼ or **ENTER**. The *Channels* menu opens.
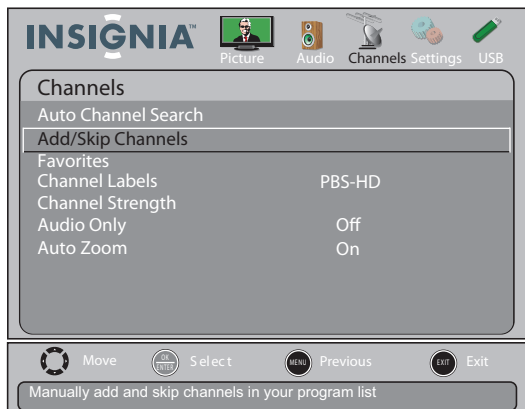
3 Press ▲ or ▼ to highlight **Add/Skip Channels**, then press **ENTER**. The *Channels-Add/Skip Channels* screen opens.
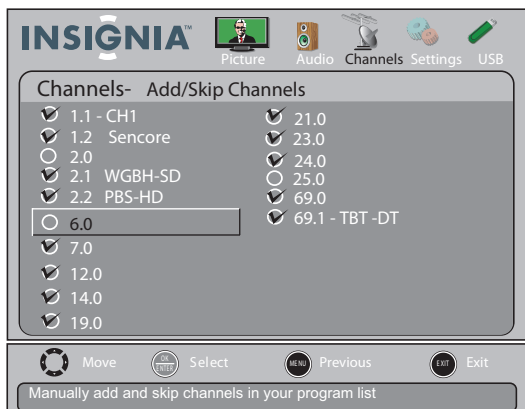
4 Press ▲ ▼ ◄ or ► to highlight the channel you want to hide, then press **ENTER**. The check mark disappears.

Notes

- A channel with a check mark is not hidden. A channel with no check mark is hidden.
- If the list has more than one page, press ▲ or ▼ to scroll through the pages.
- When you press **CH-LIST**, hidden channels are grayed in the channel list and cannot be selected.

5 Press **MENU** to return to the previous menu, or press **EXIT** to close the menu.

Setting up a favorite channel list

You can create a favorite channel list so you can quickly browse through your favorite channels by pressing **FAVORITE**, then selecting a channel from the favorite channel list.

To set up a favorite channel list:

1 Press **MENU**. The on-screen menu opens.
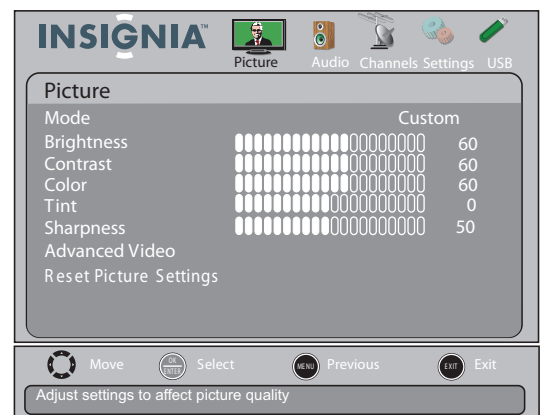
2 Press ◄ or ► to highlight **Channels**, then press ▼ or **ENTER**. The *Channels* menu opens.

3 Press ▲ or ▼ to highlight **Favorites**, then press **ENTER**. The *Channels-Favorites* screen opens.
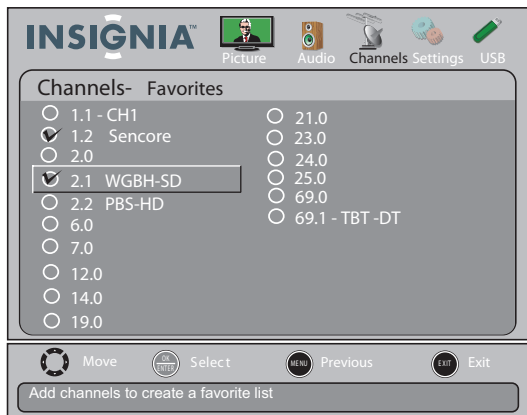
4 Press ▲ ▼ ◄ or ► to highlight the channel you want to add to the favorites list, then press **ENTER**. A check mark appears next to the channel.

> **Notes**
> • To remove a channel from the favorites list, highlight the channel, then press **ENTER**. The check mark disappears and the channel is removed from the list.
> • If the list has more than one page, press ▲ or ▼ to scroll through the pages.

5 Press **MENU** to return to the previous menu, or press **EXIT** to close the menu.

Viewing a favorite channel

To view a favorite channel:

1 Press **FAVORITE**. The favorite channel list opens.

2 Press ▲ or ▼ to highlight a channel, then press **ENTER**.

Adding or changing a channel label

If a channel is not already labeled, you can label the channel to make it easier to identify. You can also relabel a channel that is already labeled.

To add or change a channel label:
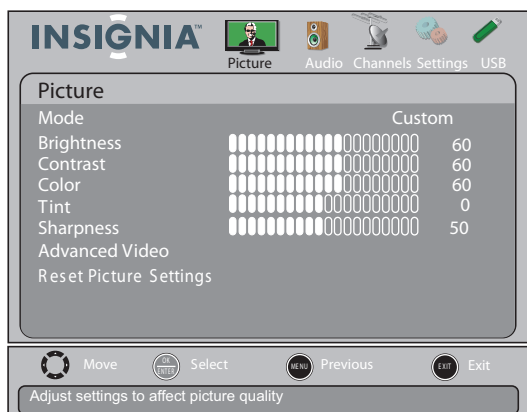
1 Press **MENU**. The on-screen menu opens.

2 Press ◄ or ► to highlight **Channels**, then press ▼ or **ENTER**. The *Channels* menu opens.

3 Press ▲ or ▼ to highlight **Channel Labels**, then press **ENTER**. The *Channels-Channel Labels* screen opens with the channel number field highlighted.

4 Press ▲ or ▼ to select the channel you want to label, then press ► to move to the channel label field.

5 Press ▲ or ▼ to select a character, then press ◄ or ► to move to the previous or next character position. Repeat this step to enter additional characters. You can enter as many as 11 characters.

6 When you have completed the label, press **MENU**.

7 Press **EXIT** to close the menu.

Checking the digital signal strength

You can check the digital signal strength to determine if you need to adjust your antenna or digital cable input. The higher the signal strength, the less likely you are to experience picture degradation.

To check the digital signal strength:

1 Press **MENU**. The on-screen menu opens.
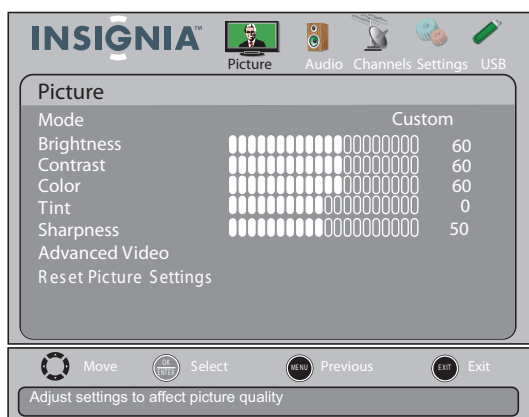
2 Press ◄ or ► to highlight **Channels**, then press ▼ or **ENTER**. The *Channels* menu opens.

3 Press ▲ or ▼ to highlight **Channel Strength**, then press **ENTER**. The signal strength meter is displayed.

4 Press **MENU** to return to the previous menu, or press **EXIT** to close the menu.

Turning Auto Zoom on or off

When **Auto Zoom** is turned on and **Auto aspect ratio** is selected, your TV automatically adjusts the aspect ratio based on the screen size and the aspect ratio of the TV program.

To turn Auto Zoom on or off:

1 Press **MENU**. The on-screen menu opens.
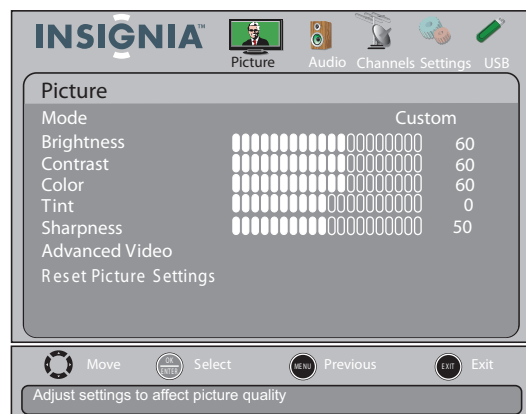
2 Press ◄ or ► to highlight **Channels**, then press ▼ or **ENTER**. The *Channels* menu opens.
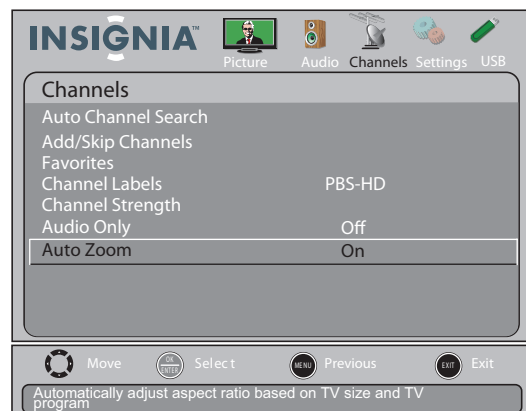
3 Press ▲ or ▼ to highlight **Auto Zoom**, then press **ENTER**.

4 Press ▲ or ▼ to select **On** or **Off**.

5 Press **MENU** to return to the previous menu, or press **EXIT** to close the menu.

Setting parental controls

Setting or changing the password

Parental controls let you prevent your children from watching inappropriate material on TV. When set, parental controls read the rating of the program (with some exceptions, such as news and sports) and deny access to programs that exceed the ratings level you select. To watch programs that exceed the selected rating, you must enter a password.

To set or change the password:

1 Press **MENU**. The on-screen menu opens.
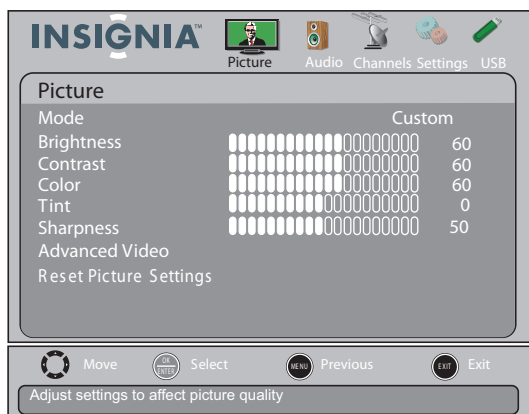
2 Press ◄ or ► to highlight **Settings**, then press ▼ or **ENTER**. The *Settings* menu opens with **Parental Controls** highlighted.
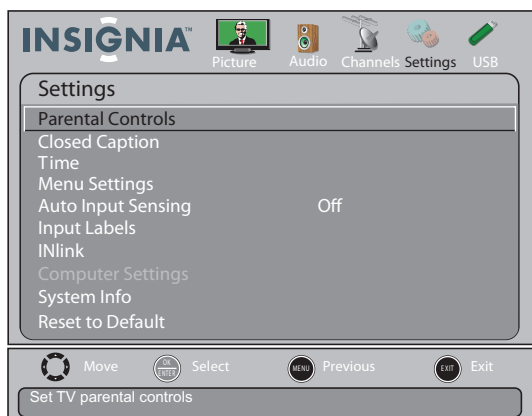
3 Press **ENTER**. The *Enter Password* screen opens.
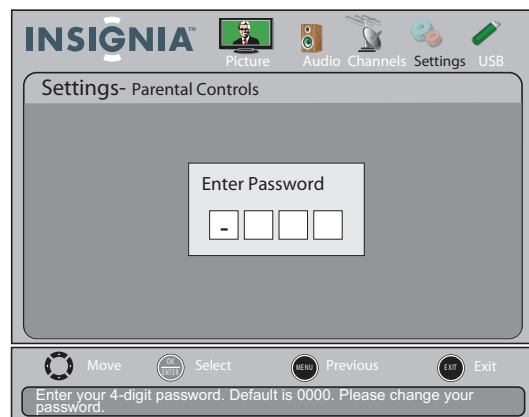
4 Press the number buttons to enter the four-digit password. The default password is **0000**. You should change the password to a number you can remember. The *Parental Controls* menu opens.

5 Press ▲ or ▼ to highlight **Change Password**, then press **ENTER**. The *Settings-Parental Controls-Change Password* screen opens.
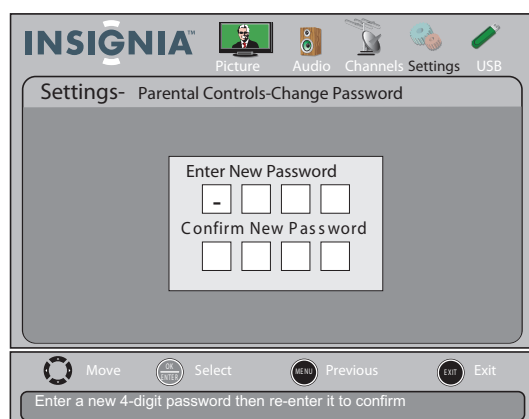
6 Press the number buttons to enter a password, then enter the password again. "Password successfully changed" is displayed.

> **Note**
>
> If you forget your password, enter **9999**.

7 Press **MENU** to return to the previous menu, or press **EXIT** to close the menu.

Locking control buttons

When the button lock is turned **On**, the buttons on the side of your TV are locked and you can only operate your TV using the remote control.

To lock control buttons:

1 Press **MENU**. The on-screen menu opens.

INSIGNIA™
Picture Audio Channels Settings USB

Picture
Mode .... Custom
Brightness |||||||||||||000000000 60
Contrast |||||||||||||000000000 60
Color |||||||||||||000000000 60
Tint |||||||||00000000000000 0
Sharpness |||||||||||00000000000 50
Advanced Video
Reset Picture Settings

Move   Select   Previous   Exit
Adjust settings to affect picture quality

2 Press ◄ or ► to highlight **Settings**, then press ▼ or **ENTER**. The *Settings* menu opens with **Parental Controls** highlighted.

INSIGNIA™
Picture Audio Channels Settings USB

Settings
Parental Controls
Closed Caption
Time
Menu Settings
Auto Input Sensing .... Off
Input Labels
INlink
Computer Settings
System Info
Reset to Default

Move   Select   Previous   Exit
Set TV parental controls

3 Press **ENTER**. The *Enter Password* screen opens.

INSIGNIA™
Picture Audio Channels Settings USB

Settings- Parental Controls

Enter Password

[-][ ][ ][ ]

Move   Select   Previous   Exit
Enter your 4-digit password. Default is 0000. Please change your password.

4 Press the number buttons to enter the four-digit password. The *Settings-Parental Controls* menu opens with **Button Lock** highlighted.

INSIGNIA™
Picture Audio Channels Settings USB

Settings- Parental Controls
Button Lock .... Off
Block Unrated TV .... Off
USA Parental Locks
Canadian Parental Locks
Change Password
RRT5
Reset RRT5

Move   Select   Previous   Exit
Lock or unlock the buttons on the TV

5 Press **ENTER**.

6 Press ▲ or ▼ to select **On** (locks the buttons) or **Off** (unlocks the buttons).

7 Press **MENU** to return to the previous menu, or press **EXIT** to close the menu.

Blocking unrated TV

To block unrated TV:

1 Press **MENU**. The on-screen menu opens.

2 Press ◄ or ► to highlight **Settings**, then press ▼ or **ENTER**. The *Settings* menu opens with **Parental Controls** highlighted.
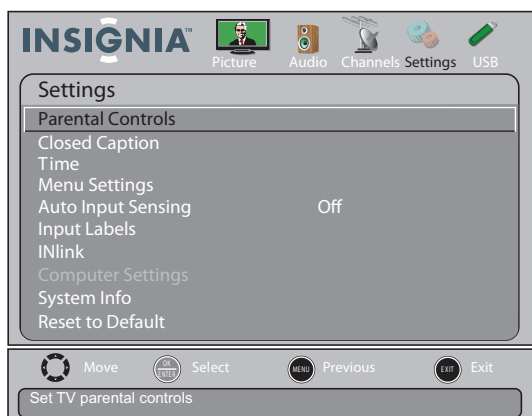
3 Press **ENTER**. The *Enter Password* screen opens.

4 Press the number buttons to enter the four-digit password. The *Settings-Parental Controls* menu opens.

5 Press ▲ or ▼ to highlight **Block Unrated TV**, then press **ENTER**.

6 Press ▲ or ▼ to select **On** (to block unrated TV) or **Off** (to unblock unrated TV).

7 Press **MENU** to return to the previous menu, or press **EXIT** to close the menu.

Setting parental control levels

You can set parental controls for the U.S. and Canada.

To set parental control levels:

1 Press **MENU**. The on-screen menu opens.
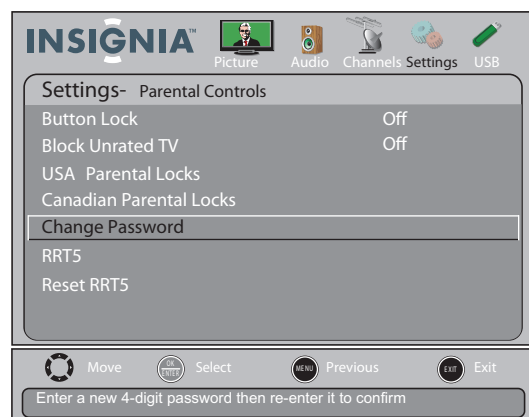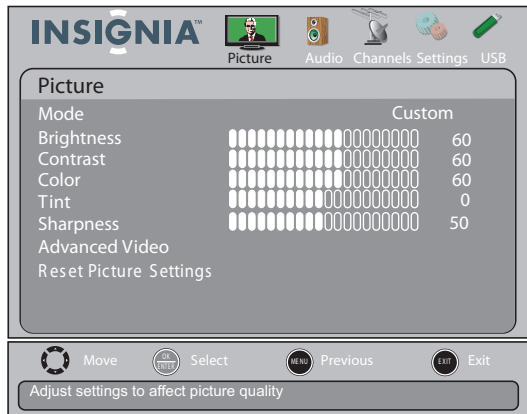

2 Press ◄ or ► to highlight **Settings**, then press ▼ or **ENTER**. The *Settings* menu opens with **Parental Controls** highlighted.
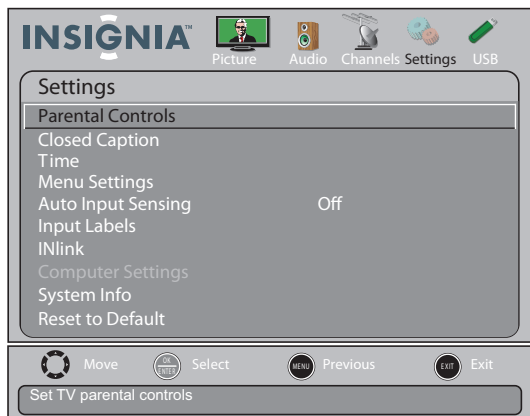
3 Press **ENTER**. The *Enter Password* screen opens.
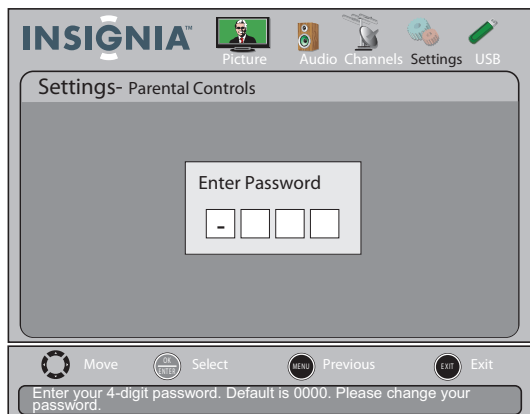
4 Press the number buttons to enter the four-digit password. The *Settings-Parental Controls* menu opens.
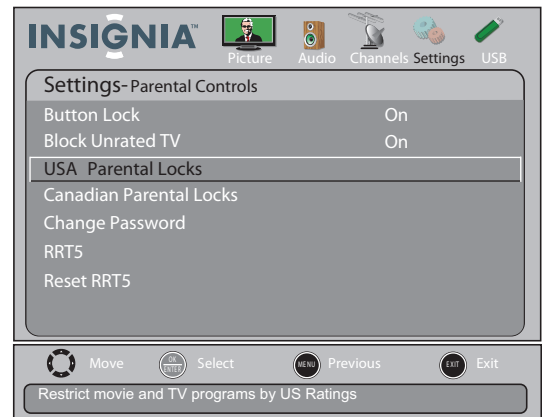
5 Press ▲ or ▼ to highlight **USA Parental Locks**, then press **ENTER**. (To set Canadian ratings, select **Canadian Parental Locks**.)

USA Parental Locks
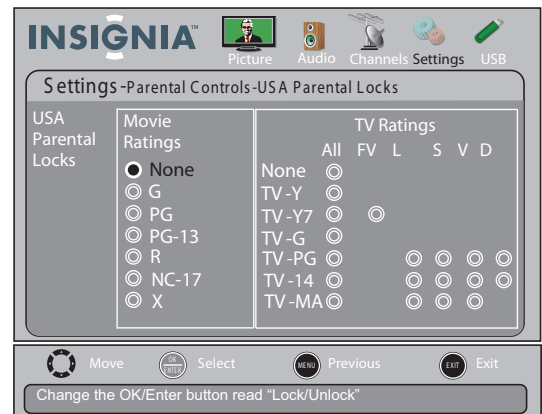
Canadian Parental Locks
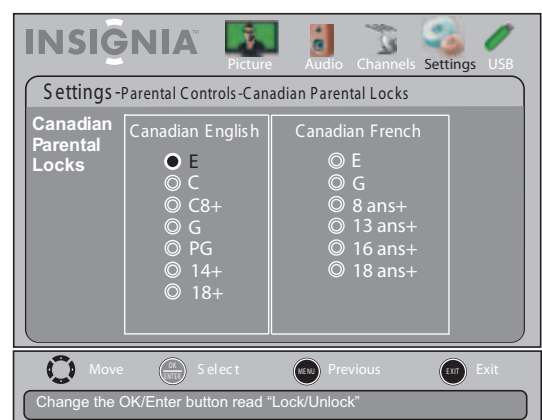
6 Press ◄ or ► to highlight:
- **Movie Ratings** or **TV Ratings** for USA ratings.
- **English Rating** or **French Rating** for Canadian ratings.

7 Press ▲ or ▼ to select the rating. If a rating has sub-ratings, press ◄ or ► to highlight a sub-rating.

> **Note**
>
> When you block a rating, that rating and all higher ratings are blocked.

8 Press **ENTER** to confirm. A lock symbol appears when a rating is blocked.

9 Press **MENU** to return to the previous menu, or press **EXIT** to close the menu.

U.S. TV ratings	
NONE	Not rated
TV-Y	All children
TV-Y7	Suitable for children 7 and older
TV-G	General audiences
TV-PG	Parental guidance suggested
TV-14	Parental guidance strongly suggested
TV-MA	Mature audiences only

Some of the age-based TV Parental Guidelines ratings also have content-based ratings.

U.S. TV content ratings	
All	All ratings are blocked
FV	Fantasy violence
L	Strong language
S	Sexual situations
V	Violence
D	Suggestive dialog

U.S. movie (MPAA) ratings	
None	Movie not rated
G	General audiences
PG	Parental guidance suggested
PG-13	Suitable for children 13 and older
R	Parental guidance suggested for children under 17
NC-17	Not suitable for children under 17
X	Adults only

Canadian English ratings	
E	Exempt programming
C	Suitable for all children
C8+	Suitable for children 8 and older
G	General audiences
PG	Parental guidance suggested
14+	Suitable for children 14 and older
18+	Adult only

Canadian French ratings	
E	Exempt programming
G	General audiences
8ans+	Suitable for children 8 and older
13ans+	Suitable for children 13 and older
16ans+	Suitable for children 16 and older
18ans+	Adult only

Downloading rating information

You can download rating information to use when setting parental controls.

To download rating information:

1 Press **MENU**. The on-screen menu opens.
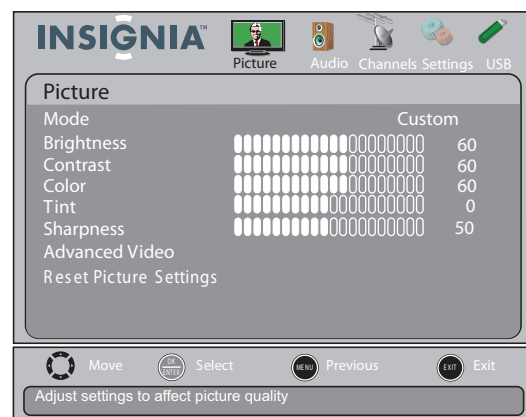
2 Press ◄ or ► to highlight **Settings**, then press ▼ or **ENTER**. The *Settings* menu opens with **Parental Controls** highlighted.
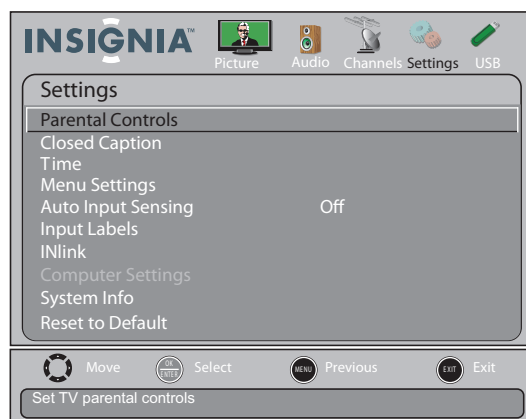
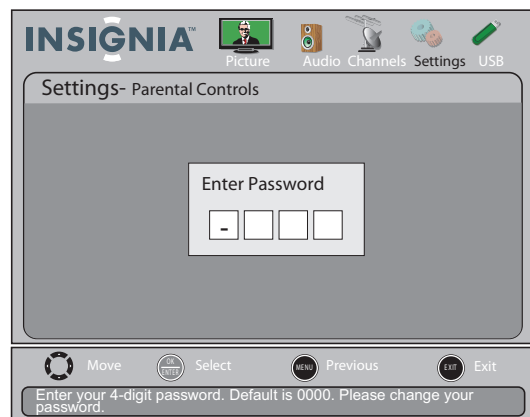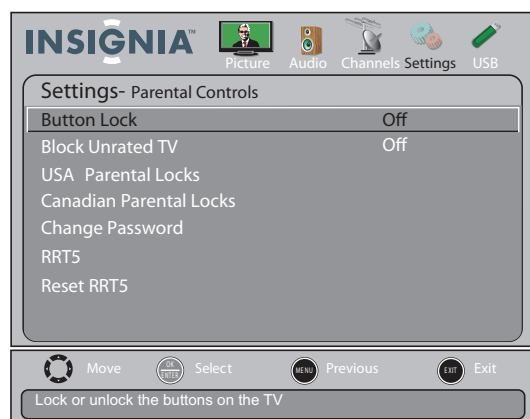**3** Press **ENTER**. The *Enter Password* screen opens.
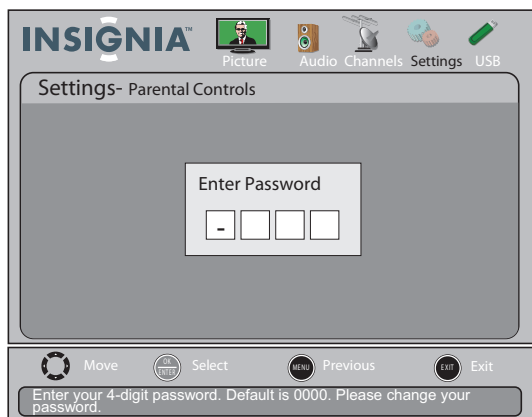
4 Press the number buttons to enter the four-digit password. The *Settings-Parental Controls* menu opens.
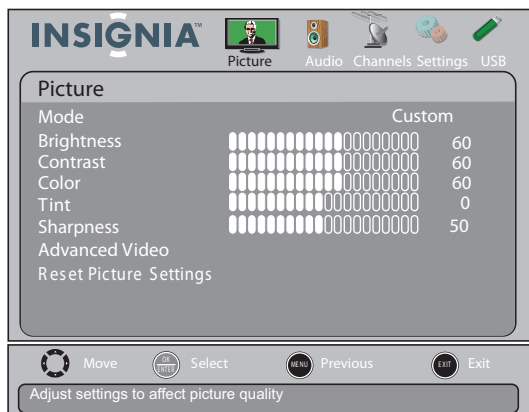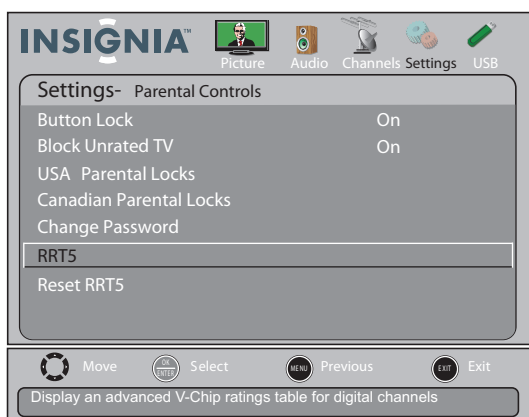

5 Press ▲ or ▼ to highlight **RRT5**, then press **ENTER**.

If the program is broadcast with RRT5 rating information, the information is downloaded automatically and can be used for parental controls.

6 To reset RRT5 information to factory mode, press ▲ or ▼ to highlight **Reset RRT5**, then press **ENTER**.

7 Select Yes (to reset the information) or No (to keep the information), then press **ENTER**.

8 Press **MENU** to return to the previous menu, or press **EXIT** to close the menu.

Using closed captioning

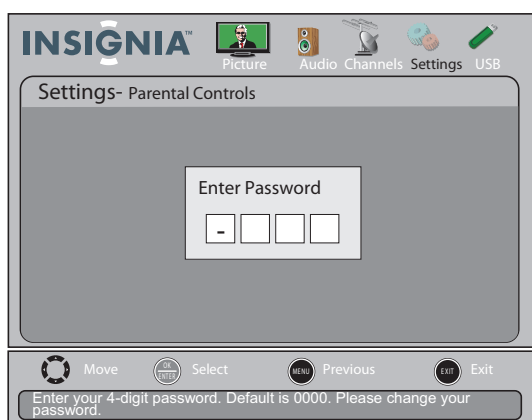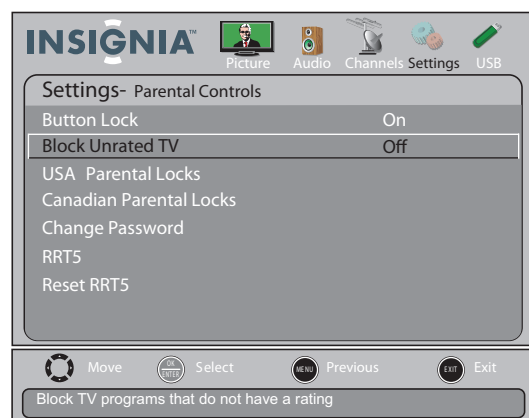## Turning closed captioning on or off

To turn closed captioning on or off:

1 Press **MENU**. The on-screen menu opens.
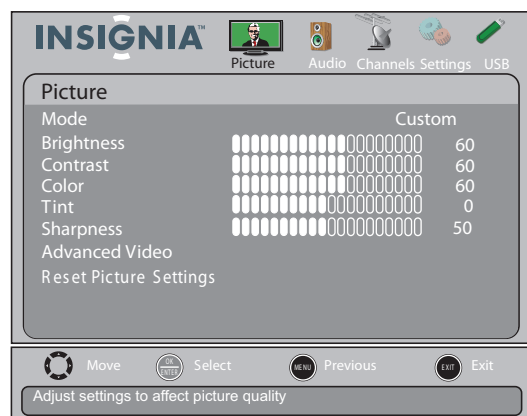
2 Press ◄ or ► to highlight **Settings**, then press ▼ or **ENTER**. The *Settings* menu opens.
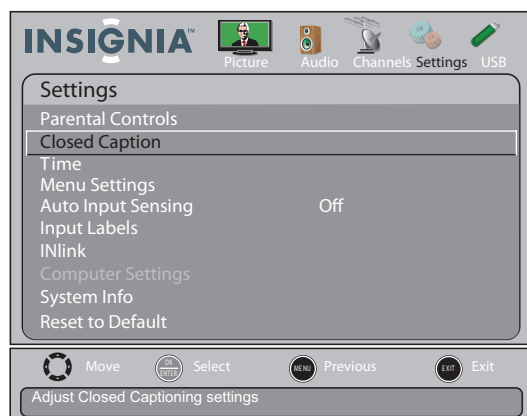
3 Press ▲ or ▼ to highlight **Closed Caption**, then press **ENTER**. The *Settings-Closed Caption* menu opens.
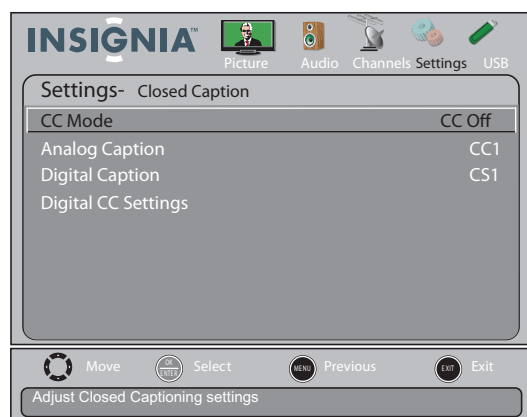
4 Press ▲ or ▼ to highlight **CC Mode**, then press **ENTER**. A menu opens.

5 Press ▲ or ▼ to select **CC Off** (turns off closed captioning), **CC On** (turns on closed captioning), or **CC On When Mute** (turns on closed captioning when the sound is muted).

6 Press **MENU** to return to the previous menu, or press **EXIT** to close the menu.

> **Note**
>
> You can also press **CCD** to turn closed captioning on or off.

Selecting the analog closed captioning mode

To select the analog closed captioning mode:

**1** Press **MENU**. The on-screen menu opens.

2 Press ◀ or ▶ to highlight **Settings**, then press ▼ or **ENTER**. The *Settings* menu opens.
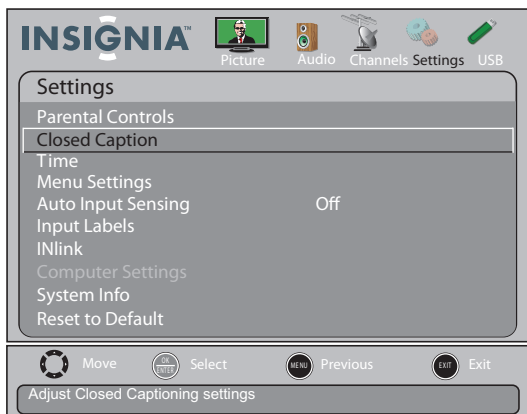
3 Press ▲ or ▼ to highlight **Closed Caption**, then press **ENTER**. The *Settings-Closed Caption* menu opens.
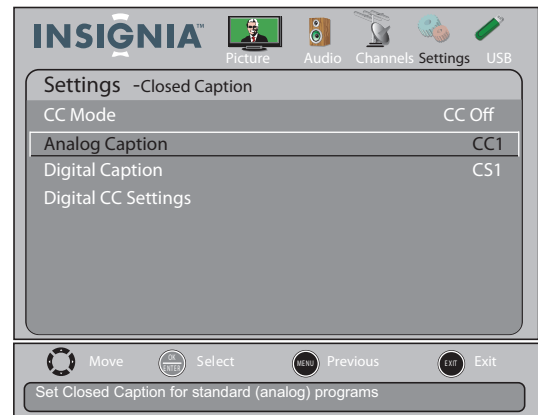
4 Press ▲ or ▼ to highlight **Analog Caption**, then press **ENTER**. A menu opens.

5 Press ▲ or ▼ to select an analog caption setting. You can select:

- **CC1** through **CC4**—Closed captioning appears in a small banner across the bottom of the screen. **CC1** is usually the "printed" version of the audio. **CC2** through **CC4** display content provided by the broadcaster.
- **Text1** through **Text4**—Closed captioning covers half or all of the screen. **Text1** through **Text4** display content provided by the broadcaster.

6 Press **MENU** to return to the previous menu, or press **EXIT** to close the menu.

Customizing digital closed captioning styles

To customize digital closed captioning styles:

1 Press **MENU**. The on-screen menu opens.
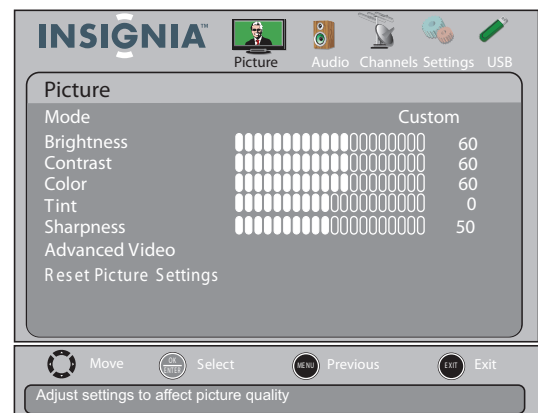
2 Press ◄ or ► to highlight **Settings**, then press ▼ or **ENTER**. The *Settings* menu opens.
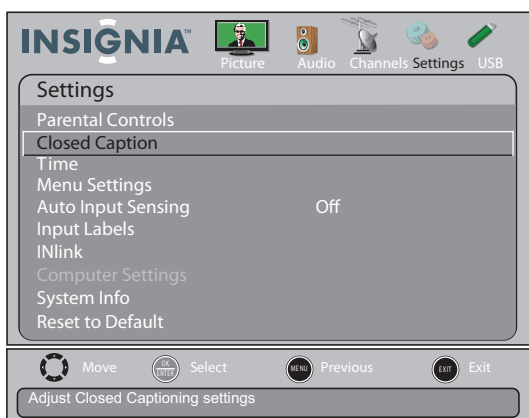
3 Press ▲ or ▼ to highlight **Closed Caption**, then press **ENTER**. The *Settings-Closed Caption* menu opens.
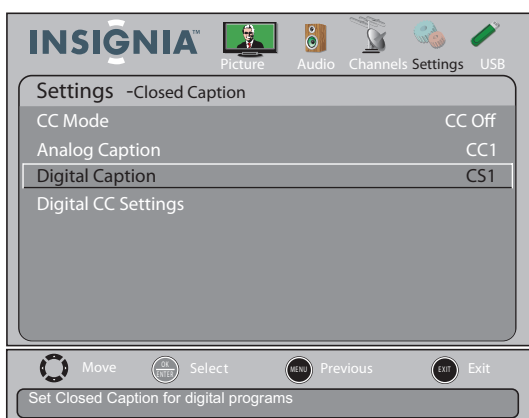
4 Press ▲ or ▼ to highlight **Digital Caption**, then press **ENTER**. A menu opens.

5 Press ▲ or ▼ to highlight a digital caption setting, then press **ENTER**. You can select **CS1** through **CS6** or **CC1** through **CC4**.

6 Press ▲ or ▼ to highlight **Digital CC Settings**, then press **ENTER**. The *Digital CC Settings* menu opens with **Style** highlighted.

7 Press **ENTER**, press ▲ or ▼ to select **Custom**, then press **ENTER**.

8 Press ▲ or ▼ to highlight an option, then press **ENTER**. You can select:
- **Size**—Selects the font size.
- **Font**—Selects the font style.
- **Text Color**—Selects the color for the words.
- **Text Opacity**—Selects the opacity level for the words.
- **Background Color**—Selects the color for the background.
- **Background Opacity**—Selects the opacity level for the background.
- **Edge Effect**—Selects the edge style.
- **Edge Color**—Selects the edge color.

9 Press **MENU** to return to the previous menu, or press **EXIT** to close the menu.

Adjusting time settings

Setting the clock

To set the clock:
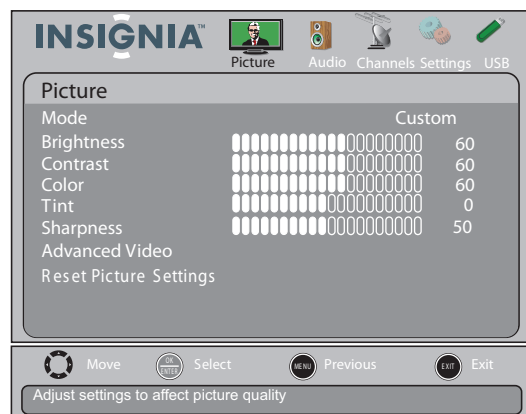
1 Press **MENU**. The on-screen menu opens.

2 Press ◄ or ► to highlight **Settings**, then press ▼ or **ENTER**. The *Settings* menu opens.

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3 Press ▲ or ▼ to highlight **Time**, then press **ENTER**. The *Settings-Time* menu opens.

INSIGNIA™
Picture Audio Channels Settings USB

Settings- Time

Date/Time

Sleep Timer   Off

Move   Select   Previous   Exit
Adjust the date and time to get the correct program times
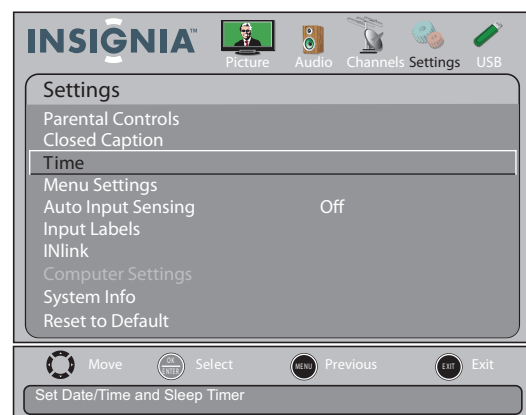
4 Press ▲ or ▼ to highlight **Date/Time**, then press **ENTER**. The *Settings-Time-Date/Time* menu opens.

INSIGNIA™
Picture Audio Channels Settings USB

Settings   -Time-Date/Time

Mode   Auto
Time Zone   Atlantic
Daylight Savings   Off
Year   2011
Month   July
Day   28
Time   10: 26   AM

Move   Select   Previous   Exit
If automatic, options are automatically set by TV source

5 Press ▲ or ▼ to highlight **Mode**, then press **ENTER**. A menu opens.

6 Press ▲ or ▼ to highlight **Manual** (to set the options manually) or **Auto** (the options are automatically set by the TV signal source).

7 Press **ENTER** to close the menu.

8 Press ▲ or ▼ to highlight **Time Zone**, then press **ENTER**. A menu opens.

9 Press ▲ or ▼ to select your time zone, then press **ENTER**. You can select **Eastern**, **Central**, **Mountain**, **Pacific**, **Alaska**, **Hawaii**, **Newfoundland**, or **Atlantic**.

10 If your viewing area observes daylight savings time and you selected **Auto** for **Mode**:

• Press ▲ or ▼ to highlight **Daylight Savings**, then press **ENTER**.

• Press ▲ or ▼ to select **On** or **Off**, then press **ENTER** to close the menu.

11 If you selected **Manual** for **Mode**:

• Press ▲ or ▼ to highlight **Year**, **Month**, or **Day**, then press ◄ or ► to adjust the setting.

• Press ▲ or ▼ to highlight **Time**, press ◄ or ► to select the hour, minute, or AM/PM field, then press ▲ or ▼ to adjust the setting.

**12** Press **MENU** to return to the previous menu, or press **EXIT** to close the menu.

Setting the sleep timer

You can specify the amount of time before your TV automatically turns off.

To set the sleep timer:

1 Press **MENU**. The on-screen menu opens.

INSIGNIA™
Picture Audio Channels Settings USB

Picture

Mode   Custom
Brightness   60
Contrast   60
Color   60
Tint   0
Sharpness   50
Advanced Video
Reset Picture Settings

Move   Select   Previous   Exit
Adjust settings to affect picture quality

2 Press ◄ or ► to highlight **Settings**, then press ▼ or **ENTER**. The *Settings* menu opens.

INSIGNIA™
Picture Audio Channels Settings USB

Settings

Parental Controls
Closed Caption
Time
Menu Settings
Auto Input Sensing   Off
Input Labels
INlink
Computer Settings
System Info
Reset to Default

Move   Select   Previous   Exit
Set Date/Time and Sleep Timer

3 Press ▲ or ▼ to highlight **Time**, then press **ENTER**. The *Settings-Time* menu opens.

INSIGNIA™
Picture Audio Channels Settings USB

Settings   -Time

Date/Time

Sleep Timer   Off

Move   Select   Previous   Exit
Set a time for the TV to turn off automatically

4 Press ▲ or ▼ to highlight **Sleep Timer**, then press **ENTER**. A menu opens.

5 Press ▲ or ▼ to select the amount of time before your TV turns off automatically. To turn off the sleep timer, select **Off**.

6 Press **MENU** to return to the previous menu, or press **EXIT** to close the menu.

Note

You can also press **SLEEP** to set the sleep timer.

Adjusting menu settings

## Selecting the menu language

To select the menu language:

1 Press **MENU**. The on-screen menu opens.
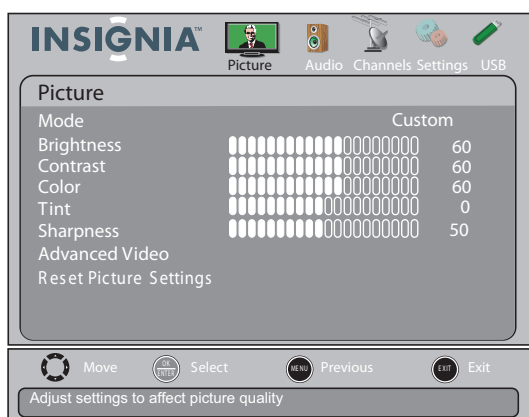
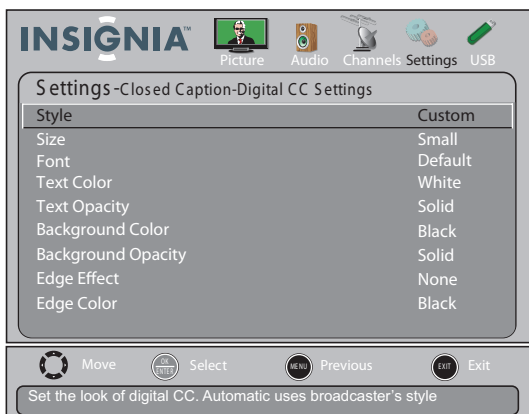**2** Press ◄ or ► to highlight **Settings**, then press ▼ or **ENTER**. The *Settings* menu opens.
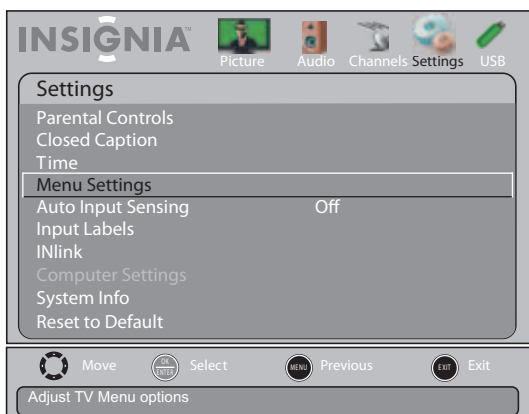
3 Press ▲ or ▼ to highlight **Menu Settings**, then press **ENTER**. The *Settings-Menu Settings* menu opens.

4 Press **ENTER**. A language menu opens.

5 Press ▲ or ▼ to highlight **English**, **Français**, or **Español**, then press **ENTER** to close the menu.

6 Press **MENU** to return to the previous menu, or press **EXIT** to close the menu.

Turning Auto Input Sensing on or off

When the Auto Input Sensing feature is turned on, your TV automatically detects which video jacks have devices connected to them. Your TV uses this information to determine what options you can select on the *INPUT SOURCE* list when you press **INPUT**.

To turn Input Sensor on or off:

1 Press **MENU**. The on-screen menu opens.
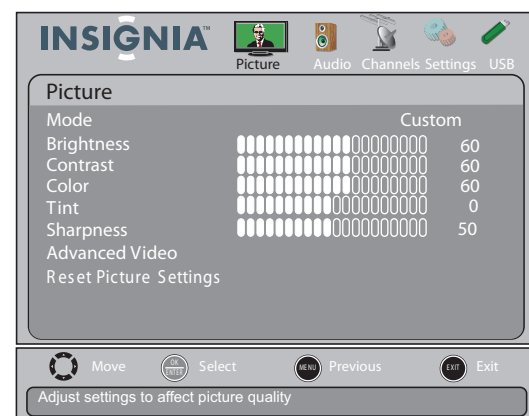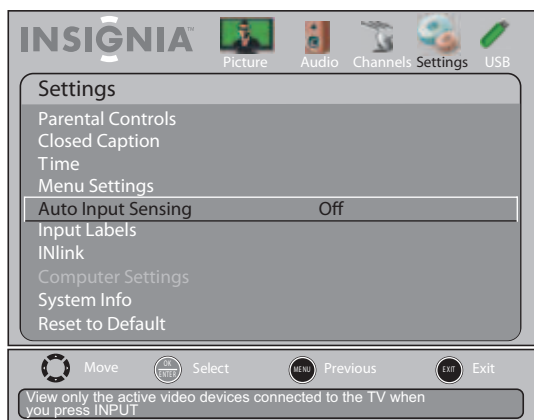
2 Press ◄ or ► to highlight **Settings**, then press ▼ or **ENTER**. The *Settings* menu opens.

3 Press ▲ or ▼ to highlight **Auto Input Sensing**, then press **ENTER**. A menu opens.

4 Press ◄ or ► to select **On** (to activate Auto Input Sensing) or **Off** (to deactivate Auto Input Sensing).

5 Press **MENU** to return to the previous menu, or press **EXIT** to close the menu.

Labeling an input source

You can add a label to an input source to make it easier to identify.

To label an input source:

1 Press **MENU**. The on-screen menu opens.

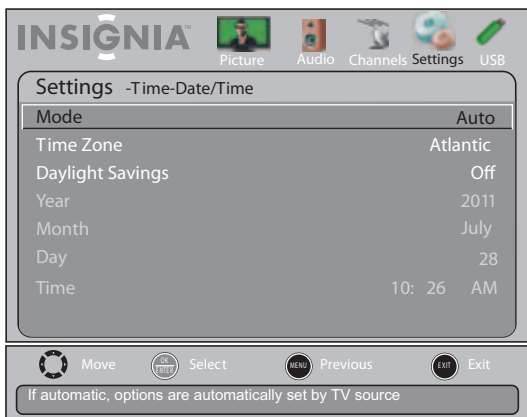**2** Press ◄ or ► to highlight **Settings**, then press ▼ or **ENTER**. The *Settings* menu opens.

3 Press ▲ or ▼ to highlight **Input Labels**, then press **ENTER**. The *Settings-Input Labels* screen opens with the input source field highlighted.
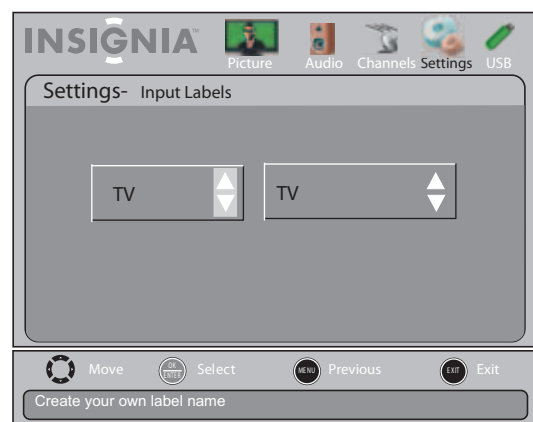
4 Press ▲ or ▼ to select the input source you want to label, then press ► to move to the custom label field.

5 Press ▲ or ▼ to select a character, then press ◄ or ► to move to the previous or next character position. Repeat this step to enter additional characters. You can enter as many as 10 characters.

6 When you have completed the label, press **ENTER**.

7 Press **MENU** to return to the previous menu or press **EXIT** to close the menu. The next time you press **INPUT**, your label will appear in the *INPUT SOURCE* list.

Restoring settings to the defaults

When you restore default settings, all the settings you have customized (except the password and parental rating) are reset.

To restore settings to the defaults:

1 Press **MENU**. The on-screen menu opens.
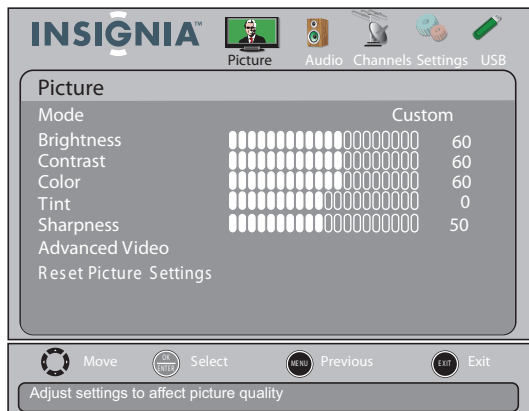
Adjust settings to affect picture quality

2 Press ◄ or ► to highlight **Settings**, then press ▼ or **ENTER**. The *Settings* menu opens.

Change power on options or reset TV to factory default
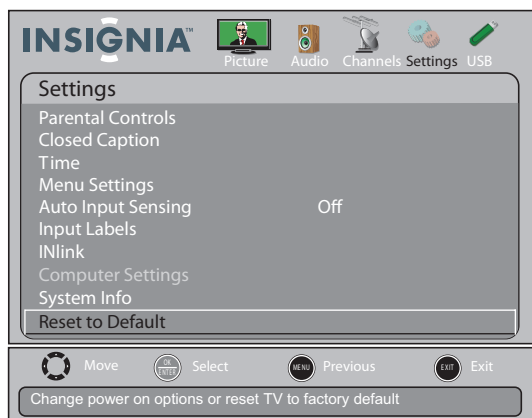
3 Press ▲ or ▼ to highlight **Reset to Default**, then press **ENTER**. A menu opens.

4 Press ▲ or ▼ to highlight **Power on in Vivid Mode**, then press **ENTER**.

5 Press ▲ or ▼ to highlight **On** (when you turn on your TV, it will be in **Vivid** picture mode) or **Off** (when you turn on your TV, it will be in the picture mode it was in before you reset to defaults), then press **ENTER**.

6 Press ▲ or ▼ to highlight **Reset to Default**, then press **ENTER**.

7 Press ◄ or ► to select **Yes** (to reset) or **No** (to not reset), then press **ENTER**.

8 Press **MENU** to return to the previous menu, or press **EXIT** to close the menu.

Using INlink

INlink lets you control HDMI CEC-compatible devices connected to the HDMI jacks on your TV using the remote control that came with your TV.

To use INlink, you must set the **INlink Control** option on the *SETTINGS-INlink* menu to **On**.

Notes
• HDMI cables must be used to connect HDMI CEC-compatible devices to your TV.
• The connected device's HDMI CEC feature must be turned on.
• If you connect an HDMI device that is not HDMI CEC-compatible, all the INlink Control features do not work.
• Depending on the connected HDMI device, the INlink Control feature may not work.

Turning INlink on or off

To turn INlink on or off:

1 Press **MENU**. The on-screen menu opens.
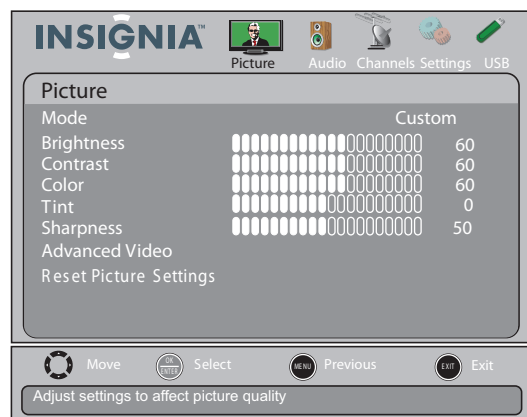
Adjust settings to affect picture quality

2 Press ◄ or ► to highlight **Settings**, then press ▼ or **ENTER**. The *Settings* menu opens.

Allow the TV to automatically control CEC devices connected to the TV via HDMI

3 Press ▲ or ▼ to highlight **INlink**, then press **ENTER**. The *Settings-INlink* menu opens.

INSIGNIA™
Picture   Audio   Channels   Settings   USB

Settings -INlink

INlink Control   Off
Device   Auto Power Off   Off
TV Auto Power On   Off
Audio Receiver   Off
INlink Device Lists
Connect
Root Menu

○ Move   OK/ENTER Select   MENU Previous   EXIT Exit
Allow the TV to automatically control CEC devices connected to the TV via HDMI
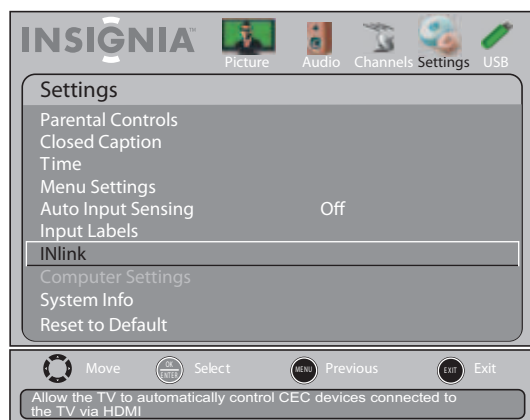
4 Press ▲ or ▼ to highlight **INlink Control**, then press **ENTER**. A menu opens.

5 Press ▲ or ▼ to highlight **On** (to turn on the **INlink Control** feature) or **Off** (to turn off the **INlink Control** feature).

6 Press **MENU** to return to the previous menu, or press **EXIT** to close the menu.

Turning Device Auto Power Off on or off

When INlink is turned on, **Device Auto Power Off** turns off HDMI CEC devices when you turn off your TV.

To turn Device Auto Power Off on or off:

1 Press **MENU**. The on-screen menu opens.

INSIGNIA™
Picture   Audio   Channels   Settings   USB

Picture

Mode   Custom
Brightness   ▮▮▮▮▮▮▮▮▮▮▮▮□□□□□□□□□□   60
Contrast   ▮▮▮▮▮▮▮▮▮▮▮▮□□□□□□□□□□   60
Color   ▮▮▮▮▮▮▮▮▮▮▮▮□□□□□□□□□□   60
Tint   ▮▮▮▮▮▮▮▮▮▮□□□□□□□□□□□□   0
Sharpness   ▮▮▮▮▮▮▮▮▮▮□□□□□□□□□□□□   50
Advanced Video
Reset Picture Settings

○ Move   OK/ENTER Select   MENU Previous   EXIT Exit
Adjust settings to affect picture quality

2 Press ◄ or ► to highlight **Settings**, then press ▼ or **ENTER**. The *Settings* menu opens.

INSIGNIA™
Picture   Audio   Channels   Settings   USB

Settings

Parental Controls
Closed Caption
Time
Menu Settings
Auto Input Sensing   Off
Input Labels
INlink
Computer Settings
System Info
Reset to Default

○ Move   OK/ENTER Select   MENU Previous   EXIT Exit
Allow the TV to automatically control CEC devices connected to the TV via HDMI

3 Press ▲ or ▼ to highlight **INlink**, then press **ENTER**. The *Settings-INlink* menu opens.

INSIGNIA™
Picture   Audio   Channels   Settings   USB

Settings -INlink

INlink Control   On
Device   Auto Power Off   Off
TV Auto Power On   Off
Audio Receiver   Off
INlink Device Lists
Connect
Root Menu

○ Move   OK/ENTER Select   MENU Previous   EXIT Exit
Automatically turn off HDMI CEC devices when the TV is turned off and INlink is set to On.

4 Press ▲ or ▼ to highlight **Device Auto Power Off**, then press **ENTER**. A menu opens.

5 Press ▲ or ▼ to select **On** (turns off the connected devices when you turn off your TV) or **Off** (does not turn off the connected devices when you turn off your TV).

6 Press **MENU** to return to the previous menu, or press **EXIT** to close the menu.

Turning TV Auto Power On on or off

When INlink is turned on and you turn on a DVD or Blu-ray player that is HDMI CEC-compatible, **TV Auto Power On** turns on your TV automatically.

To turn TV Auto Power On on or off:

1 Press **MENU**. The on-screen menu opens.

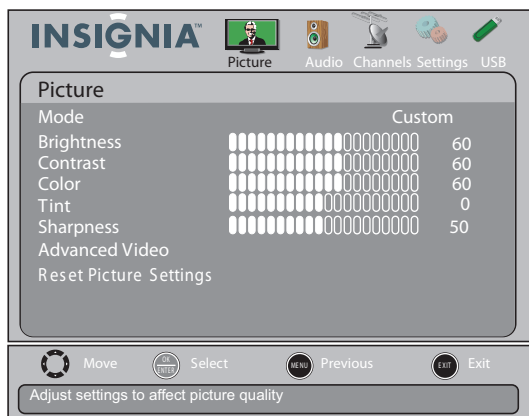2 Press ◄ or ► to highlight **Settings**, then press ▼ or **ENTER**. The *Settings* menu opens.
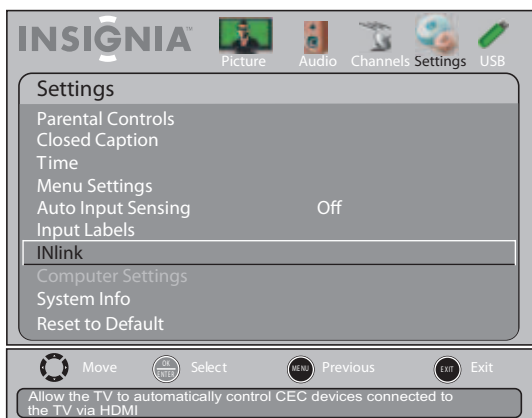
3 Press ▲ or ▼ to highlight **INlink**, then press **ENTER**. The *Settings-INlink* menu opens.

4 Press ▲ or ▼ to highlight **TV Auto Power On**, then press **ENTER**. A menu opens.

5 Press ▲ or ▼ to select **On** (turns on your TV when you turn on the connected device) or **Off** (does not turn on your TV when you turn on the connected device).

6 Press **MENU** to return to the previous menu, or press **EXIT** to close the menu.

Turning Audio Receiver on or off

When INlink is turned on and you have connected an audio receiver to your TV, turning on Audio Receiver lets you use your TV's remote control to control the volume on the audio receiver.

To turn Audio Receiver on or off:

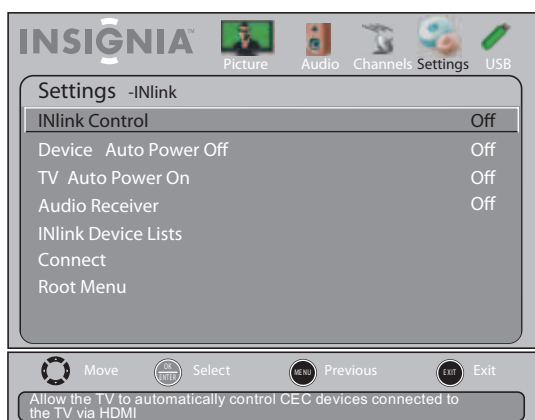1 Press **MENU**. The on-screen menu opens.
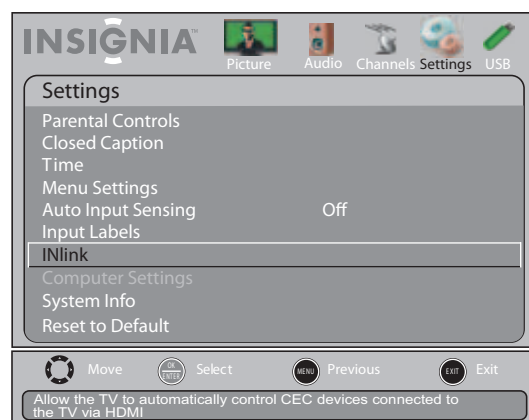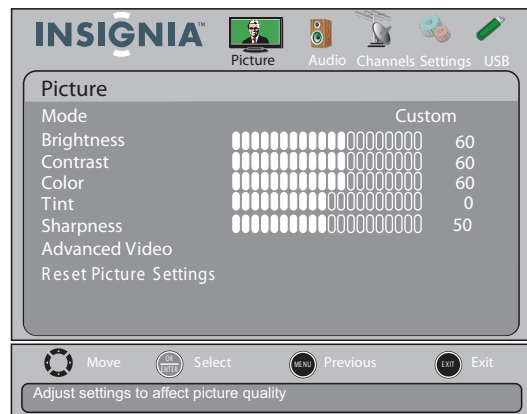

2 Press ◄ or ► to highlight **Settings**, then press ▼ or **ENTER**. The *Settings* menu opens.

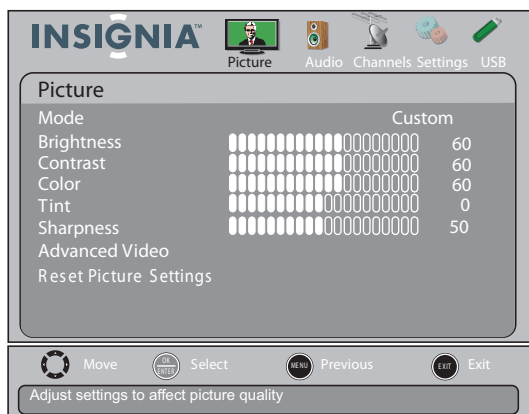**3** Press ▲ or ▼ to highlight **INlink**, then press **ENTER**. The *Settings-INlink* menu opens.

```
INSIGNIA
                    Picture  Audio  Channels Settings  USB

    Settings  -INlink

    INlink Control                          On
    Device  Auto Power Off                  On
    TV  Auto Power On                       On
    Audio Receiver                          On

    INlink Device Lists
    Connect
    Root Menu


        Move      Select      Previous      Exit
    Receiver's volume can be controlled by TV's remote control
```
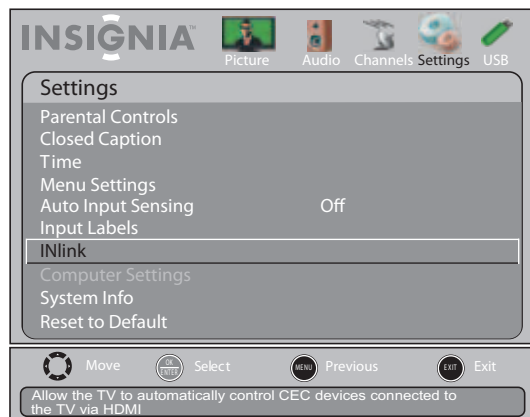
4 Press ▲ or ▼ to highlight **Audio Receiver**, then press **ENTER**. A menu opens.

5 Press ▲ or ▼ to select **On** (your TV's remote control controls the connected audio receiver's volume) or **Off** (your TV's remote control does not control the connected audio receiver's volume).

6 Press **MENU** to return to the previous menu, or press **EXIT** to close the menu.

Displaying a list of INlink-compatible (HDMI CEC) devices

You can display a list of HDMI CEC devices that are connected to your TV.

To display a list of INlink-compatible (HDMI CEC) devices:

1 Press **MENU**. The on-screen menu opens.

```
INSIGNIA
                    Picture  Audio  Channels Settings  USB

    Picture

    Mode                              Custom
    Brightness        ████████████░░░░░░░░    60
    Contrast          ████████████░░░░░░░░    60
    Color             ████████████░░░░░░░░    60
    Tint              ██████████░░░░░░░░░░     0
    Sharpness         ███████████░░░░░░░░░    50
    Advanced Video
    Reset Picture Settings


        Move      Select      Previous      Exit
    Adjust settings to affect picture quality
```

2 Press ◄ or ► to highlight **Settings**, then press ▼ or **ENTER**. The *Settings* menu opens.

```
INSIGNIA
                    Picture  Audio  Channels Settings  USB

    Settings

    Parental Controls
    Closed Caption
    Time
    Menu Settings
    Auto Input Sensing              Off
    Input Labels
    INlink
    Computer Settings
    System Info
    Reset to Default


        Move      Select      Previous      Exit
    Allow the TV to automatically control CEC devices connected to
    the TV via HDMI
```

3 Press ▲ or ▼ to highlight **INlink**, then press **ENTER**. The *Settings-INlink* menu opens.

```
INSIGNIA
                    Picture  Audio  Channels Settings  USB

    Settings  -INlink

    INlink Control                          On
    Device  Auto Power Off                  On
    TV  Auto Power On                       On
    Audio Receiver                          On

    INlink Device Lists
    Connect
    Root Menu


        Move      Select      Previous      Exit
    Go to device list to register new devices or remove devices from
    the list
```

4 Press ▲ or ▼ to highlight **INlink Device Lists**, then press **ENTER**. A list of the HDMI CEC-compatible devices you have connected appears.

5 Press **MENU** to return to the previous menu, or press **EXIT** to close the menu.

Notes

> HDMI cables must be used to connect HDMI CEC-compatible devices to your TV.
>
> The connected device's HDMI CEC feature must be turned on.
>
> If you connect an HDMI device that is not HDMI CEC-compatible, the **INlink Control** option does not work.

Waking INlink-compatible (HDMI CEC) devices

When a connected INlink-compatible device is in standby mode, use the **Connect** option to wake (turn on) the device.

To wake INlink-compatible devices:

1 Press **MENU**. The on-screen menu opens.
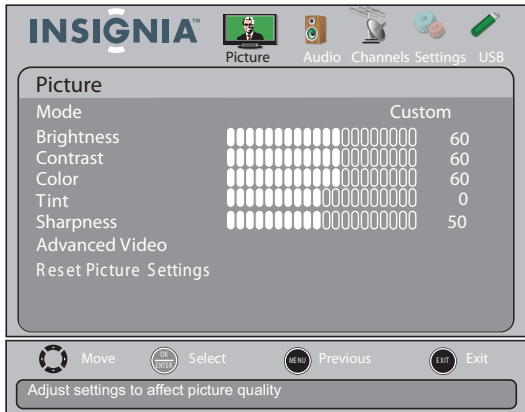
2 Press ◄ or ► to highlight **Settings**, then press ▼ or **ENTER**. The *Settings* menu opens.
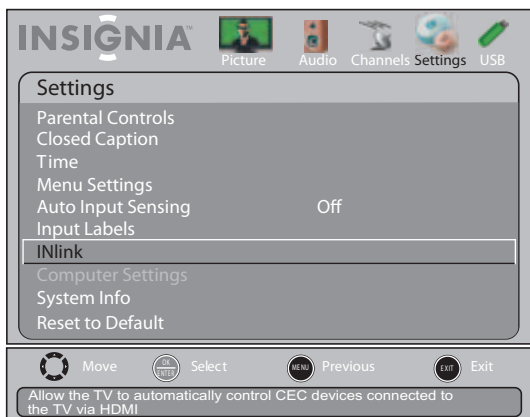
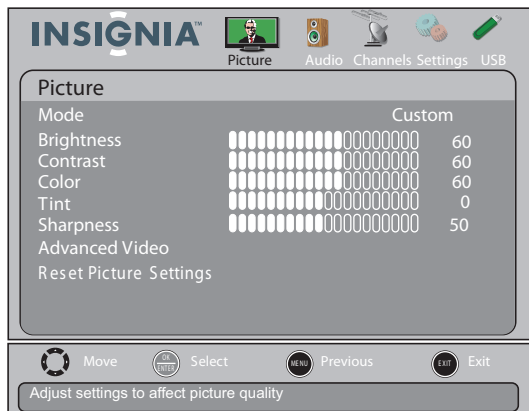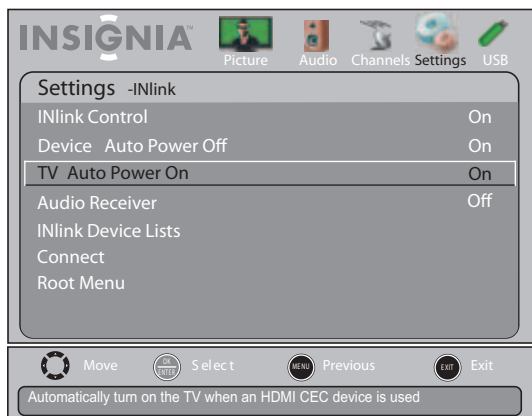3 Press ▲ or ▼ to highlight **INlink**, then press **ENTER**. The *Settings-INlink* menu opens.
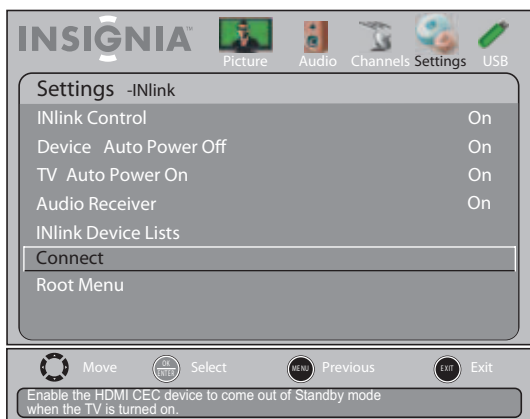
4 Press ▲ or ▼ to highlight **Connect**, then press **ENTER**. The connected INlink-compatible device in standby mode turns on.

5 Press **MENU** to return to the previous menu, or press **EXIT** to close the menu.

Opening an INlink-compatible device's root menu

You can open an INlink-compatible device's root menu, then use your TV's remote control to control the device.

To open an INlink-compatible device's root menu:
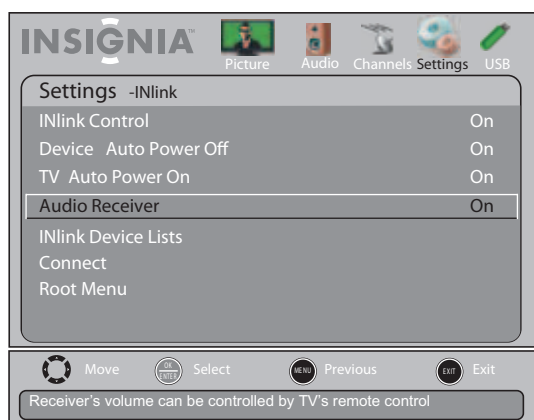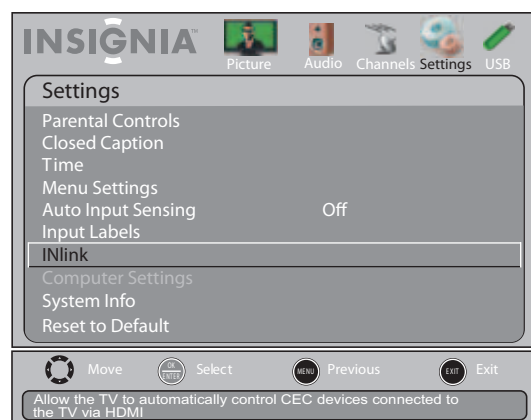
1 Press **MENU**. The on-screen menu opens.
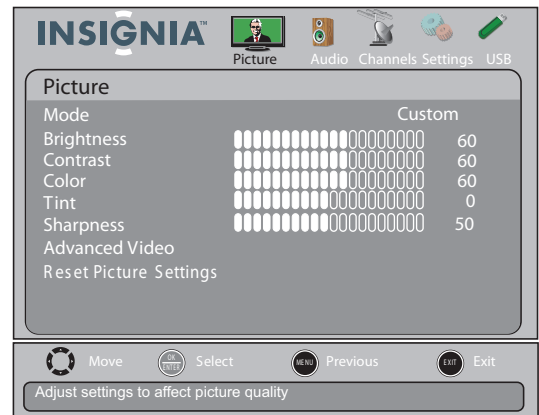
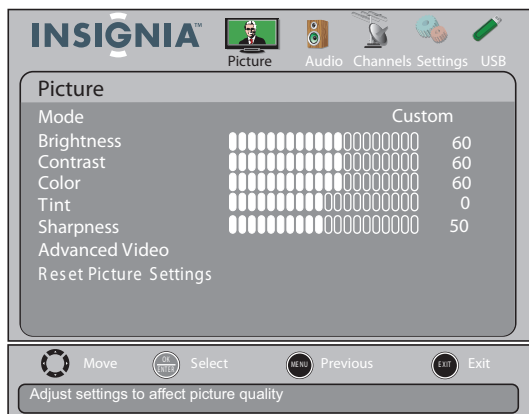2 Press ◄ or ► to highlight **Settings**, then press ▼ or **ENTER**. The *Settings* menu opens.
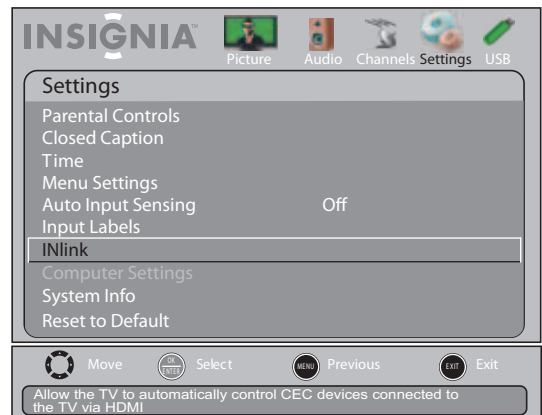
3 Press ▲ or ▼ to highlight **INlink**, then press **ENTER**. The *Settings-INlink* menu opens.
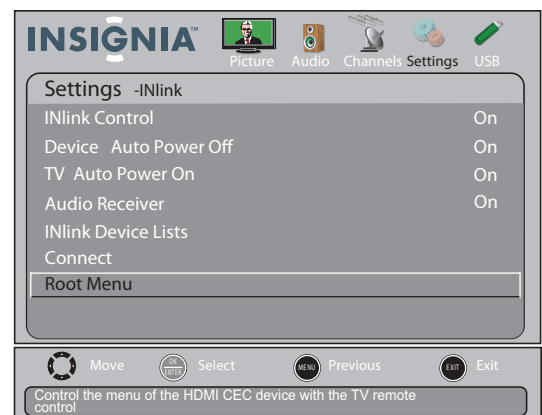
4 Press ▲ or ▼ to highlight **Root Menu**, then press **ENTER**. The device's root menu opens, and you can use the TV's remote control to control the device.

5 Press **MENU** to return to the previous menu, or press **EXIT** to close the menu.

Using a USB flash drive

You can connect a USB flash drive to your TV to view compatible JPEG pictures.

Notes
• Never remove the USB flash drive or turn off your TV while viewing JPEG pictures.
• The JPEG picture viewer only supports JPEG format images (with ".jpg" file extensions) and not all JPEG files are compatible with your TV.

Switching to USB mode

To switch to USB mode:

1 Make sure that you have connected the USB flash drive to the USB port on your TV.

2 Press **INPUT**. The *INPUT SOURCE* list opens.

3 Press ▲ or ▼ to highlight **USB**, then press **ENTER**.

Note
To exit USB mode, press **INPUT** to open the *INPUT SOURCE* list, then select another input source.

Browsing photos

To browse photos:

1 Switch to USB mode. See "Switching to USB mode" on page 55

2 Press **MENU**. The *USB* menu opens.

3 Press ▼ or **ENTER** to access the menu. **Photos** is highlighted.
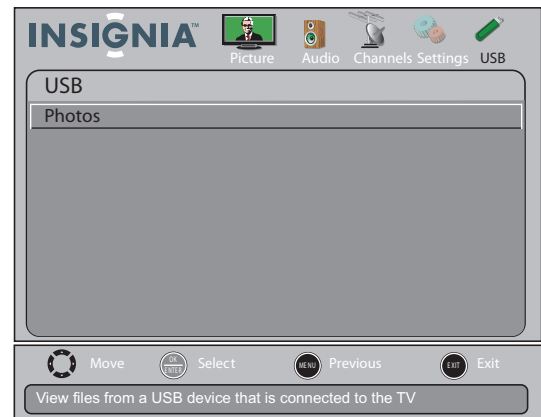
4 Press **ENTER**. The *USB-photos* menu opens

5 Press ▲ or ▼ to highlight **Browse Photos**, then press **ENTER**. The screen displays folder names and photo files stored on the USB flash drive in a thumbnail index with the first photo or folder highlighted. A control bar appears at the bottom of the screen.
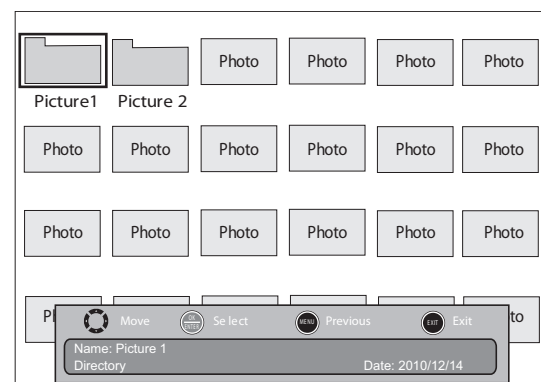

6 To navigate the thumbnail index screen, press:
- ▲ ▼ ◄ or ► to browse through the files and folders.
- **ENTER** to view a highlighted photo full-screen or open a highlighted folder.
- **MENU** to open the *USB* menu.

- **FAVORITE** to add or remove a photo from the favorite photo list. A heart appears on a photo that has been added to the favorite photo list.
- **EXIT** to return to the *USB* menu.

When a photo is displayed full-screen, a control bar appears at the bottom of the photo. The file name, picture resolution, size, and date are displayed on the bottom of the control bar. If you do not press a button within 10 seconds, the control bar closes. Press any button to open the control bar again.
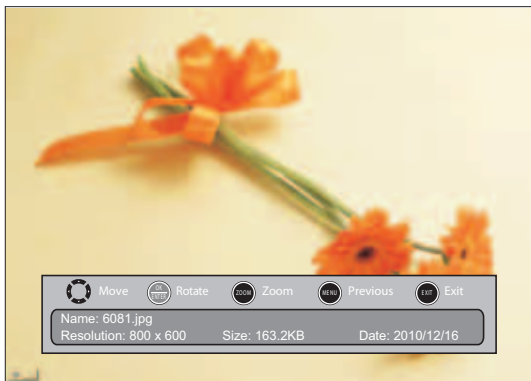
7   To navigate on the photo screen, press:

- ◀ or ▲ to go to the previous photo.
- ▶ or ▼ to go to the next photo.
- **ENTER** to rotate the photo clockwise.
- **ZOOM** one or more times to enlarge the image by 2× or 4× or to select **Fill** (the photo is displayed at it's actual size). You can press ▲ ▼ ◀ or ▶ to pan the photo.
- **EXIT** to return to the thumbnail index.
- **MENU** to return to the *USB* menu.

Viewing favorite photos

After you created your favorite photo list, you can browse among your favorite photos quickly.

To view favorite photos:

1   Switch to USB mode. See "Switching to USB mode" on page 55

2   Press **MENU**. The *USB* menu opens.

3   Press ▼ or **ENTER** to access the menu. **Photos** is highlighted.
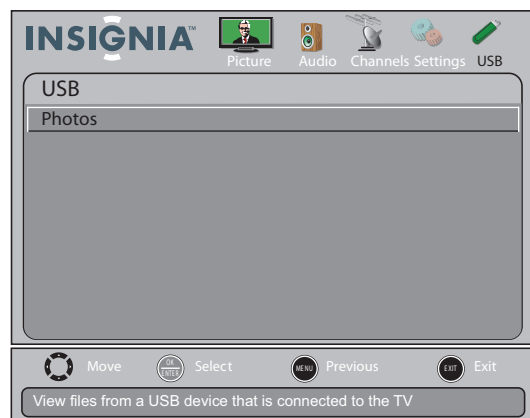
4   Press **ENTER**. The *USB-photos* menu opens.

5   Press ▲ or ▼ to highlight **Favorite Photos**, then press **ENTER**. A thumbnail index of your favorite photos opens with a control bar at the bottom of the screen.
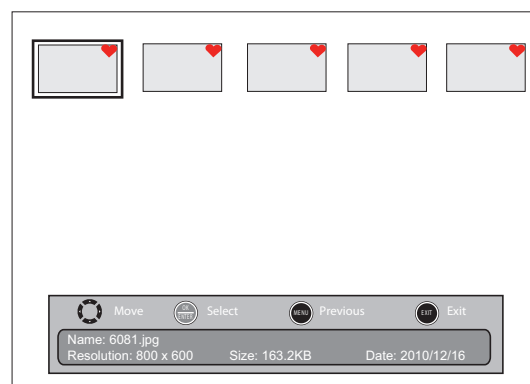
You select photos and navigate on the photo screen in the same way you do when you are browsing through photos. For more information, see "Browsing photos" on page 55.

Viewing photos in a slideshow

You can view your photos in a slideshow.

To view photos in a slideshow:

1 Switch to USB mode. See "Switching to USB mode" on page 55

2 Press **MENU**. The *USB* menu opens.

**3** Press ▼ or **ENTER** to access the menu. **Photos** is highlighted.

4 Press **ENTER**. The *USB-photos* menu opens.

5 If you want to view all the photos on the USB flash drive, press ▲ or ▼ to highlight **Browse Photos**, press **ENTER**, then press **MENU** to return to the *USB-Photos* menu.

OR

If you want to view your favorite photos only, press ▲ or ▼ to highlight **Favorite Photos**, press **ENTER**, then press **MENU** to return to the *USB-Photos* menu.

6 Press ▲ or ▼ to highlight **View Slideshow**, then press **ENTER**. A slideshow starts with the first photo in the current folder.

When a photo is displayed full-screen, a control bar appears at the bottom of the photo. The file name, picture resolution, size, and date are displayed on the bottom of the control bar. If you do not press a button within 10 seconds, the control bar closes. Press any button to open the control bar again.
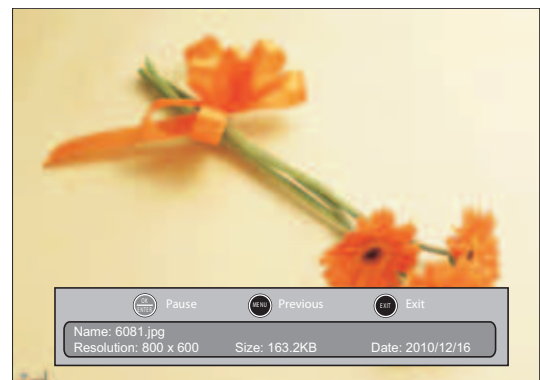
7 To control in the slideshow, press:

- **ENTER** to pause or start the slideshow.
- **EXIT** to exit the slideshow and return to thumbnail index.
- **MENU** to go to the *USB* menu.

Customizing slideshow settings

You can customize the slideshow settings, including **Repeat**, **Shuffle**, **Speed**, and **Transition**.

To customize slideshow settings:

1 Switch to USB mode. See "Switching to USB mode" on page 55

2 Press **MENU**. The *USB* menu opens.

3 Press ▼ or **ENTER** to access the menu. **Photos** is highlighted.
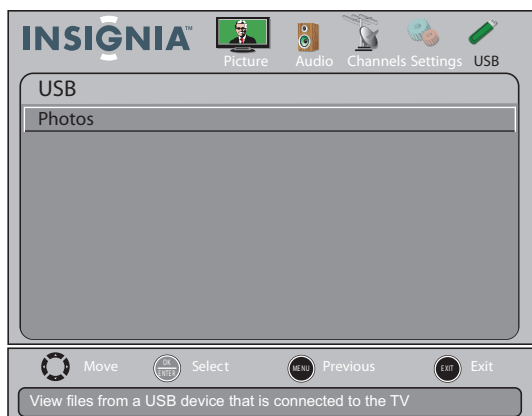

4 Press **ENTER**. The *USB-photos* menu opens.

5 Press ▲ or ▼ to highlight **Settings**, then press **ENTER**. The *USB-Photo-Settings* menu opens.

6 Press ▲ or ▼ to highlight an option, then press **ENTER**. You can select:
   - **Repeat**—Repeats the slideshow when it reaches the end. You can select **On** or **Off**.
   - **Shuffle**—Displays the slideshow photos in random order. You can select **On** or **Off**.
   - **Speed**—Sets the amount of time a photo is displayed before the slideshow moves to the next photo. You can select **4 Sec**, **6 Sec**, or **8 Sec**.
   - **Transition**—Selects the way photos transition when moving to the next file in the slideshow. You can select:
   - **None**—No transition effect.
      - **Fade to Black**—Fades the screen to black between photos.
      - **Vertical Wipe**—Wipes the screen from top to bottom between photos.
      - **Horizontal Wipe**—Wipes the screen from left to right between photos.
      - **Random**—Randomly selects a transition effect.

7 Press **EXIT** to close the menu.

Maintaining

- Do not use your TV in areas that are too hot or too cold, because the cabinet may warp or the screen may malfunction. Your TV works best in temperatures that are comfortable to you.
- Storage temperatures are 32° to 122°F (0° to 50°C).
- Working temperatures are 41° to 104°F (5° to 40°C).
- Do not place your TV in direct sunlight or near a heat source.

Cleaning the TV cabinet

Clean the cabinet with a soft, lint-free cloth. If the cabinet is especially dirty, moisten a soft, lint-free cloth in a weak detergent solution, squeeze the excess moisture from the cloth, then wipe the screen or cabinet with the cloth. Use a clean cloth to dry the screen or cabinet.

Cleaning the TV screen

Clean the screen with a soft, lint-free cloth.

Troubleshooting

Warning
Do not try to repair your TV yourself. Contact authorized service personnel.

Video and audio

Problem	Solution
Picture does not fill the screen. There are black bars around the picture.	• Change the aspect ratio. An increasing amount of digital TV and movies are presented in wide screen (16:9). See "Adjusting the TV picture" on page 32.
No picture (screen is not lit) and no sound.	• Press ⏻ on the TV or the remote control. • Make sure that the **Audio Only** option is set to **Off**. See "Playing TV audio only" on page 34. • Make sure that the video cables are connected securely to your TV. • Adjust the contrast and brightness. See "Adjusting the TV picture" on page 32. • Make sure that the power cord is plugged in. • Make sure that the correct video input source is selected. See "Selecting the video input source" on page 29. • Try another channel. The station may be experiencing problems. • Make sure that the incoming signal is compatible. • Make sure that the antenna or cable TV is connected correctly and securely. See "Connecting a cable or satellite box" on page 13 or "Connecting an antenna or cable TV (no box)" on page 17. • Check the closed caption settings. Some TEXT modes can block the screen.

Problem	Solution
Dark, poor, or no picture (screen is lit), but sound is good.	• Try another channel. The station may be experiencing problems. • Make sure that the antenna or cable TV is connected correctly and securely. See "Connecting a cable or satellite box" on page 13 or "Connecting an antenna or cable TV (no box)" on page 17. • Adjust the brightness. See "Adjusting the TV picture" on page 32. • Make sure that the correct picture mode is selected. See "Adjusting the TV picture" on page 32. • If you are using an antenna, the digital channel signal may be low. To check the digital channel signal strength, see "Checking the digital signal strength" on page 38. • If you are using an antenna and the signal strength is low, adjust the antenna or use a highly directional outdoor antenna or set-top antenna with a built-in amplifier. • Make sure that the video cables are connected securely to your TV. • The video cable(s) you are using may be bad. Try a new set. • Try another channel. The station may be experiencing problems.
No color, dark picture, or color is not correct.	• Try another channel. The station may be experiencing problems. • Adjust the color settings. See "Adjusting the TV picture" on page 32. • Make sure that the video cables are connected correctly and securely to your TV. • Make sure that the antenna or cable TV is connected correctly and securely. See "Connecting a cable or satellite box" on page 13 or "Connecting an antenna or cable TV (no box)" on page 17. • If you are using an antenna, the digital channel signal may be low. To check the digital channel signal strength, see "Checking the digital signal strength" on page 38. • If you are using an antenna and the signal strength is low, adjust the antenna or use a highly directional outdoor antenna or set-top antenna with a built-in amplifier.
Only snow (noise) appears on the screen.	• Try another channel. The station may be experiencing problems. • Make sure that the antenna or cable TV is connected correctly and securely. See "Connecting a cable or satellite box" on page 13 or "Connecting an antenna or cable TV (no box)" on page 17. • If you are using an antenna, the digital channel signal may be low. To check the digital channel signal strength, see "Checking the digital signal strength" on page 38. • If you are using an antenna and the signal strength is low, adjust the antenna or use a highly directional outdoor antenna or set-top antenna with a built-in amplifier.

Problem	Solution
Dotted lines or stripes appear on the screen.	• Make sure that the antenna or cable TV is connected correctly and securely. See "Connecting a cable or satellite box" on page 13 or "Connecting an antenna or cable TV (no box)" on page 17. • If you are using an antenna, the digital channel signal may be low. To check the digital channel signal strength, see "Checking the digital signal strength" on page 38. • If you are using an antenna and the signal strength is low, adjust the antenna or use a highly directional outdoor antenna or set-top antenna with a built-in amplifier. • Make sure that the video cables are connected securely to your TV. • The video cable(s) you are using may be bad. Try a new set. • Other devices (for example, a surround sound receiver, external speakers, fans, or hair dryers) may be interfering with your TV. Try turning off one device at a time to determine which device is causing interference. Once you have determined which device is causing interference, move it further from the TV to eliminate the interference.
Double images.	• Use a highly directional outdoor antenna, cable TV, or satellite TV.
The picture has a few bright or dark spots.	• A few bright or dark spots on an LCD screen is normal. It does not affect the operation of your TV.
Good picture, but no sound.	• Increase the volume. • Make sure that the sound is not muted. • Disconnect the headphones. • Make sure that the correct audio mode is selected. • Make sure that the audio cables are connected correctly and securely to your TV. • Make sure that the antenna or cable TV is connected correctly and securely. See "Connecting a cable or satellite box" on page 13 or "Connecting an antenna or cable TV (no box)" on page 17. • If you are using an antenna, the digital channel signal may be low. To check the digital channel signal strength, see "Checking the digital signal strength" on page 38. • The audio cable(s) you are using may be bad. Try a new set.
Poor picture	• Make sure that the room is not too bright. Light reflecting off the screen can make the picture difficult to see. • If an S-VHS camera or a camcorder is connected while another connected device is turned on, the picture may be poor. Turn off one or more devices.
Good sound but poor color	• Adjust the contrast, color, and brightness settings. See "Adjusting the TV picture" on page 32.
Audio noise	• Other devices (for example, a surround sound receiver, external speakers, fans, or hair dryers) may be interfering with your TV. Try turning off one device at a time to determine which device is causing interference. Once you have determined which device is causing interference, move it further from the TV to eliminate the interference.

Problem	Solution
No output from one of the speakers	• Adjust the audio balance. See "Adjusting sound settings" on page 34. • Make sure that the audio cables are connected correctly and securely to your TV.
After images appear	• Do not display a still image, such as a logo, game, or computer image, for an extended period of time. This can cause a permanent after-image to be burned into the screen. This type of damage is not covered by your warranty.

Remote control

Problem	Solution
Remote control does not work.	• Make sure that the power cord is correctly connected to your TV and a power outlet. • Make sure that there are no obstructions between the remote control and the remote control sensor on the front of the TV. • Point the remote control directly at the remote control sensor on your TV. For the location of the remote control sensor, see "Front" on page 8. • The supplied batteries are wrapped tightly in clear plastic. Make sure that you have removed this plastic from the batteries. • Make sure that the batteries are installed correctly. See "Installing remote control batteries" on page 27. • Replace dead batteries with new batteries. See "Installing remote control batteries" on page 27.
Trouble programming your existing universal remote control.	• See instructions and a table of common codes in "Programming a different universal remote control" on page 63. • Codes are subject to change. For up-to-date codes, go to www.insigniaproducts.com/remotecodes • Replace dead batteries with new batteries. See "Installing remote control batteries" on page 27. • Refer to the User Guide that accompanied your universal remote control and contact the manufacturer if problems persist.

General

Problem	Solution
No power	• Make sure that the power cord is correctly connected to your TV and a power outlet. • Unplug the power cord, wait 60 seconds, then plug the cord back in and turn on your TV. • Other devices (for example, a surround sound receiver, external speakers, fans, or hair dryers) may be interfering with your TV. Try turning off one device at a time to determine which device is causing interference. Once you have determined which device is causing interference, move it further from the TV to eliminate the interference.
"No signal" error message is displayed	• Press **INPUT** and make sure that you have selected the correct input for the device or service you are trying to use. • If you are using a cable or satellite box, use the remote that came with that box to change channels. • Make sure that you have the correct input selected to view channels from the cable or satellite box.

Problem	Solution
After Auto Channel Search, there are no channels	• Reception can vary by channel depending on the broadcast power level of a given station. Contact your cable or satellite TV provider. • Make sure the antenna or cable/satellite TV is connected securely to your TV. • Try replacing the cable between the antenna/cable or cable/satellite box and your TV.
One or more channels do not display.	• Make sure that the channels are not blocked. See "Setting parental control levels" on page 42. • Make sure that the channels are not hidden. The channel may have been deleted from the channel list. You can tune to the channel by pressing the number buttons or you can add the channel back to the channel list. See "Hiding channels" on page 36. • If you are using a cable or satellite box, use the remote that came with that box to change channels. • Make sure that you have the correct input selected to view channels from the cable or satellite box. • If you are using an antenna, the digital channel signal may be low. To check the digital channel signal strength, see "Checking the digital signal strength" on page 38.
Password is lost.	• Enter **9999** to access parental controls, then set a new password. See "Setting or changing the password" on page 39.
Some settings cannot be accessed.	• If a setting is grayed, the setting is not available in the current video input mode.
TV cabinet creaks.	• When the TV is in use, the temperature rises naturally and may cause the cabinet to expand or contract which can cause a creaking noise. This is not a malfunction.
Control buttons do not work	• Make sure that the **Button Lock** option is set to **Off**. See "Locking control buttons" on page 40. • Unplug the power cord, wait a few seconds, then plug the cord back in and turn on your TV.
TV keeps turning off	• Make sure that the sleep timer is not turned on. See "Setting the sleep timer" on page 47.

Note: *If the problem is not solved by using these troubleshooting instructions, turn off your TV, then turn it on again.*

Specifications

Specifications are subject to change without notice.

Warranty

NS-15E720A12	NS-19E720A12	NS-22E730A12	NS-24E730A12
Parts: 2 years	**Parts:** 2 years	**Parts:** 2 years	**Parts:** 2 years
Labor: 2 years	**Labor:** 2 years	**Labor:** 2 years	**Labor:** 2 years

Dimensions and weight

	Without stand:	With stand:
NS-15E720A12	15.16 × 10.39 × 1.69 in. (385 × 255 × 43 mm) 3.31 lbs. (1.5 kg)	15.16 × 11.34 × 5.43 in. (385 × 288 × 138 mm) 3.75 lbs (1.7 kg)
NS-19E720A12	17.95 × 11.69 × 1.73 in. (456 × 297 × 44 mm) 5.95 lbs. (2.7 kg)	17.95 × 12.99 × 5.43 in. (456 × 330 × 138 mm) 6.39 lbs (2.9 kg)
NS-22E730A12	20.51 × 13.31 × 1.89 in. (521 × 338 × 48 mm) 7.5 lbs (3.4 kg)	20.51 × 14.72 × 6.3 in. (521 × 374 × 160 mm) 8.2 lbs (3.7 kg)
NS-24E730A12	22.95 × 15.04 × 1.77 in. (583 × 382 × 45 mm) 9.92 lbs (4.5 kg)	22.95 × 16.5 × 6.3 in. (583 × 419 × 160 mm) 10.58 lbs (4.8 kg)

Screen

Screen size measured diagonally	**NS-15E720A12**: 15.6 in. **NS-19E720A12:** 18.5 in. **NS-22E730A12:** 21.5 in. **NS-24E730A12:** 23.6 in.
Display type	LCD (all models)
Panel 60 Hz vs.120 Hz	60Hz (all models)
Display resolution	**NS-15E720A12**: 720p **NS-19E720A12:** 720p **NS-22E730A12:** 1080p **NS-24E730A12:** 1080p
Panel resolution	**NS-15E720A12**: 1366 (H) × 768 (V) **NS-19E720A12:** 1366 (H) × 768 (V) **NS-22E730A12:** 1920 (H) × 1080 (V) **NS-24E730A12:** 1920 (H) × 1080 (V)
Aspect ratio	16:9 (all models)
Contrast ratio (typical)–panel	**NS-15E720A12**: 600:1 **NS-19E720A12:** 1000:1 **NS-22E730A12:** 1000:1 **NS-24E730A12:** 1000:1
Dynamic contrast ratio– list value	5000:1 (all models)
Brightness (center typical) cd/m2	**NS-15E720A12**: 220 **NS-19E720A12:** 250 **NS-22E730A12:** 250 **NS-24E730A12:** 280
Comb filter	3d y/c digital (all models)
Response time	**NS-15E720A12**: 8 ms **NS-19E720A12:** 5 ms **NS-22E730A12:** 5 ms **NS-24E730A12:** 5 ms

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Horizontal viewing angle	**NS-15E720A12:** 80 **NS-19E720A12:** 170 **NS-22E730A12:** 170 **NS-24E730A12:** 170
Vertical viewing angle	**NS-15E720A12:** 45 **NS-19E720A12:** 160 **NS-22E730A12:** 160 **NS-24E730A12:** 160

Display resolutions/VGA scan rates

HDMI 1.4 Suggested Resolutions (all models)	1080p, 1080i, 720p, 480p, 480i
HDMI 1.3 Suggested Resolutions (all models)	1080p, 1080i, 720p, 480p, 480i
Component video Suggested Resolutions (all models)	1080i, 720p, 480p, 480i
PC/VGA Suggested scan rates:	**NS-15E720A12:** 640 × 480/60Hz, 800 × 600/60Hz, 1024 × 768/60Hz, 1366 × 768/60Hz **NS-19E720A12:** 640 × 480/60Hz, 800 × 600/60Hz, 1024 × 768/60Hz, 1366 × 768/60Hz **NS-22E730A12:** 640 × 480/60Hz, 800 × 600/60Hz, 1024 × 768/60Hz, 1280 × 1024/60Hz, 1920 × 1080/60Hz **NS-24E730A12:** 640 × 480/60Hz, 800 × 600/60Hz, 1024 × 768/60Hz, 1280 × 1024/60Hz, 1920 × 1080/60Hz

Tuner

Analog	NTSC (all models)
Digital	ATSC, 8-VSB, Clear-QAM (all models)

Inputs

HDMI/DVI	**NS-15E720A12:** 2 (side) **NS-19E720A12:** 2 (side) **NS-22E730A12:** 1 (side) 1 (back) **NS-24E730A12:** 1 (side) 1 (back) (HDMI 2 with ARC for all models)
Component video	1 (back) (all models)
Composite video	**NS-15E720A12:** 1 (back) **NS-19E720A12:** 1 (back) **NS-22E730A12:** 1 (side) **NS-24E730A12:** 1 (side)
Shared audio (component and composite)	**NS-15E720A12:** yes **NS-19E720A12:** yes **NS-22E730A12:** no **NS-24E730A12:** no
S-Video	No (all models)
PC/VGA	**NS-15E720A12:** 1 (side) **NS-19E720A12:** 1 (side) **NS-22E730A12:** 1 (back) **NS-24E730A12:** 1 (back)
3.5mm PC audio input	**NS-15E720A12:** 1 (side) **NS-19E720A12:** 1 (side) **NS-22E730A12:** 1 (back) **NS-24E730A12:** 1 (back)

USB	1 (side) (all models) Support JPEG and firmware upgrade
Headphone	1 (side) (all models)

Outputs

Video	No (all models)
Analog audio	1 (side) all models
Digital audio	**NS-15E720A12:** no **NS-19E720A12:** no **NS-22E730A12:** 1 (back) **NS-24E730A12:** 1 (back)
WiFi	No (all models)
Ethernet	No (all models)

Audio

Number of speakers	2
Watts per channel	3W
Simulated Surround Sound	Yes - SRS TruSurround HD (all models)
Sound Leveler	Yes (all models)

Power

Power consumption	**NS-15E720A12:** On: 20 W Standby: <1 W **NS-19E720A12:** On: 26 W Standby: <1 W **NS-22E730A12:** On: 34 W Standby: <1 W **NS-24E730A12:** On: 33 W Standby: <1W
Power input	120V/60Hz (all models)

Miscellaneous

OSD languages	English, French, Spanish (all models)
INlink	Yes (all models)
ENERGY STAR qualified	Yes (all models)
Internet connectable	No (all models)
TV base screws	M4 type 14 mm length (4) (all models)
V-Chip (version 2.0)	Yes (all models)
Sleep timer	Yes (all models)
Channel labeling	Yes (all models)
VESA mount (mm) (horizontal × vertical)	100 × 100 (all models)

Note

The length of the wall-mount screws vary depending on the wall-mount bracket you purchased. See the instructions that came with the wall-mount bracket for screw lengths.

Programming universal remote controls

Programming a different universal remote control

You can operate your Insignia TV with a new or existing universal remote control.

To program a different universal remote control:

1 See the table below for common codes. If you have problems programming your remote or need a different remote control code, visit www.insigniaproducts.com/remotecodes for the latest remote control code information.

2 Follow your universal remote control's instructions to enter the TV code you found in Step 1.

Tips
• If your universal remote control has a code search feature, run a code search to identify a code that matches your TV. See your universal remote control's instructions for details. • If your universal remote control has a "Learn" feature, you can manually program it using the Insignia TV remote to "teach" the commands one at a time. See your universal remote control's instructions for details.

For additional help and information:
• Visit: http://www.insigniaproducts.com/remotecodes
• Call technical support for the universal remote control or cable/satellite company of the remote/set-top box you are trying to program.
• Call the Insignia Customer Care Center 1-877-467-4289.

Common universal remote control codes

The following is a list of the most common remote control codes. Codes for other remote controls are available online at: http://www.insigniaproducts.com/remotecodes or check with your cable or satellite TV provide for the remote control code.

Insignia TV codes for universal remote controls (for all Insignia TVs manufactured after Jan. 1, 2007)

Universal remote control makes and models	
One for All	**0054**
Phillips	**0198, 0490**
RCA	**135**
Sony	**068, 069, 078, 096, 100, 164, 168, 229, 026**

Set-top box makes and models	
Cablevision	**068, 069, 078, 096, 100, 164, 168, 229, 026**
Charter	**2002, 1204, 1423, 1517, 0171, 1963, 0463, 1463, 0842, 1326, 167, 415, 424, 450, 456, 461, 507, 523, 567, 577, 586**
Comcast	**10171, 11204, 11326, 11463, 11517, 11641, 11780, 11785, 11892, 11963, 12002**
Cox	**1326, 1463**
DirectTV	**10171, 11204, 11326, 11517, 11564, 11641, 11963, 12002**
Dish Network	**720**
Time Warner	**400, 450, 461, 456, 10463, 1463, 0463**
TiVo	**0091**
Verizon	**0198, 0490**

Tips
• The brand name is often visible on the front of the universal remote control, and the model number is often visible on the back. • If your universal remote control isn't listed on the chart, refer to your universal remote control's instructions and try codes for the brands Orion, Emerson, Memorex, Sansui, Sylvania, or Zenith. You may need to try several codes before finding a match.

Legal notices

FCC Part 15

This device complies with Part 15 of the FCC Rules. Operation of this product is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

This equipment has been tested and found to comply within 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.

FCC warning

Changes or modifications not expressly approved by the party responsible for compliance with the FCC Rules could void the user's authority to operate this equipment.

Cables

Connections to this device must be made with shielded cables with metallic RF/EMI connector hoods to maintain compliance with FCC Rules and Regulations.

Canada ICES-003 statement

This Class B digital apparatus complies with Canadian ICES-003.

Standard Television Receiving Apparatus — Appareil de réception télévision ordinaire, Canada BETS-7 / NTMR-7

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

HDMI

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

Energy Star

To meet Energy Star requirements, keep TV settings at the factory default settings.

SRS TruSurround HD

is a trademark of SRS Labs, Inc. TruSurround HD technology is incorporated under license from SRS Labs, Inc.

INSIGNIA™

Two-year limited warranty - Insignia Televisions

US and Canada Markets

Definitions:

Insignia Products ("Insignia") warrants to you, the original purchaser of this new Insignia-branded television ("Product"), that the Product shall be free of defects in the original manufacturer of the material or workmanship for a period of two (2) years from the date of your purchase of the Product ("Warranty Period"). For this warranty to apply, your Product must be purchased in the United States or Canada from a Best Buy or Future Shop authorized dealer of Insignia brand products only that are packaged with this warranty statement.

How long does the coverage last?

The Warranty Period lasts for 2 years (730 days) from the date you purchased the Product. Your purchase date is printed on the receipt you received with the Product.

What does this warranty cover?

During the Warranty Period, if the original manufacture of the material or workmanship of the Product is determined to be defective by an authorized Insignia repair center or store personnel, Insignia will (at its sole option): (1) repair the Product with new or rebuilt parts; or (2) replace the Product at no charge with new or rebuilt comparable products or parts. Products and parts replaced under this warranty become the property of Insignia and are not returned to you. If service of Products or parts are required after the Warranty Period expires, you must pay all labor and parts charges. This warranty lasts as long as you own your Insignia Product during the Warranty Period. Warranty coverage terminates if you sell or otherwise transfer the Product.

How to obtain warranty service?

If you purchased the Product at a Best Buy or Future Shop retail store location and your television Product has a screen size of less than 37 inches, please take your original receipt and the Product to any Best Buy or Future Shop store. Make sure that you place the Product in its original packaging or packaging that provides the same amount of protection as the original packaging. If you purchased the Product from a Best Buy or Future Shop online web site, mail your original receipt and the Product to the address listed on the web site. Make sure that you put the Product in its original packaging or packaging that provides the same amount of protection as the original packaging.

To obtain in-home warranty service for a television with a screen 37 inches or larger, in the United States call 1-888-BESTBUY, Canada call 1-866-BESTBUY for Future Shop call 1-800-663-2275. Call agents will diagnose and correct the issue over the phone or will have an Insignia-approved repair technician dispatched to your home.

Where is the warranty valid?

This warranty is valid only to the original purchaser of the product in the United States and Canada at Best Buy or Future Shop branded retail stores or websites.

What does the warranty not cover?

This warranty does not cover:

- Customer instruction/education
- Installation
- Set up adjustments
- Cosmetic damage
- Damage due to acts of God, such as power surges
- Accident(s)
- Misuse
- Abuse
- Negligence
- Commercial purposes/use, including but not limited to use in a place of business or in communal areas of a multiple dwelling condominium or apartment complex, or otherwise used in a place of other than a private home.
- Modification of any part of the Product, including the antenna
- Plasma display panel damaged by static (non-moving) images applied for lengthy periods (burn-in).

- Damage due to incorrect operation or maintenance
- Connection to an incorrect voltage or power supply
- Attempted repair by any person not authorized by Insignia to service the Product
- Products sold "as is" or "with all faults"
- Consumables, including but not limited to batteries (i.e. AA, AAA, C etc.)
- Products where the factory applied serial number has been altered or removed
- Loss or Theft of this product or any part of the product
- Failures or Damage caused by any contact including but not limited to liquids, gels or pastes.

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Contact Insignia:

For customer service please call 1-877-467-4289

www.insigniaproducts.com

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ENERGY STAR

ENGLISH
10-1338