

# User Guide



51"/59" Plasma HDTV 600Hz 1080p  
**NS-51P680A12/NS-59P680A12**



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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



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. 
- 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 which 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 TV screen

Your TV's screen is made of glass. Do not drop your TV or hit, jolt, or press hard against the plasma display panel. If the screen breaks, be careful of broken glass.

### 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.

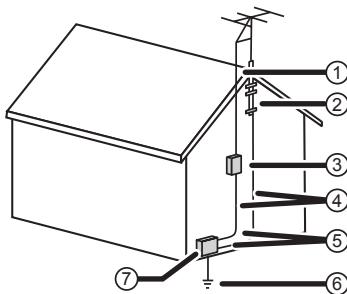
## Cautions

### 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 plasma display 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.

### Altitude

The plasma display panel can only operate normally at heights under 6,500 feet.

### Heat on the top of the plasma TV

The top side of the product may be hot after long periods of use as heat dissipates from the panel through the vent hole in the upper part of the product. This is normal and does not indicate any defect or operation failure of the product. However, children should be prevented from touching the upper part of the product.

## Introduction

Congratulations on your purchase of a high-quality Insignia product. Your NS-51P680A12 or NS-59P680A12 represents the state of the art in plasma TV design and is designed for reliable and trouble-free performance.

## Installing the stand or wall-mount bracket

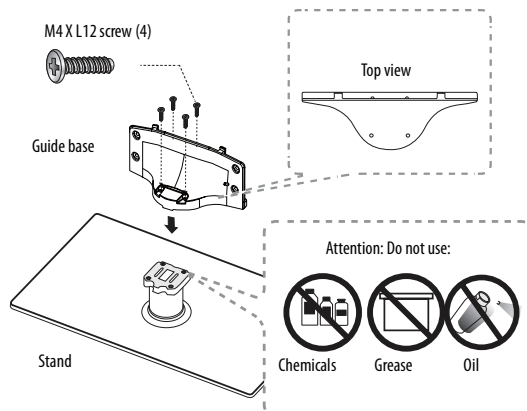
### Installing the stand

#### To install the stand:

##### Warnings

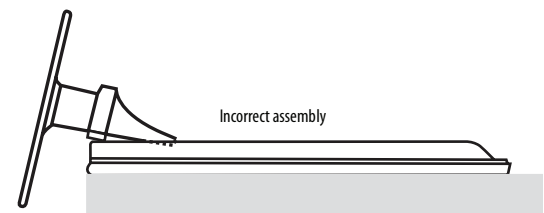
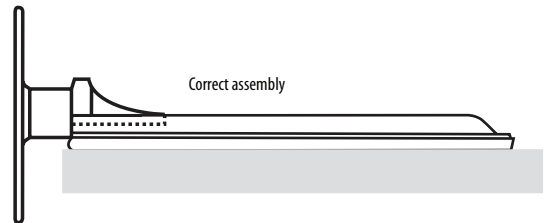
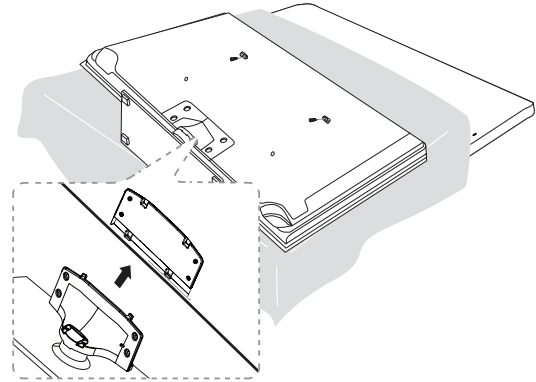
- Your TV screen is heavy. You should use two people to lift the screen and hold it in place.
- Make sure that you install the base securely before moving it. The stand could fall and cause serious injury.
- Always store your TV upright.

- 1 Slide the guide base into the stand, then secure the guide base to the stand with the four M4 X L12 screws (included).

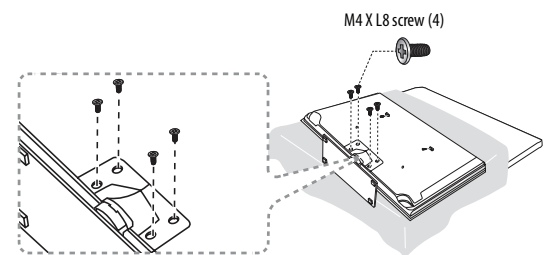


- 2 Carefully place your TV screen face-down on a cushioned, clean surface to protect the screen from damages and scratches.

- 3 Slide the guide base into the back of your TV.



- 4 Secure the TV to the stand and guide base with four M4 X L8 screws (included).



### Securing your TV to a wall or cabinet

You can secure your TV to a wall or cabinet with an anti-fall device (sold separately). To purchase an anti-fall device in the U.S., call 1-800-726-7864.

##### Warnings

- Pushing, pulling, or climbing on your TV can cause it to fall resulting in serious injury or damage to your TV.
- For added stability, secure your TV to the wall with an anti-fall device.
- If you do not think you can install an anti-fall device, contact a professional installer.

## Installing a wall-mount bracket

### Warning

This apparatus is intended to be supported by a UL Listed wall-mount bracket.

### To install a wall-mount bracket:

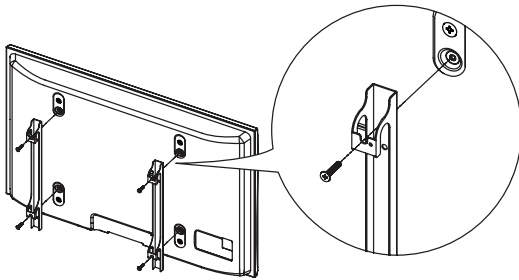
### Warning

These servicing instructions are for use by qualified service personnel only. To reduce the risk of hazards, do not perform any servicing other than that contained in the operating instructions unless you are qualified to do so.

- 1 If the stand is installed, remove the stand.
- 2 Attach the wall-mount bracket to the back of your TV using four M8 screws (not included).

### 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.



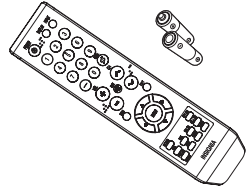




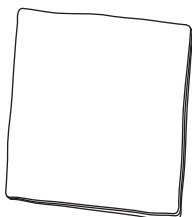
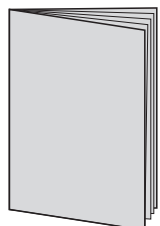
### Warnings

- Make sure that you use M8 screws. Screws with other dimensions may cause damage to the inside of your TV.
- For wall mounts that do not comply with the VESA standard screw specifications, the length of the required screws may differ. Do not use screws that do not comply with the VESA standard screw specifications.
- Do not exceed a 15° tilt when mounting your TV.

## TV components

### Accessories

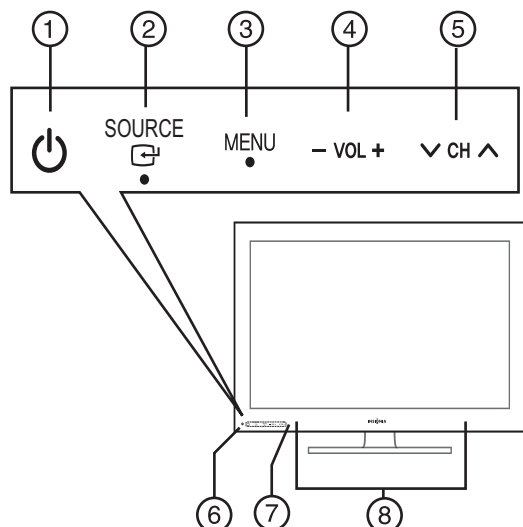
Make sure that the following accessories are provided in the packaging:

Accessories	
Remote control with two AAA batteries	
Power cord	
Ferrite core	
M4 X L12 screws (4)	
M4 X L8 screws (4)	
Cleaning cloth	
Important Information Document and Quick Setup Guide	

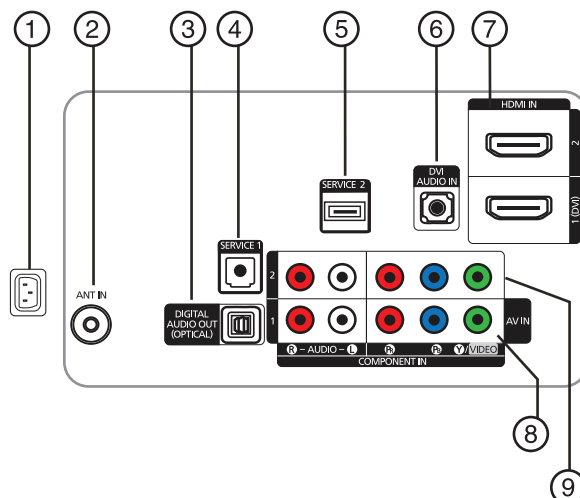
### Cleaning cloth

The cleaning cloth is for cleaning the TV screen only. Do not use the cleaning cloth to clean any other part of your TV.

## Front



## Back

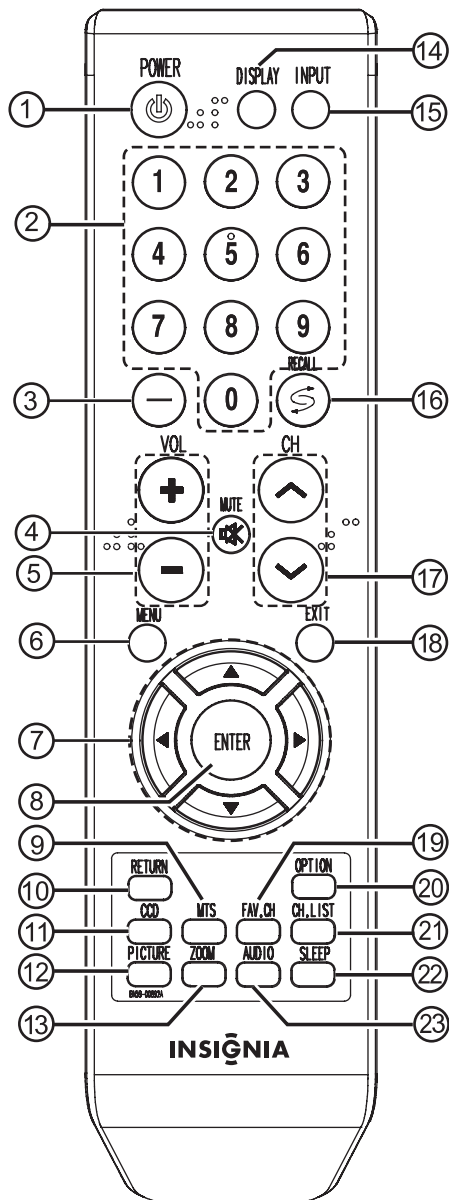


#	Item	Description
①	Power button	Press to turn your TV on or off (standby mode). When you turn off your TV, power still flows into it. To disconnect power, turn off the surge protector (if you are using one) or unplug the power cord.
②	SOURCE button	Press to select the video input source. For more information, see "Selecting the video input source" on page 22. In on-screen menus, this button functions like the <b>ENTER</b> button on the remote control.
③	MENU button	Press to open the on-screen menu.
④	VOL+/VOL- buttons	Press to increase or decrease the volume.
⑤	CH ^/CH v buttons	Press to tune to the next or previous channel in the channel list. For more information, see "Selecting a channel" on page 24.
⑥	Power indicator	Blinks, then turns off when you turn on your TV. Lights red when your TV is off (standby mode).
⑦	Remote control sensor	Receives signals from the remote control. Do not block.
⑧	Speakers	Outputs the sound from your TV.

#	Jack	Description
①	Power in	Connect the power cord to this jack.
②	ANT IN	Connect the cable for an outdoor antenna or cable TV to this jack. For more information, see "Connecting an antenna or cable TV (no box)" on page 14 or "Connecting a cable or satellite box" on page 11.
③	DIGITAL AUDIO OUT (OPTICAL)	Connect a digital audio amplifier to this jack. For more information, see "Connecting a digital audio amplifier" on page 19.
④	SERVICE1	Used for service only.
⑤	SERVICE2	Used for service only.
⑥	DVI AUDIO IN	Connect the audio for a DVI device to this jack. For more information, see "Connecting a DVI device" on page 18.
⑦	HDMI IN 1 (DVI)/HDMI IN 2	Connect an HDMI device to either HDMI jack. For more information, see "Connecting an HDMI device" on page 17. Connect a DVI device to the HDMI IN 1 jack. For more information, see "Connecting a DVI device" on page 18.
⑧	COMPONENT IN 1 PR, PB, Y and R-AUDIO-L AV1 IN VIDEO and R-AUDIO-L	Connect a component video device to these jacks, or connect an analog video device to the <b>Y/VIDEO</b> jack and the audio jacks. For more information, see "Connecting a component video device" on page 18 or "Connecting a VCR" on page 16.
⑨	COMPONENT IN 2 PR, PB, Y and AUDIO L/R	Connect a component video device to these jacks. For more information, see "Connecting a component video device" on page 18.



## Remote control



#	Button	Description
⑧	ENTER	In the on-screen menu, press to confirm selections or changes.
⑨	MTS	Press to select the audio mode. You can select <b>Stereo</b> , <b>Mono</b> , or <b>SAP</b> (separate audio program).
⑩	RETURN	In the on-screen menu, press to return to the previous menu.
⑪	CCD	Press to turn closed captioning on or off. Not available in component video or HDMI mode.
⑫	PICTURE	Press to select the picture mode. For more information, see "Adjusting the TV picture" on page 24.
⑬	ZOOM	Press to select the picture size (aspect ratio). For more information, see "Adjusting the TV picture" on page 24.
⑭	DISPLAY	Press to display information. For more information, see "Displaying additional information" on page 24.
⑮	INPUT	Press to select the video input source. For more information, see "Selecting the video input source" on page 22.
⑯	RECALL	Press to tune to the previously viewed channel.
⑰	CH ^ /CH v	Press to tune to the next or previous channel in the channel list. For more information, see "Selecting a channel" on page 24.
⑱	EXIT	Press to close the on-screen menu.
⑲	FAV.CH	Press to select a favorite channel. For more information, see "Viewing a favorite channel" on page 33.
⑳	OPTION	Press to display the channel list sub-menu.
㉑	CH.LIST	Press to open the channel list. For more information, see "Automatically searching for channels" on page 29.
㉒	SLEEP	Press to set the sleep timer. For more information, see "Setting the sleep timer" on page 42.
㉓	AUDIO	Press to select the sound mode. For more information, see "Adjusting the sound" on page 28.

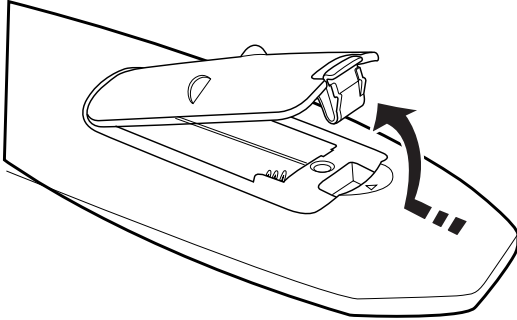
#	Button	Description
①	POWER	Press to turn your TV on or off (standby mode). When you turn off your TV, power still flows into it. To disconnect power, turn off the surge protector (if you are using one) or unplug the power cord.
②	Numbers	Press to change the channel. For more information, see "Selecting a channel" on page 24. Press to enter the parental control password.
③	—	Press to select a sub-channel. For more information, see "Selecting a channel" on page 24.
④	MUTE	Press to turn off the sound. Press again to turn the sound back on.
⑤	VOL+/VOL-	Press to increase or decrease the volume.
⑥	MENU	Press to open the on-screen menu.
⑦	▲ ▼ ◀ ▶	In the on-screen menu, press to select menu items or adjust settings.

## Using the remote control

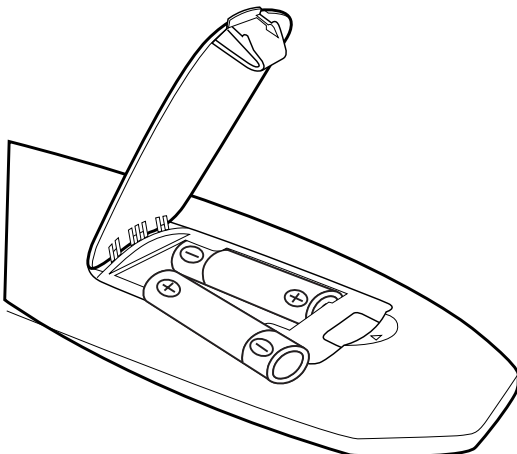
### Installing remote control batteries

#### To install remote control batteries:

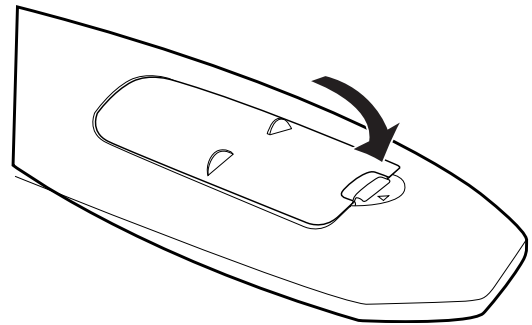
- 1 Press the battery cover latch in, then lift the cover.



- 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 Press down on the battery cover until it clicks into place.



#### 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.

#### Notes

- Do not mix batteries of different types.
- Do not mix old and new batteries.
- Remove batteries when the charge is depleted.
- 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.

#### Notes

- Do not expose the remote control to shock or liquids.
- Do not use the remote control in an area with high humidity.
- Do not place the remote control in direct sunlight. The remote control may not work if direct sunlight or bright light shines on the remote sensor. Either move your TV or change the angle at which you use the remote control.
- Do not place objects, such as furniture, between the remote control and the remote sensor.



## 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 in "Common universal remote control codes" on page 9 for common codes. If you have problems programming your remote or need a different remote control code, visit [www.insigniaproducts.com/remotecodes](http://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: [www.insigniaproducts.com](http://www.insigniaproducts.com) or check with your cable or satellite TV provider 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.




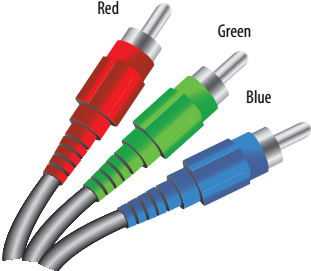

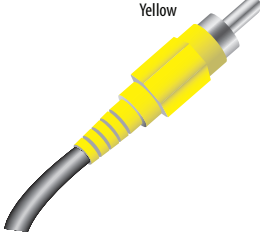


## Making connections

### 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
<b>HDMI video/audio</b> 	<b>Best (use this if your devices have HDMI)</b>	
<b>Component video (requires an audio connection)</b> 	<b>Better than composite or coaxial</b>	
<b>Composite video (requires an audio connection)</b> 	<b>Better than coaxial</b>	
<b>Coaxial video/audio</b> 	<b>Good</b>	

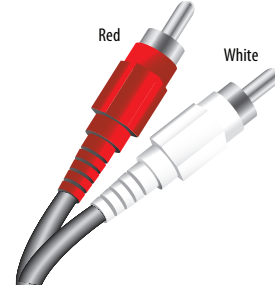
### Connection type and jack

### Cable connectors

#### Digital output



#### Analog audio



You can use the **HDMI 1 (DVI)** jack on the back of 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 the power

### To connect the power:

- Connect the power cord to the power jack on the back of your TV, then connect the other end to a surge protector or power outlet. If you are using a surge protector, make sure that it is turned on.

#### Cautions

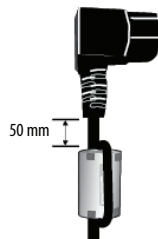
- Make sure that you use the correct type of power. See the label on your TV.
- If you do not intend to use your TV for an extended period of time, turn off the surge protector (if you are using one) or unplug the power cord from the power outlet.

## Installing the ferrite core

The ferrite core shields cables from interference. You can use the core with any cables.

### To install the ferrite core:

- Open the ferrite core, clip the core around a cable near the plug, then close the core.



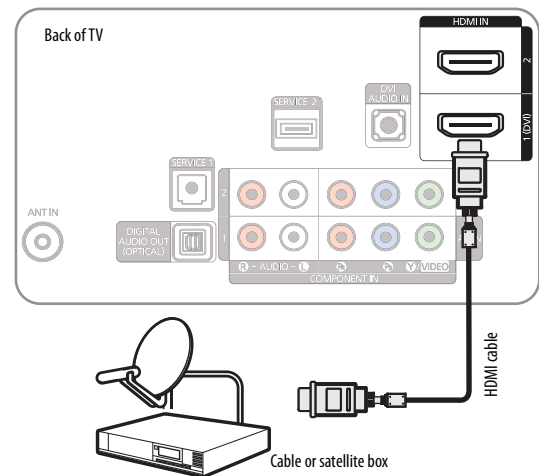
## Connecting a cable or satellite box

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 10.

### Using HDMI (best)

#### To connect a cable or satellite box using HDMI:

- 1 Turn off your TV and all connected equipment.
- 2 Connect the cable from the cable wall jack to the cable-in jack on the cable box.
- 3 Connect an HDMI cable (not included) between the **HDMI IN 1 (DVI)** or **HDMI IN 2** jack on the back of your TV and the **HDMI** jack on the cable or satellite box.



- 4 Turn on your TV, then turn on the cable or satellite box.
- 5 Go through the setup wizard on page 20.

#### Note

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

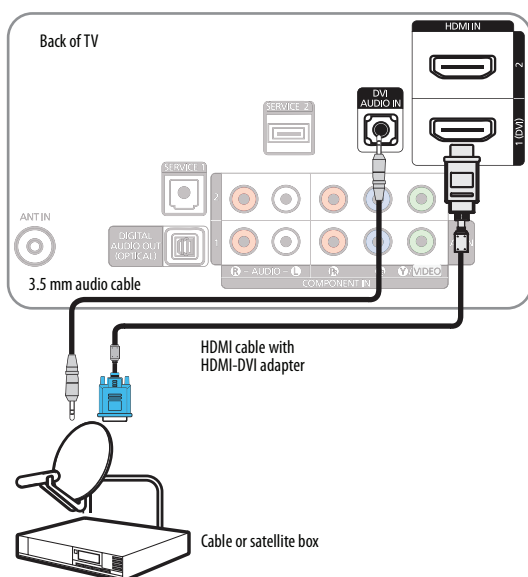
## Using DVI (same as HDMI but requires a sound connection)

### Note

A DVI device must be connected to the **HDMI 1 (DVI)** jack. If you connect a DVI device to the **HDMI 2** jack, you will not hear audio.

### To connect a cable or satellite box using DVI:

- 1 Turn off your TV and all connected equipment.
- 2 Connect the 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 the **DVI OUT** jack on the cable or satellite box, then connect the other end of the cable to the **HDMI 1 (DVI)** jack on the back of your TV.



- 5 Connect a 3.5 mm audio cable (not included) between the **DVI AUDIO IN** jack on the back of your TV and the **AUDIO OUT** jack on the cable or satellite box.

### Note

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

- 6 Turn on your TV, then turn on the cable or satellite box.
- 7 Go through the setup wizard on page 20.

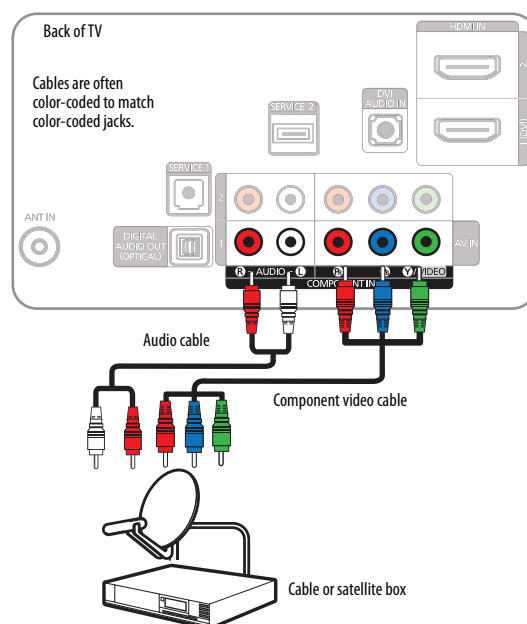
## Using component video (better)

### Note

Make sure that you connect the video and audio to matching jacks in the same row. For example, if you connect the video to the **COMPONENT IN 1** video jacks, connect the audio to the **COMPONENT IN 1 R-AUDIO-L** jacks.

### To connect a cable or satellite box using component video:

- 1 Turn off your TV and all connected equipment.
- 2 Connect the cable from the cable wall jack to the cable-in jack on the cable box.
- 3 Connect a component video cable (not included) between the **COMPONENT IN 1** or **COMPONENT IN 2** video jacks on the back of your TV and the **COMPONENT VIDEO OUT** jacks on the cable or satellite box.



- 4 Connect an audio cable (not included) between the **COMPONENT IN 1 R-AUDIO-L** or **COMPONENT IN 2 R-AUDIO-L** jacks on the back of your TV and the **AUDIO OUT** jacks on the cable or satellite TV box.

### Notes

- The bottom **Y-VIDEO/PB/PR** (component video) jacks shares the audio jacks with the bottom **Y-VIDEO** (composite video) jack.
- When you connect the audio using the **AUDIO L/R** jacks, the audio output is analog.
- You can connect the video to the component video jacks and connect the audio to the **DIGITAL AUDIO OUT (OPTICAL)** jack to get digital audio output.

- 5 Turn on your TV, then turn on the cable or satellite box.
- 6 Go through the setup wizard on page 20.

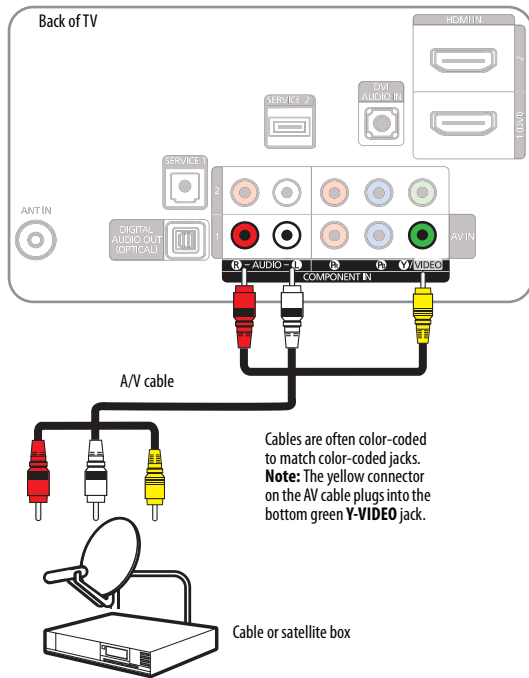
## Using composite video (good)

### To connect a cable or satellite box using composite video:

- 1 Turn off your TV and all connected equipment.
- 2 Connect the cable from the cable wall jack to the cable-in jack on the cable box.
- 3 Connect an A/V cable (not included) between the **AV IN 1 Y/VIDEO** and **AV IN 1 R-AUDIO-L** jacks on the back of your TV and the composite video and audio out jacks on the cable or satellite box.

#### Note

The **AV IN 1 Y/VIDEO** (composite video) jack shares the audio jacks with the **COMPONENT IN 1** jacks.

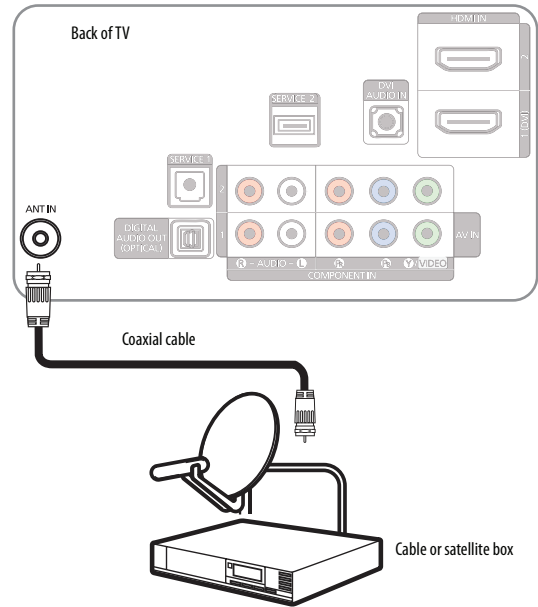


- 4 Turn on your TV, then turn on the cable or satellite box.
- 5 Go through the setup wizard on page 20.

## Using coaxial (good)

### To connect a cable or satellite box using coaxial:

- 1 Turn off your TV and all connected equipment.
- 2 Connect the cable from the cable wall jack to the cable-in jack on the cable or satellite box.
- 3 Connect a coaxial cable (not included) between the **ANT IN** jack on the back of your TV and the coaxial out jack on the cable or satellite box.



- 4 Turn on your TV, then turn on the cable or satellite box.
- 5 Go through the setup wizard on page 20.

#### 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.

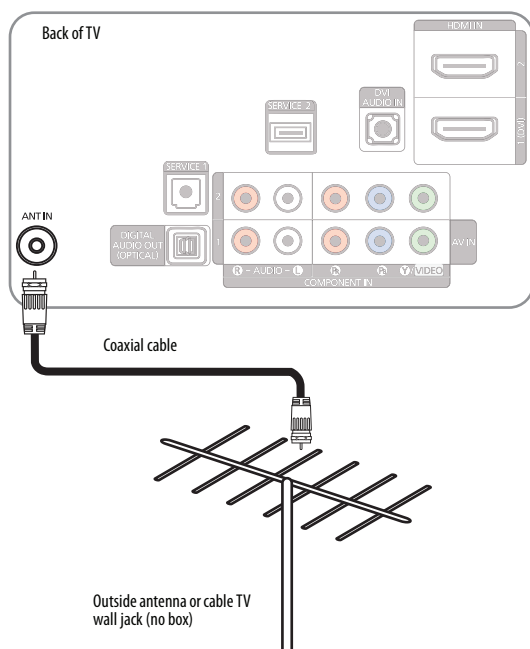
## Connecting an antenna or cable TV (no box)

### Notes

- If the signal level for a channel is weak, the picture may be distorted. Adjust the antenna or use a highly directional outdoor or set-top antenna with a built-in amplifier.
- If the picture quality is good on some channels and poor on others, the problem may be caused by a poor or weak signal from the broadcaster or cable TV provider.
- If you connect to cable or satellite TV without a set-top box and experience poor picture quality, you may need to install a set-top box to improve signal reception and picture quality. Contact your cable or satellite TV provider about upgrading to a set-top box.
- Many high-definition (HD) channels upscale standard-definition (SD) content. The picture displayed on your TV is still displayed as SD, thus the picture quality will not be as clear or crisp as it would be if the content was originally recorded in HD.

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

- 1 Turn off your TV and all connected equipment.
- 2 Connect a coaxial cable between the **ANT IN** jack on the back of your TV and the antenna or cable TV wall jack.



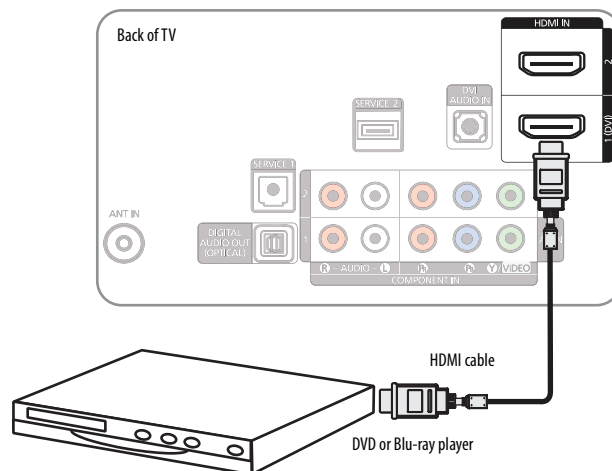
- 3 Turn on your TV.
- 4 Go through the setup wizard on page 20.

## Connecting a DVD or Blu-ray player

### Using HDMI (best)

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

- 1 Turn off your TV and all connected equipment.
- 2 Connect an HDMI cable (not included) between the **HDMI IN 1 (DVI)** or **HDMI IN 2** jack on the back of your TV and the **HDMI OUT** jack on the DVD or Blu-ray player.



- 3 Turn on your TV, then turn on the DVD or Blu-ray player.
- 4 Press **INPUT** one or more times to select **HDMI 1/DVI** or **HDMI 2**.

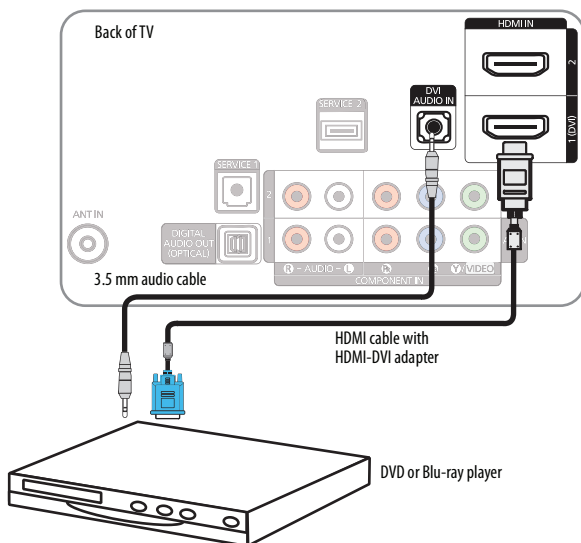
## Using DVI (same as HDMI but requires a sound connection)

### Note

A DVI device must be connected to the **HDMI 1 (DVI)** jack. If you connect a DVI device to the **HDMI 2** jack, you will not hear audio.

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

- 1 Turn off your TV and all connected equipment.
- 2 Connect an HDMI-DVI adapter (not included) to one end of an HDMI cable (not included).
- 3 Connect the HDMI-DVI adapter to the **DVI OUT** jack on the DVD or Blu-ray player, then connect the other end of the cable to the **HDMI 1 (DVI)** jack on the back of your TV.



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

### Note

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

- 5 Turn on your TV, then turn on the DVD or Blu-ray player.
- 6 Press **INPUT** one or more times to select **HDMI 1/DVI**.

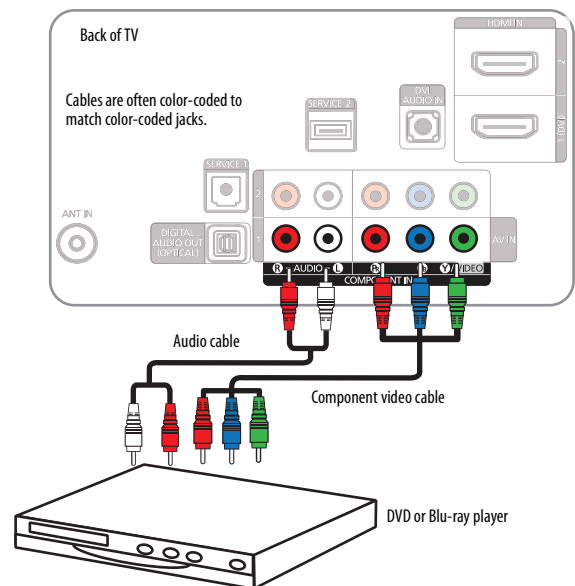
## Using component video (better)

### Note

Make sure that you connect the video and audio to matching jacks in the same row. For example, if you connect the video to the **COMPONENT IN 1** video jacks, connect the audio to the **COMPONENT IN 1 R-AUDIO-L** jacks.

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

- 1 Turn off your TV and all connected equipment.
- 2 Connect an audio cable (not included) between the **COMPONENT IN 1 R-AUDIO-L** or **COMPONENT IN 2 R-AUDIO-L** jacks on the back of your TV and the **AUDIO OUT** jacks on the DVD or Blu-ray player.



- 3 Connect an audio cable to the **R-AUDIO-L** jacks next to the component video jacks you used and the **L/R AUDIO OUT** jacks on the DVD or Blu-ray player.

### Notes

- The **AV IN 1 Y/VIDEO** (composite video) jack shares the audio jacks with the **COMPONENT IN 1** jacks.
- When you connect the audio using the **AUDIO L/R** jacks, the audio output is analog.
- You can connect the video to the component video jacks and connect the audio to the **DIGITAL AUDIO OUT (OPTICAL)** jack to get digital audio output.

- 4 Turn on your TV, then turn on the DVD or Blu-ray player.
- 5 Press **INPUT** one or more times to select **Component1** or **Component2**.

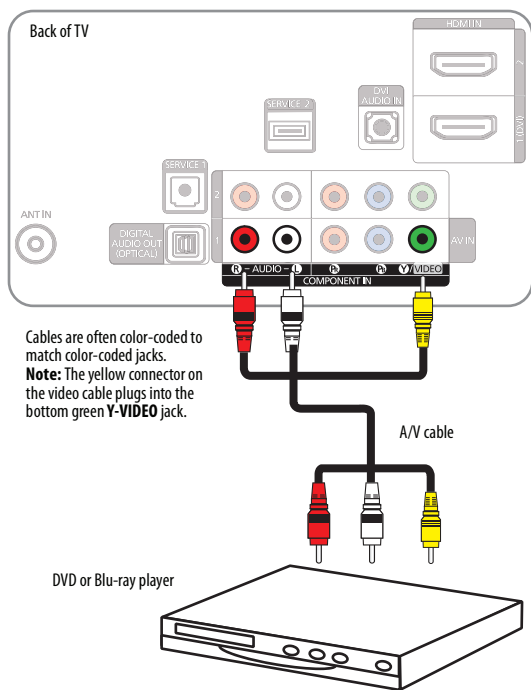
## Using composite video (good)

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

- 1 Turn off your TV and all connected equipment.
- 2 Connect an A/V cable (not provided) between the **AV IN 1 (Y/VIDEO)** and **AV IN 1 R-AUDIO-L** jacks on the back of your TV and the **AV OUT** jacks on the DVD or Blu-ray player.

#### Note

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



- 3 Turn on your TV, then turn on the DVD or Blu-ray player.
- 4 Press **INPUT** one or more times to select **AV**.

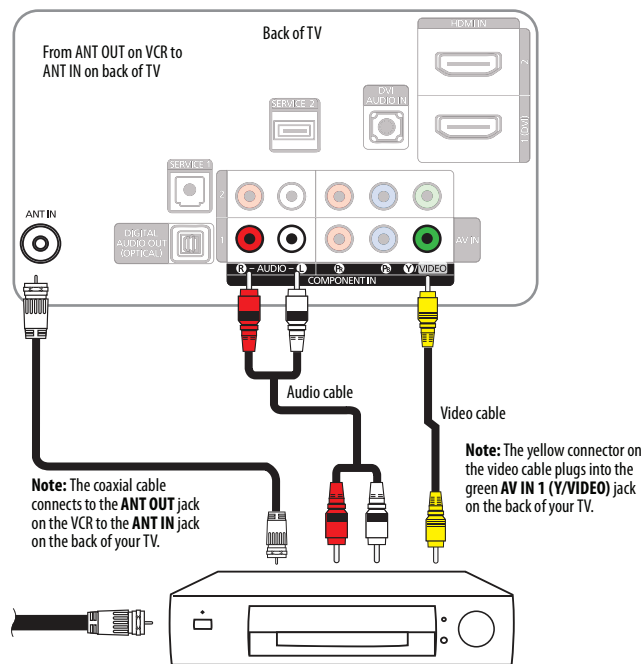
#### Note

The **AV IN 1 Y/VIDEO** (composite video) jack shares the audio jacks with the **COMPONENT IN 1** jacks.

## Connecting a VCR

### To connect a VCR:

- 1 Turn off your TV and all connected equipment.
- 2 If the antenna or cable TV cable is connected to your TV, disconnect the cable from your TV.
- 3 Connect the antenna or cable TV cable to the **ANT IN** jack on the VCR.



- 4 Connect a coaxial cable (not included) between the **ANT IN** jack on the back of your TV and the **ANT OUT** jack on the back of the VCR.
- 5 Connect a video cable (not included) between the **AV IN 1 (Y/VIDEO)** jack on the back of your TV and the **VIDEO OUT** jack on the VCR.
- 6 Connect an audio cable (not included) between the **AV IN 1 R-AUDIO-L** jacks on the back of your TV and the **AUDIO OUT** jacks on the VCR.

#### Note

If the VCR is a "mono" (non-stereo) VCR, use a Y connector to connect to the **AV IN 1 R-AUDIO-L** jacks of the TV, or connect the audio cable to the **AV IN 1 R** jack.

- 7 Turn on your TV, then turn on the VCR.
- 8 Press **INPUT** one or more times to select **AV**.



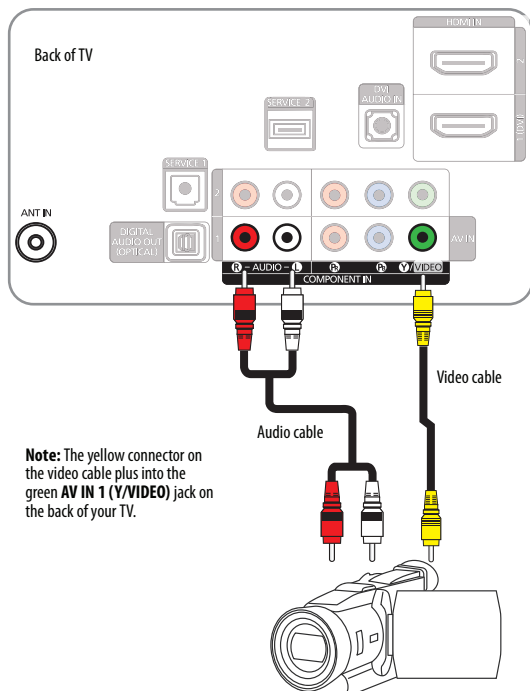
## Connecting a camcorder or game console

## Notes

- The **AV IN 1 VIDEO (Y/VIDEO)** jack is the same as the **COMPONENT IN 1 (Y/VIDEO)** jack, and the **AV IN 1 R-AUDIO-L** jacks are the same as the **COMPONENT IN 1 R-AUDIO-L** jacks.
- If the camcorder or game console has an HDMI jack, you can connect it to the **HDMI IN 1 (DVI)** or **HDMI IN 2** jack on the back of your TV. For more information, see “Connecting an HDMI device” on page 17.

**To connect a camcorder or game console:**

- 1 Turn off your TV and all connected equipment.
- 2 Connect a video cable (not included) between the **AV IN 1 (Y/VIDEO)** jack on the back of your TV and the **AV VIDEO OUT** jack on the camcorder.



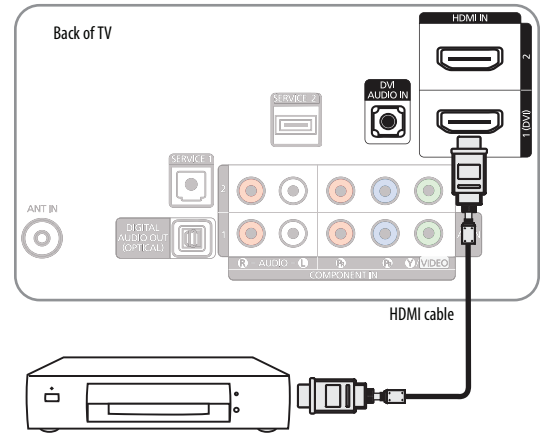
**Note:** The yellow connector on the video cable plus into the green **AV IN 1 (Y/VIDEO)** jack on the back of your TV.

- 3 Connect an audio cable (not included) between the **AV IN 1 R-AUDIO-L** jacks on the back of your TV and the **AUDIO OUT** jacks on the camcorder or game console.
- 4 Turn on your TV, then turn on the camcorder or game console.
- 5 Press **INPUT** one or more times to select **AV**.

## Connecting an HDMI device

**To connect an HDMI device to the back of your TV:**

- 1 Turn off your TV and all connected equipment.
- 2 Connect an HDMI cable (not included) between the **HDMI IN 1 (DVI)** or **HDMI IN 2** jack on the back of your TV and the **HDMI OUT** jack on the HDMI device.



- 3 Turn on your TV, then turn on the HDMI device.
- 4 Press **INPUT** one or more times to select **HDMI1/DVI** or **HDMI2**.

## Notes

- Your TV may not output sound and may display pictures with abnormal color if the HDMI device supports HDMI versions older than 1.3.
- If there is no sound when you connect an older HDMI device, connect the device to the **HDMI 1 (DVI)** jack, then connect an audio cable to the **DVI AUDIO IN** jack on the back of your TV.
- If this happens, contact the company that provided the HDMI device to confirm the HDMI version, then request an upgrade.
- HDMI cables that are not 1.3-compliant may cause an image flicker or no image.

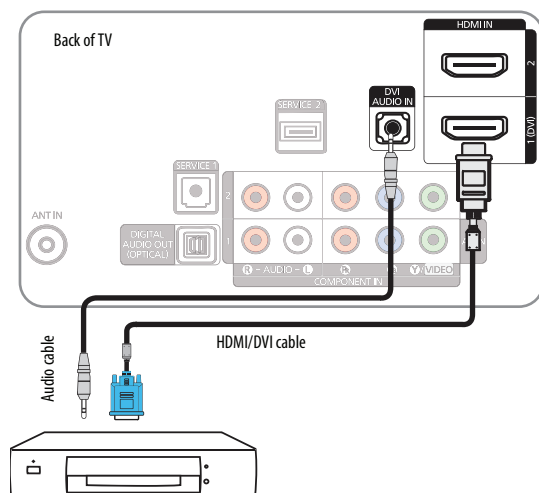
## Connecting a DVI device

### Note

When connecting a DVI device, you must use the **HDMI IN 1 (DVI)** jack on the back of your TV. You cannot use the **HDMI IN 2** jack.

### To connect a DVI device:

- 1 Turn off your TV and all connected equipment.
- 2 Connect an HDMI-DVI adapter (not included) to one end of an HDMI cable (not included).
- 3 Connect the HDMI-DVI adapter to the **DVI OUT** jack on the DVI device, then connect the other end of the cable to the **HDMI 1 (DVI)** jack on the back of your TV.



- 4 Connect a 3.5mm audio cable (not included) between the **DVI AUDIO IN** jack on the back of your TV and the **DVI AUDIO OUT** jack on the DVI device.
- 5 Turn on your TV, then turn on the DVI device.
- 6 Press **INPUT** one or more times to select **HDMI1/DVI**.

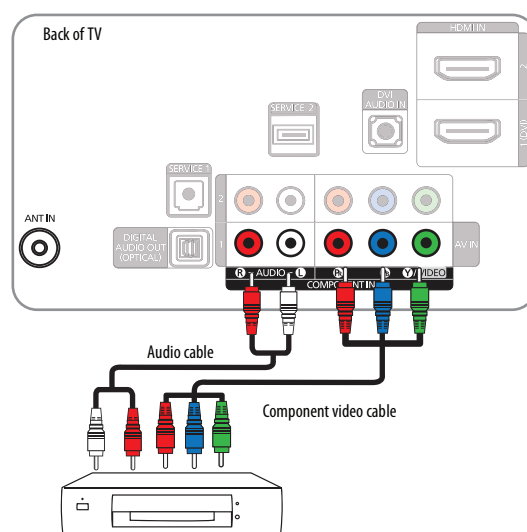
## Connecting a component video device

### Note

Make sure that you connect the video and audio to matching jacks in the same row. For example, if you connect the video to the **COMPONENT IN 1** video jacks, connect the audio to the **COMPONENT IN 1 R-AUDIO-L** jacks.

### To connect a component video device:

- 1 Turn off your TV and all connected equipment.
- 2 Connect a component video cable (not included) between the **COMPONENT IN 1** or **COMPONENT IN 2** jacks on the back of your TV and the **COMPONENT VIDEO OUT** jacks on the component video device.



- 3 Connect an audio cable (not included) between the **COMPONENT IN 1 R-AUDIO-L** or **COMPONENT IN 2 R-AUDIO-L** jacks on the back of your TV and the **AUDIO OUT** jacks on the component video device.
- 4 Turn on your TV, then turn on the component video device.
- 5 Press **INPUT** one or more time to select **Component1** or **Component2**.

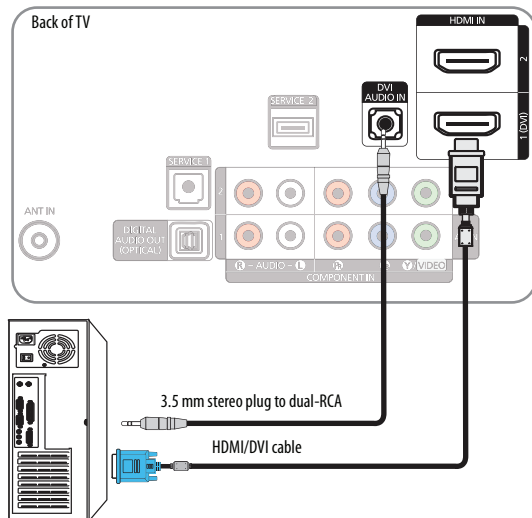
## Connecting a computer using DVI

### Note

If the computer has an HDMI jack, you can connect it to the **HDMI IN 1 (DVI)** or **HDMI IN 2** jack on the back of your TV.

### To connect a computer using DVI:

- 1 Connect an HDMI-DVI adapter (not included) to one end of an HDMI cable (not included).
- 1 Connect the HDMI-DVI adapter to the **DVI OUT** jack on the computer, then connect the other end of the cable to the **HDMI 1 (DVI)** jack on the back of your TV.



- 2 Connect a 3.5 mm audio plug to a dual-RCA cable (not included) between the **DVI AUDIO IN** jack on the back of your TV and the **LINE IN** jack on the computer.
- 3 Turn on your TV, then turn on the computer.
- 4 Press **INPUT** one or more times to select **HDMI1/DVI**.

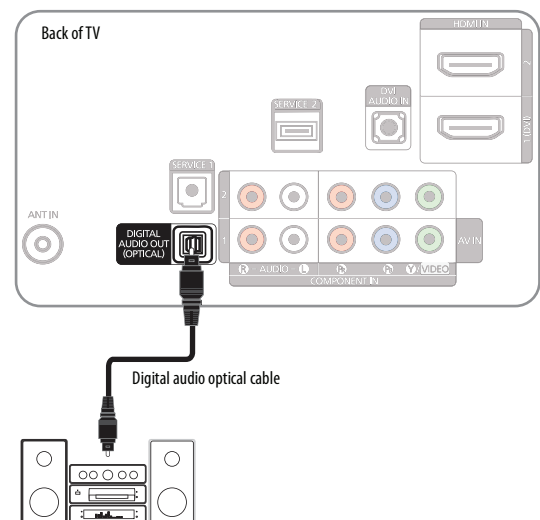
## Connecting a digital audio amplifier

### Notes

- When you connect your TV to a digital audio amplifier, decrease the volume level on your TV and use the amplifier controls to adjust the volume.
- 5.1-channel sound is possible when the TV is connected to an external device supporting 5.1-channel sound.
- When the receiver (home theater) is turned on, you can hear sound output from your TV's optical jack. When the TV is using a DTV signal, your TV sends out 5.1-channel sound to the home theater receiver.
- When the source is a digital component such as a DVD player and the source is connected to an HDMI jack on your TV, only 2-channel sound is sent to the home theater receiver. If you want to hear 5.1-channel sound, connect the digital audio jack on the source directly to an amplifier or home theater, not your TV.

### To connect a digital audio amplifier:

- Connect a digital audio optical cable (not included) between the **DIGITAL AUDIO OUT (OPTICAL)** jack on the back of your TV and the **DIGITAL AUDIO IN (OPTICAL)** jack on the amplifier.



## Turning on your TV for the first time

The first time you turn on your TV, the Plug & Play wizard opens. The Plug & Play wizard guides you through setting up basic settings including the menu language, TV signal source, the channel list, and time.

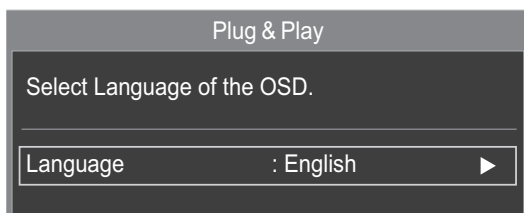
### Note

You can also access these settings from the on-screen menu.

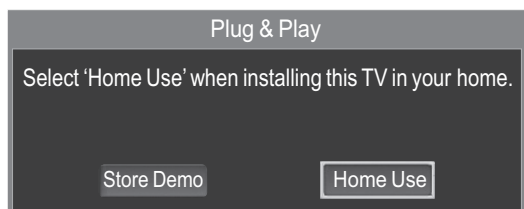
Press **MENU** on the remote control, press **▲** or **▼** to highlight **SETUP**, then press **ENTER**. Press **▲** or **▼** to select **Plug&Play**, press **ENTER**, then press **▲** or **▼** to select the setting you want to adjust.

### To set up your TV:

- 1 Make sure that you have:
  - Installed the remote control batteries. (See page 8 for details.)
  - Connected an antenna, cable TV, or satellite TV. (See pages 11 through 14 for details.)
  - Connected the power cord. (See page 11 for details.)
- 2 Press **⏻** (power). The Plug&Play *Select Language of the OSD* menu opens.



- 3 Press **ENTER** to access the menu, then press **▲** or **▼** to highlight a language. You can select **English**, **French**, or **Spanish**.
- 4 Press **ENTER**. The *Select Home Use when installing this TV in your home* screen appears.

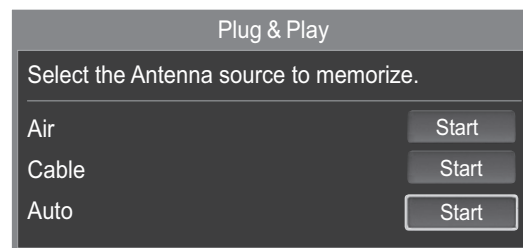


### Note

**Store Demo** mode is only intended for use in retail environments.

If your TV is accidentally set to **Store Demo** mode, reset the **Plug & Play** option. For more information, see "Resetting the Plug & Play option" on page 44.

- 5 Press **◀** or **▶** to highlight **Home Use**, then press **ENTER**. The *Select the Antenna source to memorize* screen appears.



- 6 Press **▲** or **▼** to highlight your TV signal source, then press **ENTER**. You can select **Air** (antenna), **Cable** (cable TV), or **Auto** (both antenna and cable TV). If you have digital cable, select **Auto**.
- 7 If you select **Cable**, press **▲** or **▼**, **◀** or **▶** to highlight the cable TV signal type, then press **ENTER**. You can select **STD**, **HRC**, or **IRC** for analog (antenna-based or without a cable box) or digital signals. **STD** is the most common setting. If you do not know which type of cable TV signal you have, contact your cable TV provider.

### Note

- Standard Cable TV (STD) - The most widely used method of spacing and transmitting television channels on a cable television system to prevent interference between the different channels. If your first broadcast channel is channel 2, then your cable company uses Standard. If your first broadcast channel is channel 1, then your cable company uses the HRC (Harmonic Related Carrier) method.
- Harmonic Related Carrier (HRC) - Harmonic Related Carrier is a method of spacing and transmitting television channels on a cable television system to prevent interference. The channels are spaced at 6-MHz intervals, with all carrier frequencies harmonically related to a common reference.
- Incremental Related Carriers (IRC) - A method of spacing and transmitting television channels on a cable television system that prevents interference between the channels and reduces a form of distortion.

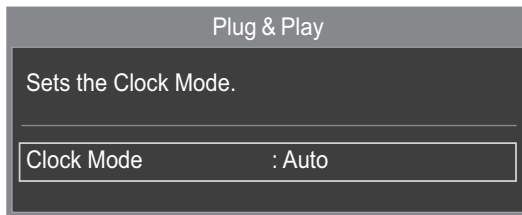
Your TV starts searching for channels available in your viewing area. The channel information is stored in the channel list. Scrambled channels are not stored in the list.



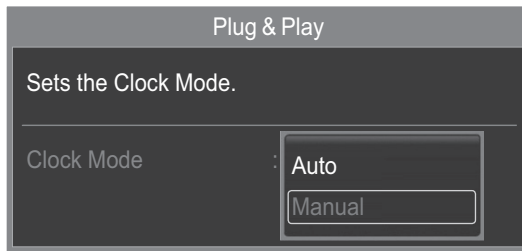
### Note

To stop the search, press **ENTER**.

When the search is complete, the *Sets the Clock Mode* screen appears.

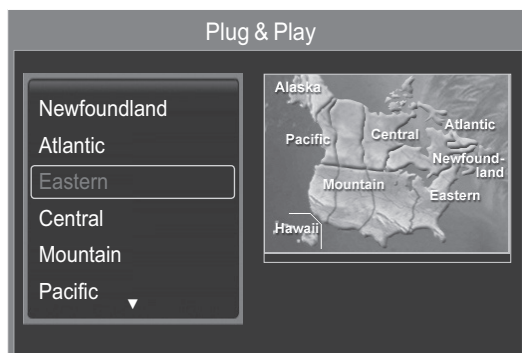


- 8 Press **ENTER**, then press **▲** or **▼** to highlight **Auto** (to automatically set the time using time information from a digital channel) or **Manual** (to manually set the time), then press **ENTER**.



- If you select **Auto**, the *Set to daylight saving time* screen appears.
  - If you select **Manual**, the *Set current date and time* screen appears. For instructions on how to manually set the time, see “Setting the clock” on page 40.
- 9 If you selected **Auto**, press **▲** or **▼** to highlight:
- **Off**—Turns off the daylight saving time feature.
  - **On**—Turns on the daylight saving time feature.
  - **Auto**—Sets the daylight saving time feature based on the time information from a digital channel.

- 10 Press **ENTER**. The time zone screen appears.



- 11 Press **▲** or **▼** to highlight a time zone, then press **ENTER**. If you receive a digital channel signal, the time zone is selected automatically.

- 12 Press **ENTER**. The *Enjoy your TV* screen opens.



- 13 Press **ENTER**. Your TV is ready to use.

#### Note

If you want to reset the **Plug & Play** option, see “Resetting the Plug & Play option” on page 44.

## Understanding the basics

#### Note

Unless otherwise noted, all tasks in this section are based on using the remote control.

### Turning your TV on or off

#### To turn your TV on and off:

- 1 Make sure that the power cord is connected to your TV and a surge protector or power outlet. If you are using a surge protector, make sure that it is turned on.
- 2 Press **⏻** (power) to turn on your TV.
- 3 Press **⏻** (power) again to turn off your TV. Your TV goes into Standby mode.

#### Warning

When you turn off your TV, power still flows into it. To completely disconnect power, turn off the surge protector or unplug the power cord.

## Selecting the video input source

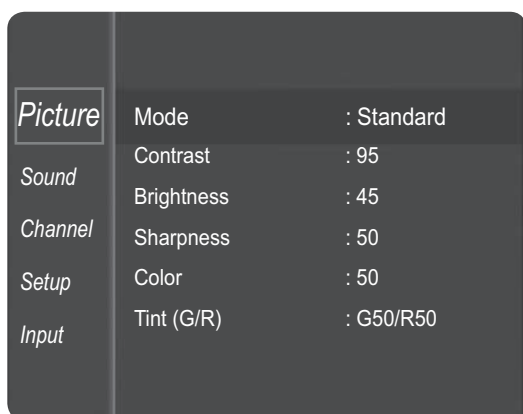
### To select the video input source:

- Press **INPUT** one or more times to select:
  - **TV**
  - **AV**
  - **Component1**
  - **Component2**
  - **HDMI1/DVI**
  - **HDMI2**

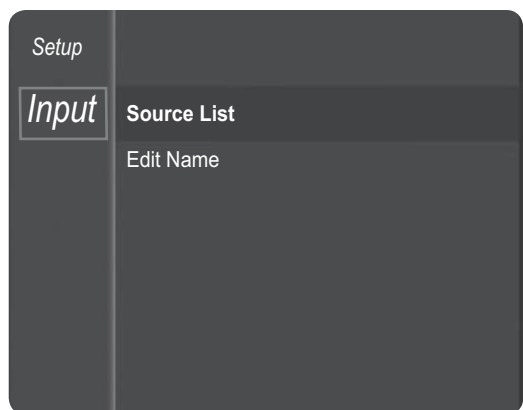
You can also select the video input source in the on-screen menu.

### To select the video input source in the on-screen menu:

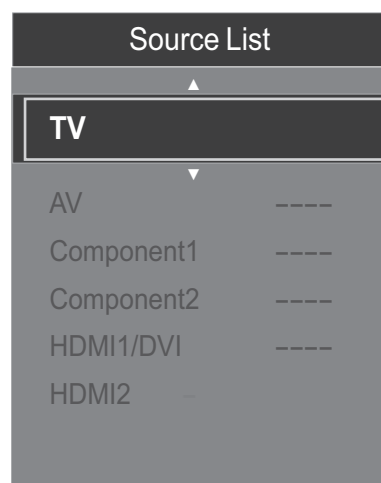
- 1 Press **MENU**. The on-screen menu opens.



- 2 Press **▲** or **▼** to highlight **Input**, then press **ENTER** to access the *Input* menu. **Source List** is highlighted.



- 3 Press **ENTER** to open the *Source List*.



- 4 Press **▲** or **▼** to highlight a video input source. You can choose only those external devices that are connected to the TV. In the *Source List*, video input sources that have devices connected to them are highlighted and sorted to the top. Video input sources that do not have devices connected to them are sorted to the bottom.
- 5 Press **ENTER** to confirm your selection.
- 6 Press **RETURN** to return to the previous menu or **EXIT** to close the menu.

## On-screen menu overview

### Picture menu

<i>Picture</i>	Mode	: Standard
<i>Sound</i>	Contrast	: 95
<i>Channel</i>	Brightness	: 45
<i>Setup</i>	Sharpness	: 50
<i>Input</i>	Color	: 50
	Tint (G/R)	: G50/R50

### Sound menu

<i>Picture</i>	Mode	: Custom
<i>Sound</i>	Equalizer	
<i>Channel</i>	SRS TruSurround HD	: Off
<i>Setup</i>	Preferred Language	: English
<i>Input</i>	Multi-Track Sound	: Stereo
	Auto Volume	: Off
	Speaker Select	: TV Speaker

### Channel menu

<i>Sound</i>		
<i>Channel</i>	Antenna	: Air
<i>Setup</i>	Auto Program	
<i>Input</i>	Clear Scrambled Channel	
	Channel List	
	Fine Tune	
	Signal Strength	

### Setup menu

<i>Channel</i>		
<i>Setup</i>	Plug & Play	
<i>Input</i>	Language	: English
	Time	
	Game Mode	: Off
	V-Chip	
	Caption	
	Energy Saving	: Off

### Input menu

<i>Setup</i>		
<i>Input</i>	Source List	
	Edit Name	

## Navigating the menus

### To navigate the on-screen menus:

- 1 Press **MENU** to open the on-screen menu.
- 2 Press **▲** or **▼** to highlight a menu, then press **ENTER** to access the menu. You can select **Picture**, **Sound**, **Channel**, **Setup**, or **Input**.
- 3 Press **▲** or **▼** to highlight an option, then press **ENTER** to access the option.
- 4 Press **▲** or **▼**, **◀** or **▶** to highlight a setting or adjust the option, then press **ENTER** to confirm.
- 5 Press **RETURN** to return to the previous menu or **EXIT** to close the menu.

## Selecting a channel

### To select a channel:

- Press **CH**  $\wedge$  or **CH**  $\vee$  to go to the next higher or lower channel in the channel list.
- Press the number buttons to directly select a channel. For example, if you want to view channel 27, press **2**, then press **7**. Your TV goes to the channel in a few seconds. If you want to go to the channel quicker, enter the channel number, then press **ENTER**.
- Press **RECALL**  $\curvearrowright$  to go to the last viewed channel.
- Press the number buttons for a main DTV channel, press  $\text{—}$ , then press the number for a DTV sub-channel to go to a digital sub-channel (if available). For example, to go to sub-channel 1 of main channel 7, press **7**,  $\text{—}$ , then **1**.

### Notes

You can press the number buttons to go to a channel that was skipped in the channel scanning.

## Adjusting the volume

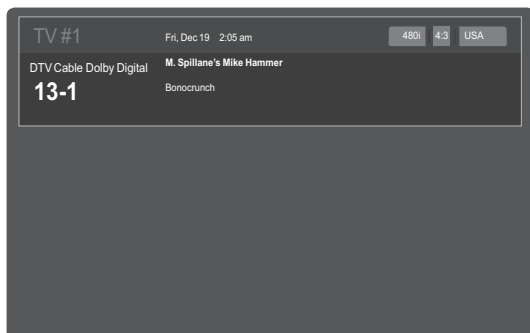
### To adjust the volume:

- Press **VOL**  $\text{—}$  or **VOL**  $+$  to decrease or increase the volume.
- Press **MUTE**  $\text{⏏}$  to turn off the sound. Press **MUTE**  $\text{⏏}$  again (or press **VOL**  $\text{—}$  or **VOL**  $+$ ) to turn the sound back on.

## Displaying additional information

### To display additional information:

- 1 Press **DISPLAY**. Your TV displays status information, such as the channel number, type of sound, and picture and sound settings.



- 2 To close the display, press **DISPLAY** again or wait about 10 seconds.

## Adjusting the picture

### Note

Unless otherwise noted, all tasks in this section are based on using the remote control.

## Adjusting the TV picture

### To adjust the picture:

- 1 Press **MENU**. The on-screen menu opens with **Picture** highlighted.

<b>Picture</b>	Mode	: Standard
<b>Sound</b>	Contrast	: 95
	Brightness	: 45
<b>Channel</b>	Sharpness	: 50
<b>Setup</b>	Color	: 50
<b>Input</b>	Tint (G/R)	: G50/R50

- 2 Press **ENTER** to access the *Picture* menu.
- 3 Press  $\blacktriangle$  or  $\blacktriangledown$  to highlight an option, then press **ENTER** to access the option.

### Note

You may need to press  $\blacktriangledown$  to see all the options.

You can select:

- **Mode**—Selects the picture mode. You can select:
  - **Dynamic**—Selects a high-definition picture for bright environments.
  - **Standard**—Selects the optimal picture display for normal environments. This setting is convenient for most situations.
  - **Movie**—Selects a comfortable picture display for dark environments.

### Note

You can also press **PICTURE** one or more times to select the picture mode.

- **Contrast**—Adjusts the contrast.
- **Brightness**—Adjusts the brightness.
- **Sharpness**—Adjusts the sharpness.
- **Color**—Adjusts the color saturation.
- **Tint (G/R)**—Adjusts the intensity of red in the picture.
- **Picture Options**—Press **ENTER** to open a list of advanced picture options. For more information, see "Adjusting advanced picture settings" on page 25.
- **Picture Reset**—Resets all picture settings to the default settings. Press **ENTER** to reset picture settings.



- Press **▲** or **▼**, **◀** or **▶** to adjust the setting, then press **ENTER** to confirm.
- Press **EXIT** to close the menu.

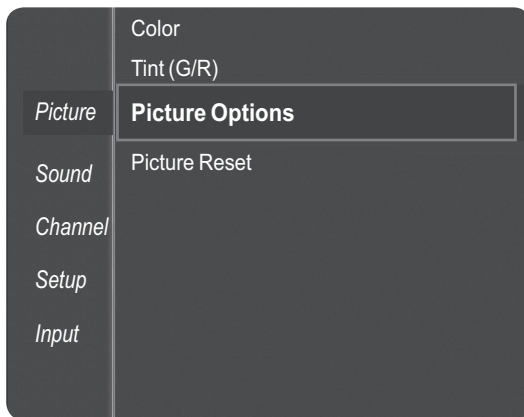
#### Notes

- When you make changes to **Contrast**, **Brightness**, **Sharpness**, **Color**, or **Tint (G/R)**, the on-screen menu is adjusted accordingly.
- You can adjust and store settings for each external device you have connected to an input of your TV.
- You can save power by reducing the brightness level.

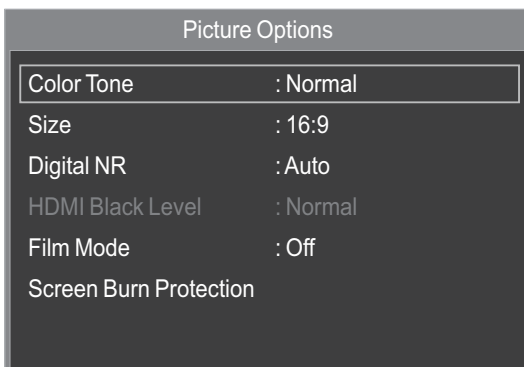
## Adjusting advanced picture settings

### To adjust advanced picture settings:

- On the *Picture* menu, press **▲** or **▼** to highlight **Picture Options**.



- Press **ENTER** to access the *Picture Options* menu.



- Press **▲** or **▼** to highlight an option, then press **ENTER** to access the option.

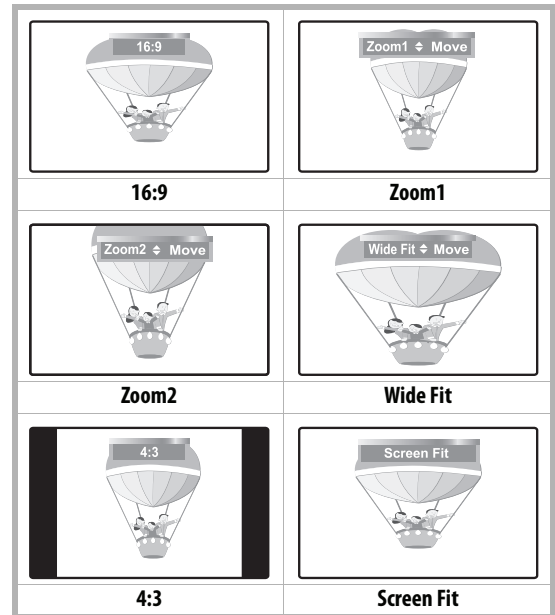
#### Note

You may have to scroll down to see all the options.

You can select:

- Color Tone**—Selects the color tone. You can select **Cool**, **Normal**, **Warm1**, or **Warm2**. **Warm1** and **Warm2** are only available if the **Mode** option is set to **Movie**.

- Size**—Sets the picture aspect ratio. The availability of these options depends on the video input source. For more information, see “Picture sizes available for input sources” on page 26.



You can select:

- 16:9**—Sets the picture to the 16:9 aspect ratio.
- Zoom1**—Stretches the 16:9 aspect ratio picture vertically.
- Zoom2**—Stretches the **Zoom1** picture vertically.
- Wide Fit**—Stretches the picture both horizontally and vertically to display the optimal picture.
- 4:3**—Sets the picture to the 4:3 aspect ratio.
- Screen Fit**—Displays the full native HD signal that cannot be viewed using a normal TV.

For more information on adjusting the picture, see “Adjusting the picture size” on page 26.

#### Note

You can also press **ZOOM** one or more times to select the picture size.

- Digital NR**—(Digital Noise Reduction) Reduces noise (static and ghosting) that may appear on the screen. You can select **Off**, **Low**, **Medium**, **High**, or **Auto**.
- HDMI Black Level**—Adjusts the black level of the picture when the video input source is a device connected to the **HDMI1 (DVI)** or **HDMI2** jack on the back of your TV. You can select:

- Normal**—The screen gets brighter.
- Low**—The screen gets darker.

#### Note

**HDMI Black Level** may not be compatible with all external devices.

- **Film Mode**—Automatically senses and processes film signals from all sources and adjusts the picture for optimum quality. You can select **Off** or **Auto**.

#### Note

**Film mode** is supported in TV, Video, component video (480i/1080i), and HDMI (1080i) modes.

- **Screen Burn Protection**—Helps protect the screen from “burn-in.” When a screen image remains in one position for too long, the image may be permanently burned into the screen. You can select:
    - **Pixel Shift**—Shifts the picture position every two minutes.
    - **Scrolling**—Displays a moving pattern.
    - **Side Grey**—When the video source is displayed in a 4:3 picture size, sets the sides of the image to gray. You can select **Dark** (darkens the sides) or **Light** (brightens the sides).
  - **Picture Reset**—Resets the advanced picture settings to the default settings. Press **ENTER** to reset picture settings.
- 4 Press **▲** or **▼**, **◀** or **▶** to adjust the setting, then press **ENTER** to confirm.
  - 5 Press **RETURN** to return to the previous menu or **EXIT** to close the menu.

### Adjusting the picture size

#### To adjust the picture size:

- If you select **Zoom1**, **Zoom2**, or **Wide Fit**, you can adjust the position. Press **◀** or **▶** to highlight **Position**, then press **ENTER**. Press **▲** or **▼** to move the picture up or down. To reset the picture to the default setting, press **◀** or **▶** to highlight **Reset**, then press **ENTER**.
- If you select **Screen Fit** in HDMI (1080i/1080p) or Component (1080i/1080p) mode, you may need to center the picture. Press **◀** or **▶** to highlight **Position**, then press **ENTER**. Press **▲** or **▼**, **◀** or **▶** to move the picture. To reset the picture to the default setting, press **◀** or **▶** to highlight **Reset**, then press **ENTER**.

### Picture sizes available for input sources

Input source	Picture size
ATV, Video, Component (480i, 480p)	16:9, Zoom1, Zoom2, 4:3
Component (720p), Air	16:9, Wide Fit, 4:3
DTV (1080i), Component (1080i, 1080p), HDMI (720p, 1080i, 1080p)	16:9, 4:3, Wide Fit, Screen Fit

#### Notes

You can adjust and store settings for each external device you have connected to an input of your TV.

### Improving the image from a game console

You can improve the image and sound from a game console by turning the **Game Mode** feature on or off.

#### Note

The **Game Mode** feature is only available if a game console is connected to your TV.


#### To turn the Game Mode feature on or off:

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

Picture	Mode	: Standard
Sound	Contrast	: 95
Channel	Brightness	: 45
Setup	Sharpness	: 50
Input	Color	: 50
	Tint (G/R)	: G50/R50

- 2 Press **▲** or **▼** to highlight **Setup**, then press **ENTER** to access the *Setup* menu.

Channel	Plug & Play
Setup	
Input	Language : English
	Time
	Game Mode : Off
	V-Chip
	Caption
	Energy Saving : Off

- 3 Press **▲** or **▼** to highlight **Game Mode**, then press **ENTER**.
- 4 Press **▲** or **▼** to highlight **Off** or **On**, then press **ENTER**. When **Game Mode** is turned on,  appears on the screen.
- 5 Press **RETURN** to return to the previous menu or **EXIT** to close the menu.

#### Notes

When Game Mode is on:

- The picture mode is set to **Standard** and cannot be changed.
- The sound mode is set to **Custom** and cannot be changed. The **Equalizer** settings are reset to the default settings. Use the **Equalizer** settings to adjust the sound.
- If you open the on-screen menu, the menu shakes slightly.

## Adjusting the computer image

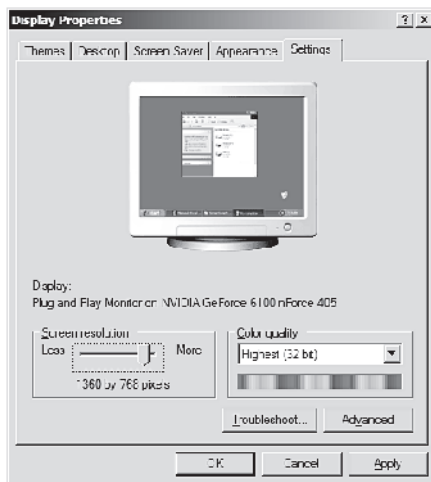
### To adjust the computer image:

- 1 Right-click a blank space on the Windows desktop. The *Display Properties* dialog box opens.

#### Note

The *Display Properties* dialog box may appear different depending on your version of Windows and your video card. However, these steps should work in most cases.

- 2 Click the **Settings** tab.



- 3 Drag the screen resolution slider to the correct resolution. The best resolution is 1920 x 1080p.
- 4 If the dialog box has a vertical frequency option, set it to **60** or **60 Hz**.
- 5 Click **OK** to close the dialog box.

If the signal from the system equals the standard signal mode, the screen is adjusted automatically. If the signal from the system does not equal the standard signal mode, adjust the mode (refer to your video card user guide), or there may be no video. For a list of compatible display modes, see "PC - HDMI/DVI scan rates" on page 48.

## Using Energy Saving mode

You can save energy by reducing the brightness of the screen.

### To use Energy Saving mode:

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

<b>Picture</b>	Mode	: Standard
	Contrast	: 95
Sound	Brightness	: 45
Channel	Sharpness	: 50
Setup	Color	: 50
Input	Tint (G/R)	: G50/R50

- 2 Press **▲** or **▼** to highlight **Setup**, then press **ENTER** to access the *Setup* menu.

<b>Channel</b>	
<b>Setup</b>	<b>Plug &amp; Play</b>
Input	Language : English
	Time
	Game Mode : Off
	V-Chip
	Caption
	Energy Saving : Off

- 3 Press **▲** or **▼** to highlight **Energy Saving**, then press **ENTER**.
- 4 Press **▲** or **▼** to highlight a mode, then press **ENTER**. You can select:
  - **Off**—Turns off energy saving.
  - **Low**—Sets mode to low.
  - **Medium**—Sets the mode to medium.
  - **High**—Sets the mode to maximum. Use this mode to watch TV in a dark environment. It will reduce eye strain as well as save energy.
- 5 Press **RETURN** to return to the previous menu or **EXIT** to close the menu.

## Adjusting the sound

### Note

Unless otherwise noted, all tasks in this section are based on using the remote control.

### Adjusting the sound

#### To adjust the sound:

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

Picture	Mode	: Standard
Sound	Contrast	: 95
Channel	Brightness	: 45
Setup	Sharpness	: 50
Input	Color	: 50
	Tint (G/R)	: G50/R50

- 2 Press **▲** or **▼** to highlight **Sound**, then press **ENTER** to access the *Sound* menu.

Picture	Mode	: Custom
Sound	Equalizer	
Channel	SRS TruSurround HD	: Off
Setup	Preferred Language	: English
Input	Multi-Track Sound	: Stereo
	Auto Volume	: Off
	Speaker Select	: TV Speaker

- 3 Press **▲** or **▼** to highlight an option, then press **ENTER** to access the option.

### Note

You may need to press **▼** to see all the options.

You can select:

- **Mode**—Selects the sound mode. You can select:
  - **Standard**—Use for general purposes.
  - **Music**—Lets you listen to music as if you are sitting in a concert hall.
  - **Movie**—Lets you experience movie sound as if you are sitting in a movie theater.
  - **Clear Voice**—Emphasizes voice over other sounds. Select this sound mode when watching news, soap operas, or documentaries.
  - **Custom**—Lets you customize the sound settings to suit your personal preferences.

- **Equalizer**—Sets the equalizer mode. You can select:
  - **Mode**—Selects the sound mode among the predefined settings. You can select **Standard**, **Music**, **Movie**, **Clear Voice**, or **Custom**.
  - **Balance L/R**—Adjusts the balance between the right and left speaker.
  - **100 Hz, 300 Hz, 1 kHz, 3 kHz, and 10 kHz**—Adjusts the level of different bandwidth frequencies.
  - **Reset**—Resets the equalizer settings to the default values.
- **SRS TruSurround HD**—If the sound is in 5.1 Surround Sound format, downmixes the sound to produce Surround Sound quality audio through your TV's speakers.
- **Preferred Language**—Selects the language for a digital TV program, if multiple tracks are available.

### Note

You can also press **MTS** one or more times to select the language for a digital program.

- **Multi-Track Sound**—Selects the audio mode for an analog TV program. You can select **Mono**, **Stereo**, or **SAP** (separate audio program), depending on available audio formats for the program. If you are having difficulty receiving stereo audio, select **Mono**.

### Note

You can also press **MTS** one or more times to select the analog audio mode.

- **Auto Volume**—Automatically adjusts the volume when changing channels. You can select **On** or **Off**.
  - **Speaker Select**—Selects the speakers the TV sound is played through. You can select:
    - **External Speaker**—Turns the TV speakers off and plays the sound through the speakers of a connected amplifier. When you select this option, the volume and **MUTE** buttons on the TV and the TV remote do not work. You need to adjust the volume using the amplifier controls.
    - **TV Speaker**—Plays the sound through the TV speakers.
  - **Sound Reset**—Resets some or all of the sound settings to the default settings. You can select:
    - **Reset All**—Resets all the sound settings to default settings. Press **ENTER** to reset sound settings.
    - **Reset Sound Mode**—Resets the current sound **Mode** settings to default settings. For more information, see the **Equalizer** option in this step.
    - **Cancel**—Cancels any changes you have made.
- 4 Press **▲** or **▼**, **◀** or **▶** to adjust the option, then press **ENTER** to confirm.
  - 5 Press **RETURN** to return to the previous menu or **EXIT** to close the menu.

# Changing channel settings

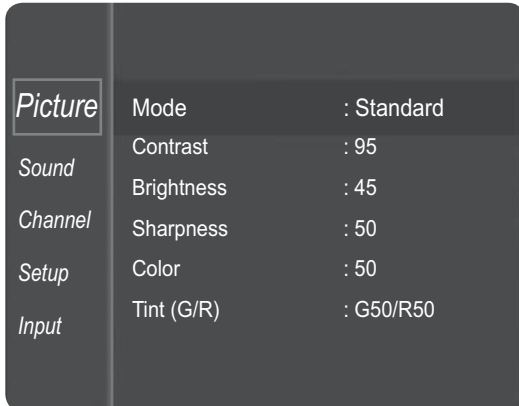
## Note

Unless otherwise noted, all tasks in this section are based on using the remote control.

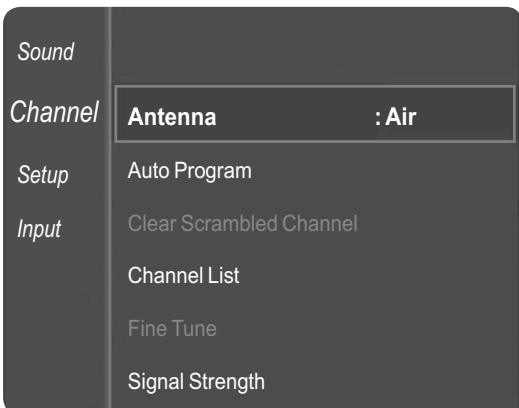
## Automatically searching for channels

### To automatically search for channels:

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



- 2 Press **▲** or **▼** to highlight **Channel**, then press **ENTER** to access the *Channel* menu. **Antenna** is highlighted.



- 3 Press **ENTER** to access the **Antenna** option, press **▲** or **▼** to highlight **Air** (antenna signal) or **Cable** (cable TV signal), then press **ENTER** to confirm. For more information, see "Resetting the Plug & Play option" on page 44.
- 4 Press **▲** or **▼** to highlight **Auto Program**, then press **ENTER** to access the option.

- 5 Press **▲** or **▼** to highlight **Air** (antenna signal), **Cable** (cable TV signal), or **Auto** (antenna and cable TV signals), then press **ENTER** to start the search. Your TV searches for channels in your viewing area that have a signal and stores the channel information in the channel list. After your TV stores the channel information, it deletes scrambled channels from the channel list.

## Note

If you want to stop the search, press **ENTER**. The *Stop Auto Program?* message appears. Press **◀** or **▶** to highlight **Yes**, then press **ENTER**.

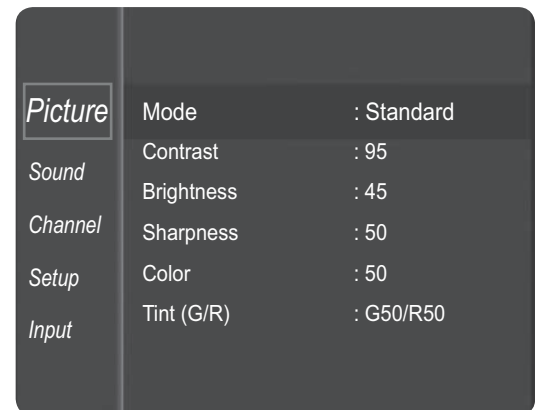
## Removing scrambled channels from the channel list

## Note

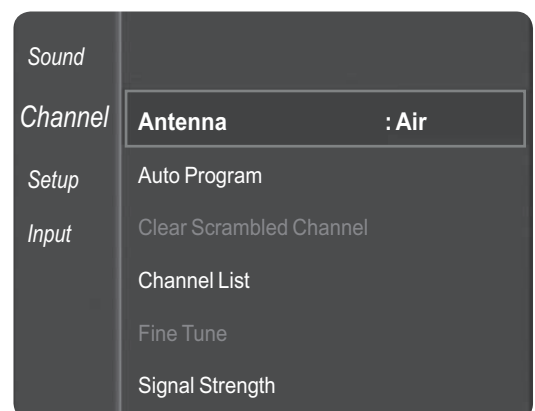
The **Clear Scrambled Channel** feature only works in cable mode.

### To remove scrambled channels from the channel list:

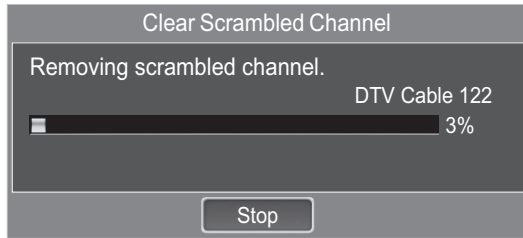
- 1 Press **MENU**. The on-screen menu opens.



- 2 Press **▲** or **▼** to highlight **Channel**, then press **ENTER** to access the *Channel* menu.



- Press **▲** or **▼** to highlight **Clear Scrambled Channel**, then press **ENTER**. Your TV removes scrambled channels from the channel list. This process may take 20 to 30 minutes. The status of the process is shown on the screen.



- Press **RETURN** to return to the previous menu or **EXIT** to close the menu.

#### Note

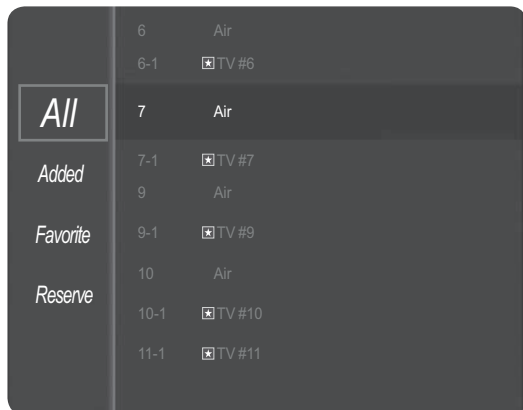
If you want to stop the clearing scrambled channels process, press **ENTER** to highlight **Stop**, press **◀** to highlight **Yes**, then press **ENTER**.

## Opening the channel list

From the channel list, you can add or delete channels from the channel list, add or delete channels from the *Favorite List*, and schedule reserved programs.

### To open the channel list:

- Press **CH.LIST**. The channel list opens with **All** highlighted and all the channels in the channel list are displayed. A appears next to the channel your TV is tuned to.

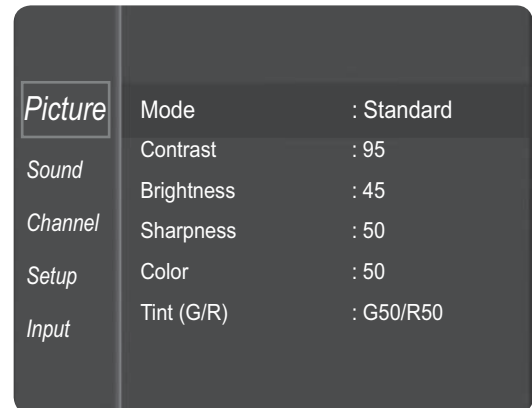


- Press **▲** or **▼** to highlight a list, then press **ENTER** to access the list. You can select:
  - All**—Shows all currently available channels.
  - Added**—Shows all added channels.
  - Favorite**—Shows all favorite channels. A appears next to favorite channels in the channel list. For more information, see “Setting up a favorite channel list” on page 32.
  - Reserve**—Shows all current reserved programs. A appears next to reserved programs in the channel list. For more information, see “Reserving programs” on page 31.
- Press **OPTION** to access a list of options, press **▲** or **▼** to highlight an option, then press **ENTER**.

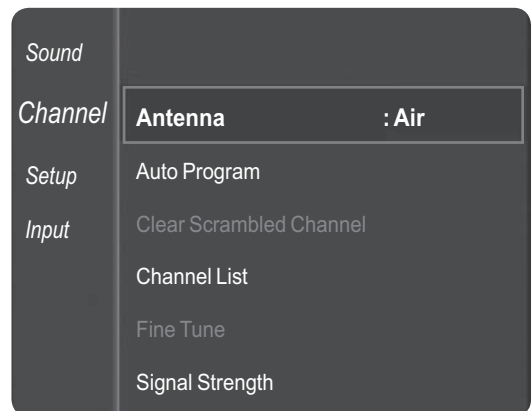
## Fine-tuning an analog channel

### To fine-tune an analog channel:

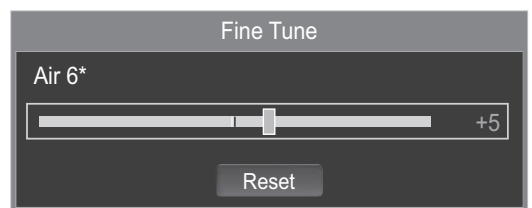
- Press **MENU**. The on-screen menu opens.



- Press **▲** or **▼** to highlight **Channel**, then press **ENTER** to access the *Channel* menu.



- Press **▲** or **▼** to highlight **Fine Tune**, then press **ENTER** to access the *Fine Tune* screen.



- Press **◀** or **▶** to fine-tune the channel, then press **ENTER** to confirm.
- Press **RETURN** to return to the previous menu or **EXIT** to close the menu.

#### Notes

- If you do not store the fine-tuned channel in memory, your adjustments are not saved.
- \* appears next to the name of fine-tuned channels in the channel list.
- To reset the fine tuning setting, press **▼** to highlight **Reset**, then press **ENTER**.

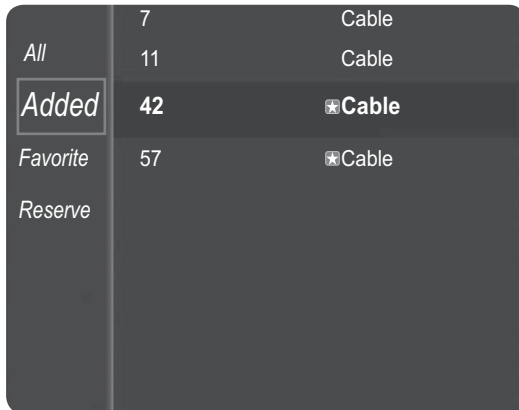


## Reserving programs

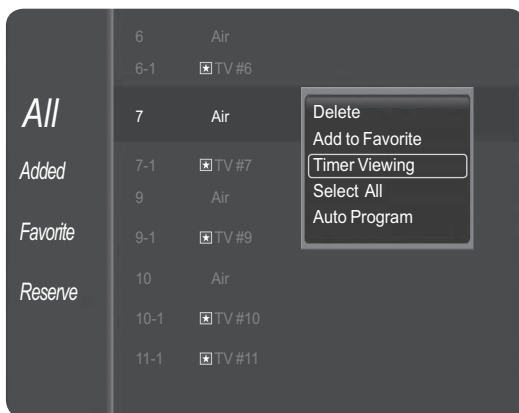
You can reserve (schedule) a program that you want to watch. When the program time arrives, your TV switches to the channel that is broadcasting the program.

### To reserve a program:

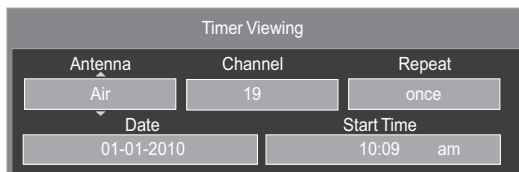
- 1 Press **CH.LIST**. The channel list opens.



- 2 Press **▲** or **▼** to highlight the channel you want to reserve, then press **ENTER**.
- 3 Press **OPTION** to access the list of options, then press **▲** or **▼** to highlight **Timer Viewing**.



- 4 Press **ENTER**. The *Timer Viewing* screen opens.



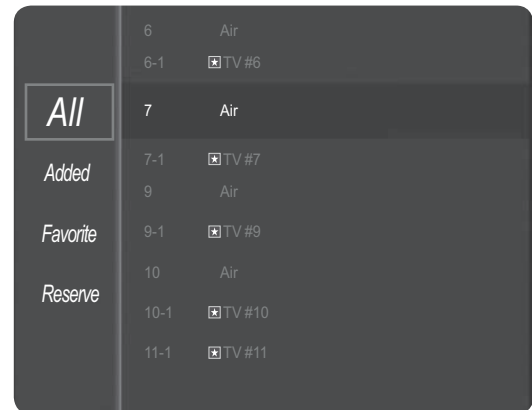
- 5 Press **▲** or **▼** to change an item. Press **◀** or **▶** to move from item to item.
- 6 Press **RETURN** to return to the previous menu or **EXIT** to close the menu.

## Changing a reservation

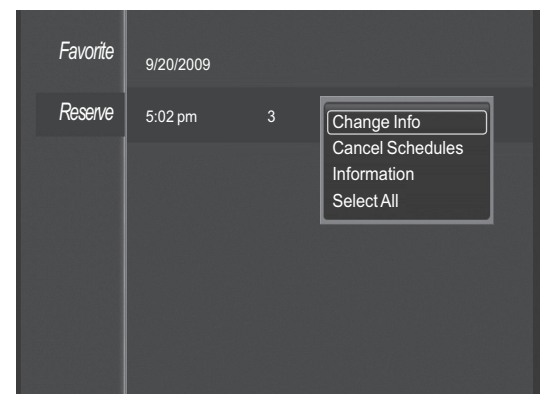
After you reserve a program, you can change the reservation.

### To change a reservation:

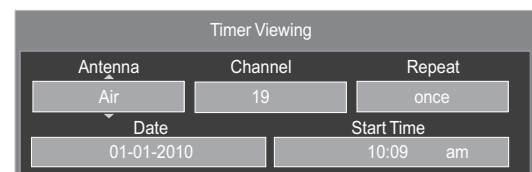
- 1 Press **CH.LIST**. The channel list opens.



- 2 Press **▲** or **▼** to highlight **Reserve**, then press **ENTER**. The list of reserved programs appears.
- 3 Press **▲** or **▼** to highlight the reservation you want to change, then press **ENTER**.
- 4 Press **OPTION** to open the list of options.



- 5 Press **▲** or **▼** to highlight **Change Info**, then press **ENTER**. The *Timer Viewing* screen opens and displays the reserved program information.



- 6 Press **▲** or **▼** to change an item. Press **◀** or **▶** to move from item to item.
- 7 After you make your changes, press **RETURN** to return to the previous menu or **EXIT** to close the menu.

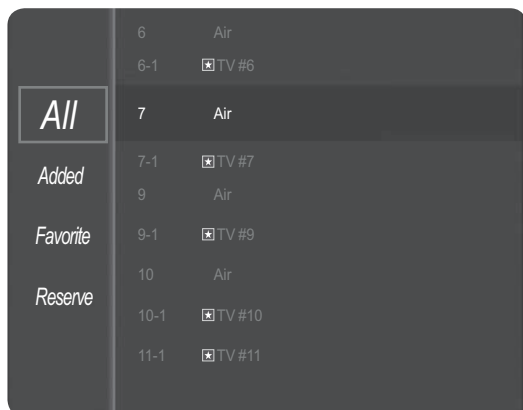
#### Note

If you want to delete a reserved program, repeat Steps 1 through 6 and select **Cancel Schedules** in Step 6.

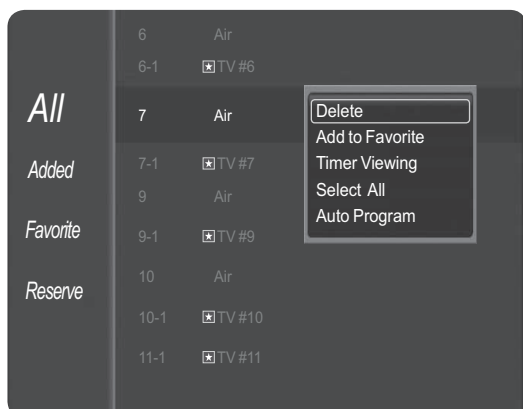
## Hiding channels

### To hide channels:

- 1 Press **CH.LIST**. The channel list opens with **All** highlighted.



- 2 Press **▲** or **▼** to highlight the channel you want to hide (delete from the channel list), then press **ENTER**.
- 3 Press **OPTION** to access the list of options. **Delete** is highlighted.



- 4 Press **ENTER**. The channel is grayed in the channel list. When you press **CH ▲** or **CH ▼**, your TV will skip the channel. You can still tune to the channel by pressing the number buttons to enter the channel number.

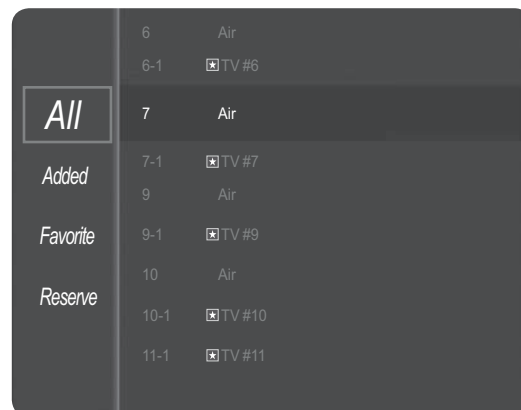
#### Note

The **Add** option only appears in the option list if you have deleted channels. If you want to add a channel back to the channel list, repeat this task and select **Add** instead of **Delete**.

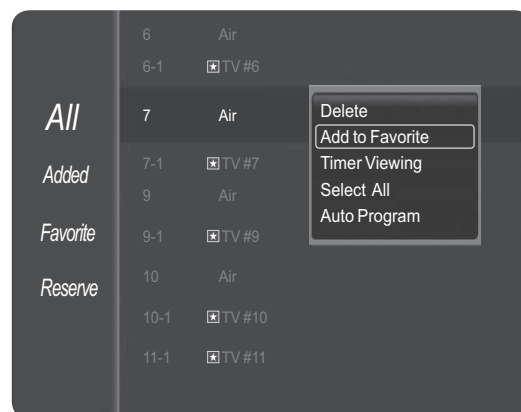
## Setting up a favorite channel list

### To set up a favorite channel list:

- 1 Press **CH.LIST**. The channel list opens with **All** highlighted.



- 2 Press **▲** or **▼** to highlight the channel you want to add to the *Favorite List*, then press **ENTER**.
- 3 Press **OPTION** to access the list of options, then press **▲** or **▼** to highlight **Add to Favorite**.



- 4 Press **ENTER**. A **★** appears next to favorite channels in the channel list.

#### Note

The **Delete from Favorite** option only appears in the option list if you have added channels to the *Favorite List*.

To delete a channel from the *Favorite List*, repeat this task and select **Delete from Favorite** instead of **Add to Favorite**.

To select all the channels in the *Favorite List*, press **OPTION**, **▲** or **▼** to highlight **Select All**, then press **ENTER**. If you want to delete all the channels in the *Favorite List*, this is a quick way to select them.

- 5 Press **RETURN** to return to the previous menu or **EXIT** to close the menu.



## Viewing a favorite channel

To view a favorite channel:

- 1 Press **FAV.CH**. The *Favorite List* opens.

	7	Cable
Added	11	Cable
Favorite	42	Cable
Reserve	57	Cable

- 2 Press **▲** or **▼** to highlight the channel you want to watch, then press **ENTER**. Your TV tunes to the channel you selected.

## Checking the DTV signal strength

To check the DTV signal strength:

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

Picture	Mode	: Standard
Sound	Contrast	: 95
Channel	Brightness	: 45
Setup	Sharpness	: 50
Input	Color	: 50
	Tint (G/R)	: G50/R50

- 2 Press **▲** or **▼** to highlight **Channel**, then press **ENTER** to access the *Channel* menu.

Sound	
Channel	Antenna : Air
Setup	Auto Program
Input	Clear Scrambled Channel
	Channel List
	Fine Tune
	Signal Strength

- 3 Press **▲** or **▼** to highlight **Signal Strength**, then press **ENTER**. The *Signal Strength* screen opens.



### Note

You cannot fine-tune a digital channel. However, you can adjust the antenna to improve the signal strength.

- 4 Press **ENTER** to close the *Signal Strength* screen.
- 5 Press **RETURN** to return to the previous menu or **EXIT** to close the menu.

# Setting parental controls

## Note

Parental controls are not available in HDMI or component video mode.

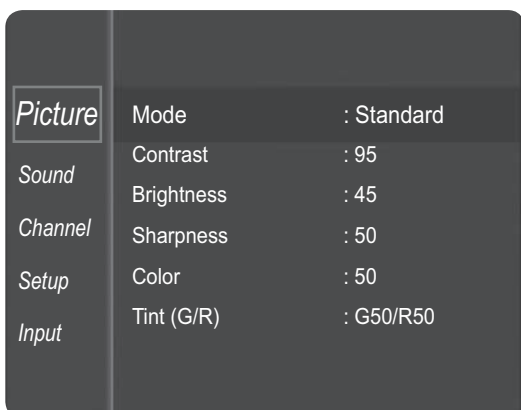
## Note

Unless otherwise noted, all tasks in this section are based on using the remote control.

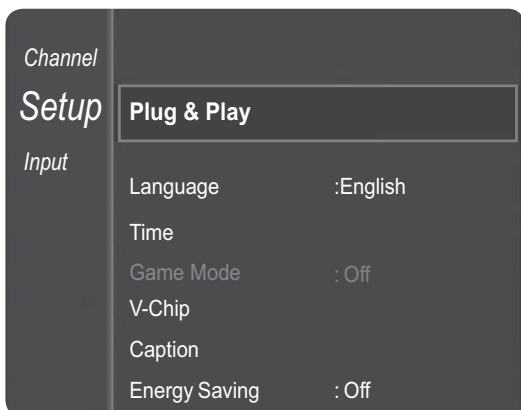
## Setting or changing the password

### To set up a password:

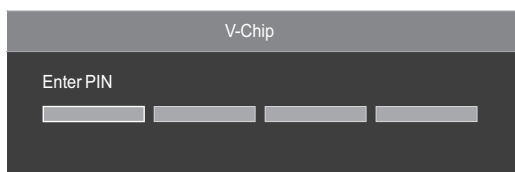
- 1 Press **MENU**. The on-screen menu opens.



- 2 Press **▲** or **▼** to highlight **Setup**, then press **ENTER** to access the *Setup* menu.



- 3 Press **▲** or **▼** to highlight **V-Chip**, then press **ENTER** to access the *V-Chip* menu. The *V-Chip* password screen opens.



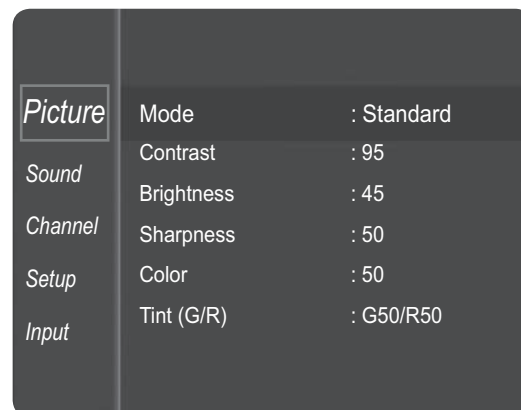
- 4 Press the number buttons to enter the password, then press **ENTER**. The default password is **0000**.
- 5 Press **▲** or **▼** to highlight **Change PIN**, then press **ENTER**.

- 6 Press the number buttons to enter the new password, press **ENTER**, then enter the new password again and press **ENTER**.
- 7 Press **RETURN** to return to the previous menu or **EXIT** to close the menu.

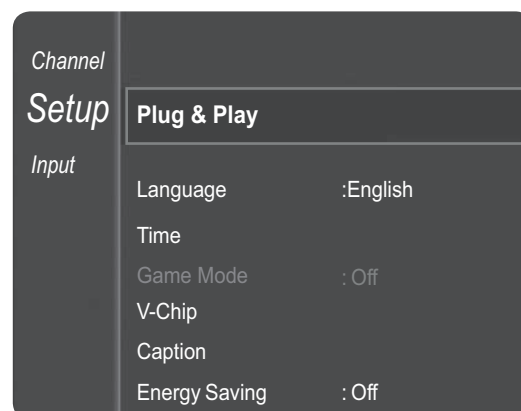
## Turning parental controls on or off

### To set parental control levels:

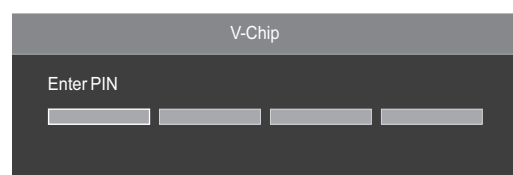
- 1 Press **MENU**. The on-screen menu opens.



- 2 Press **▲** or **▼** to highlight **Setup**, then press **ENTER** to access the *Setup* menu.



- 3 Press **▲** or **▼** to highlight **V-Chip**, then press **ENTER** to access the *V-Chip* menu. The *V-Chip* password screen opens.

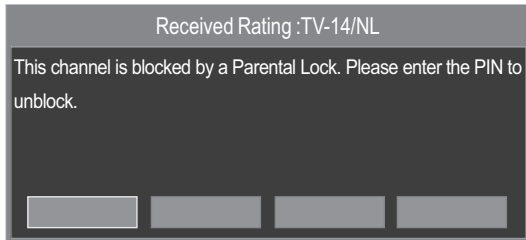


- 4 Press the number buttons to enter the password, then press **ENTER**. The default password is **0000**.
- 5 Press **▲** or **▼** to highlight **V-Chip Lock**, then press **ENTER**.
- 6 Press **▲** or **▼** to highlight **On** or **Off**, then press **ENTER**.

## Temporarily unblocking a channel

### To temporarily unblock a channel:

- When you tune to a channel or program that is blocked and the following screen appears, Press the number buttons to enter the password, then press **ENTER**.



## Setting U.S. TV parental control levels

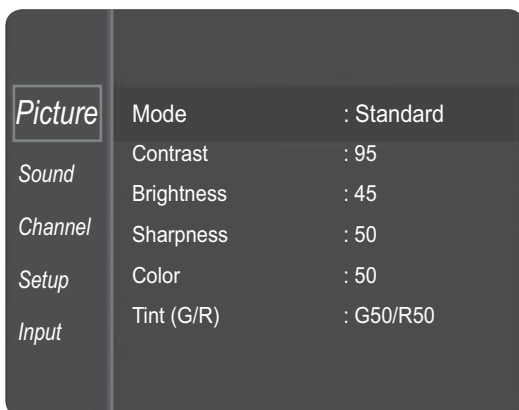
U.S. TV ratings	
NONE	Not rated
TV-Y	All children
TV-Y7	Children over seven years of age
TV-G	General audiences
TV-PG	Parental guidance suggested
TV-14	Parents strongly cautioned
TV-MA	Mature audiences only

Some of the age-based TV parental guidelines ratings also have content-based ratings.

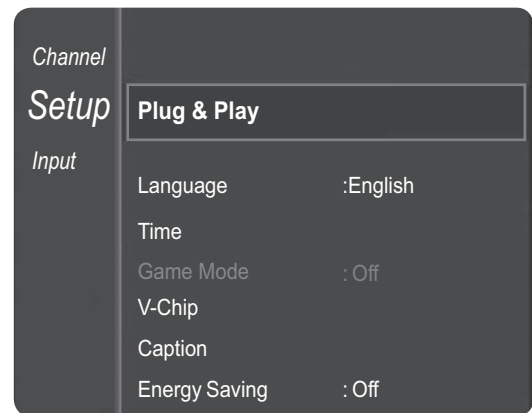
U.S. TV content ratings	
FV	Fantasy violence
L	Adult language
S	Sexual situations
V	Violence
D	Sexually suggestive dialog

### To set U. S. TV parental control levels:

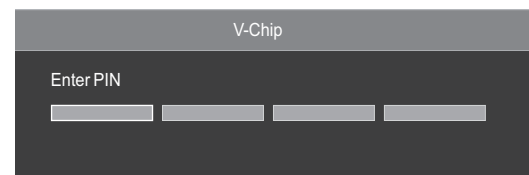
- Press **MENU**. The on-screen menu opens.



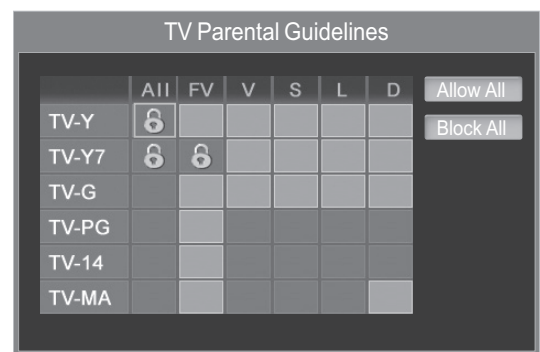
- Press **▲** or **▼** to highlight **Setup**, then press **ENTER** to access the *Setup* menu.



- Press **▲** or **▼** to highlight **V-Chip**, then press **ENTER** to access the *V-Chip* menu. The *V-Chip* password screen opens.



- Press the number buttons to enter the password, then press **ENTER**. The default password is **0000**.
- Press **▲** or **▼** to highlight **V-Chip Lock**, then press **ENTER**.
- Press **▲** or **▼** to highlight **Yes**, then press **ENTER**. The V-Chip Lock must be on to change parental control levels.
- Press **▲** or **▼** to highlight **TV Parental Guidelines**, then press **ENTER** to access the *TV Parental Guidelines* screen.



- Press **▲** or **▼**, **◀** or **▶** to highlight a rating, then press **ENTER**. The rating you selected and all higher ratings are blocked.

### Note

If you want to block all channels, highlight **Block All**, then press **ENTER**. If you want to unblock all channels, highlight **Allow All**, then press **ENTER**.

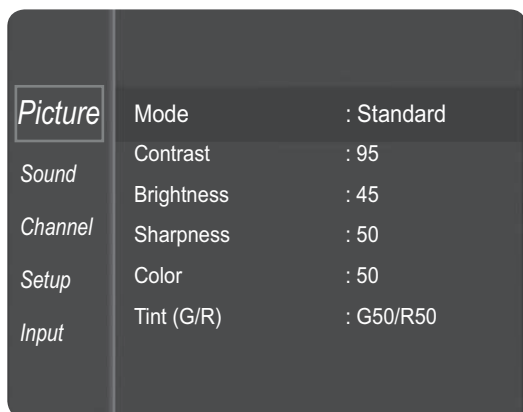
- Press **RETURN** to return to the previous menu or **EXIT** to close the menu.

## Setting movie levels

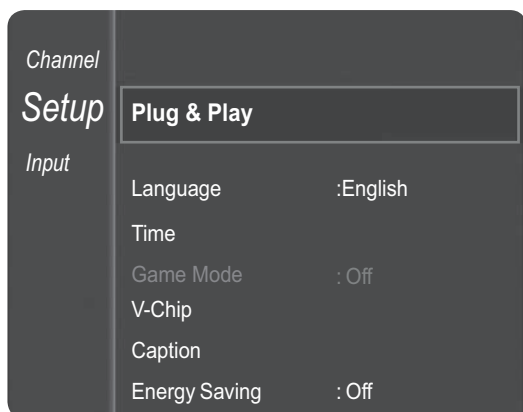
U.S. movie (MPAA) ratings	
G	General audiences
PG	Parental guidance suggested
PG-13	Suitable for children 13 and older
R	Parental guidance suggested for children under 17
NC-17	Not suitable for children under 17
X	Adults only
N/A	Movie not rated

### To set movie levels:

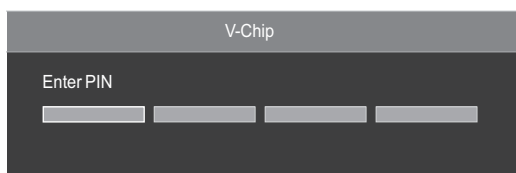
- 1 Press **MENU**. The on-screen menu opens.



- 2 Press **▲** or **▼** to highlight **Setup**, then press **ENTER** to access the *Setup* menu.

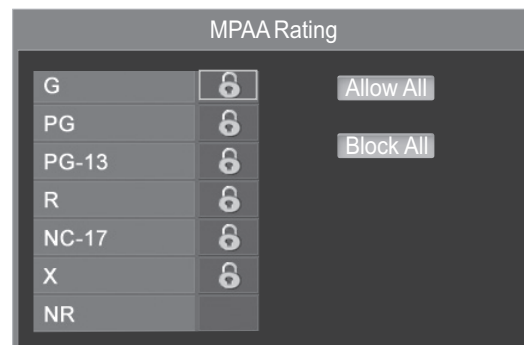


- 3 Press **▲** or **▼** to highlight **V-Chip**, then press **ENTER** to access the *V-Chip* menu. The *V-Chip* password screen opens.



- 4 Press the number buttons to enter the password, then press **ENTER**. The default password is **0000**.

- 5 Press **▲** or **▼** to highlight **V-Chip Lock**, then press **ENTER**.
- 6 Press **▲** or **▼** to highlight **Yes**, then press **ENTER**. The V-Chip Lock must be on to change parental control levels.
- 7 Press **▲** or **▼** to highlight **MPAA**, then press **ENTER** to access the *MPAA Rating* screen.



### Note

If you want to block all movie ratings, highlight **Block All**, then press **ENTER**. If you want to unblock all movie ratings, highlight **Allow All**, then press **ENTER**.

- 8 Press **▲** or **▼** to highlight a rating, then press **ENTER**. The rating you selected and all higher ratings will be blocked.
- 9 Press **RETURN** to return to the previous menu or **EXIT** to close the menu.

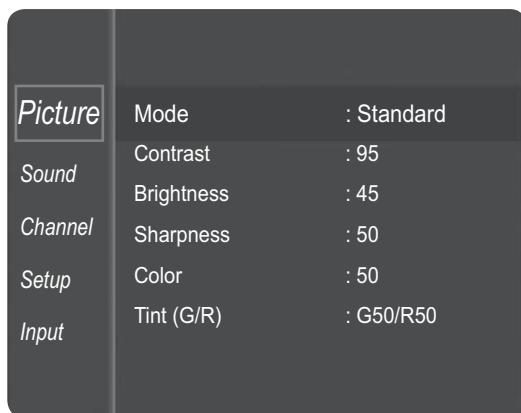
## Setting Canadian TV rating levels

Canadian English ratings	
E	Exempt programming
C	Children
C8+	Children over 8 years old
G	General audiences
PG	Parental guidance
14+	Over 14 years old
18+	Adult programming

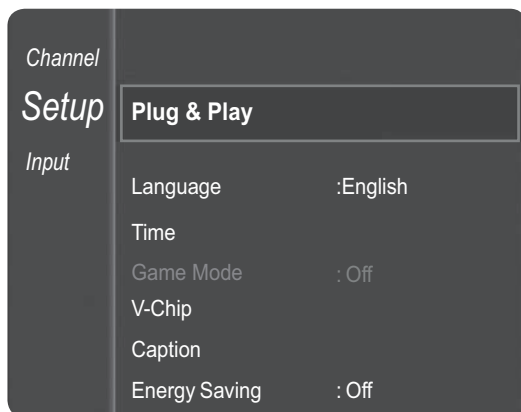
Canadian French ratings	
E	Exempt programming
G	General audiences
8ans+	Over 8 years old
13ans+	Over 13 years old
16ans+	Over 16 years old
18ans+	Over 18 years old, only for adult viewing

## To set Canadian TV ratings levels:

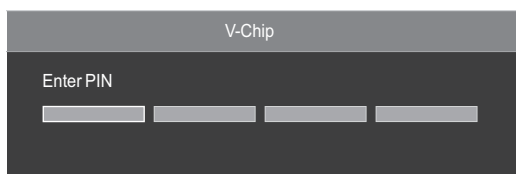
- 1 Press **MENU**. The on-screen menu opens.



- 2 Press **▲** or **▼** to highlight **Setup**, then press **ENTER** to access the *Setup* menu.

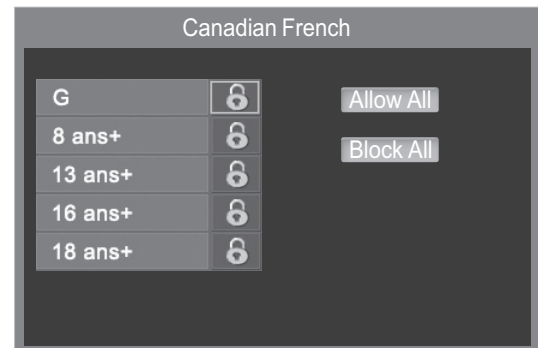


- 3 Press **▲** or **▼** to highlight **V-Chip**, then press **ENTER** to access the *V-Chip* menu. The *V-Chip* password screen opens.



- 4 Press the number buttons to enter the password, then press **ENTER**. The default password is **0000**.
- 5 Press **▲** or **▼** to highlight **V-Chip Lock**, then press **ENTER**.
- 6 Press **▲** or **▼** to highlight **Yes**, then press **ENTER**. The V-Chip Lock must be on to change parental control levels.

- 7 Press **▲** or **▼** to highlight **Canadian English** or **Canadian French**, then press **ENTER**. A screen similar to the following opens.



- 8 Press **▲** or **▼** to highlight a rating, then press **ENTER**. The rating you selected and all higher ratings will be blocked.

### Note

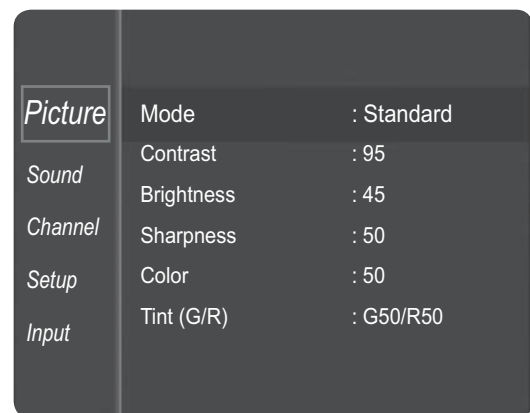
If you want to block all channels, highlight **Block All**, then press **ENTER**. If you want to unblock all channels, highlight **Allow All**, then press **ENTER**.

- 9 Press **RETURN** to return to the previous menu or **EXIT** to close the menu.

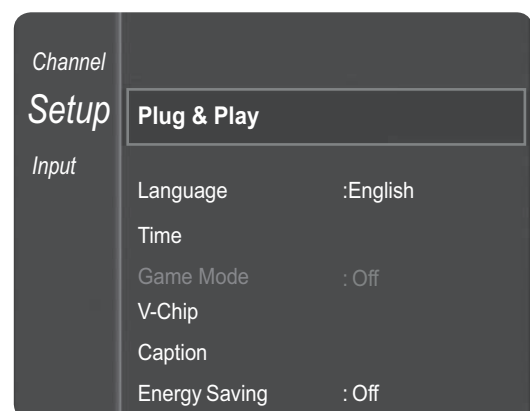
## Downloading rating information

### To download rating information:

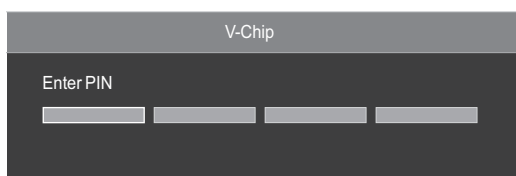
- 1 Press **MENU**. The on-screen menu opens.



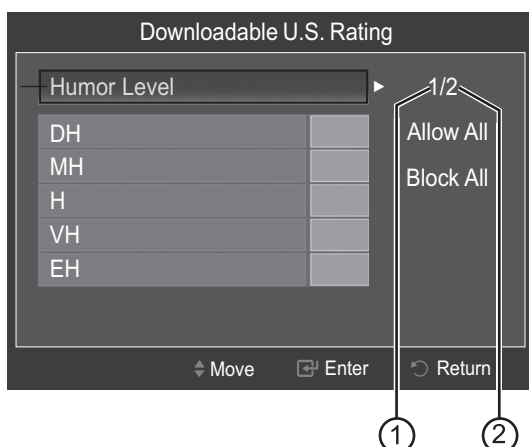
- 2 Press **▲** or **▼** to highlight **Setup**, then press **ENTER** to access the *Setup* menu.



- Press **▲** or **▼** to highlight **V-Chip**, then press **ENTER** to access the *V-Chip* menu. The *V-Chip* password screen opens.



- Press the number buttons to enter the password, then press **ENTER**. The default password is **0000**.
- Press **▲** or **▼** to highlight **V-Chip Lock**, then press **ENTER**.
- Press **▲** or **▼** to highlight **On**, then press **ENTER**. The V-Chip Lock must be on to change parental control levels.
- Press **▲** or **▼** to highlight **Downloadable U.S. Rating**, then press **ENTER** to access the *Downloadable U.S. Rating* menu.



① Number for the current rating information download.

② Total of all rating information downloads.

#### Notes

- The rating screen and rating information that appears will vary depending on the rating information provided by the broadcaster.
- Regardless of the menu language you select, the downloaded rating information will always be in English.

- Press **▲** or **▼** to highlight a rating, then press **ENTER**. The rating will be blocked.
- Press **RETURN** to return to the previous menu or **EXIT** to close the menu.

## Using closed captioning

#### Notes

- Closed captioning is not available in HDMI or component video mode.
- The availability of closed captioning depends on the broadcaster.

#### Note

Unless otherwise noted, all tasks in this section are based on using the remote control.

### Viewing closed captioning

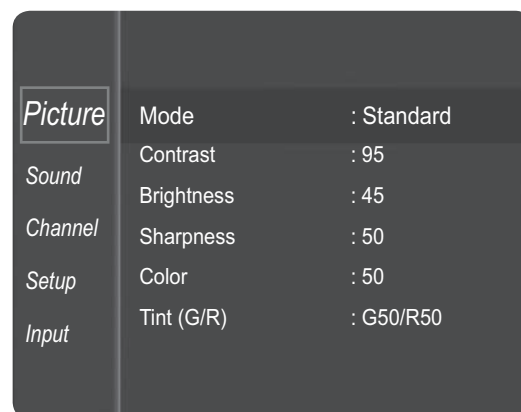
#### To view closed captions:

- Press **CCD** to turn closed captioning **On** or **Off**.

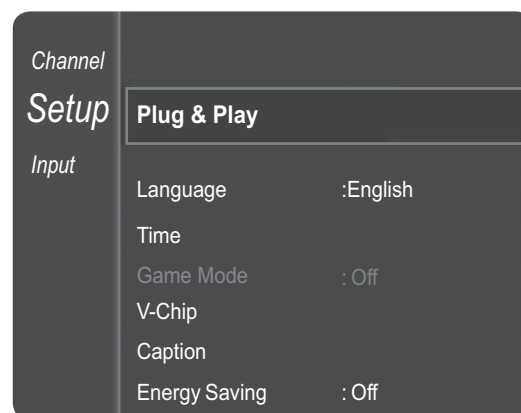
### Selecting the closed captioning mode

#### To select the closed captioning mode:

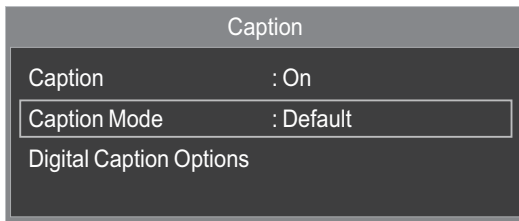
- Press **MENU**. The on-screen menu opens.



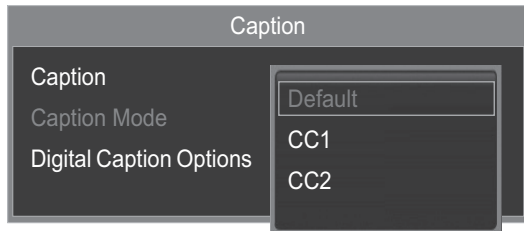
- Press **▲** or **▼** to highlight **Setup**, then press **ENTER** to access the *Setup* menu.



- 3 Press **▲** or **▼** to highlight **Caption**, then press **ENTER** to access the *Caption* menu.



- 4 Press **▲** or **▼** to highlight **Caption Mode**, then press **ENTER**.

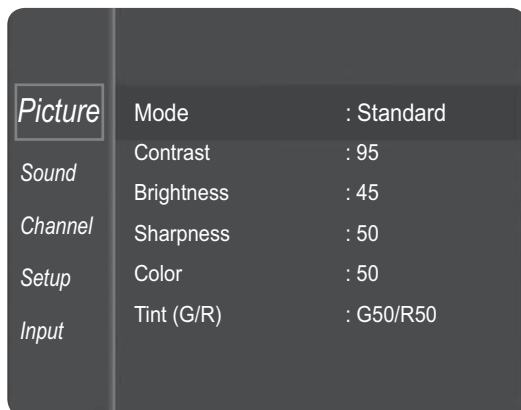


- 5 Press **▲** or **▼** to highlight a caption mode, then press **ENTER**. You can select:
- **Default**, **CC1** through **CC4**, or **Text1** through **Text4** for analog channels.
  - **Default**, **Service1** through **Service6**, **CC1** through **CC4**, or **Text1** through **Text4** for digital channels.
- 6 Press **RETURN** to return to the previous menu or **EXIT** to close the menu.

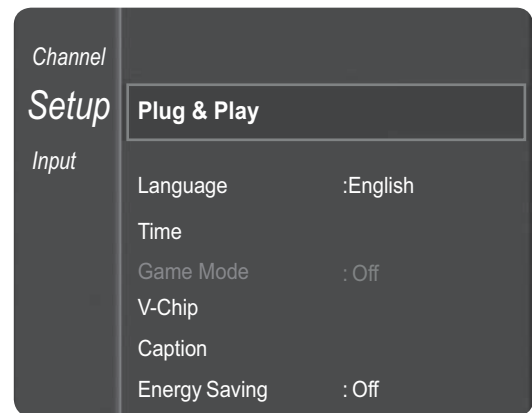
## Customizing DTV closed captioning styles

**To customize DTV closed captioning styles:**

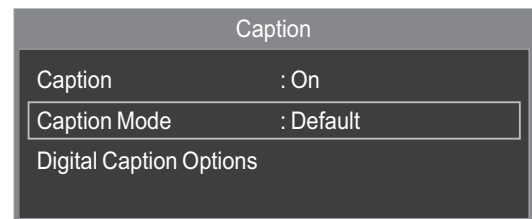
- 1 Press **MENU**. The on-screen menu opens.



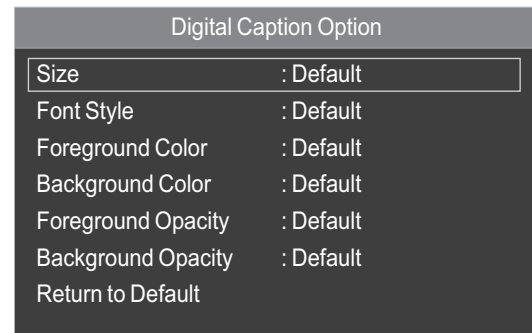
- 2 Press **▲** or **▼** to highlight **Setup**, then press **ENTER** to access the *Setup* menu.



- 3 Press **▲** or **▼** to highlight **Caption**, then press **ENTER** to access the *Caption* menu.



- 4 Press **▲** or **▼** to highlight **Digital Caption Options**, then press **ENTER**. The *Digital Caption* menu opens.



- 5 Press **▲** or **▼** to highlight a style, then press **ENTER**. You can select:
- **Size**—Selects the caption font size.
  - **Font Style**—Selects the caption font.
  - **Foreground Color**—Selects the font color.
  - **Background Color**—Selects the background color for the captions.
  - **Foreground Opacity**—Selects the opacity of the caption foreground.

- **Background Opacity**—Selects the opacity of the caption background.
- **Return to Default**—Returns all styles back to the default settings of the broadcasting station.

## Notes

- You can only change the digital caption styles when **Caption Mode** is set to **Default** or **Service1** through **Service6**.
- The font color and background color cannot be set to the same color.
- The foreground opacity and background opacity cannot both be set to transparent.

## Adjusting time settings

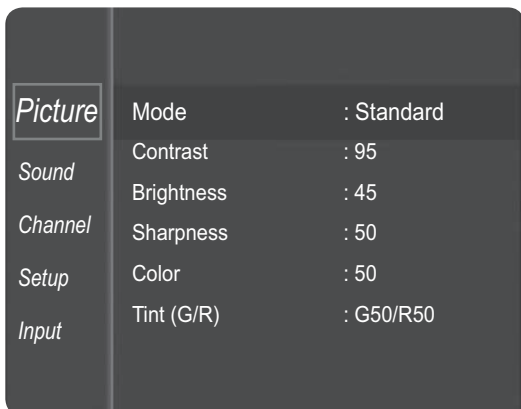
### Note

Unless otherwise noted, all tasks in this section are based on using the remote control.

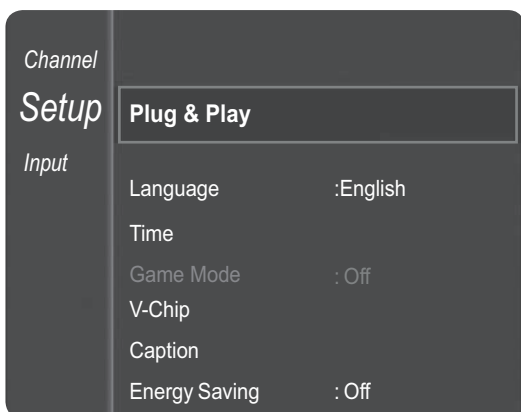
### Setting the clock

#### To set the clock:

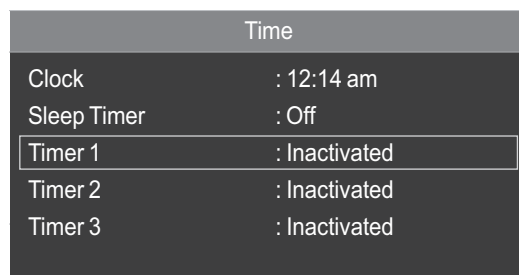
- 1 Press **MENU**. The on-screen menu opens.



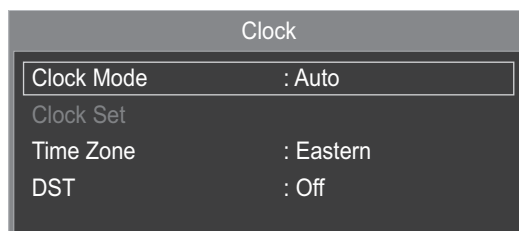
- 2 Press **▲** or **▼** to highlight **Setup**, then press **ENTER**. The **Setup** menu opens.



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

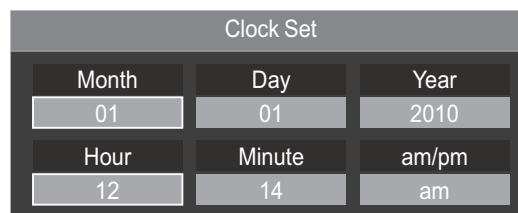


- 4 Press **▲** or **▼** to highlight **Clock**, then press **ENTER**. The **Clock** menu opens with **Clock Mode** highlighted.



- 5 Press **ENTER**, press **▲** or **▼** to highlight **Manual**, then press **ENTER**. You can only set the time if **Clock Mode** is set to **Manual**.

- 6 Press **▲** or **▼** to highlight **Clock Set**, then press **ENTER**.

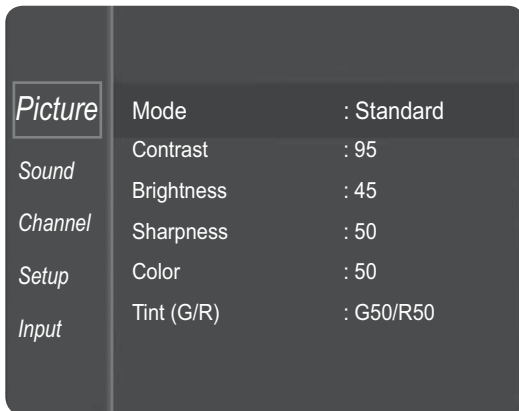


- 7 Press **▲** or **▼** to change an item. Press **◀** or **▶** to move from item to item.
- 8 After you set the clock, press **RETURN** to return to the previous menu or **EXIT** to close the menu.

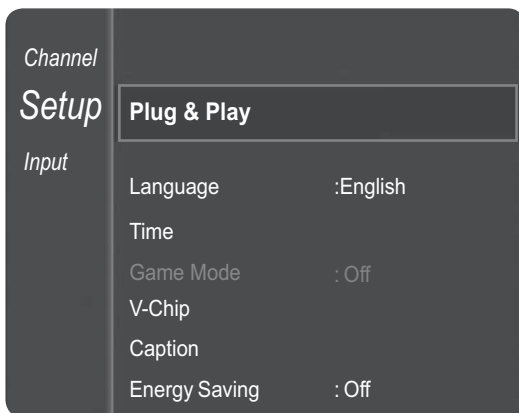


## Setting the time zone

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



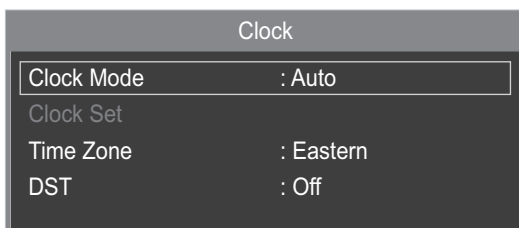
- 2 Press **▲** or **▼** to highlight **Setup**, then press **ENTER** to access the *Setup* menu.



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



- 4 Press **▲** or **▼** to highlight **Clock**, then press **ENTER**. The *Clock* menu opens with **Clock Mode** highlighted.



- 5 If **Clock Mode** is set to **Manual**, press **▲** or **▼** to highlight **Clock Mode**, press **ENTER**, press **▲** or **▼** to highlight **Auto**, then press **ENTER**. You can only set the time zone if **Clock Mode** is set to **Auto**.

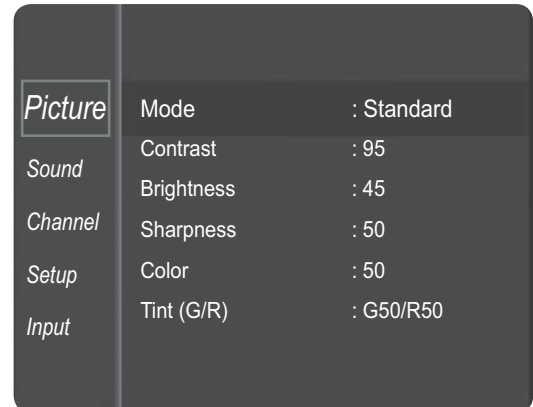
- 6 Press **▲** or **▼** to highlight **Time Zone**, then press **ENTER**.

- 7 Press **▲** or **▼** to highlight a time zone, then press **ENTER**.

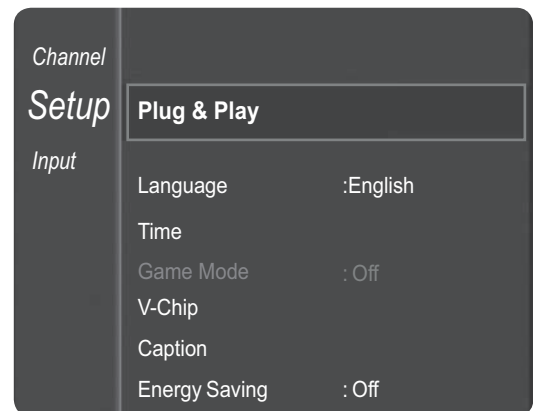
## Turning Daylight Saving Time on or off

**To turn Daylight Saving Time on or off:**

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



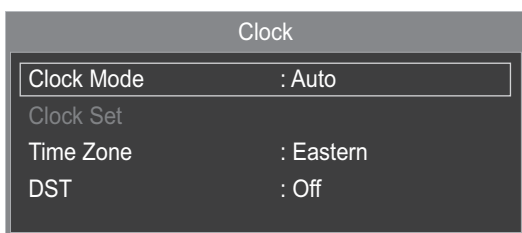
- 2 Press **▲** or **▼** to highlight **Setup**, then press **ENTER** to access the *Setup* menu.



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



- 4 Press **▲** or **▼** to highlight **Clock**, then press **ENTER**. The *Clock* menu opens with **Clock Mode** highlighted.

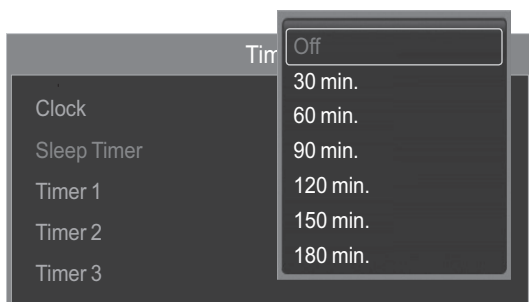


- 5 If **Clock Mode** is set to **Manual**, press **▲** or **▼** to highlight **Clock Mode**, press **ENTER**, press **▲** or **▼** to highlight **Auto**, then press **ENTER**. You can only change the **Daylight Saving Time** mode if **Clock Mode** is set to **Auto**.
- 6 Press **▲** or **▼** to highlight **DST**, then press **ENTER**.
- 7 Press **▲** or **▼** to highlight **On** or **Off**, then press **ENTER**.

## Setting the sleep timer

### To set the sleep timer:

- Press **SLEEP** one or more times to select the amount of time you want your TV to wait before it automatically turns off. You can select **30 min.**, **60 min.**, **120 min.**, **150 min.**, or **180 min.**
- To turn off the sleep timer, press **SLEEP** one or more times to select **Off**.

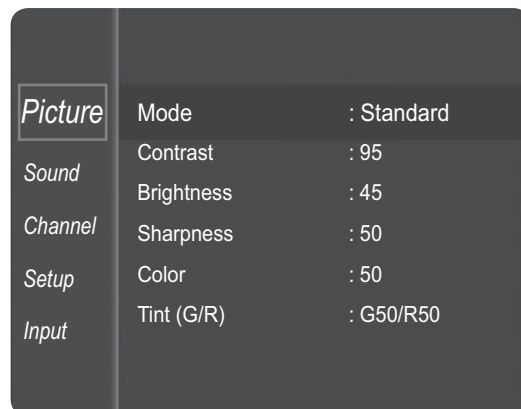


## Setting a wake-up timer

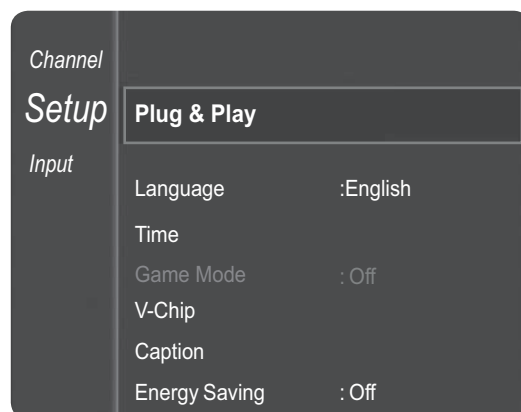
You can set a timer that will turn your TV on and off at specific times. You can set as many as three timers.

### To set a wake-up timer:

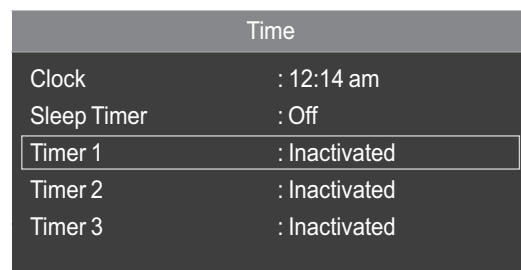
- 1 Press **MENU**. The on-screen menu opens.



- 2 Press **▲** or **▼** to highlight **Setup**, then press **ENTER** to access the *Setup* menu.



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



- 4 Press **▲** or **▼** to highlight **Timer 1**, **Timer 2**, or **Timer 3**, then press **ENTER** to access the *Timer* screen. The cursor is on the first time field under **On Time**.

Timer 1

On Time  
12 00 am Inactivate

Off Time  
12 00 am Inactivate

Volume 10 Antenna Air Channel 3

Repeat Sun Mon Tue Wed The Fri Sat  
Once

- 5 Press **▲** or **▼** to change an item. Press **◀** or **▶** to move from item to item. You need to set:
- **On Time**—Sets the time your TV turns on.
  - **Off Time**—Sets the time your TV turns off.
  - **Inactive/Active**—Turns the timer on or off.
  - **Volume**—Sets the volume level.
  - **Antenna**—Selects the TV signal source. You can select **Air** (antenna) or **Cable** (cable TV).
  - **Channel**—Selects the channel you want the TV tuned to when it turns on.
  - **Repeat**—Sets the repeat mode for the timer. You can set the timer to activate once or on one or more days of the week. After you select a day of the week, press **ENTER**. A check mark appears in the box below the day.
- 6 Press **RETURN** to return to the previous menu or **EXIT** to close the menu.

#### Note

If the timer turns on your TV and no controls or buttons are used for three hours, your TV automatically turns off to prevent over-heating.

## Adjusting menu settings

#### Note

Unless otherwise noted, all tasks in this section are based on using the remote control.

### Selecting the menu language

To select the menu language:

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

Picture	Mode	: Standard
Sound	Contrast	: 95
	Brightness	: 45
Channel	Sharpness	: 50
Setup	Color	: 50
	Tint (G/R)	: G50/R50
Input		

- 2 Press **▲** or **▼** to highlight **Setup**, then press **ENTER** to access the *Setup* menu.

Channel		
Setup	Plug & Play	
Input	Language	: English
	Time	
	Game Mode	: Off
	V-Chip	
	Caption	
	Energy Saving	: Off

- 3 Press **▲** or **▼** to highlight **Language**, then press **ENTER** to access the option.

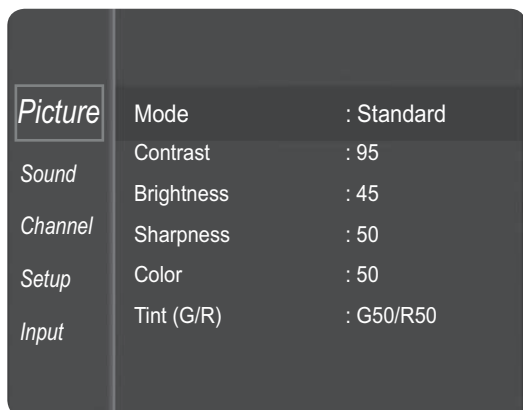
Channel	Plug & Play	
Setup	Language	: English
Input	Time	
	Game Mode	: Off
	V-Chip	
	Caption	
	Energy Saving	: Off
	Software Upgrade	

- 4 Press **▲** or **▼** to highlight a language, then press **ENTER** to confirm. You can select **English**, **French**, or **Spanish**.
- 5 Press **RETURN** to return to the previous menu or **EXIT** to close the menu.

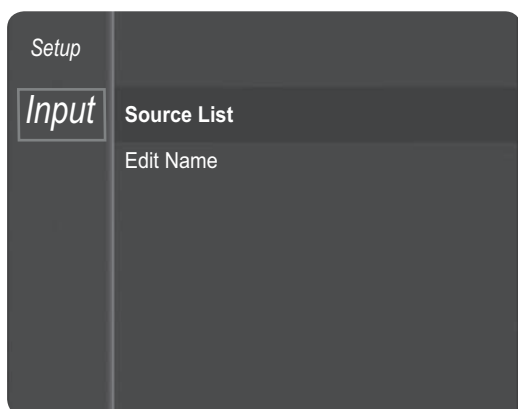
## Labeling an input source

### To change input labels:

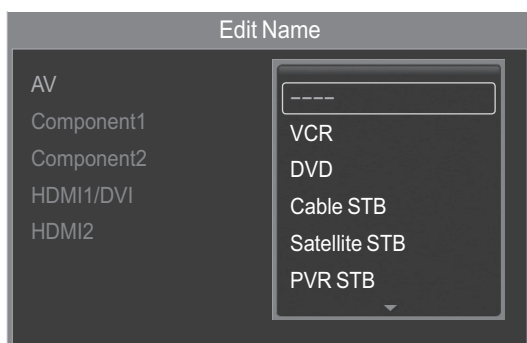
- 1 Press **MENU**. The on-screen menu opens.



- 2 Press **▲** or **▼** to highlight **Input**, then press **ENTER** to access the *Input* menu.



- 3 Press **▲** or **▼** to highlight **Edit Name**, then press **ENTER**.
- 4 Press **OPTION** to access the list of options. The *Edit Name* screen opens.



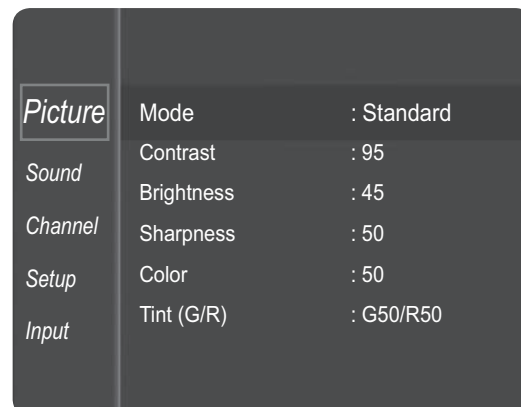
- 5 Press **▲** or **▼** to select the label you want, then press **ENTER**.

## Resetting the Plug & Play option

If you want to re-run the initial setup wizard to set up your TV again, you can reset the **Plug & Play** option.

### To reset the Plug & Play option:

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

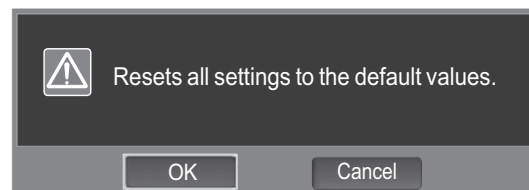


- 2 Press **▲** or **▼** to highlight **Setup**, then press **ENTER** to access the *Setup* menu. **Plug & Play** is highlighted.
- 3 Press **ENTER** to reset the **Plug & Play** option.

## Resetting settings to the defaults

### To reset settings to the defaults:

- 1 Press and hold **EXIT** until the *Resets all settings to the default values* screen opens.

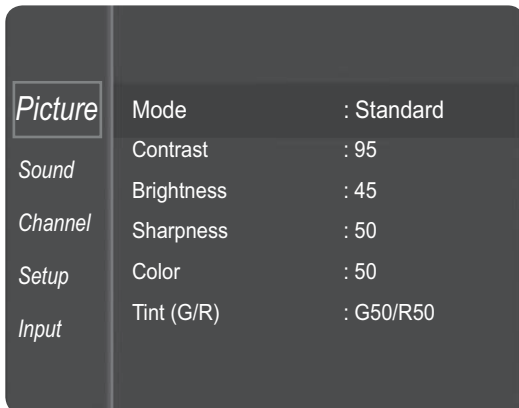


- 2 Select **OK** to reset the settings.

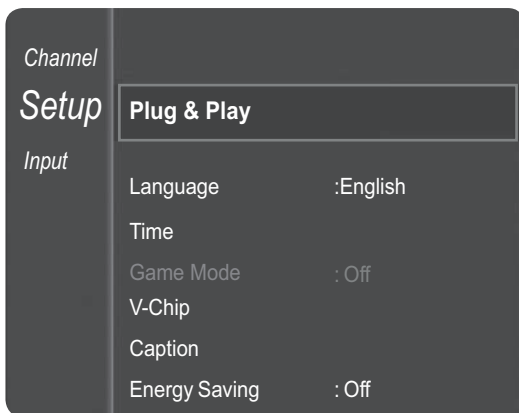
## Viewing the Open Source License Notice

**To view the Open Source License Notice:**

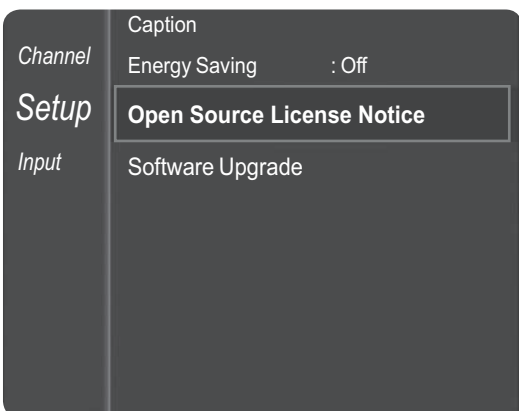
- 1 Press **MENU**. The on-screen menu opens.



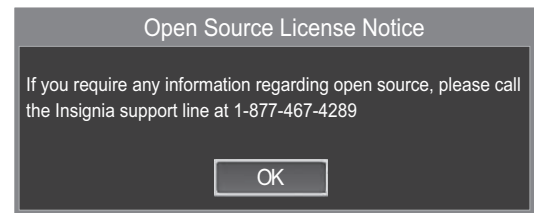
- 2 Press **▲** or **▼** to highlight **Setup**, then press **ENTER** to access the *Setup* menu.



- 3 Press **▲** or **▼** to highlight **Open Source License Notice**.



- 4 Press **ENTER**. The *Open Source License Notice* screen opens.



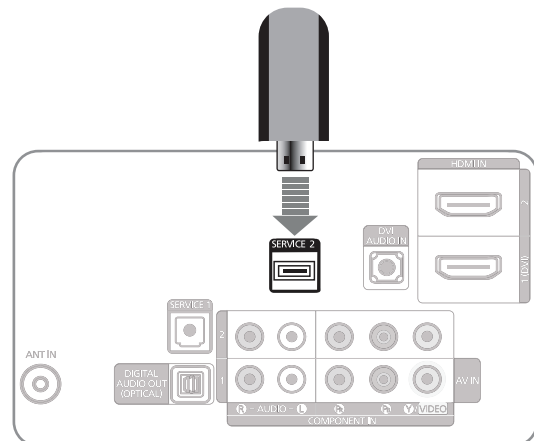
- 5 Press **ENTER** to close the *Open Source License Notice* screen.
- 6 Press **RETURN** to return to the previous menu or **EXIT** to close the menu.

## Upgrading TV software

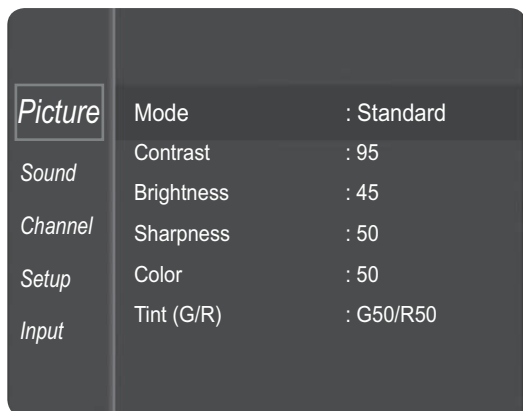
If upgrades become available for your TV, you can use a USB flash drive to upgrade your TV's software.

**To upgrade TV software:**

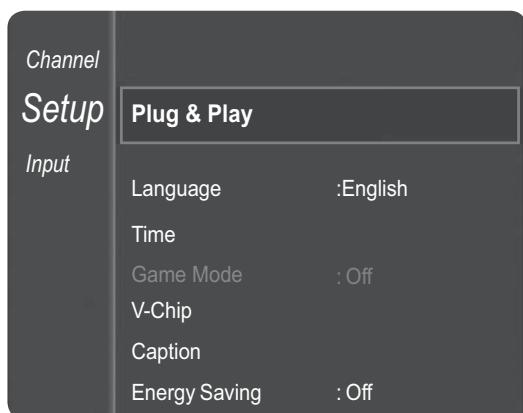
- 1 Go to [www.insigniaproducts.com](http://www.insigniaproducts.com), click **Support & Service**, enter your model number in the **Product Search** field, then click **Search**.
- 2 Download the software upgrade and copy it to a USB flash drive.
- 3 Write down all the settings you have changed in the on-screen menus. During the upgrade, all settings are reset to the factory defaults.
- 4 Plug the USB flash drive into the **SERVICE** jack on the back of your TV.



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

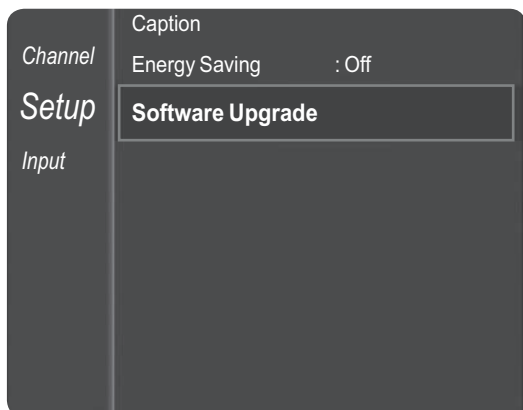


- 6 Press **▲** or **▼** to highlight **Setup**, then press **ENTER** to access the *Setup* menu.

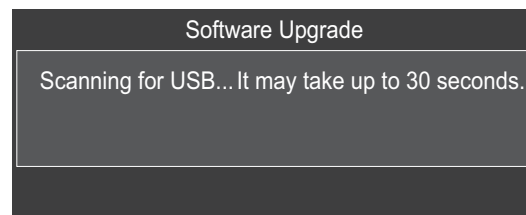


- 7 Press **▲** or **▼** to highlight **Software Upgrade**, then press **ENTER**. You may have to scroll down to see this option.

The software upgrade begins.



During the software upgrade, the following screen appears.



#### Caution

Do not disconnect power or unplug the USB flash drive during the upgrade.  
When the upgrade is complete, your TV will turn off, then back on automatically.

## 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.
- 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. **Do not** use the cleaning cloth that came with your TV to clean the cabinet. 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 the cleaning cloth or a soft, lint-free cloth. **Do not** use the cleaning cloth to clean other parts of your TV.

# Troubleshooting

## Warning

Do not try to repair your TV yourself. Refer all service to a qualified service technician.

Problem	Solution
Poor picture quality.	<ul style="list-style-type: none"> <li>Try another channel.</li> <li>Adjust the antenna.</li> <li>Check all wire connections.</li> </ul>
Poor sound quality.	<ul style="list-style-type: none"> <li>Try another channel.</li> <li>Adjust the antenna.</li> </ul>
No picture or sound.	<ul style="list-style-type: none"> <li>Try another channel.</li> <li>Press <b>INPUT</b> to make sure the correct video input source is selected. For more information, see "Selecting the video input source" on page 22.</li> <li>Make sure that the power cord is connected to your TV and a surge protector or working power outlet. If you use a surge protector, make sure that it is turned on.</li> <li>Check the antenna connections.</li> <li>Press <b>MUTE</b> to make sure that the sound is not muted.</li> </ul>
No sound or sound is too low at maximum volume.	<ul style="list-style-type: none"> <li>First, check the volume of devices connected to your TV (such as the cable or satellite TV box, DVD player, or VCR). Then, adjust the TV volume accordingly.</li> </ul>
Picture quality is good on some channels and poor on others. Sound is good.	<ul style="list-style-type: none"> <li>The problem may be caused by a poor or weak signal from the broadcaster or cable TV provider.</li> <li>If you connect to cable or satellite TV without a set-top box and experience poor picture quality, you may need to install a set-top box to improve signal reception and picture quality. Contact your cable or satellite TV provider about upgrading to a set-top box.</li> </ul>
Picture rolls vertically.	<ul style="list-style-type: none"> <li>Check all connections.</li> </ul>
Your TV operates erratically.	<ul style="list-style-type: none"> <li>Turn off the surge protector or unplug the power cord for 30 seconds, then turn on the surge protector or plug the power cord back in and turn on your TV.</li> </ul>
Your TV will not turn on.	<ul style="list-style-type: none"> <li>Test the power outlet to make sure that it is working.</li> </ul>
Remote control does not work.	<ul style="list-style-type: none"> <li>Make sure that there are no obstacles between the remote control and the remote control sensor on the front of your TV.</li> <li>Make sure that batteries are inserted into the remote.</li> <li>Make sure that the + and – symbols on the batteries match the + and – symbols inside the battery compartment.</li> <li>Clean the upper edge of the remote control (transmission window).</li> <li>Check the battery terminals.</li> <li>Replace the remote control batteries.</li> </ul>
Digital broadcasting screen problem.	<ul style="list-style-type: none"> <li>Check the digital signal strength.</li> <li>Adjust the antenna.</li> </ul>

Problem	Solution
The image is too light or too dark.	<ul style="list-style-type: none"> <li>Adjust the brightness and contrast.</li> <li>Adjust the fine tuning.</li> </ul>
The image is too large or too small.	<ul style="list-style-type: none"> <li>Adjust the <b>Picture Size</b> settings. For more information, see "Adjusting the TV picture" on page 24.</li> <li>Press <b>ZOOM</b> to select a different aspect ratio.</li> </ul>
The visual qualities of digital channels vary.	<ul style="list-style-type: none"> <li>The visual qualities of digital channels may vary depending on the original production method (analog or digital). If the original production method is digital, the visual quality is high. If the original production method is analog, the program has been converted to digital and visual quality may be lower.</li> <li>The visual quality is of an SD (standard definition) grade.</li> </ul>
Screen is black and power indicator light blinks steadily.	<p>If your TV is connected to a computer:</p> <ul style="list-style-type: none"> <li>Your TV may be in power-saving mode. Move the mouse or press a keyboard key.</li> <li>Check the cable connections.</li> </ul> <p>If your TV is connected to an external device:</p> <ul style="list-style-type: none"> <li>Your TV may be in power-saving mode. Press <b>INPUT</b>.</li> <li>Turn your TV off, then on again.</li> <li>Check the cable connections.</li> </ul>
The TV caption shows HD, but the visual quality is poor.	<ul style="list-style-type: none"> <li>The HD (high definition) caption that appears when switching channels or when pressing <b>DISPLAY</b> on the remote control means the selected channel is a digital channel. If the broadcasting station converts an analog signal into digital and transmits the signal, the visual quality may not be perfect.</li> </ul>
A distorted picture appears in the corner of the screen.	<ul style="list-style-type: none"> <li>If Screen Fit is selected in some external devices, a distorted picture may appear in a corner of the screen. This symptom is caused by external devices, not the TV.</li> </ul>
A strange sound is heard.	<ul style="list-style-type: none"> <li>This is caused by minor systems operation and is not a defect.</li> </ul>
Pixels are visible on the screen.	<ul style="list-style-type: none"> <li>There may be few bright or dark pixels on the screen. These pixels have no impact on the performance of the product.</li> </ul>
The <i>Resets all settings to the default values</i> message appears.	<ul style="list-style-type: none"> <li>This appears when you press and hold <b>EXIT</b> for several seconds. The product settings are reset to the factory defaults.</li> </ul>

# Specifications

Specifications are subject to change without notice.

## Warranty

NS-51P680A12	NS-59P680A12
Parts: 2 years	Parts: 2 years
Labor: 2 years	Labor: 2 years

## Dimensions and weight

	Without stand	With stand
NS-51P680A12	47.6 × 2.2 × 28.7 in. (120.79 × 5.6 × 72.77 cm) 48.06 lbs (21.8 kg)	47.6 × 9.9 × 31.2 in. (120.79 × 25.18 × 79.19 cm) 54.67 lbs (24.8 kg)
NS-59P680A12	54.7 × 2.2 × 32.9 in. (139.05 × 5.6 × 83.65 cm) 66.6 lbs (30.2 kg)	58.7 × 13 × 35.6 in. (149.1 × 33 × 90.42 cm) 79.1 lbs (35.9 kg)

## Screen

Screen size measured diagonally	NS-51P680A12: 50.7 in. NS-59P680A12: 59 in.
Display type	PDP (plasma display panel)
Panel	600Hz
Display resolution	1920 × 1080p
Panel resolution	1920 × 1080p
Aspect ratio	16:9
Dynamic contrast ratio--(typical) list value	1,000,000 : 1
Brightness (center typical) cd/m2-panel	350
Comb filter	3d y/c digital
Response time	0.001 ms
Horizontal viewing angle (typical)	Over 160
Vertical viewing angle (typical)	Over 160

## Display resolutions

HDMI	1080p, 1080i, 720p, 480p, 480i
Suggested resolutions	
Component video	1080i, 720p, 480p, 480i
Suggested resolutions	

## PC - HDMI/DVI scan rates

Mode	Resolution	Horizontal frequency (kHz)	Vertical frequency (Hz)	Pixel clock frequency (MHz)
IBM	640 x 350	31.469	70.086	25.175
	720 x 400	31.469	70.087	28.322
MAC	640 x 480	35.000	66.667	30.240
	832 x 624	49.726	74.551	57.284
	1152 x 870	68.681	75.062	100.000
VESA DMT	640 x 480	31.469	59.940	25.175
	640 x 480	37.861	72.809	31.500
	640 x 480	37.500	75.000	31.500
	800 x 600	37.879	60.317	40.000
	800 x 600	48.077	72.188	50.000
	800 x 600	46.875	75.000	49.500
	1024 x 768	48.363	60.004	65.000
	1024 x 768	56.476	70.069	75.000
	1024 x 768	60.023	75.029	78.750
	1152 x 864	67.500	75.000	108.000
	1280 x 1024	63.981	60.020	108.000
	1280 x 1024	79.976	75.025	135.000
	1280 x 800	49.702	59.810	83.500
	1280 x 800	62.795	74.934	106.500
	1280 x 960	60.000	60.000	108.000
	1360 x 768	47.712	60.015	85.500
	1440 x 900	55.935	59.887	106.500
	1440 x 900	70.635	74.984	136.750
	1680 x 1050	65.290	59.954	146.250
VESA DMT / DTV CEA	1920 x 1080p	67.500	60.000	148.500

## Tuner

Analog	NTSC
Digital	ATSC, 8-VSB, Clear-QAM

## Inputs

HDMI	2 (back) E-EDID-compliant HDCP-compliant
Component video	2 (back)
Composite video	1 (back) Share with COMPONENT IN 1-Y
Shared audio (component and composite)	Yes
S-Video	No
PC/VGA	No
3.5mm PC audio input	1 (back)
DVI	1- HDMI port 1 (back)
USB	1 (back) SERVICE 2 Support firmware upgrade

## Outputs

Video	No
Analog audio	No
Digital audio (optical)	1 (back)
Headphone	No
WiFi	No
Ethernet	No



## Audio

Number of speakers	2
Watts per speaker	10W
Simulated Surround Sound	Yes - SRS TruSurround HD
Sound Leveler	Yes

## Power

Power consumption	On: 111W Standby: <1 W
Power input	120V/60Hz

## Miscellaneous

OSD languages	English, French, Spanish
INlink	No
Game Mode	No
ENERGY STAR qualified	No
Internet connectable	No
TV stand and base screws	Stand: M4 X L12 (4 pcs) Base: M4 X L8 (4 pcs)
V-Chip (version 2.0)	Yes
Sleep timer	Yes
Channel labeling	No
VESA mount (mm) (horizontal × vertical)	NS-51P680A12 = 400 × 400 NS-59P680A12 = 600 × 400

### 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.

# Legal notices

## FCC Class A Notice

**This device complies with part 15 of the FCC Rules. Operation 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.

### NOTE:

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications.

Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

## FCC Class B Notice

**This device complies with part 15 of the FCC Rules. Operation 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.

### NOTE:

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

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

## FCC warning

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment. If necessary, consult with your dealer or an experienced radio/television technician for additional suggestions. You may find the booklet called How to Identify and Resolve Radio/TV Interference Problems helpful.

This booklet was prepared by the Federal Communications Commission. It is available from the U.S. Government Printing Office.

Washington, DC 20402, Stock Number 004-000-00345 -4.

## FCC warning

User must use shielded signal interface cables to maintain FCC compliance for the product.

Provided with this monitor is a detachable power supply cord with IEC320 style terminations.

It may be suitable for connection to any UL Listed personal computer with similar configuration.

Before making the connection, make sure the voltage rating of the computer convenience outlet is the same as the monitor and that the ampere rating of the computer convenience outlet is equal or exceeds the monitor voltage rating.

For 120 Volt applications, use only UL Listed detachable power cord with NEMA configuration 5 -15 P type (parallel blades) plug cap. For 240 Volt applications use only UL Listed detachable power supply cord with NEMA configuration 6-15 P type (tandem blades) plug cap.

This television receiver provides display of television closed captioning in accordance with Section 15.119 of the FCC rules.

(TV broadcast receivers with picture screens 13 inches or larger in diameter models only)

## DHHS and FDA safety certification

This product is made and tested to meet safety standards of the FCC, requirements and compliance with safety performance of the U.S. Department of Health and Human Services, and also with FDA Radiation Performance Standards 21 CFR Subchapter J.

## ICES-003 Class A Notice - Avis NMB-003, Classe A

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

Cet appareil numérique de la classe A est conforme à la norme NMB-003 du Canada.

## ICES-003 Class B Notice - Avis NMB-003, Classe B

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

Cet appareil numérique de la classe B est conforme à la norme NMB-003 du Canada.

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

## RSS 310 statement

To reduce potential radio interference to other users, the antenna type and its gain should be so chosen that the equivalent isotropically radiated power (e.i.r.p.) is not more than that permitted for successful communication.

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

**Dolby Digital**



Manufactured under license from Dolby Laboratories.  
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**HDMI**



HIGH-DEFINITION MULTIMEDIA INTERFACE

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

**Open Source Software**

For OPEN SOURCE SOFTWARE information please refer to the Legal section in the on-screen display (OSD) on the TV.

If you require additional information or you wish to receive the complete corresponding GPL or LGPL licensed source code, please call the Insignia support line at 1-877-467-4289. This source code is available for a period of three (3) years from the date of the distribution of this product by 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.

REPAIR REPLACEMENT AS PROVIDED UNDER THIS WARRANTY IS YOUR EXCLUSIVE REMEDY FOR BREACH OF WARRANTY. INSIGNIA SHALL NOT BE LIABLE FOR ANY INCIDENTAL OR CONSEQUENTIAL DAMAGES FOR THE BREACH OF ANY EXPRESS OR IMPLIED WARRANTY ON THIS PRODUCT, INCLUDING, BUT NOT LIMITED TO, LOST DATA, LOSS OF USE OF YOUR PRODUCT, LOST BUSINESS OR LOST PROFITS. INSIGNIA PRODUCTS MAKES NO OTHER EXPRESS WARRANTIES WITH RESPECT TO THE PRODUCT, ALL EXPRESS AND IMPLIED WARRANTIES FOR THE PRODUCT, INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTIES OF AND CONDITIONS OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, ARE LIMITED IN DURATION TO THE WARRANTY PERIOD SET FORTH ABOVE AND NO WARRANTIES, WHETHER EXPRESS OR IMPLIED, WILL APPLY AFTER THE WARRANTY PERIOD. SOME STATES, PROVINCES AND JURISDICTIONS DO NOT ALLOW LIMITATIONS ON HOW LONG AN IMPLIED WARRANTY LASTS, SO THE ABOVE LIMITATION MAY NOT APPLY TO YOU. THIS WARRANTY GIVES YOU SPECIFIC LEGAL RIGHTS, AND YOU MAY ALSO HAVE OTHER RIGHTS, WHICH VARY FROM STATE TO STATE OR PROVINCE TO PROVINCE.

Contact Insignia:

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

[www.insigniaproducts.com](http://www.insigniaproducts.com)

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