



## User Guide

**DRAFT**

# INSIGNIA™

Insignia 32" LCD TV/Blu-ray Combo

**NS-32LB451A11**



## Contents

---

CHILD SAFETY .....	1
Important safety instructions .....	2
Warnings .....	2
Cautions .....	3
Introduction .....	4
Installing the stand or wall-mount bracket .....	5
Installing the stand .....	5
Installing a wall-mount bracket .....	6
TV/Blu-ray combo components .....	6
Accessories .....	6
Front .....	6
Left .....	7
Right .....	7
Back .....	8
Remote control .....	9
Using the remote control .....	10
Installing remote control batteries .....	10
Aiming the remote control .....	11
Programming your universal Insignia remote control .....	11
Programming a different universal remote control .....	14
Making connections .....	15
Connecting the power .....	15
Connecting an antenna or cable TV (no box) .....	15
Connecting a cable or satellite TV box .....	16
Connecting an HDMI device .....	16
Connecting a component video device .....	17
Connecting an S-Video device .....	17
Connecting a composite video device .....	18
Connecting a camcorder or game console .....	18
Connecting a computer .....	19
Connecting a digital optical audio system .....	19
Connecting an analog audio system .....	20
Connecting headphones .....	20
Connecting a USB flash drive .....	20
Connecting your home network .....	20
Turning your TV/Blu-ray combo on for the first time .....	22
Understanding TV basics .....	23
Turning your TV/Blu-ray combo on or off .....	23
Selecting the video input source .....	23
On-screen menu overview .....	24
Navigating the menus .....	24
Switching between TV and Blu-ray modes .....	25
Selecting a channel .....	25
Adjusting the volume .....	25
Displaying additional information .....	25

Adjusting the picture .....	25
Adjusting the TV picture .....	25
Adjusting the computer image .....	26
Adjusting the sound .....	27
Adjusting the sound .....	27
Playing TV audio only .....	28
Changing channel settings .....	28
Automatically scanning for channels .....	28
Hiding channels .....	29
Setting up a favorite channel list .....	29
Viewing a favorite channel .....	30
Adding or changing a channel label .....	30
Checking the digital signal strength .....	31
Setting TV parental controls .....	31
Setting or changing the password .....	31
Setting parental control levels .....	32
Blocking unrated TV .....	34
Downloading rating information .....	35
Locking control buttons .....	35
Using closed captioning .....	36
Viewing closed captioning .....	36
Selecting the closed captioning mode .....	36
Customizing digital closed captioning styles .....	37
Adjusting time settings .....	38
Setting the date and time .....	38
Setting the sleep timer .....	38
Adjusting menu settings .....	39
Selecting the on-screen menu language .....	39
Turning the help panel on or off .....	39
Labeling an input source .....	40
Turning the Auto Input Sensor on or off .....	41
Resetting settings to the defaults .....	41
Using INlink .....	42
Turning INlink on or off .....	42
Turning Device Auto Power Off on or off .....	42
Turning TV Auto Power On on or off .....	43
Displaying a list of INlink connected devices .....	43
Using the Blu-ray Disc player .....	44
Playable discs .....	44
About Blu-ray Discs .....	44
Playing a disc .....	44
Controlling disc playback .....	44
Displaying disc information .....	45
Searching for a title, chapter, or elapsed time .....	45
Searching for a track .....	45
Repeating a title, chapter, or CD track .....	45
Selecting the subtitle language .....	45
Selecting the audio mode .....	46
Selecting a viewing angle .....	46
Using a disc menu .....	47
Using a disc popup menu .....	47
Playing audio files on a data disc or USB flash drive .....	47
Creating a music playlist .....	48

Displaying music file information .....	49
Selecting the disc menu language .....	49
Selecting the audio language .....	50
Selecting the aspect ratio .....	50
Turning film mode on or off .....	50
Selecting the PCM downsampling rate .....	50
Adjusting the digital output mode .....	51
Turning dynamic range control on or off .....	51
Turning parental controls on or off .....	51
Selecting the parental control country .....	52
Setting the parental control level .....	52
Changing parental password .....	52
Setting automatic disc playback mode .....	52
Setting the BD-Live Internet access level .....	53
Viewing available BD-Live storage space .....	53
Erasing BD-Live storage .....	53
Setting the screen saver activation time .....	53
Resetting settings to the factory defaults .....	54
Downloading player update software .....	54
<b>Connecting to the Internet .....</b>	<b>54</b>
Determining if the network connection is active .....	54
Configuring a wired Internet connection .....	55
Configuring a wireless Internet connection .....	55
Understanding the wireless network list .....	56
Connecting to an unencrypted wireless network .....	56
Connecting to an encrypted wireless network .....	57
Connecting to a wireless network using WPS (Wi-Fi Protected Setup) .....	58
Connecting to a wireless network using WPS pin .....	58
Connecting to a non-broadcasting wireless network using DHCP .....	59
Testing the Internet connection .....	60
<b>Using BD-Live Features .....</b>	<b>60</b>
Adding BD-Live memory .....	60
Setting up BD-Live Internet access .....	60
Using BD-Live .....	61
<b>Using Netflix .....</b>	<b>61</b>
Watching movies with Netflix™ .....	61
Registering your TV/Blu-ray combo with Netflix .....	61
<b>Using Pandora .....</b>	<b>61</b>
Listening to radio with Pandora™ .....	61
Registering your TV/Blu-ray combo with Pandora .....	61
<b>Maintaining .....</b>	<b>62</b>
General guidelines .....	62
Condensation .....	62
Storing discs .....	62
Handling discs .....	62
Cleaning discs .....	62
<b>Troubleshooting .....</b>	<b>63</b>
Frequently asked questions .....	63
Power problems .....	63
Blu-ray Disc problems .....	63
TV problems .....	64
BD-Live and USB connections .....	64
Other .....	65
<b>Specifications .....</b>	<b>65</b>

Remote control codes .....	66
Legal notices .....	78
Two-year limited warranty .....	81
US and Canada Markets .....	81

# 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 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/Blu-ray combo. This label is located on the back of your TV/Blu-ray combo.



This symbol indicates that there are important operating and maintenance instructions in the literature accompanying your TV/Blu-ray combo.

- 1 Read these instructions.
- 2 Keep these instructions.
- 3 Heed all warnings.
- 4 Follow all instructions.
- 5 Do not use this apparatus near water.
- 6 Clean only with a dry cloth.
- 7 Do not block any ventilation openings. Install in accordance with the manufacturer's instructions.
- 8 Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
- 9 Do not defeat the safety purpose of the polarized or grounding-type plug. A polarized plug has two blades with one wider than the other. A grounding type plug has two blades and a third grounding prong. The wide blade or the third prong are provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.
- 10 Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.
- 11 Only use attachments/accessories specified by the manufacturer.
- 12 Use only with a cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with the apparatus. When a cart is used, use caution when moving the cart/apparatus combination to avoid injury from tip-over.  S3125A
- 13 Unplug this apparatus during lightning storms or when unused for long periods of time.
- 14 Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.

- 15 The main plug is the disconnecting device. The plug must remain readily operable.
- 16 An apparatus with a 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 this Class I device 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 shall not be exposed to dripping or splashing, and no objects filled with liquids, such as vases, shall be placed on the apparatus.

## Warnings

### Electric shock hazard

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

### Lightning

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

### Power lines

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

### Handling the LCD panel

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

### Replacement parts

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

### Safety check

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

## Power source

Operate your TV/Blu-ray combo 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

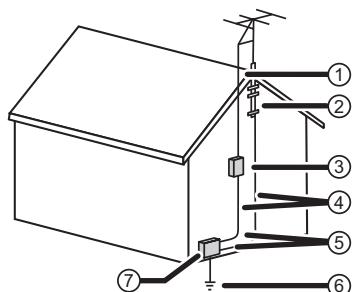
### Damage requiring service

Unplug this TV/Blu-ray combo 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/Blu-ray combo.
- If your TV/Blu-ray combo has been exposed to rain or water.
- If your TV/Blu-ray combo 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/Blu-ray combo to its normal operation.
- If your TV/Blu-ray combo has been dropped or damaged in any way.
- When your TV/Blu-ray combo exhibits a distinct change in performance.

### Outdoor antenna grounding

If an outside antenna or cable system is connected to your TV/Blu-ray combo, 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/Blu-ray combo if the TV/Blu-ray combo is brought from cool surroundings into a warm room or if the temperature of the room rises suddenly. When this happens, the TV/Blu-ray combo's performance may be impaired. To prevent this, let the TV/Blu-ray combo 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/Blu-ray combo is exposed to the breeze from an air conditioner. In such cases, change the location of the TV/Blu-ray combo.

### 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/Blu-ray combo.

### End of life directives

Your TV/Blu-ray combo 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/Blu-ray combo also contains material that can be recycled and reused. For disposal or recycling information, contact your local authorities or the Electronic Industries Alliance at [www.eia.org](http://www.eia.org) to find a recycler in your area.

### Non-active pixels

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

#### Warning

To prevent the spread of fire, keep candles or open flames away from this product at all times.

#### Warning

The lamp(s) within this product contain mercury. Disposal should be in compliance with local, state, or federal laws.

#### Warning

Use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.

# Insignia 32" LCD TV/Blu-ray Combo, 1080p

## Introduction

Congratulations on your purchase of a high-quality Insignia product. Your NS-32LB451A11 represents the state of the art in LCD TV and Blu-ray Disc player design and is designed for reliable and trouble-free performance.

### **AUDYSSEY Dynamic Volume plus Dynamic EQ**

Have you ever caught yourself wishing that you didn't constantly need to adjust the volume: wishing that the commercials wouldn't blare and that you could better hear whispering during a movie scene? Audyssey Dynamic Volume is a feature that lets you put the remote control down and enjoy your show while Audyssey adjusts the sound levels for you automatically. Audyssey Dynamic EQ is a feature that automatically finds the richest sound settings—including enhanced bass—for each scene, even when the volume level is held steady, making the sound coming from your TV/Blu-ray combo speakers sound more lifelike. See page 27 for instructions on how to adjust the audio settings to take advantage of Audyssey.

### **SRS TruSurround HD™**

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

### **INlink**

Enjoy the benefit of having HDMI CEC compatible products plug and play! No setup is needed! CEC technology lets different components discover and communicate with each other. See page 42 for instructions on how to use INlink.

### **BD Live**

Download BD Live™ content, such as movie reviews, ringtones, desktop wallpapers, interactive games, and more, by connecting your Blu-ray combo to the Internet. You can use a wired or wireless connection. See page 55 for instructions for configuring a wired Internet connection or page 55 for instructions for configuring a wireless Internet connection. See page 60 for information about using BD Live features.

# Installing the stand or wall-mount bracket

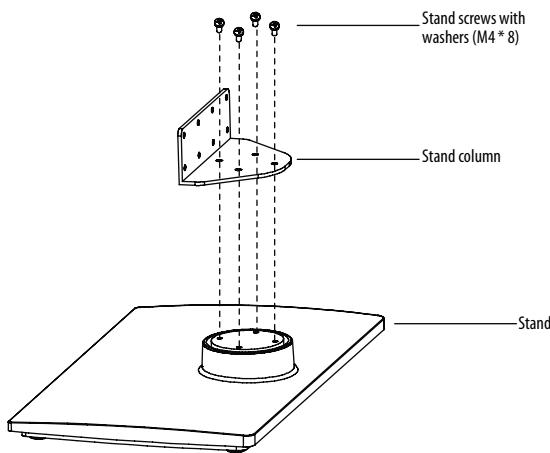
## Installing the stand

### Tips

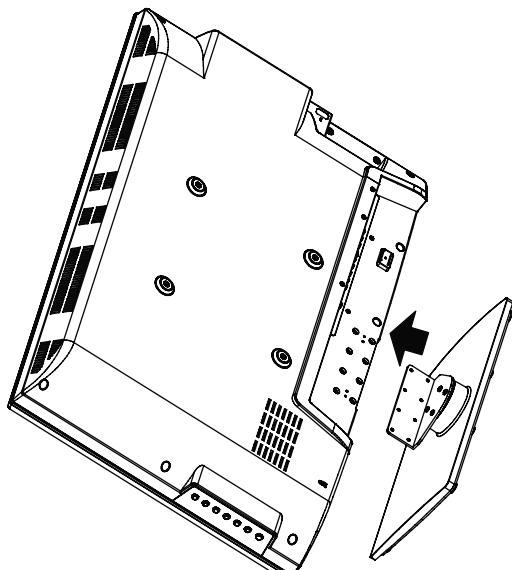
- Unplug the AC cord from the **AC INPUT** jack.
- Before beginning this process, make sure that you lay your TV/Blu-ray combo on a clean, safe, and cushioned surface to avoid any damage to your TV/Blu-ray combo.
- Do not touch or press the TV screen. The glass might break under pressure.

### To install the stand:

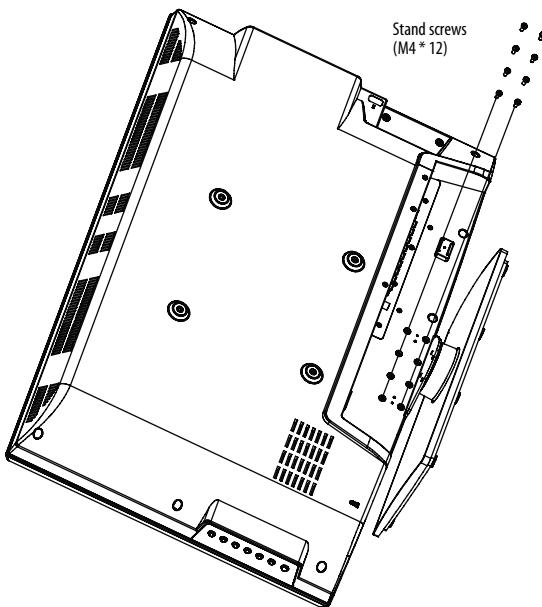
- 1 Remove the stand from the box and place it on a table or bench.
- 2 Secure the stand to the stand column with the provided four screws and washers.



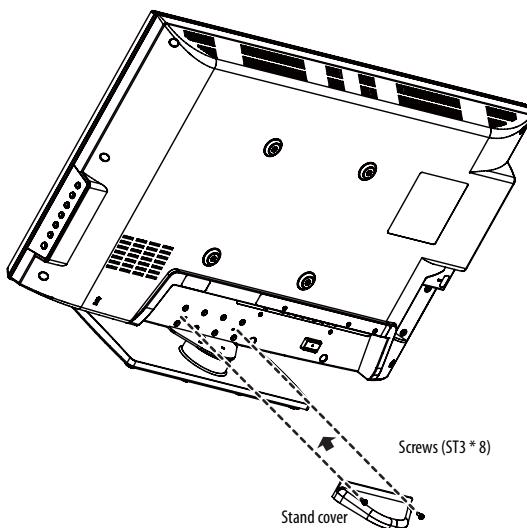
- 3 Place your TV/Blu-ray combo face down on table, aligning the bottom of your TV/Blu-ray combo with the edge of the table. Place a towel or similar material between the screen and the table to protect the screen.
- 4 Slide the stand column into the slot in the bottom of the TV/Blu-ray combo.



- 5 Secure the stand column with the eight provided screws.



- 6 Secure the stand cover (included) to the TV/Blu-ray combo with the two screws provided.



- 7 Place your TV/Blu-ray combo in an upright position on a flat surface.

### Note

To remove the stand, reverse these steps.

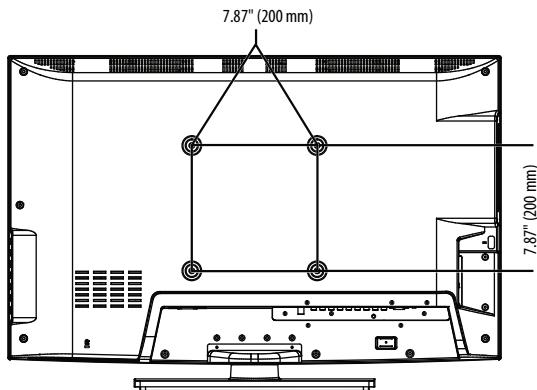
## Installing a wall-mount bracket

### To attach your TV/Blu-ray combo to 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 Remove the two screws on the back of the stand that secure the back cover, then remove the cover.
- 2 Remove the eight screws holding the TV/Blu-ray combo to its stand, then remove the stand.
- 3 Attach the wall-mount bracket with M4 screws (not provided).

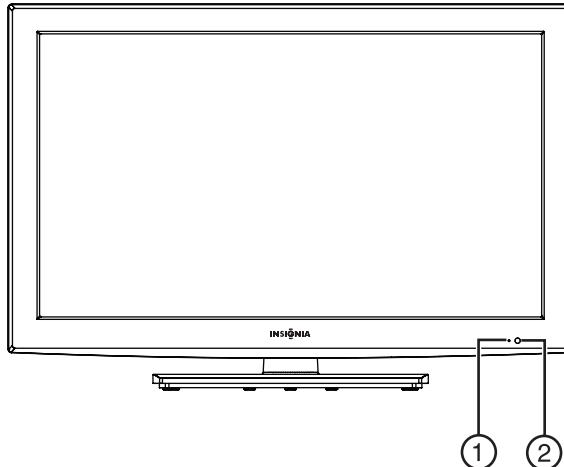


## TV/Blu-ray combo components

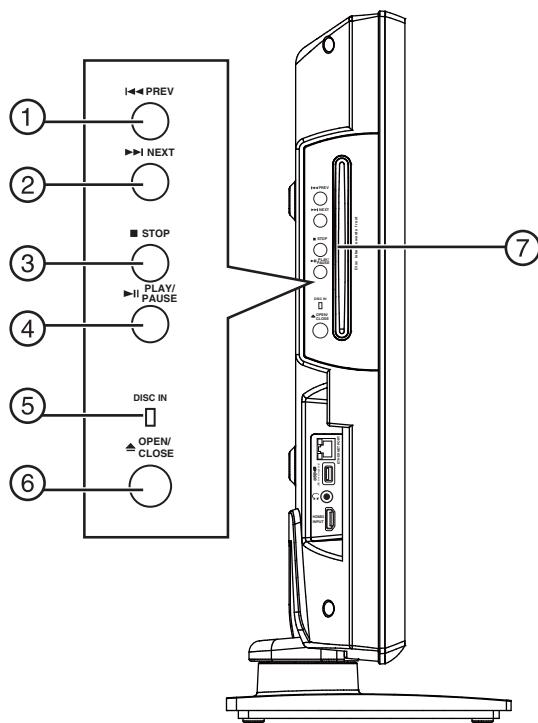
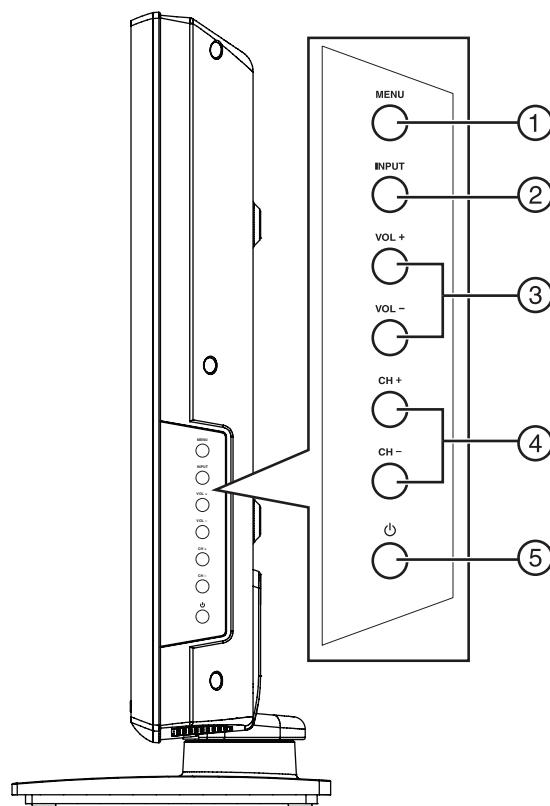
### Accessories

- Remote control
- Batteries AA (2)
- Remote control holder
- AC power cord
- Cleaning cloth
- Component cable
- Audio cable
- Stand
- Stand screws and washers (4)
- Stand column screws (8)
- Stand cover screws (2)
- *Quick Setup Guide*

### Front



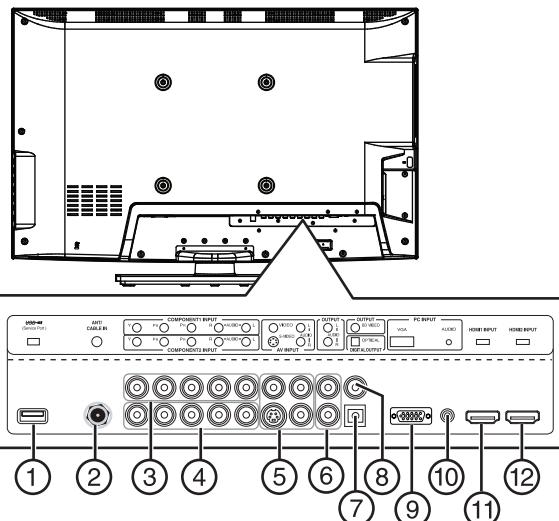
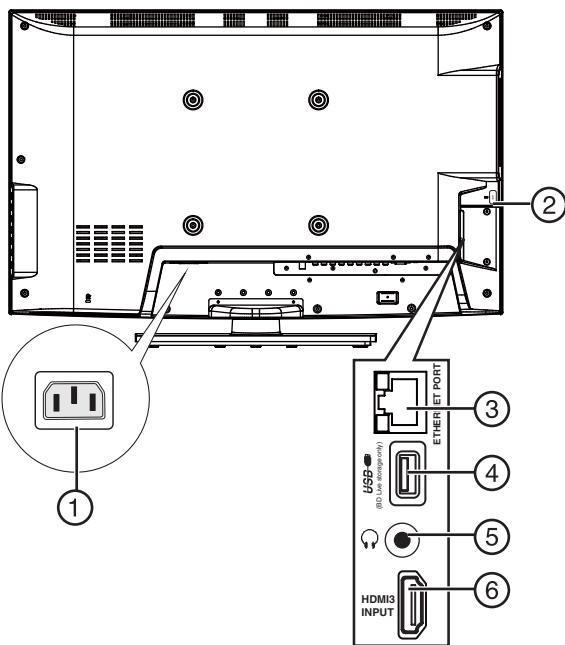
#	Item	Description
1	Power indicator	Lights blue when your TV/Blu-ray combo is turned on. Lights red when your TV/Blu-ray combo is in standby mode. Does not light when the power cord is unplugged. For more information, see "Turning your TV/Blu-ray combo on or off" on page 23.
2	Remote sensor	Receives signals from the remote control. Do not block.

**Left****Right**

#	Item	Description
①	◀◀ PREV	Press to go to the previous chapter on a Blu-ray Disc or DVD or to the previous track on a CD.
②	▶▶ NEXT	Press to go to the next chapter on a Blu-ray Disc or DVD or to the next track on a CD.
③	■ STOP	Press to stop disc playback.
④	▶▶ PLAY/PAUSE	Press to start or pause disc playback.
⑤	DISC IN	Lights when a disc is in the disc slot.
⑥	▲ OPEN/CLOSE	Press to eject a disc from the disc slot. Press this button to close network applications (Netflix and Pandora).
⑦	Disc slot	Insert a disc into this slot to start playback.

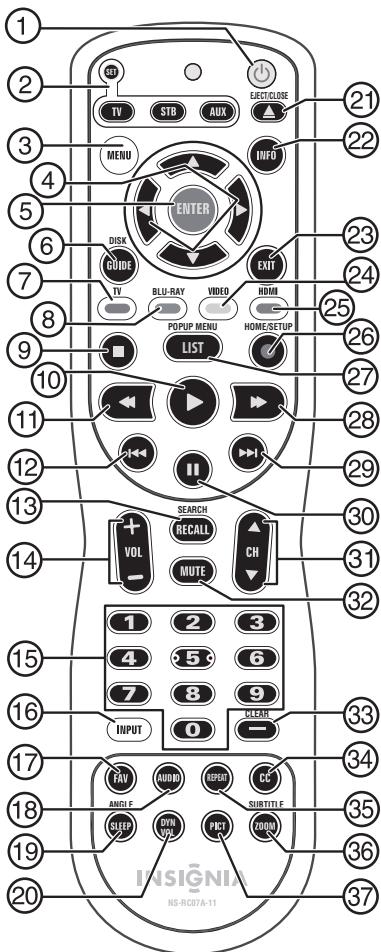
#	Item	Description
①	MENU	Press to open the on-screen menu. You can also press this button to go back when navigating the menus.
②	INPUT	Press to open the input source menu, then press ▲ or ▼ to select an input source. For more information, see "Selecting the video input source" on page 23. In menu mode, this button functions as the <b>ENTER</b> button.
③	VOL +/VOL -	In TV or Blu-ray mode, press to increase or decrease the volume. In menu mode, VOL+ functions as the right arrow and VOL- functions as the left arrow.
④	CH +/CH -	In TV mode, press to go to the next or previous channel in the channel list. For more information, see "Selecting a channel" on page 25. In menu mode, CH+ functions as the up arrow and CH- functions as the down arrow.
⑤	POWER	Press to turn your TV/Blu-ray combo on or off (standby mode). For more information, see "Turning your TV/Blu-ray combo on or off" on page 23. <b>Warning:</b> When your TV/Blu-ray combo is in standby mode, power is still flowing into it. To disconnect the power, unplug the power cord.

## Back



#	Item	Description
①	AC INPUT	Connect the power cord to this jack and to a power outlet. For more information, see "Connecting the power" on page 15.
②	Wi-Fi antenna	Sends and receives signals from a wireless router or access point.
③	ETHERNET PORT	Use this jack to connect your TV/Blu-ray combo to the Internet to download BD-Live information. For more information, see "Setting the BD-Live Internet access level" on page 53.
④	USB (BD Live storage only)	Connect a USB drive to this jack to play files on your TV/Blu-ray combo, or to store the BD Live information.
⑤	Q (headphone)	Connect headphones to this jack.
⑥	HDMI3 INPUT	Connect an HDMI device to this jack. For more information, see "Connecting an HDMI device" on page 16.

#	Item	Description
①	USB (service port)	Do not use.
②	ANT/CABLE IN	Connect an antenna, cable TV, or satellite TV to this jack. For more information, see "Connecting an antenna or cable TV (no box)" on page 15 or "Connecting a cable or satellite TV box" on page 16.
③	COMPONENT1 INPUT	Connect a component video device to these jacks. For more information, see "Connecting a component video device" on page 17.
④	COMPONENT2 INPUT	Connect a component video device to these jacks. For more information, see "Connecting a component video device" on page 17.
⑤	AV INPUT: S-VIDEO and VIDEO with AUDIO L and R	Connect an S-Video device to the <b>S-VIDEO</b> jack or a standard video device to the <b>VIDEO</b> jack, then connect the audio for the device to the <b>AUDIO L</b> and <b>R</b> jacks. The <b>S-VIDEO</b> and <b>VIDEO</b> jacks share the same audio jacks. For more information, see "Connecting an S-Video device" on page 17 or "Connecting a composite video device" on page 18.
⑥	OUTPUT: AUDIO L and R	Connect an analog audio system to these jacks to play your TV/Blu-ray combo's audio through external speakers. For more information, see "Connecting an analog audio system" on page 20.
⑦	DIGITAL OUTPUT: OPTICAL	Connect a digital optical audio system to this jack to play your TV/Blu-ray combo's audio through external speakers. For more information, see "Connecting a digital optical audio system" on page 19.
⑧	OUTPUT: BD VIDEO	Connect an external monitor to this jack to view the playback picture from the built-in Blu-ray player. The image is fixed to NTSC composite video (480i).
⑨	PC INPUT: VGA	Connect the video for a computer to this jack. For more information, see "Connecting a computer" on page 19.
⑩	PC INPUT: AUDIO	Connect the audio for a computer to this jack. For more information, see "Connecting a computer" on page 19.
⑪	HDMI1 INPUT	Connect an HDMI device to this jack. For more information, see "Connecting an HDMI device" on page 16.
⑫	HDMI2 INPUT	Connect an HDMI device to this jack. For more information, see "Connecting an HDMI device" on page 16.

**Remote control**

#	Button	Description
①	POWER	Press to turn your TV/Blu-ray combo on or off (standby mode). For more information, see "Turning your TV/Blu-ray combo on or off" on page 23. <b>Warning:</b> When your TV/Blu-ray combo is in standby mode, power is still flowing into it. To disconnect the power, unplug the power cord.
②	SET/TV/STB/AUX	Press to program the remote control to control connected devices. For more information, see "Programming your universal Insignia remote control" on page 11.
③	MENU	Press to open the on-screen menu for the TV. You can also press this button to go back when navigating the TV menus.
④	▲▼◀▶	Press to select and adjust options in on-screen menus.
⑤	ENTER	Press to confirm selections or changes.
⑥	GUIDE/DISK	In TV mode, press to display the program guide. For more information, see "Displaying additional information" on page 25. During DVD playback, press to open the DVD root menu where you can select DVD playback options. (This button is valid for DVDs that have a multi-layer menu.)

#	Button	Description
⑦	TV	Press to select TV as the video source. For more information, see "Selecting the video input source" on page 23.
⑧	BLU-RAY	Press to select the built-in Blu-ray Disc player as the video source. For more information, see "Selecting the video input source" on page 23. When playing a Blu-ray Disc that has a Java™ application, press to control playback. For more information, see the documentation that came with the Blu-ray Disc.
⑨	■ (stop)	Press to stop disc playback.
⑩	▶ (play)	Press to start disc playback.
⑪	◀◀ (fast reverse)	Press to fast reverse. Each time you press this button, the fast-reverse speed decreases from Fast×2, Fast×4, Fast×8, Fast×16, Fast×32, Fast×64, to Fast×128. Press ▶ (play) to resume normal playback.
⑫	◀◀ (previous)	Press to go to the previous chapter, title, or track.
⑬	RECALL/SEARCH	In TV mode, press to return to the previous channel. During DVD playback, press to search for a title, chapter, or specific time on a disc.
⑭	VOL+/VOL-	Press to increase or decrease the volume.
⑮	Numbers	Press to enter channel numbers or the parental control password. During DVD or CD playback, press SEARCH, then press the number buttons to enter a title, chapter, track, or time.
⑯	INPUT	Press to open the video input list, press ▲ or ▼ to highlight a video input source, then press ENTER. For more information, see "Selecting the video input source" on page 23.
⑰	FAV/ANGLE	In TV mode, press to open the favorite channel list. For more information, see "Viewing a favorite channel" on page 30. When playing a disc, press to open the angle menu to select a viewing angle. For more information, see "Selecting a viewing angle" on page 46.
⑱	AUDIO	In TV mode, press to adjust the audio quality such as the Treble, Bass, or Balance. When playing a Blu-ray Disc or DVD, press to select the audio track. For more information, see "Selecting the audio mode" on page 46.
⑲	SLEEP	Press to set the sleep timer. You can select <b>Off</b> , <b>5</b> , <b>10</b> , <b>15</b> , <b>30</b> , <b>60</b> , <b>90</b> , <b>120</b> , <b>180</b> , or <b>240</b> minutes. For more information, see "Setting the sleep timer" on page 38.
⑳	DYN VOL	Press to select the level of Audyssey Dynamic Volume. You can select <b>Heavy</b> , <b>Medium</b> , <b>Light</b> , or <b>Off</b> . For more information, see "Adjusting the sound" on page 27. <b>Note:</b> This will disable SRS audio mode if previously being used.
㉑	EJECT/CLOSE ▲	Press to eject a disc from the disc slot. Press this button to close network applications (Netflix and Pandora).
㉒	INFO	Press to display TV status information, such as the channel number, channel name (if available), or signal source. For more information, see "Displaying additional information" on page 25.
㉓	EXIT	Press to close or exit the on-screen menus. This works for both TV and Blu-ray modes.

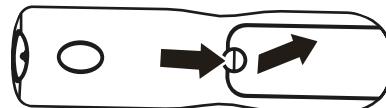
#	Button	Description
(24)	VIDEO	Press one or more times to select the device connected to the <b>VIDEO</b> or <b>S-VIDEO</b> jack as the video source. For more information, see "Selecting the video input source" on page 23. When playing a Blu-ray Disc that has a Java™ application, press to control playback. For more information, see the documentation that came with the Blu-ray Disc.
(25)	HDMI	Press one or more times to select the device connected to the HDMI1, HDMI2, or HDMI3 jack as the video source. For more information, see "Selecting the video input source" on page 23. When playing a Blu-ray Disc that has a Java™ application, press to control playback. For more information, see the documentation that came with the Blu-ray Disc.
(26)	HOME/SETUP	In Blu-ray mode, press to open Setup menu. Press this button to close network applications <b>or stop disc playback</b> .
(27)	POP UP MENU/LIST	During Blu-ray Disc playback, press to open a menu that lets you control Blu-ray Disc playback. Press to display a PVR or set-top box channel list.
(28)	▶▶ (fast forward)	Press to fast forward. Each time you press this button, the fast-forward speed increases from Fast×2, Fast×4, Fast×8, Fast×16, Fast×32, Fast×64, to Fast×128. Press ▶ (play) to resume normal playback.
(29)	▶▶ (next)	Press to go to the next chapter, title, or track.
(30)	II (pause)	Press to pause playback. Press again to resume playback.
(31)	CH ▲/CH ▼	Press to change channels. For more information, see "Selecting a channel" on page 25.
(32)	MUTE	Press to mute the sound. Press again to restore the sound.
(33)	—/CLEAR	In TV mode, press to enter a digital sub-channel number. For more information, see "Selecting a channel" on page 25. When playing a disc, press to clear currently inputted numbers or text.
(34)	CC	Press to turn closed captioning on or off. You can select <b>CC Off</b> , <b>CC On</b> , or <b>CC On Mute</b> . For more information, see "Viewing closed captioning" on page 36.
(35)	REPEAT	In Blu-ray mode, press to repeat the current title, chapter, track, or repeat all.
(36)	ZOOM/SUBTITLE	Press to select the aspect ratio. You can select <b>Normal</b> , <b>Wide</b> , <b>Zoom</b> , <b>Cinema</b> , or <b>Auto</b> . In Blu-ray mode, press to select a subtitle language or to turn subtitles off.
(37)	PICT	Press to select the video mode. You can select <b>Vivid</b> , <b>Standard</b> , <b>Energy Savings</b> , <b>Theater</b> , <b>Sports</b> , or <b>Custom</b> . For more information, "Adjusting the TV picture" on page 25.

# Using the remote control

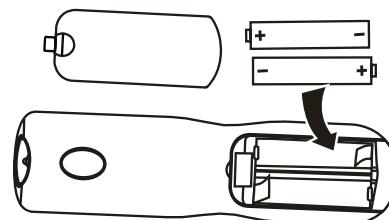
## Installing remote control batteries

### To install remote control batteries:

- 1 Remove the battery compartment cover.



- 2 Insert two AA batteries (included) into the battery compartment. Make sure that the + and – symbols on the batteries match the + and – symbols in the battery compartment.



- 3 Replace the cover.

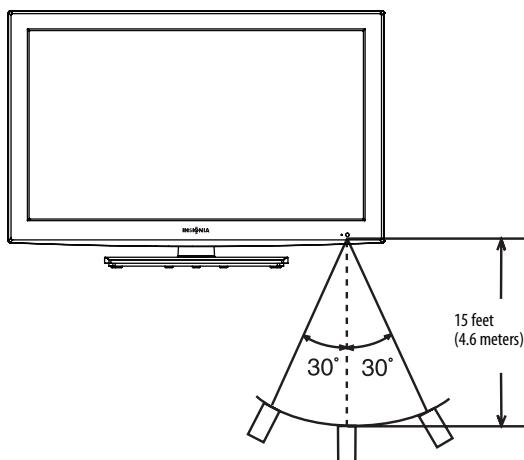
### Cautions

- Batteries should not be exposed to excessive heat, such as sunshine, heat registers, or fire.
- Battery chemicals can cause a rash. If the batteries leak, clean the battery compartment with a cloth. If chemicals touch your skin, wash immediately.
- Make sure that batteries are disposed of correctly. Do not burn or incinerate.
- Make sure that you match the + and – symbols on the batteries with the symbols in the battery compartment.
- Do not mix different types of batteries or old and new batteries.
- If you do not intend to use the remote control for an extended period of time, remove the batteries to prevent leakage.
- Do not try to recharge non-rechargeable batteries. They may overheat and rupture.

## Aiming the remote control

### To use the remote control:

Point the remote control directly at your TV/Blu-ray combo, within a 60° angle horizontally (30° to either side) and within 30° vertically of the remote control sensor on the front of your TV/Blu-ray combo, and within 15 feet (4.6 meters) of your TV/Blu-ray combo.



#### Caution

Do not expose the remote control to liquids, direct sunlight, or shock.

#### Notes

- Objects between the remote control and the remote control sensor may block the remote control signal.
- The range of the remote control may be diminished if direct sunlight or other strong light is shining at the remote control sensor. In this case, change the angle of the lighting, move your TV/Blu-ray combo, or operate the remote control closer to the remote control sensor.

## Programming your universal Insignia remote control

### To program your remote control:

- Find the codes for the devices you want to program in "Remote control codes" on page 66 and write them down or highlight them.
- Turn on the device (for example, a DVD player) and, if needed, load media such as a DVD.
- Press the device button on the TV remote for the device that you want to program (**STB** or **AUX**).
- Press and hold **SET** until the red LED blinks twice, then release.
- Enter the first five-digit code for the device and brand that you want to program. The LED blinks once as each digit is entered. If the code is valid, the LED blinks twice.

#### Note

If the LED does not blink twice, repeat steps 2 to 4 and try entering the code again.

- Aim the remote at the device and press **□** (power). The device should turn off. If it does not, repeat Steps 3 through 5, trying each code for your brand until you find one that works. If you cannot find a code that works, see "Searching for your code" below.

- Repeat Steps 1 to 5 for the other devices you want to control. For future reference, write down each working device code.

## Searching for your code

If your device does not respond to the remote control after trying all codes listed for your brand, or if your brand is not listed, try searching for your code.

### To search for your code:

- Turn on the device you want to control.
- Press the device button on your TV remote control (**STB** or **AUX**) once.
- Press and hold **SET** until the red LED blinks twice, then release.
- Enter **9 9 1**. The LED blinks twice.
- Press the number that matches your device type.
  - 0**—Cable converters, video accessories, satellite receivers
  - 1**—TVs
  - 2**—VCRs, DVD players, Blu-ray Disc players
  - 3**—Audio amplifiers, audio amplifiers/tuners, CD players
- Aim the remote at the device and press **□** (power). The remote sends IR codes from its library to the selected device, starting with the most popular code first. If the device responds, go to Step 8.
- If the device does not respond, press **CH ▲** and the remote tests the next code for that device type. Continue to press **CH ▲** until the device turns off.

#### Note

Press **CH ▼** to try the previous code.

- Now that you have found the correct code, press **SET** to save the code that worked for your device. The LED blinks twice to indicate that the code has been saved.
- To search for other device codes, repeat Steps 1 to 8.

## Checking the codes

If you have set up the remote using the procedure in "Searching for your code" on page 11, you may need to find out which five-digit code is operating your equipment.

### To find out which code is assigned to your STB (for example):

- Press **STB** once.
- Press and hold **SET** until the red LED blinks twice, then release.
- Enter **9 9 0**. The LED blinks twice.

- To view the code for the first digit, press **1**. Count the red LED blinks (for example, three blinks = 3), then write down the number in the appropriate code listing at the top of this column.

**Note**

If the LED does not blink, the code digit is 0.

- Repeat Step 4 for the four remaining digits, using **2** for the second digit, **3** for the third digit, **4** for the fourth digit, and **5** for the fifth digit.
- To check for other device codes, repeat Steps 1 through 5, substituting the device button for the device you would like to check.

**Using learning**

This universal remote control includes a learning feature so you can add functions that are unique to your home entertainment devices (such as VCR Tracking Up or Down). However, there are some considerations to keep in mind.

**Precautions**

- Your original remote controls must be in working order for learning to work properly.
- Learned buttons are mode-specific, so each one can store a unique function for each mode.
- Do not use the following buttons for learning: **Device buttons** or **SET**.
- Learning capacity is approximately 42 to 75 buttons, depending on the code being learned.
- Certain device functions are not learnable, including multi-frequency types, some high frequency functions, and other unusual formats.
- For optimum learning, avoid high levels of ambient light such as natural sunlight or energy-efficient fluorescent lights.

**Note**

Have your original remote controls handy before programming learning.

**Programming a learned button****To program a learned button:**

- Place your Insignia remote control head-to-head (about 2" apart) from your original remote control (the one that came with the device).
- Locate the button on your original remote control that you want the Insignia remote control to learn. Press the mode button you want to learn functions on.
- Press and hold **SET** until the LED blinks twice, then release.
- Enter **9 7 5**. The LED blinks twice.

**Note**

If more than 10 seconds pass between button presses, the remote exits programming.  
If the LED displays one long flash instead, replace the batteries. If the remote control continues to display one long flash, the remote control cannot learn a new button.

- Press the button on your TV's remote control that you want to program. The feedback LED stays lit for three seconds, indicating that the remote is ready to learn.

- On the original remote, press and hold the button to be learned. Continue holding the button on the original remote until the Insignia's LED blinks twice.

**Note**

If the red LED displays one long blink, a learning error has occurred. Try repeating this step again until a successful capture occurs. If the function is still not captured, press and hold **SET** to exit programming and review the "Precautions" above. After reviewing, start programming again at Step 1.

- Repeat Steps 4 and 5 to program another button. Once you have completed programming all the buttons you want, press and hold **SET** until the LED blinks twice to save all data learned.

**Deleting a single learning button**

This process returns the button to its original programming for the mode you select. You can also delete learned programming by teaching a different function to the button (see "Programming a Learned button" above).

**Note**

If more than 10 seconds pass between button presses, the remote exits programming.  
If the LED displays one long flash instead, replace the batteries. If the remote control continues to display one long flash, the remote control cannot learn a new button.

**To delete a single learned button:**

- Press the mode button that you want to remove the learned button from.
- Press and hold **SET** until the LED blinks twice, then release.
- Enter **9 7 6**. The LED blinks twice.
- Press the button containing the learned function to be deleted, twice. The LED blinks twice and programming ends.

**Deleting all learned buttons in a specific mode****Note**

If more than 10 seconds pass between button presses, the remote exits programming.  
If the LED displays one long flash instead, replace the batteries. If the remote control continues to display one long flash, the remote control cannot learn a new button.

**To delete all learned buttons in a specific mode:**

- Press and hold **SET** until the LED blinks twice, then release.
- Press **9 7 6**. The LED blinks twice.
- Press a mode button twice (for example, **TV** (should TV be deleted here?), **STB**, or **AUX**) to clear all the learned buttons for that mode. The LED blinks twice and programming ends.

## Changing volume lock

Volume Lock sets the volume and mute buttons to the device you select, regardless of what mode you are in. For example, if you lock the volume to your DVD player and then go to TV mode, when you press the volume button on your Insignia remote, the volume will change on the DVD player and not on your TV.

### To lock volume control:

- 1 Press and hold **SET** until the red LED blinks twice, then release.
- 2 Enter **9 9 3**, the LED blinks twice.
- 3 Press the mode button for the device you want to control (for example, TV).
- 4 The LED blinks twice. Now when you press **VOL+**, **VOL-**, or **Mute**, the selected device controls the volume regardless of the current mode.

### To unlock all volume control:

- 1 Press and hold **SET** until the red LED blinks twice, then release.
- 2 Enter **9 9 3**, the LED blinks twice.
- 3 Press **VOL+**. The LED blinks four times. Volume is independently controlled for all programmed devices.

### To unlock a single device's volume control:

- 1 Press the device mode button (**should TV be deleted here?** **TV**, **STB**, or **AUX**).
- 2 Press and hold **SET** until the red LED blinks twice, then release.
- 3 Enter **9 9 3**. The LED blinks twice.
- 4 Press **VOL-**. The red LED blinks four times. Volume is independently controlled for the selected devices.

## Programming channel lock

Channel control can be locked so that the Insignia remote controls a single device's channel-changing functions, regardless of operating mode. This is often enabled by users who watch all broadcast TV through one device, such as a cable set-top box. The affected buttons are **1** through **0**, **CH ▲**, **CH ▼**, and **RECALL**.

### To lock all channel controls to one device:

- 1 Press the mode button for the device that you want to use for changing channels, such as STB for your cable set top box.
- 2 Press and hold **SET** until the mode LED blinks twice, then release.
- 3 Enter **9 7 3**. The mode LED blinks twice.
- 4 Press **CH ▲** once. The mode LED blinks twice.

Now, regardless of what mode you select, the channel buttons will only change channels on the assigned device.

### To unlock channel locks:

- 1 Press and hold **SET** until the mode LED blinks twice, then release.
- 2 Enter **9 7 3**. The mode LED blinks twice.

- 3 Press **CH ▼** once. The mode LED blinks four times.

Now the channel functions will correlate to the active mode (for example, press **CH ▲** in TV mode and the TV changes channel accordingly).

## Using buttonmover

Your Insignia universal remote control includes a buttonmover feature that lets you copy buttons from one mode (such as source mode) to another mode (such as destination mode) or to a different button in the same mode.

### Note

Do not use any of the Device buttons, **□** (power), or **SET** as a source or destination button.

### To move buttons in the same device mode:

- 1 Press the device button (**should TV be deleted here?** **TV**, **STB**, or **AUX**).
- 2 Press and hold **SET** until the LED blinks twice, then release.
- 3 Press **9 9 4**. The LED blinks twice.
- 4 Press the button you want to move.
- 5 Press the new button that should perform the function. The LED blinks twice.
- 6 Repeat Steps 1-5 to move additional buttons.

### To move buttons to a different device mode:

- 1 Press and hold **SET** until the LED blinks twice, then release.
- 2 Press **9 9 4**. The LED blinks twice.
- 3 Press the device button that contains the function you want to move (for example, **AUX**).
- 4 Press the button you want to move (such as **Play**).
- 5 Press the device button that you want to move the function to (such as **TV**).
- 6 Press the button in the new mode that should perform the function (for example, **Play**). The LED blinks twice.
- 7 Repeat Steps 1-6 to move additional buttons.

### To restore all buttonmoved data in a specific mode:

- 1 Press and hold **SET** until the LED blinks twice, then release.
- 2 Press **9 9 4**. The LED blinks twice.
- 3 Press the device button you want to remove all buttonmoved data from twice. The LED blinks twice.
- 4 Repeat for each device you want to restore.

### To restore original button function:

- 1 Press the device button for which you want to remove the buttonmoved data from a specific button.
- 2 Press and hold **SET** until the LED blinks twice, then release.
- 3 Enter **9 9 4**. The LED blinks twice.
- 4 Press the button you want to remove the buttonmoved data from twice. The LED blinks twice.

5 Repeat Steps 1-4 for additional buttons you want to remove.

### Programming macros

Your Insignia universal remote control includes the ability to program any button (other than the **SET** button) with a macro function. Each one can be set up to perform a pre-programmed set of sequential button presses with the press of a single button. A macro can be used to control a home theater operation, to set a favorite channel, or for other functions you would like to control with one button press. Each macro button can hold up to 15 button presses, total.

#### Note

Programming a new macro over an existing one erases the original macro.

### To program a mode-independent macro:

- 1 Press and hold **SET** until the red LED blinks twice, then release.
- 2 Press **9 9 5**. The LED blinks twice.
- 3 Press the button you want to assign to a macro.
- 4 Enter the series of commands you want the macro to execute (up to 15 commands).
- 5 Press and hold **SET** until the red LED blinks twice, then release.

Now, when you press the preset macro button, the remote sends the series of commands you have entered, regardless of what mode you are in. For example, you could program a macro button to turn on both your TV and cable box and select a particular channel.

#### Note

To clear the macro, repeat Steps 1-5, but do not enter a series of commands at Step 4.

### To program a mode-dependent macro:

- 1 Press the device mode button (**should TV be deleted here?** **TV**, **STB**, or **AUX**).
- 2 Press and hold **SET** until the LED blinks twice, then release.
- 3 Press **9 7 8**. The LED blinks twice.
- 4 Press the button you want to assign to a macro.
- 5 Enter the series of commands you want the macro to execute (up to 15 commands).
- 6 Press and hold **SET** until the red LED blinks twice, then release.

Now, when you press the macro button, the remote sends the series of commands you have entered, but only if you are in the mode you selected in Step 1. For example, you could program the macro button to turn on both your TV and cable box and select a particular channel, but only if you are in TV mode. If you are in DVD mode, this button does not execute the macro you set up in TV mode.

#### Note

To clear the macro, repeat Steps 1-6, but do not enter a series of commands at Step 5.

## Programming a different universal remote control

You can operate your Insignia TV/Blu-ray combo with a new or existing universal remote control.

### To program a different universal remote control:

- 1 See the table below for common codes. If you have problems programming your remote or need a different remote control code, visit [www.insigniaproducts.com](http://www.insigniaproducts.com) for the latest remote control code information.

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

##### Universal remote control makes and models

Philips PHDVDS, PHSDSS, PMDVRS, PDVR8	RCA RCU807	One for All URC-6690	Sony RM-VL600
---	---------------	-------------------------	------------------

115	135	0464	8043	
-----	-----	------	------	--

##### Set-top box makes and models

Comcast M1057	Dish Network VIP508, VIP622	Motorola DRC800	TIVO Series 3, HD	DirectTV RC23
------------------	--------------------------------	--------------------	----------------------	------------------

0463	720	0463	0091	10463
------	-----	------	------	-------

Codes for other remote controls are available online at: [www.insigniaproducts.com](http://www.insigniaproducts.com)

#### 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.

- 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.

- 3 If all else fails, you must use a different universal remote control that can operate both your set-top box and your TV. Four such remotes are listed on the chart, but many other compatible models are available in the market.

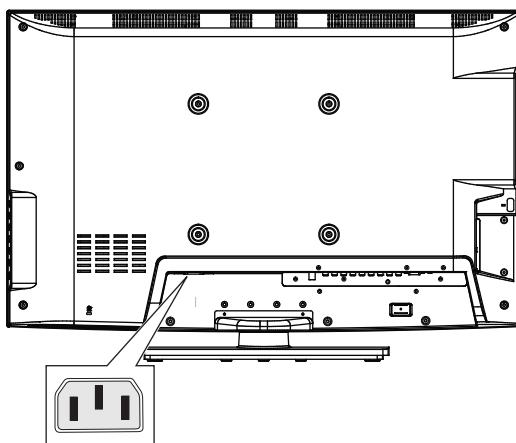
For more help, go to [insigniaproducts.com](http://insigniaproducts.com) or call technical support for your universal remote control or set-top box manufacturer, or call the Insignia Customer Care Center. For US and Canada markets, call 1-877-467-4289. For Mexico markets, call 01 800-926-3000.

# Making connections

## Connecting the power

### To connect the power:

- Plug the power cord into the AC INPUT jack on the back of your TV/Blu-ray combo and into a power outlet.



### Warnings

- Do not connect your TV/Blu-ray combo to power using any device other than the supplied AC power cord. This could cause fire, electrical shock, or damage.
- Do not use with a voltage other than the power voltage displayed on the label on your TV/Blu-ray combo. This could cause fire, electrical shock, or damage.
- Do not plug or unplug the power cord when your hands are wet. This may cause electrical shock.
- The AC cord has a grounding-type AC line plug. If the supplied AC cord does not match your power outlet, contact a qualified electrician to replace the obsolete outlet. Do not defeat the purpose of a grounded plug. This could cause fire or electrical shock.

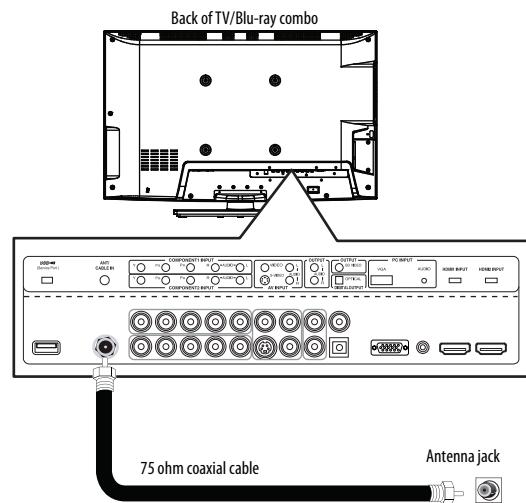
### Cautions

- When your TV/Blu-ray combo is not used for a long time, unplug it from the power outlet.
- If you need to replace the supplied AC cord, contact customer service.

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

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

- 1 Make sure that your TV/Blu-ray combo's power cord is unplugged.
- 2 Connect one end of a 75 ohm coaxial cable to the antenna or cable wall jack, then connect the other end of the cable to the **ANT/CABLE IN** jack on the back of your TV/Blu-ray combo. If your antenna cable has a 300 ohm twin-lead connector, use a 300-75 ohm adapter.



### Note

- Always unplug the coaxial cable when you move your TV/Blu-ray combo.
- If you switch between antenna and cable, install an antenna selector.
- If you need help connecting cable TV, contact your cable TV provider.

## Connecting a cable or satellite TV box

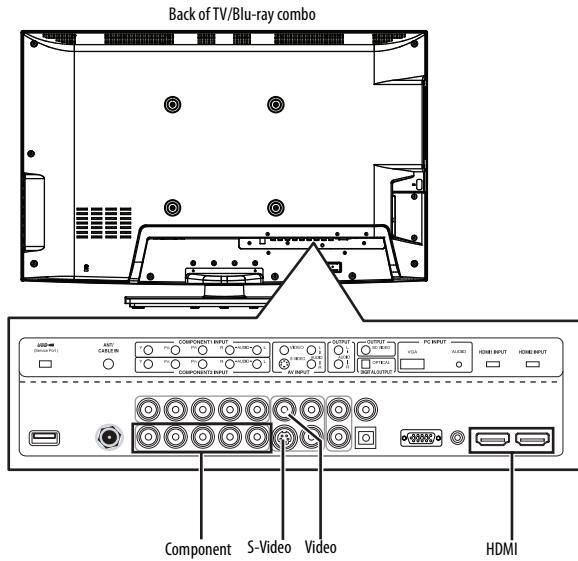
Connection type	Video quality
HDMI	Best
Component	Better than composite, S-Video, or coaxial
S-Video	Better than composite or coaxial
Composite	Better than coaxial
Coaxial	Good

### Note

Installation methods may vary depending on the type of cable or satellite box. Contact your cable or satellite provider for more information.

### To connect a cable or satellite TV box:

- 1 Make sure that your TV/Blu-ray combo's power cord is unplugged and the cable or satellite TV box is turned off.
- 2 Connect the incoming cable from the cable TV or satellite TV wall jack to the cable-in jack on the cable or satellite TV box.



- 3 Depending on the jacks available on the cable or satellite TV box, connect a cable from the outgoing jacks on the cable or satellite TV box to the corresponding jacks on the back of your TV. The connection can be to an **HDMI** jack, **COMPONENT1** or **COMPONENT2 INPUT** jacks, **AV INPUT S-VIDEO** jack, or **AV INPUT VIDEO** jack.

- 4 If you use the **COMPONENT1** or **COMPONENT2 INPUT** jacks, connect an audio cable to the **L/R** audio jacks to the right of the video jacks.

Or,

- If you use the **AV INPUT S-VIDEO** or **AV INPUT VIDEO** jack, connect an audio cable to the **AV INPUT AUDIO L/R** audio jacks.

### Note

If the cable or satellite TV box does not have an HDMI, component, S-Video, or composite jack, connect the cable or satellite TV box to the **ANT/CABLE IN** jack on the back of your TV/Blu-ray combo. For more information, see "Connecting an antenna or cable TV (no box)" on page 15.

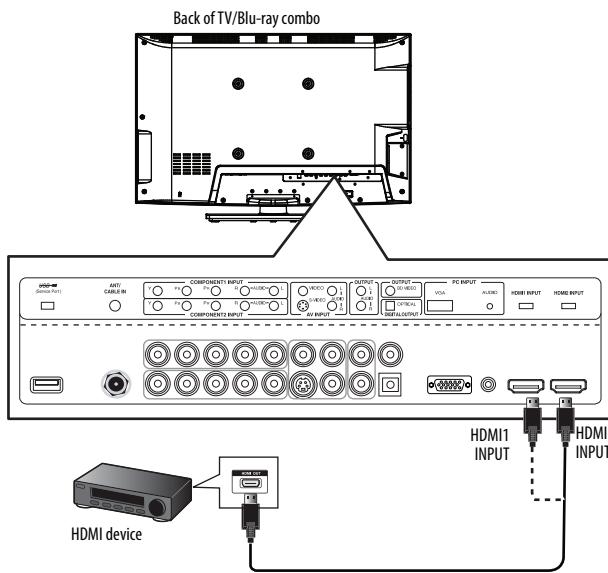
## Connecting an HDMI device

### To connect an HDMI device:

- 1 Make sure that your TV/Blu-ray combo's power cord is unplugged and the HDMI device is turned off.
- 2 Connect an HDMI cable to the **HDMI1 INPUT** or **HDMI2 INPUT** jack on the back of your TV/Blu-ray combo and to the **HDMI OUT** jack on the HDMI device.

### Note

You can also connect an HDMI device to the **HDMI3 INPUT** jack.



- 3 Turn on your TV/Blu-ray combo, then turn on the HDMI device.
- 4 Press **INPUT** to open the source list, press **INPUT** repeatedly or press **▲** or **▼** to highlight **HDMI-1**, **HDMI-2**, or **HDMI-3**, then press **ENTER**.

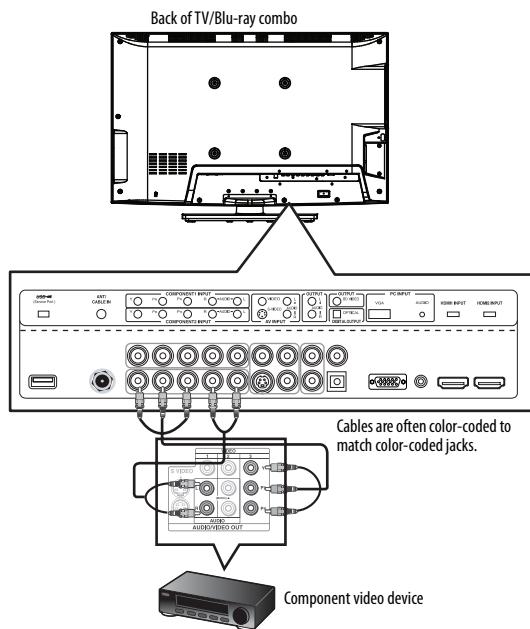
### Note

To connect a DVI device, use a DVI to HDMI adapter cable to connect to any **HDMI** jack on your TV/Blu-ray combo, then connect an audio cable to the **PC INPUT AUDIO** jack on the back of the TV/Blu-ray combo.

## Connecting a component video device

### To connect a component video device:

- 1 Make sure that your TV/Blu-ray combo's power cord is unplugged and the component video device is turned off.
- 2 Connect a component video cable to the **COMPONENT1 INPUT (Y, PB, PR)** or **COMPONENT2 INPUT** jacks on the back of your TV/Blu-ray combo and to the corresponding **COMPONENT OUT** jacks on the component video device.

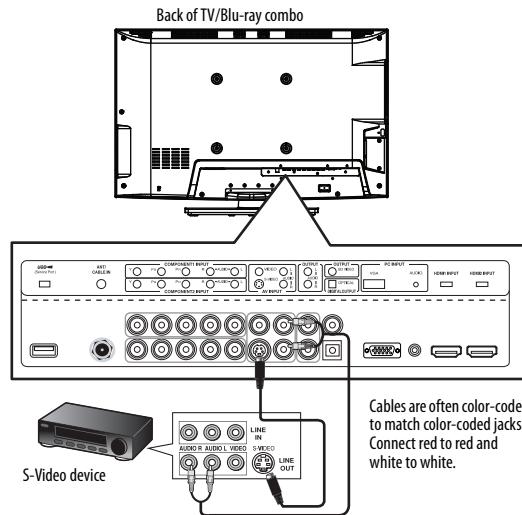


- 3 Connect an audio cable to the **COMPONENT1 INPUT AUDIO L** and **R** or **COMPONENT2 INPUT AUDIO L** and **R** jacks on the back of your TV/Blu-ray combo and to the **COMPONENT AUDIO OUT** jacks on the component video device.
- 4 Turn on your TV/Blu-ray combo, then turn on the component video device.
- 5 Press **INPUT** to open the source list, press **INPUT** repeatedly or press **▲** or **▼** to highlight **Component-1** or **Component-2**, then press **ENTER**.

## Connecting an S-Video device

### To connect an S-Video device:

- 1 Make sure that your TV/Blu-ray combo's power cord is unplugged and the S-Video device is turned off.
- 2 Connect an S-Video cable to the **AV INPUT S-VIDEO** jack on the back of your TV/Blu-ray combo and to the **S-VIDEO OUT** jack on the S-Video device.



- 3 Connect an audio cable to the **AV INPUT AUDIO L** and **R** audio jacks on the back of your TV/Blu-ray combo and to the **AUDIO OUT** jacks on the S-Video device.
- 4 Turn on your TV/Blu-ray combo, then turn on the S-Video device.
- 5 Press **INPUT** to open the source list, press **INPUT** repeatedly or press **▲** or **▼** to highlight **AV**, then press **ENTER**.

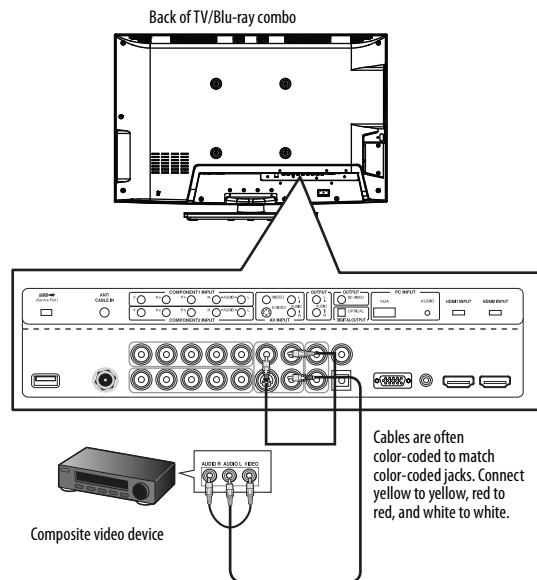
### Note

The **AV INPUT S-VIDEO** jack and the **AV INPUT VIDEO** jack share the **AV INPUT AUDIO L** and **R** jacks. If you have devices connected to both video jacks, the **S-VIDEO** jack controls the audio jacks.

## Connecting a composite video device

### To connect a composite video device:

- 1 Make sure that your TV/Blu-ray combo's power cord is unplugged and the composite video is turned off.
- 2 Connect an AV cable to the **AV INPUT VIDEO** and **AV INPUT AUDIO L** and **R** jacks on the back of your TV/Blu-ray combo and the **VIDEO** and **AUDIO OUT** jacks on the composite video device.



- 3 Turn on your TV/Blu-ray combo, then turn on the composite video device.
- 4 Press **INPUT** to open the source list, press **INPUT** repeatedly or press **▲** or **▼** to highlight **AV**, then press **ENTER**.

### Note

The **AV INPUT S-VIDEO** jack and the **AV INPUT VIDEO** jack share the **AV INPUT AUDIO L** and **R** jacks. If you have devices connected to both video jacks, the **S-VIDEO** jack controls the audio jacks.

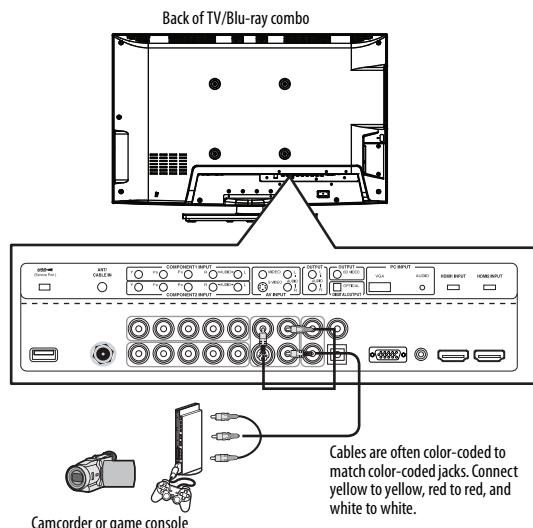
## Connecting a camcorder or game console

### Note

The **AV INPUT S-VIDEO** jack and the **AV INPUT VIDEO** jack share the **AV INPUT AUDIO L** and **R** jacks. If you have devices connected to both video jacks, the **S-VIDEO** jack controls the audio jacks.

### To connect a camcorder or game console:

- 1 Make sure that your TV/Blu-ray combo's power cord is unplugged and the camcorder or game console is turned off.
- 2 Connect the video connector on a composite video cable to the **AV INPUT VIDEO** jack on the back of your TV/Blu-ray combo and the **VIDEO OUT** jack on the camcorder or game console.



- 3 Connect the left and right audio connectors on the composite cable to the **AV INPUT AUDIO L/R** audio jacks on the back of your TV/Blu-ray combo and to the **AUDIO OUT** jacks on the camcorder or game console.
- 4 Turn on your TV/Blu-ray combo, then turn on the camcorder or game console.
- 5 Press **INPUT** to open the source list, press **INPUT** repeatedly or press **▲** or **▼** to highlight **AV**, then press **ENTER**.

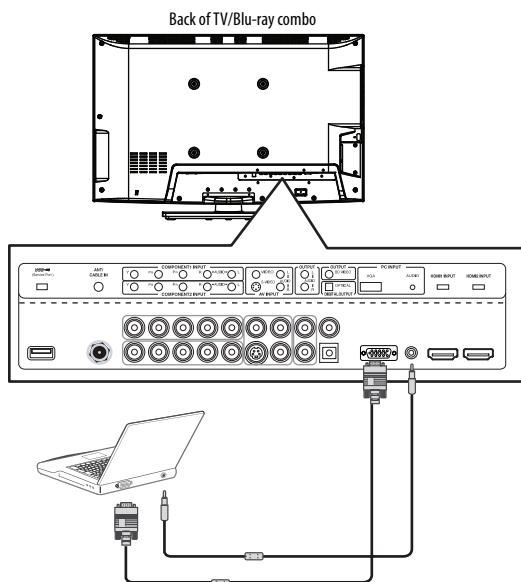
## Connecting a computer

### Note

If the computer has an HDMI jack, you can connect it to an HDMI jack on your TV/Blu-ray combo.

### To connect a computer:

- 1 Make sure that your TV/Blu-ray combo's power cord is unplugged and the computer is turned off.
- 2 Connect a VGA cable to the **PC INPUT VGA** jack on the back of your TV/Blu-ray combo and to the **VGA** jack on the computer.



- 3 Connect an audio cable to the **PC INPUT AUDIO** jack on the back of your TV/Blu-ray combo and to the **AUDIO OUT** jack on the computer.
- 4 Turn on your TV/Blu-ray combo, then turn on the computer.
- 5 Press **INPUT** to open the source list, press **INPUT** repeatedly or press **▲** or **▼** to highlight **VGA**, then press **ENTER**.

### Notes

- The on-screen menus may have different options in PC mode than in TV mode.
- If there is no video signal from the computer when your TV/Blu-ray combo is in PC mode, "No signal" appears on the TV screen.
- Your TV/Blu-ray combo does not support a Plug and Play connection to the computer.

## Supported resolutions

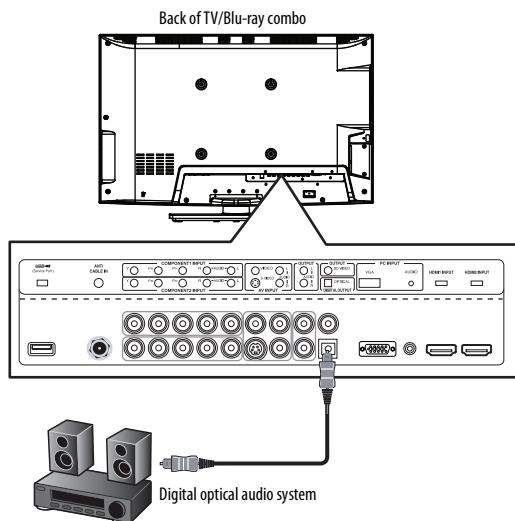
You may need to change the computer's resolution to one listed in the following table.

Mode	Resolution	Refresh rate
VGA	640 × 480	60 Hz
VGA	720 × 400	70 Hz
SVGA	800 × 600	60 Hz
XGA	1024 × 768	60 Hz
WXGA	1280 × 720	60 Hz
SXGA	1280 × 1024	60 Hz
WXGA	1360 × 768	60 Hz
FHD	1920 × 1080	60 Hz

## Connecting a digital optical audio system

### To connect a digital optical audio system:

- Connect a digital audio optical cable to the **DIGITAL OUTPUT OPTICAL** jack on the back of your TV/Blu-ray combo and to the **DIGITAL OPTICAL INPUT** jack on the audio system.



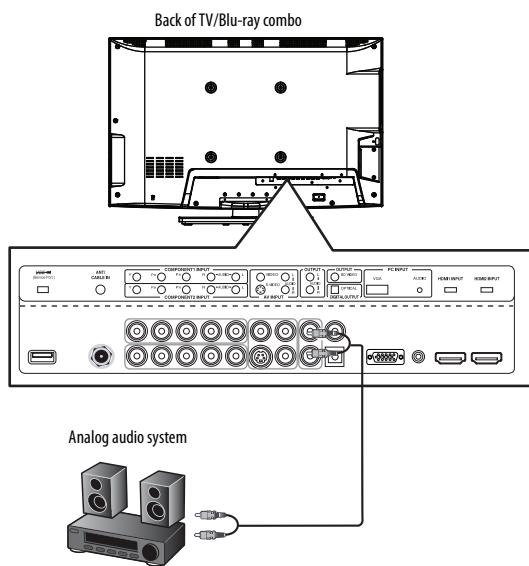
### Note

The **DIGITAL OUTPUT OPTICAL** jack only works with digital sources.

## Connecting an analog audio system

### To connect an analog audio system:

- Connect an audio cable to the **OUTPUT AUDIO L** and **R** jacks on the back of your TV/Blu-ray combo and to the **AUDIO IN** jacks on the audio system.



### Notes

To hear the audio from your TV/Blu-ray combo through the audio system:

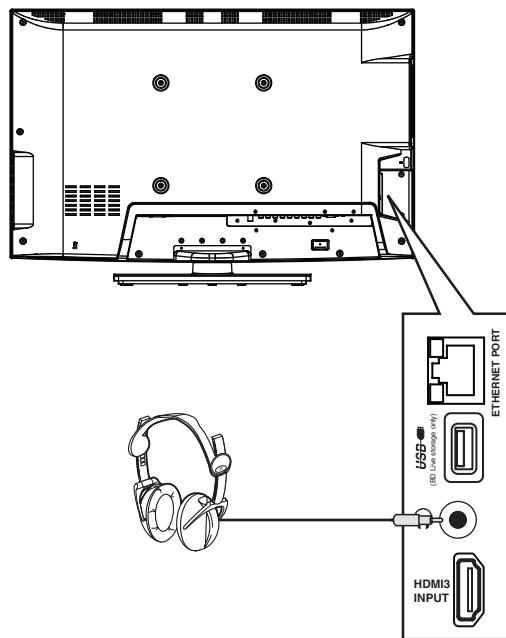
- You must turn off your TV/Blu-ray combo's internal speakers. For more information, see "Adjusting the sound" on page 27.
- Set the volume on your TV/Blu-ray combo and the audio system above 0 (zero).

## Connecting headphones

### To connect headphones:

- Connect the headphones to the **Q** (headphone) jack on the back of your TV/Blu-ray combo.

Back of TV/Blu-ray combo



### Note

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

## Connecting a USB flash drive

### To connect a USB flash drive:

- Plug the USB flash drive into the USB port on your TV/Blu-ray combo.

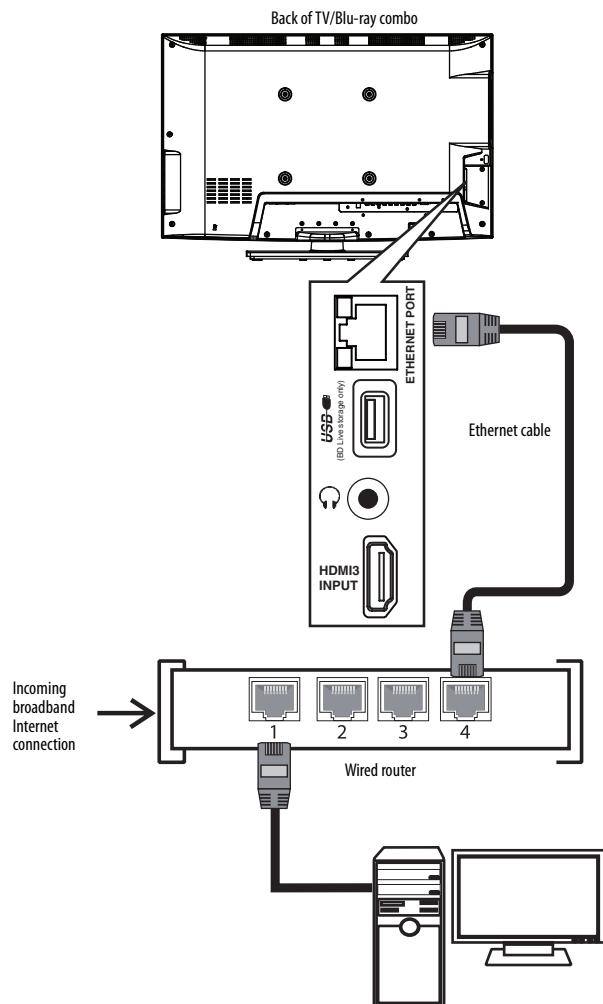
## Connecting your home network

You can connect your TV/Blu-ray combo to your home network using:

- A wired connection. This type connection provides the best performance because devices attached with cables are not subject to radio frequency interference. For instructions, see "Wired connection" on page 21.
- A wireless connection. For instructions, see "Wireless connection" on page 21.

**Wired connection****To connect your TV/Blu-ray combo using a wired router:**

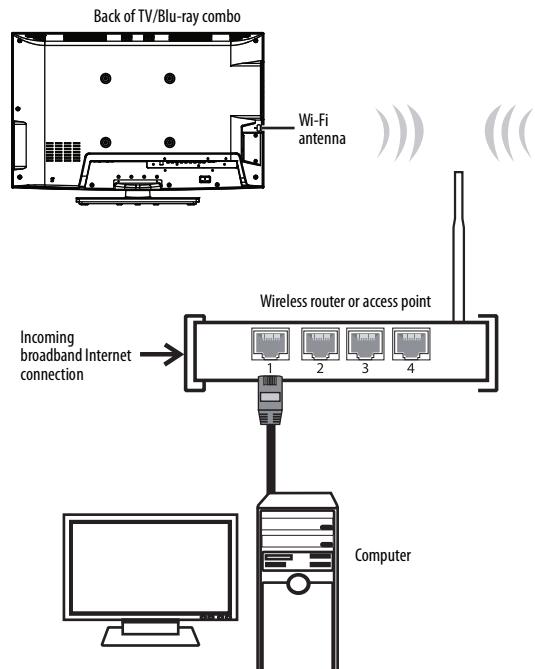
- Connect an Ethernet cable (CAT5 or better with an RJ45 connector) to the **ETHERNET** jack on the back of your TV/Blu-ray combo and to an Ethernet jack on a router.

**Wireless connection**

The network configuration and connection method may vary depending on the equipment in use and the network environment. Your TV/Blu-ray combo is equipped with an IEEE 802.11n (Wi-Fi) wireless module, which also supports the 802.11b/g standards. For the best wireless performance, we recommend using a IEEE 802.11n certified Wi-Fi network (access point or wireless router).

**To connect a wireless access point or router:**

- See "Configuring a wireless Internet connection" on page 55.

**Note**

When plugging or unplugging the cable, hold the connector on the end of the cable. When unplugging, do not pull on the cable. Press down the lock tab and pull the connector out of the jack.

# Turning your TV/Blu-ray combo on for the first time

The first time you turn on your TV/Blu-ray combo, the Setup Wizard screen opens. The Setup Wizard guides you through setting up basic settings including the menu language, time mode, picture mode, and TV signal source.

## To set up your TV/Blu-ray combo:

- 1 Make sure that you have inserted the batteries in the remote control, connected your devices to the TV/Blu-ray combo, and connected the power cord.
- 2 Press **○** (power), then wait several seconds. The *Choose Your Menu Language* screen opens (only the first time you turn on your TV/Blu-ray combo).



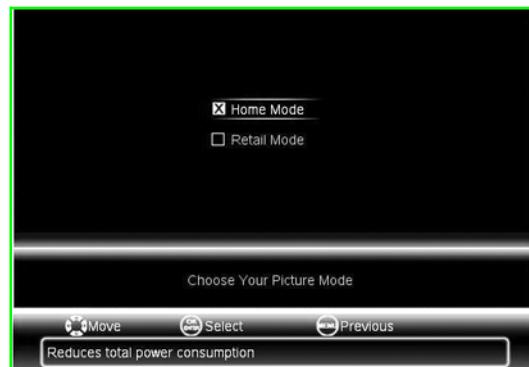
- 3 Press **▲** or **▼** to highlight **English**, **Français**, or **Español**, then press **ENTER**. The *Choose Your Time Setting* screen opens with **Mode** highlighted.



- 4 Press **▲** or **▼** to highlight an option, then press **◀** or **▶** to adjust the option. You can select:
  - **Mode**—You can select **Auto** or **Manual**. If you select **Auto**, the date and time are set based on a time signal received from a digital TV channel. If you select **Manual**, you can adjust the date and time.
  - **Time Zone**—You can select the time zone.
  - **Daylight Savings**—You can select **On** or **Off**.
  - **Year**—Press **◀** or **▶** to select the current year.

- **Month**—Press **◀** or **▶** to select the current month.
- **Day**—Press **◀** or **▶** to select the current day.
- **Time**—When **Time** is highlighted, press **◀** or **▶** to move the cursor from field to field, then press **▲** or **▼** to change the value in the field.

- 5 Press **ENTER**. The *Choose Your Picture Mode* screen opens.



- 6 Press **▲** or **▼** to highlight **Home Mode** or **Retail Mode**, then press **ENTER**. If you selected **Home Mode** (default selection with the same settings as the **Energy Savings** picture mode), the *Choose Your TV Source* screen opens. If you selected **Retail Mode** (selection has the same settings as the **Vivid** picture mode), the warning "If you select Retail Mode, then Energy Saving is not realized."

If you select **No**, then press **ENTER**, the *Choose Your Picture Mode* screen reopens. Go back to Step 5.

If you select **Yes**, then press **ENTER**, the *Choose Your TV Source* screen opens.



- 7 Press **▲** or **▼** to highlight **Antenna**, **Cable**, or **Cable/Satellite Box**, depending on the type of connection you have, then press **ENTER**.
  - If you are using an antenna for a standard or HD TV signal, select **Antenna**.
  - If your cable TV is connected directly to your TV/Blu-ray combo (without a box), select **Cable**.
  - If your cable is connected to your TV/Blu-ray combo through a cable or satellite box, select **Cable/Satellite Box**.

If you selected **Antenna** or **Cable**, your TV/Blu-ray combo automatically scans for available channels in your area and stores the channel information in the channel list. This may take several minutes. While scanning, your TV/Blu-ray combo display a progress bar.

If you selected **Cable/Satellite Box**, your TV/Blu-ray combo does not need to scan for channels, and no progress bar is displayed.

#### Notes

- During auto scan, digital channels will be scanned first, then analog channels. When all available digital channels have been found, the message will ask you "Do you want to continue scanning analog channel?" You can select **No**, then press **ENTER** to exit the analog channel scan, or let your TV/Blu-ray combo continue scanning.
- You can press **MENU** or **EXIT** at any time to stop the auto scan, but you will need to run the auto scan again to create a channel list.

**8** If you connected a cable or satellite TV box, press **INPUT** to open the source list, press **INPUT** repeatedly or press **▲** or **▼** to highlight the jack the box is connected to, then press **ENTER**.

## Understanding TV basics

#### Note

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

### Turning your TV/Blu-ray combo on or off

#### To turn your TV/Blu-ray combo on or off:

- 1 Make sure that you have connected the power cord to your TV/Blu-ray combo and a power outlet.
- 2 Press **◊** (power). Your TV/Blu-ray combo turns on and the power indicator on the front of your TV/Blu-ray combo turns blue.
- 3 Press **◊** (power) again. Your TV/Blu-ray combo turns off (Standby mode) and the power indicator on the front of your TV/Blu-ray combo turns red.

#### Warning

When your TV/Blu-ray combo is in Standby mode, power still flows into it. To disconnect power, unplug the power cord.

#### Note

When your TV/Blu-ray combo does not receive a signal and you do not press any buttons for 15 minutes, your TV/Blu-ray combo goes into Standby mode.

## Selecting the video input source

#### To select the video input source:

- 1 Press **INPUT**. The input source list opens.



**2** Press **INPUT** repeatedly or press **▲** or **▼** to highlight a video input source, then press **ENTER**. You can select:

- **TV**
- **BLU-RAY**
- **AV** (device connected to the **AV INPUT VIDEO** or **AV INPUT S-VIDEO** jack)
- **Component-1**
- **Component-2**
- **HDMI-1**
- **HDMI-2**
- **HDMI-3**
- **VGA**

## On-screen menu overview

### PICTURE menu



### AUDIO menu



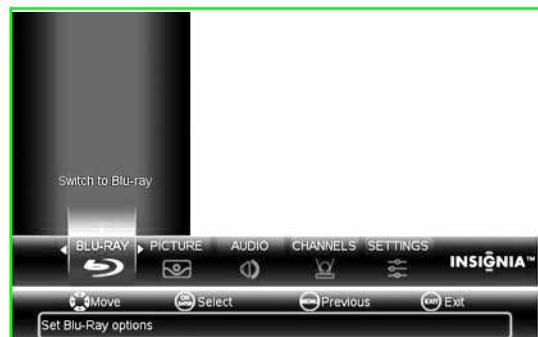
### CHANNELS menu



### SETTINGS menu



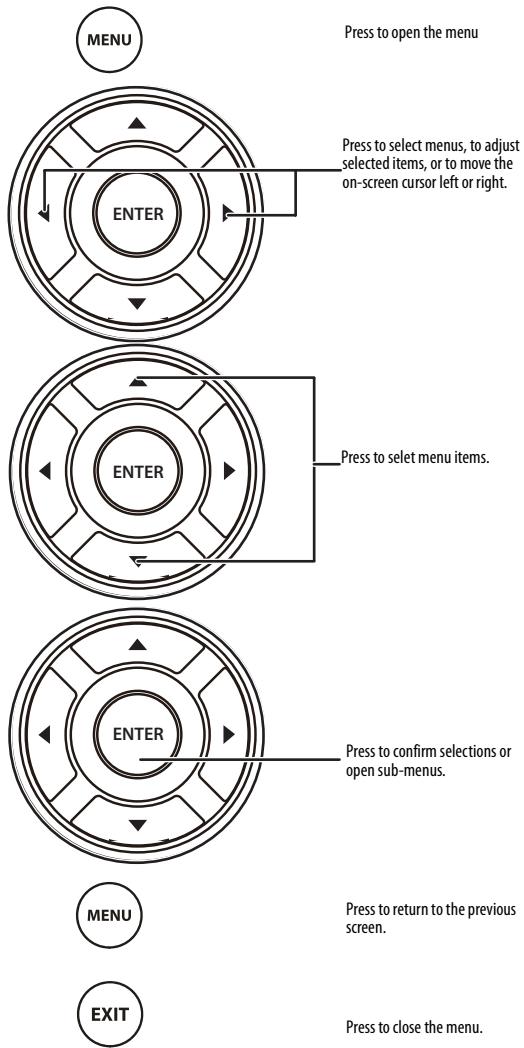
### BLU-RAY menu



#### Note

- Depending on the signal source selected, you may see different options on your screen. The following menus are shown in TV mode.
- Menu items that are not selectable are grayed out. Menus in this guide are shown in TV mode, unless otherwise indicated.
- The screens shown in the guide are for explanation purposes and may vary from the actual screens on your TV/Blu-ray combo.

## Navigating the menus



## Switching between TV and Blu-ray modes

### To switch between TV and Blu-ray modes:

- Press **TV** for TV mode.
- Press **BLU-RAY** for Blu-ray mode.

## Selecting a channel

### To select a channel:

- Press **CH ▲** or **CH ▼** to go to the next or previous channel in the channel list and skip channels that are not in the list. For more information, see "Automatically scanning for channels" on page 28.
- Press the number buttons for the channel, then wait for the channel to change or press **ENTER**. For example:
  - To select channel 2, press **2**.
  - To select channel 12, press **1** then press **2**.
  - To select channel 120, press **1, 2**, then press **0**.
- Press **RECALL** to go to the last viewed channel.
- To select a digital sub-channel, press the number buttons for the main channel, press **—**, then press the number for the sub-channel. For example, to select sub-channel 001 of digital channel 015, press **0, 1, 5, —, 0, 0, 1**.

## Adjusting the volume

### To adjust the volume:

- 1 Press **VOL+** to increase the volume.
- 2 Press **VOL-** to decrease the volume.
- 3 Press **MUTE** to turn off the sound. Press **MUTE**, again to restore the sound.

## Displaying additional information

### To display additional information:

- Press **INFO** to show an information banner. The information banner shows current program information such as channel number, channel name (if available), signal source, program description, and DTV signal strength, and resolution.
- Press **GUIDE** to display program information in a window with live program content for the channel you are watching. Press **▶** to view information about next program, then press **◀** to go back to the information about the previous program. Press **GUIDE** or **EXIT** to exit this feature.

## 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 TV picture:

- 1 Press **MENU**. The on-screen menu opens with the **PICTURE** menu displayed.



- 2 Press **▲** to access the **PICTURE** menu.

- 3 Press **▲** or **▼** to highlight a setting, then press **▶** or **ENTER** to access the options for the setting. You can select:

- **Mode**—Selects the picture mode. You can select:
  - **Vivid**—Provides a bright and dynamic picture.
  - **Standard**—Provides standard picture quality.
  - **Energy Savings**—Decrease the backlight brightness to save energy.
  - **Theater**—Provides a movie-like picture.
  - **Sports**—Provides an ideal picture for fast-motion sports.
  - **Custom**—Sets your personal preferences.

### Notes

- You can also press **PICT** to select the picture mode.
- If you adjust **Brightness**, **Contrast**, **Color**, **Tint**, or **Sharpness**, your TV/Blu-ray combo switches to **Custom** mode automatically.

- **Brightness**—Adjusts the picture brightness.
- **Contrast**—Adjusts the picture contrast.
- **Color**—Adjusts the color intensity of the picture.
- **Tint**—Adjusts the red and green colors in the picture.
- **Sharpness**—Adjusts the picture focus.

- **Advanced Video**—Opens the **Advanced Video** menu where you can adjust additional video settings. Press **►** or **ENTER** to access the **Advanced Video** settings.



- **Aspect Ratio**—Selects the aspect ratio of the picture. You can select **Normal**, **Wide**, **Zoom**, **Cinema**, or **Auto**. **Auto** is only available in TV mode when **Auto Zoom** on the **CHANNELS** menu is turned on. In VGA mode or when a computer is connected to an HDMI jack, only **Wide** and **Normal** are available.
- **Overscan**—You can select **On** or **Off**. When a computer is connected to your TV/Blu-ray combo, this option is turned off automatically to show the computer's full image on the screen.
- **Color Temperature**—Adjust the color temperature of the picture. You can select **Cool**, **Normal**, or **Warm**.
- **Noise Reduction**—Selects the noise reduction mode to reduce picture noise (snow). You can select **Off**, **Low**, **Middle**, or **High**.
- **Backlight**—Controls the overall brilliance of the screen. You can adjust the backlight through a range of 0 ~ 100. The backlight scale will appear on the screen. Press **◀** or **►** to decrease or increase the backlight setting.
- **Adaptive Contrast**—Optimizes the overall picture to make it more vivid. You can select **On** or **Off**.
- **Dynamic Contrast Ratio**—Enhances the contrast ratio between light and dark areas of the screen. You can select **On** or **Off**.
- **Reset Picture Settings**—Resets all picture settings to the factory defaults. When you select this option, a confirmation box opens. Press **▲** or **▼** to highlight **Yes** or **No**, then press **ENTER**.
- 4 Press **◀** or **►** to adjust the option, or press **▲** or **▼** to select a setting.
- 5 Press **MENU** to return to the previous menu, or press **EXIT** to close the menu.

## Adjusting the computer image

### To adjust the computer image:

- 1 Press **MENU**. The on-screen menu opens with the **PICTURE** menu displayed.



- 2 Press **◀** or **►** to select **SETTINGS**. The **SETTINGS** menu opens.



- 3 Press **▲** to highlight **Computer Settings**, then press **►** or **ENTER** to access the **Computer Settings** settings.



- 4 Press **▲** or **▼** to highlight a setting, then press **►** or **ENTER** to access the options for the setting. You can select:
  - **Auto Adjust**—Automatically adjust the computer image for the best picture. When this option is selected, press **►** or **ENTER**.
  - **H. Position**—Adjusts the horizontal position of the computer image.
  - **V. Position**—Adjusts the vertical position of the computer image.
  - **Clock**—Adjusts the clock, to eliminate vertical bars or stripes on the picture background.
  - **Phase**—Adjusts the phase, after the frequency has been set, to optimize the picture.
- 5 Press **◀** or **►** to adjust the option, or press **▲** or **▼** to select a setting.
- 6 Press **MENU** to return to the previous menu, or press **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 with the **PICTURE** menu displayed.



- 2 Press **◀** or **►** to select **AUDIO**. The **AUDIO** menu opens.



- 3 Press **▲** to access the **AUDIO** menu.

- 4 Press **▲** or **▼** to highlight a setting, then press **►** or **ENTER** to access the options for the setting. You can select:
  - **Audyssey Dynamic Volume**—Selects the Audyssey mode. You can select **Off**, **Light**, **Medium**, or **Heavy**. When the Audyssey mode is set to **Light**, **Medium**, or **Heavy**, your TV/Blu-ray combo automatically adjusts the volume to keep the volume level consistent.
  - **SRS TruSurround HD™**—Provides the ultimate home theater sound solution. You can select **On** or **Off**.

### Note

If you set the SRS TruSurround HD™ to **On**, Audyssey Dynamic Volume is set to **Off** automatically.

- **Treble**—Adjusts the high sounds.
- **Bass**—Adjusts the low sounds.
- **Balance**—Adjusts the balance between the left and right audio channels.
- **Advanced Audio**—Opens the *Advanced Audio* menu where you can adjust additional audio settings. Press **►** or **ENTER** to access the Advanced Audio settings.
  - **Digital Audio/SPDIF**—Sends digital audio to an external audio system. You can select **PCM** (to select to output audio in 2-channel stereo), or **RAW** (to pass through the original digital audio sound).
  - **Audio Language**—(Digital channels only) Selects an alternate audio language, if available.
  - **MTS/SAP**—(Analog channels only) Selects the audio mode. You can select:
    - **Mono**—Select this option if there is noise or static on weak stereo broadcasts.
    - **Stereo**—Select this option for programs broadcast in stereo.
    - **SAP**—Select this option to listen to a secondary audio program, if available.
    - **Speakers**—Selects the internal speakers or external speakers (line out).
  - **Reset Audio Settings**—Reset all audio settings to factory defaults.
- 5 Press **◀** or **►** to adjust the option, or press **▲** or **▼** to select a setting.
- 6 Press **MENU** to return to the previous menu, or press **EXIT** to close the menu.

## Playing TV audio only

When watching TV, you can turn off the TV picture and listen to the audio only.

### To play TV audio only:

- 1 Press **MENU**. The on-screen menu opens with the **PICTURE** menu displayed.



- 2 Press **◀** or **▶** to select **CHANNELS**. The **CHANNELS** menu opens.



- 3 Press **▲** to highlight **Audio Only**, then press **▶** or **ENTER** to access the Audio Only settings.



- 4 Press **▲** or **▼** to select **On** or **Off**.
- 5 Press **MENU** to return to the previous menu, or press **EXIT** to close the menu.

### Notes

- After **Audio Only** is turned on, the TV picture will disappear within 10 seconds after the on-screen menu is closed.
- **Audio Only** works only when the input source is TV and your TV/Blu-ray combo is receiving a broadcast signal.
- To exit **Audio Only** mode, press any button except the power button. When you exit **Audio Only** mode, the **Audio Only** setting is automatically reset to **Off**.

## Changing channel settings

### Note

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

### Automatically scanning for channels

When you scan for channels, your TV/Blu-ray combo searches for channels with signals and stores the channel information in the channel list. When you press **CH ▲/CH ▼**, your TV/Blu-ray combo goes to the next or previous channel in the channel list.

If the TV signal source changes, for example you change from an outdoor antenna to cable TV (no box), you need to scan for channels.

### To automatically scan for channels:

- 1 Press **MENU**. The on-screen menu opens with the **PICTURE** menu displayed.



- 2 Press **◀** or **▶** to select **CHANNELS**. The **CHANNELS** menu opens.



- 3 Press **▲** to highlight **Auto Channel Search**, then press **▶** or **ENTER** to access the **Auto Channel Search** screen.



4 Press **▲** or **▼** to highlight **Antenna, Cable**, or **Cable/Satellite Box**, depending on the type of connection you have, then press **ENTER**.

- If you are using an antenna for a standard or HDTV signal, select **Antenna**.
- If your cable TV is connected directly to your TV/Blu-ray combo (without a box), select **Cable**.
- If your cable is connected to your TV/Blu-ray combo through a cable or satellite box, select **Cable/Satellite Box**.

If you selected **Antenna** or **Cable**, your TV/Blu-ray combo automatically scans for available channels in your area and stores the channel information in the channel list. This may take several minutes. While scanning, your TV/Blu-ray combo displays a progress bar.

#### Notes

- During auto scan, digital channels will be scanned first, then analog channels. When all available digital channels have been found, the message will ask you "Do you want to continue scanning analog channel?" You can select **No**, then press **ENTER** to exit the analog channel scan, or let your TV/Blu-ray combo continue scanning.
- You can press **MENU** or **EXIT** at any time to stop the auto scan, but you will need to run the auto scan again to create a channel list.

## Hiding channels

You can hide channels in the channel list. When you press **CH ▲/CH ▼**, your TV/Blu-ray combo will skip the hidden channels. You can still tune to a hidden channel by pressing the number buttons for the channel.

#### To hide channels:

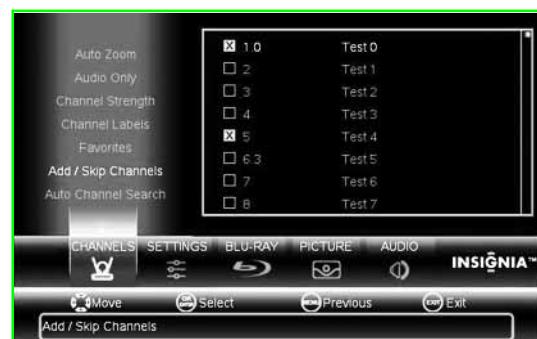
1 Press **MENU**. The on-screen menu opens with the **PICTURE** menu displayed.



2 Press **◀** or **▶** to select **CHANNELS**. The **CHANNELS** menu opens.



3 Press **▲** to highlight **Add/Skip Channels**, then press **▶** or **ENTER** to access the channel list screen.



4 Press **▲** or **▼** to highlight the channel you want to hide, then press **ENTER** to uncheck the highlighted channel. You can add a channel to the list by highlighting a channel and checking it.

5 Repeat Step 4 to hide additional channels.

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

## Setting up a favorite channel list

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

#### To set up a favorite channel list:

1 Press **MENU**. The on-screen menu opens with the **PICTURE** menu displayed.



2 Press **◀** or **▶** to select **CHANNELS**. The **CHANNELS** menu opens.



3 Press **▲** to highlight **Favorites**, then press **▶** or **ENTER** to access the favorites screen.

4 Press **▲** or **▼** to highlight the channel you want to add to the *Favorites* list, then press **ENTER** to check the highlighted channel. You can remove a channel from the list by highlighting the channel and unchecking it.

5 Repeat Step 4 to add additional channels.

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

## Viewing a favorite channel

### To view a favorite channel:

1 Press **FAV** on your remote control. The *Favorites* channel list opens.



2 Press **▲** or **▼** to highlight the channel you want to watch, then press **ENTER**.

3 Press **FAV** or **EXIT** to close the *Favorites* list.

## Adding or changing a channel label

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

### To add or change a channel label:

1 Press **MENU**. The on-screen menu opens with the **PICTURE** menu displayed.



2 Press **◀** or **▶** to select **CHANNELS**. The **CHANNELS** menu opens.



3 Press **▲** to highlight **Channel Labels**, then press **▶** or **ENTER** to access the channel labels screen.



4 Press **▲** or **▼** to select the channel you want to label, then press **►** to move to the **Alpha 01** box. A small keyboard opens with the channel label in the text entry area.



5 Press **▲** **▼** **◀** or **▶** to highlight a letter, number, or character, then press **ENTER** to put your selection in the text entry area. Repeat this step to add additional letters. You can add as many as seven letters.

6 Press **▲** **▼** **◀** or **▶** to highlight Enter on the keyboard, then press **ENTER**. The new label will appear in the Channel Label submenu and in the Channel List.

7 Press **MENU** to close the keyboard and return to the channel entry area.

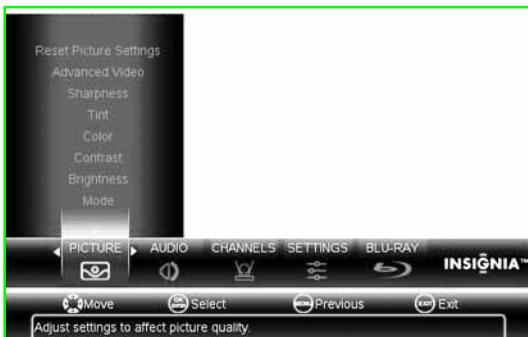
8 Press **MENU** to return to the previous menu, or press **EXIT** to close the menu.

## Checking the digital signal strength

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

### To check the digital signal strength:

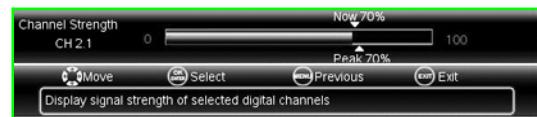
1 Press **MENU**. The on-screen menu opens with the **PICTURE** menu displayed.



2 Press **◀** or **▶** to select **CHANNELS**. The **CHANNELS** menu opens.



3 Press **▲** to highlight **Channel Strength**, then press **►** or **ENTER** to open the digital TV signal strength meter.



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

## Setting TV parental controls

### Note

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

Your TV/Blu-ray combo has a V-chip that lets you control the type of programs your children can watch. Parental controls include two ratings: MPAA (based on age) and TV Parental Guidelines (based on content and age). A TV program may have an MPAA or TV Parental Guidelines rating, so you should set control for both ratings.

Before you can select ratings, you need to set up a parental controls password.

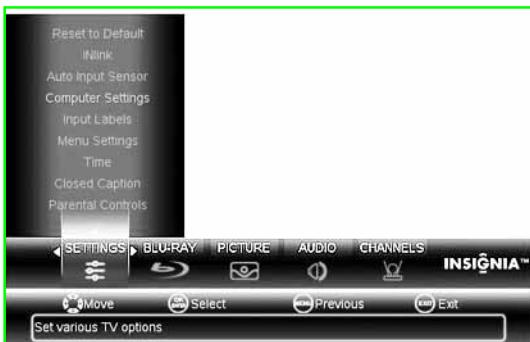
## Setting or changing the password

### To set or change the password:

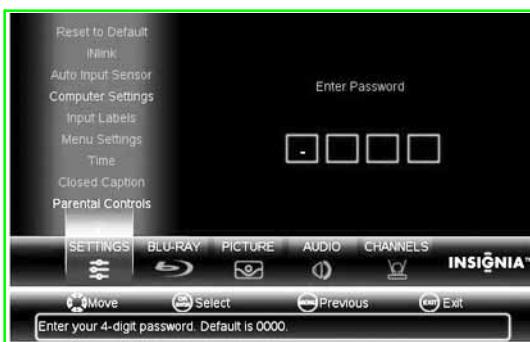
1 Press **MENU**. The on-screen menu opens with the **PICTURE** menu displayed.



2 Press **◀** or **▶** to select **SETTINGS**. The **SETTINGS** menu opens.



3 Press **▲** to highlight **Parental Controls**, then press **▶** or **ENTER**. The *Enter Password* screen opens.



4 Press the number buttons to enter the four-digit password. The default password is **0000**. You should change the password to a number you can remember. The *Parental Controls* menu opens.



5 Press **▲** or **▼** to highlight **Change Password**, then press **▶** or **ENTER**. The *Enter New Password* screen opens.



6 Press the number buttons to enter a password, then enter the password again.

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

#### Note

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

## Setting parental control levels

### To set parental control levels:

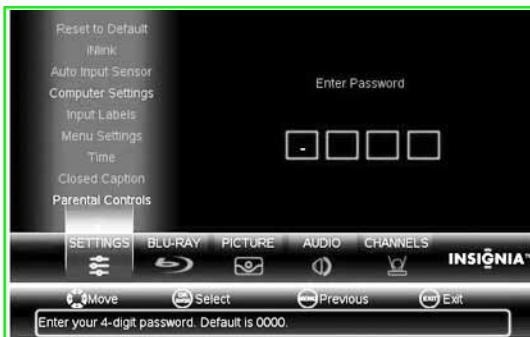
1 Press **MENU**. The on-screen menu opens with the **PICTURE** menu displayed.



2 Press **◀** or **▶** to select **SETTINGS**. The **SETTINGS** menu opens.



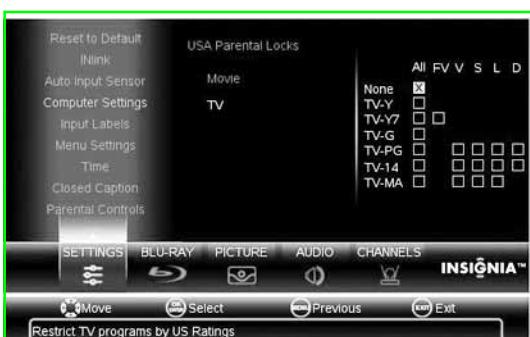
3 Press **▲** to highlight **Parental Controls**, then press **►** or **ENTER**. The *Enter Password* screen opens.



4 Press the number buttons to enter the four-digit password. The default password is **0000**. You should change the password to a number you can remember. The *Parental Controls* menu opens.



5 Press **▲** or **▼** to highlight **USA Parental Locks** or **Canadian Parental Locks**, then press **►** or **ENTER** to open the *USA Parental Locks* or *Canadian Parental Locks* screen.



6 Press **▲** **▼** **◀** or **►** to highlight a rating, then press **ENTER** to block or unblock the rating. When you block a rating, that rating and all higher ratings are blocked.

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

#### Note

When you first set parental controls, they take effect immediately. If you have set parental controls then tune to a blocked channel or program, you are prompted to enter the password. After you enter the password, parental controls are turned off. To reactivate the parental lock settings, turn off your TV/Blu-ray combo, then turn it on again.

#### 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

**U.S. movie (MPAA) ratings**

None	Movie not rated
G	General audiences
PG	Parental guidance suggested
PG-13	Suitable for children 13 and older
R	Parental guidance suggested for children under 17
NC-17	Not suitable for children under 17
X	Adults only

**Canadian English ratings**

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

**Canadian French ratings**

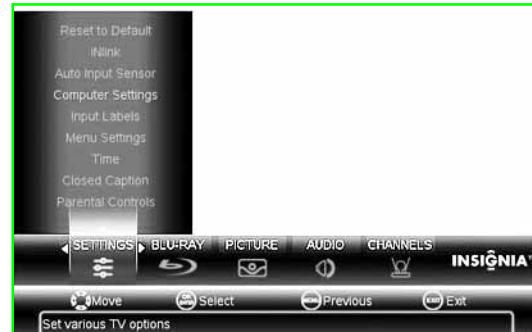
E	Exempt programming
G	General audiences
8ans+	Over 8 years old
13ans+	Over 13 years old
16ans+	Over 16 years old
18ans+	Adult programming

**Blocking unrated TV****To block unrated TV:**

1 Press **MENU**. The on-screen menu opens with the **PICTURE** menu displayed.



2 Press **◀** or **▶** to select **SETTINGS**. The **SETTINGS** menu opens.



3 Press **▲** to highlight **Parental Controls**, then press **▶** or **ENTER**. The *Enter Password* screen opens.



4 Press the number buttons to enter the four-digit password. The default password is **0000**. You should change the password to a number you can remember. The *Parental Controls* menu opens.



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

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

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

## Downloading rating information

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

### To download rating information:

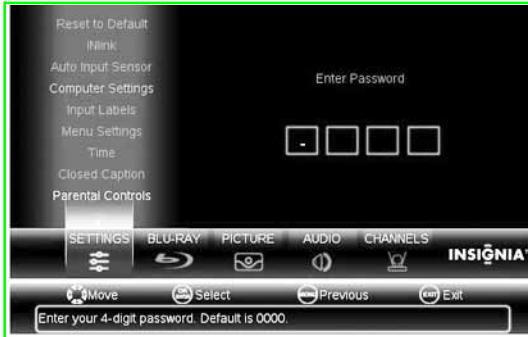
- 1 Press **MENU**. The on-screen menu opens with the **PICTURE** menu displayed.



- 2 Press **◀** or **▶** to select **SETTINGS**. The **SETTINGS** menu opens.



- 3 Press **▲** to highlight **Parental Controls**, then press **▶** or **ENTER**. The **Enter Password** screen opens.



- 4 Press the number buttons to enter the four-digit password. The default password is **0000**. You should change the password to a number you can remember. The **Parental Controls** menu opens.



- 5 Press **▲** or **▼** to highlight **RRT5**, then press **▶** or **ENTER**.
- 6 Press **▲** or **▼** to highlight an option, then press **▶** or **ENTER**.
- 7 Press **▲** or **▼** to select a rating, then press **ENTER**.
- 8 Press **MENU** to return to the previous menu, or press **EXIT** to close the menu.

### Note

If the program is broadcast with RRT5 rating information, the information is downloaded automatically and can be used for parental controls. If the program is not broadcast with RRT5 rating information, no information is downloaded.

## Locking control buttons

When the button lock is turned **On**, the buttons on the front of your TV/Blu-ray combo are locked and you can only operate your TV/Blu-ray combo using the remote control.

### To lock control buttons:

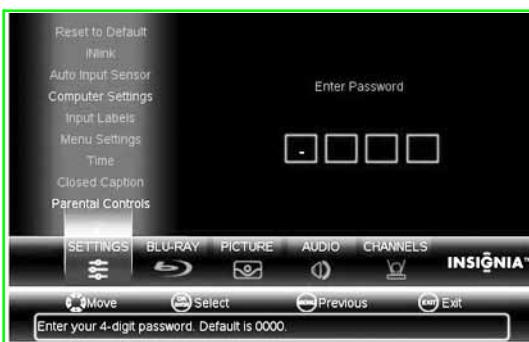
- 1 Press **MENU**. The on-screen menu opens with the **PICTURE** menu displayed.



2 Press **◀** or **▶** to select **SETTINGS**. The **SETTINGS** menu opens.



3 Press **▲** to highlight **Parental Controls**, then press **▶** or **ENTER**. The *Enter Password* screen opens.



4 Press the number buttons to enter the four-digit password. The default password is **0000**. You should change the password to a number you can remember. The **Parental Controls** menu opens.



5 Press **▲** or **▼** to highlight **Button Lock**, then press **▶** or **ENTER**.

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

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

## Using closed captioning

### Note

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

Your TV/Blu-ray combo can decode and display closed-captioned television programs. Closed captioning displays text on the screen for hearing impaired viewers or translates and displays text in another language.

There are two closed-captioning formats:

- **Captions**—This closed caption mode displays text in a small box across the bottom of the screen in English or another language. Generally, closed captions in English are transmitted on C1 and closed captions in other languages are transmitted on C2.
- **Text**—This closed caption mode usually fills half of the screen with a programming schedule or other information provided by the broadcaster.

## Viewing closed captioning

### To view closed captioning:

- Press **CC** to select **CC Off**, **CC On**, or **CC On Mute**.

## Selecting the closed captioning mode

### To select the closed captioning mode:

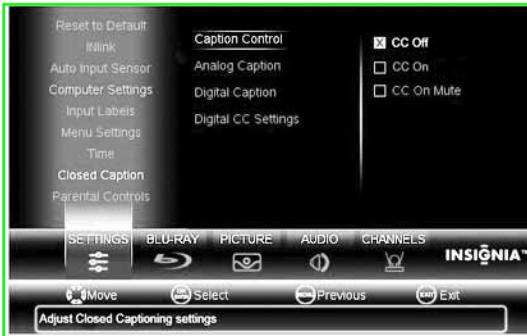
- 1 Press **MENU**. The on-screen menu opens with the **PICTURE** menu displayed.



- 2 Press **◀** or **▶** to select **SETTINGS**. The **SETTINGS** menu opens.



3 Press **▲** to highlight **Closed Caption**, then press **►** or **ENTER**. The *Closed Caption* menu opens.



4 Press **▲** or **▼** to highlight **Analog Caption** or **Digital Caption**, then press **►** or **ENTER**.

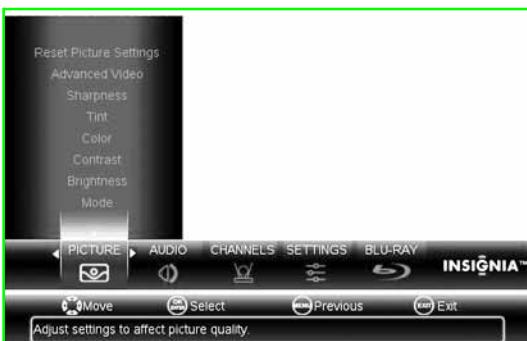
5 Press **▲** or **▼** to select a setting.

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

## Customizing digital closed captioning styles

### To customize digital closed captioning styles:

1 Press **MENU**. The on-screen menu opens with the *PICTURE* menu displayed.



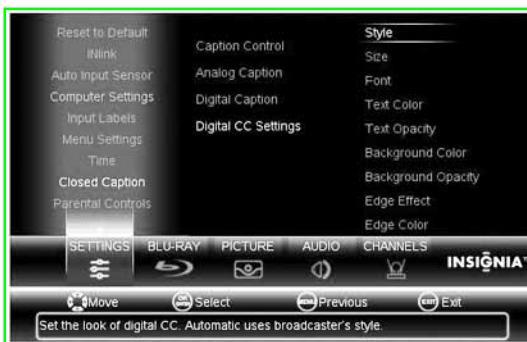
2 Press **◀** or **▶** to select **SETTINGS**. The *SETTINGS* menu opens.



3 Press **▲** to highlight **Closed Caption**, then press **►** or **ENTER**. The *Closed Caption* menu opens.



4 Press **▲** or **▼** to highlight **Digital CC Settings**, then press **►** or **ENTER** to access the Digital CC Settings.



5 Press **▲** or **▼** to highlight a setting. You can select:

- **Style**—Selects the Digital Closed Caption style. You can select **Automatic** or **Custom**. The default setting for this option is **Automatic**. To change any of the other settings, you must change the setting for this option to **Custom**.
- **Size**—Selects the font size.
- **Font**—Selects the font style.
- **Text Color**—Selects the text color.
- **Text Opacity**—Selects the text opacity.
- **Background Color**—Selects the background color.
- **Background Opacity**—Selects the background opacity.
- **Edge Effect**—Selects the edge style.
- **Edge Color**—Selects the edge color.

6 When a setting is highlighted, press **►** or **ENTER** to access to open the submenu for the setting, press **▲** or **▼** to select the option, then press **ENTER**.

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

# Adjusting time settings

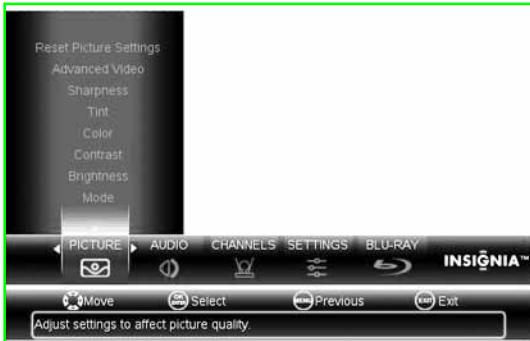
## Note

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

## Setting the date and time

### To set the date and time:

- 1 Press **MENU**. The on-screen menu opens with the **PICTURE** menu displayed.



- 2 Press **◀** or **▶** to select **SETTINGS**. The **SETTINGS** menu opens.



- 3 Press **▲** to highlight **Time**, then press **▶** or **ENTER**. The **Time** menu opens with **Date/Time** highlighted.

- 4 Press **▶** or **ENTER** to access the **Date/Time** menu.



- 5 Press **▲** or **▼** to highlight a setting, then press **▶** or **ENTER** to access the options for the setting. You can select:

- **Mode**—Press **▲** or **▼** to select **Auto** or **Manual**, then press **ENTER**. If you select **Auto**, the date and time are set based on a time signal received from a digital TV channel, and the only options you can adjust are **Time Zone** and **Daylight Savings**.
- **Time Zone**—Press **▲** or **▼** to select the time zone, then press **ENTER**.
- **Daylight Savings**—Press **▲** or **▼** to select **On** or **Off**, then press **ENTER**.
- **Year**—Press **◀** or **▶** to select the current year, then press **ENTER**.
- **Month**—Press **◀** or **▶** to select the current month, then press **ENTER**.
- **Day**—Press **◀** or **▶** to select the current day, then press **ENTER**.
- **Time**—Press **◀** or **▶** to move the cursor from field to field, press **▲** or **▼** to change the value in the field.

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

## Setting the sleep timer

You can specify the amount of time before your TV/Blu-ray combo automatically turns off.

### To set the sleep timer:

- 1 Press **MENU**. The on-screen menu opens with the **PICTURE** menu displayed.



- 2 Press **◀** or **▶** to select **SETTINGS**. The **SETTINGS** menu opens.



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

4 Press **▲** or **▼** to highlight **Sleep Timer**, then press **►** or **ENTER**. The sleep timer menu opens.



5 Press **▲** or **▼** to select the amount of time you want your TV/Blu-ray combo to wait before it automatically turns off.

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

#### Note

You can also press **SLEEP** one or more times to set the sleep timer. You can select **OFF, 5, 10, 15, 30, 60, 90, 120, 180, or 240** minutes.

## Adjusting menu settings

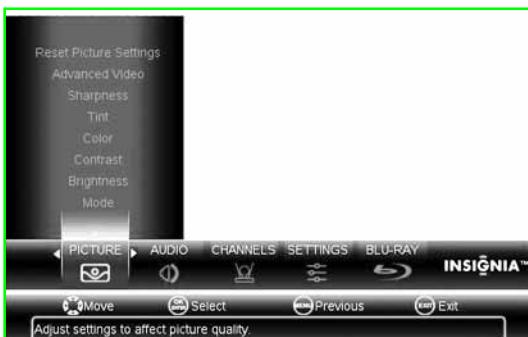
#### Note

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

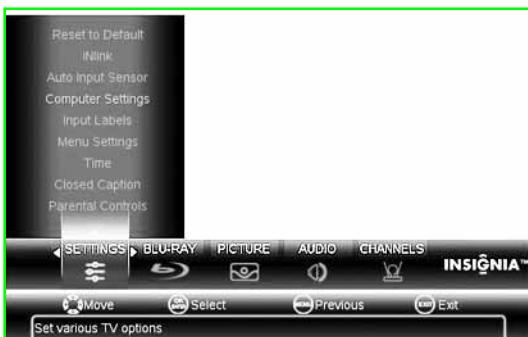
### Selecting the on-screen menu language

#### To select the on-screen menu language:

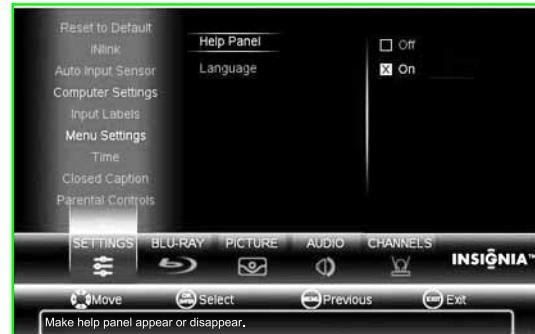
1 Press **MENU**. The on-screen menu opens with the **PICTURE** menu displayed.



2 Press **◀** or **▶** to select **SETTINGS**. The **SETTINGS** menu opens.



3 Press **▲** to highlight **Menu Settings**, then press **►** or **ENTER**.



4 Press **▲** or **▼** to highlight **Language**, then press **►** or **ENTER** to access the language options.



5 Press **▲** or **▼** to select a language.

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

### Turning the help panel on or off

You can turn the help panel at the bottom of the menu on or off.

#### To turn the help panel on or off:

1 Press **MENU**. The on-screen menu opens with the **PICTURE** menu displayed.



2 Press **◀** or **▶** to select **SETTINGS**. The **SETTINGS** menu opens.



3 Press **▲** to highlight **Menu Settings**, then press **▶** or **ENTER**.

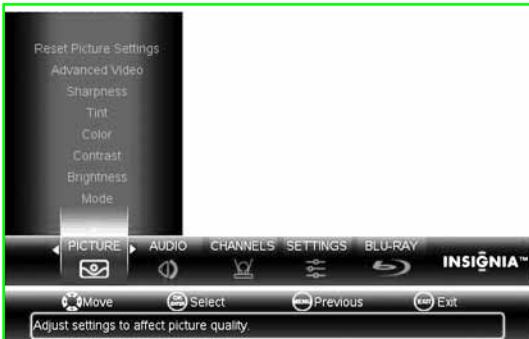


4 Press **▲** or **▼** to highlight **Help Panel**, then press **▶** or **ENTER** to access the help panel options.  
 5 Press **▲** or **▼** to select **On** or **Off**. If you select **Off**, the help panel at the bottom of the menu will immediately be hidden from view.  
 6 Press **MENU** to return to the previous menu, or press **EXIT** to close the menu.

## Labeling an input source

### To label an input source:

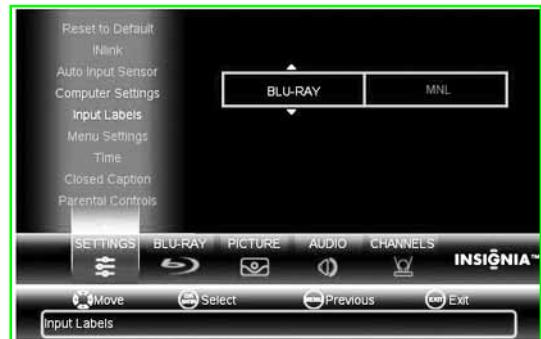
1 Press **MENU**. The on-screen menu opens with the **PICTURE** menu displayed.



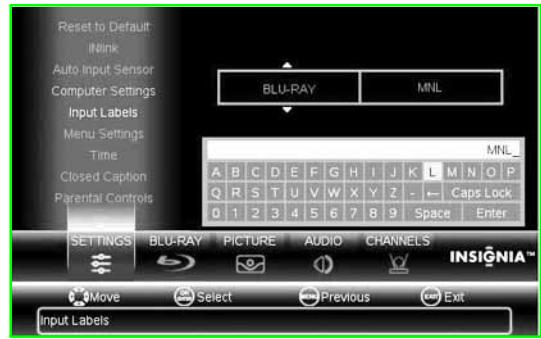
2 Press **◀** or **▶** to select **SETTINGS**. The **SETTINGS** menu opens.



3 Press **▲** to highlight **Input Labels**, then press **▶** or **ENTER**.



4 Press **▲** or **▼** to select the input you want to change the label for (for example **HDMI**).  
 5 Press **▶** to move the cursor to the label selection field, then press **▶** or **ENTER**. A small keyboard appears with label in the text entry area.



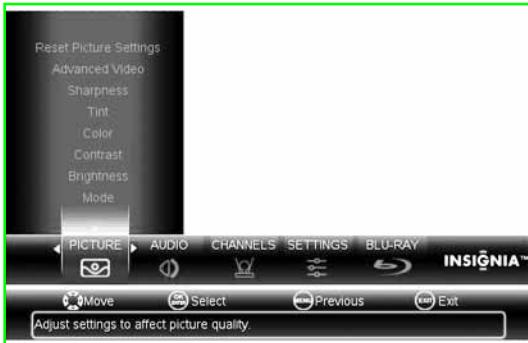
6 Press **▲** **▼** **◀** or **▶** to highlight a letter, number, or character, then press **ENTER**. Your selection appears in the text entry area. Repeat this step to enter more characters. You can enter up to seven characters.  
 7 Press **▲** **▼** **◀** or **▶** to highlight **Enter** on the keyboard, then press **ENTER**. The new label will appear in the input list menu.  
 8 Press **MENU** to return to the previous menu, or press **EXIT** to close the menu.

## Turning the Auto Input Sensor on or off

The **INPUT** button on your remote control lets you select devices connected to the video input jacks on your TV/Blu-ray combo. When you turn on the **Auto Input Sensor**, only the inputs that have connected devices are active. The other inputs are grayed and cannot be selected.

### To turn Auto Input Sensor on or off:

- 1 Press **MENU**. The on-screen menu opens with the **PICTURE** menu displayed.



- 2 Press **◀** or **▶** to select **SETTINGS**. The **SETTINGS** menu opens.



- 3 Press **▲** to highlight **Auto Input Sensor**, then press **▶** or **ENTER**.



- 4 Press **▲** or **▼** to select **On** or **Off**.
- 5 Press **MENU** to return to the previous menu, or press **EXIT** to close the menu.

### Note

You can always select **TV** whether the **Auto Input Sensor** is on or off. When **Auto Input Sensor** is set to **On** and you press **INPUT**, the video input source you are watching is highlighted.

## Resetting settings to the defaults

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

### To reset settings to the defaults:

- 1 Press **MENU**. The on-screen menu opens with the **PICTURE** menu displayed.



- 2 Press **◀** or **▶** to select **SETTINGS**. The **SETTINGS** menu opens.



- 3 Press **▲** to highlight **Reset to default**, then press **▶** or **ENTER**.



- 4 Press **▲** or **▼** to highlight **Yes**, then press **ENTER**.
- 5 Press **MENU** to return to the previous menu, or press **EXIT** to close the menu.

# Using INlink

INlink lets you control HDMI CEC-compatible devices using the remote control that came with your TV/Blu-ray combo. For more information, see "INlink" on page 4.

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

## Turning INlink on or off

### To turn INlink on or off:

- 1 Press **MENU**. The on-screen menu opens with the *PICTURE* menu displayed.



- 2 Press **◀** or **▶** to select **SETTINGS**. The *SETTINGS* menu opens.



- 3 Press **▲** to highlight **INlink**, then press **▶** or **ENTER**.



- 4 When **INlink Control** is highlighted, press **▶** or **ENTER**.
- 5 Press **▲** or **▼** to select **On** or **Off**. If you select **Off**, other options in the *INlink* menu are disabled and cannot be selected.

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

## Turning Device Auto Power Off on or off

### To turn Device Auto Power Off on or off:

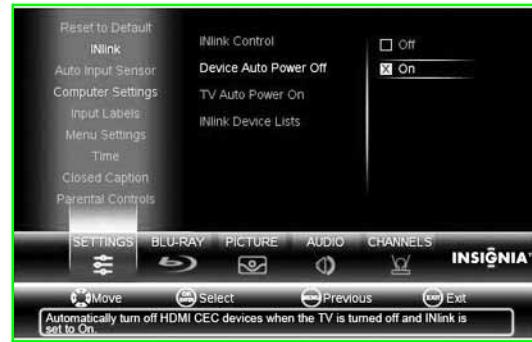
- 1 Press **MENU**. The on-screen menu opens with the *PICTURE* menu displayed.



- 2 Press **◀** or **▶** to select **SETTINGS**. The *SETTINGS* menu opens.



- 3 Press **▲** to highlight **INlink**, then press **▶** or **ENTER**.



- 4 Press **▼** to highlight **Device Auto Power Off**, then press **▶** or **ENTER**.
- 5 Press **▲** or **▼** to select **On** (turns off the connected device when you turn off your TV/Blu-ray combo) or **Off** (does not turn off the connected device when you turn off your TV/Blu-ray combo).
- 6 Press **MENU** to return to the previous menu, or press **EXIT** to close the menu.

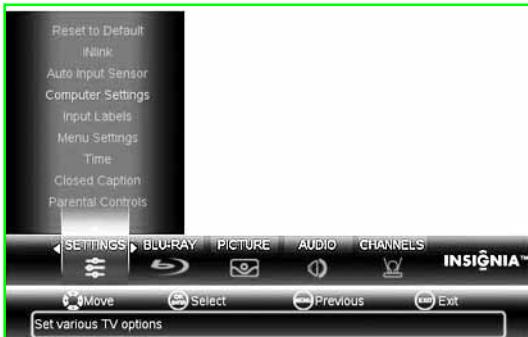
## Turning TV Auto Power On on or off

### To turn TV Auto Power On on or off:

- 1 Press **MENU**. The on-screen menu opens with the **PICTURE** menu displayed.



- 2 Press **◀** or **▶** to select **SETTINGS**. The **SETTINGS** menu opens.



- 3 Press **▲** to highlight **INlink**, then press **▶** or **ENTER**.



- 4 Press **▼** to highlight **TV Auto Power On**, then press **▶** or **ENTER**.
- 5 Press **▲** or **▼** to select **On** (turns on your TV/Blu-ray combo when you turn on the connected device) or **Off** (does not turn on your TV/Blu-ray combo when you turn on the connected device).
- 6 Press **MENU** to return to the previous menu, or press **EXIT** to close the menu.

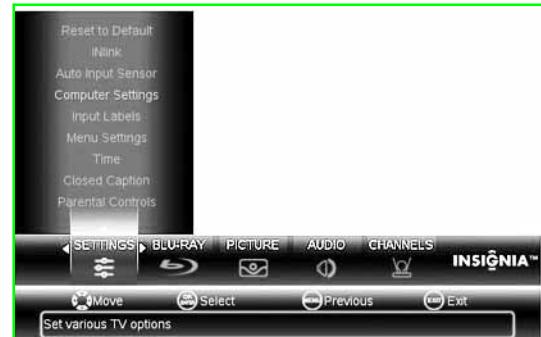
## Displaying a list of INlink connected devices

### To display a list of INlink connected devices:

- 1 Press **MENU**. The on-screen menu opens with the **PICTURE** menu displayed.



- 2 Press **◀** or **▶** to select **SETTINGS**. The **SETTINGS** menu opens.



- 3 Press **▲** to highlight **INlink**, then press **▶** or **ENTER**.



- 4 Press **▼** to highlight **INlink Device Lists**, then press **▶** or **ENTER**. A list of the HDMI CEC-compatible devices you have connected appears.
- 5 Press **MENU** to return to the previous menu, or press **EXIT** to close the menu.

# Using the Blu-ray Disc player

## Note

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

## Playable discs

Disc type	Logo	Disc type	Logo
Blu-ray Disc		DVD-R	
DVD-video (DVD-ROM)		Audio CD (CDDA)	
DVD-RAM		DTS-CD	
DVD-RW		MP3/WMA/ Data CD	

## Notes

- Writeable DVDs (DVD-RAM, DVD-RW, or DVD-R) must be finalized, VR mode only.
- Your TV/Blu-ray combo supports discs that are compatible with DVD-RAM Standard Version 2.0.
- Playback may not work for some types of discs, or when specific operations, such as changing the angle or aspect ratio, are being performed. Information about the disc is on the disc or disc packaging.
- Do not let the disc become dirty or scratched. Fingerprints, dirt, dust, scratches, or cigarette smoke on the recording surface may make it impossible to use the disc for playback.
- Your TV/Blu-ray combo can play CD-R/RW, DVD-RAM/-RW/-R recorded with UDF or ISO9660 format.
- Windows Media Audio (WMA) files must be written to the disc with a .wma file extension in order to be recognized and played back correctly.
- High bit-rate or variable bit-rate .wma files may not play back correctly.

## About Blu-ray Discs

The massive storage capacity of a Blu-ray Disc allows a higher standard of picture and audio quality and a wealth of special effects and enhanced features not available on DVDs.

## Java™

Your TV/Blu-ray combo features Java support so you can get the most out of the latest Blu-ray Discs. When a Blu-ray Disc loads, explore the title menu to enjoy these extra features.

## Color buttons

The red, green, yellow, and blue buttons on the remote control are used with interactive menus when operating a Blu-ray Disc that includes Java applications. For more information about using this type of disc, see the instructions that came with the disc.

## Playing a disc

### To play a disc:

- 1 Turn on your TV/Blu-ray combo.
- 2 Press **INPUT**, press **▲** or **▼** to highlight **BLU-RAY**, then press **ENTER**.
- 3 Insert a disc in the disc slot with the label (if the disc has one) facing forward. Hold the disc without touching either of its surfaces, align it with the guides, and gently push it in.

## Note

If a Disc is inserted during some modes other than Blu-ray mode, it may switch to Blu-ray mode and start playback automatically.

- 4 If the disc does not start playing automatically, press **▶** (play).
- 5 If a Blu-ray Disc or DVD menu opens, press **▲** **▼** **◀** or **▶** to select **PLAY**, then press **ENTER**.
- 6 To eject the disc, press **EJECT/CLOSE ▲**.

## Note

If you eject a disc from the disc slot, then change to a different video input source or turn off your TV/Blu-ray combo, you cannot insert a disc into the disc slot.

## Controlling disc playback

### To control disc playback:

- To pause playback, press **II** (pause). Press this button or **▶** (play) to resume normal playback.
- To stop playback, press **■** (stop). The **Setup** menu opens. To resume playback, press **▲** **▼** **◀** or **▶** to select **DVD/BD-ROM**, then press **ENTER**. Depending on the disc, playback starts where it stopped or at the beginning of the disc. If you press **■** (stop) twice, playback stops completely. To start playback again, press **▶** (play).

## Notes

Not all Blu-ray Discs support the resume feature.

- To fast forward or fast reverse, press **▶▶** or **◀◀**. Each time you press one of these buttons, the fast-forward or fast-reverse speed increases from Fast X2, Fast X4, Fast X8, Fast X16, Fast X32, Fast X64, to Fast X128. Press **▶** (play) to resume normal playback.
- To go to the previous chapter, press **◀◀** within two seconds after the current chapter starts. To go to the beginning of the current chapter, press **◀◀** anytime after playing the first two seconds of the chapter.
- To go to the next chapter, press **▶▶**.

## Note

If  appears on the screen, the operation you are trying is not allowed by your TV/Blu-ray combo or the disc. For example, most discs will not let you fast forward through the warning information at the beginning of a title.

## Displaying disc information

Your TV/Blu-ray combo displays information about the disc, such as type of disc, current elapsed time in the title, total amount of time in title, current chapter, and total number of chapters.

### To display disc information:

- 1 Press **INFO**.



- 2 Press **INFO** again to close the display.

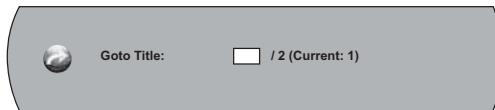
#### Note

The information displayed for discs other than Blu-ray Discs will be different.

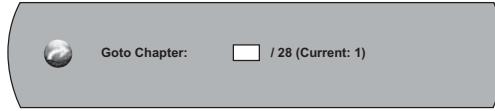
## Searching for a title, chapter, or elapsed time

### To search for a title, chapter, or elapsed time:

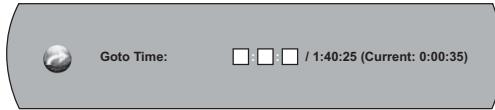
- 1 During playback, press **SEARCH** one or more times to select a search mode:
  - Press once to search for a title.



- Press twice to search for a chapter.



- Press three times to go to a specific elapsed time.

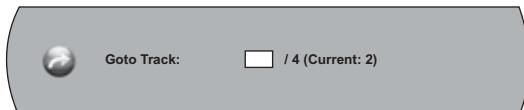


- 2 Press the number buttons to enter the title number, chapter number, or amount of elapsed time, then press **ENTER**. Your TV/Blu-ray combo goes to the title, chapter, or elapsed time you specified.

## Searching for a track

### To search for a track:

- 1 During audio CD playback, press **SEARCH**. The following menu opens.



- 2 Enter the track number with the number buttons, then press **ENTER**.

## Repeating a title, chapter, or CD track

### To repeat a title or chapter:

- Press **REPEAT** one or more times to select a repeat mode:
  - **Repeat Title**—Repeats the current title.
  - **Repeat Chapter**—Repeats the current chapter.
  - **Repeat Off**—Resumes normal playback.

### To repeat a CD track:

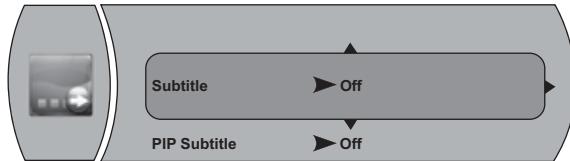
- Press **REPEAT** one or more times to select a repeat mode:
  - **Repeat All**—Repeats the entire track.
  - **Random On**—Play the tracks in random order.
  - **Repeat Track**—Repeats the current track.
  - **Repeat off**—Resumes normal playback.

## Selecting the subtitle language

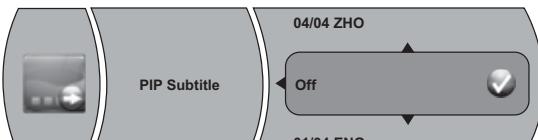
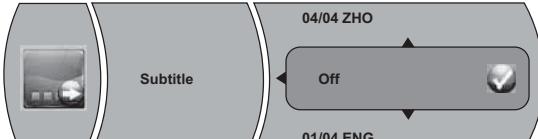
You can select the subtitle language by pressing the **SUBTITLE** button or from the on-screen menu.

### To select the subtitle language using the **SUBTITLE** button:

- 1 Press **SUBTITLE** to display the subtitle menu.



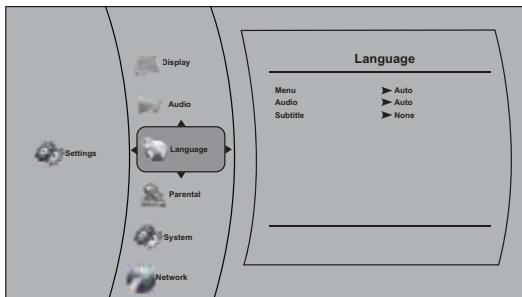
- 2 Press **▲** or **▼** to highlight an option, then press **ENTER** to access the submenu.



- 3 Press **▲** or **▼** to highlight the subtitle language you want, then press **ENTER**.

**To select a subtitle language using the on-screen menu:**

- 1 Press **ENTER**. The *Settings* menu opens.
- 2 Press **▲** or **▼** to select **Language**. The *Language* menu opens.



- 3 Press **▶** or **ENTER** to access the language options.
- 4 Press **▲** or **▼** to highlight **Subtitle**, then press **ENTER**.
- 5 Press **▲** or **▼** to highlight a language, then press **ENTER**.
- 6 Press **◀** to go to the previous menu.

**Notes**

- Not all languages are available on a disc.
- Some discs do not let you select the subtitle language from your player. Instead, you have to select the subtitle language from the disc setup menu (the menu that appears after you insert the disc).

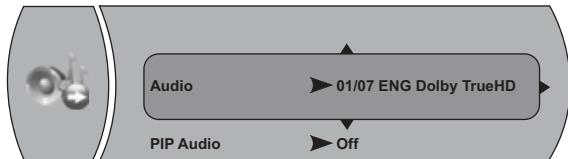
**Note**

Some Blu-ray Disc and DVDs are compatible with picture-in-picture (PIP) mode. In PIP mode, the primary video is displayed on the full screen, and the secondary video is displayed in a small window. See the documentation that came with the disc for playback instructions.

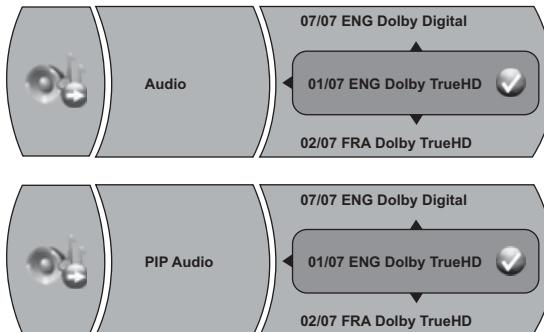
## Selecting the audio mode

**To select the audio mode:**

- 1 Press **AUDIO** to display the audio menu, then press **ENTER** to open the audio menu.



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



- 3 Press **▲** or **▼** to highlight the subtitle language you want, then press **ENTER**.

**Note**

Some Blu-ray Disc and DVDs are compatible with picture-in-picture (PIP) mode. In PIP mode, the primary video is displayed on the full screen, and the secondary video is displayed in a small window. See the documentation that came with the disc for playback instructions.

## Selecting a viewing angle

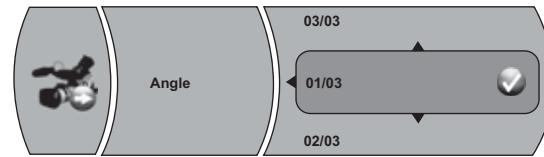
Some Blu-ray Discs and DVDs have scenes recorded from multiple viewing angles.

**To select a viewing angle:**

- 1 Press **ANGLE** to display the *Angle* menu.



- 2 Press **ENTER** to access the *Angle* menu.



- 3 Press **▲** or **▼** to highlight the angle you want, then press **ENTER**.

## Using a disc menu

### To use a disc menu:

- During Blu-ray Disc or DVD playback, press **DISK**. The Blu-ray Disc menu opens if available.

#### Note

Press **DISK** again to resume playback at the scene that was playing when you pressed **DISK**.

- Press **▲ ▼ ◀ ▶** to highlight an option, then press **ENTER**.

#### Notes

- Depending on the Blu-ray Disc or DVD, you may not be able to resume playback at the scene that was playing when you pressed **DISK**.
- DISK** is valid for DVDs that have a multi-layer menu.

## Using a disc popup menu

### To use a disc popup menu:

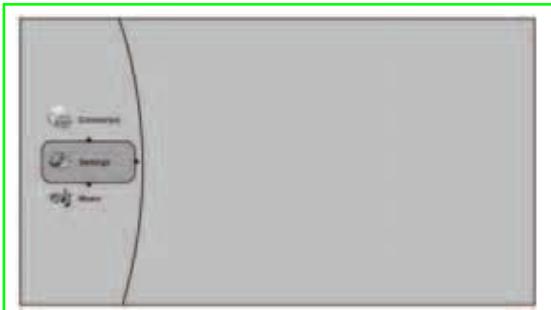
- During disc playback, press **POPUP MENU**. The disc menu opens, if available.
- Press **▲ ▼ ◀ ▶** to highlight an option, then press **ENTER**.

## Playing audio files on a data disc or USB flash drive

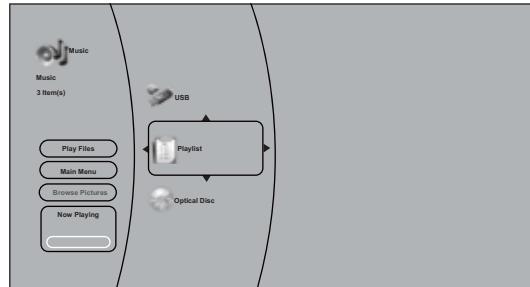
When you insert a data disc or USB flash drive containing music files, icons are added to the menu to indicate that music files are available for playback.

### To view audio files on a data disc or USB flash drive:

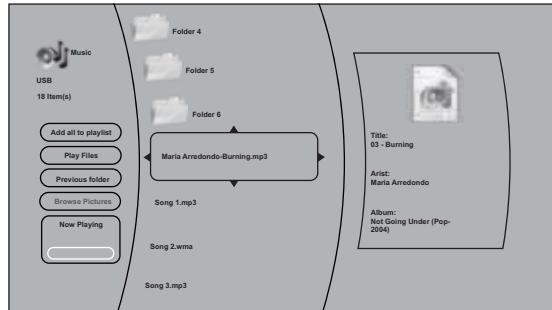
- Insert a data disc or USB flash drive into your TV/Blu-ray DVD combo. The following menu opens.



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



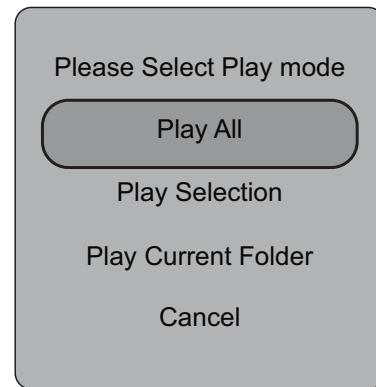
- Press **▲** or **▼** to highlight **USB** or **Optical Disc**, then press **ENTER**. A list of the folders and supported audio files in the top folder of the USB flash drive or data disc appears.



- Press **EXIT** repeatedly to return to the previous menu.

### To play multiple audio files on a data disc or USB flash drive:

- When an audio file is highlighted, press **◀** to highlight **Play Files**, then press **ENTER**. A list of options opens.



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

- Play All**—Plays all audio files.
- Play Selection**—Plays audio files added to the playlist.

#### Note

When you add a file to the playlist, **Play Selection** appears on the screen automatically.

- Play Current Folder**—Plays all the audio files in the current folder.
- To exit without playing the audio files, press **▲** or **▼** to highlight **Cancel**, then press **ENTER**.

**To play an individual audio file on a data disc or USB flash drive:**

- When an audio file is highlighted, press **ENTER**. The following menu opens.

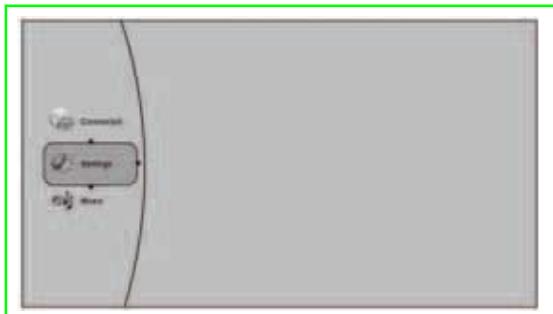


- Press **▲** or **▼** to highlight **Play (File)**, then press **ENTER**. Playback will begin.

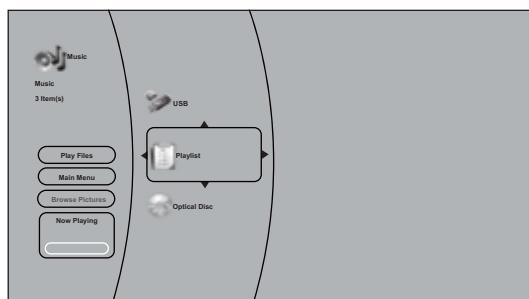
## Creating a music playlist

**To create a music playlist:**

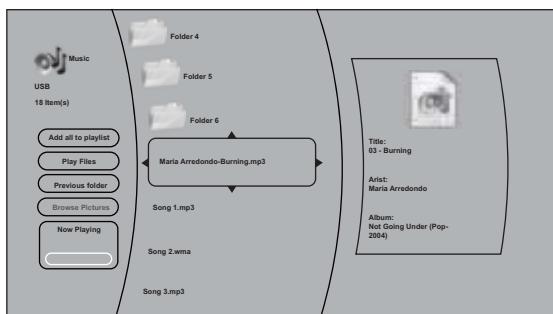
- Insert a data disc or USB flash drive into your TV/Blu-ray combo. The following menu opens.



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



- Press **▲** or **▼** to highlight **USB** or **Optical Disc**, then press **ENTER**. A list of the folders and supported audio files in the top folder of the USB flash drive or data disc appears.

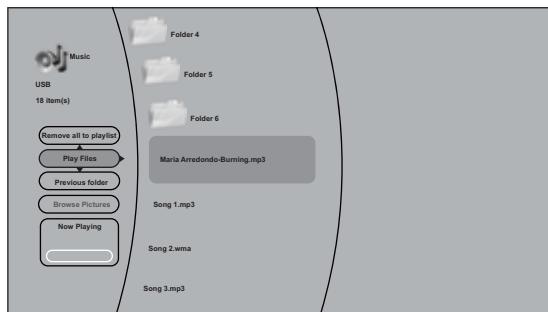


- Press **▲** or **▼** to highlight an audio file, then press **ENTER**. The following menu opens with **Add To Playlist** highlighted.



- Press **ENTER** to add the file to the playlist. The file will be highlighted.
- Repeat Steps 4 and 5 to add additional files to the playlist.

- Press **◀**. A menu opens.



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

- Add all to Playlist**— Adds all files into the playlist.
- Remove all from Playlist**— Removes all files from the playlist.

### Note

When you add a file to the playlist, **Remove all from playlist** appears on the screen automatically.

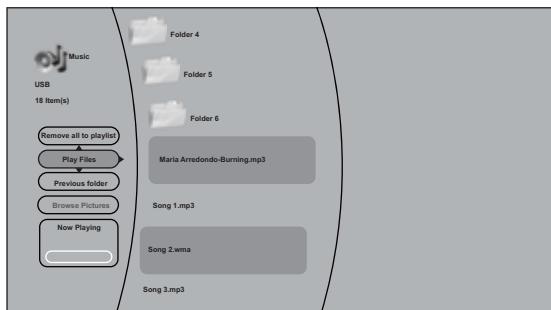
- Play Files**— Opens the *Please Select Play Mode* menu. Press **▲** or **▼** to highlight an option, then press **ENTER**.
- Previous folder**— Returns to the previous menu.
- Now Playing**— Opens a progress bar.

### Notes

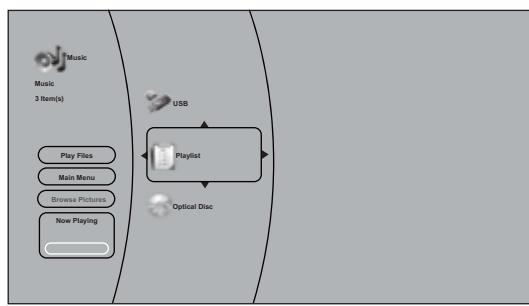
- Do not navigate back to the main menu. If you do, the playlist will be cleared.
- Removing the USB flash drive or optical disc containing the songs in the playlist will clear the playlist.

**To play music files in the playlist:**

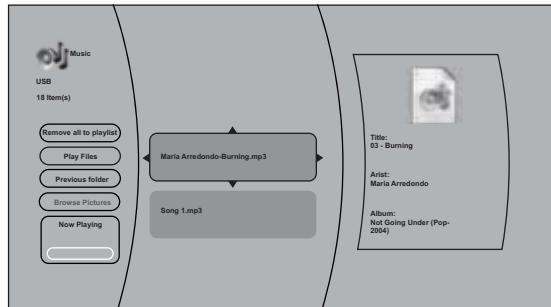
- 1 After you have added all the files you want to the playlist, press **◀** to move to the left column.



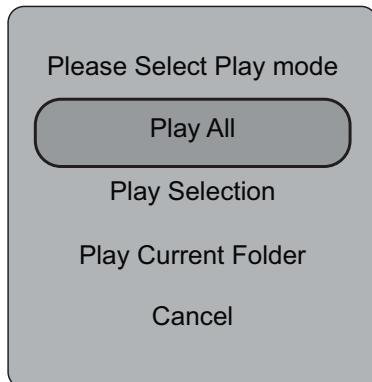
- 2 Press **▼** to highlight **Previous Folder** and press **ENTER**.



- 3 Press **▲** or **▼** to highlight **Playlist**, then press **ENTER**. A screen opens that shows only the files in the playlist.



- 4 When an audio file is highlighted, press **◀** to highlight **Play Files**, then press **ENTER** to open the *Please Select Play Mode* list.



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

- 6 To exit without playing the audio file, press **EXIT**.

**Displaying music file information****To display file information about the music file that is playing:**

- 1 Press **▲** or **▼** to highlight **Now Playing**, then press **ENTER**. The following display appears.



Random play indicator



Repeat indicator

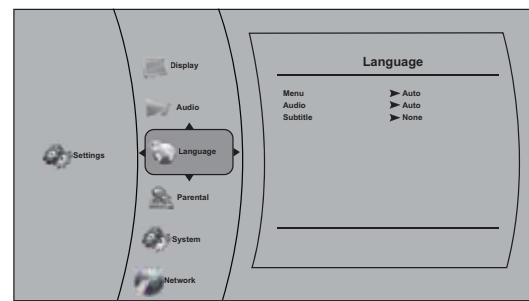


Play indicator

- 2 Press **EXIT** to exit.

**Selecting the disc menu language****To select the disc menu language:**

- 1 Press **ENTER**. The *Settings* menu opens.
- 2 Press **▲** or **▼** to select **Language**. The *Language* menu opens.



- 3 Press **►** or **ENTER** to access the language options.

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

- 5 Press **▲** or **▼** to highlight a language, then press **ENTER**.

- 6 Press **◀** to go to the previous menu.

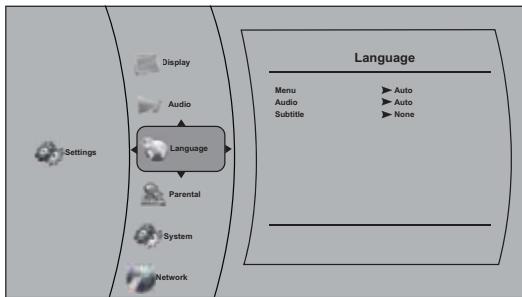
**Notes**

- Not all languages are available on a disc.
- Most discs only have one menu language.

## Selecting the audio language

### To select the audio language:

- 1 Press **ENTER**. The *Settings* menu opens.
- 2 Press **▲** or **▼** to select **Language**. The *Language* menu opens.



- 3 Press **▶** or **ENTER** to access the language options.
- 4 Press **▲** or **▼** to highlight **Audio**, then press **ENTER**.
- 5 Press **▲** or **▼** to highlight a language, then press **ENTER**.
- 6 Press **◀** to go to the previous menu.

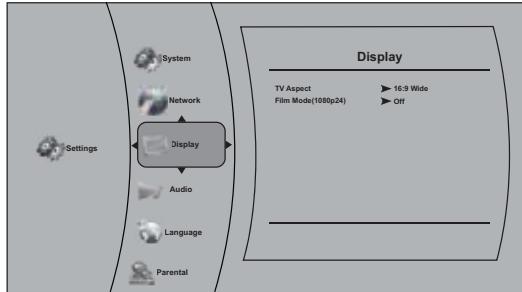
#### Notes

- Not all languages are available on a disc.
- Some discs do not let you select the audio language using your TV/Blu-ray combo's menu. Instead, you have to select the audio language from the disc setup menu (the menu that appears after you insert the disc).

## Selecting the aspect ratio

### To select the aspect ratio:

- 1 Press **ENTER**. The *Settings* menu opens.
- 2 Press **▲** or **▼** to highlight **Display**. The *Display* menu opens.

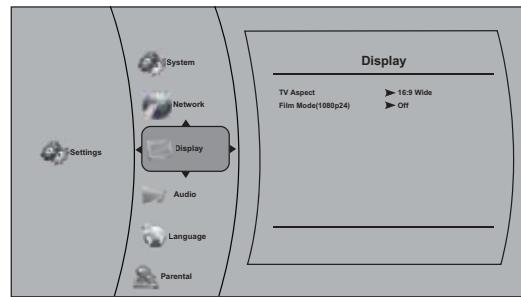


- 3 Press **▶** or **ENTER** to access the display options.
- 4 Press **▲** or **▼** to highlight **TV Aspect**, then press **ENTER**.
- 5 Press **▲** or **▼** to highlight the aspect ratio you want, then press **ENTER**. You can select **16:9 wide**, **16:9 Pillarbox**, **4:3 Pan and Scan**, or **4:3 Letterbox**.
- 6 Press **◀** to go to the previous menu.

## Turning film mode on or off

### To turn film mode on or off:

- 1 Press **ENTER**. The *Settings* menu opens.
- 2 Press **▲** or **▼** to highlight **Display**. The *Display* menu opens.

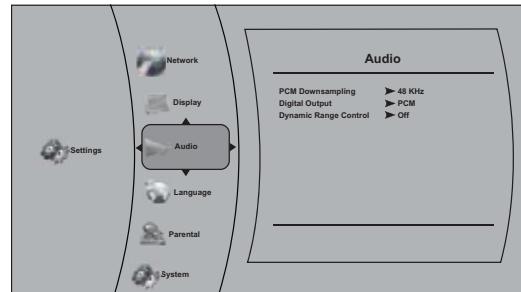


- 3 Press **▶** or **ENTER** to access the display options.
- 4 Press **▲** or **▼** to highlight **Film Mode(1080p24)**, then press **ENTER**.
- 5 Press **▲** or **▼** to highlight **On** or **Off**, then press **ENTER**. **Off** selects a 60 frames/second output format.
- 6 Press **◀** to go to the previous menu.

## Selecting the PCM downsampling rate

### To select the PCM downsampling rate:

- 1 Press **ENTER**. The *Settings* menu opens.
- 2 Press **▲** or **▼** to highlight **Audio**. The *Audio* menu opens.



- 3 Press **▶** or **ENTER** to access the audio options.
- 4 Press **▲** or **▼** to highlight **PCM Downsampling**, then press **ENTER**.
- 5 Press **▲** or **▼** to highlight **48KHz** or **Off**, then press **ENTER**.

#### Note

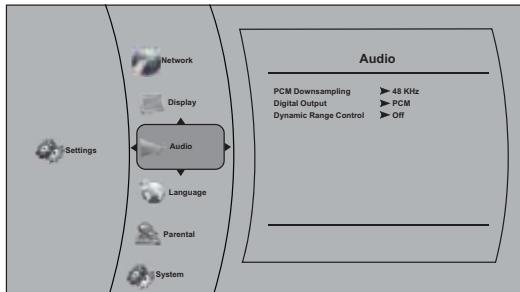
Incorrectly setting the digital audio output's PCM sampling rate may result in unpredictable audio playback.

- 6 Press **◀** to go to the previous menu.

## Adjusting the digital output mode

### To adjust the digital audio output mode:

- 1 Press **ENTER**. The *Settings* menu opens.
- 2 Press **▲** or **▼** to highlight **Audio**. The *Audio* menu opens.



- 3 Press **►** or **ENTER** to access the audio options.
- 4 Press **▲** or **▼** to highlight **Digital Output**, then press **ENTER**.
- 5 Press **▲** or **▼** to highlight the digital output mode you want, then press **ENTER**. You can select:
  - **PCM**—Sends mixed digital audio over the OPTICAL connection in two-channel PCM format.
  - **Bitstream**—Sends the original bitstream from the disc over the OPTICAL connection using legacy audio formats. Blu-ray Disc audio is limited to the soundtrack for main movie and does not send PiP audio or audio effects.
  - **Bitstream mixed**—Blu-ray Disc audio streams are mixed and encoded into a single bitstream. Use this option if you are using an SPDIF 5.1CH receiver and you want to enjoy mixed Blu-ray Disc audio in surround sound.
- 6 Press **◀** to go to the previous menu.

#### Note

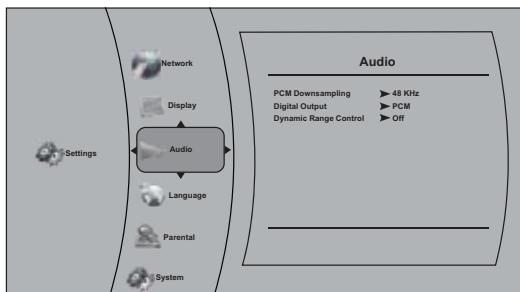
- When Bitstream is selected, your TV/Blu-ray combo cannot output secondary audio.
- If a disc has PiP audio, you can select it by pressing **AUDIO**.

## Turning dynamic range control on or off

Dynamic range control only works when your TV/Blu-ray combo detects a Dolby Digital signal.

### To turn dynamic range control on or off:

- 1 Press **ENTER**. The *Settings* menu opens.
- 2 Press **▲** or **▼** to highlight **Audio**. The *Audio* menu opens.



- 3 Press **►** or **ENTER** to access the audio options.

- 4 Press **▲** or **▼** to highlight **Dynamic Range Control**, then press **ENTER**.

- 5 Press **▲** or **▼** to highlight an option, then press **ENTER**. You can select:

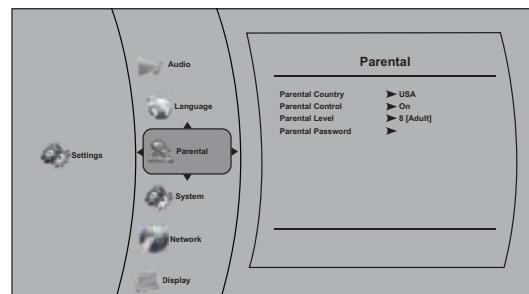
- **On**—Select this option if you play movies at low volume or if you have small speakers. Your TV/Blu-ray combo uses compression to make low-audio content easier to hear and prevent high-audio content from getting too loud.
- **Off**—Select this option if you do not want to use the **Dynamic Range Control** feature. The dynamic range control gain value is ignored, and the audio program is reproduced with full dynamic range.
- **Auto**—Select this option to listen to movies at the dynamic range they were recorded in.

- 6 Press **◀** to go to the previous menu.

## Turning parental controls on or off

### To turn parental control on or off:

- 1 Press **ENTER**. The *Settings* menu opens.
- 2 Press **▲** or **▼** to highlight **Parental**. The *Parental* menu opens.



- 3 Press **►** or **ENTER**. The password screen opens.

- 4 Enter your password. The default password is **0000**.

- 5 Press **▲** or **▼** to highlight **Parental Control**, then press **ENTER**.

- 6 Press **▲** or **▼** to highlight **On** or **Off**, then press **ENTER**. If you select **On**, you will be prompted to enter the parental control password before being allowed to change the other parental control options. If you select **Off**, you can change the options without entering a password.

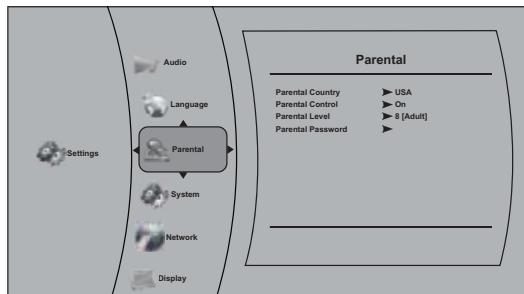
- 7 Press **◀** to go to the previous menu.

## Selecting the parental control country

If a Blu-ray Disc has parental rating system for more than one country, you can select the country you want to use.

### To select the parental control country:

- 1 Press **ENTER**. The *Settings* menu opens.
- 2 Press **▲** or **▼** to highlight **Parental**. The *Parental* menu opens.

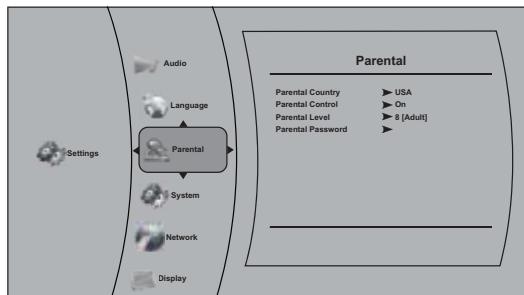


- 3 Press **►** or **ENTER**. The password screen opens.
- 4 Enter your password. The default password is **0000**.
- 5 Press **▲** or **▼** to highlight **Parental Country**, then press **ENTER**.
- 6 Press **▲** or **▼** to select the country you want, then press **ENTER**.
- 7 Press **◀** to go to the previous menu.

## Setting the parental control level

### To set the parental control level:

- 1 Press **ENTER**. The *Settings* menu opens.
- 2 Press **▲** or **▼** to highlight **Parental**. The *Parental* menu opens.



- 3 Press **►** or **ENTER**. The password screen opens.
- 4 Enter the default password (**0000**).
- 5 Press **▲** or **▼** to highlight **Parental Level**, then press **ENTER**.
- 6 Press **▲** or **▼** to highlight the rating level you want to block, then press **ENTER**. That rating and all higher ratings will be blocked. You can select:
  - **1[Kid Safe]**—Suitable for all children.
  - **2[G]**—General audiences.
  - **3[PG]**—Parental guidance suggested.
  - **4[PG-13]**—Not suitable for anyone under 13.
  - **5[PG-R]**—Parental guidance suggested.

- **6[R]**—Not suitable for any under 17 unless supervised by a parental or adult guardian.
- **7[NC-17]**—Not suitable for any under 17.
- **8[Adult]**—All DVDs can be played.

- 7 Press **◀** to go to the previous menu.

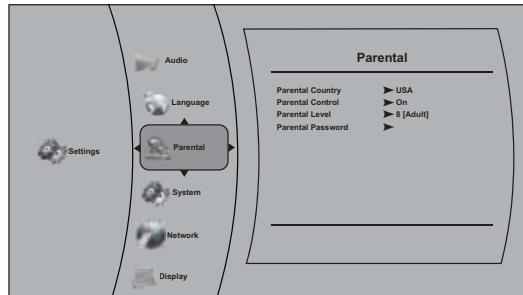
### Note

The **Parental Control** option must be set to **On** for the parental rating level to have effect. For more information, see "Turning parental controls on or off" on page 51.

## Changing parental password

### To change parental password:

- 1 Press **ENTER**. The *Settings* menu opens.
- 2 Press **▲** or **▼** to highlight **Parental**. The *Parental* menu opens.

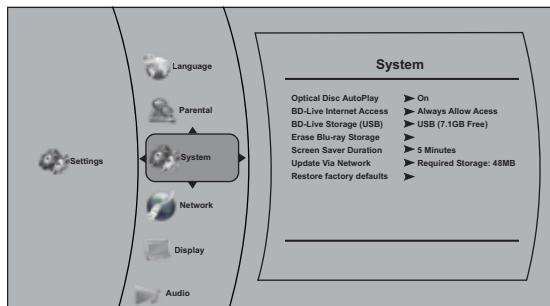


- 3 Press **►** or **ENTER**. The password screen opens.
- 4 Enter your password. If you have not set a password, enter **0000** (default password). If you forget your password, reset your player to the factory defaults. The password will be reset to **0000**. For more information, see "Resetting settings to the factory defaults" on page 54.
- 5 Press **▲** or **▼** to highlight the **Parental Password**, then press **ENTER**. The "Please enter new parental control password" screen opens.
- 6 Enter the new password, press **▲** or **▼** to highlight **OK**, then press **ENTER**.
- 7 Press **◀** to go to the previous menu.

## Setting automatic disc playback mode

### To set automatic disc playback mode:

- 1 Press **ENTER**. The *Settings* menu opens.
- 2 Press **▲** or **▼** to highlight **System**. The *System* menu opens.



- 3 Press **►** or **ENTER** to access the system options.

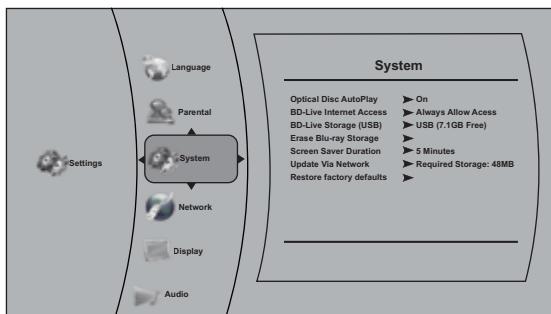
- 4 Press **▲** or **▼** to highlight **Optical Disc AutoPlay**, then press **ENTER**.
- 5 Press **▲** or **▼** to highlight **On** or **Off**, then press **ENTER**. When **On** is selected and you insert a Blu-ray Disc, files play back automatically. When **Off** is selected and you insert a Blu-ray Disc, the disc you can select are displayed on the *Settings* menu.
- 6 Press **◀** to go to the previous menu.

## Setting the BD-Live Internet access level

You can set the BD-Live Internet access level to control access to BD-Live.

### To set the BD-Live Internet access level:

- 1 Press **ENTER**. The *Settings* menu opens.
- 2 Press **▲** or **▼** to highlight **System**. The *System* menu opens.

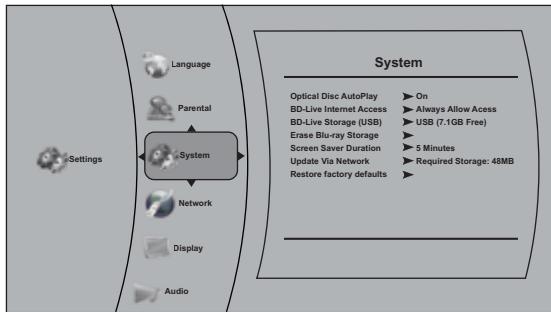


- 3 Press **▶** or **ENTER** to access the system options.
- 4 Press **▲** or **▼** to highlight **BD-Live Internet Access**, then press **ENTER**.
- 5 Press **▲** or **▼** to highlight the access level you want, then press **ENTER**. You can select:
  - **Limit Access**—Allows Internet access with valid "BD-Live" network access approval.
  - **Always Allow Access**—Always allows BD-Live Internet access.
  - **Prohibit Access**—Never allows BD-Live Internet access.
- 6 Press **◀** to go to the previous menu.

## Viewing available BD-Live storage space

### To view available BD-Live storage space:

- 1 Press **ENTER**. The *Settings* menu opens.
- 2 Press **▲** or **▼** to highlight **System**. The *System* menu opens. The available storage space is displayed next to **BD-Live Storage**.

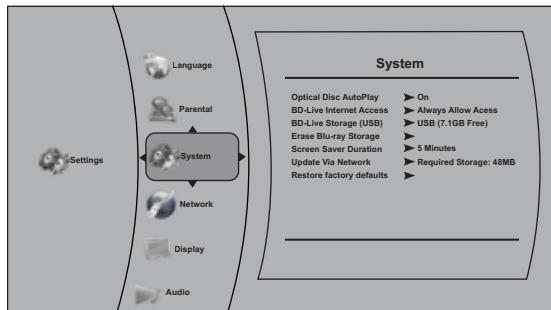


- 3 Press **◀** to go to the previous menu.

## Erasing BD-Live storage

### To erase BD-Live storage:

- 1 Press **ENTER**. The *Settings* menu opens.
- 2 Press **▲** or **▼** to highlight **System**. The *System* menu opens.



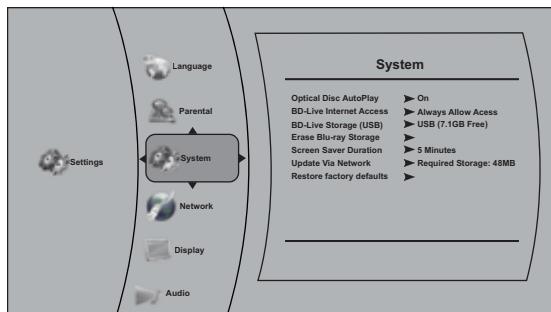
- 3 Press **▶** or **ENTER** to access the system options.
- 4 Press **▲** or **▼** to highlight **Erase Blu-ray Storage**, then press **ENTER**.
- 5 Press **◀** or **▶** to highlight **OK**, then press **ENTER**. All bookmarks and BD-Live content saved in memory are deleted.
- 6 Press **◀** to go to the previous menu.

## Setting the screen saver activation time

Your player has a screen saver feature that turns the screen black when your player is inactive. You can set the amount of time you want your player to wait before activating the screen saver.

### To set the screen saver activation time:

- 1 Press **ENTER**. The *Settings* menu opens.
- 2 Press **▲** or **▼** to highlight **System**. The *System* menu opens.

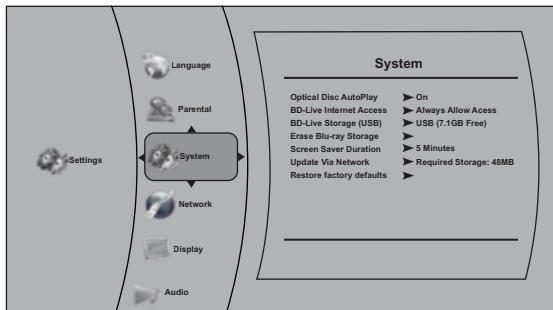


- 3 Press **▶** or **ENTER** to access the system options.
- 4 Press **▲** or **▼** to highlight **Screen Saver Duration**, then press **ENTER**.
- 5 Press **▲** or **▼** to highlight the amount of time you want the player to wait before activating the screen saver feature, then press **ENTER**.
- 6 Press **◀** to go to the previous menu.

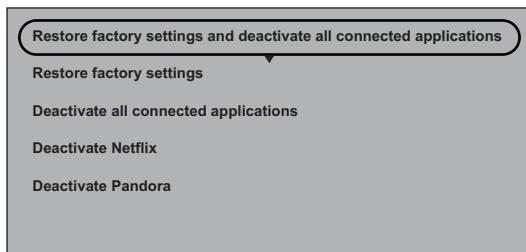
## Resetting settings to the factory defaults

### To reset settings to the factory defaults:

- 1 Press **ENTER**. The *Settings* menu opens.
- 2 Press **▲** or **▼** to highlight **System**. The *System* menu opens.



- 3 Press **▶** or **ENTER** to access the system options.
- 4 Press **▲** or **▼** to highlight **Restore factory defaults**, then press **ENTER**. The following menu opens.

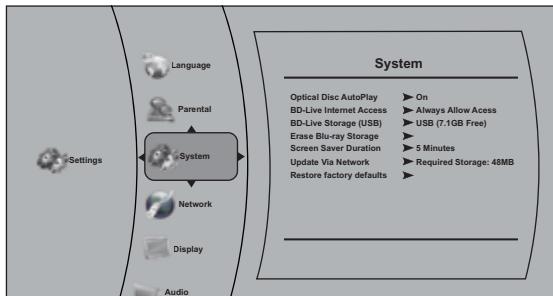


- 5 Press **▲** or **▼** to highlight an option, then press **ENTER**. A message appears asking you to confirm your selection.
- 6 Press **◀** or **▶** to highlight **OK**, then press **ENTER**.
- 7 Press **◀** to go to the previous menu.

## Downloading player update software

### To download player update software:

- 1 Press **ENTER**. The *Settings* menu opens.
- 2 Press **▲** or **▼** to highlight **System**. The *System* menu opens.



- 3 Press **▶** or **ENTER** to access the system options.
- 4 Press **▲** or **▼** to highlight **Update Via Network**, then press **ENTER**.

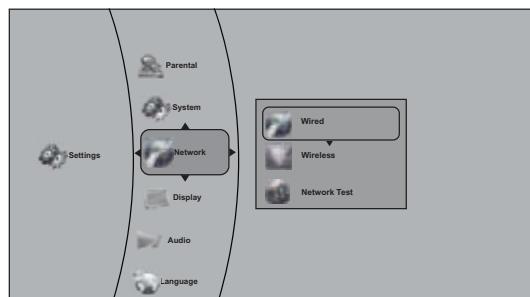
- 5 Follow the on-screen instructions for updating the software.
- 6 Press **◀** to go to the previous menu.

## Connecting to the Internet

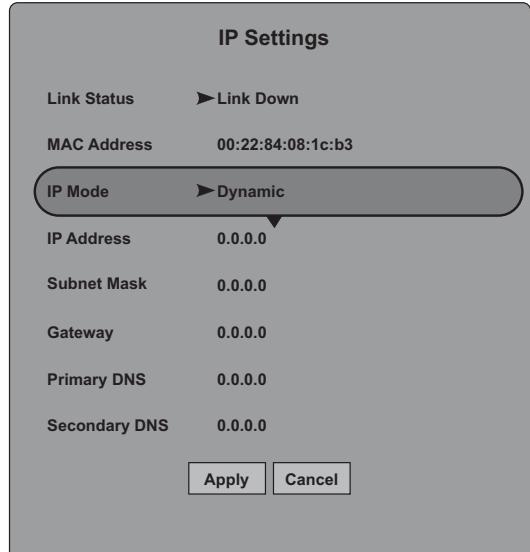
### Determining if the network connection is active

#### To determine if the network connection is active:

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



- 3 Press **▲** or **▼** to highlight **Wired**, then press **ENTER**. The *IP Settings* screen opens. If the network connection is active, **Link Up** appears next to **Link Status**. If the network connection is not active, **Link Down** appears next to **Link Status**.

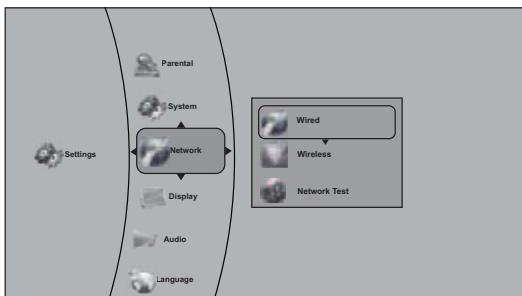


- 4 Press **◀** to go to the previous menu.

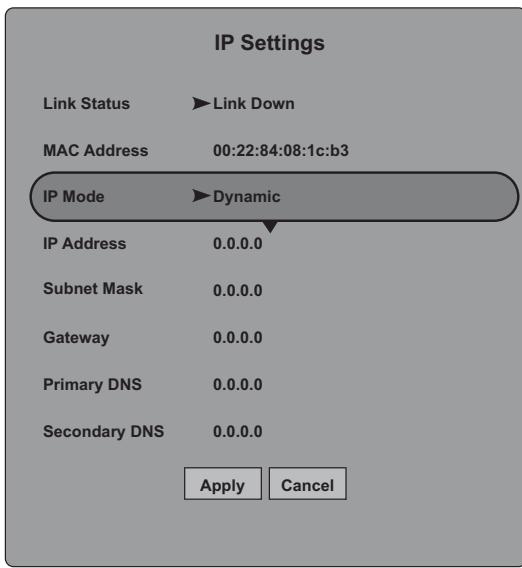
## Configuring a wired Internet connection

### To configure a wired Internet connection:

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



- 3 Press **▲** or **▼** to highlight **Wired**, then press **ENTER**. The *IP Settings* screen opens.

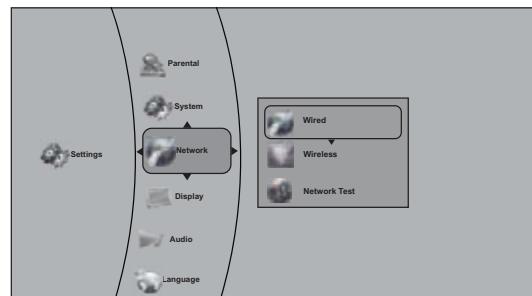


- 4 Press **▲** or **▼** to highlight **IP Mode**, then press **ENTER**.
- 5 Press **▲** or **▼** to highlight an IP mode, then press **ENTER**. You can select:
  - **Off**—Disables the network interface.
  - **Manual**—Lets you manually configure network settings, such as IP address, subnet mask, and gateway settings
  - **Dynamic**—Uses DHCP to automatically obtain an IP address.
- 6 Press **▲** or **▼** to highlight **Apply**, then press **ENTER**. To cancel manual setup, select **Cancel**, then press **ENTER**.
- 7 Press **◀** to go to the previous menu.

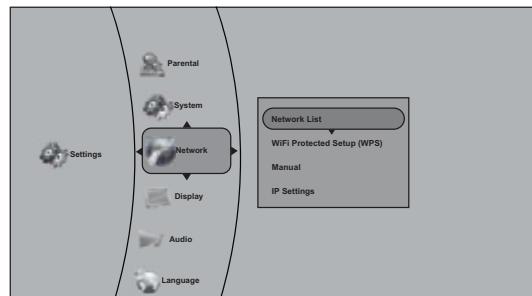
## Configuring a wireless Internet connection

### To configure a wireless Internet connection:

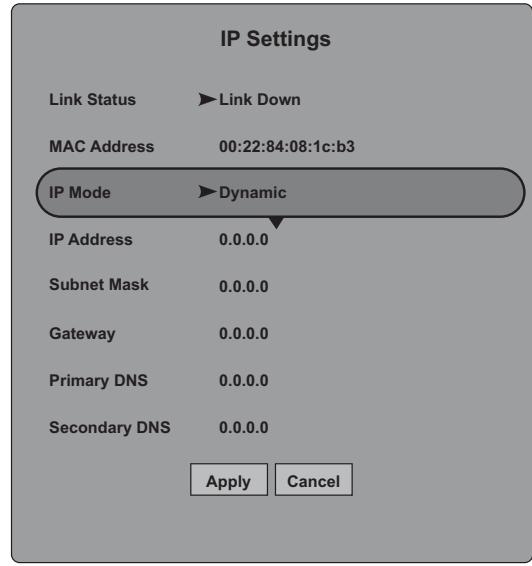
- 1 Press **ENTER**. The *Settings* menu opens.
- 2 Press **▲** or **▼** to highlight **Network**, then press **ENTER**. The *Network* menu opens.



- 3 Press **▲** or **▼** to highlight **Wireless**, then press **ENTER**. The list of wireless options opens.



- 4 Press **▲** or **▼** to highlight **IP Settings**, then press **ENTER**. The *IP Settings* screen opens.

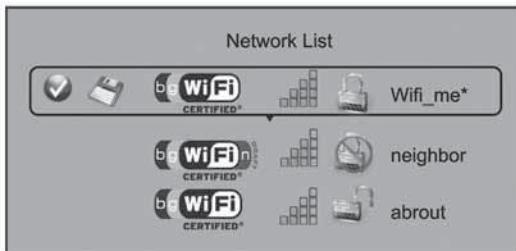


- 5 Press **▲** or **▼** to highlight **IP Mode**, then press **ENTER**.
- 6 Press **▲** or **▼** to highlight an IP mode, then press **ENTER**. You can select:
  - **Off**—Disables the network interface.
  - **Manual**—Lets you manually configure network settings, such as IP address, subnet mask, and gateway settings

- **Dynamic**—Uses DHCP to automatically obtain an IP address.
- 7 Press **▲** or **▼** to highlight **Apply**, then press **ENTER**. To cancel manual setup, select **Cancel**, then press **ENTER**.
- 8 Press **◀** to go to the previous menu.

## Understanding the wireless network list

When you select **Network List** in the wireless network setup, a menu appears with a list of the available wireless networks.



### Connected



When your TV/Blu-ray combo is turned on, it will connect to the wireless network displaying this symbol. Typically, this is the last wireless network connected before powering down.

\*

Indicates that the TV/Blu-ray combo is currently connected to this network.

### Saved



The wireless network properties (if any) have been saved in your TV/Blu-ray combo's memory.

### Wireless security



The wireless network data is not encrypted.



The wireless network data is encrypted. A "security key" must be entered so your TV/Blu-ray combo can share data over the network.



The wireless network data is encrypted. The encryption scheme is not supported by the TV/Blu-ray combo.

### Wireless protocol



The wireless network supports 802.11b.



The wireless network supports 802.11g.



The wireless network supports 802.11n (draft; not all 802.11n routers may be compatible with your TV/Blu-ray combo).

### Signal strength



Strong



Good



Medium



Weak

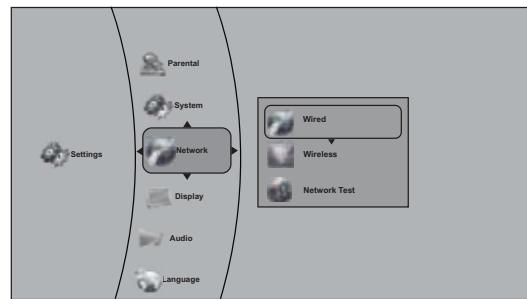


No signal

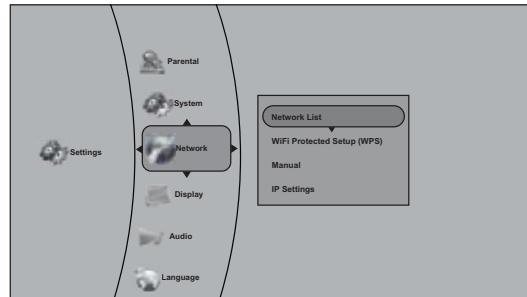
## Connecting to an unencrypted wireless network

### To connect to an unencrypted wireless network:

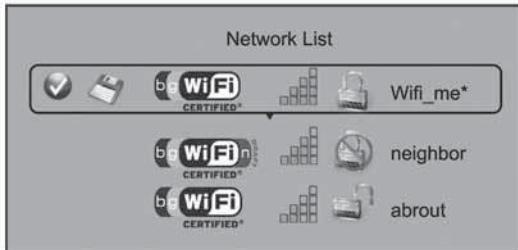
- 1 Press **ENTER**. The **Settings** menu opens.
- 2 Press **▲** or **▼** to highlight **Network**, then press **ENTER**. The **Network** menu opens.



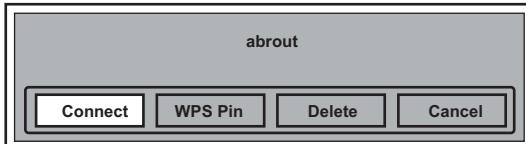
- 3 Press **▲** or **▼** to highlight **Wireless**, then press **ENTER**. The list of wireless options opens.



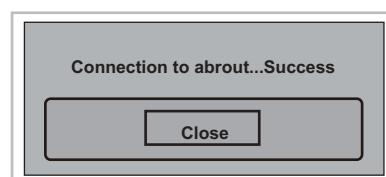
4 Press **▲** or **▼** to highlight **Network List**, then press **ENTER**. The following menu opens.



5 Press **▲** or **▼** to highlight the unencrypted wireless network you want to connect to, then press **ENTER**. The following menu opens.



6 Press **◀** or **▶** to highlight **Connect**, then press **ENTER**. If the wireless network is functioning, a connected icon and a message saying that you have connected to the network appear on the screen.



7 Press **ENTER** to close the message. If you do not see this message, your TV/Blu-ray combo was not able to connect to the network. Repeat the steps above.

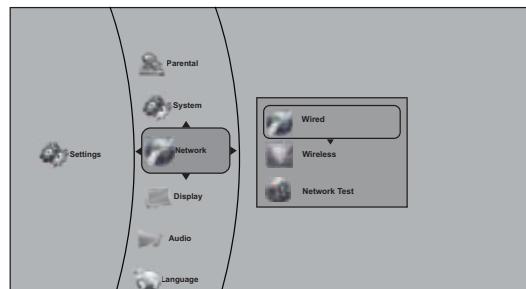
8 Press **◀** to go to the previous menu.

## Connecting to an encrypted wireless network

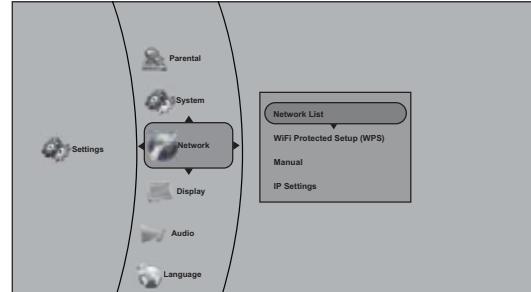
### To connect to an encrypted wireless network:

1 Press **ENTER**. The Settings menu opens.

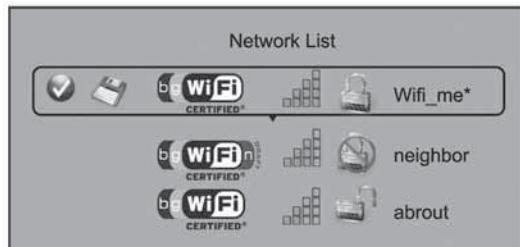
2 Press **▲** or **▼** to highlight **Network**, then press **ENTER**. The **Network** menu opens.



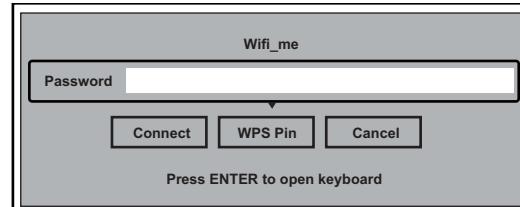
3 Press **▲** or **▼** to highlight **Wireless**, then press **ENTER**. The list of wireless options opens.



4 Press **▲** or **▼** to highlight **Network List**, then press **ENTER**. The following menu opens.



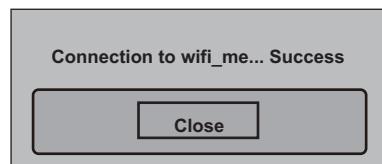
5 Press **▲** or **▼** to highlight the encrypted wireless network you want to connect to, then press **ENTER**. The following menu opens.



6 Press **ENTER** to open an on-screen keyboard.

7 Enter the password by pressing **▲** **▼** **◀** or **▶** to highlight a letter, number, or character, then pressing **ENTER**. Your selection appears in the Password box above the keyboard. (If you make a mistake, use the backspace key (**⌫**) to erase the mistake.) After the password has been entered, press the **OK** key on the keyboard to close the keyboard.

8 Press **▼** to select **Connect**, then press **ENTER**. If the wireless network is functioning, a connected icon and a message saying that you have connected to the network appear on the screen.



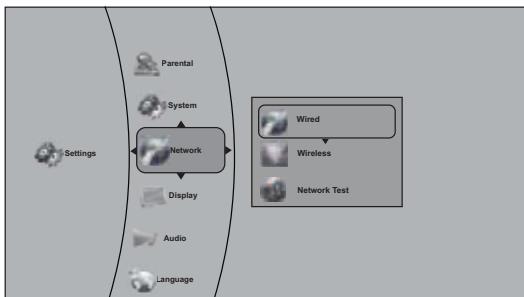
9 Press **ENTER** to close the message. Your TV/Blu-ray combo is now connected to the network. In the future, when you turn on your TV/Blu-ray combo, it will automatically connect to this network. You do not need to repeat these steps again.

10 Press **◀** to go to the previous menu.

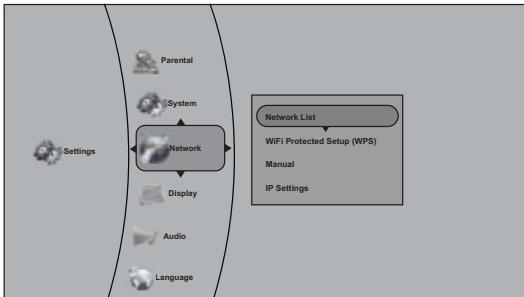
## Connecting to a wireless network using WPS (Wi-Fi Protected Setup)

### To connect to a wireless network using WPS:

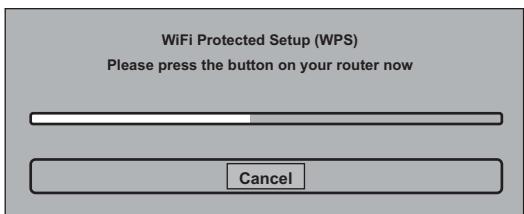
- 1 Press **ENTER**. The **Settings** menu opens.
- 2 Press **▲** or **▼** to highlight **Network**, then press **ENTER**. The **Network** menu opens.



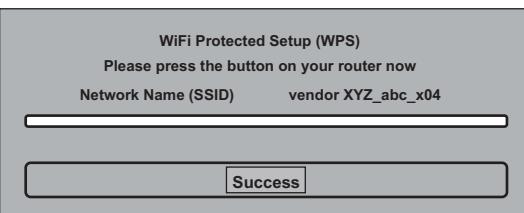
- 2 Press **▲** or **▼** to highlight **Wireless**, then press **ENTER**. The list of wireless options opens.



- 3 Press **▲** or **▼** to highlight **WiFi Protected Setup**, then press **ENTER**. The following menu opens.



- 4 Press the button on top of your router. The following screen should appear. When you see **Success** on the screen, your player is connected to the router.



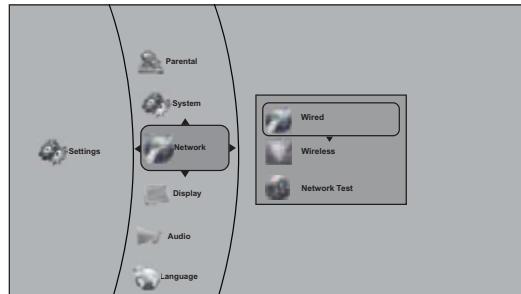
- 5 Press **ENTER** to close the message. If you do not see this message, your TV/Blu-ray combo could not connect to the network. Repeat the steps above.

6 Press **◀** to go to the previous menu.

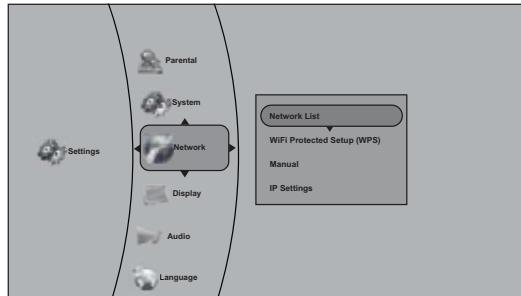
## Connecting to a wireless network using WPS pin

### To connect to a wireless network using WPS pin:

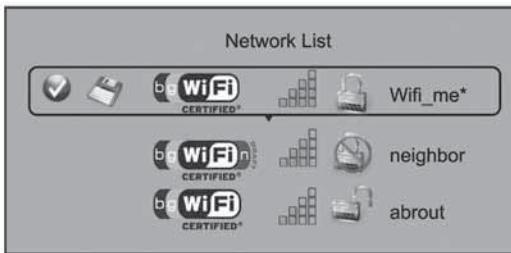
- 1 Press **ENTER**. The **Settings** menu opens.
- 2 Press **▲** or **▼** to highlight **Network**, then press **ENTER**. The **Network** menu opens.



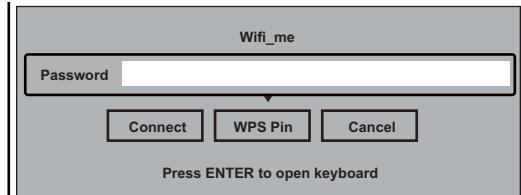
- 3 Press **▲** or **▼** to highlight **Wireless**, then press **ENTER**. The list of wireless options opens.



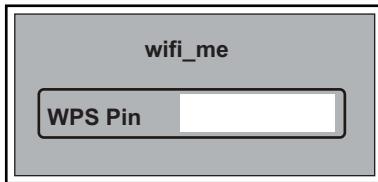
- 4 Press **▲** or **▼** to highlight **Network List**, then press **ENTER**. The following menu opens.



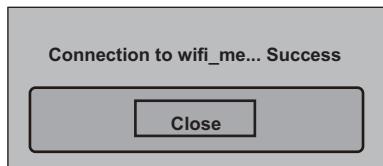
- 5 Press **▲** or **▼** to highlight the wireless network you want to connect to, then press **ENTER**. The following menu opens.



6 Press **◀** or **▶** to highlight **WPS Pin**, then press **ENTER**. The following screen opens.



7 Use the number buttons on the remote to enter the WPS pin (typically found on the back of the router), then press **ENTER**. If the wireless network is functioning, a connected icon and a message saying that you have connected to the network appear on the screen.



8 Press **ENTER** to close the message. Your TV/Blu-ray combo is now connected to the network. In the future, when you turn on your TV/Blu-ray combo, it will automatically connect to the network. You do not need to repeat these steps again.

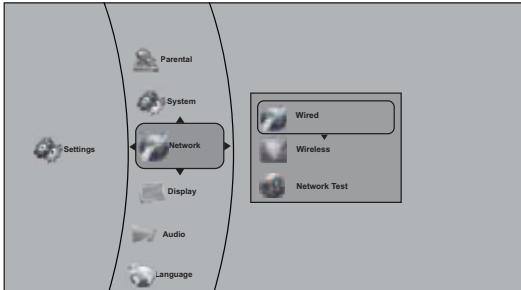
9 Press **◀** to go to the previous menu.

## Connecting to a non-broadcasting wireless network using DHCP

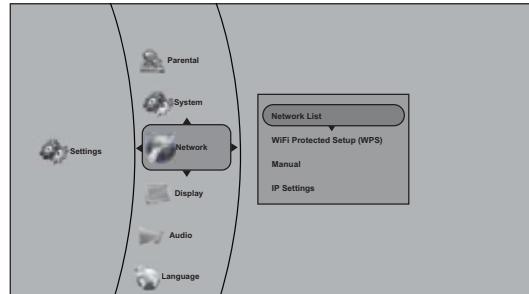
### To connect to a non-broadcasting wireless network using DHCP:

1 Press **ENTER**. The **Settings** menu opens.

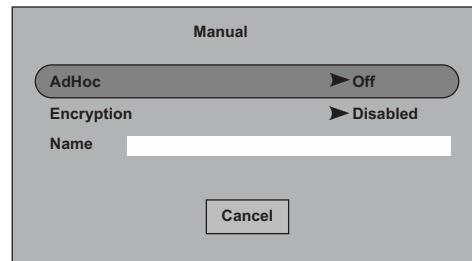
2 Press **▲** or **▼** to highlight **Network**, then press **ENTER**. The **Network** menu opens.



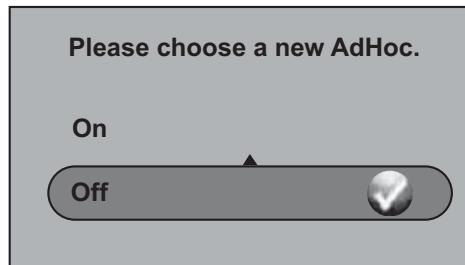
3 Press **▲** or **▼** to highlight **Wireless**, then press **ENTER**. The list of wireless options opens.



4 Press **▲** or **▼** to highlight **Manual**, then press **ENTER**. The **Manual** menu opens.



5 Press **▲** or **▼** to highlight **AdHoc**, then press **ENTER**. The following menu opens.

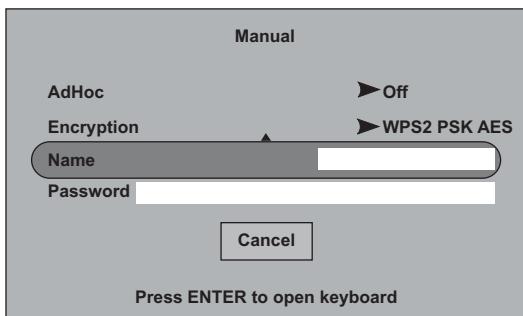
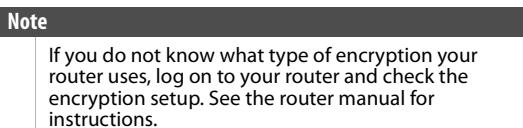


6 Press **▲** or **▼** to highlight **On** or **Off** based on the AdHoc property of the non-broadcasting network, then press **ENTER**. The **Manual** menu reopens.

7 If the network is encrypted, press **▲** or **▼** to highlight **Encryption**, then press **ENTER**. The following menu opens.



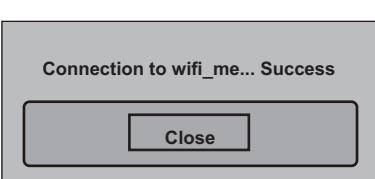
8 Press **▲** or **▼** to highlight the encryption type of the non-broadcasting network, then press **ENTER**. The **Manual** menu reopens.



9 Press **▲** or **▼** to highlight **Name** or **Password**, then press **ENTER** to open an on-screen keyboard.

10 Enter the password by pressing **▲** **▼** **◀** or **▶** to highlight a letter, number, or character, then pressing **ENTER**. Your selection appears in the **Name** or **Password** box above the keyboard. (If you make a mistake, use the backspace key (**⌫**) to erase the mistake. After the password has been entered, press the **ⓧ** key on the keyboard to close the keyboard.)

11 Press **▼** to select **Connect**, then press **ENTER**. If the wireless network is functioning, a connected icon appear a message saying that you have connected to the network appear on the screen.



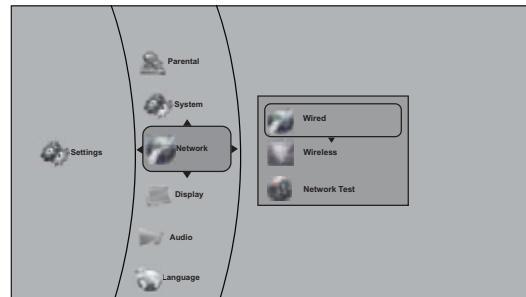
12 Press **ENTER** to close the message. Your TV/Blu-ray combo is now connected to the network. In the future, when you turn on your TV/Blu-ray combo, it will automatically connect to this network. You do not need to repeat these steps again.

13 Press **◀** to go to the previous menu.

## Testing the Internet connection

### To test the Internet connection:

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



- 3 Press **▲** or **▼** to highlight **Network Test**, then press **ENTER**. Your TV/Blu-ray combo starts testing the network.
- 4 When test was completed, press **ENTER** to close the test menu.
- 5 Press **◀** to go to the previous menu.

## Using BD-Live Features

Some Blu-ray Discs contain additional features that you can access, such as:

- Downloadable movie trailers,
- Additional "commentary" by actors and directors
- Multi-person game play and chat

To access these features, your TV/Blu-ray combo must be configured for BD-Live Internet access and be equipped with additional memory.

### Adding BD-Live memory

#### To add BD-Live memory:

- 1 Insert a 1 GB USB flash drive into a USB port on a computer and make sure that it is formatted FAT 32.
- 2 Insert the formatted flash drive into the USB port on your TV/Blu-ray combo.

### Setting up BD-Live Internet access

#### To set up BD-Live Internet access:

- 1 Follow the instructions in "Setting the BD-Live Internet access level" on page 53. Make sure that **Limit Access** or **Always Allow Access** is selected.
- 2 If the free space on the USB flash drive is less than 100 MB, clear BD storage. Follow the instructions in "Erasing BD-Live storage" on page 53.
- 3 Set up the Internet connection. Follow the instructions in "Connecting to the Internet" on page 54.
- 4 Test the network connection. Follow the steps in "Testing the Internet connection" on page 60.

## Using BD-Live

### To use BD-Live:

- 1 Select the BD-Live option from the *Special Features Menu* on the Blu-ray Disc, then press **ENTER**. Your TV/Blu-ray combo will display the BD-Live Menu in a few minutes.
- 2 Select the content to download on the previous submenu. The download could take up to 10 minutes, depending on the content size and network speed.

The downloaded content is stored under *My Downloads*. You can choose to either playback or delete the downloaded content.

#### Notes

- Your TV/Blu-ray combo only supports the connection of USB memory in order to fulfill the BD 2.0 1 GB memory requirement.
- Any externally connected drive will become the default storage for BD-Live content, and the internal storage will be ignored.
- You must have the BD-Live disc in your TV/Blu-ray combo to play any related (and already downloaded) content.
- Some BD-Live content could expire and will not play.
- You will occasionally need to manually delete the contents in storage in order to free space. See "Erasing BD-Live storage" on page 53.

## Using Netflix

### Watching movies with Netflix™

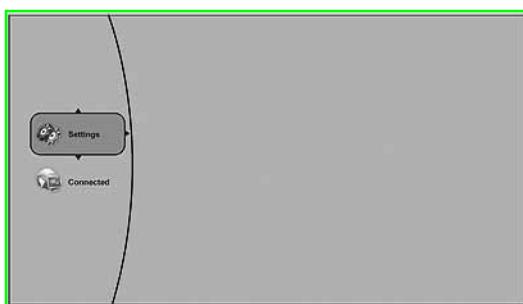
Before being able to view movies with Netflix, you must first:

- Have connected your TV/Blu-ray combo to the Internet and passed the Network Test.
- Have a valid Netflix account

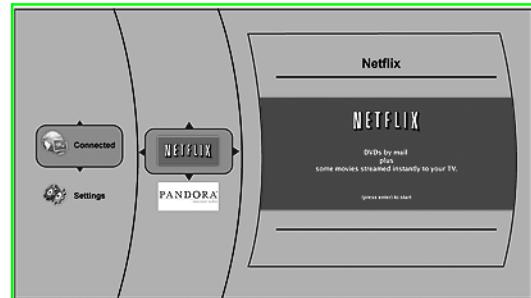
### Registering your TV/Blu-ray combo with Netflix

#### To register your TV/Blu-ray combo with Netflix:

- 1 Press **INPUT**, press **▲** or **▼** to highlight **BLU-RAY**, then press **ENTER**. The *Settings* menu opens.



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



- 3 Press **▲** or **▼** to highlight **NETFLIX**, then press **ENTER**. A message asks "Are you a member of Netflix?"
- 4 Press **▲** or **▼** to highlight **Yes**, then press **ENTER**.
- 5 Follow the on-screen instructions to activate your TV/Blu-ray combo, and link it to your Netflix account. Your TV/Blu-ray combo will be registered, and you can begin enjoying movies from Netflix.

## Using Pandora

### Listening to radio with Pandora™

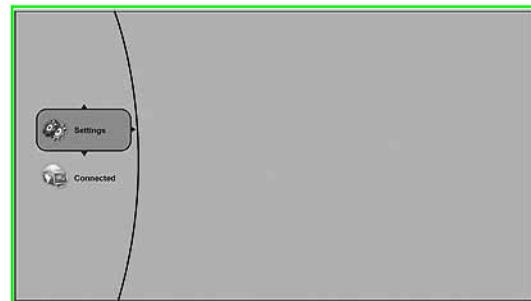
Before being able to listen to radio with Pandora, you must first:

- Have connected your TV/Blu-ray combo to the Internet and passed the Network Test
- Have a valid Pandora account

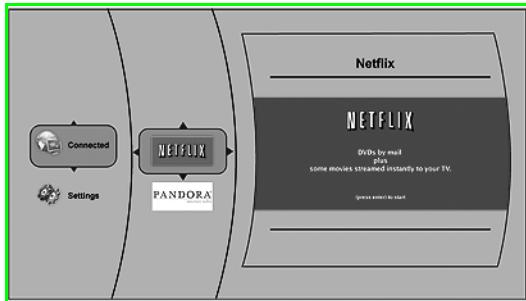
### Registering your TV/Blu-ray combo with Pandora

#### To register your TV/Blu-ray combo with Pandora:

- 1 Press **INPUT**, press **▲** or **▼** to highlight **BLU-RAY**, then press **ENTER**. The *Settings* menu opens.



2 Press **▲** or **▼** to highlight **Connected**, then press **ENTER**. The **Connected** screen opens.



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

4 Follow the on-screen instructions to activate your TV/Blu-ray combo, and link it to your Pandora account. Your TV/Blu-ray combo will be registered, and you can begin enjoying movies from Pandora.

## Maintaining

### General guidelines

- The top and back panels of your TV/Blu-ray combo may become hot after a long period of use. This is not a malfunction.
- When you are not using your TV/Blu-ray combo, make sure that you remove the disc and put your TV/Blu-ray combo into standby mode.
- If you do not use your TV/Blu-ray combo for a long period of time, it may not function correctly. Turn on and use your TV/Blu-ray combo occasionally.

- Do not locate your TV/Blu-ray combo:
  - Near heating devices or in an enclosed vehicle
  - In an area with a temperature over 95°F (35°C) or humidity over 80%
  - Dirty places
  - In an area with direct exposure to sunlight

### Condensation

Condensation may form inside your TV/Blu-ray combo when:

- You move your TV/Blu-ray combo from a cold area to a warm area
- You use your TV/Blu-ray combo in a cold room where you have just turned on a heater
- Air conditioning is blowing directly on your TV/Blu-ray combo
- Your TV/Blu-ray combo is in a damp place

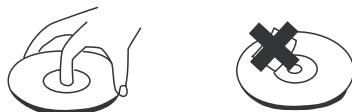
If condensation forms inside your TV/Blu-ray combo, it will not work correctly. Turn on your TV/Blu-ray combo, remove the disc, and do not use your TV/Blu-ray combo for two to three hours. To minimize condensation problems, keep the power cord connected to a power outlet.

### Storing discs

- Do not store discs in a place that is exposed to direct sunlight or heat.
- Do not store discs in a place that is exposed to moisture and dust, such as a bathroom or near a humidifier.
- Store discs vertically in their cases. Stacking discs or placing objects on discs when not in their cases may cause warping.

### Handling discs

- To keep a disc clean, do not touch the play side (non-label side) of the disc.
- Do not attach paper or tape to the disc.



### Cleaning discs

- Before playback, wipe the disc outwards from the center (not in a circle) with a clean cloth.



# Troubleshooting

## Frequently asked questions

Question	Answer
How do I play multi-channel surround sound?	Connect a sound system to the <b>DIGITAL OUTPUT OPTICAL</b> or <b>OUTPUT AUDIO L/R</b> jacks.
Can I play Blu-ray Discs or DVDs that I bought in another country?	You can play the discs if the video was recorded in standard NTSC format. You cannot play: <ul style="list-style-type: none"> <li>• Blu-ray Discs that do not have a region code of <b>A</b></li> <li>• DVDs that do not have a region code of <b>1</b> or <b>ALL</b></li> </ul>
What is the best type of video connection I should use?	<ul style="list-style-type: none"> <li>• Composite video provides a good picture.</li> <li>• Component video provides a better picture than composite video.</li> <li>• HDMI video provides the best picture, but it takes longer for an HDMI picture to appear when you first start playing a disc.</li> </ul>
What types of discs will my TV/Blu-ray combo play?	<p>Your TV/Blu-ray combo can play the following discs:</p> <ul style="list-style-type: none"> <li>• Blu-ray Disc-video</li> <li>• DVD-video</li> <li>• CD</li> <li>• DVD-R/RW (DVD video format and DVD video recording format)</li> <li>• DVD-R DL (DVD video format and DVD video recording format)</li> </ul> <p>Your TV/Blu-ray combo can also play CD-Rs and CD-RWs that have been recorded in one of the following standards:</p> <ul style="list-style-type: none"> <li>• CD-DA</li> <li>• MP3/WMA</li> </ul> <p>You must close the session when you record CDs.</p>

## Power problems

Problem	Solution
No power	<p>Make sure that the power cord is plugged in.</p> <p>If the power is off in your location, check fuses or the circuit breaker.</p> <p>Unplug the TV/Blu-ray combo, then plug it back in.</p>

## Blu-ray Disc problems

Problem	Solution
Remote control does not work	<ul style="list-style-type: none"> <li>• Make sure that you point the remote control at the remote control sensor on the front of your player. For more information, see "Aiming the remote control" on page 11.</li> <li>• Make sure that there is no obstruction between the remote control and the remote control sensor.</li> <li>• Make sure that bright light does not shine on the remote control sensor. Bright light can interfere with signal reception.</li> <li>• Make sure that colored glass is not in front of the remote control sensor. Colored glass can interfere with signal reception.</li> <li>• The batteries may be dead. Replace the batteries.</li> </ul>
TV/Blu-ray combo does not work	<ul style="list-style-type: none"> <li>• A built-in safety device may have been activated. Press <b>□</b> (power) on the side of your TV/Blu-ray combo to turn it off, then turn it on again. If your TV/Blu-ray combo still does not turn on, unplug the power cord, wait about one minute, plug it in again, then press <b>□</b> (power) on the side of your TV/Blu-ray combo.</li> <li>• Condensation may have formed inside your TV/Blu-ray combo. Turn off your TV/Blu-ray combo and wait about two to three hours for the condensation to evaporate.</li> </ul>
Playback will not start, or playback starts then stops	<ul style="list-style-type: none"> <li>• If you see <b>○</b>, the action you are trying is not allowed by your TV/Blu-ray combo or the disc.</li> <li>• Make sure that the disc is inserted with the label facing forward.</li> <li>• Make sure that the disc is not dirty. To clean the disc, see "Cleaning discs" on page 62.</li> <li>• The disc may be blank or not compatible with your TV/Blu-ray combo. For a list of compatible discs, see "Playable discs" on page 44.</li> </ul>
Startup is slow	<ul style="list-style-type: none"> <li>• Startup may be slow the first time you plug in the power cord or after a power failure.</li> </ul>
The disc is ejected automatically while playing	<ul style="list-style-type: none"> <li>• Make sure that the disc is not dirty. To clean the disc, see "Cleaning discs" on page 62.</li> <li>• The disc may be blank or not compatible with your TV/Blu-ray combo. For a list of compatible discs, see "Playable discs" on page 44.</li> <li>• Try resetting your player. Press <b>POWER</b>, wait five seconds, then press <b>POWER</b> again.</li> </ul>
Your TV/Blu-ray combo is on and displays the start logo and menu, but there is no image from the disc displayed	<ul style="list-style-type: none"> <li>• Make sure that the disc is not dirty. To clean the disc, see "Cleaning discs" on page 62.</li> <li>• Try resetting your player. Press <b>□</b> (power), wait five seconds, then press <b>□</b> (power) again.</li> </ul>

## TV problems

Problem	Solution
Ghosts in picture	Ghosts are caused by the television signal following two paths. One is the direct path and the other is reflected by tall buildings, hills or other large objects. Try changing the direction or position of the antenna to improve the reception.
Picture has spots, streaks, or it flutters	Black spots or horizontal streaks may appear or the picture may flutter or drift because of interference from automobile ignition systems, neon lamps, or AC-powered tools and appliances, such as drills or hair dryers. Turn off appliances, plug the power cord into another power outlet, preferably on a different circuit, or move your TV/Blu-ray combo to another location.
Picture has snow	If your TV/Blu-ray combo is located far from the TV station, such as in a fringe reception area where the signal is weak, small dots may appear in the picture. If the signal is extremely weak, the installation of a larger external antenna may be necessary.
Radio frequency interference (RFI)	RFI can be caused by two-way radios. This type of interference produces moving ripples or diagonal streaks in the picture. Some cases may cause a loss of contrast in the picture. Changing the direction and position of the antenna or installing an RFI filter may improve the picture.
Slight picture size variations	A slight picture size variation is normal when you adjust the contrast or brightness setting.
Poor or no sound	<ul style="list-style-type: none"> <li>The station or cable TV provider may be experiencing problems. Tune to another station.</li> <li>Check volume adjustments or muting.</li> <li>Check for sources of possible interference.</li> </ul>
Poor reception on some channels	<ul style="list-style-type: none"> <li>The station or cable TV provider may be experiencing problems. Tune to another station.</li> <li>Station signal is weak. Reorient the antenna to receive stronger reception.</li> <li>Check for sources of possible interference.</li> </ul>
Poor color or no color	<ul style="list-style-type: none"> <li>The station or cable TV provider may be experiencing problems. Tune to another station.</li> <li>Make sure that you have scanned for channels. See "Automatically scanning for channels" on page 28.</li> <li>Adjust the picture settings. See "Adjusting the TV picture" on page 25.</li> <li>Check antenna or cable TV connections or reorient the antenna.</li> <li>Check for sources of possible interference.</li> </ul>
Picture wobbles or drifts	<ul style="list-style-type: none"> <li>The station or cable TV provider may be experiencing problems. Tune to another station.</li> <li>Make sure that you have scanned for channels. See "Automatically scanning for channels" on page 28.</li> <li>The cable TV provider is scrambling the channel.</li> <li>Check the antenna orientation.</li> </ul>
No cable TV reception	<ul style="list-style-type: none"> <li>Check all cable TV connections.</li> <li>Set <b>Choose your TV source</b> to <b>Cable</b>. See "Automatically scanning for channels" on page 28.</li> <li>The station or cable TV provider may be experiencing problems. Tune to another station.</li> </ul>
Horizontal or diagonal bars on the screen	<ul style="list-style-type: none"> <li>Check antenna connections and try reorienting it.</li> <li>Check for sources of possible interference.</li> </ul>

Problem	Solution
No reception above channel 13	<ul style="list-style-type: none"> <li>Make sure that <b>Choose your TV source</b> is set correctly. See "Automatically scanning for channels" on page 28.</li> <li>If using an antenna, check UHF antenna connections.</li> </ul>
Closed captioning does not work	<ul style="list-style-type: none"> <li>The TV station is experiencing problems or the program tuned is not closed captioned. Try another channel.</li> <li>Check cable TV connection or VHF/UHF antenna, then reposition or rotate the antenna.</li> <li>Turn on closed captioning in the menu. See "Viewing closed captioning" on page 36.</li> </ul>
Wrong language is displayed	Select the correct language in the menu options. See "Selecting the on-screen menu language" on page 39.
Picture has a few bright or dark spots	A few bright or dark dots on an LCD screen is normal. It does not affect the operation of this TV.

## BD-Live and USB connections

Problem	Solution
Cannot connect to the Internet	<ul style="list-style-type: none"> <li>Make sure that the Internet connection is set up correctly. For more information, see "Configuring a wired Internet connection" on page 55.</li> <li>Test the Internet connection to make sure that it is working. For more information, see "Testing the Internet connection" on page 60.</li> <li>Make sure that the <b>BD-Live Internet Access</b> option is not set to <b>Prohibit Access</b>. For more information, see "Setting the BD-Live Internet access level" on page 53.</li> <li>Make sure that the disc you are playing is a legal copy.</li> </ul>
After connecting to the Internet, cannot download a file	<ul style="list-style-type: none"> <li>BD storage may be full. Try clearing storage. For more information, see "Erasing BD-Live storage" on page 53.</li> <li>Make sure that the Internet connection is still working. Try testing the connection. For more information, see "Testing the Internet connection" on page 60.</li> <li>If you are using a USB drive, try a different drive.</li> </ul>
File downloaded successfully, but playback pauses	<ul style="list-style-type: none"> <li>Make sure that the USB drive is a 2.0 USB device. If the drive is a 1.1 USB device, pausing can occur.</li> </ul>
When playing a file on a USB drive, playback pauses.	<ul style="list-style-type: none"> <li>Try another USB drive.</li> </ul>

## Other

Problem	Solution
Audio and video pause momentarily.	<ul style="list-style-type: none"> <li>This occurs normally between playlist chapters or scenes.</li> <li>Video and audio momentarily pause when your TV/Blu-ray combo switches between layers on a dual-layer disc.</li> </ul>
Blu-ray Disc or DVD does not play	<ul style="list-style-type: none"> <li>You can play the discs if the video was recorded in standard NTSC format. You cannot play:           <ul style="list-style-type: none"> <li>Blu-ray Discs that do not have a region code of A.</li> <li>DVDs that do not have a region code of 1 or ALL</li> </ul>           Make sure that the disc is not dirty or defective. For more information, see "Cleaning discs" on page 62.         </li> <li>Parental controls are blocking the disc because of the rating. Change the parental controls to allow the rating to play. For more information, see "Setting the parental control level" on page 52.</li> </ul>
PIP does not work with a Blu-ray Disc	<ul style="list-style-type: none"> <li>Make sure that the Blu-ray disc allows PIP. See the documentation that came with the disc.</li> </ul>
Subtitles do not display	<ul style="list-style-type: none"> <li>Subtitles are not recorded on the disc.</li> <li>Turn the subtitles on. For more information, see "Selecting the subtitle language" on page 45.</li> </ul>
Cannot change the viewing angle	<ul style="list-style-type: none"> <li>Not all discs are recorded with multiple viewing angles.</li> <li>Not all scenes on a disc are recorded with multiple viewing angles.</li> </ul>
Resume feature does not work	<ul style="list-style-type: none"> <li>Resume information is lost when you press ■ (stop) several times or when you eject the disc.</li> <li>Some discs do not support the resume feature.</li> </ul>

## Specifications

Specifications are subject to change without notice.  
Dimensions and weight are approximate.

<b>LCD</b>	<b>Panel:</b> 32" wide TFT LCD <b>Resolution:</b> 1920 × 1080 <b>Viewing angle:</b> (H/V) 176°/176° <b>Contrast ratio:</b> 4000:1 (typical) <b>Brightness:</b> (cd/m <sup>2</sup> ) 450
<b>Dimensions</b>	<b>With stand:</b> 30.98 × 21.16 × 8.46 in. (787 × 537.4 × 215 mm) <b>Without stand:</b> 30.98 × 19.43 × 3.44 in. (787 × 493.4 × 87.5 mm)
<b>Weight</b>	29.54 lbs. (13.4 kg)
<b>TV</b>	<b>TV standard:</b> ATSC/NTSC <b>Tuning system:</b> Electronic tuning <b>Frequency range:</b> VHF/UHF <b>Stereo:</b> BTSC <b>CATV:</b> 135 channels
<b>Power</b>	<b>Input:</b> 120V AC ~ 60 Hz <b>Consumption (max.):</b> 170W
<b>Sound</b>	Output 10W × 2
<b>Terminals</b>	<b>AV INPUT:</b> Video, S-Video, audio L/R <b>COMPONENT1 INPUT:</b> Y, Pb, Pr, audio L/R <b>COMPONENT2 INPUT:</b> Y, Pb, Pr, audio L/R <b>HDMI1:</b> HDMI IN <b>HDMI2:</b> HDMI IN <b>HDMI3:</b> HDMI IN <b>VGA:</b> VGA input, audio (mini-jack) <b>AUDIO OUTPUT:</b> L/R audio, digital optical audio <b>VIDEO OUTPUT:</b> BD video output (NTSC) <b>HEADPHONE:</b> Mini-jack <b>Antenna IN:</b> F type
<b>Blu-ray Disc player</b>	<b>Signal system:</b> NTSC <b>Playable discs:</b> 12 cm
<b>Operating conditions</b>	<b>Temperature:</b> 41°F ~ 95°F (5°C~35°C) <b>Humidity:</b> 20% ~ 80% RH <b>Atmospheric pressure:</b> 86 KPa ~ 106 KPa

# Remote control codes

## Audio amplifiers

Audio amplifiers	
Adcom	30577, 31100
Anthem	32220
Bose	30674
Carver	30892
Durabrand	31561
Elan	30647
GE	30078
Harman/Kardon	30892
JVC	30331
Left Coast	30892
Lenox	31561
Marantz	30892
McIntosh	30251
Modulaire	30395
NEC	30264
Optimus	30395, 30823
Philips	30892
Pioneer	30823
Polk Audio	30892
RadioShack	30395
RCA	30823
Realistic	30395
Shure	30264
Sony	30689, 30815
Soundesign	30078
Victor	30331
Wards	30078
Yamaha	30354, 30133

## Audio accessories

Audio accessories	
Accurian	31106
Altec Lansing	30607, 31056
Apple	31115
Creative	30872
DLO	31155
GPX	32113
Griffin	31891
iDeck	31106
iHome	32152
iLive	32113
lmerge	31491
iPort	31917
Klipsch	31339
Marantz	31491
Memorex	32119
Monitor Audio	31106
Motorola	31464
Omnifi	31605
Roku	31828
Sonance	31917
Yamaha	31809, 31810, 32021

## Audio receivers

Audio receivers	
ADC	30531
Adcom	30616
Aiwa	31405, 30189, 30121, 31089, 31388, 31641
Akai	30244, 31512
Alco	31390
AMC	31077
Amphion Media Works	31563
AMW	31563
Anam	31609, 31074
Anthem	31185
Apex Digital	31257, 31430, 31774
Arcam	31189
Audiotronic	31189
Audiovox	31390
B & K	30702, 30820, 30840
BK	30702
Bose	31229, 30639, 31253, 31629, 31841, 31933
Cairn	30189
Cambridge Soundworks	31370
Capetronic	30531
Carver	31189, 30189, 30121, 31089, 31289
Coby	31389
Curtis Mathes	30014
Daewoo	31250
Denon	31360, 30121, 31104, 31142, 31306, 32857
Emerson	30531
Fisher	31801
Garrard	30463
Grundig	30189
Harman/Kardon	30110, 30189, 30891, 31289, 31304, 31306, 32241
Hitachi	31273, 31801
iLive	32013
Inkel	30491
Insignia	31030, 31077, 31893, 32169, 32175
Integra	30135, 30842, 31298, 31320, 31805
iSymphony	32258
JBL	30110, 31306
JVC	31058, 30074, 31374, 31495, 31871, 32239
Kawasaki	31390
Kenwood	31313, 31570, 30077, 30186, 31027
KLH	31390, 31412, 31428
Koss	31366, 31497
Lexicon	31076
LG	31293, 32197
Linn	30189
Liquid Video	31497
Magnavox	31189, 31269, 30189, 30391, 30531, 31089, 31266, 31514
Marantz	31189, 31269, 30189, 30891, 31089, 31289
McIntosh	31289
Micromega	31189, 30189
Mitsubishi	31393
Musicmagic	31089
Myryad	31189
Nakamichi	31313, 30097, 31555
Norcent	31389

**Audio receivers**

Nova	31389
Onkyo	30135, 30842, 31298, 31320, 31531, 31805, 31905
Optimus	31023, 30074, 30014, 30121, 30186, 30531, 31074
Oritron	31366, 31497
Outlaw	30391
Panasonic	31308, 31518, 30367, 31275, 31288, 31316, 31548, 31633, 31763, 31764
Philips	31189, 31269, 30189, 30391, 30891, 31089, 31266
Pioneer	31023, 30014, 30150, 30244, 30531, 30630, 31123, 31384, 31935
Polaroid	31508
Polk Audio	30189, 31289
Proscan	31254
RadioShack	31609
RCA	31023, 31609, 31254, 30531, 31074, 31123, 31390, 31511
Realistic	31609, 30121, 30186
Revox	30189
Rio	31869
Samsung	31295, 31304, 31500
Sangean	32165
Sansui	31189, 30189, 31089
Sanyo	31251, 31469, 31801
Sharp	30186, 31286
Sharper Image	31556
Sherwood	30491, 31077, 31653, 31905, 32169
Sherwood	Newcastle 32169
Sonic Blue	31869
Sonic Frontiers	31185
Sony	31058, 31441, 31258, 31759, 31622, 30474, 31158, 31406, 31558, 31658, 31758, 31822, 31858
Stereophonics	31023
Sunfire	31313
Teac	30463, 31074, 31390, 31528
Technics	31308, 31518, 31633
Thorens	31189
Toshiba	30135, 30842, 31123, 31788
Venturer	31390
Victor	30074
Wards	30189, 30014
XM	31406
Yamaha	31023, 30176, 30186, 30376, 31176, 31276, 31331, 31375, 31376, 31476, 31815, 32061
Zenith	30857, 31293

**Cable converters**

Archer	00237
BCC	00276
Bell South	00899
British Telecom	00003
Century	00008
Cisco	01877, 00877, 01982
Clearmaster	00883
ClearMax	00883
Cool Box	00883
Coolmax	00883
Digeo	01187, 02187
Director	00476
Fosgate	00276
GE	00144
General Instrument	00476, 00810, 00276, 00003
Gibralter	00003
GMI	00883
GoldStar	00144
Hamlin	00009, 00273
Hitachi	00003, 00008, 00009
i3 Micro	01602
Insight	00476, 00810
Jerrold	00476, 00810, 00276, 00003
Memorex	00000
Mitsubishi	00003
Motorola	01376, 00476, 00810, 00276, 01187, 01106, 01982
Multitech	00883
Myrio	01602, 01822
Nova Vision	00008
Novaplex	00008
Pace	01877, 00877, 00237, 00008, 01982
Panasonic	00000, 00008, 00144, 00107, 01982
Paragon	00000, 00008, 00525
Penney	00000
Philips	01305, 00317
Pioneer	01877, 00877, 00144, 00533
Pulsar	00000
Quasar	00000
RadioShack	00883
RCA	01256
Regal	00276, 00279, 00273
Runco	00000
Samsung	00003, 00144, 01982
Scientific Atlanta	01877, 00877, 00477, 00237, 00003, 00000, 00008, 01982
Sejin	01602
Sony	01006
Sprucer	00144
Starcom	00003
Supercable	00276
Supermax	00883
Thomson	01256

**Cable converters**

Cable converters	
A-Mark	00008, 00144
ABC	00237, 00003, 00008
Accuphase	00003
Acorn	00237
Action	00237
Active	00237
ADB	02586
Americast	00899
Amino	01602, 01822

**Cable/PVR combos**

Cable/PVR combos	
Americast	00899
Amino	01822

**Cable/PVR combos**

Cisco	01877, 01982
Digeo	01187, 02187
General Instrument	00810
Jerrold	00810
Motorola	01376, 00810, 01187, 01106, 01982
Myrio	01822
Pace	01877, 00237, 01982
Pioneer	01877
RCA	01256
Scientific Atlanta	01877, 01982
Sony	01006
Supercable	00276
Thomson	01256
Zenith	00899

**CD players**
**CD players**

Acoustic Research	30420
Aiwa	30157
Arcam	30157
Audio Research	30157
Burmester	30420
Cairn	30157
California Audio Labs	30029
Cambridge Soundworks	30157
Carver	30157
Curtis Mathes	30032
Denon	30034
DKK	30000
DMX Electronics	30157
Fisher	30000
Garrard	30393,30420
Genexxa	30032
Grundig	30157
Hafler	30173
Harman/Kardon	30100,30157,30173
Hitachi	30032
Inkel	30157,30180
Integra	30101
JVC	30032,30072
Kenwood	30626,30000,30029,30028,30190
KLH	31318,31711
Krell	30157
Linn	30157
Magnavox	30157,30038,30274
Marantz	30626,30029,30157,30038,30180,30435
Matsui	30157
McIntosh	30256,30290,30660
MCS	30029
Memorex	30000, 30032,30420
Micromega	30157
Miro	30000
Mission	30157
Modulaire	30000,30032,30087,30180,30420
MTC	30420
Myryad	30157
NSM	30157
Onkyo	31327,30101

**CD players**

Optimus	30000,30032,30087,30393,30420
Panasonic	30029,30388,30752
Parasound	30420
Penney	30029
Philips	30626,30157,30274
Pioneer	31062,30032,31087
Polk Audio	30157
Proceed	30420
Proton	30157
QED	30157
Quad	30157
Quasar	30029
RadioShack	30000,30032,30180,30420
RCA	31062, 30032,30053,30420
Realistic	30000,30032,30087,30180,30420
Revox	30157
Roksan	30435
Rotel	30157,30420
SAE	30157
Sansui	30000,30157
Sanyo	30000,30087
Sharp	30180
Sherwood	30180
Sonic Frontiers	30157
Sony	30490,30000,30100,31364,30185
Sugden	30157
Sylvania	30157
Symphonic	30180
TAG McLaren	30157
Tandy	30032
Tascam	30393,30420
Teac	30490,30180,30393,30420
Technics	30029
Thule Audio	30157
Victor	30072
Wards	30032,30157,30053,30087
Yamaha	30490,30036,31292
Yorx	30000

**DVD players**
**DVD players**

3D LAB	20503, 20539
Accurian	20675, 21072, 21416
Advent	21016
Afreey	20698
Aiwa	20641
Akai	20695, 20705, 20770, 20899, 21089
Alba	20672, 20717
Alco	20790
Allegro	20869
Amphion Media Works	20872
AMW	20872
Apex Digital	20533, 20672, 20717, 20755, 20794, 20796, 20797, 20830, 21004, 21020, 21056, 21061, 21100
Argo	21023
Aspire Digital	21168, 21407
Astar	21489

**DVD players**

Audiovox	20717, 20790, 21041, 21071, 21072, 21121, 21122
Axion	21071, 21072
B & K	20655, 20662
BBK	21224
Bel Canto Design	21571
Blaupunkt	20717
Blue Parade	20571
Blue Sky	20695
Bose	21895, 22023
Brandt	20651
Broksonic	20695, 20868
California Audio Labs	20490
Celestial	21020
Centrex	20672, 21004
Cinea	20831
CineVision	20876, 20833, 20869
Citizen	21003, 20695, 21277
Clairtone	20571
Coby	20778, 21077, 21086, 21107, 21177
Craig	20831
Creative	20503, 20539
Curtis Mathes	21087
CyberHome	20816, 20874, 21023, 21024, 21117, 21129, 21502, 21537
Cytron	20705
Daewoo	20784, 20705, 20770, 20833, 20869, 21169, 21172, 21234, 21242
Dansai	20770
Daytek	20872
Decca	20770
Denon	20490, 20634, 22258
Denver	20778
Desay	21407
DigitalMax	21738
Digitrex	20672
Disney	20675, 21270
DiViDo	20705
Dual	20675, 21068, 21085
Durabrand	21127
DVD2000	20521
Electrohome	21003
Emerson	20591, 20675, 20821, 21268
Enterprise	20591
Entivo	20503, 20539
Enzer	20770
ESA	20821, 21268
Firstline	20651
Fisher	20670
Funai	20675, 21268, 21334
Gateway	21073, 21077, 21158
GE	20522, 20815, 20717
Go Video	20573, 20744, 20717, 20715, 20741, 20783, 20833, 20869, 21044, 21075, 21099, 21158, 21304, 21730
Go Vision	21071, 21072
GoldStar	20741, 20869
Goodmans	20790
Gradiente	20490, 20651

**DVD players**

Greenhill	20717
Grundig	20539, 20705
Harman/Kardon	20582, 20702
Hello Kitty	20831
Hitachi	20573, 20664, 21247
Hiteker	20672
Humax	21500, 21588
iLo	21348
Initial	20717
Insignia	21268
Integra	20571, 20627, 21769
IRT	20783
JBL	20702
Jensen	21016
JMB	20695
JVC	20558, 20623, 20867, 21164, 21275, 21550
Kawasaki	20790
Kenwood	20490, 20534
KLH	20717, 20790, 21020, 21149
Kloss	20533
Koss	20651, 21061
Lasonic	20627, 20798
Lecson	21533
Lenoxx 21127	
LG	20591, 20741, 20869
LiteOn	21058, 21158, 21416, 21440, 21656, 21738
Loewe	20511, 20741
Logix	20783
Magnasonic	20651, 20675
Magnavox	20503, 20539, 20646, 20675, 20821, 21268, 21354, 21506
Marantz	20503, 20539, 20675
McIntosh	21533, 21273
Medion	20651
Memorex	20695, 20831, 21270
Microsoft	20522, 22083
Minato	20752
Mintek	20839, 20717
Mitsubishi	21521, 20521
NAD	20741
Naiko	20770
NEC	20785, 20869
Nesa	20717
NexxTech	21402
Norcent	21003, 20872, 21107, 21265
Onkyo	20503, 20627, 21769
Oppo	20575, 21224
Optimus	20571
Oritron	20651
Palsonic	20672
Panasonic	20503, 20490, 20571, 20632, 20703, 21362, 21462, 21490, 21641, 21762
Philco	20675
Philips	20503, 20539, 20646, 20675, 20854, 21260, 21267, 21340, 21354, 22056, 22084
PianoDisc	21024
Pioneer	20525, 20571, 20142, 20631, 20632, 21460, 21512, 21571
Polaroid	21020, 21061, 21086

**DVD players**

Polk Audio	20539
Portland	20770
Presidian	20675, 21072, 21738
Prima	21016
Proceed	20672
Proscan	20522
ProVision	20778
Qwestar	20651
Radionette	20741
RadioShack	20571
RCA	20522, 20571, 20717, 20790, 20822, 21022, 21132, 21769
Realistic	20571
Reoc	20752
Rio	20869
Rotel	20623, 21178
Rowa	20823, 21004
Saba	20651
Sampo	20698, 20752
Samsung	20490, 20573, 20744, 20199, 20820, 20899, 21044, 21075
Sansui	20695
Sanyo	20670, 20675, 20695, 20873, 21334
Schneider	20783
Schwaiger	20752
Sensory Science	21158
Sharp	20630, 20675, 20752, 21256, 22250
Sharper Image	21117
Sherwood	20770, 21043, 21077
Sherwood Newcastle	21077
Shinsonic	20533, 20839
Slim Art	20784
Sonic Blue	20573, 20715, 20783, 20869, 21099
Sony	20533, 21533, 20864, 21033, 21070, 21431, 21516
Sova	21122
Superscan	20821
SVA	20717
Sylvania	20675, 20821, 21268
Symphonic	20675, 20821, 21268, 21334
Tatung	20770
Teac	20571, 20717, 20790
Technics	20490, 20703
Technika	20770
Terapin	21031
Tevion	20651
Theta Digital	20571
Thomson	20522, 20511
Tivo	21503, 21512, 21588
Toshiba	20503, 20573, 20539, 20695, 21045, 21154, 21503, 21510, 21588, 21769
Unimax	20770
Universum	20591
Urban Concepts	20503, 20539
US Logic	20839
V	21064, 21226
Venturer	20790
Vizio	21064, 21226
Xbox	20522, 22083

**DVD players**

Yamaha	20490, 20539, 20545
Yamakawa	20872
Zenith	20503, 20591, 20741, 20869
Zeus	20784
Zoece	21265

**DVD players (Blu Ray and HD-DVD)**

DVD players (Blu Ray and HD-DVD)	
Denon	22258
Integra	21769
LG	20741
Microsoft	22083
Onkyo	21769
Panasonic	21641
Philips	22084
Pioneer	20142
RCA	21769
Samsung	20199
Sharp	22250
Sony	21516
Toshiba	21769
Xbox	22083

**DVD/PVR combos controlled by the DVD**

DVD/PVR combos controlled by the DVD	
Go Video	21730
Humax	21500, 21588
LG	20741
Panasonic	20490
Philips	21340
Pioneer	20631, 21512
RCA	20522
Sharp	21256
Sony	21033, 21070
Sylvania	20675
Tivo	21512
Toshiba	21503, 21510, 21588

## Home automation

Home automation	
Accutek	31215
Amana	31716
Bionaire	30846, 31215, 31861
Da-Lite	31794
Draper	32190
Frigidaire	31333
GE	30240
GoldStar	31537
Holmes	31215
Kenmore	31537
Lasko	30846, 31890
LG	31537
Lightolier	30184
Lutron	30597, 30318, 31239, 31597
Marmitek	30167
One For All	30167
PCS	30184
RadioShack	30240
Screen Research	32097
Security System	30167
Sharper Image	30846
SmartLinc	30184
Universal	30167
Universal X10	30167
Whirlpool	31332
Windmere	31215
X10	30167

## DVR/PVR Systems for satellite receivers

DVR/PVR systems for satellite receivers	
AlphaStar	00772
Bell ExpressVu	00775, 01170
Chaparral	00216
Coolsat	01806
Crossdigital	01109
DirecTV	01377, 00392, 00566, 00639, 01639, 01142, 00247, 00749, 01749, 00819, 01856, 01076, 01108, 00099, 01109, 01392, 01414, 01442, 01443, 01444, 01609, 01640
Dish Network System	01505, 00775, 01170, 01775
Dishpro	01505, 00775, 01775
Echostar	01505, 00775, 01170, 01775
Expressvu	00775, 01775
Fortec Star	01821
Funai	01377
GE	00392, 00566
General Instrument	00869
GOL	00775, 01775
Hitachi	00749, 00819
Houston	00775
HTS	00775, 01775
Hughes Network Systems	01142, 00749, 01749, 01442, 01443, 01444
Humax	01790
Innova	00099
Jerrold	00869
JVC	00775, 01170, 01775
LG	01226, 01414

## DVR/PVR systems for satellite receivers

Magnavox	00722
McIntosh	00869
Mitsubishi	00749
Motorola	00869
Netsat	00099
Next Level	00869
Panasonic	00247, 00701
Pansat	01807
Philips	01142, 00749, 01749, 00775, 00819, 01076, 00722, 00099, 01442
Primestar	00869
Proscan	00392, 00566
RadioShack	00566, 00775, 00869
RCA	00392, 00566, 01142, 00775, 00855, 00143, 01392, 01442
Samsung	01377, 01142, 01276, 01108, 01109, 01442, 01609
SKY	00099
Sony	00639, 01639, 01640
Star Choice	00869
Star Trak	00772, 00869
Thomson	00392, 00566
Tivo	01142, 01442, 01443, 01444
Toshiba	00749, 01749, 00790, 01285
UltimateTV	01392, 01640
Ultrasat	01806
Uniden	00722
Voom	00869
Zenith	01856

## TVs

TVs	
A-Mark	10047, 10054
Accurian	11803
Accuscan	10047
Action	10030, 10873
Admiral	10047, 10054, 10017, 10051, 10093, 10463, 10180
Advent	10761, 10783, 10815, 10817, 10842
Adventuri	10000
Aqna	10150
Aiko	10092
Akai	10060, 10812, 10702, 10030, 10145, 10056, 10672, 11675, 11676, 11935
Albatron	10700, 10843
Alfide	10672
Alleron	10030
Ambassador	10150, 10177
America Action	10180
American High	10000, 10060
Ampro	10751
Amstrad	10171, 10177
Amtron	10000, 10180
Anam	10180
AOC	10180, 10030, 11365
Aomni	11623
Apex Digital	10156, 10748, 10879, 10765, 10767, 10890, 11217
Astar	11531, 11738

**TVs**

Audinac	10180
Audiovox	10451, 10180, 10092, 10623, 10802, 10846, 10875, 11937, 11951, 11952
Aventura	10171
Axion	11937
Baysonic	10180
Beaumark	10017, 10178, 10030
Belcor	10030
Bell & Howell	10054, 10154, 10093
BenQ	11032, 11212, 11315
Boxlight	10893
Bradford	10180
Brockwood	10178, 10030, 10056
Broksonic	10236, 10463, 10180, 10177, 11935
Byd:sign	11309
Candle	10030, 10056
Capehart	10017, 10178, 10030, 10092
Carnivale	10030
Carver	10054
Celebrity	10000
Celera	10765
Changhong	10156, 10765, 10767, 10783
Cineral	10451, 10092
Citek	10047
Citizen	10054, 10000, 10451, 10463, 10180, 10060, 10030, 10171, 10092, 10056, 11935
Clarion	10180
Classic	10030, 10092, 10056
Colortyme	10047, 10054, 10017, 10060, 10178, 10030
Commercial Solutions	11447, 10047
Concerto	10056
Conic	10178
Contec	10180
Craig	10180, 10171
Crosley	10054, 10000, 10180, 10030, 10171
Crown	10093, 10180, 10056, 10672
Crown Mustang	10672
Curtis Mathes	10047, 10054, 10154, 10000, 10051, 10451, 10093, 10180, 10060, 10702, 10178, 10030, 10145, 10166, 10056, 10466, 11147, 11347
CXC	10180
Cytron	11326
Daewoo	10451, 10178, 10092, 11661, 11756, 10623, 10661, 10672, 11755
Dayton	10092
Daytron	10178, 10030, 10092, 10056
Dell	11080, 11178, 11264, 11403, 11863
Denon	10145
Digital Life	10872
Dream Vision	11164
Dumont	10017, 10180, 10178
Durabrand	10463, 10180, 10178, 10171, 11034
Dwin	10093, 10720, 10774
Dynex	11463, 11780, 11785, 11810
Eaton	10060
Electroband	10000
Electrograph	11623, 11755
Electrohome	10154, 10000, 10463, 10150, 10178, 10030, 10056
Emerald	10178, 10177

**TVs**

Emerson	10047, 10154, 10451, 10236, 10463, 10180, 10150, 10178, 10171, 10177, 10623, 11394, 11963
Emprex	11422
Envision	10030, 10813, 11365
Epson	10833, 10840
ESA	10812, 10171, 11963
Fisher	10054, 10154, 10000
Fortress	10093
Fujitsu	10683, 10809, 10853
Funai	10000, 10180, 10171, 11271, 11963
Futuretech	10180
Gateway	11756, 11755
GE	11447, 10047, 10000, 10051, 10451, 10060, 10178, 10030, 11147, 11347
Gemini	10047
Gibralter	10017, 10000, 10030
Go Video	10886
Go Vision	11937
GoldStar	10047, 10054, 10178, 10030, 10056, 11154
Gradiente	10053, 10056
Grundig	10706, 10672, 10683
Grundy	10180
Grunpy	10180
Haier	11034
Hallmark	10236, 10180, 10178
Hannspree	11348, 11351, 11745
Harley Davidson	10000, 10180, 10060, 10178, 10030
Harman/Kardon	10054
Harvard	10180
Havermy	10093
Heathkit	10017
Helios	10865
Hello Kitty	10451
Hewlett Packard	11494, 11502, 11642
Hisense	10748
Hitachi	10047, 10054, 10017, 10000, 10051, 11145, 10145, 10056, 11445, 11643
HP	11494, 11502, 11642
Hyundai	10849, 10865, 11219, 11294
iLo	11286, 11603, 11684, 11990
Ima	10236, 10180, 10178
Infinity	10054
InFocus	11164
Initial	11603, 11990
Insignia	10171, 11204, 11326, 11517, 11564, 11641, 11710, 11780, 11963, 12002
Inteq	10017, 10145
JBL	10054
JCB	10000
Jensen	10761, 10815, 10817
JIL	10030
Jutan	10030
JVC	10054, 10053, 10030, 10650, 10731, 11253, 11774
Kamp	10017, 10180
Kawasho	10030
KEC	10180, 10060
Kenwood	10180, 10030
KLH	10156, 10180, 10765, 10767

**TVs**

Kloss	10030
Konka	10180, 10720
KTV	10463, 10180, 10030
Lark	10154
LG	10054, 11265, 10060, 10178, 10030, 10056, 10700, 10856, 11154, 11178, 11423, 11993
Lloyd's	10236, 10180, 10030, 10056
Logik	10236, 10180, 10056
Luxman	10056
LXI	10047, 10054, 10017, 10154, 10000, 10156, 10051, 10093, 10060, 10053, 10178, 10030, 10171, 10166, 10056
Magnasonic	10054, 10000, 10156, 10093, 10030, 10092, 10056
Magnavox	10047, 11454, 10054, 10154, 10000, 10250, 10051, 10180, 10060, 10030, 10171, 10092, 10706, 10802, 11198, 11254, 11365, 11755, 11866, 11963, 11990
Majestic	10017
Marantz	11454, 10054, 10030, 10704, 10855, 11154, 11398
Matsui	10056, 10177
Matsushita	10250, 10051, 10650
Maxent	11756, 10762, 11211, 11714, 11755, 11757
Megapower	10700
Megatron	10047, 10178, 10145, 10056
Memorex	10154, 10463, 10180, 10150, 10178, 10030, 10056
MGA	10150, 10178, 10030
MGN Technology	10178
Micro Genius	10150
Midland	10047, 10017, 10051, 10056
Mintek	11603, 11990
Mitsubishi	10154, 10093, 11250, 10150, 10178, 10030, 10836, 10868, 11392
Monivision	10700, 10843
Motorola	10054, 10051, 10093, 10150
MTC	10180, 10060, 10030, 10092, 10056
Multitech	10180
NAD	10156, 10178, 10166, 10056, 10866, 11156
NEC	10047, 10178, 10030, 10056, 10497, 10704, 10882, 11398, 11704
NetTV	10762, 11755
New Tech	10056
Nikko	10178, 10030, 10092
Nikkodo	10178, 10030, 10092
Nishi	10030
Norcent	10748, 10824, 11365
Norwood Micro	11286
NTC	10092
Nyon	10000
Olevia	11144, 11240, 11331, 11610
Onwa	10180
Optimus	10154, 10250, 10093, 10180, 10150, 10178, 10030, 10166, 10056, 10650
Optoma	11348
Optonica	10093
Orion	10017, 10236, 10463, 10180, 10178, 11463, 10177
Pace	10092

**TVs**

Panasonic	10054, 10000, 10156, 10250, 10051, 10236, 10030, 10650, 11291, 11310, 11410, 11480, 11941
Panda	10706
Paxonic	10060, 10030
PCE	10156, 10060
Penney	10047, 10000, 10156, 10250, 10051, 10060, 10178, 10030, 10056, 11347
Petters	11523
Philco	10054, 10463, 10030, 10145
Philips	11454, 10054, 10030, 10171, 10056, 10690, 11154, 11254, 11744, 11867
Pilot	10051, 10060, 10178, 10030, 10056
Pioneer	10166, 10679, 10866, 11260, 11398, 11457
Planar	11496
Polaroid	10765, 10865, 11276, 11314, 11326, 11328, 11341, 11523, 11766, 12002
Portland	10451, 10092
Precision	10236, 10180, 10177
Prima	10761, 10783, 10815, 10817, 11785
Princeton	10700, 10717
Prism	10250, 10051
Proscan	11447, 10047, 10466, 11347
Proton	10178, 10466
Pulsar	10017, 10092
Pulser	10178, 10092
Quartz	10150, 10178
Quasar	10250, 10051, 10650
Rabbit	10047
RadioShack	10047, 10154, 10180, 10150, 10178, 10030, 10056
RCA	11447, 10047, 10054, 10000, 10051, 10093, 10178, 12002, 11958, 11781, 11547, 11347, 11247, 11147, 11047, 10774, 10679, 10090
Realistic	10047, 10154, 10180, 10150, 10178, 10030, 10056
RevolutionHD	11623
Runco	10017, 10060, 10030, 10497, 10603, 11292, 11398, 11629
Sampo	10047, 10030, 11756, 10762, 11755
Samsung	10047, 10054, 10017, 10154, 10060, 10812, 10702, 10178, 10030, 10056, 10587, 10766, 10814, 11060, 11575
Sanky	10060, 10030
Sansui	10463, 10060, 10030, 11409, 11935
Sanyo	10047, 10054, 10154, 10000, 10463, 10171, 10088, 10799, 10893, 11142, 11755
Saville	10060
Sceptre	10878, 11217, 11360, 11599
Scotch	10178
Scott	10236, 10180, 10178, 10030, 10177, 11711
Sears	10047, 10054, 10017, 10154, 10000, 10156, 10051, 10093, 10060, 10053, 10178, 10030, 10171, 10166, 10056
Seleco	11351
Sharp	10054, 10093, 10180, 10491, 10688, 10689, 10818, 10851, 11602
Sheng Chia	10093
Shivaki	10178
Siemens	10145
Signature	10047, 10093, 10030
Simpson	10178, 10030

**TVs**

Singer	10060, 10092
Solar Drape	10000
Sole	10813, 11623
Sony	10017, 10154, 11100, 10000, 10150, 10053, 10834, 11685
Soundesign	10180, 10178, 10056
Sova	11952
Soyo	11520, 11826
Spectravision	10156, 10178
Squareview	10171
SR2000	10154, 10171
SSS	10180
Starlite	10236, 10180
Studio Experience	10843
Superscan	10093, 10864
Supreme	10000
SV2000	10054
SVA	10748, 10587, 10865, 10870, 10871, 10872
Sylvania	10047, 10054, 10154, 10000, 10051, 10178, 10030, 10171, 10092, 10056, 11271, 11314, 11394, 11864, 11963
Symphonic	10000, 10180, 10178, 10171
Syntax	11144, 11240, 11331, 11610
Tandy	10093
Tatung	10000, 10051, 11756, 11286
Teac	10154, 10706, 10689
Technics	10054, 10250, 10051
Technovox	10030
Techview	10847, 12004
Techwood	10250, 10051, 10060, 10056
Teco	11040
Teknika	10054, 10463, 10180, 10150, 10060, 10178, 10092, 10056
Telecolor	10017
Telefunken	10702, 10056
Thomas	10047, 10178, 10056
Thomson	11447, 10047
TMK	10236, 10180, 10178, 10056, 10177
TNCi	10017
Tocom	10156
Toshiba	10154, 11256, 10156, 10150, 11265, 10060, 11145, 10145, 10166, 12006, 11935, 11704, 11656, 11635, 11524, 11356, 11164, 11156, 10845, 10832, 10822, 10650
Totlevision	10051
Toyomenka	10178
Truetone	10250, 10051
TruTech	11723
TVS	10463
Ultra	10092
Universal	10047
Universum	10177
US Logic	11286
V	11756, 10864, 10885, 11755
Vector Research	10030
Victor	10053
Vidikron	10054, 11292, 11398, 11629
Vidtech	10178
Viewsonic	10857, 10864, 10885, 11330, 11578, 11627, 11640, 11755, 12014

**TVs**

Viking	10060
Viore	11684
Vizio	11756, 11758, 10864, 10885, 11755
Wards	10047, 10054, 10017, 10154, 10000, 10051, 10093, 10236, 10178, 10030, 10166, 10056, 10866, 11156
Waycon	10156
Welton	10178
Westinghouse	10000, 10451, 10885, 10889, 10890, 11282, 11577, 11712
White Westinghouse	10451, 10236, 10463, 10623, 10889
World	10451, 10236, 10463, 10180
Wyse	11365
XR-1000	10154, 10180, 10171
Yamaha	10030, 10769, 10833, 10839, 11526
Yorx	10030
Zenith	10047, 10017, 10000, 10093, 10463, 11265, 10812, 10178, 10030, 11145, 10145, 10171, 10092

**TV/DVD combination controlled by the DVD**
**TV/DVD combination controlled by the DVD**

Advent	21016
Akai	20695
Apex Digital	20830
Audiovox	21071, 21121, 21122
Axion	21071
Broksonic	20695
Citizen	20695
Emerson	20675, 21268
ESA	21268
Funai	21268
Go Vision	21071
Hitachi	21247
Insignia	21268
Jensen	21016
Magnavox	21268
Panasonic	21490
Philips	20854, 21260
Prima	21016
RCA	21022
Samsung	20899
Sansui	20695
Sova	21122
Sylvania	20675, 21268
Toshiba	20695

**TV/DVD combination controlled by the TV**
**TV/DVD combination controlled by the TV**

Accurian	11803
Akai	11675, 11935
Audiovox	11937, 11951, 11952
Axion	11937
Broksonic	11935
Citizen	11935
Dynex	11810
Emerson	11394, 11963
ESA	11963
Funai	11963

**TV/DVD combination controlled by the TV**

iLo	11990
Initial	11990
Insignia	11963, 12002
LG	11993
Magnavox	11866, 11963, 11990
Maxent	11714
Mintek	11990
Panasonic	11941
Polaroid	11523, 11766, 12002
RCA	11958, 12002
Sansui	11935
Sova	11952
Sylvania	11394, 11864, 11963
Techview	12004
Toshiba	11524, 11635, 11935, 12006

**TV/VCR combination controlled by the TV**
**TV/VCR combination controlled by the TV**

America Action	10180
Audiovox	10180
Emerson	10236

**TV/VCR combination controlled by the VCR**
**TV/VCR combination controlled by the VCR**

Broksonic	20479, 21479
Citizen	21278
Curtis Mathes	21035
Daewoo	21278
Emerson	20479, 20593, 21278, 21479
Funai	20000
GE	20807, 21035, 21060
GoldStar	21237
Harley Davidson	20000
Hitachi	20000
LG	21037
Lloyd's	20000
Magnasonic	20593, 21278
Magnavox	20000, 20593, 21781
Memorex	20162, 21037, 21162, 21237, 21262
Mitsubishi	20807
Optimus	20162, 20593, 21162, 21262
Orion	20479, 21479
Panasonic	20162, 21035, 21162, 21262
Penney	21035, 21237
Quasar	20162, 21035, 21162
RadioShack	20000, 21037
RCA	20807, 21035, 21060
Samsung	21014
Sansui	20000, 20479, 21479
Sears	20000, 21237
Sony	20000, 21232
Sylvania	21781
Symphonic	20000, 20593
Thomas	20000
Toshiba	20845, 21145
Zenith	20000, 20479, 21479

**TV/VCR/DVD combination controlled by the DVD**
**TV/VCR/DVD combination controlled by the DVD**

Akai	20899
Broksonic	20868
Emerson	20821
ESA	20821
Funai	21334
Magnavox	20821
Panasonic	21362, 21462
RCA	21132
Sharp	20630
Superscan	20821
Sylvania	20821
Symphonic	20821
Toshiba	21045

**TV/VCR/DVD combination controlled by the VCR**
**TV/VCR/DVD combination controlled by the VCR**

Sharp	20807
-------	-------

**VCRs**
**VCRs**

A-Mark	20037, 20000, 20046
ABS	21972
Accurian	20000
Admiral	20060, 20048, 20039, 20209, 20479
Adventura	20037, 20000
Aiwa	20037, 20000
Alba	20209
Alienware	21972
Allegro	20039
American High	20035, 20081
Amstrad	20000
Astra	20035
Audiovox	20037, 20038
Avis	20000
Bell & Howell	20035, 20048, 20039, 20000, 20046, 20479
Broksonic	20184, 20121, 20209, 20479, 21479
Calix	20037
Candle	20037, 20038
Canon	20035
Carver	20035, 20081
Citizen	20035, 20037, 20000, 20209, 20479, 21278
Classic	20037
Colortyme	20060, 20035, 20045
Colt	20000
Craig	20037
Criterion	20000
Crosley	20035, 20081, 20000, 20149
Curtis Mathes	20060, 20035, 20162, 20000, 21035
CyberPower	21972
Daewoo	20037, 20045, 20046, 21278
Daytron	20037
Dell	21972
Denon	20081, 20042
DirecTV	20739
Dual	20000
Durabrand	20039, 20038

VCRs	
Dynatech	20000
Electrohome	20060, 20037, 20000, 20043, 20209
Electrophonic	20037
Emerald	20184, 20121
Emerex	20032
Emerson	20037, 20184, 20000, 20121, 20043, 20209, 20479, 20593, 21278, 21479, 21593
Fisher	20039, 20000, 20046
Fuji	20035, 20033
Fujitsu	20000
Funai	20037, 20000, 20593, 21593
Garrard	20000
Gateway	21972
GE	20060, 20035, 20048, 20000, 20149, 20807, 21035, 21060
Gemini	20060
Genexxa	20037, 20000
Go Video	20614
GoldStar	20035, 20037, 20039, 20000, 20038, 21237
Goodmans	20037, 20081, 20000
Gradiente	20000
Granada	20081, 20042
Grundig	20081
Harley Davidson	20000
Harman/Kardon	20081, 20038
Headquarter	20046
Hewlett Packard	21972
Hi-Q 20035,	20000
Hitachi	20035, 20037, 20045, 20000, 20042, 20089
Howard Computers	21972
HP	21972
Hughes Network Systems	20042, 20739
Humax	20739
Hush	21972
Hytek	20000
iBUYPOWER	21972
Instant Replay	20035
Jensen	20067
JVC	20067, 21162
KEC	20037
Kenwood	20067, 20038, 20046
Kodak	20035, 20037
KTV	20000
LG	20037, 20038, 21037
Linksys	21972
Lloyd's	20000, 20038
Loewe	20081
Logik	20000
Luxor	20046
LXI	20037, 20000, 20042, 20067
Magnasonic	20037, 20000, 20593, 21278
Magnavox	20035, 20037, 20048, 20039, 20081, 20000, 20149, 20563, 20593, 20618, 21593, 21781
Marantz	20035, 20081, 20038
Marta	20037
Matsui	20037, 20209
Matsushita	20035, 20162, 20081, 21162
Media Center PC	21972

VCRs	
MEI	20035
Memorex	20035, 20162, 20037, 20048, 20039, 20000, 20209, 20046, 20479, 21037, 21162, 21237, 21262
Metz	20037
MGA	20060, 20043
Microsoft	21972
Mind	21972
Minolta	20042
Mitsubishi	20060, 20048, 20000, 20042, 20067, 20043, 20807
Motorola	20035, 20048
MTC	20000
MTX	20000
Multitech	20039, 20000
NEC	20067, 20038
Nikko	20037
Nikkodo	20037
Niveus Media	21972
Northgate	21972
Olympus	20035, 20162
Optimus	21062, 20035, 20162, 20037, 20048, 20000, 20593, 21162, 21262
Orion	20184, 20000, 20121, 20209, 20479, 21479
Panama	20035
Panasonic	21062, 20035, 20162, 20000, 20225, 20614, 20616, 21035, 21162, 21262 Penney 20035, 20162, 20037, 20081, 20000, 20042, 20067, 20038, 21035, 21237
Pentax	20042
Philco	20035, 20081, 20000, 20209, 20479
Philips	20035, 20162, 20048, 20081, 20045, 20000, 20209, 20616, 20618, 20739, 21081, 21181
Pilot	20037
Pioneer	20162, 20081, 20042, 20067
Polk Audio	20081
Presidian	21593
Proscan	20060, 21060
Protec	20000
Pulsar	20039
Quarter	20046
Quartz	20035, 20046
Quasar	20035, 20162, 21035, 21162
RadioShack	20035, 20162, 20037, 20048, 20000, 20046, 21037, 21162
Radix	20037
Randex	20037
RCA	20060, 20035, 20048, 20045, 20000, 20042, 20149, 20807, 20880, 21035, 21060
Realistic	20035, 20162, 20037, 20048, 20000, 20121, 20046, 21162
ReplayTV	20614, 20616
Ricavision	21972
Runco	20039
Samsung	20060, 20045, 20000, 20038, 20739, 21014
Sanky	20048, 20039
Sansui	20000, 20067, 20209, 20479, 21479
Sanyo	20000, 20046, 20479
Scott	20184, 20045, 20121, 20043

**VCRs**

Sears	20060, 20035, 20162, 20037, 20048, 20039, 20033, 20045, 20000, 20042, 20043, 20067, 20209, 20046, 21237
Sharp	20048, 20032, 20000, 20807, 20848
Shintom	20039, 20000
Siemens	20037
Signature	20060, 20035, 20037, 20048, 20000, 20149, 20046, 20479
Singer	20037
Sonic Blue	20614, 20616
Sonographe	20046
Sony	20035, 20032, 20033, 20000, 20067, 20046, 20636, 21032, 21232, 21972
Soundmaster	20000
Stack 9	21972
STS	20042
SV2000	20000
SVA	20000
Sylvania	20035, 20081, 20000, 20043, 20593, 21593, 21781
Symphonic	20000, 20593, 21593
Systemax	21972
Tagar Systems	21972
Tandy	20000
Tashiko	20037
Tatung	20048, 20081, 20000, 20067
Teac	20000, 20067
Technics	20035, 20162, 20037, 20000
Teknika	20035, 20037, 20000
Tevion	20479
Thomas	20000
Thomson	20060
Tivo	20618, 20636, 20739, 21996
TMK	20000
TNIX	20037
Toshiba	20045, 20000, 20043, 20209, 20845, 21008, 21145, 21972, 21996
Totlevision	20037
Touch	21972
Trix	20037
Ultra	20045
Vector	20045
Vector Research	20184, 20038
Victor	20067
Video Concepts	20045
Videomagic	20037
Videosonic	20000
Viewsonic	21972
Villain	20000
Voodoo	21972
Wards	20060, 20035, 20037, 20048, 20081, 20033, 20045, 20000, 20042, 20043, 20038, 20149, 20046, 20479
Wharfedale	20593
White Westinghouse	20000, 20209, 20479
World	20209, 20479
XR-1000	20035, 20000
Yamaha	20038
Zenith	20037, 20039, 20033, 20000, 20209, 20479, 21479

**VCRs**

ZT Group	21972
----------	-------

**Video Accessories****Video Accessories**

2Wire	02045
ABS	01272
Access HD	02185
Accurian	01653
Alienware	01272
Amino	01481
AT&T	00858, 02045
Buffalo	01739
CASTi	02305
CyberPower	01272
D-Link	01554, 01731, 02186
Digital Stream	02303
Epson	01563
Gateway	01272
Hewlett Packard	01272, 01267
Howard Computers	01272
HP	01272, 01267
Hush	01272
iBUYPOWER	01272
Insignia	01415
KoolConnect	01481
LG	01415
Linksys	01272, 01365
Media	Center PC 01272
Microsoft	01272, 02049
Mind	01272
Motorola	00858, 01363, 01998
Netgear	02036
Niveus Media	01272
Northgate	01272
Panasonic	01120
Pioneer	01010
Ricavision	01272
Roku	01486
Samsung	01190, 01490
Scientific Atlanta	00858
Sensory Science	01126
Sharp	01010
SMC	01456
Sony	01272, 01324, 01364
Stack 9	01272
SureWest	01481
Sylvania	01563
Systemax	01272
Tagar Systems	01272
Toshiba	01272
Touch	01272
Viewsonic	01272, 01329
Vizio	01126
Voodoo	01272
VUDU	02298
Xbox	02049
Zenith	01415
ZT Group	01272

# Legal notices

## FCC Part 15

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

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

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

## FCC warning

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

All other devices shall bear the following statement in a conspicuous location on the device: 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. Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.

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.

In order to maintain compliance with the FCC RF exposure guidelines, this equipment should be installed and operated with minimum distance 20cm between the radiator and your body.

## DHHS and FDA safety certification



CERTIFICATION: COMPLIES WITH FDA RADIATION PERFORMANCE STANDARDS, 21 CFR SUBCHAPTER J. COMPLIES WITH FDA PERFORMANCE STANDARDS FOR LASER PRODUCTS EXCEPT FOR DEVIATIONS PURSUANT TO LASER NOTICE NO. 50, DATED JUNE 24, 2007.

## Canada ICES-003 statement

Cable Compatible Television apparatus.  
Télévision câblocompatible, Canada.

## DTS

Manufactured under license under U.S. Patent #'s: 5,451,942; 5,956,674; 5,974,380; 5,978,762; 6,487,535 & other U.S. and worldwide patents issued & pending. DTS is a registered trademark and the DTS logos, symbol, DTS-HD and DTS-HD Advanced Digital Out are trademarks of DTS, Inc. 1996-2008 DTS, Inc. All rights reserved.

## Dolby

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



## Java



## VC-1 Patent Portfolio License

THIS PRODUCT IS LICENSED UNDER THE VC-1 PATENT PORTFOLIO LICENSE FOR THE PERSONAL AND NON-COMMERCIAL USE OF A CONSUMER TO (i) ENCODE VIDEO IN COMPLIANCE WITH THE VC-1 STANDARD ("VC-1 VIDEO") AND/OR (ii) DECODE VC-1 VIDEO THAT WAS ENCODED BY A CONSUMER ENGAGED IN A PERSONAL AND NON-COMMERCIAL ACTIVITY AND/OR WAS OBTAINED FROM A VIDEO PROVIDER LICENSED TO PROVIDE VC-1 VIDEO. NO LICENSE IS GRANTED OR SHALL BE IMPLIED FOR OTHER USE. ADDITIONAL INFORMATION MAY BE OBTAINED FROM MPEG LA, L.L.C. SEE <HTTP://WWW.MPEGLA.COM>

## AVC Patent Portfolio License

THIS PRODUCT IS LICENSED UNDER THE AVC PATENT PORTFOLIO LICENSE FOR THE PERSONAL AND NON-COMMERCIAL USE OF A CONSUMER TO (i) ENCODE VIDEO IN COMPLIANCE WITH THE AVC STANDARD ("AVC VIDEO") AND/OR (ii) DECODE AVC VIDEO THAT WAS ENCODED BY A CONSUMER ENGAGED IN A PERSONAL AND NON-COMMERCIAL ACTIVITY AND/OR WAS OBTAINED FROM A VIDEO PROVIDER LICENSED TO PROVIDE AVC VIDEO. NO LICENSE IS GRANTED OR SHALL BE IMPLIED FOR OTHER USE. ADDITIONAL INFORMATION MAY BE OBTAINED FROM MPEG LA, L.L.C. SEE HTTP://WWW.MPEGLA.COM

## Mercury warning

The lamp(s) within this product contain mercury. Disposal should be in compliance with local, state or federal laws.

## GNU PUBLIC LICENSE

The BD player runs software that is covered under the GPL. As such, we are required to publish the following:

GNU GENERAL PUBLIC LICENSE  
Version 2, June 1991

Copyright (C) 1989, 1991 Free Software Foundation, Inc.

51 Franklin Street, Fifth Floor, Boston, MA 02110-1301, USA

Everyone is permitted to copy and distribute verbatim copies of this license document, but changing it is not allowed.

## Preamble

The licenses for most software are designed to take away your freedom to share and change it. By contrast, the GNU General Public License is intended to guarantee your freedom to share and change free software--to make sure the software is free for all its users. This General Public License applies to most of the Free Software Foundation's software and to any other program whose authors commit to using it. (Some other Free Software Foundation software is covered by the GNU Lesser General Public License instead.) You can apply it to your programs, too.

When we speak of free software, we are referring to freedom, not price. Our General Public Licenses are designed to make sure that you have the freedom to distribute copies of free software (and charge for this service if you wish), that you receive source code or can get it if you want it, that you can change the software or use pieces of it in new free programs; and that you know you can do these things.

To protect your rights, we need to make restrictions that forbid anyone to deny you these rights or to ask you to surrender the rights.

These restrictions translate to certain responsibilities for you if you distribute copies of the software, or if you modify it.

For example, if you distribute copies of such a program, whether gratis or for a fee, you must give the recipients all the rights that you have. You must make sure that they, too, receive or can get the source code. And you must show them these terms so they know their rights.

We protect your rights with two steps: (1) copyright the software, and (2) offer you this license which gives you legal permission to copy, distribute and/or modify the software.

Also, for each author's protection and ours, we want to make certain that everyone understands that there is no warranty for this free software. If the software is modified by someone else and passed on, we want its recipients to know that what they have is not the original, so that any problems introduced by others will not reflect on the original authors' reputations.

Finally, any free program is threatened constantly by software patents. We wish to avoid the danger that redistributors of a free program will individually obtain patent licenses, in effect making the program proprietary. To prevent this, we have made it clear that any patent must be licensed for everyone's free use or not licensed at all.

The precise terms and conditions for copying, distribution and modification follow.

## TERMS AND CONDITIONS FOR COPYING, DISTRIBUTION AND MODIFICATION

0. This License applies to any program or other work which contains a notice placed by the copyright holder saying it may be distributed under the terms of this General Public License. The "Program", below, refers to any such program or work, and a "work based on the Program" means either the Program or any derivative work under copyright law: that is to say, a work containing the Program or a portion of it, either verbatim or with modifications and/or translated into another language. (Hereinafter, translation is included without limitation in the term "modification".) Each licensee is addressed as "you".

Activities other than copying, distribution and modification are not covered by this License; they are outside its scope. The act of running the Program is not restricted, and the output from the Program is covered only if its contents constitute a work based on the Program (independent of having been made by running the Program). Whether that is true depends on what the Program does.

1. You may copy and distribute verbatim copies of the Program's source code as you receive it, in any medium, provided that you conspicuously and appropriately publish on each copy an appropriate copyright notice and disclaimer of warranty; keep intact all the notices that refer to this License and to the absence of any warranty; and give any other recipients of the Program a copy of this License along with the Program.

You may charge a fee for the physical act of transferring a copy, and you may at your option offer warranty protection in exchange for a fee.

2. You may modify your copy or copies of the Program or any portion of it, thus forming a work based on the Program, and copy and distribute such modifications or work under the terms of Section 1 above, provided that you also meet all of these conditions:

a) You must cause the modified files to carry prominent notices stating that you changed the files and the date of any change.  
b) You must cause any work that you distribute or publish, that in whole or in part contains or is derived from the Program or any part thereof, to be licensed as a whole at no charge to all third parties under the terms of this License.

c) If the modified program normally reads commands interactively when run, you must cause it, when started running for such interactive use in the most ordinary way, to print or display an announcement including an appropriate copyright notice and a notice that there is no warranty (or else, saying that you provide a warranty) and that users may redistribute the program under these conditions, and telling the user how to view a copy of this License. (Exception: if the Program itself is interactive but does not normally print such an announcement, your work based on the Program is not required to print an announcement.) These requirements apply to the modified work as a whole. If identifiable sections of that work are not derived from the Program, and can be reasonably considered independent and separate works in themselves, then this License, and its terms, do not apply to those sections when you distribute them as separate works. But when you distribute the same sections as part of a whole which is a work based on the Program, the distribution of the whole must be on the terms of this License, whose permissions for other licensees extend to the entire whole, and thus to each and every part regardless of who wrote it.

Thus, it is not the intent of this section to claim rights or contest your rights to work written entirely by you; rather, the intent is to exercise the right to control the distribution of derivative or collective works based on the Program.

In addition, mere aggregation of another work not based on the Program with the Program (or with a work based on the Program) on a volume of a storage or distribution medium does not bring the other work under the scope of this License.

3. You may copy and distribute the Program (or a work based on it, under Section 2) in object code or executable form under the terms of Sections 1 and 2 above provided that you also do one of the following:

- a) Accompany it with the complete corresponding machine-readable source code, which must be distributed under the terms of Sections 1 and 2 above on a medium customarily used for software interchange; or,
- b) Accompany it with a written offer, valid for at least three years, to give any third party, for a charge no more than your cost of physically performing source distribution, a complete machine-readable copy of the corresponding source code, to be distributed under the terms of Sections 1 and 2 above on a medium customarily used for software interchange; or,
- c) Accompany it with the information you received as to the offer to distribute corresponding source code. (This alternative is allowed only for noncommercial distribution and only if you received the program in object code or executable form with such an offer, in accord with Subsection b above.)

The source code for a work means the preferred form of the work for making modifications to it. For an executable work, complete source code means all the source code for all modules it contains, plus any associated interface definition files, plus the scripts used to control compilation and installation of the executable. However, as a special exception, the source code distributed need not include anything that is normally distributed (in either source or binary form) with the major components (compiler, kernel, and so on) of the operating system on which the executable runs, unless that component itself accompanies the executable.

If distribution of executable or object code is made by offering access to copy from a designated place, then offering equivalent access to copy the source code from the same place counts as distribution of the source code, even though third parties are not compelled to copy the source along with the object code.

4. You may not copy, modify, sublicense, or distribute the Program except as expressly provided under this License. Any attempt otherwise to copy, modify, sublicense or distribute the Program is void, and will automatically terminate your rights under this License. However, parties who have received copies, or rights, from you under this License will not have their licenses terminated so long as such parties remain in full compliance.

5. You are not required to accept this License, since you have not signed it. However, nothing else grants you permission to modify or distribute the Program or its derivative works. These actions are prohibited by law if you do not accept this License. Therefore, by modifying or distributing the Program (or any work based on the Program), you indicate your acceptance of this License to do so, and all its terms and conditions for copying, distributing or modifying the Program or works based on it.

6. Each time you redistribute the Program (or any work based on the Program), the recipient automatically receives a license from the original licensor to copy, distribute or modify the Program subject to these terms and conditions. You may not impose any further restrictions on the recipients' exercise of the rights granted herein. You are not responsible for enforcing compliance by third parties to this License.

7. If, as a consequence of a court judgment or allegation of patent infringement or for any other reason (not limited to patent issues),

conditions are imposed on you (whether by court order, agreement or otherwise) that contradict the conditions of this License, they do not excuse you from the conditions of this License. If you cannot distribute so as to satisfy simultaneously your obligations under this License and any other pertinent obligations, then as a consequence you may not distribute the Program at all. For example, if a patent license would not permit royalty-free redistribution of the Program by all those who receive copies directly or indirectly through you, then the only way you could satisfy both it and this License would be to refrain entirely from distribution of the Program.

If any portion of this section is held invalid or unenforceable under any particular circumstance, the balance of the section is intended to apply and the section as a whole is intended to apply in other circumstances.

It is not the purpose of this section to induce you to infringe any patents or other property right claims or to contest validity of any such claims; this section has the sole purpose of protecting the integrity of the free software distribution system, which is implemented by public license practices. Many people have made generous contributions to the wide range of software distributed through that system in reliance on consistent application of that system; it is up to the author/donor to decide if he or she is willing to distribute software through any other system and a licensee cannot impose that choice.

This section is intended to make thoroughly clear what is believed to be a consequence of the rest of this License.

8. If the distribution and/or use of the Program is restricted in certain countries either by patents or by copyrighted interfaces, the original copyright holder who places the Program under this License may add an explicit geographical distribution limitation excluding those countries, so that distribution is permitted only in or among countries not thus excluded. In such case, this License incorporates the limitation as if written in the body of this License.

9. The Free Software Foundation may publish revised and/or new versions of the General Public License from time to time. Such new versions will be similar in spirit to the present version, but may differ in detail to address new problems or concerns.

Each version is given a distinguishing version number. If the Program specifies a version number of this License which applies to it and "any later version", you have the option of following the terms and conditions either of that version or of any later version published by the Free Software Foundation. If the Program does not specify a version number of this License, you may choose any version ever published by the Free Software Foundation.

10. If you wish to incorporate parts of the Program into other free programs whose distribution conditions are different, write to the author to ask for permission. For software which is copyrighted by the Free Software Foundation, write to the Free Software Foundation; we sometimes make exceptions for this. Our decision will be guided by the two goals of preserving the free status of all derivatives of our free software and of promoting the sharing and reuse of software generally.

## **NO WARRANTY**

11. BECAUSE THE PROGRAM IS LICENSED FREE OF CHARGE, THERE IS NO WARRANTY FOR THE PROGRAM, TO THE EXTENT PERMITTED BY APPLICABLE LAW, EXCEPT WHEN OTHERWISE STATED IN WRITING THE COPYRIGHT HOLDERS AND/OR OTHER PARTIES PROVIDE THE PROGRAM "AS IS" WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESSED OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. THE ENTIRE RISK AS TO THE QUALITY AND PERFORMANCE OF THE PROGRAM IS WITH YOU. SHOULD THE PROGRAM PROVE DEFECTIVE, YOU ASSUME THE COST OF ALL NECESSARY SERVICING, REPAIR OR CORRECTION.

12. IN NO EVENT UNLESS REQUIRED BY APPLICABLE LAW OR AGREED TO IN WRITING WILL ANY COPYRIGHT HOLDER, OR ANY OTHER PARTY WHO MAY MODIFY AND/OR REDISTRIBUTE THE PROGRAM AS PERMITTED ABOVE, BE LIABLE TO YOU FOR DAMAGES, INCLUDING ANY GENERAL, SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES ARISING OUT OF THE USE OR INABILITY TO USE THE PROGRAM (INCLUDING BUT NOT LIMITED TO LOSS OF DATA OR DATA BEING RENDERED INACCURATE OR LOSSES SUSTAINED BY YOU OR THIRD PARTIES OR A FAILURE OF THE PROGRAM TO OPERATE WITH ANY OTHER PROGRAMS), EVEN IF SUCH HOLDER OR OTHER PARTY HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

END OF TERMS AND CONDITIONS

## Two-year limited warranty

### 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

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)

Distributed by Best Buy Purchasing, LLC

7601 Penn Avenue South, Richfield, Minnesota, U.S.A.  
55423-3645

© 2010 BBY Solutions, Inc.

All rights reserved. INSIGNIA is a trademark of BBY Solutions, Inc. Registered in some countries. All other products and brand names are trademarks of their respective owners.

# INSIGNIA™

[www.insigniaproducts.com](http://www.insigniaproducts.com)  
US & Canada: 1 (877) 467-4289

Distributed by Best Buy Purchasing, LLC  
7601 Penn Avenue South, Richfield, MN USA 55423-3645  
© 2010 BBY Solutions, Inc.

All rights reserved. INSIGNIA is a trademark of BBY Solutions, Inc. Registered in some countries.  
All other products and brand names are trademarks of their respective owners.



ENGLISH  
10-0371