

APPENDIX H
: USER'S MANUAL

TOSHIBA



OWNER'S MANUAL

DLP™ Projection Television

COLORSTREAM® HD

THEATERWIDE HD

44HM85

Owner's Record

The model number and serial number are on the back of your TV. Record these numbers in the spaces below. Refer to these numbers whenever you communicate with your Toshiba dealer about this TV.

Model:

Serial No.:

Dear Customer,

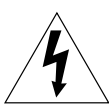
Thank you for purchasing this Toshiba TV. This manual will help you use the many exciting features of your new TV. Before operating the TV, please read this manual completely, and keep it nearby for future reference.


Safety Precautions

WARNING

TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE.

	WARNING RISK OF ELECTRIC SHOCK DO NOT OPEN	
WARNING: TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER (OR BACK). NO USER-SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.		

 The lightning symbol in the triangle tells you that the voltage inside this product may be strong enough to cause an electric shock. DO NOT TRY TO SERVICE THIS PRODUCT YOURSELF.



 The exclamation mark in the triangle tells you that important operating and maintenance instructions follow this symbol.

NOTE TO CATV INSTALLERS

This is a reminder to call the CATV system installer's attention to Article 820-40 of the NEC, which provides guidelines for proper grounding and, in particular, specifies that the cable ground shall be connected to the grounding system of the building, as close to the point of cable entry as practical. For additional antenna grounding information, see items 27 and 28 on page 4.

Lamp Unit Replacement

CAUTION: HOT SURFACE!

	The temperature of the lamp immediately after use exceeds 392°F (200°C). Touching the lamp before it has cooled will result in severe burns. ALLOW THE LAMP TO COOL FOR AT LEAST ONE (1) HOUR BEFORE REPLACING IT.	
---	--	---

The lamp in this product has a limited service life. The length of service life varies depending on product use and user settings. If you use the lamp beyond its service life:

- you may notice a reduction in the colors and/or brightness of the picture, at which time you should replace the lamp unit; and
- the strength of the quartz glass in the lamp will be reduced and the lamp may rupture. If the lamp ruptures, the TV will not operate until the lamp unit is replaced.

Note: The lamp unit is designed so broken lamp glass remains securely inside the lamp unit.

See pages 50-52.

- Dispose of the used lamp unit by the approved method for your area.

	Note: The lamp unit contains mercury. Disposal of mercury may be regulated due to environmental considerations. For disposal or recycling information, contact your local authorities or the Electronics Industries Alliance (www.eiae.org).
---	---

Child Safety



It Makes A Difference Where Your TV Stands

Congratulations on your purchase! As you enjoy your new TV, keep these safety tips in mind:

The Issue

- ◆ If you are like most consumers, you have a TV in your home. Many homes, in fact, have more than one TV.
- ◆ The home theater entertainment experience is a growing trend, and larger TVs are popular purchases; however, they are not always supported on the proper TV stands.
- ◆ Sometimes TVs are improperly secured or inappropriately situated on dressers, bookcases, shelves, desks, audio speakers, chests, or carts. As a result, TVs may fall over, causing unnecessary injury.



Toshiba Cares!

- ◆ The consumer electronics industry is committed to making home entertainment enjoyable and safe.
- ◆ The Consumer Electronics Association formed the Home Entertainment Support Safety Committee, comprised of TV and consumer electronics furniture manufacturers, to advocate children's safety and educate consumers and their families about television safety.

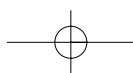
Tune Into Safety

- ◆ One size does NOT fit all! Use appropriate furniture large enough to support the weight of your TV (and other electronic components).
- ◆ Use appropriate angle braces, straps, and anchors to secure your furniture to the wall (but never screw anything directly into the TV).
- ◆ Carefully read and understand the other enclosed instructions for proper use of this product.
- ◆ Do not allow children to climb on or play with furniture and TVs.
- ◆ Avoid placing any item on top of your TV (such as a VCR, remote control, or toy) that a curious child may reach for.
- ◆ Remember that children can become excited while watching a program and can potentially push or pull a TV over.
- ◆ Share our safety message about this hidden hazard of the home with your family and friends. Thank you!



2500 Wilson Blvd.
Arlington, VA 22201 U.S.A.
Tel. 703-907-7600 Fax 703-907-7690
www.CE.org

CEA is the Sponsor, Producer and Manager of the International CES®

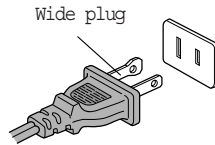


Important Safety Instructions

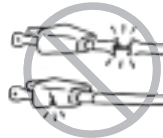
- 1) Read these instructions.
- 2) Keep these instructions.
- 3) Heed all warnings.
- 4) Follow all instructions.



- 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 it exits the apparatus.



- 11) Only use attachments/accessories specified by the manufacturer.

- 12) Use only with the cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with the apparatus. When a cart is used, use caution when moving the cart/apparatus combination to avoid injury from tip-over.



- 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, or the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped. **This applies to all items except those specified on pages 50-52 of this manual.**

- 15) **CAUTION:** To reduce the risk of electric shock, do not use the polarized plug with an extension cord, receptacle, or other outlet unless the blades can be inserted completely to prevent blade exposure.

- 16) **WARNING:** This product contains a lamp to project the picture, and requires special safety precautions:

- See pages 50-52 for instructions on lamp unit replacement.
- **DO NOT attempt to service this product except as specified on pages 50-52.** The only user-serviceable item in this product is the lamp unit.

Installation, Care, and Service

Installation

Follow these recommendations and precautions and heed all warnings when installing your TV:

- 17) Never modify this equipment. Changes or modifications may void: a) the warranty, and b) the user's authority to operate this equipment under the rules of the Federal Communications Commission.

- 18) **DANGER: RISK OF SERIOUS PERSONAL INJURY, DEATH, OR EQUIPMENT DAMAGE!** Never place the TV on

an unstable cart, stand, or table. The TV may fall, causing serious personal injury, death, or serious damage to the TV.

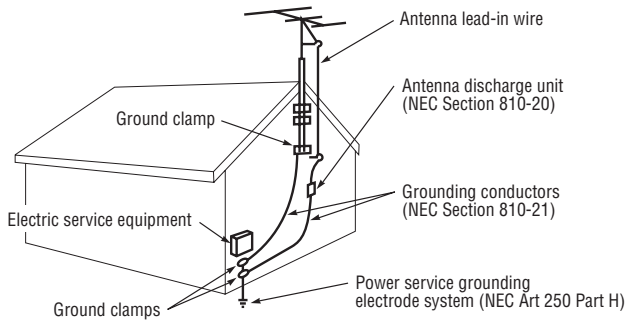


- 19) Never place or store the TV in direct sunlight; hot, humid areas; areas subject to excessive dust or vibration; or locations with temperatures at or below 41°F (5°C).
- 20) Always place the TV on the floor or a sturdy, level, stable surface that can support the weight of the unit.
- 21) Never expose the apparatus to dripping or splashing or place items such as vases, aquariums, any other item filled with liquid, or candles on top of the TV.
- 22) Always place the back of the television at least one (1) inch away from any vertical surface (such as a wall) to allow proper ventilation.
- 23) Never block or cover the slots or openings in the TV cabinet back, bottom, and sides. Never place the TV:
 - on a bed, sofa, rug, or similar surface;
 - too close to drapes, curtains, or walls; or
 - in a confined space such as a bookcase, built-in cabinet, or any other place with poor ventilation.
 The slots and openings are provided to protect the TV from overheating and to help maintain reliable operation of the TV.
- 24) Never allow anything to rest on or roll over the power cord, and never place the TV where the power cord is subject to wear or abuse.
- 25) Never overload wall outlets and extension cords.
- 26) Always operate this equipment from a 120 VAC, 60 Hz power source only.

(continued on next page)

Installation (cont. from previous page)

- 27) Always make sure the antenna system is properly grounded to provide adequate protection against voltage surges and built-up static charges (see Section 810 of the National Electric Code).



28) **DANGER: RISK OF SERIOUS PERSONAL INJURY OR DEATH!**



- Use extreme care to make sure you are never in a position where your body (or any item you are in contact with, such as a ladder or screwdriver) can accidentally touch overhead power lines. Never locate the antenna near overhead power lines or other electrical circuits.
- Never attempt to install any of the following during lightning activity:
 - a) an antenna system; or b) cables, wires, or any home theater component connected to an antenna or phone system.

Care

For better performance and safer operation of your TOSHIBA TV, follow these recommendations and precautions:

- 29) Always sit approximately 10–25 feet away from the TV and as directly in front of it as possible. The picture can appear dull if you sit too far to the left or right of the TV, or if sunlight or room lights reflect on the screen. Turn the TV off to check for reflections on the screen, and then remove the source of reflections while viewing the TV.
- 30) Always unplug the TV before cleaning. Never use liquid or aerosol cleaners. Clean only with a dry cloth. Do not spray volatile compounds such as insecticide on the cabinet. This may cause a discoloration or damage of the cabinet.
- 31) **WARNING: RISK OF ELECTRIC SHOCK!** Never spill liquids or push objects of any kind into the TV cabinet slots.
- 32) If the air temperature rises suddenly (for example, when the TV is first delivered), condensation may form on the lenses. This can make the picture appear distorted or the color appear faded. If this happens, turn off the TV for 6 to 7 hours to allow the condensation to evaporate.

Care (cont. from previous column)

- 33) For added protection of your TV from lightning and power surges, always unplug the power cord and disconnect the antenna from the TV if you leave the TV unattended or unused for long periods of time.
- 34) During normal use, the TV may make occasional snapping or popping sounds. This is normal, especially when the unit is being turned on or off. If these sounds become frequent or continuous, unplug the power cord and contact a Toshiba Authorized Service Center.

35) **Special care for DLP™ (digital light processing) units:**

- **Lamp**—The lamp in this product has a limited service life. The length of service life varies depending on product use or user settings. If you use the lamp beyond its service life:

- you may notice a reduction in the colors and/or brightness of the picture, at which time you should replace the lamp unit; and
- the strength of the quartz glass in the lamp will be reduced and the lamp may rupture. If the lamp ruptures, the TV will not operate until the lamp unit is replaced.

See pages 50-52.

Note:

- The lamp unit is designed so broken lamp glass remains securely inside the lamp unit.



- The lamp unit contains mercury. Disposal of mercury may be regulated due to environmental considerations. For disposal or recycling information, please contact your local authorities or the Electronics Industries Alliance (www.eiae.org).

- Dispose of the used lamp unit by the approved method for your area.

Service

- 36) **WARNING: RISK OF ELECTRIC SHOCK!** Never attempt to service the TV yourself, except as specified on pages 50-52.

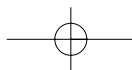
Opening and removing the covers may expose you to dangerous voltage or other hazards. Failure to follow this WARNING may result in death or serious injury. Refer all servicing not specified in this manual to a Toshiba Authorized Service Center.

- 37) If you have the TV serviced:


- Ask the service technician to use only replacement parts specified by the manufacturer.
- Upon completion of service, ask the service technician to perform routine safety checks to determine that the TV is in safe operating condition.

- 38) When the TV reaches the end of its useful life, ask a qualified service technician to properly dispose of the TV.

Note: The lamp unit contains mercury. Disposal of mercury may be regulated due to environmental considerations. Dispose of the used lamp unit by the approved method for your area. For disposal or recycling information, please contact your local authorities or the Electronics Industries Alliance (www.eiae.org).



Important notes about your DLP™ projection TV

- 1) The light source for this TV is a projection lamp unit with a limited service life. When the lamp wears out, the picture may become dark or black, or the lamp may fail, at which time you must replace the lamp unit. See "Lamp unit replacement" on pages **50-52**.
- 2) Each time you turn on the TV, it may take up to several seconds to go from no picture to full picture brightness.
- 3) The display on this TV is manufactured using an extremely high level of precision technology; however, an occasional pixel (dot of light) may show constantly on the screen. This is a structural property of micro-display projection TV technology, and is not a sign of malfunction. Such pixels are not visible when the picture is viewed from a normal viewing distance (see **item 29 on page 4**).
- 4) Depending on the media you are viewing, it is possible, although unlikely, that a limited number of viewers may see a "rainbow effect" on the screen, which can, in rare instances, result in eye fatigue. This is a rare occurrence related to technology of this type, and is not a sign of TV malfunction.
- 5) Always sit approximately 10–25 feet away from the TV and as directly in front of it as possible. The picture quality may be affected by your viewing position and length of viewing time. If you sit too closely to the TV for too long, you may suffer from eye fatigue. See **item 29 on page 4**.
- 6)  This TV contains several cooling fans to moderate the internal temperature. You may be able to hear the fans noise during or after operation.
- 7) Always place the back of the television at least one (1) inch away from any vertical surface (such as a wall) to allow proper ventilation.
- 8) Review all safety and operating information in this owner's manual before you use your TV.
- 9) Interactive video games that involve shooting a "gun" type of joystick at an on-screen target may not work on this TV.

FCC Compliance Statement

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

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

CAUTION

The users manual or instruccion manual for an intentional or unintentional radiator shall caution the user that changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

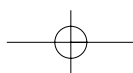


Table of Contents

Safety Warnings	2	Sleep Timer Setup	37
Important Safety Instructions	3-4	Auto Off	38
Function Status Indicators	6	SPECIAL Menu Options	
Step 1. Hook Up TV		Aspect Ratio	39
Rear Connections Panel	7	On-Screen Menu Languages	40
Front Connections Panel	8	Captions Setup	41
ANT/Cable Service Hookup	9	Caption/Text Mode Selection	42
Cable Box Connections	10	Key Lock	43
VCR Connections	11	Cinema Mode Setup	44
DVD Player	12	Demo (Menu Review)	45
RGB-DTV/DVI-DTV Input	13	SCREEN Menu Options	
RGB-PC/DVI-PC Input	14	LOCK Menu Options	
External Stereo Connections	15	Parental Lock Setup	46
Home Theater: Speaker Layout	16	Parental Lock (Ratings Overview)	47
Monitor Out Setup	17	PIP/Twin Picture Operation	
Remote Control Functions in TV Mode	18-19	POP	
On-Screen Displays	20	Step 3. Miscellaneous	
Front Panel Controls	21	Programming the Remote	48
Step 2. Customize your TV's Features		Programming Codes	49-52
SETUP Menu		Maintenance	53
Auto Program: Channel Search	22	Troubleshooting	54-55
Manual Program: Adding/Deleting Channels	23	Glossary	56-57
Fine Tuning Adjustment	24	Product Specifications	58
Signal Reception Booster	25	Warranty	59-60
Favorite Channels Setup	28		
VIDEO Menu Options	29-30		
AUDIO Menu Options	31-32		
TIME Menu Options			
Auto Clock Setup	33		
Manual Clock Setup	34		
TV Turn Off Timer Setup	35		
TV Turn On Timer Setup	36		

Setup Checklist

Step 1. Make all equipment and source connections.

See pages 10-17.

Step 2. Install batteries in remote control and do a channel search.

See page 22.

Step 3. Adjust TV features and options to your preference.

See contents above.

Welcome to Toshiba

Welcome to Toshiba

Congratulations! You have purchased one of the finest DLP™ projection TVs on the market. The goal of this manual is to guide you through setting up and operating your Toshiba TV as quickly as possible.

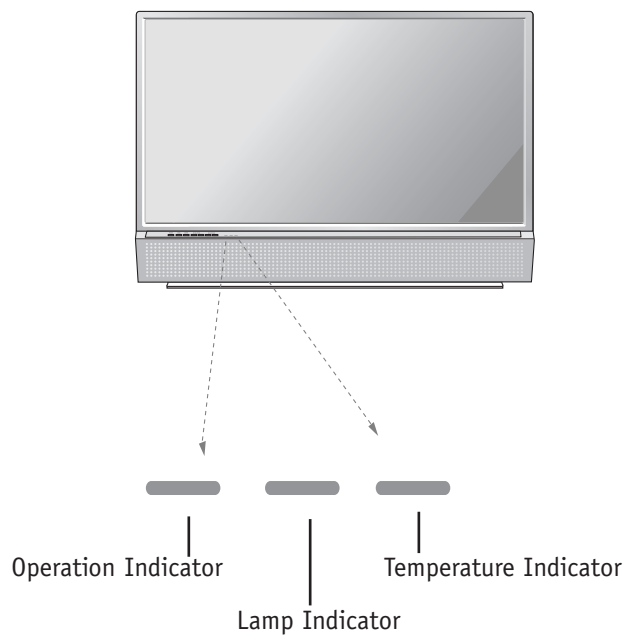
This manual applies to models 44NHM84. The model and serial numbers are on the back of your TV. Write these numbers in the space provided on the front cover of this manual for your records.

Instructions in this manual are based on using the remote control. You can also use the controls on the TV if they have the same name as those on the remote control.

Please read all the safety and operating instructions carefully, and keep the manual for future reference.

Function Status Indicators

Lamp indicator, operation indicator, and temperature indicator located below the front panel controls, reveal the operating status of the DLP projection TV.

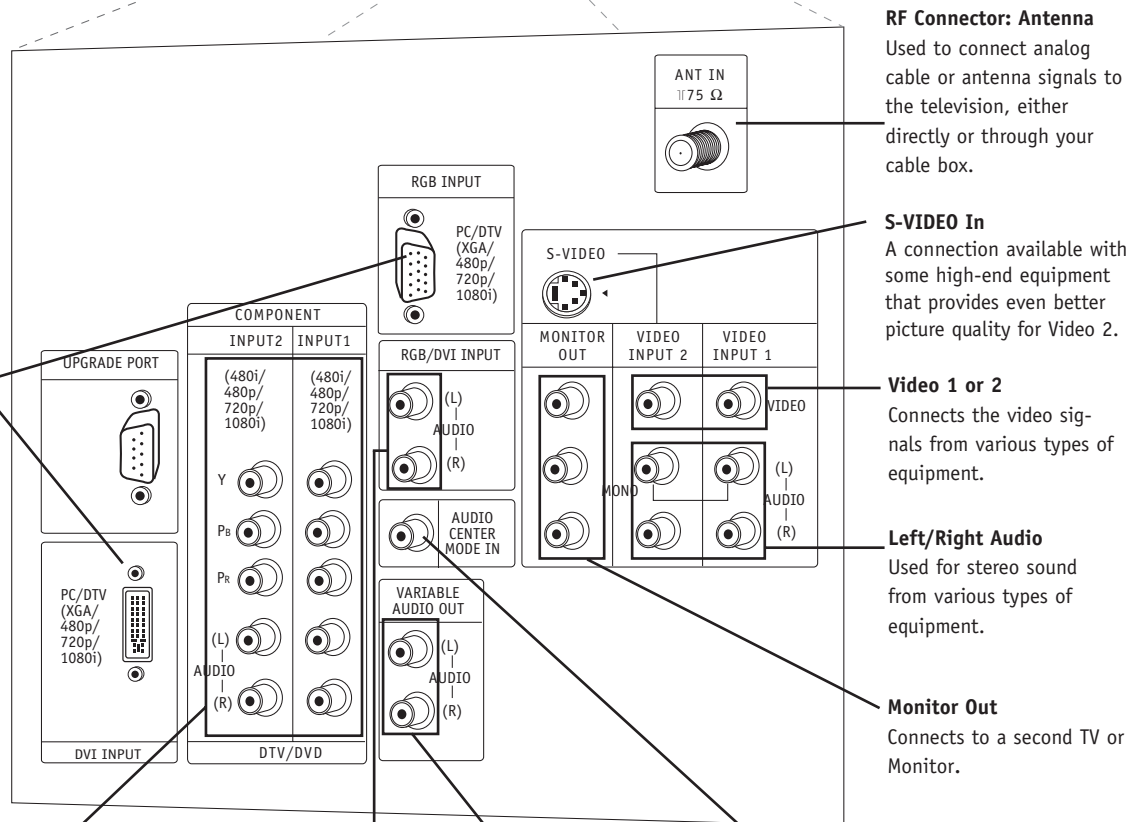
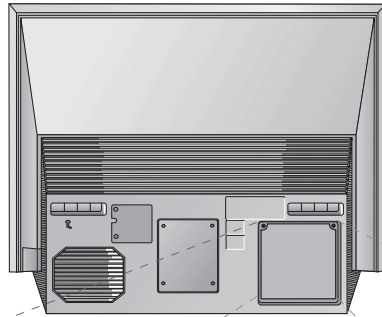


Operation Indicator	Off	Power cord is not connected.
	Red	Power Cord is connected, TV is in standby mode.
	Green	TV turns on.
	Orange (flashing)	Preparing operation in standby mode.
Lamp Indicator	Green (flashing)	The lamp cover is not closed.
Temperature Indicator	Orange	The projection TV is overheating. Check the blocked vents of the projection TV .
	Red	The projection TV shut down due to overheating.
	Red (flashing)	The projection TV shut down due to the cooling fan trouble. Contact an authorized service center.

Rear Connections Panel

Connecting cables and external equipment to your TV.

This manual explains the features available on the 44SZ8R TVs.



RF Connector: Antenna
Used to connect analog cable or antenna signals to the television, either directly or through your cable box.

S-VIDEO In
A connection available with some high-end equipment that provides even better picture quality for Video 2.

Video 1 or 2
Connects the video signals from various types of equipment.

Left/Right Audio
Used for stereo sound from various types of equipment.

Monitor Out
Connects to a second TV or Monitor.

RGB/DVI Input
Connect the TV output connector from a PC/DTV to the appropriate input port.

Component Input 1-2
Connect a component video/audio device to these jacks. Refer to your DVD manual for further information.

RGB/DVI Input
Used for audio connections from a PC source or HD-STB Satellite system.

Variable Audio Out
Used to connect either an external amplifier, or add a sub-woofer to your surround sound system.

Audio Center Mode In
Connect to external Dolby Digital Center "preamp output."

Mini glossary

- JACK** A connection on the back of a TV, VCR, or any other A/V device. This includes the RF jack and the Audio/Video jacks that are color-coded.
- SIGNAL** Picture and sound traveling through cable, or over the air, to your television screen.

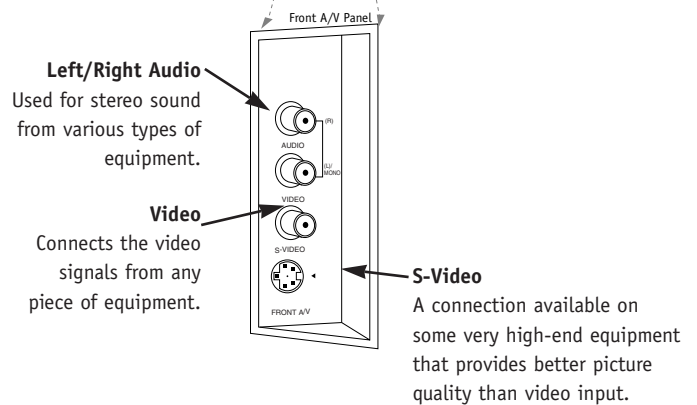
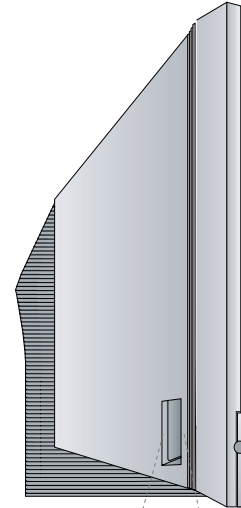
Front Connection Panel

There are four jacks on the left side on your projection TV that make connecting Audio/Video devices like video games and camcorders very simple.

The jacks are like those found on the back jack connection panel. This means that most equipment that connects to those types of jacks on the rear jackpack, may be connected to the front connection panel.

To use the front jacks as the signal source, select them using Main Input menu as described on page 25. They will be named "Front Video" in the Main Input menu.

- ◆ *If you input both Front Video and S-Video, only the S-Video will work.*
- ◆ *If you're connecting a video game device, make sure to change the picture settings with the EZ Picture option in the Video menu (see page 29).*



Mini glossary

A/V CABLES Audio/Video cables. Three cable connector—Right audio (red), Left audio (white), and Video (yellow). A/V cables are used for stereo playback of videocassettes and for higher quality picture and sound from other A/V devices.

A/V DEVICE Any device that produces video or sound (VCR, DVD, cable box, or television).

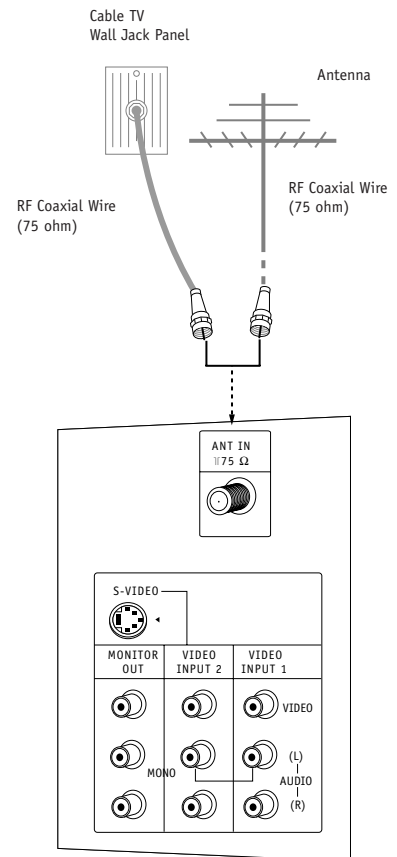
ANT / Cable Service Hookup

1

Connect an antenna or cable service to your TV as shown.

2

Turn to page 22 to do a channel search with EZ Scan for Ant/Cable connection(s).



- ◆ *If you receive your RF signal through an antenna that is several years old and connects with two small prongs, you will need to purchase a 300 to 75 ohm adapter. It should be available from your local electronics dealer.*
- ◆ *We recommend using a 75 ohm cable for your antenna connections in order to prevent interference.*

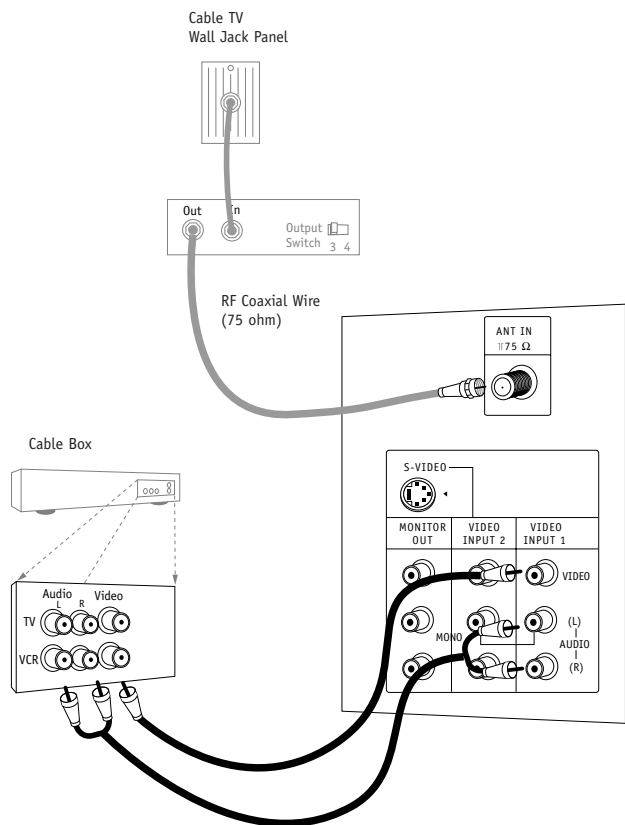
For best signal reception, it is recommended to have your Antenna professionally adjusted.

Cable Box Connections

1

Locate the output jack on the back of your cable box. Connect this to the Antenna jack on the back of your TV.

Or find the composite video and audio jacks on the back of your cable box, and connect them following the instructions provided with your equipment. This can be combined with any other equipment you may want to hook up.



- ◆ *If you're using a cable box, leave the TV on channel 3 or 4 and use your cable box to change channels.*

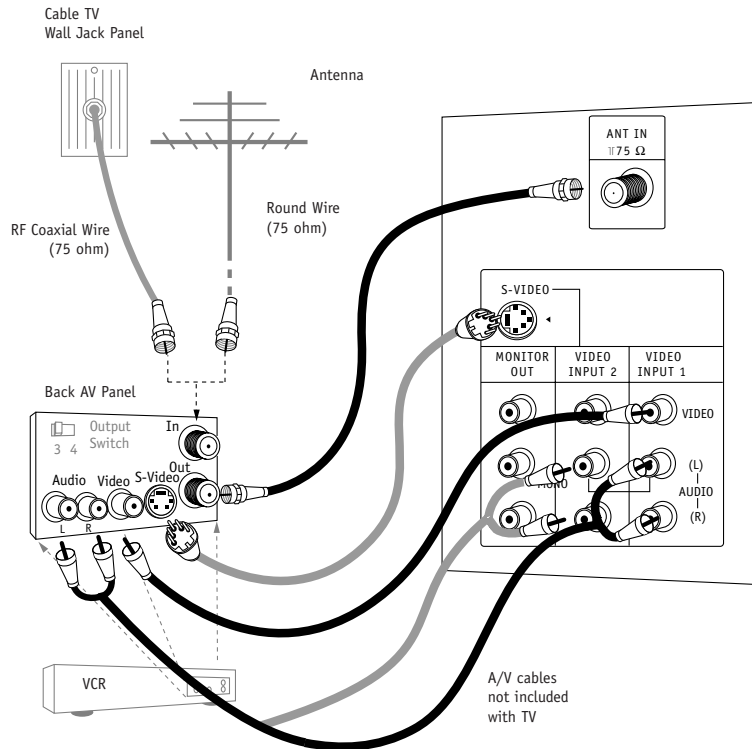
VCR Connections

1

Locate the Antenna jack on the back of your TV. Connect this to RF out jack on the back of your VCR.

Or, find the composite video and audio jacks on the back of your VCR, and connect them following the instructions provided with your equipment.

You may connect either the composite video or the S-Video cables to your TV. (Do not connect both the composite and the S-Video cables. In the event that you connect both composite and the S-Video cables, only the S-Video will work.)



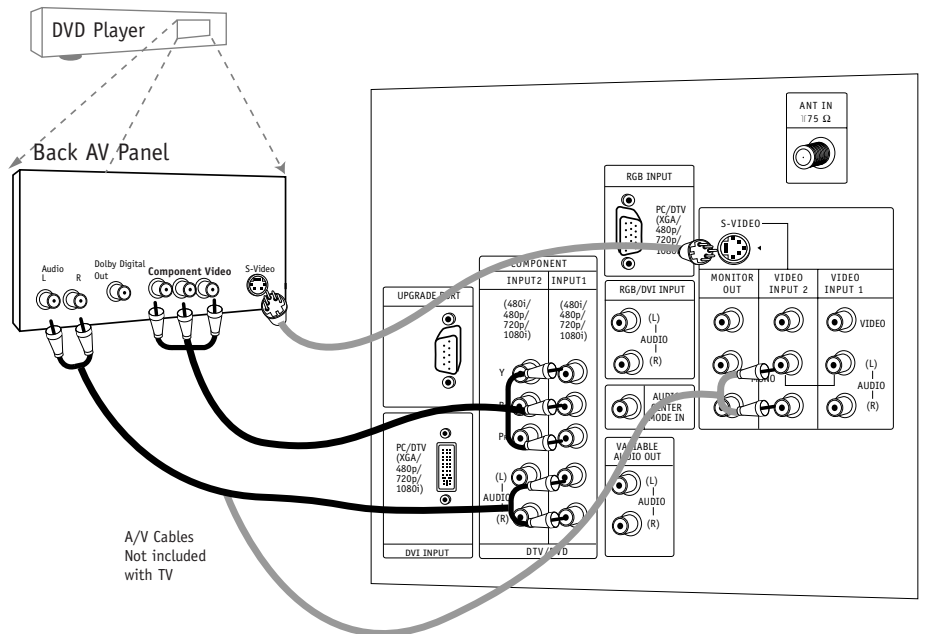
- ◆ To hear stereo sound from cable or your VCR, you will need to connect A/V cables as well as the wire that runs from the VCR to your TV.
- ◆ If you want to receive your signals on Channel 3 or 4, locate the Out to TV jack on your VCR. Connect a cable from the Out to TV jack to the Antenna In jack on the back of your TV.
- ◆ After connecting external equipment to the TV, don't display a still picture for a long time on the screen. Doing so may damage the TV screen.

1

Find the audio and component or S-Video jacks on the back of your DVD Player and connect them following the instructions provided with your equipment.

You may connect either the composite video or the S-Video cables to your TV. Do not connect both the composite and the S-Video.

Some high-end DVD players use a picture reproduction system called "component video." If your DVD player has component output, use the connectors marked "Component 1/2" on the jack panel. Please refer to your DVD manual for proper installation.



Component 1 (or 2) Input

Y	P _B	P _R
1920X1080i		
1280X720p		
720X480p		
720X480i		

• Component Input ports

Connect DVD player jacks to Monitor Component input jacks as indicated below.

Component input jacks on the Monitor	Y	P _B	P _R
Video output jacks on DVD player	Y	P _B	P _R
	Y	B-Y	R-Y
	Y	C _b	C _r
	Y	P _B	P _R

Mini glossary

COMPONENT VIDEO Some video equipment uses three separate lines (Y, Pb, Pr) to more precisely reproduce images. Your video equipment manual will explain how this relates to your equipment.

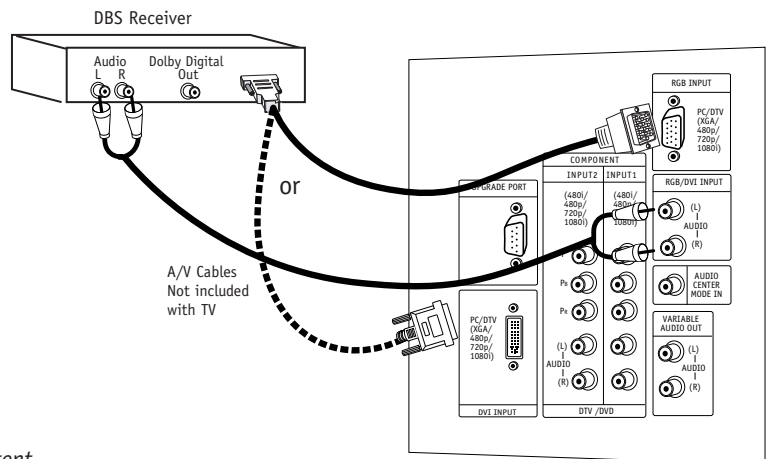
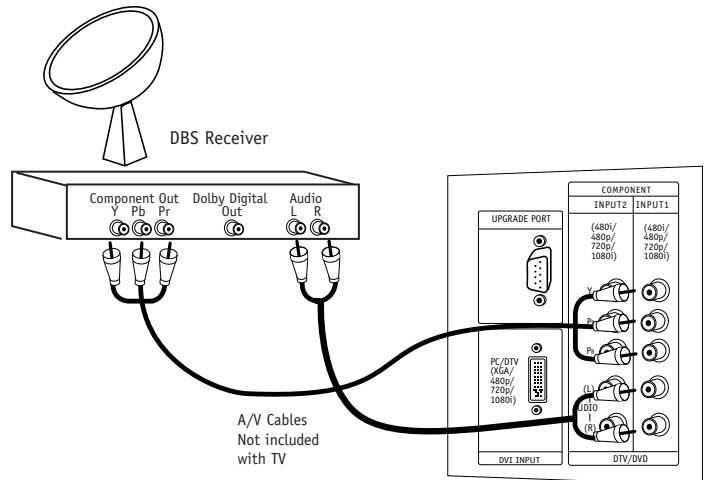
RGB-DTV/DVI-DTV Input

1

Find the audio and Y, P_B, P_R/RGB/DVI jacks on the back of your DBS receiver and connect them following the instructions provided with your equipment.

2

Connect these cables to your TV as shown.



- ◆ The DTV shows the sharpest picture in 720p mode.
- ◆ This TV supports HDCP (High-bandwidth Digital Content Protection) protocol for DVI-DTV (480p, 720p, 1080i) mode.
- ◆ Select RGB-DTV Source and press ENTER. Use UP/DOWN arrows to select the desired options (H-Position/ V-Position/Phase) and then use LEFT/RIGHT arrows to make appropriate adjustments.
- ◆ In RGB-DTV mode, H-Position/ V-Position/Phase are not adjustable if you choose either the POP or Twin picture modes.

RGB-DTV/DVI-DTV Input

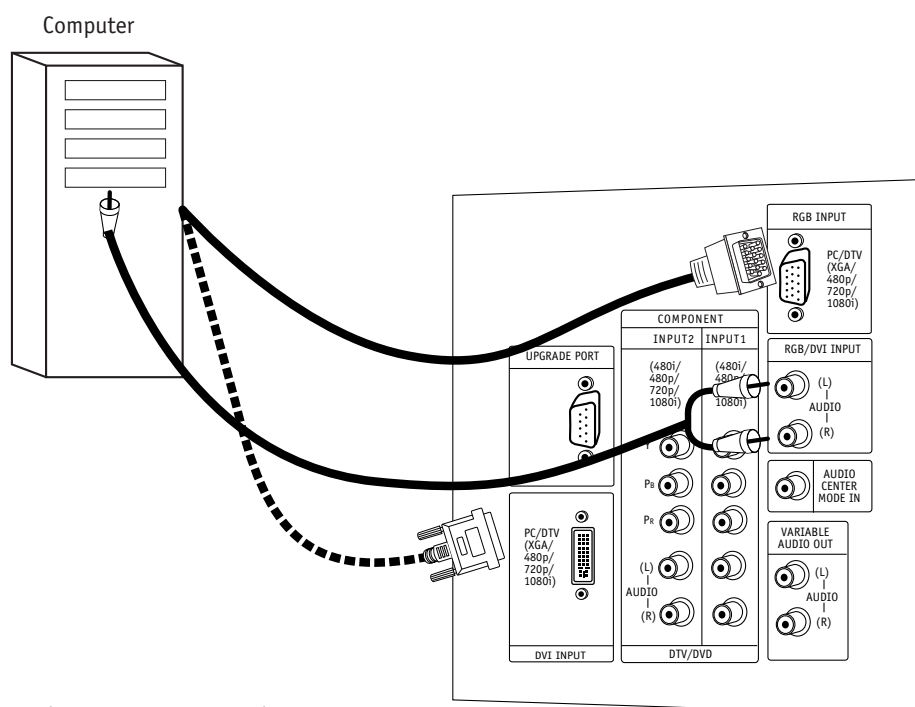
HD-SET TOP
1920x1080i
1280x720P
720x480P

Signal	Component1	Component2	RGB/DVI-DTV
480i	Yes	Yes	No
480p	Yes	Yes	Yes
720p	Yes	Yes	Yes
1080i	Yes	Yes	Yes

RGB-PC/DVI-PC Input

1 Find the audio and RGB or DVI jacks on the back of your PC and then connect them following the instructions provided with your equipment.

2 Connect these cables to your TV as shown.



◆ Select RGB-PC Source and press ENTER. Use UP/DOWN arrows to select the desired options (H-Position/V-Position/H-Size/V-Size/Phase) and then use LEFT/RIGHT arrow to make appropriate adjustments.

- **Horizontal position, Vertical position, Horizontal size, and Vertical size:** Based on the input mode (resolution), the adjustment ranges may change.

- **PHASE:** Removes any horizontal noise and clears up or sharpens the character images. Adjustment range is -15 ~ + 15.

◆ In DVI-PC mode, adjustments are only Vertical size, and Horizontal size.

◆ In RGB-PC/DVI-PC modes, for POP or Twin screen, H-Position/V-Position/H-Size/V-Size/Phase are not adjustable.

◆ Synchronization input form: Signals are separate.

RGB-PC/DVI-PC Input

MODE	Resolution	Horizontal	Vertical
Text	640x350	31.5KHz	70Hz
	640x480	31.5KHz	60Hz
VGA	640x480	37.9KHz	72Hz
	640x480	37.5KHz	75Hz
SVGA	800x600	35.2KHz	56Hz
	800x600	37.9KHz	60Hz
	800x600	48.1KHz	72Hz
	800x600	46.9KHz	75Hz
XGA	1024x768	48.4KHz	60Hz
	1024x768	56.5KHz	70Hz
	1024x768	68.7KHz	85Hz

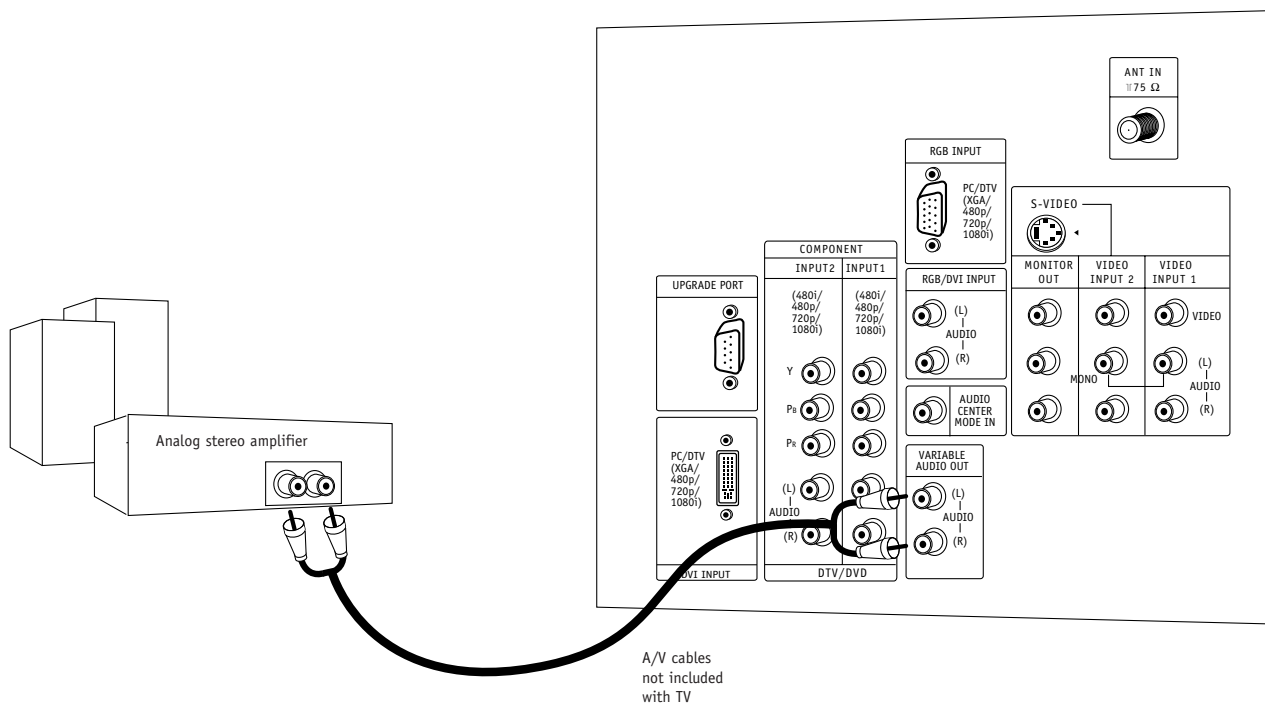
External Stereo Connections

Connect Left/Right Variable Audio Output to an external Audio Amplifier System.

1 Locate both Variable Audio Out jacks on the back of your TV and the Left/Right audio input jacks on the back of your stereo's amplifier.

2 Connect these jacks, making sure that they are connected correctly. (red=Right, white=Left.)

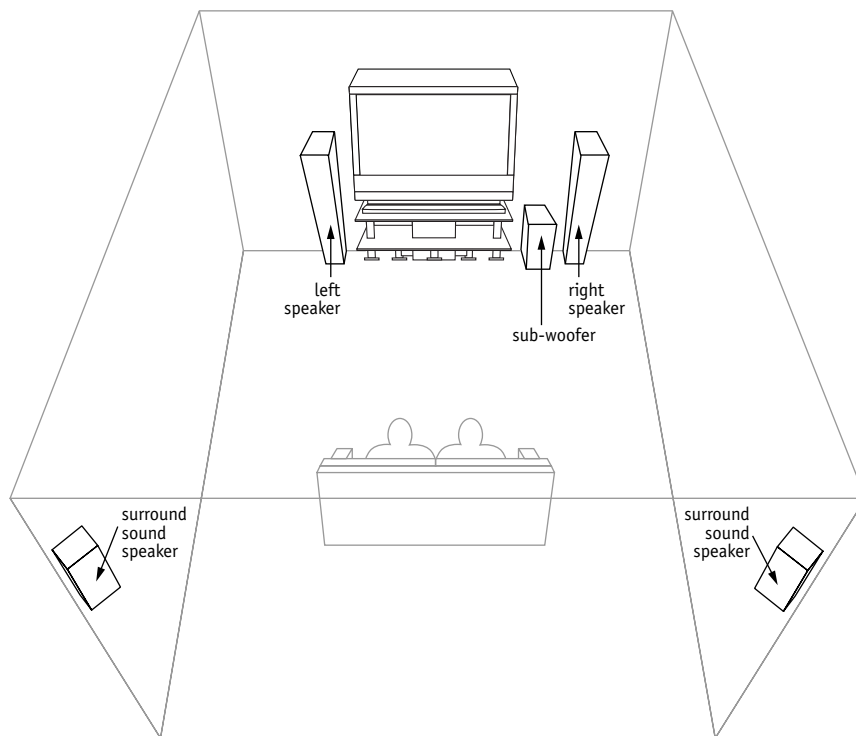
3 Adjust the sound on your stereo, according to directions provided with the amplifier.



Home Theater: Speaker Layout

This is a typical speaker layout. Any number of other speaker setups are possible, and some changes may be needed to maximize your sound. However, a Dolby Digital Receiver is required to hear 5.1 channel audio.

Left and right speakers on each side of the TV enhance separation. The TV's sound optional hookup "center mode in," makes the dialog sound as though it's coming directly from the TV. The rear surround sound speakers provide the majority of other sounds, like those from special effects in movies. Your sub-woofer generates ultra-low frequency sound, for rumbling low-end audio.



- ◆ *Sound is affected by speaker placement, so make sure nothing is in front of the speakers, and that they are aimed in appropriate directions.*
- ◆ *You have the option of turning the TV speakers on or off.*

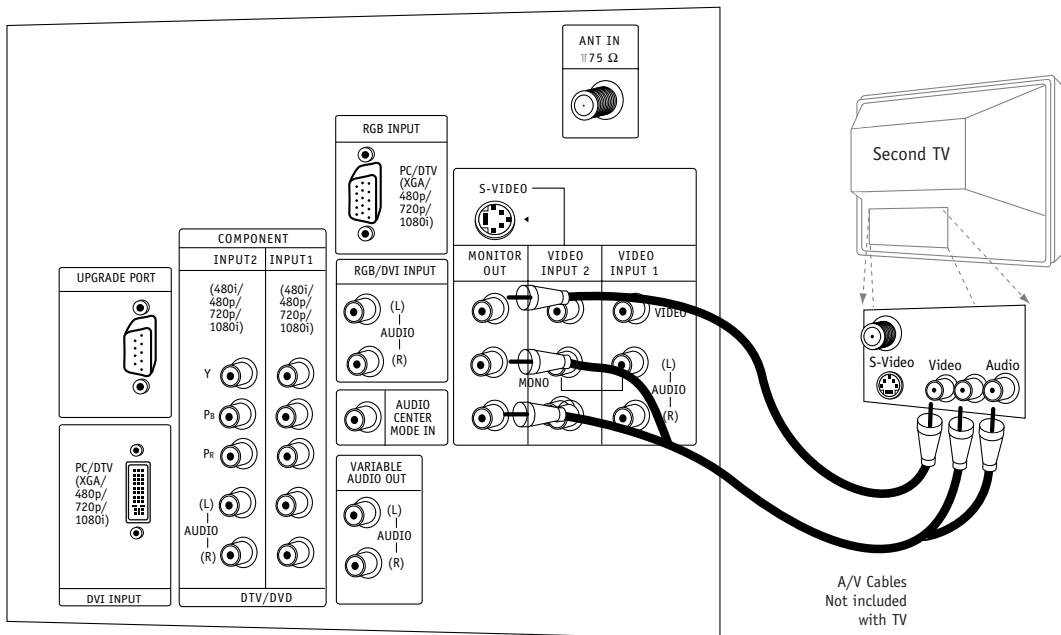
Monitor Out Setup

1

Your TV has a special signal output capability which allows you to hook up a second TV or monitor.

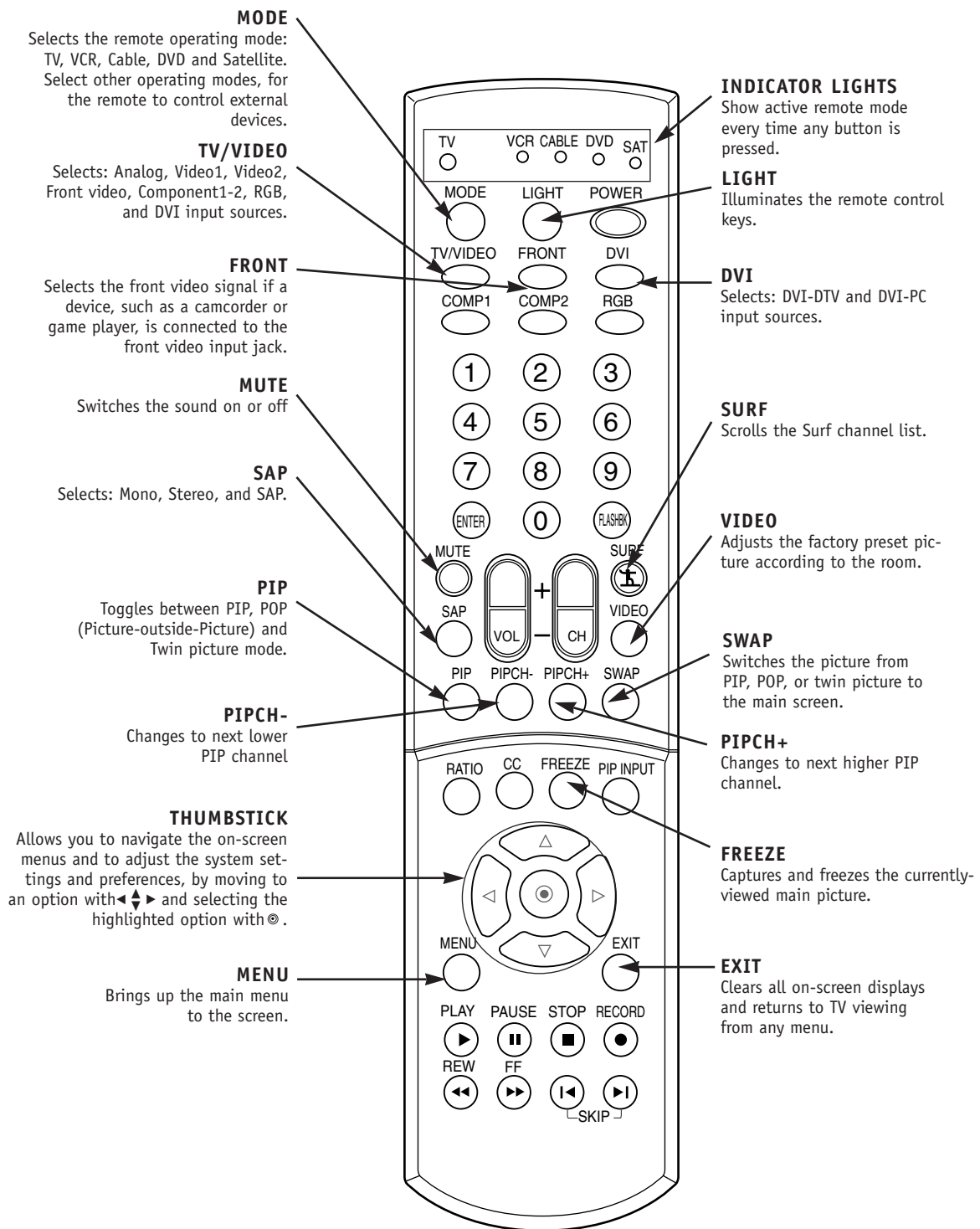
2

Just connect the second TV or monitor to the MONITOR OUT Audio/Video jacks located on the back of your TV. See the Operating Manual of the second TV or monitor for further details regarding that device's input settings.

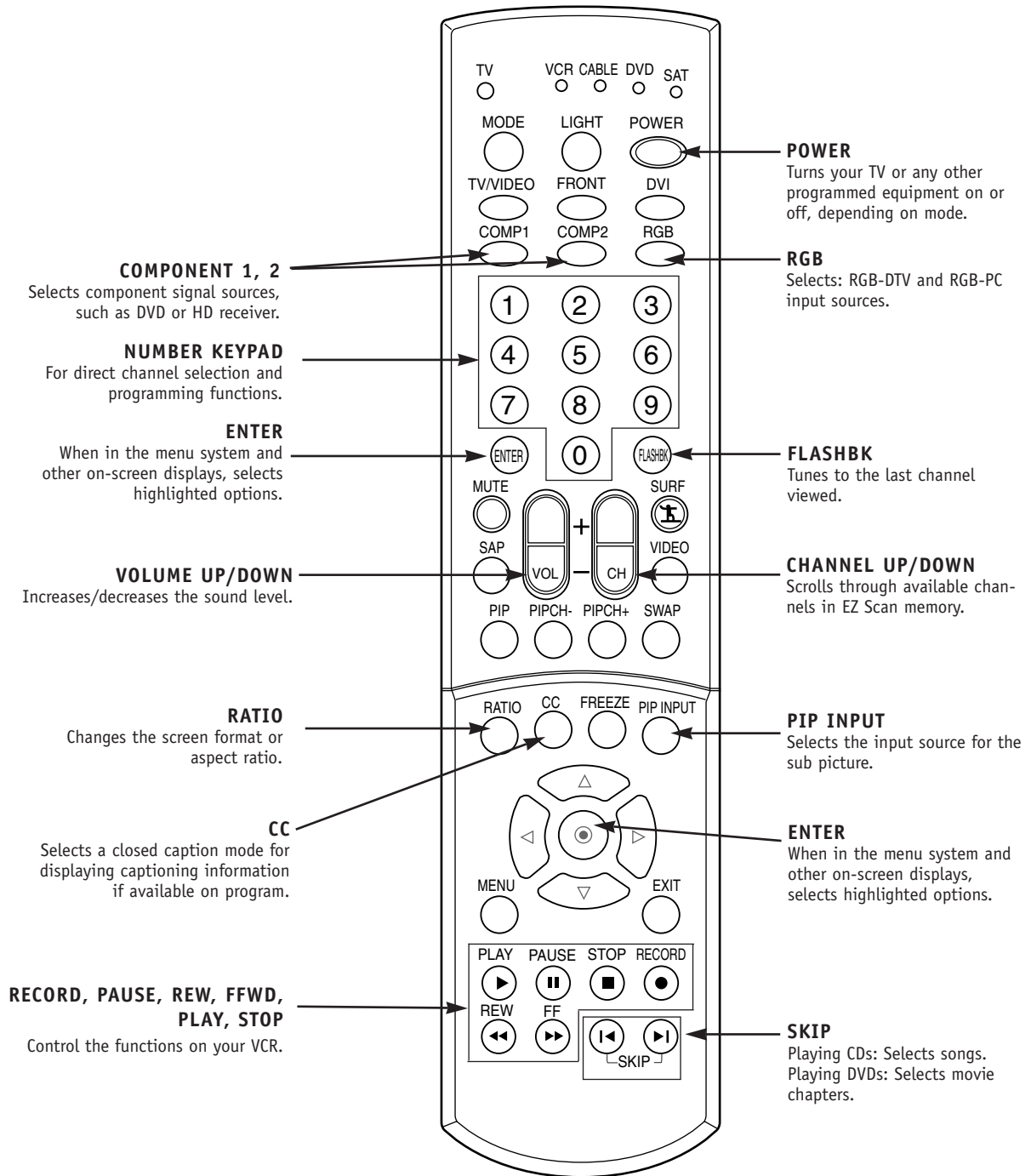


- ◆ *Component 1 - 2, RGB-DTV/PC, and DVI-DTV/PC input sources for main picture cannot be used for Monitor Out.*

Remote Control Functions in TV Mode

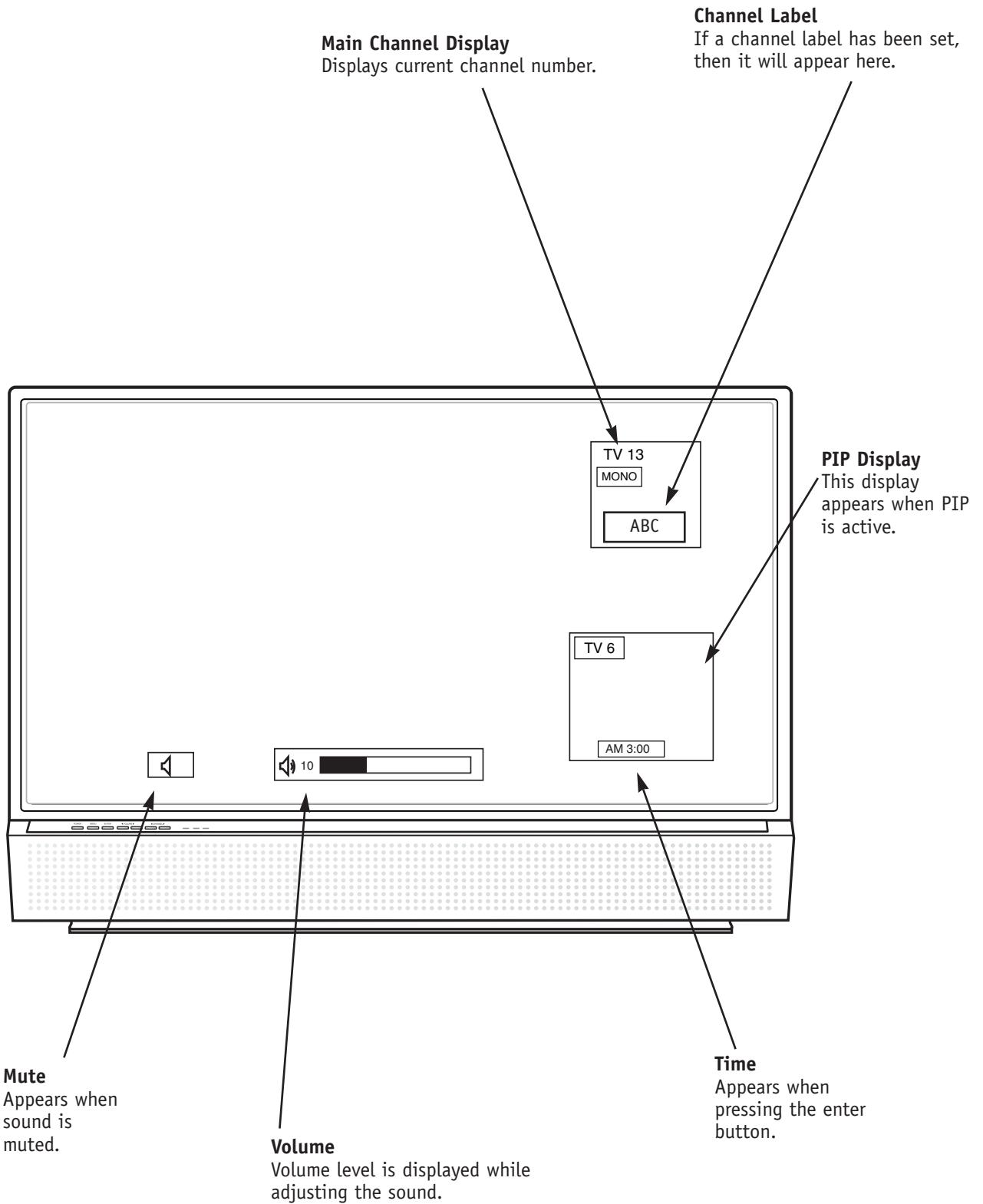


Remote Control Functions in TV Mode

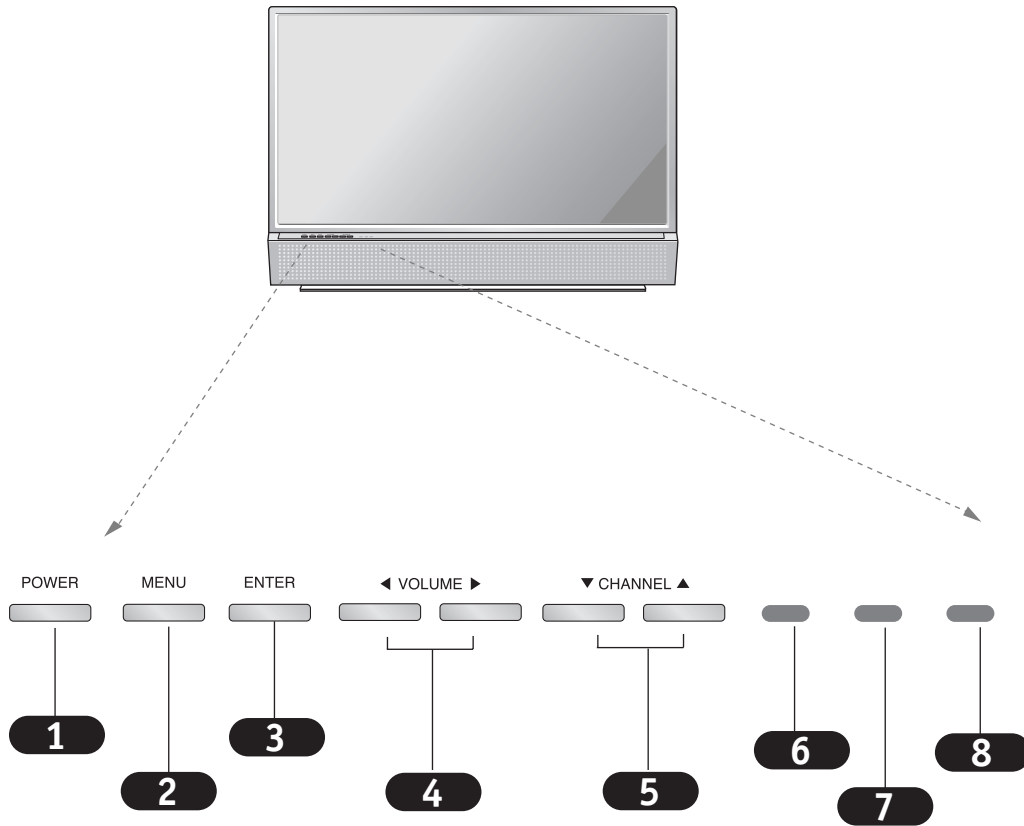


On-Screen Displays

This page describes your on-screen display and information banner options.



Front Panel Controls



- 1** POWER
- 2** MENU
- 3** ENTER (Same as ENTER button on your remote control)
- 4** VOLUME UP / DOWN
- 5** CHANNEL UP / DOWN
- 6** Operation indicator. (See page 7).
- 7** Lamp indicator. (See page 7).
- 8** Temperature indicator. (See page 7).

- ◆ See menu pages for instructions on using the on-screen menus.
- ◆ The POWER, MENU, ENTER, VOLUME, and CHANNEL buttons work just as they do on your remote control.
- ◆ If TV is moved from cold to normal room temperature, condensation may form inside TV, wait 6~7 hours for the TV to adjust to room temperature before turning it on.



- HDMI™, the HDMI logo and High-Definition Multimedia Interface are trademarks or registered trademarks of HDMI Licensing.
- This set can receive the High-Definition Multimedia Interface (HDMI) or Input of Digital Visual Interface(DVI).
- This set supports HDCP (High-bandwidth Digital Contents Protection) Protocol for the set (480p, 720p, 1080i) modes.
- When you Connect with HDMI/DVI Source Devices (DVD Player or Set Top Box or PC) supporting Auto HDMI/DVI function, automatically, support Plug & Play and then set the HDMI/DVI Source Devices (640 x 480p). After reading in HDMI/DVI Source Devices using Display Data Channel(DDC) Protocol, EDID stored in the set is used. If HDMI/DVI Source Devices not supported Auto HDMI/DVI is been, the Resolution is set, manually.
- To get the best picture quality, adjust the DVD Player or Set Top Box output resolution to 1280 x 720p.
- To get the best picture quality, adjust the PC graphics card to 1024 x 768, 60Hz.
- When Source Devices have DVI Output Connector, you must connect audio with separated cable.(Refer to <How to connect>)

How to connect

1. When Source Devices (DVD Player or Set Top Box) support HDMI.

- If Source Devices have HDMI Output Connector, Source Devices connect to the set with HDMI Cable .(not supplied with the product).
- If Source Devices support Auto HDMI, automatically, Source Devices divert output resolution in 1280 x 720p. But if not, resolution divert Manually Setting for reference Manual of Source Devices.
- To get the best picture quality, adjust the DVD Player or Set Top Box output resolution to 1280 x 720p.
- Because HDMI sends Digital Video and Audio with one cable, need not especial Audio Cable for using HDMI Cable.

2. When Source Devices (DVD Player or Set Top Box) supports DVI.

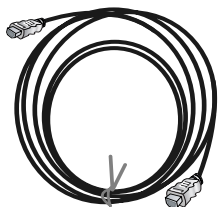
- If Source Devices have DVI Output Connector, Source Devices connect to the set with HDMI to DVI Cable (not supplied with the product).
- If Source Devices support Auto DVI, automatically, Source Devices divert output resolution in 1280 x 720p. But if not, resolution divert Manually Setting for reference Manual of Source Devices.
- To get the best picture quality, adjust the DVD Player or Set Top Box output resolution to 1280 x 720p.
- In this case, Audio use other cable. When Source Devices have Analog Audio Output Connector, RGB/DVI Audio Input of the set connect to Audio Cable (not supplied with the product). And then you can listen to normal Audio.

3. When PC supports DVI.

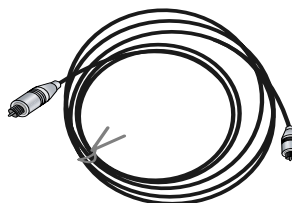
- If PC have DVI Output Connector, Source Devices connect to the set with HDMI to DVI Cable (not supplied with the product).
- To get the best picture quality, adjust the PC graphics card to 1024 x 768, 60Hz.
- Use the the set's HDMI/DVI (VIDEO) for video connections, depending on your PC connector.
- If the graphics card on the PC does not output analog RGB and DVI simultaneously, connect only one of either RGB Input or HDMI/DVI Input to display the PC on the set.
- If he graphics card on the PC does output analog RGB and DVI simultaneously, the set to either RGB Input or HDMI/DVI Input; (the other mode is set to Plug and Play automatically by the set.)
- Then, make the corresponding audio connections. If using a sound card, adjust the PC sound as required.
- In this case, Audio use other cable. When PC (or sound card of PC) have Analog Audio Output Connector, RGB/DVI Audio Input of the set connect to Analog Audio Cable (not supplied with the product). And then you can listen to normal Audio.

Reference

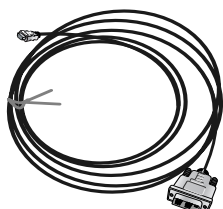
Cable sample



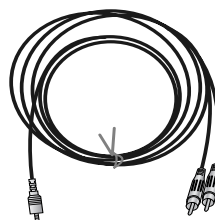
HDMI Cable
(not supplied with the product)



Analog Audio Cable (RCA type)
(not supplied with the product)



HDMI to DVI Cable
(not supplied with the product)



Analog Audio Cable (Stereo to RCA type)
(not supplied with the product)

How to use

1. Connect the HDMI/DVI Source Devices(DVD Player or Set Top Box or PC) and the set.
2. Turn on the display by pressing the POWER button on the set and HDMI/DVI Source Devices remote control.
3. Select HDMI/DVI Input source in Main Input option of PIP/DW menu.
4. Check the image on your set. There may be noise associated with the resolution, vertical pattern, contrast or brightness in HDMI/DVI Source Devices. If noise is present, change the HDMI/DVI Source Devices to another resolution, change the refresh rate or adjust the brightness and contrast on the menu until the picture is clear. If the refresh rate of the PC graphics card can not be changed, change the PC graphics card or consult the manufacturer of the PC graphics card.

Notes:

- Depending on the graphics card, DOS mode may not work if you use a HDMI to DVI Cable.
- Avoid keeping a fixed image on the set screen for a long period of time. The fixed image may become permanently imprinted on the screen. Use the Orbiter screen saver when possible.
- When Source Devices connected HDMI/DVI Input, output PC Resolution(VGA, SVGA, XGA), Position, Size may not fit to Screen. As shown in the lower picture, press the **MENU** button to adjust the screen Position of the set and contact a PC graphics card service center.
- When Source Devices connected HDMI/DVI Input output the set Resolution(480p, 720p, 1080i), the set Display fit EIA/CEA-861-B Specification to Screen. If not, refer to the Manual of HDMI/DVI Source Devices or contact your service center.
- In case HDMI/DVI Source Devices is not connected Cable or poor cable connection, "No Signal" OSD display in HDMI/DVI Input. And In case of Video Resolution not supported the set output in HDMI/DVI Source Devices, "No Signal" OSD display. Refer to the Manual of HDMI/DVI Source Devices or contact your service center.

SETUP Menu

Auto Program: Channel Search

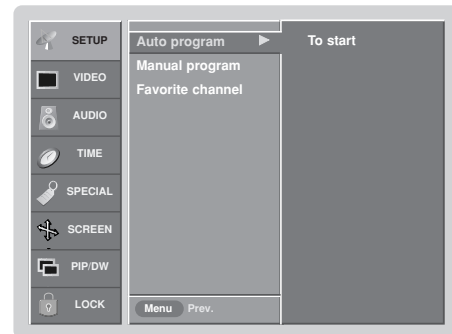
- Redo Auto Program if the DLP projection TV is ever moved to another location.
- Auto Program will search for channels only through the ANT IN jack.
- If channels numbers for broadcast over-the air TV and cable TV are duplicated where different channels have the same number, press the same number buttons again to toggle between:

Broadcast TV Channels

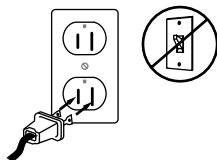


Cable TV Channels

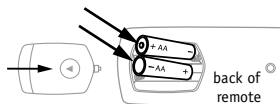
(For example, press 17 to go to the channel, press 17 again to go to the duplicated channel.)



1. Refer to pages 7-17 to connect external equipment to your TV. If you have done so, plug in your TV to a standard (non-switched) 120V 60Hz power outlet.



2. If you have done so, remove the back of the remote and install in two AA batteries. Make sure batteries are properly installed (check the +/- symbols).

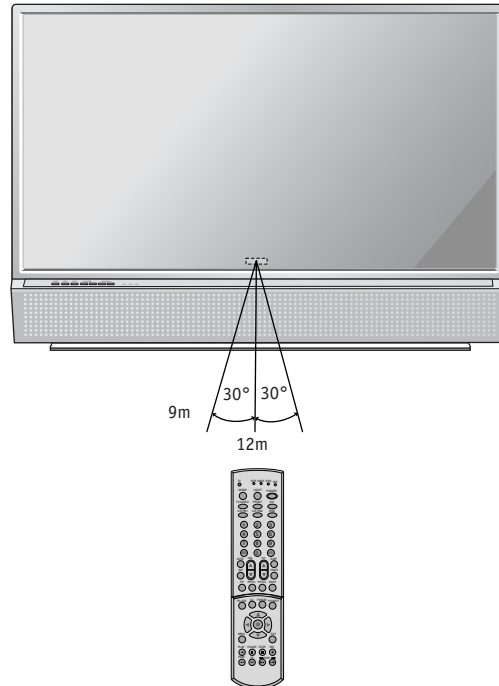


3. With the remote control in hand, press the POWER button to turn your TV on.
4. Press the **A.PROG** button and then press the ► button. AUTO PROGRAM starts the channel search.
If you want to stop auto programming, press the **ENTER** button. Only the channels found up to that time are memorized.
 - You can also select the **Auto program** option and do a channel search in the **SETUP** menu.



Caution: Never throw batteries into a fire.

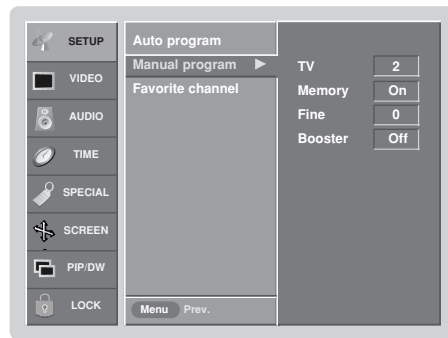
Remote control effective range



For optimum performance, aim the remote control directly at the TV and make sure there is no obstruction between the remote control and the TV.

- ◆ *If your Toshiba TV remote control does not operate all the features of your other device, use the original remote control for that device.*
- Dispose of batteries in a designated disposal area.*
- Attention should be drawn to the environmental aspects of battery disposal.*
- Do not mix battery types or combine used batteries with new ones.*
- If the remote control does not operate correctly, or if the operating range becomes reduced, replace both batteries with new ones.*
- If the batteries are dead or if you will not use the remote control for a long time, remove the batteries to prevent battery acid from leaking into the battery compartment.*

SETUP Menu



Manual Program: Adding/Deleting Channels

- You can add or delete channels from the channel scan manually.

1. Use the ▲ / ▼ or NUMBER buttons to select the channel number you want to add or delete.
2. Press the **MEMORY/ERASE** button.
3. Use the **MEMORY/ERASE** button to select **Memory** or **Erase**.
4. Press the **ENTER** button.

- You can also do **Manual program** with the **SETUP** menu.

Fine Tuning Adjustment

- Use this function to correct the picture's instability and condition if it is poor.

1. Press the **MENU** button and then use ▲ / ▼ button to select the **SETUP** menu.
2. Press the ► button and then use ▲ / ▼ button to select **Manual program**.
3. Press the ► button and then use ▲ / ▼ button to select **Fine**.
4. Use the ◀ / ▶ button to adjust the picture to your preference.
5. Press the **ENTER** button to save.

Notes

- To remove fine tuning from a channel, reprogram the finely-tuned channel with Auto program or Manual Program.
- If a finely-tuned channel is memorized, the color of the channel number changes to yellow.

Signal Reception Booster

- If TV signal reception is poor because you are in a fringe area, set Booster to On. If the picture condition is good, set Booster to Off.
- Adjustments for one channel don't affect the adjustment for other channels. Set booster to on or off for each channel separately.

1. Press the **MENU** button and then use ▲ / ▼ button to select the **SETUP** menu.
2. Press the ► button and then use ▲ / ▼ button to select Manual program.
3. Press the ► button and then use ▲ / ▼ button to select Booster.
4. Use ◀ / ▶ button to select **On** or **Off**.
5. Press the **ENTER** button to save.

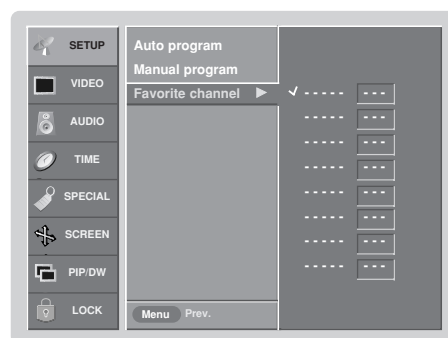
SETUP Menu

Favorite Channels Setup

- Favorite Channels is a convenient feature that lets you quickly scan up to 8 channels of your choice without having to wait for the TV to scan through all the in-between channels.

1. Press the **MENU** button and then use **▲/▼** button to select the **SETUP** menu.
2. Press the **▶** button and then use **▲/▼** button to select **Favorite channel**.
3. Press the **▶** button and then use **▲/▼** button to select the first favorite channel position.
4. Use the **◀/▶** button to set the desired channel number for first favorite channel.
5. Repeat steps 3 to 4 to memorize other favorite channels.
6. Press the **ENTER** button to save.

- To tune to a favorite channel, press the **FCR** (Favorite Channel Review) button repeatedly. The eight favorite channels appear on the screen in numerical order.



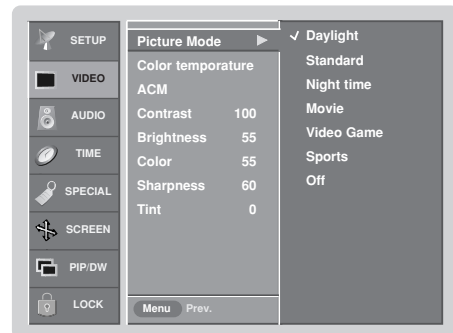
VIDEO Menu

Picture Mode

- Picture Mode adjusts the TV to the best picture appearance.
- If adjusting picture options (contrast, brightness, color, sharpness, or tint) manually, APC automatically changes to Off.

1. Press the **MENU** button and then use **▲ / ▼** button to select the **VIDEO** menu.
2. Press the **▶** button and then use **▲ / ▼** button to select **Picture Mode**.
3. Press the **▶** button and then use **▲ / ▼** button to set **Daylight, Standard, Night time, Movie, Video Game** and **Sports** settings are preset for good picture quality at the factory and cannot be changed.
4. Press the **ENTER** button to save.

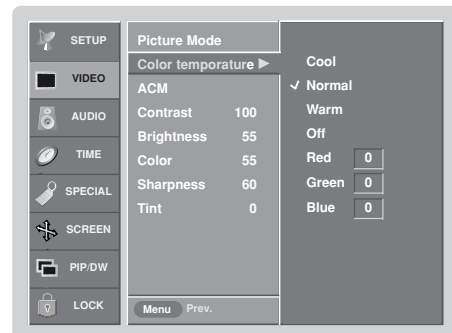
- **Picture Mode** Lets you choose a preset value for the picture settings.
- **Off** Lets you adjust the picture manually to your preferences.
- **Daylight** Increases the levels of all picture settings to fit daylight conditions.
- **Standard** Restores the picture levels to their original settings.
- **Night Time** Decreases the levels of all picture settings to fit Night Time conditions.
- **Movie** Adjusts Video settings to enhance Movie viewing. Contrast and Sharpness levels are lowered so that the picture looks warm and soft.
- **Video Game** Sets the picture settings to the levels that are more suitable to enjoy games. Color, Contrast, and Sharpness levels are lowered to reduce the amount of glare.
- **Sports** Sets the picture settings to the levels that are more suitable to view sporting events. Contrast and Color levels are raised so that an action scene appears clear and brilliant.



Color Temperature Control

Auto Color Temperature Control

- To initialize values (reset to default settings), select the **Normal** option.
1. Press the **MENU** button and then use **▲ / ▼** button to select the **VIDEO** menu.
 2. Press the **▶** button and then use **▲ / ▼** button to select **Color temperature**.
 3. Press the **▶** button and then use **▲ / ▼** button to select either: **Cool** (Preset), **Normal** (Default), or **Warm** (Preset).
 4. Press the **ENTER** button to save.



Manual Color Temperature Control (Color temperature set to Off option)

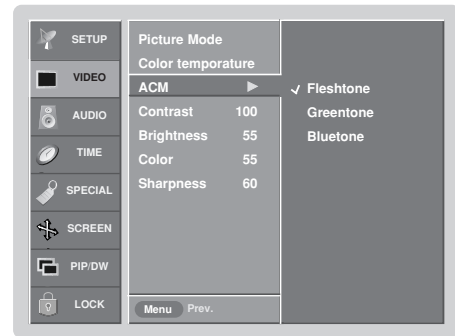
- You can adjust red, green, or blue to any color temperature you prefer.
1. Press the **MENU** button and then use **▲ / ▼** button to select the **VIDEO** menu.
 2. Press the **▶** button and then use **▲ / ▼** button to select **Color temperature**.
 3. Press the **▶** button and then use **▲ / ▼** button to select **Off**.
 4. Press the **▶** button and then use **▲ / ▼** button to select **Red, Green** or **Blue**.
 5. Use the **◀ / ▶** button to make appropriate adjustments.
 - The adjustment range of **Red, Green, and Blue** is -30 ~ +30.
 6. Press the **ENTER** button to save.

VIDEO Menu

ACM (Active Color Management)

- Adjust the **ACM** to select the desired skin colour option.
- This function works in the following mode:
TV, VIDEO1,2, COMPONENT1, 2, RGB-DTV, HDMI-DTV.
- It's not available to use this function in **XD off** mode.

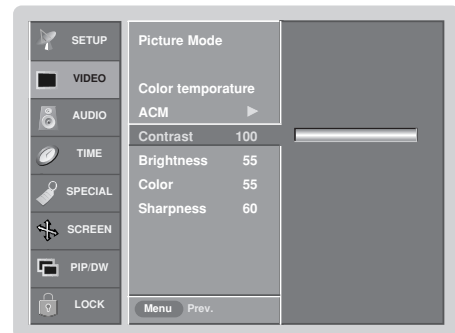
1. Press the **MENU** button and then use ▲ / ▼ button to select the **VIDEO** menu.
2. Press the ► button and then use ▲ / ▼ button to select **ACM**.
3. Press the ► button and then use ◀ / ▶ button to make appropriate adjustments.
4. Press the **ENTER** button to save.



Manual Picture Control (Picture Mode set to **off** option)

- You can adjust picture contrast, brightness, color, sharpness, and tint options to the levels you prefer.

1. Press the **MENU** button and then use ▲ / ▼ button to select the **VIDEO** menu.
2. Press the ► button and then use ▲ / ▼ button to select the desired picture option (**Contrast, Brightness, Color, Sharpness, Tint**).
3. Press the ► button and then use ◀ / ▶ button to make appropriate adjustments.
4. Press the **ENTER** button to save.




AUDIO Menu

Sound mode

- This function lets you enjoy the best sound without any special adjustment because the TV has the appropriate sound options based on the program content.
- If you adjust sound options (Treble and Bass) manually, DASP automatically changes to **Off**.

1. Press the **DASP** button repeatedly to select the appropriate sound setup as shown below.



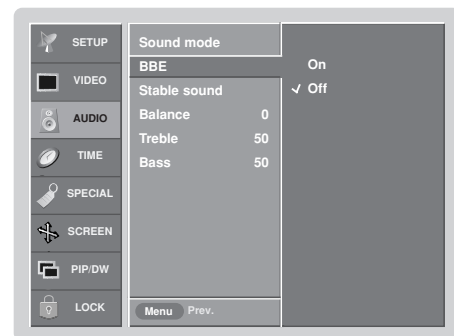
- You can also adjust **DASP** in the **AUDIO** menu.
- **SRS TSXT**, **Flat**, **Music**, **Movie**, and **Sports** are preset for good sound quality at the factory and cannot be changed.
-  is a trademark of SRS Labs, Inc.
- TruSurround technology is incorporated under license from SRS Labs, Inc.

BBE

- BBE High Definition Sound restores clarity and presence for better speech intelligibility and music realism.

1. Press the **MENU** button and then use **▲** / **▼** button to select the **AUDIO** menu.
2. Press the **▶** button and then use **▲** / **▼** button to select **BBE**.
3. Press the **▶** button and then use **▲** / **▼** button to select **On** or **Off**.
4. Press the **ENTER** button to save.

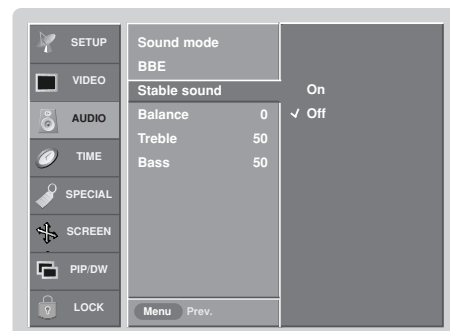
- **BBE**. Manufactured under license from BBE Sound, Inc.
- Treble, Bass or BBE aren't suitable for **SRS TSXT** mode.



Stable sound

- AVL maintains an equal sound level; even if you change channels.

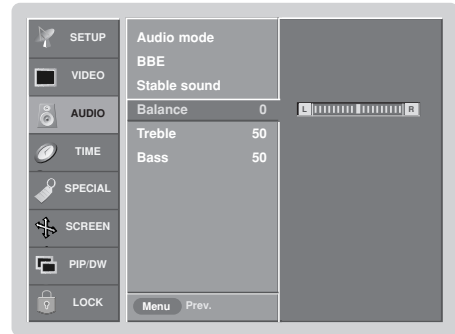
1. Press the **MENU** button and then use **▲** / **▼** button to select the **AUDIO** menu.
2. Press the **▶** button and then use **▲** / **▼** button to select **Stable sound**.
3. Press the **▶** button and then use **▲** / **▼** button to select **On** or **Off**.
4. Press the **ENTER** button to save.



AUDIO Menu

Manual Sound Control (**DASP off** option and balance)

1. Press the **MENU** button and then use ▲ / ▼ button to select the **AUDIO** menu.
2. Press the ► button and then use ▲ / ▼ button to select the desired sound option (**Balance, Treble, Bass**).
3. Press the ► button and then use ◀ / ▶ button to make appropriate adjustments.
4. Press the **ENTER** button to save.



Stereo/SAP Broadcasts Setup

- The TV can receive MTS stereo programs and any SAP (Secondary Audio Program) that accompanies the stereo program; if the broadcaster transmits one additional sound signal in addition to the original one.
- Mono: The primary language is heard from left and right speakers. Signal mode is mono.
- Stereo: The primary language is heard from left and right speakers. Signal mode is stereo.
- SAP: The secondary language is heard from left and right speakers in mono sound.

1. Press the **MTS** button repeatedly.



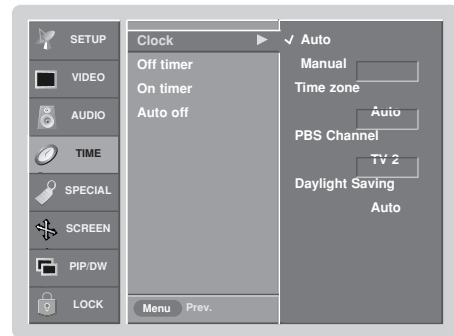
- Select mono sound mode if the signal is not clear or in poor signal reception areas.
- **Stereo, SAP** modes are available only if included on the broadcast signal.

TIME Menu

Auto Clock Setup

- Set the time automatically through the PBS broadcast signal.
- The PBS setup signal includes information for the current time.
- Set the clock manually, if the current time is set incorrectly programmed by the auto clock function.

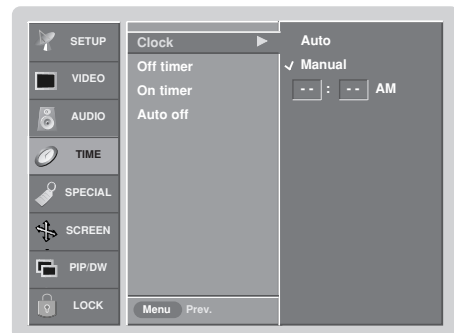
1. Press the **MENU** button and then use **▲ / ▼** button to select the **TIME** menu.
2. Press the **▶** button and then use **▲ / ▼** button to select **Clock**.
3. Press the **▶** button and then use **▲ / ▼** button to select **Auto**.
4. Press the **▶** button and then use **▲ / ▼** button to select the time zone for your viewing area. Your choices are: **Auto**, **E.S.T.** (Eastern Standard Time), **C.S.T.** (Central Standard Time), **M.S.T.** (Mountain Standard Time), **P.S.T.** (Pacific Standard Time), **Alaska**, and **Hawaii**.
5. Press the **▶** button and then use **▲ / ▼** button to set **PBS Channel**.
6. Press the **▶** button and then use **▲ / ▼** button to set Daylight Saving Time **Auto**, **On** or **Off**, depending on whether or not your viewing area observes Daylight Saving Time.
7. Press the **ENTER** button to save.



Manual Clock Setup

- If current time setting is wrong, reset the clock manually.

1. Press the **MENU** button and then use **D / E** button to select the **TIME** menu.
2. Press the **▶** button and then use **▲ / ▼** button to select **Clock**.
3. Press the **▶** button and then use **▲ / ▼** button to select **Manual**.
4. Press the **▶** button and then use **▲ / ▼** button to set the hour.
5. Press the **▶** button and then use **▲ / ▼** button to set the minutes.
6. Press the **ENTER** button to save.

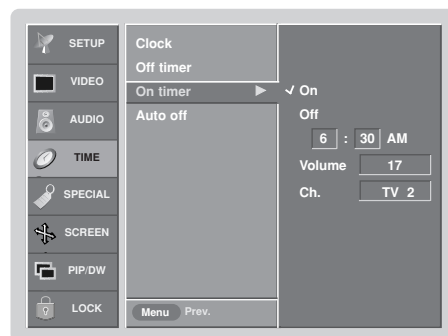


TIME Menu

On/Off Timer Setup

- Timer function operates only if current time has been set.
- Off-Timer function overrides On-Timer function if they are set both set to the same time.
- The TV must be in standby mode for the On-Timer to work.
- If you do not press any button within 2 hours after the TV turns on with the On Timer function, the TV will automatically revert to standby mode.

1. Press the **MENU** button and then use **▲ / ▼** button to select the **TIME** menu.
2. Press the **▶** button and then use **▲ / ▼** button to select **Off timer** or **On timer**.
3. Press the **▶** button and then use **▲ / ▼** button to select **On**.
 - To cancel **On/Off timer** function, select **Off**.
4. Press the **▶** button and then use **▲ / ▼** button to set the hour.
5. Press the **▶** button and then use **▲ / ▼** button to set the minutes.
6. **For only On timer function**
 - Press the **▶** button and then use **▲ / ▼** button to set the sound level at turn-on.
 - Press the **▶** button and then use **▲ / ▼** button to select the channel at turn-on.
7. Press the **ENTER** button to save.



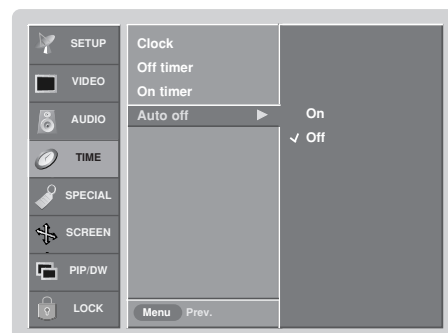
Sleep Timer

- The Sleep Timer turns the TV off at the preset time. Note that this setting is cleared when the TV is turned off.
1. Press the **SLEEP** button repeatedly to select the number of preset minutes. First the **zz** --- **Min** option appears on the screen, followed by the following sleep timer turn off times: 10, 20, 30, 60, 90, 120, 180, and 240 minutes.
 2. When the number of minutes you want is displayed on the screen, press the **ENTER** button. The timer begins to count down from the number of minutes selected.
 3. To check the remaining minutes before the TV turns off, press the **SLEEP** button once.
 4. To cancel the Sleep Timer, press the **SLEEP** button repeatedly until **zz** --- **Min** appears.

Auto Off

- If set to on and there is no input signal, the TV turns off automatically after 10 minutes.

1. Press the **MENU** button and then use **▲ / ▼** button to select the **TIME** menu.
2. Press the **▶** button and then use **▲ / ▼** button to select **Auto off**.
3. Press the **▶** button and then use **▲ / ▼** button to select **On** or **Off**.
4. Press the **ENTER** button to save.




SPECIAL Menu Options

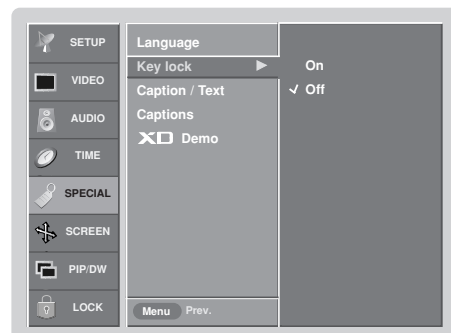
On-Screen Menu Languages

- The menus can be shown on the screen in the selected language. First select your language.
1. Press the **MENU** button and then use ▲ / ▼ button to select the **SPECIAL** menu.
 2. Press the ► button and then use ▲ / ▼ button to select **Language**.
 3. Press the ► button and then use ▲ / ▼ button to select your desired language.
From this point on, the on-screen menus will be shown in the language of your choice.
 4. Press the **ENTER** button to save.

Key Lock

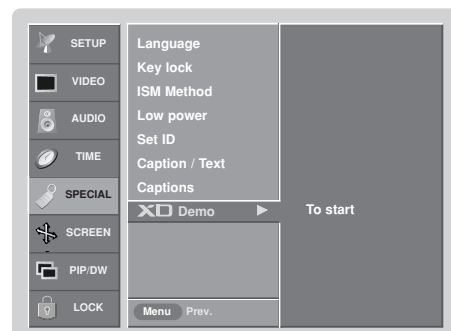
- The TV can be set up so that it can only be used with the remote control.
- This feature can be used to prevent unauthorized viewing by locking out the front panel controls.
- This TV is programmed to remember which option it was last set to even if you turn the TV off.

1. Press the **MENU** button and then use ▲ / ▼ button to select the **SPECIAL** menu.
2. Press the ► button and then use ▲ / ▼ button to select **Key lock**.
3. Press the ► button and then use ▲ / ▼ button to select **On** or **Off**.
4. Press the **ENTER** button to save.
 - With the Key lock On, the display '  Key lock' appears on the screen if any button on the front panel is pressed.



XD Demo

- Use it to see the difference between XD Demo on and XD Demo off.
1. Press the **MENU** button and then use ▲ / ▼ button to select the **SPECIAL** menu.
 2. Press the ► button and then use ▲ / ▼ button to select **XD Demo**.
 3. Press the ► button to begin **XD Demo**.
 4. Press the **MENU** button to stop **XD Demo**.



Closed Captions

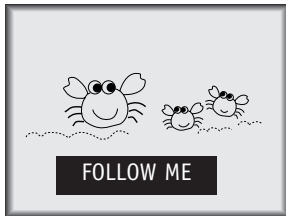
Closed captioning is a process which converts the audio portion of a television program into written words which then appear as subtitles on the television screen. Closed captions allow viewers to read the dialogue and narration of television programs.

Using Closed Captions

Captions are the subtitles of the dialogue and narration of television programs. For prerecorded programs, program dialogue can be arranged into captions in advance. It's possible to caption a live program by using a process called real-time captioning, which creates captions instantly. Real-time captioning is normally done by professional reporters using a machine shorthand system and computer for translation into English.

Captioning is an effective system for the hearing-impaired, and it can also aid in teaching language skills.

- The picture at left shows a typical caption.



Caption Tips

- Not all TV broadcasts include closed caption signals.
- Sometimes TV stations broadcast four different caption signals on the same channel. By selecting **CC 1 to CC 2**, you can choose which signal you view. **CC 1** is usually the signal with the captions, while **Another mode** might show demonstration or programming information.
- Your TV might not receive caption signals normally in the following situations.

1. Poor reception conditions are encountered:



• IGNITION:

Picture may flutter, drift, suffer from black spots, or horizontal streaking. Usually caused by interference from automobile ignition systems, neon lamps, electrical drills, and other electrical appliances.



• GHOSTS:

Ghosts are caused when the TV signal splits and follows two paths. One is the direct path and the other is reflected off tall buildings, hills or other objects. Changing the direction or position of the antenna may improve reception.



• SNOW:

If your receiver is located at the weak, fringe area of a TV signal, your picture may be marred by small dots. It may be necessary to install a special antenna to improve the picture.

2. An old, bad, or illegally recorded tape is being played.
3. Strong, random signals from a car or airplane interfere with the TV signal.
4. The signal from the antenna is weak.
5. The program wasn't captioned when it was produced, transmitted, or taped.

Captions

1. Use the **CAPTION** button repeatedly to select Caption **Off**, **EZ Mute**, or **On**.
 - **EZ Mute** shows the selected captions option (if available on program) when the TV sound is muted
2. Press the **ENTER** button to save.

Caption/Text

1. Press the **MENU** button and then use **▲ / ▼** button to select the **SPECIAL** menu.
2. Press the **▶** button and then use **▲ / ▼** button to select **Caption / Text**.
3. Press the **▶** button and then use **▲ / ▼** button to select caption: **CC1**, **CC2**, **CC3**, **CC4**, **Text1**, **Text2**, **Text3**, or **Text4**.

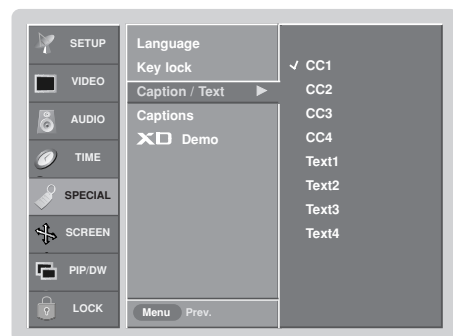
• CAPTION

The term for the words that scroll across the bottom of the TV screen; usually the audio portion of the program provided for the hearing impaired.

• TEXT

The term for the words that appear in a large black frame and almost cover the entire screen; usually messages provided by the broadcaster.

4. Press the **ENTER** button to save.

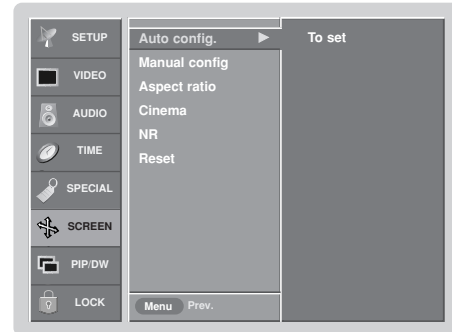


SCREEN Menu

Auto Adjustment

- RGB (PC) mode only; This function doesn't work for RGB-DTV mode.
- Automatically adjusts picture position and minimizes image shaking.
- After adjustment, if the image is still not correct, your TV is functioning properly but needs further adjustment.
- The **Auto config.** and **Manual config.** are not active in DVI mode.

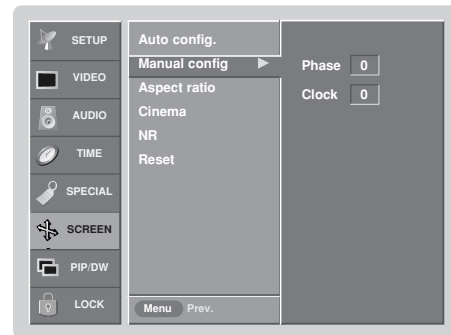
1. Press the **MENU** button and then use **▲ / ▼** button to select the **SCREEN** menu.
2. Press the **▶** button and then use **▲ / ▼** button to select **Auto config.**.
3. Press the **▶** button to run Auto configure.
 - When **Auto config.** has finished, **OK** will be shown on screen.
 - If the position of the image is still not correct, try Auto adjustment again.
4. In RGB (PC) mode, if the image needs to be adjusted more after using **Auto config.**, you can make further adjustments with the **Manual config.** option.



Manual Configure (RGB-PC mode only)

- If the image still isn't clear after auto adjustment and especially if characters are still jittery, adjust the picture Phase manually.
- To correct the screen size, adjust **Clock**.

1. Press the **MENU** button and then use **▲ / ▼** button to select the **SCREEN** menu.
2. Press the **▶** button and then use **▲ / ▼** button to select **Manual config.**.
3. Press the **▶** button and then use **▲ / ▼** button to select **Phase** or **Clock**.
4. Use the **◀ / ▶** button to make appropriate adjustments.
 - The **Phase** adjustment range is 0 ~ 30.
 - The **Clock** adjustment range is -127 ~ +128.
5. Press the **ENTER** button to save.



Setting Picture Format

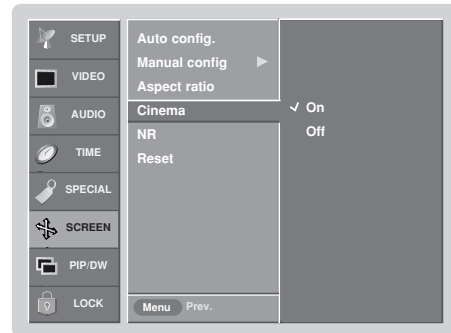
- Caution: If a 4:3 fixed image is on the screen for a long time, it may remain visible.
- Set every aspect ratio for TV, Video, Component 480i sources.
- Use 4:3, or 16:9 for other RGB-PC and DVI-PC sources.
- Horizon is not available for Component (480p,720p,1080i), DTV (480p,720p,1080i) sources.

1. Press the **ARC** button repeatedly to select the desired picture format. You can also adjust **ARC** in the **SCREEN** menu.
 - **4:3**
Choose **4:3** when you want to view a picture with an original 4:3 aspect ratio, with black bars appearing at both the left and right sides.
 - **16:9**
Choose **16:9** when you want to adjust the picture horizontally, in a linear proportion to fill the entire screen.
 - **Theater wide 1**
Choose **Horizon** when you want to adjust the picture in a non-linear proportion, that is, more enlarged at both sides, to create a spectacular view.
 - **Theater wide 2**
- Choose **Zoom** when you want to view the picture without any alteration. However, the top and bottom portions of the picture will be cropped.

SCREEN Menu

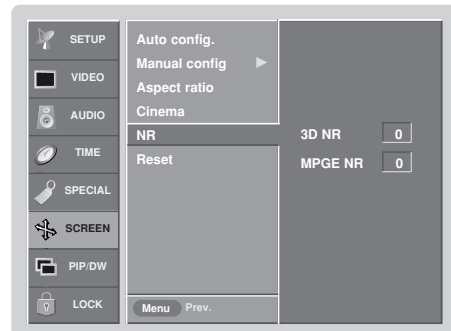
Cinema Mode Setup (TV, Video1-2 and Component 480i mode only)

- Sets up the TV for the best picture appearance for viewing movies.
1. Press the **MENU** button and then use ▲ / ▼ button to select the **SCREEN** menu.
 2. Press the ► button and then use ▲ / ▼ button to select **Cinema**.
 3. Press the ► button and then use ▲ / ▼ button to select **On** or **Off**.
 4. Press the **ENTER** button to save.



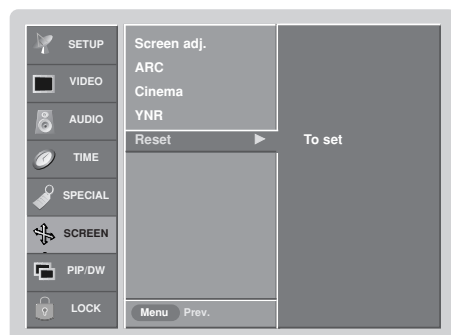
NR (Noise Reduction)

- You can select **3D NR** or **MPEG NR** to reduce the picture noise which may appear on the screen during watching the TV.
1. Press the **MENU** button and then use ▲ / ▼ button to select the **SCREEN** menu.
 2. Press the ► button and then use ▲ / ▼ button to select **NR**.
 3. Press the ► button and then use ▲ / ▼ button to select **3D NR** or **MPEG NR**.
 4. Press the ◀ / ▶ button to make appropriate adjustments.
 5. Press the **ENTER** button to save.



Initializing (Reset to original factory value)

- Reset is unique to each function: Manual config., Position, Split zoom, PIP position and sub picture size for double window.
 - Use the Reset option to initialize the adjusted settings.
1. Press the **MENU** button and then use ▲ / ▼ button to select the **SCREEN** menu.
 2. Press the ► button and then use ▲ / ▼ button to select **Reset**.
 3. Press the ► button.
 - You can initialize Position, Split zoom, PIP Transparency, PIP position, PIP size and sub picture size for double window.



Parental Lock Setup

Parental Control can be used to block specific channels, ratings and other viewing sources.

The Parental Control Function (V-Chip) is used to block program viewing based on the ratings sent by the broadcasting station. The default setting is to allow all programs to be viewed. Viewing can be blocked by the type of program and by the categories chosen to be blocked. It is also possible to block all program viewing for a time period. To use this function, the following must be done :

1. Set ratings and categories to be blocked.
2. Specify a password
3. Enable the lock

V-Chip rating and categories

Rating guidelines are provided by broadcasting stations. Most television programs and television movies can be blocked by TV Rating and/or Individual Categories. Movies that have been shown at the theaters or direct-to-video movies use the Movie Rating System (MPAA) only.

Ratings for Movies previously shown in theaters:

Movie Ratings :

- Blocking Off (Permits all programs)
- G (General audience)
- PG (Parental guidance suggested)
- PG-13 (Parents strongly cautioned)
- R (Restricted)
- NC-17 (No one 17 and under admitted)
- X (Adult only)

If you set PG-13 : G and PG movies will be available , PG-13, R, NC-17 and X will be blocked.

Ratings for Television programs including made-for-TV movies :

General TV Ratings:

- Blocking Off
- TV-G (general audience) (individual categories do not apply)
- TV-PG (parental guidance suggested)
- TV-14 (14 years and older)
- TV-MA (mature audience)

Children TV Ratings:

- Blocking Off
- TV-Y (youth) (individual content categories do not apply)
- TV-Y7 (youth, 7 years and up)

Content Categories:

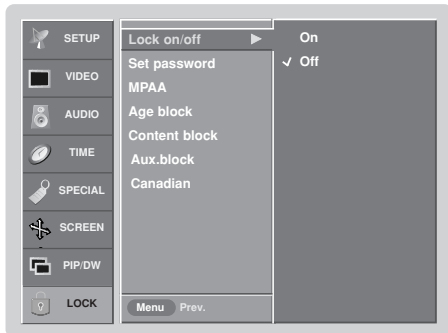
- Dialog - sexual dialogue (applies to TV-PG, TV-14)
- Language - adult language (applies to TV-PG, TV-14, TV-MA)
- Sex scenes - sexual situations (applies to TV-PG, TV-14, TV-MA)
- Violence (applies to TV-PG, TV-14, TV-MA)
- F Violence - fantasy violence (applies only to TV-Y7)

Aux. Block

- Video 1, 2 (On, Off)
- Component 1, 2 (On, Off)
- RGB, DVI (On, Off)

Parental Lock

- Lets you set up blocking schemes to block specific channels, ratings, and external viewing sources.
- A password is required to gain access to this menu if the Lock System is turned on



1. Press the **MENU** button and then use **▲ / ▼** button to select the **LOCK** menu. Then, press the **▶** button

- If Lock is already set, enter the password as requested.
 - The TV is set up with the initial password "0-0-0-0".
2. Use the **▲ / ▼** button to choose from the following **LOCK** Menu options. Once the option is selected, change the settings to your preference.
 - **Lock on/off:** Activates or disables the blocking scheme you set up previously.
 - **Set Password:** Change the password by inputting a new password twice.
 - **MPAA (Movie Rating):** Blocks movies according to the movie ratings limits specified, so children cannot view certain movies. You can set the ratings limit by blocking out all the movies with the ratings above a specified level. Keep in mind that the movie ratings limit only applies to movies shown on TV, not TV programs, such as soap operas.
 - **TV Rating-Children:** Prevents children from watching certain children's TV programs, according to the ratings limit set. The children rating does not apply to other TV programs. Unless you block certain TV programs intended for mature audiences in the TV Rating - sub menu, your children can view those programs.
 - **TV Rating-General:** Based on the ratings, blocks certain TV programs that you and your family do not want to view.
 - **Aux. Block:** Enables you to select a source to block from the external source devices you have hooked up.

3. Press the **ENTER** button to save.

Note

- If you ever forget your password, key in '7', '7', '7', '7' on the remote control.

PIP (Picture-in-Picture) / Twin Picture Operation

PIP lets you view 2 different inputs (sources) on your monitor screen at the same time. One source will be large, and the other source (PIP) will show a smaller inset image.

Twin Picture splits the screen into 2, allowing 2 pictures to be shown on the TV screen at the same time. Each source is given half the screen.

Watching PIP

Press the PIP button to show the sub picture.
Each press of PIP changes the PIP options as shown below.

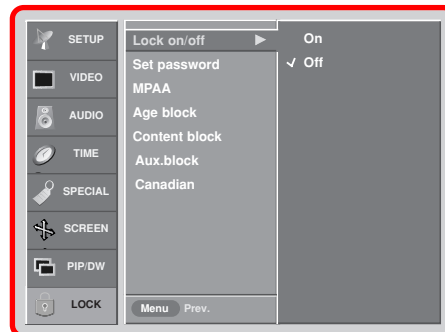


PIP / Twin Picture Source Selection

Changes the picture source for the Sub Picture image so you can watch your TV, cable TV, VCR, or any other devices that are connected to your TV.

Using the menu

- 1 Press the MENU button on the remote control, then use the UP/DOWN arrow button to select the Setup menu.
- 2 Press ENTER or the RIGHT arrow button to access the Setup menu.
- 3 Use the UP/DOWN arrows to select the Sub Input option.
- 4 Press ENTER or the RIGHT arrow to access the Sub Input menu, then use the UP/DOWN arrow button to select the source. Your choices are: Ant/Cable, Video 1, Video 2, Front Video.
- 5 Press EXIT to save and return to TV viewing or press the LEFT arrow to save and return to the previous Menu.



- ◆ Do not display a fixed image on the screen for long periods of time. Doing so may cause image burn-in.
- ◆ Not all sources are available for PIP.

Using the PIP INPUT button on the remote control

- 1 Use the PIP INPUT button to select the input source for the sub picture.
Each time you press PIP INPUT button, you toggle between Ant/Cable, Video 1, Video 2, and Front Video.

PIP (Picture-in-Picture) / Twin Picture Operation

Selecting PIP / Twin Picture Channels

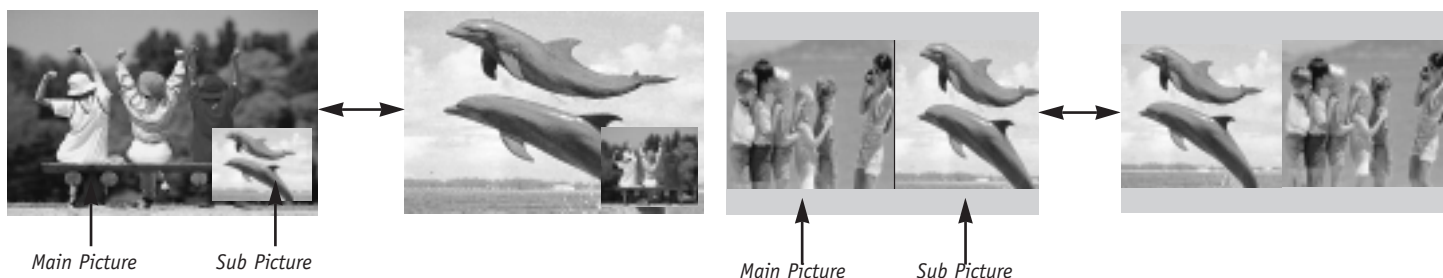
- 1 Press the PIP button on the remote control to select PIP or Twin picture mode. Select the Ant/Cable source with the PIP INPUT button.
- 2 Use the PIPCH-/PIPCH+ button to select a channel for the sub picture.

Swapping Pictures

Press the SWAP button.

Each time you press the SWAP button, you switch the Main and Sub pictures.

It's available to SWAP the Main and Sub picture in Ant/Cable, video 1-2, and front video input sources for Main picture.



Moving the Sub Picture (PIP mode only)

In the PIP mode, each press of the UP/DOWN/LEFT/RIGHT arrow buttons will move the sub picture to a different position on the screen.

POP (Picture-outside-Picture)

Use POP to search the pictures of all the programmed channels one-by-one on the 3 POP screen display, while the main screen remains the current channel.

- 1 Press PIP button on the remote control with the POP image on the screen to activate POP (Picture-outside-Picture) mode. The pictures of all the programmed channels are searched with the 3 POP screen, as shown to the right.
 - Press SWAP, to enlarge the selected channel being searched on the POP screen to view it on the Main screen. (It's available to use this function in Ant/Cable input source for Main and Sub picture.)



- 2 Press the EXIT button to exit POP mode.

◆ Run EZ Scan channel search before using POP mode.

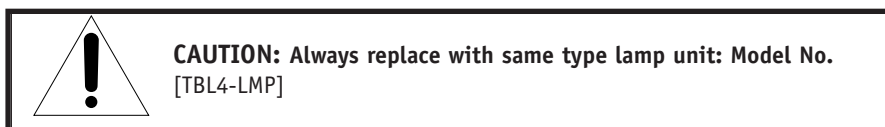
Lamp Unit Replacement

- To obtain a replacement lamp unit:
- In the U.S.:

	Web	Contact
In warranty	www.tacp.toshiba.com/service	Call toll-free 1-800-631-3811.
Out of warranty	www.ceaccessories.toshiba.com	Consult your consumer electronics dealer for availability.

- In Canada, contact a Toshiba parts distributor by directing your web browser to www.toshiba.ca Click "Home Entertainment," and then click "Support."

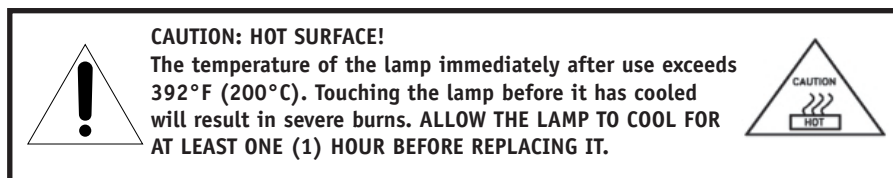
Use the replacement lamp unit model listed below only. Using any other lamp may cause damage to the TV and/or lamp. Model name is TBL4-LMP.



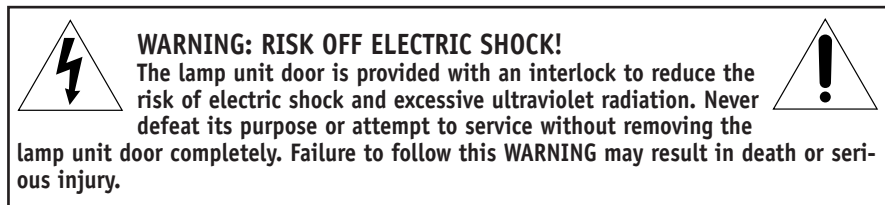
You must replace the lamp when:

- The image gets darker or starts to deteriorate.
- Follow the instructions to replace the lamp, as shown below.

1. Turn off the TV and unplug the power cable.
2. STOP! Allow the lamp to cool for at least one (1) hour before replacing it.



3. Remove the 2 retaining screws on the lamp cover with a Phillips type screwdriver. Remove the lamp door completely from the TV.



4. Remove the two retaining screws on the lamp case with using Phillips type screwdriver.
5. Lift up the fixed wire handle of the lamp.

Lamp Unit Replacement(Contd.)

6. Pull out the handle slowly and remove the lamp case.
7. Insert the new lamp gently into the correct position. Make sure it is inserted correctly.

Note:

- Never subject the lamp unit to excessive shock.
- Never touch the lamp unit glass or otherwise get it dirty.
Doing so may affect the image quality and reduce the service life of the lamp. See "Cleaning the lamp unit glass" at below.

Cleaning the lamp unit glass

If you accidentally touch the lamp unit glass or otherwise get it dirty, wipe it with a lint-free lens cleaning cloth (such as a cloth for cleaning camera lenses or eyeglasses).



CAUTION: NEVER clean a hot lamp with any type of flammable liquid or aerosol cleaning agent. Many ordinary cleaning agents (such as glass cleaners) contain chemicals that may be flammable at certain temperatures. If the lamp unit is not allowed to cool for at least one (1) hour, such chemicals may ignite.

8. Using a manual Phillips screwdriver (Do Not use an electric screwdriver), tighten the screws you removed in step 3.
9. Replace the lamp cover and tighten the cover screws.



NOTE: Make sure the lamp unit and door are installed securely; otherwise, the TV may not turn on.

10. Plug in the power cord and turn on the TV. After the initial warmup period (which may take up to several seconds for full picture brightness), the TV should operate normally. If any of the following conditions exist, turn off the TV, unplug the power cord, and repeat steps 1–9 to ensure that the lamp unit and lamp unit door are installed correctly:

- The lamp indicator flashes green.
- No picture
- Dark picture
- TV will not turn on

If, after repeating steps 1–10, the problem still exists:

- In the U.S., call Customer Service at 1-800-631-3811.
- In Canada, locate the nearest Toshiba authorized service depot by directing your web browser to www.toshiba.ca; click "Home Entertainment," and then click "Support."

Lamp Unit Replacement(Contd.)

Lamp unit disposal

- Place the used lamp unit in the empty box from the new lamp unit.
- Keep the lamp unit out of reach of children and pets.



CAUTION: Always handle the lamp unit with care. The lamp unit in this TV was designed for safe replacement by consumers; however, if the lamp unit is subjected to intentional or accidental abuse (such as excessive mechanical abuse or handling by children or pets), the unit may break, exposing sharp edges or pinch points.

- Dispose of the used lamp unit by the approved method for your area.



NOTE: The lamp unit contains mercury, the disposal of which may be regulated due to environmental considerations. For disposal or recycling information, contact your local authorities or the Electronics Industries Alliance (www.eiae.org).

Programming the Remote

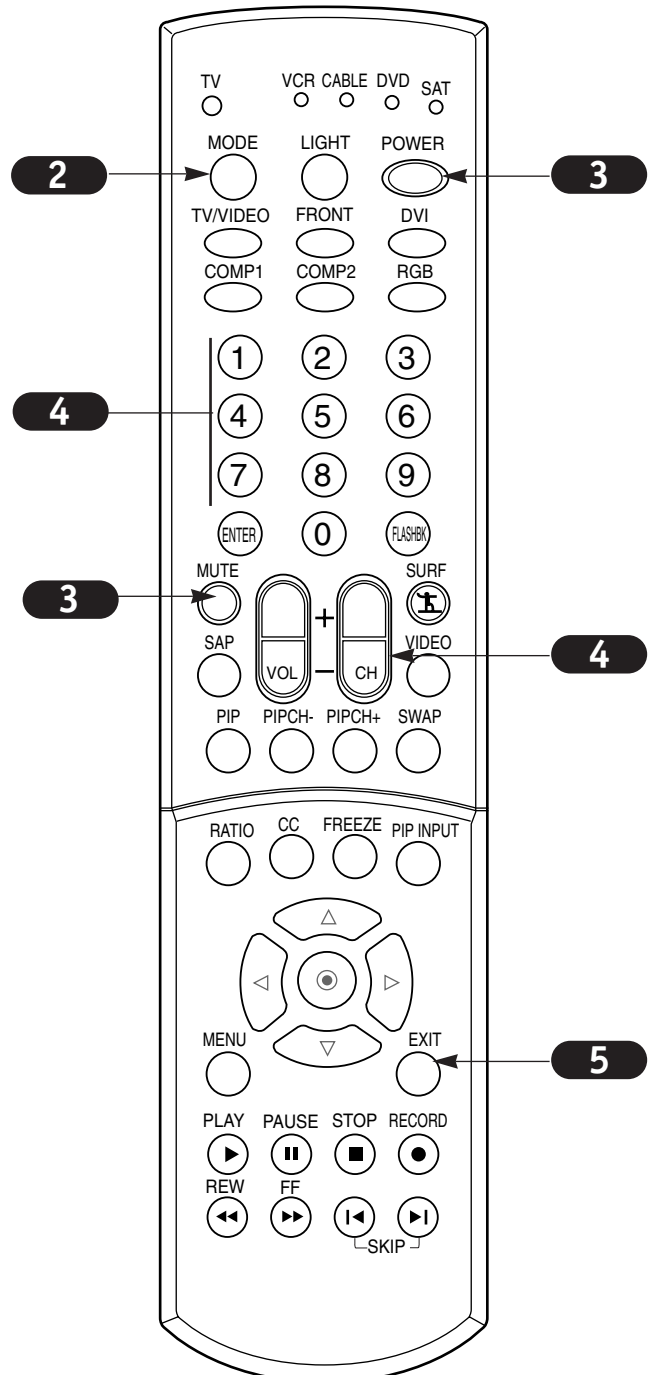
The remote control for your HD receiver is a multi-brand or universal remote control that can be programmed to operate most remote-control-lable devices of other manufacturers.

Note: The remote control may not be able to control all models of other brands.

- 1** Test your remote control.
To find out whether your remote control can operate the device without programming, turn on the device such as a the VCR and press the corresponding mode button (VCR) on the remote control while pointing at the device. Test the **POWER** and **CH +/-** buttons to see if the device responds properly. If not, the remote requires programming to operate the device.
- 2** Turn on the device to be programmed. Then press the corresponding mode button on the remote control.
- 3** Press the **POWER** button and the **MUTE** button simultaneously. Now the remote control is ready to program the code for the corresponding device.
- 4** There are two ways to find the right code for the device.

A. If you press the **CH +/-** buttons repeatedly, the codes will change one at a time. Press the **POWER** button after each code change. If the right code is found, the device will turn off.

B. Enter a code number using the number buttons on the remote. The right code numbers for the corresponding component can be found on the following pages. Again, if the code is correct, the device will turn off.
- 5** Press the **EXIT** button to store the program.
- 6** Test the remote control functions to see if the device responds properly. If not, repeat from step 2.



Programming Codes: TVs

TVs

Brand	Codes	Brand	Codes	Brand	Codes	Brand	Codes
A MARK	112 143	GOLDSTAR	004 102 106		019 024 040	Sharp	004 014 019
ADMIRAL	072 081 161		110 112 113		056 130 132		022 028 029
AKAI	006 146		116 119 122	NIKEI	134		081 143 170
AMPRO	073 167		127 137 143	ONKING	043		175
AMSTRAD	052	HALL MARK	004 116	ONWA	043	SIEMENS	088
ANAM	043 054 056	HITACHI	004 006 009	OPTONICA	019 081	SIGNATURE	072
	080 104 108		010 011 012	PANASONIC	034 056 080	SONY	041 070 079
	112 115 118		023 041 075		092 164		085 126 139
	121 131		143 158 163	PHILCO	003 004 006	SOUNDESIGN	147 185
AOC	004 006 058		166		024 043 056		003 004 028
	112	INFINITY	164		059 060 063		043 116
BLAUPUNKT	088	INKEL	129	PHILIPS	003 004 005	SPECTRICON	112
CANDLE	002 003 004	JBL	164		006 038 059	SSS	004 043
	006	JCPENNY	004 006 008		070 093 143	SUPRE MACY	002
CAPEHART	058		009 024 030		160 164	SYLVANIA	003 004 006
CETRONIC	043		065 101 143		006 018 023		044 059 060
CITIZEN	002 003 004		156 160		025 027 116		063 064 116
	006 043 101	JENSEN	013	PIONEER	135 176	TANDY	127 140 160
	103 143	JVC	034 038 070		164	TATUNG	164
CLASSIC	043		083 145		164	TECHNICS	081
CONCERTO	004	KEC	043		135 176	TECHWOOD	056 062
CONTEC	039 043 050	KENWOOD	006 070	PORTLAND	004 143	TEKNIKA	034 080 084
	051	KLOSS	002 059	PROSCAN	144 160 161		004
CORONADO	143	KMC	143		165 167		002 003 004
CRAIG	043 054	KTV	006 043 143	PROTON	004 058 116		006 024 028
CROWN	043 143		154		131 143 171		031 043 072
CURTIS MATHES	004 006 101	LG	255		173		077 101 103
	116 143	LODGENET	072	QUASAR	034 056 092		143
CXC	043	LOGIK	072	RADIO SHACK	019 043 047	TELEFUNKEN	037 046 086
DAEWOO	004 016 017	LUXMAN	004		116 127 143		087
	043 044 055	LXI	007 015 052	RCA	004 006 023	TELERENT	072
	071 076 103		081 160 164		024 056 065	TERA	172
	107 111 114		166		074 144 152	TMK	004 116
	117 120 123	MAGNAVOX	003 004 006		156 160 161	TOSHIBA	007 015 030
	125 127 128		022 059 060		165		040 051 062
	136 143		061 063 064	REALISTIC	007 019 043		101 138
DAYTRON	004 116 143		127 143 160		047	TOTEVISION	143
DYNASTY	043		164	ROCTEC	186	UNIVERSAL	008 009
DYNATECH	062	MARANTZ	006 077 164	RUNCO	168 169	VIDEO CONCEPTS	146
ELECTROHOME	024 077 143	MATSUI	164	SAMPO	004 006 058	VIDIKRON	174
EMERSON	004 005 006	MEMOREX	004 007 072		116	VIDTECH	004 116
	028 043 047		116	SAMSUNG	004 050 089	WARDS	004 008 009
	048 050 051	METZ	088		101 105 113		019 028 060
	096 116 143	MGA	004 006 024		116 127 133		061 063 064
	151 153 154		028 042 049		137 143 160		072 074 116
	155		077 116	SANYO	007 020 021		143 164
FISHER	007 057	MINERVA	088		033 039 053	YAMAHA	004 006
FUNAI	028 043	MITSUBISHI	004 006 024		057 082 166	YORK	004 116
FUTURETECH	043		028 040 042	SCOTT	004 028 043	YUPITERU	043
GE	004 006 008		109 116 124		048 116 143	ZENITH	001 072 073
	009 034 056		146	SEARS	004 007 015		095 103 157
	073 074 091	MTC	004 006 062		028 030 057	ZONDA	112
	116 130 144		101		082 094 101		
	155 160 161	NAD	015 025		116 143 160		
	165	NEC	006 007 016				

Programming Codes: VCRs

VCRs

Brand	Codes	Brand	Codes	Brand	Codes	Brands	Codes
AIWA	034		055 060 130		034 040 041	TOTEVISION	040 101
AKAI	016 043 046		150 152		062 063 107	UNITECH	040
	124 125 146	KENWOOD	014 034 039		109 140 144	VECTOR RESEARCH	012
AMPRO	072		043 047 048		145 147	VICTOR	048
ANAM	031 033 103	LG	255	REALISTIC	003 008 010	VIDEO CONCEPTS	012 034 046
AUDIO DYNAMICS	012 023 039	LLOYD	034		014 031 033	VIDEOSONIC	040
	043	LXI	003 009 013		034 040 053	WARDS	003 013 017
BROKSONIC	035 037 129		014 017 034		054 101		024 031 033
CANON	028 031 033		101 106	RICO	058		034 040 053
CAPEHART	108	MAGIN	040	RUNCO	148		054 131
CRAIG	003 040 135	MAGNAVOX	031 033 034	SALORA	014	YAMAHA	012 034 039
CURTIS MATHES	031 033 041		041 067 068	SAMSUNG	032 040 102		043
DAEWOO	005 007 010	MARANTZ	012 031 033		104 105 107	ZENITH	001 034 048
	064 065 108		067 069		109 112 113		056 058 072
	110 111 112	MARTA	101		115 120 122		080 101
	116 117 119	MATSUI	027 030		125		
DAYTRON	108	MEI	031 033	SANSUI	022 043 048		
DBX	012 023 039	MEMOREX	003 010 014		135		
	043		031 033 034	SANYO	003 007 010		
DYNATECH	034 053		053 072 101		014 102 134		
ELECTROHOME	059		102 134 139	SCOTT	017 037 112		
EMERSON	006 017 025	MGA	045 046 059		129 131		
	027 029 031	MINOLTA	013 020	SEARS	003 008 009		
	034 035 036	MITSUBISHI	013 020 045		010 013 014		
	037 046 101		046 049 051		017 020 031		
	129 131 138		059 061 151		042 073 081		
	153	MTC	034 040		101		
FISHER	003 008 009	MULTITECH	024 034	SHARP	031 054 149		
	010	NEC	012 023 039	SHINTOM	024		
FUNAI	034		043 048	SONY	003 009 031		
GE	031 033 063	NORDMENDE	043		052 056 057		
	072 107 109	OPTONICA	053 054		058 076 077		
	144 147	PANASONIC	066 070 074		078 149		
GO VIDEO	132 136		083 133 140	SOUNDESIGN	034		
GOLDSTAR	012 013 020		145	STS	013		
	101 106 114	PENTAX	013 020 031	SYLVANIA	031 033 034		
	123		033 063		059 067		
HARMAN KARDON	012 045	PHILCO	031 034 067	SYMPHONIC	034		
HITACHI	004 018 026	PHILIPS	031 033 034	TANDY	010 034		
	034 043 063		054 067 071	TATUNG	039 043		
	137 150		101	TEAC	034 039 043		
INSTANTREPLAY	031 033	PILOT	101	TECHNICS	031 033 070		
JCL	031 033	PIONEER	013 021 048	TEKNIKA	019 031 033		
JCPENNY	012 013 015	PORTLAND	108		034 101		
	033 040 066	PULSAR	072	THOMAS	034		
	101	QUARTZ	011 014	TMK	006		
JENSEN	043	QUASAR	033 066 075	TOSHIBA	008 013 042		
JVC	012 031 033		145		047 059 082		
	043 048 050	RCA	013 020 033		112 131		

Programming Codes: SAT/DVDs

SAT

Brand	Codes	Brand	Codes	Brand	Codes	Brand	Codes
ALPHASTAR DSR	123		027 133 134	PERSONAL CABLE	117	VIEWSTAR	115
AMPLICA	050	GENERAL INSTRUMENT	003 004 016	PHILIPS	071	WINEGARD	128 146
BIRDVIEW	051 126 129		029 031 059	PICO	105	ZENITH	001 081 082
BSR	053		101	PRESIDENT	019 102		083 084 091
CAPETRONICS	053	HITACHI	139 140	PRIMESTAR	030 110 111		120
CHANNEL MASTER	013 014 015	HOUSTON TRACKER	033 037 039	PROSAT	072		
	018 036 055		051 057 104	RCA	066 106		
CHAPARRAL	008 009 012	HUGHES	068	REALISTIC	043 074		
	077	HYTEK	053	SAMSUNG	123		
CITOH	054	JANIEL	060 147	SATELLITE SERVICE CO	028 035 047		
CURTIS MATHES	050 145	JERROLD	061		057 085		
DRAKE	005 006 007	KATHREIN	108	SCIENTIFIC ATLANTA	032 138		
	010 011 052	LEGEND	057	SONY	103		
	112 116 141	LG	255	STARCAST	041		
DX ANTENNA	024 046 056	LUTRON	132	SUPER GUIDE	020 124 125		
	076	LUXOR	062 144	TEECOM	023 026 075		
ECHOSTAR	038 040 057	MACOM	010 059 063		087 088 090		
	058 093 094		064 065		107 130 137		
	095 096 097	MEMOREX	057	TOSHIBA	002 127		
	098 099 100	NEXTWAVE	028 124 125	UNIDEN	016 025 042		
	122	NORSAT	069 070		043 044 045		
ELECTRO HOME	089	PACE SKY SATELLITE	143		048 049 078		
EUROPLUS	114	PANASONIC	060 142		079 080 086		
FUJITSU	017 021 022	PANSAT	121		101 135 136		

DVD

Brand	Codes	Brand	Codes	Brand	Codes	Brand	Codes
APEX DIGITAL	022		025	PHILIPS	013	THOMPSON	005 006
DENON	020 014	MAGNAVOX	013	PIONEER	004 026	TOSHIBA	019 008
GE	005 006	MARANTZ	024	PROCEED	021	YAMAHA	009 018
GOLDSTAR	010 016 025	MITSUBISHI	002	PROSCAN	005 006	ZENITH	010 016 025
HARMAN KARDON	027	NAD	023	RCA	005 006		
JVC	012	ONKYO	008 017	SAMSUNG	011 015		
LG	001 010 016	PANASONIC	003 009	SONY	007		

Programming Codes: Cable Boxes

CATV

Brand	Codes	Brand	Codes	Brand	Codes	Brand	Codes
ABC	003 004 039		008 009 010	REGAL	049 050		032 035
	042 046 052		052 069 074	REGENCY	057	VIEWSTAR	012 015 018
	053	LG	255	REMBRANT	025		086 087 088
ANTRONIK	014	M-NET	037	RK	091		089
ARCHER	005 007 014	MACOM	033	SAMSUNG	030 068	ZENITH	001 060 093
	024	MAGNAVOX	010 012 064	SCIENTIFIC ATLANTA	003 011 041		
CABLE STAR	026		079		042 043 045		
CENTURION	092	MEMOREX	001		046		
CENTURY	007	MOVIE TIME	028 032	SHERITECH	022		
CITIZEN	007	NSC	015 028 038	SIGNAL	030		
COLOUR VOICE	065 090		071 073	SIGNATURE	052		
COMBANO	080 081	OAK	016 031 037	SL MARX	030		
COMTRONICS	019 030		053	SPRUCER	047 078		
DIAMOND	023	PANASONIC	044 047	STARCOM	002 004 008		
EAGLE	020 030 040	PARAGON	001		009		
EASTERN	057 062 066	PHILIPS	006 012 013	STARGATE	008 030		
ELECTRICORD	032		020 065 085	SYLVANIA	067		
GE	072		090	TADIRAN	030		
GEMINI	008 022 025	PIONEER	034 051 052	TANDY	017		
	054		063 076	TEXSCAN	029 067		
GI	052 074	POST NEWS WEEK	016	TOCOM	039 040 056		
GOLDEN CHANNEL	030	PRUCER	059	TOSHIBA	001		
HAMLIN	049 050 055	PTS	011 048 071	UNIKA	007 014 024		
HITACHI	052 055		072 073 074	UNITED CABLE	004 053		
HOSPITALITY	070 077	PULSAR	001	UNIVERSAL	005 007 014		
JERROLD	002 003 004	RCA	047		024 026 027		

Troubleshooting

Some quick and easy tips to fixing problems yourself.

SYMPTOMS	POSSIBLE SOLUTIONS
Snowy picture and unclear sound.	<ul style="list-style-type: none">• Check your antenna connection or location.• Check your cable input.• Check to see if the TV/VCR button on your VCR has the TV selected.
Multiple images or 'ghost shadows.'	<ul style="list-style-type: none">• Check your antenna direction and/or location.• Check your cable input.• Make sure the cable from your antenna to your TV is properly connected.
Interference: Sharp lines across the screen and unclear sound.	<p><i>The following may cause image problems or distortion: Electrical appliances, powerful lights, cars, trucks; computers or portable phones; medical equipment</i></p> <ul style="list-style-type: none">• If possible increase the distance between your TV and the offending appliance. Or shut one of them off.
Normal picture but no sound.	<ul style="list-style-type: none">• Check sound level.• Make sure the TV sound is not muted.• Try another channel. The problem may be the broadcast, not your TV.• Are the Audio cables properly installed?• Are the wires for external speakers (if you have external speakers) properly installed?• Make sure your speakers are turned on in the Audio menu.• If your audio mode is set to SAP, that channel may not have a SAP program.
No picture and unclear sound.	<ul style="list-style-type: none">• Are you in TV or cable tuning mode, and should be in the other?• Make sure output channels on all A/V equipment are on the same channel (3 or 4).• Check that all connections are tight.
No picture and no sound.	<ul style="list-style-type: none">• Is the AC power cord plugged in?• Check that your AC power outlet works. (Test it by plugging in something else or try another outlet.)• Make sure your brightness and audio controls are set properly.• Try another channel. The problem may be with the broadcast.
No color, but the sound is O.K.	<ul style="list-style-type: none">• Check the color settings in the Video menu.• Try another channel. The problem may be with the broadcast.
Picture has a big black box on it, but the sound is O.K.	<ul style="list-style-type: none">• The Caption option may be in Text mode. Select CC 1 in the Caption/Text menu or Off in the Caption menu.
Picture has two horizontal black bars, one on top and one on bottom.	<ul style="list-style-type: none">• Your program is in letterbox. This means that the shape of your TV is a square, but the program is a rectangle. Think of the bars as empty space the program doesn't fill; not picture that's blocked out. Because this format is a direct representation of film as you see it in the movies, you are actually seeing MORE of the program when you see those bars.
Missing Secret code	<ul style="list-style-type: none">• If you forget the secret code, press the remote control Button '7', '7', '7' and '7' when the display asks you to enter the secret code.

Troubleshooting (Contd.)

Remote control doesn't work.	<ul style="list-style-type: none">• Make sure the batteries are fresh and installed properly.
Menu options can't be changed or selected.	<ul style="list-style-type: none">• Try unplugging your TV for a few minutes, then plug it back in.
No picture or sound when any non-cable source is selected.	<ul style="list-style-type: none">• Check to see if the source equipment has been turned on.• Make sure that the connections are secure on the back of your TV and on the source equipment.
Weak or no Stereo Sound when using a stereo VCR.	<ul style="list-style-type: none">• Check to see if all the connections are secure.• Look in the Audio mode menu to see if all the settings are correct.• You are using channel 3 or 4 to view your VCR. No stereo sound is present under that decision.
The PIP inset is black or lacks contrast.	<ul style="list-style-type: none">• Check to be sure that the PIP source is turned on.• You might want to adjust the PIP picture settings under the PIP menu.• Check that all the wires are connected properly.• Check to see if your input source for PIP is set correctly.
The PIP inset is "snow" when the source is Antenna.	<ul style="list-style-type: none">• Look to see if the TV/VCR button on your VCR has the TV selected or change the PIP to another source.
Time is incorrect.	<ul style="list-style-type: none">• Reset clock manually.
Picture Interference	<ul style="list-style-type: none">• Even though you may be getting cable service, the signal may be weak, which means the quality of your picture may suffer due to other factors. If there are problems with the image on your TV, consult the Troubleshooting guide on the following pages. You may also want to contact your cable service provider to determine if the problem is from the cable service.

Product Specifications

Model

44SZ8R-UE	Horizontal Size (Inches)	41.7
	Height (Inches)	30.1
	Depth (Inches)	14
	Weight (lbs.)	69

Power Requirement	AC 120V, 60Hz
-------------------	---------------

Television System	American TV Standard, NTSC, ATSC with STB
-------------------	---

Television Channels	VHF: 2 - 13 UHF: 14 - 69 CATV: 1 - 125
---------------------	--

Power Consumption (W)	240W
-----------------------	------

Antenna	75 ohm External Terminal for VHF/UHF
---------	--------------------------------------

Audio Output (W)	12W x 2
------------------	---------

External Input/Output Ports	A/V input (3 set) A/V output (1 set) S-Video input (2) Component input (2 set) RGB input (1) DVI input (1) RGB/DVI audio input (1 set) Variable audio output (1 set) Audio center mode input (1) Calibration port (1)
-----------------------------	--

TOSHIBA AMERICA CONSUMER PRODUCTS, L.L.C.

HEAD OFFICE: 82 TOTOWA ROAD, WAYNE, NJ 07470, U.S.A.

NATIONAL SERVICE DIVISION: 1420-B TOSHIBA DRIVE, LEBANON, TN 37087, U.S.A.

TOSHIBA OF CANADA LTD.

HEAD OFFICE: 191 McNABB STREET, MARKHAM, ONTARIO, L3R 8H2, CANADA – TEL: (905) 470-5400

SERVICE CENTERS:

TORONTO: 191 McNABB STREET, MARKHAM, ONTARIO L3R 8H2, CANADA – TEL: (905) 470-5400

MONTREAL: 18050 TRANS CANADA, KIRKLAND, QUEBEC, H9J 4A1, CANADA – TEL: (514) 390-7766

VANCOUVER: 22171 FRASERWOOD WAY, RICHMOND, B.C., V6W 1J5, CANADA – TEL: (604) 303-2500

MANUFACTURED BY

TOSHIBA AMERICA CONSUMER PRODUCTS, L.L.C.

ColorStream, StableSound, and TheaterWide are registered trademarks of Toshiba America Consumer Products, L.L.C.

The DLP logo and DLP medallion are trademarks of Texas Instruments.

Dolby is a registered trademark of Dolby Laboratories.

PRINTED IN KOREA

TOSHIBA