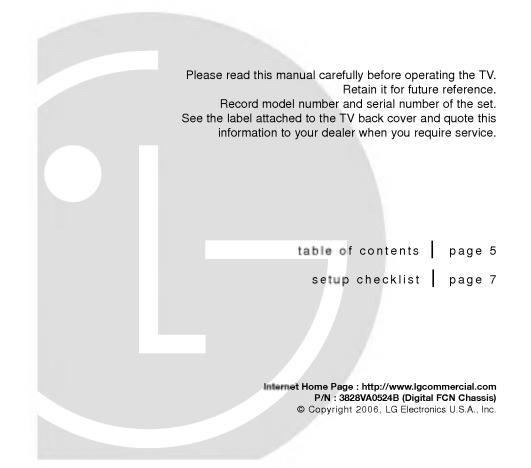


Installation and Operating Guide | Warranty

Model Number | DU-27FB32C



For Customer Support/Service, please call:

1-888-865-3026

www.lgcommercial.com

RECORD THE SERIAL NUMBER The serial number of this Color TV is located on the back of the cabinet. For future reference, we suggest that you record the serial number here: MODEL NO. DU-27FB32C SERIAL NO.



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



The lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.

The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance

WARNING:

TO PREVENT FIRE OR SHOCK HAZARDS, DO NOT EXPOSE THIS PRODUCT TO RAIN OR MOISTURE.

POWER CORD POLARIZATION:

CAUTION: To prevent electric shock, match wide blade of plug to wide slot, fully insert.

ATTENTION: Pour éviter les chocs électriques, introduire la lame la plus large de la fiche dans la borne correspondante de la prise et pousser jusqu'au fond.

NOTE TO CABLE/TV INSTALLER:

This reminder is provided to call the cable TV system installer's attention to Article 820-40 of the National Electric Code (U.S.A.). The code 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 the cable entry as practical.

REGULATORY INFORMATION:

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 when the equipment is operated in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. 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:

Do not attempt to modify this product in any way without written authorization from LG Electronics U.S.A., Inc. Unauthorized modification could void the user's authority to operate this product.

COMPLIANCE:

The responsible party for this product's compliance is: LG Electronics U.S.A., Inc. 1000 Sylvan Avenue, Englewood Cliffs, NJ 07632, USA • Phone: 1-201-816-2000. Marketed and Distributed in the United States by LG Electronics U.S.A., Inc. 2000 Millbrook Drive, Lincolnshire, IL 60069 © Copyright 2006, LG Electronics U.S.A., Inc.

IMPORTANT SAFETY INSTRUCTIONS

SAFETY INSTRUCTIONS

Important safety instructions shall be provided with each apparatus. This information shall be given in a separate booklet or sheet, or be located before any operating instructions in an instruction for installation for use and supplied with the apparatus.

This information shall be given in a language acceptable to the country where the apparatus is intended to be used.

The important safety instructions shall be entitled "Important Safety Instructions". The following safety instructions shall be included where applicable, and, when used, shall be verbatim as follows. Additional safety information may be included by adding statements after the end of the following safety instruction list. At the manufacturer's option, a picture or drawing that illustrates the intent of a specific safety instruction may be placed immediately adjacent to that safety instruction:

- Read these instructions.
- Keep these instructions.
- Heed all warnings.
- Follow all instructions.



- 1. Do not use this apparatus near water.
- 2. Clean only with a dry cloth.
- 3. Do not block any ventilation openings. Install in accordance with the manufacturer's instructions.
- 4. Do not install near any heat sources such as radiators, heat registers,

stoves, or other apparatus (including amplifiers) that produce heat.

- 5. Do not defeat the safety purpose of the polarized or grounding-type plug. A polarized plug has two blades with one wider than the other. A grounding-type plug has two blades and a third grounding prong. The wide blade or the third prong are provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.
- Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.
- 7. Only use attachments/accessories specified by the manufacturer.

(Continued on next page)

IMPORTANT SAFETY INSTRUCTIONS

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



- Unplug this apparatus during lightning storms or when unused for long periods of time.
- 10. Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as powersupply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.
- 11. CAUTION, Concerning the Power Cord: Most appliances recommend they be placed upon a dedicated circuit; that is, a single outlet circuit which powers only that appliance and has no additional outlets

or branch circuits. Check the specification page of this owner's manual to be certain.

Do not overload wall outlets. Overloaded wall outlets, loose or damaged wall outlets, extension cords, frayed power cords, or damaged or cracked wire insulation are dangerous. Any of these conditions could result in electric shock or fire. Periodically examine the cord of your appliance, and if its appearance indicates damage or deterioration, unplug it, discontinue use of the appliance, and have the cord replaced with an exact replacement part by an authorized servicer. Protect the power cord from physical or mechanical abuse, such as being twisted, kinked, pinched, closed in a door, or walked upon. Pay particular attention to plugs, wall outlets, and the point where the cord exits the appliance.

- 12. Outdoor Use Marking: WARNING -To Reduce The Risk Of Fire Or Electric Shock, Do Not Expose This Appliance To Rain Or Moisture
- 13. Wet Location Marking: Apparatus shall not be exposed to dripping or splashing and no objects filled with liquids, such as vases, shall be placed on or over apparatus.

Table of Contents

Use this page as a reference for finding the pages or sections to go to and set up the TV's features for the end user

Digital CC Menu 24 Closed Captions Menu 24 Captions Unknown display 24 Digital Captions Menu 24

Source Name 27 Clock Setup (Auto/Manual) 28 Timer Setup (On/Off Timers) 29

Captions: Analog-Digital (Setup Overview) ... 30 Captions: Analog-Digital Menu Structures 31

See the Setup Checklist on page 7

Step 1. TV Connections

TV/VCR/Cable Box/and other Equipment Hookup	Step 3. Customize the TV's Features
TV Hook up Directory11	Setup Menu
Antenna	Add/Del/Blank25
Cable service	Channel Labels (Preset and Custom)26
Antenna with VCR14	Source Name
Cable service with VCR	Clock Setup (Auto/Manual)

Additional Equipment Hookup

S-Video VCR/DVD etc
Component Video 17
Composite Audio/Video
External Amplifier (Audio Out [Matrix] hook up) 18

Step 2. TV Reception Set Up & Channel Search

Step 2. TV Reception Set Up & Channel Search Auto Program: Select Antenna, or Cable service	Parental Control Menu
and start the channel search	Installer Menus
Front Panel Controls/Source Inputs	LT2000 Quickset II Clone Programmer 50 - 52
Picture/Sound Source Selection	Clone Programmer Troubleshooting
Source Menu	Troubleshooting
On-Screen Menus/Displays Overview 23	Maintenance
	Glossary
Other Menus and On-Screen Displays	Notes
Sleep Timer Menu	WarrantyBack Cover

Purchase the Optional Installer's Remote and Clone Programmer

To perform a normal installation set up, you need an installer's remote such as the LP702, and the LT2000 Quickset II Clone Programmer-both are shown and described in later sections. The installer remote allows access to the Installer and User menus. The LT2000 Quickset II Clone Programmer is used to duplicate an LG TV's setup and install it on another identical LG TV. See your LG Dealer.

Note: Design and specifications are subject to change without prior notice.

TV Features Overview

A brief overview of the features on this TV

Analog and Digital Tuners

This TV is equipped with both analog and digital tuners. The analog tuner is used for standard over-the-air antenna and cable type (CATV) sources. The digital tuner is provided to receive over-the-air digital programming.

After running Auto Programming on the TV, analog channels will appear numerically with Channel Up/Down and Digital Channels will appear numerically in the channel scan after either the highest/lowest analog channel or aux source.

Installer Menu Default Items

Some items explained in this guide may have different default settings than those shown on the installer menu pages. As a result, those items may need to be reset based on the requirements of the institution.

Install a Two-way Signal Splitter?

If there is only one RF lead available, install a two-way splitter in order to be able to provide 75 ohm RF leads to both the Antenna/Cable and Digital Antenna inputs on the TV connections panel.

Available Source Connections

- Antenna/Cable
- Digital Antenna
- Component Video with Right/Left Audio
- S-Video with Right/Left Audio
- Standard Composite Video with Right/Left Audio
- Matrix Audio Out Speaker
- Front Panel Controls
- Front Panel Source Inputs

Features

Analog Menus

Alarm Menu

Audio Menu

- Captions/Text
- Language
- Parental Control
- Sleep On/Off Timers
- Screen Degauss
- Video Menu
- XDS Display

<u>Digital Menus</u>

- Digital Audio (Note: Even though an OSD
- Digital Captions indicates that digital features
- Digital Video
- are available, they may not be present on the actual channel picture and sound signals.)
- Menu present on

Page 6

Setup Checklist

Following lists the steps necessary to install and set up the TV

Setup and Operation Checklist

- 1. Unpack the TV and all accessories.
- 2. Connect the TV to antenna and all external video source equipment. See pages 10 - 18.
- 3. Install batteries in remote control. See page 11.
- 4. Plug TV and source equipment into power outlets. See page 11.
- 5. Turn TV on. See pages 8, 9 or 20.
- 6. Choose on screen menu language. See page 33. (English is selected.)

Reception Setup and Channel Search

8. Use Auto Program* to search for all channels in your area.

See page 19.

- 7. Select viewing source for TV. See page 22.
- 8. Adjust Installer menu per requirements of the lodge entertainment system. See pages 41 through 49.

Customize the TVs Features for the End User

9. Fine-tune source image and sound to personal preference or as required by source.

See pages 25 through 40.

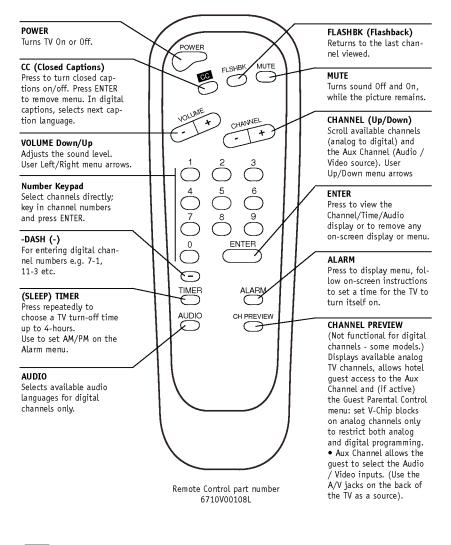
Additional Features Setup

See page 5, Table of Contents.

*Auto Program finds channels which have a signal present and are actively being broadcast. Some broadcasters do not provide or send or broadcast a signal continuously. As a result, some DTV channels may not be found in the channel scan. If you know that there is a DTV channel that was not found by Auto Program, run Auto Program again; when the DTV channel is actually sending out a program. Or, add the channel using the Add/Del/Blnk option in the Setup menu.

User Remote Control

A list of the keys and their functions on the 6710V00108L user's remote supplied with the TV

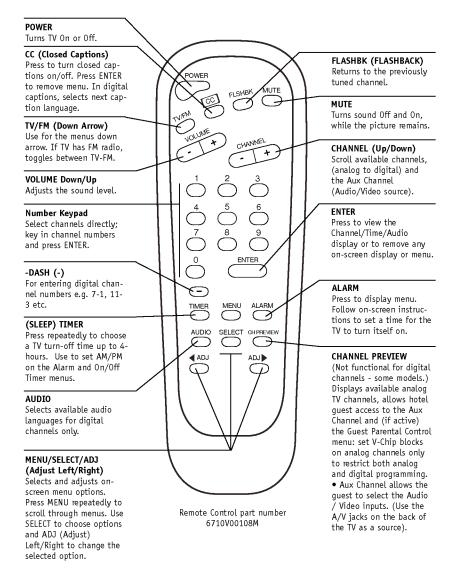




Audio Languages: Availability of audio languages are determined only by each broadcaster and may not be available on all digital programs.

Installer Remote Control

Keys descriptions and their functions for the optional Installer's remote





Audio Languages: Availability of audio languages are determined only by each broadcaster and may not be available on all digital programs.

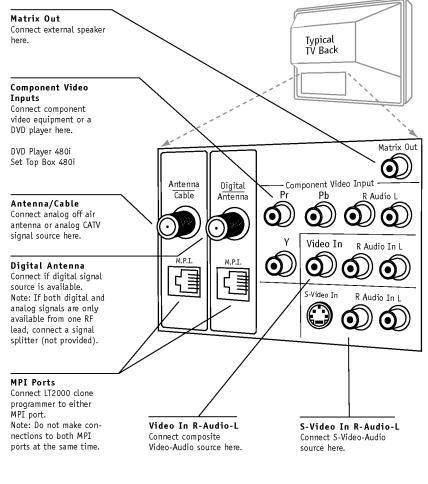
Connections/Installation Overview

Rear Connections Panel

Use this page for reference when connecting analog or digital signal sources and other source equipment. To hookup source equipment, refer to the next page; shows pages to go to for equipment hookup options. Also, see the front connection panel hookup options on page 20. Notes:

• Digital cable is not available on this TV.

• If only one wire provides the signal source, use a standard 2-way signal splitter and connect it to both the Antenna-Cable and Digital Antenna RF jacks on the TV, see below.



Digital Cable (DCATV) This TV cannot be used for digital cable signals.

Hookup Directory

Available Source Connections

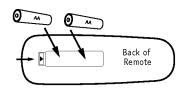
IMPORTANT !!!

Use this page to decide where you need to begin your setup. First, find the line below that best describes what you want to do, then go to that page number. Go to additional pages as required.

Off Air Antenna Only (provide digital signal to TV if required by using a signal splitter)

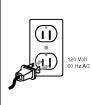
Cable Service Only If you have cable service and no other equipment, go to
Off Air Antenna with VCR If you are using an antenna and have a VCR, go to
Cable Service with VCR If you have cable service and a VCR, go to
S-Video If you want to connect an S-Video VCR/DVD Player etc., go to
Component Video If you want to hook up a component video device, go to
Composite Video If you want to hook up a composite video device, go to
External Speaker

Install Batteries in User Remote Control



Remove the back of the remote and install two high-quality AA batteries.

Plug TV into Wall Power Outlet

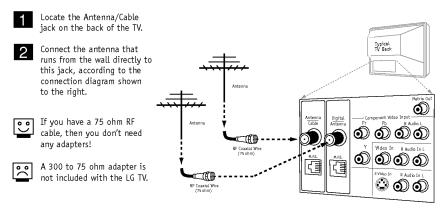


After all connections have been made, plug the TV and all system equipment into power sources as applicable. This TV is designed to operate on standard current, 120-volt 60 Hertz AC power. Do not attempt to operate it on DC Current.

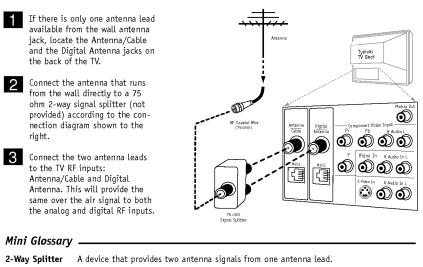
Hook Up an Off Air Antenna

Connect an over the air signal source to the TV

Over the Air Antenna



To get digital with only one RF antenna lead, install a signal splitter



75 ohm The wire that comes from an off-air antenna or cable service provider. Each end looks like a hex shaped nut with a wire sticking through the middle, and it screws onto the threaded jack on the back of the TV. 300 to (Not shown) A small device that connects a flat two-wire 300 ohm antenna to a 75 ohm RF jack. They are usually about an inch long with two screws on one end and a Adapter

Hook Up Cable Service (CATV)

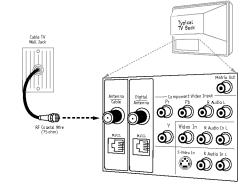
Connect cable service to the TV

Cable Service



Locate the Antenna/Cable in jack on the back of the TV set.

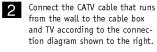
- Connect the CATV cable that runs 2 from the wall according to the connection diagram shown to the right.
- \sim The TV digital tuner does not work with a Digital Cable signal source.



Cable Service with a Cable Box



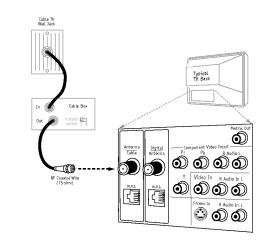
Locate the Antenna/Cable in jack on the back of the TV set.



- ပိ If you're using a cable box, tune the TV to channel 3 or 4 and use your cable box to change channels.
- If you're using a cable box, Auto)° Program might only find the channel your cable service is on (usually channel 3 or 4).



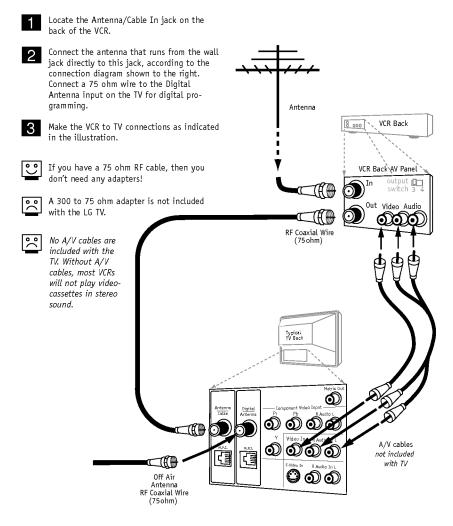
The TV digital tuner does not work with a Digital Cable signal source.



Hook Up an Off Air Antenna with VCR

Connect an over the air signal source to the VCR and TV

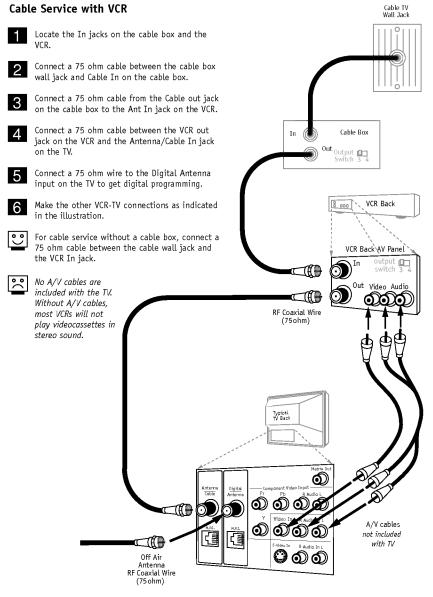
Over the Air Antenna with VCR



Hook Up a Cable Box with VCR

Connect a cable box and VCR to the TV

Cable Service with VCR



Hook Up S-Video DVD Player or VCR

Connect an S-Video source to the TV

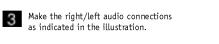
S-Video DVD Player or VCR

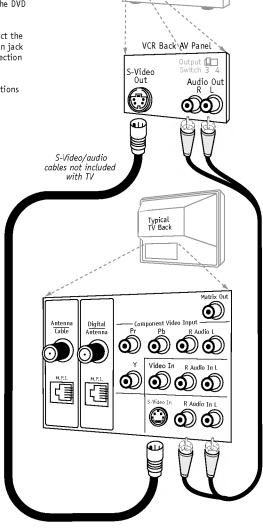
1

Locate the S-Video out jack on the DVD player or VCR.

2 On the DVD player or VCR, connect the S-Video out jack to the S-Video in jack on the TV according to the connection diagram shown to the right.







VCR Back

Hook Up Component Video

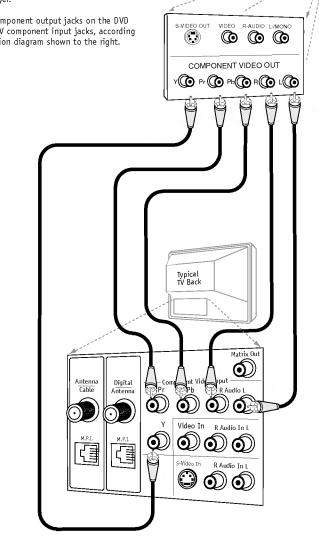
Connect a component video source to the TV

Component Video



Locate the component output jacks on the back of the DVD player.

Connect the component output jacks on the DVD player to the TV component input jacks, according to the connection diagram shown to the right.



DVD Player with

Component Video

000 8

Hook Up Composite Audio/Video & External Speaker

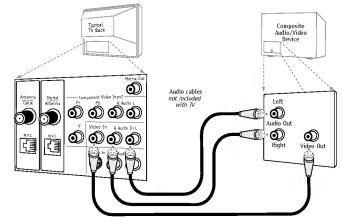
Connect the TV to an composite audio/video source and an external speaker

Composite Audio/Video

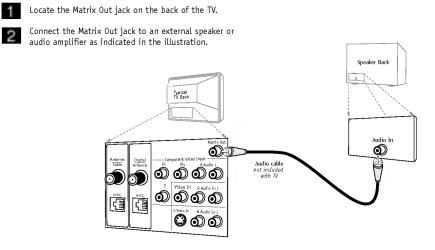
Locate the composite audio/video input jacks on the TV.



Connect the composite audio/video input jacks to a composite audio/video device as shown in the illustration.

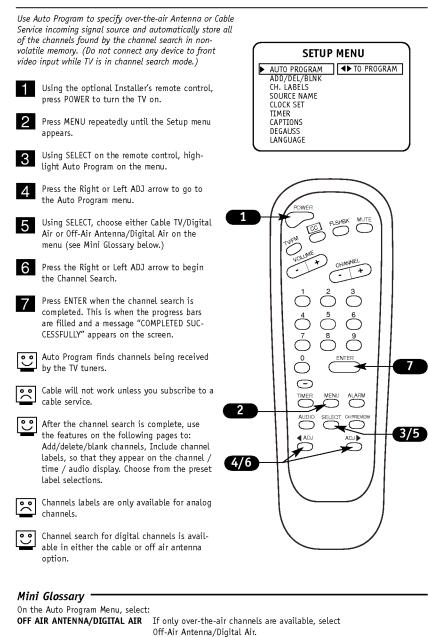


External Speaker





Auto Program (Channel Search)

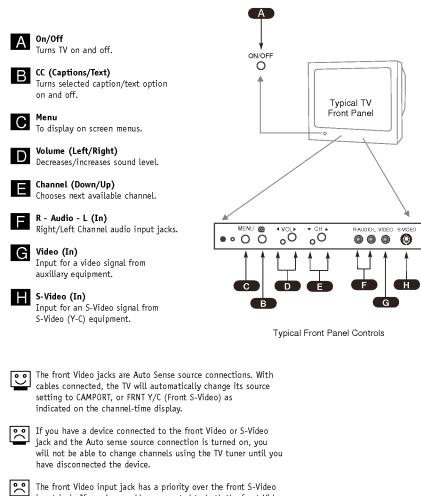


CABLE/DIGITAL AIR

If you subscribe to a cable service, select Cable TV/Digital Air.

Front Panel Controls / Source Inputs

Using the front panel controls to operate the TV



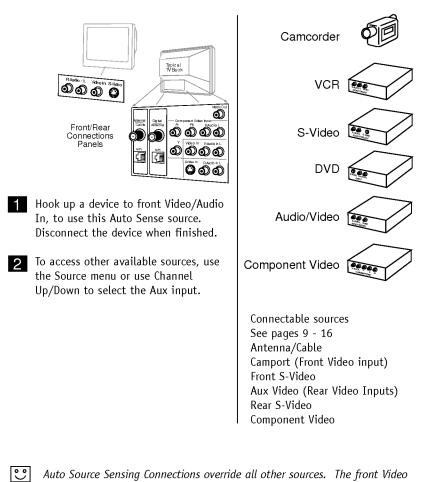
input jack. If you have cables connected to both the front Video jack and the front S-Video jack (and the Auto sense source connection is turned on in the Installer menu), only the image from the front Video input will be displayed.

Picture/Sound Source Selection

Note: The Installer by changing options in the Installer menu, can change the default setup and determine which source connections are available.

• Auto Source Sensing Connections: The front video inputs Camport and S-Video (Y-C), override all other source inputs. The Auto Sense feature is factory preset to be on --for both front video inputs.

• The Source menu shows which picture and sound sources are available.

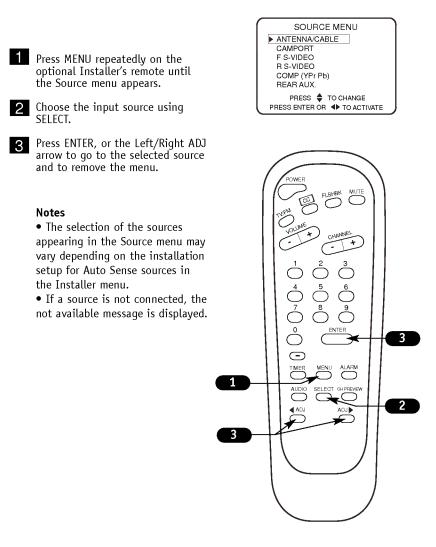


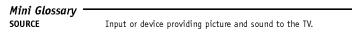
Auto Source Sensing Connections override all other sources. The front Video and S-Video in jacks are Auto Sense source connections. If you have devices connected to these jacks you will not be able to change channels using the TV tuner until you have disconnected those devices.

Page 21

Source Menu

Selecting picture and sound sources





AUTO SENSE SOURCE Input(s) that the TV automatically switches to when connected.

On-Screen Menus/Displays Overview

Descriptions of the menus and on-screen status displays Using MENU and the other keys indicated on the optional Installer's remote, the user can access the menus/displays described below.

On-Screen Menus

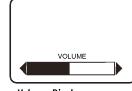
On-Screen Menus	5	
Setup Menu		Adjusts the basic characteristics of the TV.
Auto Program	19	Automatically finds and stores active channels to scroll
		through using Channel Up/Down.
Source Menu	22	Selects input sources to see and hear on the TV.
Add/Del/Blnk	25	Manually pick and choose which active channels will
		appear when using Channel Up/Down.
Channel Labels	26	Labels the channels with their network names (ABC, CBS,
		HBO, etc.).
Source Name	27	Create new names for the sources' on-screen displays.
		Allows the installer to customize sources names.
Clock Set	28	Sets the time on the TV.
Timer	29	Sets the TV's automatic turn On/Off times.
Captions	30	Analog-Digital Captions (Caption/Text) Setup Overview.
Captions Menus	31	Analog-Digital Captions Menus Structures.
Degauss	32	Improves the quality color image on the screen.
Language	33	Chooses the language the on-screen menus will appear in.
Audio Menu	34	Customizes the sound. The options are: Bass, Treble,
		Balance, Audio Mode/Audio Language, Front Surround,
		SoundRite, Audio Pref.
Digital Audio	35	Digital audio language selection.
Video Menu	36	Customizes the picture. The options are:
		Contrast, Brightness, Color, Tint, Sharpness, Picture Pref,
		and Aspect Ratio (Aspect Ratio only for Digital Channels).
Parental	37	Allows user to block program content or the A/V sources
Control Menu		for up to 99 hours, with the use of a password.

Other Menus and On-Screen Displays

Volume	24	Shows current sound level setting; press VOLUME Up/Down to activate.
Channel/Time	24	Shows the current time, channel, video and type of incoming audio signal, or mute, and XDS info; press ENTER to activate.
Ch Preview	24	Displays the available channels list; press CH PREVIEW. (Only Analog Channels are displayed not digital).
Captions/Text	24	Turns selected Caption/Text option On and Off; press CC to activate.
Sleep Timer	24	Sets the time the TV will turn off.
Ghost Channel	24	Shows the current channel number in red scrolling down the screen. Refer to Installer menu to turn off.
Alarm	24	Sets a time for the TV to automatically turn itself on.

Other Menus and On-Screen Displays

Press the remote keys indicated below to access these menus and displays



Volume Display Press VOLUME. Shows current sound level.



Channel/Time/Audio Display Press ENTER. Shows selected channel or source, time if the clock is set, incoming audio signal, and XDS info if available on program. For XDS, wait 5 seconds then press ENTER.

SLEEP TIMER



Ch Preview Menu Press CH PREVIEW. Shows list of TV Analog Channels, AUX source, and provides access to the Parental Control menu. (Some models - not functional on digital channels.)

Ghost Channel Display

ward. To disable Ghost Channel, see Installers menu.

Channel number appears in red

on the right side of the pic-

ture and slowly scrolls down-

21



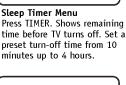
Closed Captions Menu Press CC. Turns selected option on or off for both analog and digital captions. See Caption / Text pages to set up options.

CC CAPTIONS UNKNOWN

Captions Unknown Display

Press CC, if captions are not

known, this display appears.





Alarm Menu Press Alarm. Sets a time for the TV to automatically turn itself on. **Digital Captions Menu** Press CC to scroll each digital captions language, if available.

CC CAPTIONS ENGLISH

Digital Captions On-screen Display

Press ENTER twice to see the on-screen display for digital channels. Reveals channel number and program details: Title, day, time, languages available, audio options available, video formats available, Closed captions options available, etc.

News and local programmir Thu Jan 19, 2007	ng 4:00 P	M	5:50 PM 6:00 PM	DTV 66-1 Dolby Digital	HD
Multi-lingual	16:9	1080i	TV-PG		

Page 24

Add/Delete/Blank Channel Setup

Fine-tune the channel selection list

- Use the MENU key on the optional Installer's remote to access the Setup menu.
- 2 Use SELECT to highlight the Add/Del/Blnk option.
- 3 Using either the NUMBER keypad and ENTER or the Channel Up/Down arrow on the remote, select a channel. (If adding a deleted channel, you will need to use the NUMBER keypad and ENTER.)
- 4. Using the Right/Left ADJ arrow, specify whether the channel is to be Added, Deleted or Blank.
- 5 To continue, select another channel and repeat Step 4. When you are finished, press ENTER to remove menu.

Adding Aux, VCR3, VCR4, to the Channel Preview List. Go to the Setup menu, select the Add/Del/Blnk option. Use Channel Up/Down to select Ch 126-0 for VCR3 (Ch 127-0 for VCR4) and choose Added.

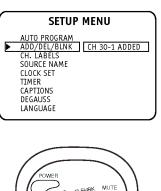
Note: If the option was turned off in the Service menu, you will have to reinstate it before it can appear as an option in the Channel Preview list. Note: You can specify Add, Delete or Blank for VCR3, VCR4, and Aux. Caution: If you delete Ch 3-0, VCR3 (Ch 126-0) is also deleted. If you delete Ch 4-0, VCR4 (Ch 127-0) is also deleted and vice versa.

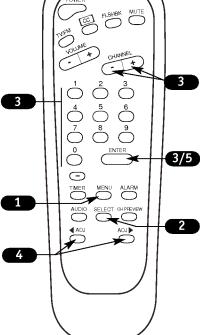
- Channel scanning up: Analog Channels, Digital ပိ Channels, VCR3, VCR4 and Aux. Use Channel Up to scan all channels, Ch Preview for analog only. Channel scanning down, reverse order of above.
- If you delete a channel, it isn't gone for good. Just select it using the NUMBER keypad on the remote, or add it later. 00
- \sim Blank does not work on Digital channels.

To add digital channels that were deleted, run ŝ Auto Program again.

Mini Glossary

- ADDED Adds new channels to the list that the user can scroll through using Channel Up/Down.
- DELETED Removes channels for one reason or another from the channel scan list available using Channel Up/Down.
- BLANK Deletes the video but retains the audio, if present on an analog channel.

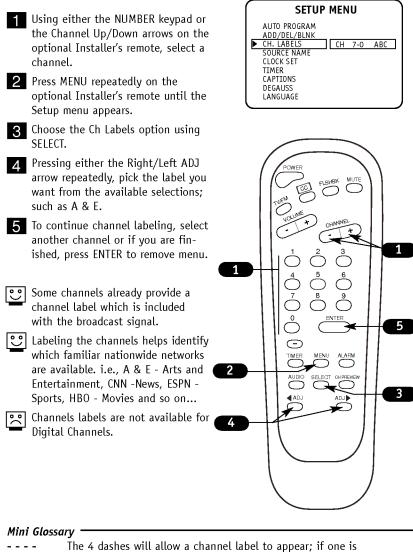




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Setting Preset Channel Labels

Selecting channel names from the preset Channel Labels

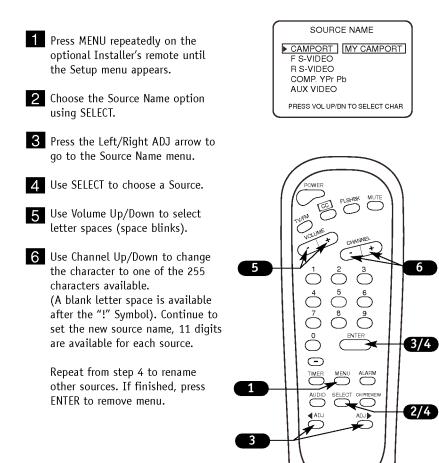


- - The 4 dashes will allow a character provided by the broadcaster.

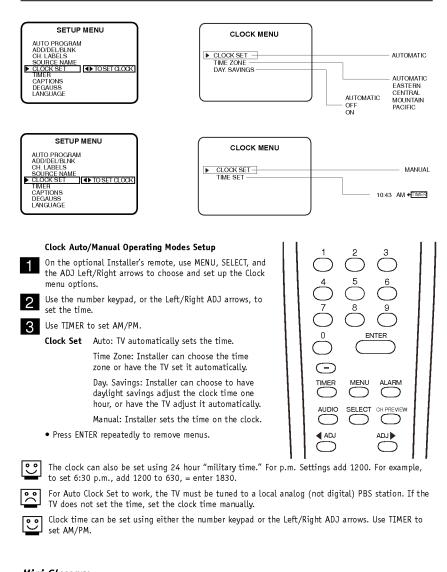
NONE Prevents any channel label from appearing.

Source Custom Name Menu

This menu enables the Installer to customize source names



Clock Setup (Auto or Manual)

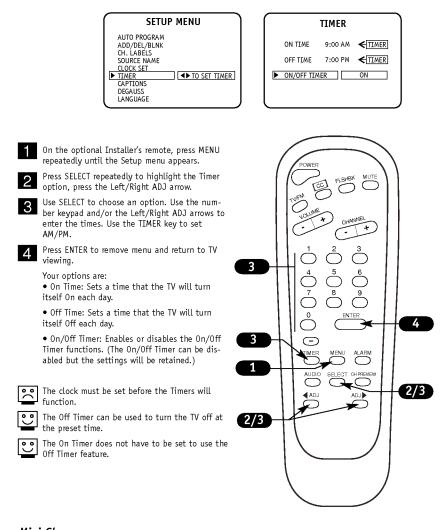


Mini Glossary

TIME	A four-digit figure broken down into hours and minutes, used to enter the time when setting the clock or programming timers.
HOURS	First two digits that are entered when setting the clock or programming timers.
MINUTES	The last two digits that are entered when setting the clock or programming timers.
TIMER	Chooses AM or PM when setting the clock.

On-Off Timers Setup

Set up On/Off Timers Note: On/Off Timers operate independently



Mini Glossary

TIME	A four-digit figure broken down into hours and minutes, used to enter the time when setting the clock or programming timers.
HOURS	First two digits that are entered when setting the clock or programming timers.
MINUTES	The last two digits that are entered when setting the clock or programming timers.
TIMER	Chooses AM or PM when setting the clock.

Captions: Analog-Digital (Caption/Text) Setup Overview

Set up Closed Caption/Text options for the end user

Analog-Digital Closed Captions/Text Overview, End-user Setup

The caption/text feature is designed to be available to the end user on either an analog or digital channel. For the end user to get analog captions, all the user needs to do is press CC on the remote and select On - - same for digital channels, select On and pick a language. The installer can elect to make analog and digital captions available by turning captions on. The installer sets the caption options on both analog and digital menus. To set up digital captions, the installer must tune in a channel with digital captions. Use 'Set by Program' to show digital captions that are similar in appearance to analog captions e.g. white text on black.

End User Captions Operation

If both analog and digital captions are turned on by the installer, analog and digital captions will be available to the end user. If digital captions are not available on a digital channel and analog captions are, then analog captions will appear.

Analog Closed Captions/Text Operating Modes Setup

On the optional Installer's remote, use MENU, SELECT, and ADJ (Left/Right) arrows to choose Closed Captions / Text mode and set up other options for the end user.

Quick/Mute	When CC is pressed: End user can only turn Captions On/Off.
	(If CC on Mute is On, shows captions when sound is muted.) (If locked, caption type is retained with Power On/Off.)
Standard	When CC is pressed: End user can choose a captions type. (If locked, type is retained with Power On/Off.)

Press ENTER to remove menus.

Digital Captions Operating Modes Setup

On the optional Installer's remote, use MENU, SELECT, and ADJ (Left/Right) arrows to configure the Digital Captions appearance.

Language Selects the default Digital Caption Language.

Style:

Set By Program Captions appear white text on black, similar to analog captions.

Custom The installer configures the Digital Captions appearance, see the next page for the digital captions appearance options available.

Press ENTER to remove menus.

Standard closed captioning is available using the Caption 1 option.

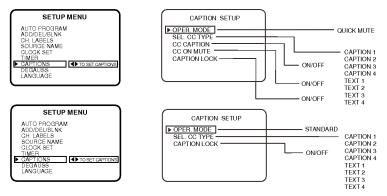
Caption/Text are features which allow the TV to display the closed caption and/or text options if made available by the broadcaster.

Availability and functionality of Caption/Text options are determined only by each broadcaster and may not be available on every program.

Captions: Analog-Digital Menu Structures

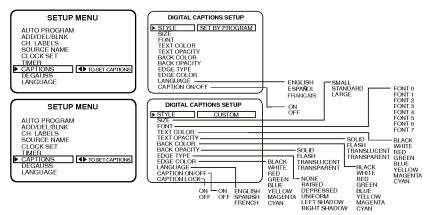
Review Analog and Digital Captions options available Note: Digital captions are only available on some digital channels.

Analog Captions Menu Structure



Availability and functionality of Analog Captions are determined only by each broadcaster and may not be available on every program.

Digital Captions Menu Structure



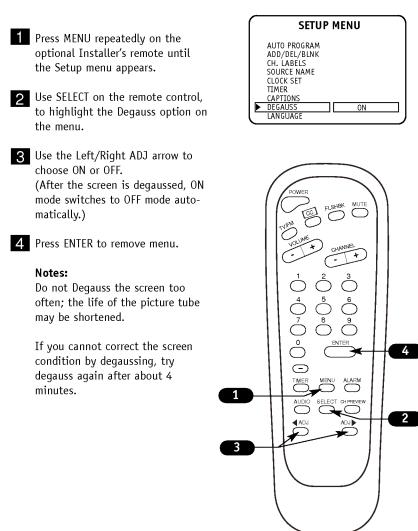
Availability and functionality of Digital Captions are determined only by each broadcaster and may not be available on every program.

Mini Glossary

- CAPTIONS The term for the words that scroll across the bottom of your 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. (Only available on analog channels.)

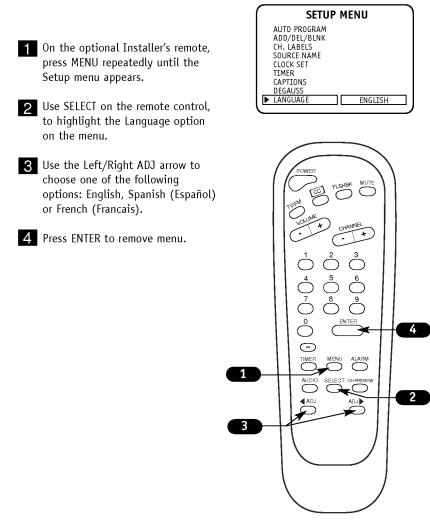
Degauss the Screen

Remove color impurities appearing on the screen



Language for the On-Screen Menus

Choose English, Spanish, (Español) or French (Francais) for the on-screen menus



Audio Menu

Set up the audio menu options for the end user

1 On the optional Installer's remote, press MENU repeatedly to go to the Audio menu.

- **2** Using SELECT on the remote control, highlight the audio menu option you want to change. Choose from:
 - Bass: Increases/decreases lower-end sounds.
 - Treble: Increases/decreases higher-end sounds.

• Balance: Allows you to put the sound more to the left or right channel.

• Audio Mode: Choose from Stereo sound, Mono, or 2nd Audio/SAP.

• Audio Lang: Choose from English, Spanish or French Audio Language default. (Only available on Digital Channels.)

• Front Surround: Turns front surround speakers on and off.

• SoundRite: Turns the uniform volume feature on and off.

• Audio Pref: Selects Custom or Preset.

3 Use the Left/Right ADJ arrow to adjust or change the option you have selected.

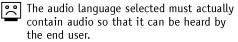
4 Use SELECT to choose other Audio menu options, or press ENTER to remove menu.

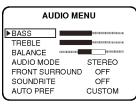
5 Use the Audio button to scan the Audio Languages available for a Digital Channel.

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1	1

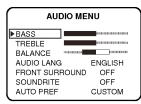
Not all programming is broadcast in stereo sound or has 2nd Audio SAP.

Not all Digital Channels offer more than one audio language. (See the next page.)

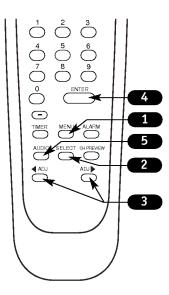




Analog Channel Display



Digital Channel Display



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Audio Menu: Digital Audio Language Selection

Use the AUDIO button to select digital audio languages, if available

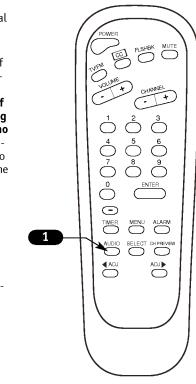
News and local programmi Thu Jan 19, 2007	ng 4:00 PM	5:50 PM 6:00 PM	DTV 66-1 Dolby Digital	HD
Multi-lingual	16:9 1080i	TV-PG		

Indicates the broadcast has additional audio languages available.

Note: The broadcaster has control of any additional languages available. If a program display shows another language is being broadcast, press the AUDIO button to select that audio. If however, no other language is being included on the program's signal, no other audio may be heard. This condition is not the fault of the TV. If no other language is being broadcast, the TV can't play it. To hear audio, you must select an active language.

On the optional Installer's remote, press AUDIO repeatedly to scroll the available digital audio language on the selected channel.

• As mentioned above, even if another language is indicated as being available, if it is not being added to the audio signal, no audio will be heard for that additional language.



Mini Glossarv	
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STEREO SOUND	Stereo (stereophonic) sound refers to audio that's divided into right and left sides.
MONO SOUND	Mono (monaural) sound is one channel of sound. On more than one speaker, all the speakers play the same audio.
CUSTOM	Your own audio menu settings.
PRESET	Resets audio menu values to their original settings.

Video Menu

Use the Video Menu to customize the picture's appearance

1 On the optional installer's remote, press the MENU key repeatedly until the Video menu appears. Your options are:

• Contrast: Adjusts the level of difference between white and black in the TV picture. The more contrast, the brighter the picture appears.

- Brightness: Increases or decreases amount of white in the TV picture.
- Color: Adjusts levels of all colors in the TV picture.

• Tint: Adjusts the relative amounts of red and green in the picture.

• Sharpness: Raises or lowers the definition of the picture. The lower the level, the softer the image will appear.

• Aspect Ratio: (Digital channels) Modifies height and width ratio of the picture when available from the broadcaster. Aspect Ratio options: Zoom, Full Screen, Letter box.

• Picture Preference: Choose either Custom or Preset:

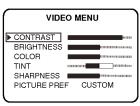
Custom = Allows you to set the picture appearance to your requirements.

Preset = Resets all the above options back to their original, factory-set levels.

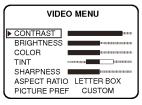
2 Using SELECT on the remote control, choose Contrast on the menu.

3 Use the Left/Right ADJ arrow to change or adjust the contrast level as required.

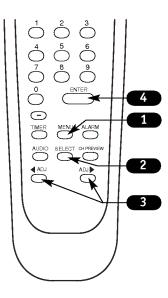
- Press ENTER, to remove the menu, or repeat from Step 2 to adjust other Video menu options.
- Choose the Preset option in Picture Preference to quickly reset the Video menu options to their original default values.
- Aspect Ratio is only for Digital Channels. The availability of Aspect Ratios are determined only by the broadcaster and may not be available on all programs.
- Aspect Ratio options are not available for 480i (SD) digital channels.



Analog Channel Display



Digital Channel Display



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Parental Control Menu

This feature can "block" undesirable programming from appearing on the TV. Set restrictions using Age Block for all programming, TV and movies.

End user can only set restrictions using Ch Preview menu on any Analog channel or Aux source (some models digital too. The TV will employ parental control restrictions on analog and digital channels if there is V-Chip data on the program.

Overview

Parental Control offers the user a wide variety of options and settings that restrict or "block" the programming that can appear on the TV. Parental Control allows the user the capability of defining which program rating they consider acceptable, to the younger or more sensitive viewer. It can be preset and turned either on or off by the user who specifies a secret 4-number code, the password. The number of hours blocked are specified. General audience and children viewer blocks can both be programmed into the TV's memory. Viewer ratings are specified for both TV and the motion picture industry; both rating systems should be used, for complete coverage. The ratings are based on the ages of children. (See following pages.)

To insure complete coverage for all TV programs, (movies and regular TV shows) choose a rating for MPAA to restrict movies from the selections on the following pages. AND choose ratings from the TV Parental Guidelines Rating System also on the following pages, using the Age Block option for General Audiences and for Children. In addition to those, you may wish to add additional restrictions from the Content Block sub menu. See the Parental Control menu and submenus examples on the following pages.

Things to Consider before Setting Up Parental Control

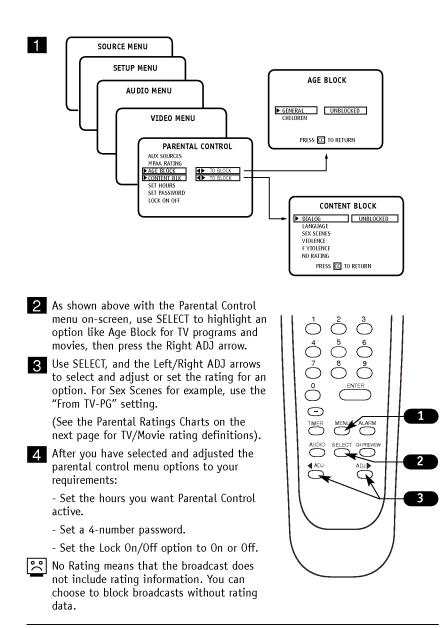
- Determine which rating you consider acceptable to the viewer. For example, if you choose TV-PG, all more restrictive ratings will be automatically blocked; the viewer will not be able to see: TV-PG, TV-14 or TV-MA rated programming.
- Do you want to block the auxiliary video source entirely? (Blocks the signal sent by the equipment, such as a VCR, connected to the TV Audio/Video input jacks; in the Aux. Sources option.) Or leave unblocked, then choose allowable ratings.
- Block program "Content" based on individual parameters such as: Strong Dialog, Bad Language, Sex Scenes, Violence Scenes or Fantasy Violence Scenes; in the Content Blk option.
- How many hours do you want Parental Control to be active? You can set the Hours option for up to 99 hours.
- Select a password; in the Set Password option. Use the numbered keys on the remote to set a password. Don't forget the password.

Note: Reset Parental Control Block Hours to Zero and Cancel Password

This provides the institution staff and the installer a means to reset the TV to normal operation; if a user has either forgotten the password or has left Parental Control Block active. Note: Installer Menu item 0-I Installer Seq must be set to 0 for this to work. On the optional installer's remote control, press and hold down MENU until the menu disappears (takes about 8 seconds). Immediately press 9, 8, 7, 6 and then CC. This will reset the Block Hours to Zero and cancel the current 4-number password.

Parental Control Menu

After you have read the preceding page, follow instructions below to set up and activate Parental Control



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Parental Control TV/Movie Rating Guidelines

TV Parental Guidelines Rating System

TV-G	General Audience	Considered suitable for all audiences; children may watch unattended.
TV-PG	Parental Guidance Suggested	Unsuitable for younger children, may contain: Suggestive Dialog, Foul Language, Sex and Violence Scenes.
TV-14	Parents Strongly Cautioned	Unsuitable for children under 14, may contain: Strong Dialog, Foul Language, Sex and Violence Scenes.
TV-MA	Mature Audiences Only	Adults only, may contain: Strong Dialog, Foul Language, Sex and Violence Scenes.

CHILDREN'S CLASSIFICATIONS

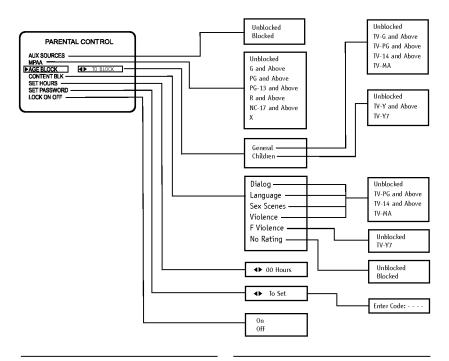
TV-Y	Children	Considered suitable for all children under 7 years old.
TV-Y7	Children 7 and over	Considered suitable for children over 7, may contain Fantasy Violence Scenes.

Motion Picture Association Of America (MPAA) Rating System

G	General Audiences	Content not offensive to most viewers.
PG	Parental Guidance Suggested	Content is such that parents may not want their children to view the program.
PG-13	Parental Guidance Suggested	Program is inappropriate for preteens, with a greater degree of offensive material than a PG rated program.
R	Restricted viewing	Not for children under age 17. Strong elements of sex and/or violence.
NC-17	Restricted Viewing	Not for children under age 17 under any circumstances. Strong sexual content.
Х	Hard Core Films	Same as NC-17 rating.

Note: LG Electronics Corporation is not liable for any program content that appears when using this rating system; as always, user discretion is advised.

You can set different Parental Control viewing restrictions for general audiences and for children - - both can be active at the same time.
 Simply specifying one TV program content block such as Sex Scenes, will not automatically lock another undesirable content in the TV program from appearing.



Note: Reset Parental Control Block Hours to Zero and Cancel Password

This provides the institution staff and the installer a means to reset the TV to normal operation; if a user has either forgotten the password or has left Parental Control Block active.

On the optional installer's remote control, press and hold down MENU until the menu disappears (takes about 8 seconds). Immediately press 9, 8, 7, 6 and then CC. This will reset the Block Hours to Zero and cancel the current 4-number password.

Make Parental Control restrictions permanent, with no preset or fixed hours time limit

In the Installer's Menu, set Item 84: PERMANENT BLK, 0 or 1. 0 Blocking restrictions always active, no time limit. 1 Restrictions limited to specified hours, 12 - 99.

Reset the Maximum Number of Parental Control Default Block Hours

You can change the Block hours from the 12-hour default setting to up to 99 hours.

In the Installer's Menu, item: 22-I MAX BLK HRS 12, use the ADJ Left/Right adjust arrow to set a different default number of hours.

Turn Parental Control Feature Off/On

In the Installer's Menu, installer items:

21-I V-CHIP, 0 = disable, or 1 = enable

51-I DIS. VCHIP M., 0 = enable, or 1 = disable Options Setups for V-Chip Menu and Block Functions

- For Installer items: 21-I V-CHIP, 51-I DIS VCHIP M
- 0 0 No menu, no blocking.
- 0 1 No menu, no blocking.
- 1 0 Shows menu, Block functions.
- 1 1 No menu, Block functions.

Use the Installer Menu to set up or change operational settings. See detailed descriptions of the Installer Menu items on the following pages

Installer's menu items can be accessed by using the optional installer's remote control. Just press and hold MENU (about 8 seconds) until the menu disappears, then press 9, 8, 7, 6, then ENTER. To remove the Installer's Menu, press ENTER repeatedly. Any changes you make will be stored in nonvolatile memory.

The Installer's menu opens with the main menu. Use MENU and SELECT to sequence through the installer menus and submenus. Use SELECT or TV/FM to scroll up/down in the menus and submenus. To change a setting use the Left/Right ADJ keys. Press ENTER to return to main menu.

Using the Installer's Menu

Items 0-I - 103-I are accessible only in the Installer's Menu. Their numbers, descriptions, ranges, factory default settings, and a place for listing any changes made on site are given below and on the following pages.

The Factory Menu that is intended for qualified service technicians only, is not shown. XX-F Menu Items (not shown here) are service type adjustments and only qualified technicians having specialized test equipment should access them.

INSTALLERS
INSTALLERS1
INSTALLERS2
INSTALLERS3
INSTALLERS4
INSTALLERS5
INSTALLERS6
INSTALLERS7
TV MICRO V2.08
D2A CARD V2.05
D2A CARD 4 - MICRO COMM
STATUS

Typical Installer Menu

Menu Item	Function	Value Range	Default Value	Brief Description of Function and Comments	
0-I.	INSTALLER SEQ	0 - 3	0	Leave default set at 0.	
1-I.	POWER MANAGE	0 - 7	0	Sets number of hours of no activity before auto shutoff.	
2-I.	AC ON	0/1	0	Set to 1 to enable auto turn on at power up.	
3-I.	BAND-AFC	0 - 7	0	Sets Tuning band.	
4-I.	STRT CHANNEL	0 - 255	255	Channel at turn-on (255 for last Channel). For digital channels, use with item 101-I Start Minor Channel.	
5-I.	CHAN LOCK	0/1	0	When set to 1, cannot tune from current channel.	
6-I.	GHOST CH	0/1	0	Set to 1 to enable Ghost Channel display.	
7-I.	START VOLUME	0-63, 255	255	Volume level at TV turn-on (Set 255 to retain last level).	
8-I.	MIN VOLUME	0 - 63	0	Minimum volume setting.	
9-I.	MAX VOLUME	0 - 63	63	Maximum volume setting.	
10-I.	MUTE DISABLE	0/1	0	Set to 1 to disable mute function.	
11-I.	KEY DEFEAT	0/1	1	Set to 1 to disable the front panel keyboard MENU key.	
12-I.	NOT USED				
13-I.	SCAN MODE	0/1	0	Puts TV On-Off event in Ch Up/Down sequence.	
14-I.	NOT USED				
15-I.	SLEEP TIMER	0/1	1	Set to 1 to enable Sleep Timer.	
16-I.	EN TIMER	0/1	1	Set to 1 to enable Timer.	
17-I.	ALARM	0/1	1	Set to 1 to enable Alarm.	
18-I.	NOT USED				
19-I.	NOT USED				
20-I.	FEATURE LEVEL	0/1	1	Zen 1 Leave default set 1 (1 Zen1).	
21-I.	V-CHIP	0/1	1	Set to 1 to enable V-Chip (Parental Control).	
22-I.	MAX BLK HRS	0 - 99	12	Sets number of Parental Control blocking hours.	
23-I.	CAPTION LOCK	0/1	0	Set to 1 to retain caption setting at turn off.	
24-I.	TEXT MODE	0/1	1	Set to 1 to add Text option to closed caption menu.	
25-I.	FUNCTION PRE.	0 - 3	0	Controls channel preview in Pay-Per-View function menu.	

Installer Menu Items 26-I through 63-I

Menu Item	Function	Value Range	Default Value	Brief Description of Function and Comments	
26-I.	NOT USED				
27-I.	NOT USED				
28-I.	CH OVER RIDE	0/1	1	When set to 0, limits direct access to favorite channels.	
29-I.	OLD OCV	0/1	0	OCV should set to 1.	
30-I.	ACK MASK	0/1	0	M.P.I. communication parameter.	
31-I.	POLL RATE	20 - 169	94	M.P.I. communication parameter.	
32-I.	TIMING PULSE	186 - 227	204	M.P.I . communication parameter.	
33-I.	NOT USED				
34-I.	CAMPORT EN	0/1	1	Set to 1 to enable the front AUX (Camport) input.	
35-I.	SUP. PORT YUV	0/1	0	Reserved for future use.	
36-I.	FRNT Y-C EN	0/1	1	Set to 1 to enable the front S-Video input.	
37-I.	REAR Y-C EN	0/1	1	Set to 1 to enable the rear S- Video input.	
38-I.	YPRPB EN	0/1	1	Set to 1 to enable the component input.	
39-I.	REAR VIDEO EN	0/1	1	Set to 1 to enable rear AUX video input.	
40-I.	AUTO CAMPORT	0/1	1	Set to 1 to automatically switch to Camport.	
41-I.	NOT USED				
42-I.	AUTO FRNT Y-C	0 / 1	1	Set to 1 to automatically switch to front S-Video input.	
43-I.	NOT USED				
44-I.	NOT USED				
45-I.	NOT USED				
46-I.	STRT AUX SRCE	0-2,255	255	Sets the starting AUX source.	
47-I.	AUX STATUS	0 / 1	0	Set to 1 for M.P.I. AUX source reported as Channel number instead of Channel 0.	
48-I.	DIS SETUP M	0/1	0	Set to 1 to disable Setup menu.	
49-I.	DIS AUDIO M	0/1	0	Set to 1 to disable Audio menu.	
50-I.	DIS VIDEO M	0/1	0	Set to 1 to disable Video menu.	
51-I.	DIS VCHIP M	0/1	0	Set to 1 to disable V-Chip (Parental Control) menu.	
52-I.	DIS SOURCE M	0/1	0	Set to 1 to disable Source menu.	
53-I.	DIS CHTIME M	0/1	0	Set to 1 to disable Channel-Time on-screen display.	
54-I.	EN SET COL	0/1	0	Set to 1 to enable custom color for the Setup menu.	
55-I.	FOR SETUP M	0 - 7	6	Custom foreground color for the Setup menu.	
56-I.	BCK SETUP M	0 - 7	4	Custom background color for the Setup menu.	
57-I.	EN AUDIO COL	0/1	0	Set to 1 to enable custom color for the Audio menu.	
58-I.	FOR AUDIO M	0 - 7	3	Custom foreground color for the Audio menu.	
59-I.	BCK AUDIO M	0 - 7	5	Custom background color for the Audio menu.	
60-I.	EN VIDEO COL	0 / 1	0	Set to 1 to enable custom color for the Video menu.	
61-I.	FOR VIDEO M	0 - 7	4	Custom foreground color for the Video menu.	
62-I.	BCK VIDEO M	0 - 7	7	Custom background color for the Video menu.	
63-I.	EN PTL COL	0 / 1	0	Set to 1 to enable custom color for the V-Chip (Parental Control) menu.	

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Installer Menu Items 64-I through 88-I

Menu Item	Function	Value Range	Default Value	Brief Description of Function and Comments
64-I.	FOR PTL M	0 - 7	6	Custom foreground color for the V-Chip (Parental Control) menu.
65-I.	BCK PTL M	0 - 7	4	Custom background color for the V-Chip (Parental Control) menu.
66-I.	EN SRC COL	0/1	0	Set to 1 to enable custom color for the Source menu.
67-I.	FOR SRC M	0 / 7	3	Custom foreground color for the Source menu.
68-I.	BCK SRC M	0 - 7	4	Custom background color for the Source menu.
69-I.	EN CHT COL	0/1	1	Set to 1 to enable custom color for the Channel-Time on-screen display.
70-I.	FOR CHT COL	0 - 7	1	Custom foreground color for the Channel-Time display.
71-I.	BCK CHT COL	0 - 7	1	Custom background color for the Channel-Time display.
72-I.	NOT USED			
73-I.	CH NOT AVBLE	0 / 1	0	When set to 1 and channel over ride is set to 0, "NOT AVAILABLE" message is displayed when directly accessing a channel not in the favorite channel list.
74-I.	CH-TIME SIZE	0 / 1	0	When set to 1 and transparent background is selected for Channel-Time display, (foreground color = background color and custom color enabled) a large channel number is displayed instead of the normal Channel-Time on-screen display.
75-I.	REVERT CH	0/1	0	When set to 1 and loss of M.P.I. communication occurs, TV tunes to Start Channel.
76-I.	DEFEAT XDS	0/1	0	When set to 1, XDS display program information will not appear.
77-I.	NOT USED			
78-I.	UPN MSB	0 - 255	14	User programmable number, most significant byte. (Line - Day)
79-I.	UPN MSB1	0 - 255	28	User programmable number, most significant byte- 1. (Week)
80-I.	UPN MSB2	0 - 255	12	User programmable number, most significant byte- 2. (SN - HIGH)
81-I.	UPN LSB	0 - 255	2	User programmable number, least significant byte. (SN - LOW)
82-I.	CHKSM ERROR	0/1	1	Enforces rigid M.P.I. checksum.
83-I.	HANDSHK TIME	0 - 5	0	Relaxes M.P.I. timing to be compatible with PC based Windows controlled systems.
84-I.	PERMANENT BLK	0/1	0	Removes block hours setting for Parental Control and make blocks permanent.
85-I.	A MUTE TIME	0 - 254	35	Controls muting audio delay time when switching between AUX sources.
86-I.	V MUTE TIME	0 - 254	40	Controls muting video delay time when switching between AUX sources.
87-I.	NOT USED			
88-I.	EN NOISE MUTE	0 / 1	1	When set to 1, the audio signal volume is limited to a minimum value if no signal is being received from the broadcaster.

Installer Menu Items 89-I through 103-I

Menu Item	Function	Value Range	Default Value	Brief Description of Function and Comments
89-I.	POKE ENABLE	0 / 1	0	When set to 1, writing to Non - volatile memory through M.P.I. is enabled.
90-I.	KEY LOCK	0/1	0	When set to 1, front keyboard functionality is disabled.
91-I.	NOT USED			
92-I.	NOT USED			
93-I.	NOT USED			
94-I.	NOT USED			
95-I.	AUDIO MD DISP	0 / 1	1	When set to 1, Audio Mode Information is enabled to appear in the Channel Time Display.
96-I.	NOT USED			
97-I.	NOT USED			
98-I.	NOT USED			
99-I.	NOT USED			
100-I.	ATSC TUNE MD	0 / 1	0	Sets ATSC tuning mode. Set to 0 for virtual channel, set to 1 for physical channel.
101-I.	STRT MINOR CH	0 ~ 255	0	Sets the starting minor channel. For NTSC set to 0. If not 0, sets minor channel number. Set to 255 to show last tuned channel at turn on.
102-I.	NOT USED			
103-I.	A RATIO LOCK	0 / 1	0	Set to 1, to retain current aspect ratio at turn off. At turn on, last set aspect ratio will be used. Set to 0 to reset picture aspect ratio to default at TV turn on.

Detailed Descriptions of Installer Menu Items

0-I. INSTALLER SEQUENCE

Gives access to Installer Menu depending on the code selected.

0 = 9876 1 = 43212 = 1478 3 = 3698

1-I. POWER MANAGE (Power Management)

Determines hours of no activity before automatic shutoff. The POWER MANAGE function is for saving energy. When set to 0, Power Manage is OFF. Settings range from 0 - 7, with 1 - 7 representing the hours that the TV will remain on, unless there has been activity from either the control panel or remote control.

*M.P.I. Multiple Protocol Input: LG protocol for remote control of TV through RJ11 (M.P.I.) jack on TV connections panel.

2-I. AC ON (AC Power Switchable)

Allows the TV to turn ON just by applying AC

power. Pressing the ON button is not necessary. This is desirable when the TV is plugged into a cable box or a power outlet controlled by a wall switch. Use ADJ to select 0 or 1, where 0 is the default is OFF, and 1 is ON.

NOTE: When set to 1 (ON), the TV does not respond to ON/OFF commands from either the remote or the control panel, and the SLEEP TIMER is also not functional.

3-I. BAND/AFC (Band/Automatic Frequency Control)

Channels are accessed faster when fixed modes are used. The AFC (search modes) should only be used when some channels are not on nominal frequencies. NOTE: BAND is automatically set by AUTO

Detailed Descriptions for Installer Menu Items 4-I through 13-I

PROGRAM. If some channels were not found by AUTO PROGRAM, select the appropriate AFC setting here and add the channels using the ADD/DEL option in the Setup Menu.

4-I. STRT CHANNEL (Start Channel)

Important: For NTSC start channel, item 101-I STRT MINOR CHANNEL, must be set to 0. When active, this function allows you to determine the initial channel number when the TV is turned 0N. (To set a digital channel, use with Item 101 Start Minor Channel.) This feature is useful for an in-house information channel, since the TV would always select that channel when it is turned on. Setting this to 255 causes the last channel viewed when TV was turned off to be the tuned to channel when the TV is turned on again. The range of values is 0 - 255. Use ADJ (adjust) keys to choose numbers for the start channel.

5-I. CHAN LOCK (Channel Lock)

CHAN LOCK is ideal if a cable box (or similar) is the sole source for programming—and the TV must always be on the same channel. Changing channels with Channel Up/Down or keypad numbers is impossible. Channel Lock is inactive when set to 0 (default). Generally, this feature is used in conjunction with START CHANNEL (item 4-I.) where the start channel may, for example, be set to 3 or 4. If the start channel is 3, then the TV will remain on channel 3.

NOTE: When CHANNEL LOCK is active and CHANNEL OVER RIDE is disabled, AUTO PROGRAM is not functional.

6-I. GHOST CH (Ghost Channel)

When set to 1, the current channel number is displayed in the upper right corner of the picture. The number moves slightly to prevent damage to the screen. The default is "0" or OFF. NOTE: When captions are on, "Ghost Channel" is not displayed.

7-I. START VOLUME

This function allows the Installer to determine the initial volume level setting when the TV is turned ON. This feature is useful for an in-house information channel, since the TV would always select that Volume level when it is turned on. The range of values are 0 - 63, 255. If 255 is selected, the current volume level will be retained in memory

when the TV is turned off. At TV turn on, Volume level is automatically set to the previous or last level.

8-I. MIN VOLUME (Minimum Volume)

This function determines the minimum volume level allowable with the VOLUME (VOL) Up/Down control. In this way, for example, someone cannot set the sound too low to hear. The range is from 0 to 63 change values with ADJ (adjust). The factory default is 0, which provides full range of volume control. It may be best to set the same value on every TV.

NOTE: The minimum volume level cannot have a value setting higher than in the MAX VOLUME level (described below).

9-I. MAX VOLUME (Maximum Volume)

This function determines the maximum volume level allowable with the VOLUME Up/Down control. In this way, for example, someone cannot set the sound level high enough to disturb others. The range is 0 to 63, with 63 as the default which gives the user the full range of volume control. Change values with ADJ Left/Right keys. It may be best to set the same value on every TV. NOTE: The maximum volume level cannot have a value setting lower than the MIN VOLUME level (See item 8 -I).

10-I. MUTE DISABLE

Enables or disables sound mute function. If set to 1, sound cannot be muted. If set to 0, sound can be muted.

11-I. KEY DEFEAT

Enables or disables the menu key on the front panel keyboard. Set to 0 to enable, set to 1 to disable. If set to 1, Key lock appears if MENU key on front panel is pressed.

12-I. NOT USED

13-I. SCAN MODE

Allows variation in the On/Off setup with CHANNEL Up/Down. You may opt for TV channels only or TV channels + Off/On with the following settings for Scan Mode. Scan mode Characteristics: 0 = Channel Up/Down keys Change channels only.

 1 = Channel Down below the lowest channel (or channel up higher than the highest channel) and the TV turns off.

Detailed Descriptions for Installer Menu Items 14-I through 36-I

14-I. NOT USED

15-I. SLEEP TIMER

When set to 1, the Sleep Timer feature is available to the user (but no message is displayed prior to turn-off). When set to 0, the Sleep Timer is not functional.

16-I. EN. TIMER

Set to 1, On/Off Timer functions are available to end user. Set to 0 to disable Timer functions. Note: Clock must be set in order to use Timers.

17-I. ALARM

Gives you the option of making the Alarm function available to the user. Set to 1, Alarm function is available to user. Set to 0 to disable the Alarm function. Note: Clock must be set in order to set the Alarm.

18-I. NOT USED

19-I. NOT USED

20-I. FEATURE LEVEL

Default set to ZEN 1 for Zenith IR remote control operation. Set 0, P LBL for Zenith Private Label IR remote control operation. WARNING: Do not change the default value unless you have the proper remote control to operate the TV.

21-I. V-CHIP

Set to 1 to activate V-Chip (Parental Control); have it available to user to filter or control or restrict programming content. Set to 0 to turn V-Chip feature off, not available to user; no programming restrictions can be set.

22-I. MAX BLK HRS

Set 0 to 99 for the maximum V-Chip (Parental Control) block hours. Default setup is for 12 blocking hours.

23-I. CAPTION LOCK

Set to 1 to restore previous Caption On/Off state after TV turns off. When set to 0, Captions are always off, when TV is initially turned on.

24-I. TEXT MODE

Determines whether TEXT 1, TEXT 2, TEXT 3, or TEXT 4 decoding is enabled when TEXT is turned on

(either from the Setup Menu or directly with CC on the remote).

TIP: Set Text Mode to 1 only if text is offered in your video system.

25-I. FUNCTION PRE

Set to 0 to suppress CHANNEL PREVIEW from the FUNCTION menu with some Pay-Per-View systems.

26-I. NOT USED

27-I. NOT USED

28-I. CH. OVER RIDE (Channel Override)

When set to 1, the user can select channels with either Channel Up/Down or by direct keypad entry. When set to 0, only those channels that are entered for scanning may be selected by direct keypad entry. Note: If set to 0, Auto Program is locked; (as shown on Setup menu) channel search is not available.

29-I. OLD OCV (On Command Video™)

Set to 1 for operation with systems from On Command Corporation.

30-I. ACK MASK

M.P.I. Communication Parameter. Leave at default setting unless changed by Pay-Per-View provider.

31-I. POLL RATE

M.P.I. Communication Parameter. Leave at default setting unless changed by Pay-Per-View provider.

32-I. TIMING PULSE

M.P.I. Communication Parameter. Leave at default setting unless changed by Pay-Per-View provider.

33-I. NOT USED

34-I. CAMPORT ENABLE Set to 1 to enable the front AUX (Camport) input. Set to 0 to disable front AUX input.

35-I. SUP. PORT YUV Reserved for future use.

36-I. FRONT Y-C EN.

Set to 1 to enable the front S-Video input. Set to 0 to disable front S-Video input.

Detailed Descriptions for Installer Menu Items 37-I through 59-I

37-I. REAR Y-C EN.

Set to 1 to enable the rear S-Video input. Set to 0 to disable the rear S-Video input.

38-I. YPrPb EN.

Set to 1 to enable rear Component Video input. Set to 0 to disable rear Component Video input.

39-I. REAR VIDEO EN.

Set to 1 to enable rear AUX (Video) input. Set to 0 to disable rear AUX input.

40-I. AUTO CAMPORT

Set to 1 to automatically switch to Camport when equipment is connected to front Video input. Set to 0 to disable front Video automatic source selection. Note: If disabled, do not connect any jacks.

41-I. NOT USED

42-I. AUTO FRONT Y-C

Set to 1 to automatically switch viewing source to front S-Video input if equipment is connected. Set to 0 to disable front S-Video auto source selection. Note: If disabled, do not connect any jacks.

43-I. NOT USED

44-I. NOT USED

45-I. NOT USED

46-I. STRT AUX SRCE Sets the starting AUX source.

47-I. AUX STATUS

Set to 1 for M.P.I. AUX source to be reported as a channel number instead of channel 0. Set to 0 to disable AUX identification change.

48-I. DIS SETUP M

Set to 1 to disable the Setup menu. Setup menu will not appear. Set to 0 to enable the Setup menu.

49-I. DIS AUDIO M

Set to 1 to disable the Audio menu. Audio menu will not appear. Set to 0 to enable the Audio menu.

50-I. DIS VIDEO M

Set to 1 to disable the Video menu. Video menu will not appear. Set to 0 to enable the Video menu.

51-I. DIS VCHIP M

Set to 1 to disable V-Chip menu. V-Chip menu will not appear. Set to 0 to enable the V-Chip menu.

52-I. DIS SOURCE M

Set to 1 to disable Source menu. Source menu will not appear. Set to 0 to enable the Source menu.

53-I. DIS CH-TIME

Set to 1 to disable the Channel-Time display. Channel-Time display will not appear. Set to 0 to enable the Channel-Time display.

54-I. EN SET COL

Set to 1 to enable custom color settings for the Setup menu. Set to 0 to disable custom color settings for the Setup menu.

55-I. FOR SETUP M (Setup Menu Foreground Color)

Set according to Color Chart.

0 = Black	3 = Yellow	6 = Cyan
1 = Red	4 = Blue	7 = White
2 = Green	5 = Violet	

56-I. BCK SETUP M (Setup Menu Background Color)

0 = Black	3 = Yellow	б = Cyan
1 = Red	4 = Blue	7 = White
2 = Green	5 = Violet	

57-I. EN AUDIO COL

Set to 1 to enable custom color settings for the Audio menu. Set to 0 to disable custom color settings for the Audio menu.

58-I. FOR AUDIO COL (Audio Menu Foreground Color)

0 = Black	3 = Yellow	6 = Cyan
1 = Red	4 = Blue	7 = White
2 = Green	5 = Violet	

59-I. BCK AUDIO COL (Audio Menu Background Color)

0 = Black	3 = Yellow	6 = Cyan
1 = Red	4 = Blue	7 = White
2 = Green	5 = Violet	

Detailed Descriptions for Installer Menu Items 60-I through 75-I

60-I. EN VIDEO COL

Set to 1 to enable custom color settings for the Video menu. Set to 0 to disable custom color settings for the Video menu.

61-I. FOR VIDEO M (Video Menu Foreground Color)

0 = Black	3 = Yellow	6 = Cyan
1 = Red	4 = Blue	7 = White
2 = Green	5 = Violet	

62-I. BCK VIDEO COL (Video Menu Background Color)

0 = Black	3 = Yellow	6 = Cyan
1 = Red	4 = Blue	7 = White
2 = Green	5 = Violet	

63-I. EN PTL COL

Set to 1 to enable custom color settings for the V-Chip menu. Set to 0 to disable custom color settings for the V-Chip menu.

64-I. FOR PTL M (V-Chip Menu Foreground Color)

0 = Black	3 = Yellow	6 = Cyan
1 = Red	4 = Blue	7 = White
2 = Green	5 = Violet	

65-I. BCK PTL M (V-Chip Menu Background Color)

0 = Black	3 = Yellow	б = Cyan
1 = Red	4 = Blue	7 = White

2 = Green 5 = Violet

66-I. EN SRC COL

Set to 1 to enable custom color for the Source menu. Set to 0 to disable custom color for the Source menu.

67-I. FOR SRC M (Source Menu Foreground Color)

0 = Black	3 = Yellow	6 = Cyan
1 = Red	4 = Blue	7 = White
2 = Green	5 = Violet	

68-I. BCK SRC M (Source Menu Background Color)

0 = Black	3 = Yellow	6 = Cyan
1 = Red	4 = Blue	7 = White
2 = Green	5 = Violet	

69-I. EN CH-T COL

Set to 1 to enable custom color for the Channel-Time display. Set to 0 to disable custom color for the Channel-Time display.

70-I. FOR CH-T COL (Channel-Time Display Foreground Color)

0 = Black	3 = Yellow	6 = Cyan
1 = Red	4 = Blue	7 = White
2 = Green	5 = Violet	

Note: If foreground and background color are the same, menu background is transparent.

71-I. BCK CH-T COL (Channel-Time Display Background Color)

0 = Black	3 = Yellow	6 = Cyan
1 = Red	4 = Blue	7 = White
2 = Green	5 = Violet	

Note: If foreground and background color are the same, menu background is transparent.

72-I. NOT USED

73-I. CH NOT AVBLE

When set to 1 and channel override is set to 0, "NOT AVAILABLE" message is displayed when directly accessing a channel not in the favorite channel list. (Applies to NTSC Channels Only.)

74-I. CH-TIME SIZE

When set to 1 and transparent background is selected for Channel-Time display, (foreground color = background color and custom color enabled) a large channel number is displayed instead of the normal Channel-Time display.

75-I. REVERT CH

When set to 1 and loss of M.P.I. communication occurs, TV automatically tunes to the specified Start Channel.

Detailed Descriptions for Installer Menu Items 76-I through 103-I

76-I. DEFEAT XDS

Set to 1 to disable XDS display. Set to 0 to enable XDS display. XDS data (provided at the discretion of the broadcaster), is available only on analog channels. After a channel change, wait 5 seconds then press ENTER to see XDS data, if available.

77-I. NOT USED

78-I. UPN MSB

User programmable number, most significant byte readable by M.P.I. command.

79-I. UPN MSB-1

User programmable number, most significant byte-1 readable by M.P.I. Command.

80-I. UPN MSB-2

User programmable number, most significant byte-2 readable by M.P.I. command.

81-I. UPN LSB

User programmable number, least significant byte readable by M.P.I. command.

82-I. CHKSM ERROR

Enforces rigid M.P.I checksum validation. Set to 1 for validation. Set to 0 to turn off.

83-I. HANDSHK TIME

Adds an additional delay to the handshake time which is 64 msec, thus relaxing M.P.I. timing requirements to be compatible with PC based Windows controlled systems, range is 0 - 5. Set to 0 to retain standard 64 msec delay. Set to 1 - 5 to increase @ 16 msec ea., the delay up to 144 msec.

84-I. PERMANENT BLK

Allows Parental Control blocking schemes to be permanent by removing the blocking hours function. Set to 1 to install Parental Control blocking restrictions permanently. Set to 0 for user-specified hours control of blocking schemes.

85-I. A MUTE TIME

Controls audio muting delay time when switching between AUX sources. Range is 0 to 254 msec.

86-I. V MUTE TIME

Controls video muting delay time when switching between AUX sources. Range is 0 to 254 msec.

87-I. NOT USED

88-I. EN NOISE MUTE

When set to 1, the audio signal volume is limited to a minimum value while receiving no signal from the broadcaster.

89-I. POKE ENABLE

When set to 1, writing to Non-volatile Memory thru M.P.I. Is enabled.

90-I. KEY LOCK

When set to 1, front keyboard functionality is disabled. When set to 0, keyboard is enabled.

91-I. NOT USED

92-I. NOT USED

93-I. NOT USED

94-I. NOT USED

95-I. AUDIO MD DISP

When set to 1, Audio Mode Information is enabled to appear as part of the Channel-Time Display.

96-I. NOT USED

97-I. NOT USED

- 98-I. NOT USED
- 99-I. NOT USED

100-I. ATSC TUNE MD (ATSC Tuning Mode)

Sets ATSC tuning mode. Set to 0 for virtual channel, set to 1 for physical channel.

101-I. STRT MINOR CH (Start Minor Channel)

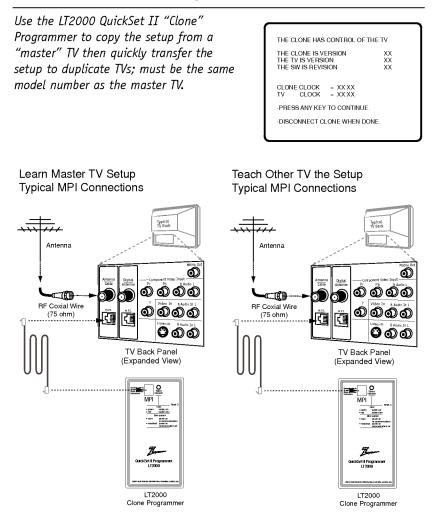
Sets the starting minor digital channel number. For NTSC set at 0. Not 0, sets digital minor start channel number. Used with item 4-I Start Channel. Set the major channel number in 4-1 and the minor digital dash number in item 101-I. At TV turn on, start channel number is automatically tuned in. Set to 0 if item 4-I is set to 255 for last tuned channel.

102-I. NOT USED

103-I. A RATIO LOCK (Aspect Ratio Lock)

When set to 1, current picture aspect ratio is retained at power off. At power on, previous aspect ratio will be used. If set to 0, resets aspect ratio to default setting at TV turn on.

LT2000 QuickSet Clone Programmer



The optional QuickSet II Clone Programmer (LT2000) allows custom setup and programming information to be quickly copied from a master TV into multiple identical television sets. Once learned from the master, setup data is retained in the LT2000 for future use.

When using the LT2000, cloning operations will go easier if the TV set is connected to a good quality signal and operating with a stable picture displayed. To operate the LT2000, use the indicated keys on the HP602, LP702 or MBR3447 LG remotes, or the front panel keys on the TV receiver.

Notes: Use only one MPI port for cloning. Do not run Auto Program while cloning.

LT2000 QuickSet Programmer

Cloning Preparations

Before You Begin Cloning...

• Only use one MPI port for connecting to MPI equipment.

• Do not run Auto Program while TV is connected to clone programmer.

• The "master TV" should be connected to a good, stable signal from an overthe-air antenna or cable service and turned on.

• Teaching and Learning is only possible between identical model LG TVs. (However, the Clone programmer can store 3 different master TV setups.)

WARNING: Copying a blank or incorrect

memory into a TV will cause the TV to operate erratically or become inoperable.

MBR3447LG or the TV front panel controls to operate Learning and Teaching menus.

• Make sure that the batteries in the Clone programmer are fresh.

• If the batteries are removed, the Clone Clock time will be lost.

• Decide if you want to set the time from the Clone programmer or copy the time to the Clone programmer; from a TV which has the clock set to the current time. • Follow the connection diagrams on the previous page to connect the Clone to a master TV and, after learning is complete, to another TV to "teach" it the setup.

• Setting the time and transferring it to the Clone or another TV is a separate procedure.

• Once a TV's setup is copied to another TV, that TV needs to be disconnected from power for about 5 seconds to activate the newly copied setup.

• See Troubleshooting to solve problems.

A. Set Up a Master TV

Using an LG Multi-Brand remote like the MBR3447LG, set up a "Master" TV with custom settings and features as described in the TV's operating guide.

The master TV's Setup is what you will copy to the Clone Programmer and transfer to TVs with the same model number so they will operate identically.

B. Connect Clone to Master TV

If there is a good connection, the "Clone has Control of TV" message will appear. (See menu on the previous page.)

A slow flashing green light indicates there is a problem with the communications between the TV and the programmer. In this case, check for a damaged cable, poor contacts or other connection troubles.

If the status indicator is red, the programmer batteries are low and should be replaced. Use 4 good-quality alkaline AA batteries.

LT2000 QuickSet Programmer

Cloning

THE CLONE HAS CONTROL OF THE	тv
THE CLONE IS VERSION THE TV IS VERSION THE SW IS REVISION	XX XX XX
CLONE CLOCK = XX:XX TV CLOCK = XX:XX	
-PRESS ANY KEY TO CONTINUE.	
-DISCONNECT CLONE WHEN DONE.	

C. Learn Setup from Master TV

Press 1 to select the "Learn From TV" option, then press ON/OFF, POWER, or ENTER to go to the Memory Bank Selection Menu. Pick the Memory "Bank" you want to store this Master TV's Setup in by pressing either Channel key repeatedly to pick Memory 1, 2 or 3. (If you choose a Memory "Bank" that already has a master TV's setup in it, it will be overwritten by this Master TV's setup.)

Once the Clone memory bank is selected, press ON/OFF, POWER or ENTER. The Clone memory bank you have selected will be shown. Press ON/OFF or POWER to begin copying the master TV's setup.

Ca. Set the Clock (Optional)

Set the time on the Master TV's Clock. (If the time has already been copied from another TV into the Clone programmer, you can set the Master TV's clock by copying the time from the Clone programmer.) The LT2000 Clone Programmer can copy the current time to both a master TV and to the Clone's internal clock; accurate to within one minute. (Another reason that the Clone programmer should be equipped with fresh, high-quality alkaline batteries is for it to keep the time as accurately as possible.) CLONE SELECTION MENU (1) LEARN FROM TV (2) TEACH TO TV (3) SET CLONE CLOCK FROM TV (4) SET TV CLOCK FROM CLONE (5) DISPLAY TV SETUP (6) DISPLAY CLONE SETUP

-TO CHANGE MENU ITEMS, PRESS CHANNEL KEYS OR DIGITS. -TO EXECUTE ITEM, PRESS ON/OFF, POWER, OR ENTER

Since the Clone Programmer's time cannot be set directly, the time needs to be copied from an LG TV equipped with M.P.I. Input capability.

Once the time is copied to the Clone programmer, the current time can then be transferred to another TV. (This can be a Master TV, or another TV which has had the features already set up.)

D. Teach Master TV's Setup to Another Identical TV

Once Learning is complete, remove the M.P.I. cable from the master TV and connect it to the TV that you want to copy the master TV's setup to. With the "TV is Controlled by Clone" message displayed, press 2 or use either Channel key to go to the "Teach to TV" option, press ON/OFF, POWER or ENTER.

Follow on-screen instructions to transfer the Setup and other information to the "Learning" TV. After the "Teach to TV is Complete" message is displayed, press any key to return to the Clone menus option, then press ON/OFF, POWER or ENTER. If finished, remove the M.P.I. Cable from the TV.

E. Disconnect TV Power for 5 Seconds Unplug the TV power cord of the newly "Cloned TV" from the power outlet for about 5 seconds to activate the newly copied Setup.

LT2000 Clone Programmer

Operation Notes

Disconnect the Clone from the TV when you are finished; automatically switching it off. The realtime clock continues to run after the main circuits have been switched off.

Reset Clone After Static Shock

After replacing exhausted batteries, or if the programmer behaves strangely after a static shock, use a paper clip or similar instrument inserted through the small hole marked "RESET" to activate the internal reset switch and restore normal operation.

After a reset, check the real-time clock setting. It may be necessary to reset the Clone Programmer clock from a TV containing the correct time.

The LT2000 programmer is designed to be used with TVs containing the 221-01006 and later processors. Use with earlier TV sets may give unpredictable results. The specific microprocessor used in any TV set may be determined by activating the Installer Menu. The microprocessor part number appears on the screen when the Installer Menu is activated. Processors before the 221-01006-04 have a limited screen display capability. They can not display entire screens as shown in the quick setup instructions accompanying the LT2000 clone programmer. Use the printed menu illustrations on the quick setup sheet supplied with the Clone as an aid to making your programming choices. (Although the menus are not all displayed, the clone functions all operate normally).

Clone Programmer/Cloning Procedure Troubleshooting

Problem	Possible Cause(s)	Possible Solution(s)
Clone Programmer		
LED does not blink.	 M.P.I. cord not connected. TV not turned on. Weak batteries. 	-Connect M.P.I. cord. -TV must be on for clone to work. -Install 4 fresh AA high-quality alkaline batteries.
Clone menu hard to read.	• Weak signal.	-Connect TV to a reliable signal Source.
No time set.	• No time on Master TV.	-Set time on master TV, copy time to Clone Programmer.
Menu items 7-8 not on clone selection menu.	• Not necessary.	-Channel Labels already cloned; if they were on Master TV.
Master and Other TVs		
Cloning did not work.	• Procedure interrupted.	-Wait until procedure complete message is displayed.
	• Different TV models.	-Cloning is only possible with identical model TVs.
Clone time disappeared.	• Batteries were removed.	-Batteries must remain installed to retain time settings.
Channel Labels not present on cloned TV.	 Saved to other memory. 	-Must save channel labels to same memory bank as master TV setup.
New Setup not present.	• TV not reset.	-Disconnect newly cloned TV from power for 5 seconds.
When cloning opera	tions are complete, just unplug t	he LT2000 from the TV.
If the TV does not a	display a picture (blank screen) a	fter a few seconds, just change channels.

Troubleshooting

Some Quick and Easy Tips for Resolving Problems

Installer Menu Settings and TV Problems

Installer menu item settings dictate how the TV functions. If a feature is not available or a problem can not be solved, check the installer menu settings to assure feature and functional items are set to appropriate levels, etc.

Symptom(s)	Possible Cause(s)	Possible Solution(s) Page	e(s)
Power			
No Power.	 AC Power Cord not connected or power outlet doesn't work. 	Connect power cord. Try a different power outlet. Local power failure?	11
No Source image.	 Source turned off. 	Turn source equipment on.	
	 Source not selected. 	Select source.	22
Remote Control Problem	s		
Remote doesn't work.	• Remote not in TV mode.	Put remote into TV mode.	9
	 TV software functioning. 	Wait until software function is complete.	
	 Not aimed at remote sensor. 	Point remote at TV Front Control Panel.	20
	 Remote too far from TV or IR path to TV obstructed. 	Move remote closer to TV or darken room. Remove obstructions.	
	 Weak batteries. 	Replace batteries.	11
	 Wrong battery polarity. 	Check that "+" and "-" match in battery compartment	. 11
	• Too much light in room.	Dim room light.	
Caption/Text Problems			
Picture has a big black box on it, but the sound is okay.	• Caption/Text mode turned on.	The CC (closed captions) option may be in Text 1, 2, 3, or 4 mode. Select Caption 1, or OFF in the Caption/Text menu.	30
No Closed Captions or Text.	 Not available on program. Not provided by broadcaster. (Even though CC indicated on OSD) 	Check local TV listings to see if available on broadcass Relocate over-the-air antenna. Try a different channel with Closed Captions or Text.	:. 30
	 Not turned on. 	Pick a Closed Caption or Text option and turn Caption	s on.
Captions appear when sound is muted.	• CC on Mute selected.	Set Captions option to Off.	30

Troubleshooting

Some Quick and Easy Tips for Resolving Problems

Symptoms	Possible Cause(s)	Possible Solution(s)	Page(s)
Picture Reception Poor or no picture.	* TV station problems.	Try a different channel.	8/9/20
foor of no picture.	 * Video menu not adjusted properly. 	•	36
Local interference.	* Check for disturbing source.	The following may cause image problems or di Electrical appliances, powerful lights, cars, tru computers or portable phones; medical equipm	stortion: cks;
	* Appliance too close to TV.	If possible increase the distance between the and the offending appliance. Or shut one of the	
Poor or no color.	* Sub-standard broadcast.	Try a different channel.	8/9/20
	* Sub-standard cable signal.	Notify cable company of reception problem. If a VCR is connected, play a tape.	
Picture wobbles or drifts.	* RF not connected, loose. * Local interference.	Make or tighten connection. Try different channel. Turn off interfering appliance.	12/15 8/9/20
	* Scrambled CATV channel.	Tune to unscrambled channel.	8/9/20
No CATV reception.	* Cable not connected.	Connect cable to Antenna/Cable (RF) jack.	13/15
	* Cable service interrupted.	Contact cable service.	
	* Antenna set, not CATV.	Select 'Cable TV' in Setup menu, run Auto Prog	ram. 19
Normal picture, poor or no sound.	* Audio muted.	Press MUTE or volume right key to increase sound level.	8/9
	* Broadcast problem.	Try a different channel.	8/9/20
	* A/V cables incorrectly connected.	Install A/V cables correctly. 1	4/15/17/18
	* Audio Out cable wrong.	Install Matrix Out external amplifier/speaker cable correctly.	16
	* Front Surround turned off.	Turn Front Surround On in the Audio menu.	35
	* No 2nd Audio/ SAP on program.	Choose another audio mode option or a different program.	35
Snowy or Poor Picture.	 * Wrong Ant. connection/location. * TV/VCR button set wrong. 	Move antenna, check connection/location. Set TV/VCR button on VCR correctly.	12/15
	* Wrong output channel selected.	Set output channels on all A/V equipment to same channel (3 or 4).	14/15
	* Loose connection.	Check that all connections are correct.	12-18
	* Broadcast problem.	Try another channel.	8/9/20
	* Video menu options set wrong.	Check Video menu brightness controls.	36
TV turns Off.	* Sleep Timer turned TV Off.	Turn TV back on.	8/9/20
	* Off Timer turned TV Off.	Turn TV back on.	8/9/20
	* Power failure.	Check other power outlets.	
	* Power outlet controlled by switch. (Switch turned off.)	Connect TV power cord to outlet that is not controlled by a switch.	
TV turns On.	* On Timer turned TV On.	Disable On/Off Timer.	29
TV does not turn On/Off per On/Off Timer settings.	* On/Off Timer option disabled.	Go to Timer option in Setup menu and enable On/Off Timer.	29

Troubleshooting

Some Quick and Easy Tips for Resolving Problems

Symptoms	Possible Cause(s)	Possible Solution(s)	Page(s)
Source Selection / Sou			
Camport (Front Audio/Video) source not selectable.	• Equipment not connected.	Connect Audio/Video equipment to front Audio/Video.	20
No Camport image. (Front Video)	 Equipment not turned on. Not enabled. 	Turn on equipment connected to front Video inpu Enable Camport in Installer menu.	t. 20 46
S- Video Source not selectable.	 Camport (Front Video) connected. 	Disconnect equipment connected to front Video jack.	20
	 Not connected. 	Connect S-Video equipment to S-Video In.	16/20
No S-Video image.	 Equipment not turned on. 	Turn on equipment connected to S-Video In.	
No S-Video audio.	 S-Video audio not connected. 	Connect audio for S-Video to Audio In R - L. (Use Audio In Left jack to connect only one audi	16/20 o wire.)
Antenna/Cable not selectable.	 Front Video connected. S-Video equipment connected. 	Disconnect equipment connected to front Video. Disconnect S-Video equipment from front or rear jack panel.	20 16/20
No Antenna Cable image.	• Not Connected.	Connect over-the-air antenna or cable service wire to Antenna/Cable jack.	12/13
Rear Audio Video not selectable.	 Front Video connected. S-Video equipment connected. 	Disconnect equipment from front Video jack. Disconnect S-Video equipment from front or rear jack panel.	20 16/20
		Go to Setup menu, select Add/Del/Blank option.	25
		Press MENU select "Added" in Add/Del/Blnk option in Setup menu. (See Installer menus.)	25
No rear Audio Video image.	* Equipment not turned on.	Turn on equipment connected to rear Audio/Video).
	* Equipment not connected.	Connect equipment to rear Audio/Video.	14-18

Troubleshooting/Maintenance

Some Quick and Easy Tips for Resolving Problems

Symptom(s)	Possible Cause(s)	Possible Solution(s)	Page(s)
Parental Control Problem	5		
User cannot access Parental Control menu.	 Digital channel tuned in. (Ch Preview not functional for digital channels on some models.) 	Tune in an analog channel to access Parental Control 8/9 menu with Ch Preview on remote.	
User cannot operate Parental Control menu.	 Digital channel tuned in. (Ch Preview not functional for digital channels on some models.) 	Tune in an analog channel to be able to navigate 8/9/20 and set up Parental Control restrictions.	
Guest has left Parental Control active, password is not known.	 Parental Control needs to be reset. 	Press and hold down MENU key until menu disappears. 37 Key in 9-8-7-6 and press CC. (For this to work, Installer menu item 0-1 Installer Seq needs to be set to 0.) 41	
Protected/blocked	• Program content is restricted.	Key-in password and turn Lock On/Off (restrictions) Off.	
message shows on-screen.		Set to Off in Lock On/Off menu.	37-39
	• Don't know password.	Tune to channel without Parental Control "Content" restrictions. Wait until restriction time expires.	37-39
TV-PG programs blocked.	• TV- PG set to be blocked.	Reset restrictions to PG- 13 so TV- PG programs will appear.	37-39
Foul language is heard.	• Foul language not blocked.	Restrict Language in Content options on Parental Control menu.	37-39
	 Program is not rated. 	Restrict or block programs with no ratings.	

Maintenance

Routine TV Cabinet and Screen Cleaning

Careful and regular cleaning can extend the the useful service life of the TV. Be sure to turn the power off and pull out the power cord before you begin any cleaning.

Screen Cleaning

1. Here's a great way to keep the dust off the screen for a while. Wet a soft cloth in a mixture of lukewarm water and a little fabric softener or dish washing detergent. Wring the cloth until it's almost dry, and then use it to wipe the screen.

2. Make sure the excess water is off the screen, and then let it air-dry before turning it on.

Cabinet Cleaning
1. Use a soft cloth with a mild soap solution to wipe the cabinet. (Avoid using any harsh, industrial strength variety of cleaner.)

2. Rinse the cloth and wipe the cabinet again.

3. Let the cabinet air-dry before turning the TV on.

Extended Absence

If the TV will be dormant for a long time, it's a good idea to unplug the power to protect against possible damage from lightning or power surges. If you use an off-air antenna, you may also want to disconnect it from the back of the TV. If you unplug the TV, you may have to reset the clock using the Clock Set menu described earlier. See page 28.

Glossary

A list of definitions for some of the words found in this guide

75 OHM	The wire that comes from an off-air antenna or cable service provider.	
RF CABLE	The end looks like a hex-shaped nut with a wire sticking through the middle. It screws onto the threaded jack on the back of the TV.	
300 TO 75 OHM ADAPTER	A small device that connects a two-wire 300 ohm antenna to a 75 ohm RF jack. They are usually about an inch long with two screws on one end and a round opening with a wire sticking out on the other end.	
A/V CABLES	Audio/Video cables. Three cables bunched together—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).	
ADDED	Lets you add new channels to the list that the user can scroll through using CH (Channel) Up/Down.	
AMPLIFIER	An electronic device that amplifies sound from a television, CD player, VCR, DVD, or other Audio/Video device.	
ANTENNA	The physical receiver of television signals sent over the air. A large metal piece of equipment does not always have to be visible to be using an antenna.	
AUTO PROGRAM	Auto Program has the TV automatically find all the channels available.	
BLANK	Channels that are Blanked will not have Video (shows a blank screen) only audio, if present on channel. (Not available on digital channels.)	
DELETED	Lets you remove channels from the list that the user will scroll through using CH (Channel) Up/Down.	
DIGITAL TUNER	Receives a digital signal and turns it into picture and sound.	
INPUT	Refers to an input jack that receives a signal from a TV, VCR, or other Audio/Video device.	
JACK	A connection on the back of a TV, VCR, or other Audio/Video device.	
MONO SOUND	Mono (monaural) sound is one channel of sound. On more than one speaker, all the speakers play the same audio.	
M.P.I.	Multiple Protocol Interface: LG protocol for external control of TV through RJ11 (M.P.I.) input jack on TV connections panel. (M.P.I. jack is used for cloning TV's features.)	
OUTPUT	Refers to the output jack that sends a signal out of a VCR, DVD, or other A/V device.	
2ND AUDIO PROGRAMMING SAP	Second Audio Programming (SAP) is another separate audio channel available with some programming. Choosing SAP often refers to listening to audio in another language, such as Spanish or French.	
S-VIDEO	Provides higher-quality picture and sound. (S-Video is also referred to as "Y-C".)	
SIGNAL	Picture and sound traveling through a cable, or over the air, to the television.	
STEREO SOUND	Stereo (Stereophonic) sound refers to audio that's divided into right and left sides.	
TUNER	Device that picks up the broadcast signal and turns it into picture and sound.	
XDS	Extended Data Service: Additional program information included on the signal provided at the discretion of the broadcaster.	

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Notes

This page is available to write any comments



Direct-View Welcome to the LG family! We believe that you will be pleased with your new TV. Color TV Please read this warranty carefully, it is a "LIMITED WARRANTY" as defined under Federal Law. This warranty gives you specific legal rights, and you may also have other rights that vary from state-to-state within the U.S.A.

LG's RESPONSIBILITY

- Service Labor During a period of one year from effective warranty date, LG will provide service labor by an LG authorized service center when needed, as determined by the LG service center, as a result of manufacturing defects.
 - Parts New or remanufactured replacements for factory-defective parts will be supplied by an LG authorized service center for one year from effective warranty date (color picture tube two years). Such replacement parts are warranted for the remaining portion of the original warranty period.
 - Warranty Warranty service is provided in the institution in most cases. (Some repairs may require Service the unit to be taken by the servicer to the repair facility and returned, at no additional charge.) Call 1-888-865-3026 for further information.

This warranty covers manufacturing defects and does not cover installation, adjustment of customer controls, installation or repair of antenna systems, cable converters or cable company-supplied equipment; it also does not cover damage due to misuse, abuse, negligence, acts of God or other causes beyond the control of LG. Any alteration of the product after manufacture voids this warranty in its entirety.

THIS WARRANTY IS IN LIEU OF ANY OTHER WARRANTY, EXPRESS OR IMPLIED, INCLUDING WITHOUT LIMITA-TION, ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, AND LG SHALL NOT BE LIABLE FOR ANY CONSEQUENTIAL, INDIRECT, OR INCIDENTAL DAMAGES OF ANY KIND, INCLUDING LOST REVENUES OR PROFITS IN CONNECTION WITH THIS PRODUCT. SOME STATES DO NOT ALLOW LIMITATIONS ON HOW LONG AN IMPLIED WARRANTY LASTS OR THE EXCLUSION OR LIMITATION OF INCIDENTAL OR CONSE-QUENTIAL DAMAGES, SO THE ABOVE LIMITATIONS OR EXCLUSIONS MAY NOT APPLY TO YOU.

OWNER'S RESPONSIBILITY

	Warranty begins on the date of installation of the Commercial Products Direct View Television Receiver. For your convenience, keep the dealer's dated bill of sale or delivery ticket as evidence of the purchase date.
Operating Guide	Read the Installation Guide carefully so that you will understand the operation of the TV and how to adjust the controls.
Antenna	Reception problems caused by inadequate antenna or faulty antenna connections are the owner's responsibility.
	For warranty service information, call 1-888-865-3026. Parts and service labor that are LG's responsibility (see above) will be provided without charge. Other service is at the owner's expense. If you have any problem in obtaining satisfactory warranty service, call 1-888-865-3026. You must provide the model number, serial number and date of purchase or date of original installation.
	Before you ask for warranty service, read "Maintenance and Troubleshooting" in this installation guide. You might avoid a service call.

For Customer Support/Service Please call: 1-888-865-3026

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