



22LX570M
28LX570M
32LX570M
43LX570M

Hospital Grade Interactive Pro:Centric[®] TVs

Commercial Mode Setup Guide

Note: Selected features shown in this guide may not be available on all models.

EXPERIENCED INSTALLER

LG Setup Wizard
pages 12 – 13

Custom Master TV Setup
pages 40 – 42

Cloning Procedures
pages 43 – 46

For Customer Support/Service, please call:

1-888-865-3026

The latest product information and documentation is available online at:

www.lg.com/us/commercial

MODEL and SERIAL NUMBER

The model and serial numbers of this TV are located on the back of the cabinet. For future reference, LG suggests that you record those numbers here:

Model No. _____ 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.

WARNING:

This product contains chemicals known to the State of California to cause cancer and birth defects or other reproductive harm. ***Wash hands after handling.***

POWER CORD POLARIZATION:

This product is equipped with a 3-wire grounding-type alternating current power plug. This plug will fit into the power outlet only one way. This is a safety feature. If you are unable to insert the plug fully into the outlet, contact your electrician to replace your obsolete outlet. Do not defeat the safety purpose of the 3-wire grounding-type plug.

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 Electrical 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 to 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.
1000 Sylvan Avenue, Englewood Cliffs, NJ 07632

IMPORTANT SAFETY INSTRUCTIONS

1. Read these instructions.
2. Keep these instructions.
3. Heed all warnings.
4. Follow all instructions.
5. Do not use this apparatus near water.
6. Clean only with dry cloth.
7. Do not block any ventilation openings. Install in accordance with the manufacturer's instructions.
8. Do not install near any heat sources, such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
9. Do not defeat the safety purpose of the polarized or grounding-type plug. A polarized plug has two blades with one wider than the other. A grounding-type plug has two blades and a third grounding prong. The wide blade or the third prong are provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.
10. Protect the power cord from being walked on or pinched, particularly at plugs, convenience receptacles, and the point where it exits from the apparatus.
11. Only use attachments/accessories specified by the manufacturer.
12. Use only with the cart, stand, tripod, bracket, or table specified by the manufacturer or sold with the apparatus. When a cart is used, use caution when moving the cart/apparatus combination in order to avoid injury from tip-over.



13. Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.
14. Never touch this apparatus or antenna during a thunder or lightning storm.
15. When mounting a TV on the wall, make sure not to install the TV by the hanging power and signal cables on the back of the TV.
16. Do not allow an impact shock or any objects to fall into the product, and do not drop objects onto the screen.

17. Power Cord

Caution: It is recommended that appliances 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 TV specifications.

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 twisting, kinking, or pinching or being closed in a door or walked upon. Pay particular attention to plugs, wall outlets, and the point where the cord exits the appliance.

Do not use a damaged or loose power cord. Be sure to grasp the plug when unplugging the power cord. Do not pull on the power cord to unplug the TV.

18. Overloading

Do not connect too many appliances to the same AC power outlet as this could result in fire or electric shock. 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 fire or electric shock.

19. Outdoor Use/Wet Location



Warning: To reduce the risk of fire or electrical shock, do not expose this product to rain, moisture or other liquids.

Do not touch the TV with wet hands. Do not install this product near flammable objects such as gasoline or candles or expose the TV to direct air conditioning.

Do not expose to dripping or splashing and do not place objects filled with liquids, such as vases, cups, etc., on or over the apparatus (e.g., on shelves above the unit).

20. Grounding

Ensure that you connect the earth ground wire to prevent possible electric shock (i.e., a TV with a three-prong grounded AC plug must be connected to a three-prong grounded AC outlet). If grounding methods are not possible, have a qualified electrician install a separate circuit breaker. Do not try to ground the unit by connecting it to telephone wires, lightning rods, or gas pipes.

21. Disconnect Device

The mains plug is the disconnecting device. The plug must remain readily operable.

As long as this unit is connected to the AC wall outlet, it is not disconnected from the AC power source even if you turn off this unit by SWITCH.

(Continued on next page)

IMPORTANT SAFETY INSTRUCTIONS

(Continued from previous page)

22. Outdoor Antenna Grounding

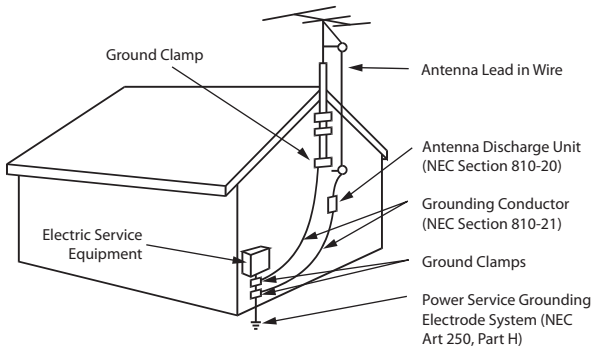
If an outside antenna or cable system is connected to the product, follow the precautions below.

An outdoor antenna system should not be located in the vicinity of overhead power lines or other electric light or power circuits or where it can come into contact with such power lines or circuits as death or serious injury can occur.

Be sure the antenna system is grounded so as to provide some protection against voltage surges and built-up static charges.

Article 810 of the National Electrical Code (NEC) in the U.S.A. provides information with respect to proper grounding of the mast and supporting structure, grounding of the lead-in wire to an antenna-discharge unit, size of grounding conductors, location of antenna-discharge unit, connection to grounding electrodes, and requirements for the grounding electrode.

Antenna Grounding According to NEC, ANSI/NFPA 70



23. Cleaning

When cleaning, unplug the power cord and wipe gently with a soft cloth to prevent scratching. Do not spray water or other liquids directly on the TV as electric shock may occur. Do not clean with chemicals such as alcohol, thinners or benzene.

24. Transporting Product

Make sure the TV is turned Off and unplugged and that all cables have been removed. It may take two or more people to carry larger TVs. Do not press against or put stress on the front panel of the TV during transport.

25. Ventilation

Install the TV where there is proper ventilation. Do not install in a confined space such as a bookcase. Do not cover the TV with cloth or other materials (e.g., plastic) while it is plugged in. Do not install in excessively dusty places.

26. Do not touch the ventilation openings, as they may become hot while the TV is operating.

27. If you smell smoke or other odors coming from the TV or hear strange sounds, unplug the power cord, and contact an authorized service center.

28. Do not press against the front panel of the TV with your hand or a sharp object (e.g., a nail, pencil, or pen) or make a scratch on it.

29. Keep the product away from direct sunlight.

30. Dot Defect

The LCD panel is a high technology product with resolution of two million to six million pixels. In a very few cases, you could see fine dots on the screen while you are viewing the TV. Those dots are deactivated pixels and do not affect the performance and reliability of the TV.

31. Generated Sound

“Cracking”: A cracking noise that occurs while the TV is On or when it is turned Off is generated by plastic thermal contraction due to temperature and humidity. This noise is common for products where thermal deformation is required.

Electrical circuit humming/panel buzzing: A low level noise is generated from a high-speed switching circuit, which supplies a large amount of current to operate a product. It varies depending on the product. This generated sound does not affect the performance and reliability of the product.

32. For LCD TV

If the TV feels cold to the touch, there may be a small “flicker” when it is turned On. This is normal; there is nothing wrong with the TV. Some minute dot defects may be visible on the screen, appearing as tiny red, green, or blue spots. However, they have no adverse effect on the TV’s performance. Avoid touching the LCD screen or holding your finger(s) against it for long periods of time. Doing so may produce some temporary distortion effects on the screen.

Safety Warnings	2	Cloning Procedures	43–46
Important Safety Instructions	3–4	Exporting a Clone File	43
Table of Contents	5	Importing a Clone File	44
Commercial Mode Overview	6–9	FTG File Manager Utilities Overview	47–52
Setup Checklist	6	Creating an FTG Configuration File	47
Pass-through Mode	6	FTG File Manager Main Screen	49
FTG Mode	7	FTG Channel Map Configuration Utility	50
Determining the TV Operating Mode	9	FTG Channel Map Editor	51
Pro:Centric Operation	10–11	FTG Installer Menu Configuration Utility	52
Pro:Centric Interactive Menu Features	10	References	
Pro:Centric Interactive Menu Navigation	10	Updating TV/PTC Software using a USB Memory Device	53
Pro:Centric Setup	11	Downloading a Splash Screen Image using a USB Memory Device	54
LG Setup Wizard	12–13	Power Consumption Settings	55
Before You Begin	12	TV Aux Input Configuration	56
Initiate Configuration or Exit the LG Setup Wizard	12	<i>b</i> -LAN Setup & Overview	57
EZ-Manager Wizard	14–19	FTG Mode via EBL (Local Configuration)	58
Initiate the EZ-Manager Wizard	14	Auto Input(s) Sensing Feature	59
TV Configuration Options	14	LX570M Hospital Operations	60–61
Zone and Room Number Assignments	15	Restoring Factory Defaults on the TV(s)	62
Configure Pro:Centric Settings	16	Using the TV Zoning Feature	63–65
USB Configuration	18	22/28LX570M Rear and Side Jack Panels	66
Express Script	20–25	32/43LX570M Rear and Side Jack Panels	67
Initiate the Express Script	20	External Stereo Speaker Specifications	68
Configure Pro:Centric Settings	20	Installer Remote Control Typical Key Functions	69
Complete the TV Configuration	21	LG Pro:Centric Patient Remote and Pillow Speaker	70–71
Channel Banks Overview	25	Pillow Speaker Setup	72
Ez Download Utility	26–28	VESA Standard TV Mounts	73
Before You Begin	26	Troubleshooting	74–76
Accessing and Using the Ez Download Utility	26	General Troubleshooting	74
Installer Menu	29–39	Commercial Mode Check / FTG Operation Troubleshooting	75
Accessing the Installer Menu	29	Channel Banks Setup Troubleshooting	76
Using the Installer Menu	30	Glossary of Terms	77
Exiting the Installer Menu and Activating Settings	30	Document Revision History / Open Source Software Notice	78
Custom Master TV Setup	40–42	Back Cover	79
Before You Begin	40		
Clonable TV Setup Menu Features	40		
Custom Master TV Setup Procedure	41		

Notes

- Installer Menu content is intended for use primarily by qualified TV electronics technicians.
- Refer to the applicable Owner's Manual for additional information on TV installation, specifications, maintenance, and safety instructions.
- Design and specifications subject to change without prior notice. This document provides examples of typical TV displays. Your displays may vary from those shown in this document.

Commercial Mode Overview

This document describes how to set up LX570M Pro:Centric® TVs for Commercial Mode operation. LG commercial TV functionality is based on “ownership” of the Channel Map; that is, the Channel Map resides in the TV’s CPU, Protocol Translator Card (PTC), or the embedded *b*-LAN™ (EBL) module, or it resides externally from the TV (i.e., in a device from the solution provider).

These TV models are capable of Free-To-Guest (FTG) Mode operation via the TV CPU. Alternatively, the EBL module can be configured either for Pass-through Mode (default) or FTG Mode. When neither the CPU nor EBL is in FTG Mode, these TV models also allow external control via the TV’s MPI port.

Setup Checklist

Note: This document provides information specific to Commercial Mode operation. Refer to the Owner’s Manual for information on TV installation and hardware and cable connections.

Installation

- Unpack TV and all accessories.
 - Install batteries in the Installer Remote.
 - Install TV on VESA mount or stand.
- Note:** It may be advisable to make all cable connections before installing on VESA mount or stand, as appropriate.

Cable Connections

- Make all rear jack panel connections, as appropriate.

Commercial Mode Setup

- Complete appropriate procedures as described in this document for Commercial Mode operation.

Hardware Connections

- Install any additional hardware as appropriate to your institution, LAN, etc.

Pass-through Mode

This mode allows you to configure individual TVs for Pro:Centric and/or FTG Mode via CPU operation or create a Master TV Setup for cloning purposes. This mode also allows external control via the GAME CONTROL/MPI port on the TV rear jack panel.

There are three methods for configuring individual TVs that are currently in Pass-through Mode: using one of the two LG Setup Wizard options or using the Custom Master TV Setup procedure as described in this document.

LG Setup Wizard Configuration

When the TV is in a factory default state, the LG Setup Wizard provides the following two configuration options:

- The EZ-Manager Wizard provides automated or manual options for configuring Pro:Centric operation and also provides the option to configure the TV using a USB memory device.
- The Express Script provides streamlined configuration of the TV for FTG Mode via CPU operation (including pillow speaker setup) and also provides the option to configure the TV for Pro:Centric operation.

See “LG Setup Wizard” on pages 12 to 13 for further information.

Custom Master TV Setup

Unlike the guided process above, the Custom Master TV Setup procedure enables you to create a customized Master TV Setup for cloning purposes for TVs that are to remain in Pass-through Mode. Use the Installer Remote to configure Installer Menu items as required for TV operation and set up TV features (Channel, Picture, Audio, etc.). See “Custom Master TV Setup” on pages 40 to 42 for detailed information.

Commercial Mode Overview (Cont.)

Installer Menu

To create a Master TV Setup, you will need to know how to access the commercial controller (PTC) Installer Menu and make changes to the default values as required. If necessary, familiarize yourself with the Installer Menu and how to make and save changes. Refer to pages 29 to 39 for information on accessing the Installer Menu and for detailed descriptions of the Installer Menu items.

TV Setup Menus

On-screen setup menus control the features of the TV. Use the Installer Remote to access the TV setup menus, and set the TV features to the desired configuration for the end user.

Cloning

Cloning refers to the process of using a Master TV Setup to configure a Target TV. The Master TV's clonable setup menu features should be configured as part of the Master TV Setup. If there are features in the Master TV's setup—channel icons or labels, digital font options, etc.—that are not set or that are set incorrectly, those features also will not be set or will be set incorrectly in the Target TVs. Refer to pages 43 to 46 for detailed information on cloning requirements and procedures.

External MPI Control

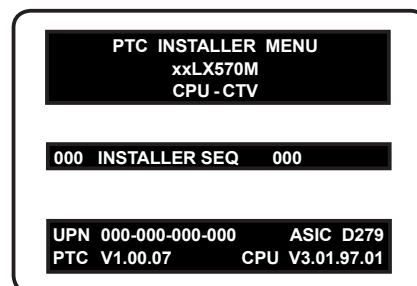
To control the TV using an external MPI control device, you must use the TV's GAME CONTROL/MPI port for communication purposes. In these TVs, Installer Menu item 118 POWER SAVINGS controls the power circuitry for both the embedded b-LAN module and the GAME CONTROL/MPI port; therefore, to ensure that the GAME CONTROL/MPI port circuitry is powered, thus enabling MPI communication, Installer Menu item 118 POWER SAVINGS must be set appropriately. See Installer Menu item descriptions as well as Reference section, "b-LAN Setup & Overview," for further information.

Note: These TV models are not equipped with MPI card slots.

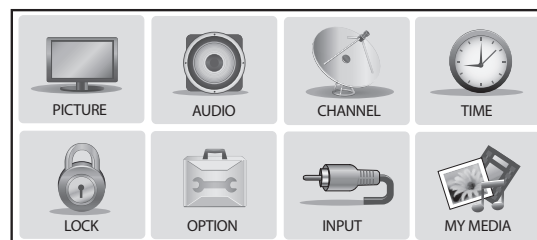
FTG Mode

In this mode, an FTG Channel Map enables the decryption of each Pro:Idiom® encrypted channel. The FTG Channel Map also provides logical channel mapping of physical RF channels (digital and analog) and Aux inputs. The method for creating the FTG Channel Map is ultimately determined by which element of the TV will "own" the FTG Channel Map—the CPU or the EBL.

For these TV models, there are two FTG Modes—FTG Mode via CPU and FTG Mode via EBL—which are separate and distinct FTG Modes of operation, each with its own unique advantages and requirements, as outlined on the following page.



Typical Installer Menu



TV Setup Menus

Commercial Mode Overview (Cont.)

When the TV CPU is configured with an FTG Channel Map, the CPU controls and restricts the tuning operation of the TV, and when the EBL is configured with an FTG Channel Map, the EBL controls and restricts the tuning operation of the TV. In these models, FTG Mode via CPU also provides the option to select either logical or physical tuning (see note below) during configuration. You must determine which element of the TV will own the FTG Channel Map before you can begin configuration.

Note: Logical channel mapping of physical RF channels eliminates dash tuning; for example, physical 19-3 can be mapped to logical channel 9. It also allows physical RF channels and Aux inputs to be listed in any order, not only in physical numeric ascending order. Physical channel tuning requires that you include the dash when direct entering RF channel numbers and Aux inputs (the latter designated by 130-0 through 137-0).

FTG Mode via CPU

This mode provides the following features:

- Logical or physical tuning of physical RF channels and Aux inputs.
- Mapping of RF channels with minor (program) numbers up to 999.
- FTG Channel Map of up to 600 channels.
- Start Channel set for RF or Aux input delivered content.
- Pro:Centric data delivery over RF.
- TV Zoning option for location-specific configuration.

LG's FTG File Manager PC software enables you to create an FTG Configuration (.tlx) file, which may be used to configure the CPU for FTG Mode. You can also create a Clone (.tlx) file from a Master TV Setup that may be used to configure the CPU for FTG Mode. In this mode, the CPU is the owner of the FTG Channel Map and must be configured with an FTG Channel Map and FTG Installer Menu settings using one of the following processes:

- Local: Configure an individual LX570M TV via its USB port using a USB memory device / ".tlx" file. The file may be either a Clone file (see Cloning Procedures" on pages 43 to 46) or an FTG Configuration file (see "FTG File Manager Utilities Overview" on pages 47 to 52).
- Remote: Configure all LX570M TVs at the site using a Pro:Centric server head end device (Example: PCS200R). Refer to the **Pro:Centric Server Admin Client User Guide** for further information.

FTG Mode via EBL

This mode provides the following features:

- Logical tuning of physical RF channels and Aux inputs.
- Mapping of RF channels with minor (program) numbers up to 255.
- FTG Channel Map of up to 141 logical channels.
- Start Channel set for RF or Aux input delivered content.
- Pro:Centric data delivery over RF.

LG's FTG Device Configuration Application PC software is required to configure the EBL. In this mode, the EBL is the owner of the FTG Channel Map and must be configured with an FTG Channel Map and FTG Installer Menu settings using one of the following processes:

- Local: Configure an individual LX570M TV's EBL via its TV-LINK CFG jack using a direct PC-to-TV (EBL) connection and the FTG Device Configuration Application. See Reference section, "FTG Mode via EBL (Local Configuration)," for information on the "Write" process for an FTG Channel Map and FTG Installer Menu settings.
 - Remote: Configure all LX570M TV EBLs at the site using a Free-To-Guest Management Appliance (FMA) head end device (Example: FMA-LG101). Refer to the **Free-To-Guest (FTG) Device Configuration Application User Guide** and/or the Installation & Configuration Guide for the FMA device for further information.
-

Commercial Mode Overview (Cont.)

While the TV is in FTG Mode:

- Users can still access the Installer Menu using an LG Installer Remote; however, all Installer Menu items will be read-only.
- FTG Mode via CPU configuration changes must be made using a “.tlx” file (typically edited in the FTG File Manager), while FTG Mode via EBL configuration changes must be made using the FTG Device Configuration Application. FTG Channel Map Configuration and FTG Installer Menu Configuration utilities in both PC applications enable you to make changes, respectively, to the FTG Channel Map and FTG Installer Menu settings as necessary. Based on the initial method used to configure the TV for FTG Mode operation (via CPU or EBL), all subsequent changes must be transferred to either the TV CPU or the EBL via a process that is in accordance or compatible with that method (see information on local configuration in this document or refer to documentation for the head end device/server for information on remote management).
- If it becomes necessary to restore the TV to Pass-through Mode, there are several options that will enable you to do so. See Reference section, “Restoring Factory Defaults on the TV(s),” for further information.

Pages 47 to 52 provide overviews of the utilities that comprise the FTG File Manager. Refer to the **Free-To-Guest (FTG) File Manager User Guide** for further information on the FTG File Manager. Refer to the **Free-To-Guest (FTG) Device Configuration Application User Guide** for information on the FTG Device Configuration Application.

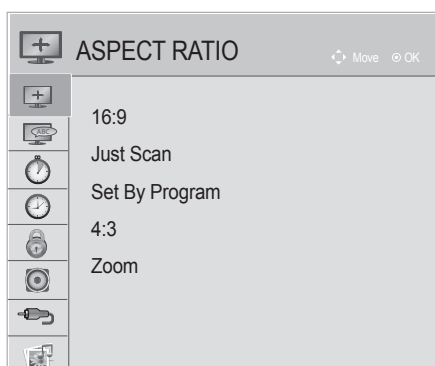
Remote Management in FTG Mode

When the TV is configured for FTG Mode via CPU, remote management of the FTG Channel Map and FTG Installer Menu settings is provided by a Pro:Centric server, via a Clone/Configuration (.tlx) file loaded on the Pro:Centric server Admin Client. Refer to the **Pro:Centric Server Admin Client User Guide** for further information.

When the TV is configured for FTG Mode via EBL, the *b*-LAN module, which is internal to the TV, allows hotel/institution head end equipment (for example, an FMA-LG101) with *b*-LAN technology to provide remote management of the FTG Channel Map and FTG Installer Menu settings. See Reference section, “*b*-LAN Setup & Overview,” for further information.

Determining the TV Operating Mode

To determine the operating mode of the TV, press **MENU** on the Installer Remote. The menu displayed depends on the operating mode. If the Function Menu (see example below) appears, the TV is in a mode (FTG, PPV, etc.) that does not allow the end user to change the fundamental TV setup. If the TV setup menus (see example on page 7) appear, the TV is in Pass-through Mode.



Function Menu

Indicates the TV is not in Pass-through Mode. While the TV is in this mode, Installer Menu settings can be accessed as read-only.

Pro:Centric Operation

Pro:Centric Interactive Menu Features

LG's Pro:Centric application enables patients and visitors to locate and select television entertainment using an interactive channel guide, check the daily weather, and view hospital and surrounding amenities via custom billboards and points-of-interest maps.

Pro:Centric application features include:

- Portal and information screens/pages (including a "Welcome" page) that include branding logos.
- An optional customized user interface (custom "skins").
- Billboards and points-of-interest maps, which can be customized to focus on hospital amenities, local attractions and businesses, hotels, restaurants, news, events, etc.
- An optional Weather billboard that includes a local radar map, current conditions, and a four day forecast.
- An interactive channel guide that provides a channel list with channel icons. An electronic program guide (EPG) is an optional feature that displays up to three days of programming information viewable by channel and time.
- Video spooling that enables the hospital to deliver a video file to patient and visitor TVs for promotion and information purposes.

The Pro:Centric server Admin Client web editor/content wizard is provided for customer configuration of portal messages and billboards/maps.

Note: Customized content is typically defined by the service integrator and/or hospital administrators. LG does not provide hospital-specific content.

Pro:Centric Interactive Menu Navigation

LG's Pro:Centric pillow speaker provides access to both interactive menus and regular TV features. Press **PORTAL** on the Pro:Centric pillow speaker to access the interactive menus.

Note: Interactive menu options may vary, depending on Pro:Centric features enabled for the site. The following are default interactive menus.



Channel Guide

Shows available TV networks and logical channels. When available, EPG data provides additional channel and program information.

Information

Typically displays information on hotel amenities, for example, restaurants, in-room dining, business centers, facilities, etc., as well as information on local weather and attractions.

Help

Provides help for navigating the interactive menus.

Watch TV

Removes the interactive menu from the screen and returns to the previously tuned TV channel.

Pro:Centric Setup

Administration and management options for the Pro:Centric server are described in detail in the **Pro:Centric Server Admin Client User Guide**. This document describes only those settings that must be specified on the TVs to enable Pro:Centric remote management and/or the Pro:Centric application.

- Remote management (TV E-Z Installation): The Pro:Centric server Admin Client provides remote management facilities for downloading splash screen image and software/firmware updates as well as facilities for downloading a Clone/Configuration (.tlx) file for FTG Mode via CPU configuration.
- Pro:Centric application: The application, which operates in conjunction with FTG and PPV Modes, comprises the Pro:Centric interactive menus/features described on the previous page. Pro:Centric application settings are managed via the Pro:Centric server Admin Client.

The Pro:Centric server settings can be configured using one of the methods described below.

Note: If using a Pro:Centric pillow speaker, also set Installer Menu item 027 HOSPITAL MODE to the required value.

TV in Factory Default State

When the TV is in a factory default state, LG's Setup Wizard (see pages 12 to 13) provides automated or manual options for configuring the Pro:Centric server settings. The EZ-Manager branch of the Setup Wizard also provides a USB configuration option that enables you to configure a TV for FTG Mode via CPU using a Clone/Configuration (.tlx) file stored on a USB memory device. The ".tlx" file incorporates FTG Installer Menu settings, including Installer Menu items 098 PRO:CENTRIC and 119 DATA CHANNEL, which are used to set up the TV's Pro:Centric feature.

TV in Pass-through Mode

If the TV is in Pass-through Mode, set Installer Menu items 098 PRO:CENTRIC and 119 DATA CHANNEL to the appropriate values. See Installer Menu information on pages 29 to 39 for further details. Also, as necessary, refer to "Custom Master TV Setup" on pages 40 to 42 and/or cloning information on pages 43 to 46.

Note: When the TV is in either Pass-through Mode or FTG Mode via CPU, you can also leave Installer Menu item 119 DATA CHANNEL set to its default value (255) to enable the TV's Data Channel Auto Search feature to set the DATA CHANNEL value. See item 119 description on page 38 for additional information.

TV in FTG Mode

If the TV is in FTG Mode (via CPU or EBL), use the appropriate FTG application software to update Installer Menu items #98 Pro:Centric and #119 Data Channel (along with their affiliated fields). Then, transfer the FTG Installer Menu settings to the TV in accordance with the FTG Mode of configuration. Refer to the FTG Mode overview on pages 7 to 9 for further information on FTG Mode operation and configuration. Also—for FTG Mode via CPU only—see note above regarding the option to use the TV's Data Channel Auto Search feature to set the DATA CHANNEL value.

LG Setup Wizard

The LG Setup Wizard, comprising EZ-Manager Wizard and Express Script configuration options, will appear on the screen each time the TV is turned ON, until one of its configuration methods has been completed or the wizard is exited. Use the Installer Remote to make selections and complete each step.

- The primary purpose of the EZ-Manager Wizard is to guide you through the process (automated or manual) of configuring the essential Installer Menu items for Pro:Centric operation. However, while intended primarily for Pro:Centric-related configuration, the EZ-Manager Wizard also offers Zoning options. LX570M TVs support the TV Zoning feature, which enables location-specific settings (see Reference section, “Using the TV Zoning Feature,” for further information). The EZ-Manager Wizard enables you to set the TV Zone # in the TV as part of the configuration process.
- The EZ-Manager Wizard also enables you to access USB download options as part of the configuration process, if desired, to perform USB configuration and/or update functions.
- The Express Script guides you through the process of configuring the TV for FTG Mode via CPU operation. This includes setting up the pillow speaker, as required. The Express Script also enables you to configure the Pro:Centric settings on the TV.



Caution: Do NOT unplug the TV power cord or remove the antenna cable during the configuration process, as doing so will interrupt the current step and may corrupt the configuration data.



Note: If you do not intend to complete the Express Script, but you wish to enable pillow speaker functionality, you must set Installer Menu item 027 HOSPITAL MODE appropriately. See the “Installer Menu” section of this document for further information.

Before You Begin

- If you plan to create a customized Master TV Setup using the procedure described on pages 31 to 35, be sure to exit the LG Setup Wizard in order to avoid setup conflicts or setting modes that may cause the TV to malfunction or restrict the custom setup procedure. See also “Initiate Configuration or Exit the LG Setup Wizard” below.
- If it has been completed or exited and therefore does not display, the Setup Wizard can be reactivated; however, this requires that you restore the TV to a factory default condition. See Reference section, “Restoring Factory Defaults on the TV(s),” for further information.

Initiate Configuration or Exit the LG Setup Wizard

The welcome screen provides a brief introduction to the LG Setup Wizard.

Note: Once you proceed with one of the configuration options, it is not possible to return to the Setup Wizard Welcome screen; however, if you simply wish to exit the EZ-Manager Wizard or Express Script (depending on your selection from the Setup Wizard Welcome screen), you can do so using “exit” options available from the subsequent screen(s).



From the Welcome screen, you have the following options:

- To proceed with the EZ-Manager Wizard, use the arrow keys on the Installer Remote to select/highlight **EZ-Manager**, and then press **OK**. Then, continue to the “EZ-Manager Wizard” section on pages 14 to 19.
- To proceed with the Express Script, use the arrow keys on the Installer Remote to select/highlight **Express Script**, and then press **OK**. Then, continue to the “Express Script” section on pages 20 to 25.
- To exit the Setup Wizard, use the arrow keys on the Installer Remote to select/highlight **Exit**, and then press **OK**. In the confirmation pop-up window, select **OK**, and then press **OK** once more on the Installer Remote.

Note: Both the EZ-Manager Wizard and the Express Script enable you to configure Pro:Centric settings on this TV, even if you do not intend to configure any of the additional settings available. After you configure the Pro:Centric settings, you will have the option to exit without completing the remainder of the EZ-Manager Wizard or Express Script (as applicable), if desired.

Note: If you exit the Setup Wizard from this Welcome screen, no configuration will be performed and all Installer Menu items will retain their default values, including Installer Menu item 119 DATA CHANNEL. The default DATA CHANNEL setting (255) means that the Pro:Centric remote management feature on this TV will be activated if a Pro:Centric server is installed and the Data Channel value is set during a Data Channel Auto Search (see item 119 description on page 38 for additional information). If you actually would like to disable the Pro:Centric feature, both the EZ-Manager Wizard and the Express Script provide an option to do so.

EZ-Manager Wizard

Initiate the EZ-Manager Wizard

After you select the “EZ-Manager” option from the Setup Wizard Welcome screen, an EZ-Manager Welcome screen provides a brief introduction to the EZ-Manager Wizard.

Note: Each EZ-Manager Wizard step is allotted a time frame after which the wizard proceeds without user interaction. If the Pro:Centric server is configured on the system and if no location-specific settings are required in the TV, for example, TV Zone, Label, and/or Room Number settings, from this point, the wizard can proceed through each of the configuration steps with no further user interaction.



Note: If there is no user action in this screen within 10 seconds, the wizard will proceed to the first configuration step. Once the wizard has proceeded, it is not possible to return to the Welcome screen; however, if you simply wish to exit the wizard, you can do so by selecting the “Exit” option from the subsequent screen(s).

From the EZ-Manager Welcome screen, you have the following options:

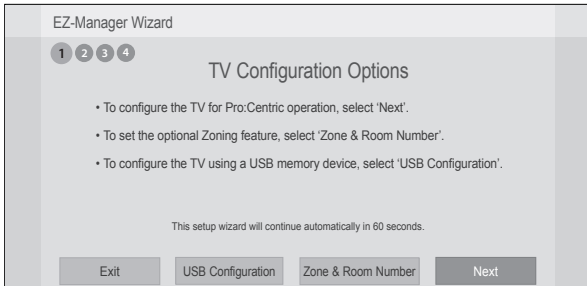
- To proceed with the EZ-Manager Wizard, use the arrow keys on the Installer Remote to select **Next**, and then press **OK**. Then, continue to the “TV Configuration Options” section below.
- To exit the EZ-Manager Wizard, but retain the use of the Pro:Centric remote management feature on this TV (i.e., Installer Menu item 119 DATA CHANNEL set to 255) in the future, use the arrow keys on the Installer Remote to select **Exit**, and then press **OK**. In the confirmation pop-up window, select **OK**, and then press **OK** once more on the Installer Remote.
- If you do not intend to install a Pro:Centric server on this system and you do not wish to use the wizard’s Zoning or USB configuration options, exit the wizard as follows: Use the arrow keys on the Installer Remote to select **No Pro:Centric**, and then press **OK**. This will disable the Pro:Centric feature of this TV (i.e., Installer Menu item 119 DATA CHANNEL will be set to 0). In the confirmation pop-up window, select **OK**, and then press **OK** once more on the Installer Remote.

TV Configuration Options

From the TV Configuration Options screen, you can choose how to proceed with the configuration of this TV (assuming you do not opt to exit the wizard, which you may also do at any time).



Note: If you intend to use the Zoning feature on the TV for location-specific configuration purposes, select the “Zone & Room Number” option from this screen and assign the appropriate TV Zone # in the TV BEFORE you continue with additional configuration.



Note: If there is no user action in this screen within one minute, the wizard will automatically continue to the next configuration step.

Use the Left/Right arrow keys on the Installer Remote to navigate between options on this screen. Each time you select/highlight one of the following options, the screen text and fields will change in accordance with your selection.

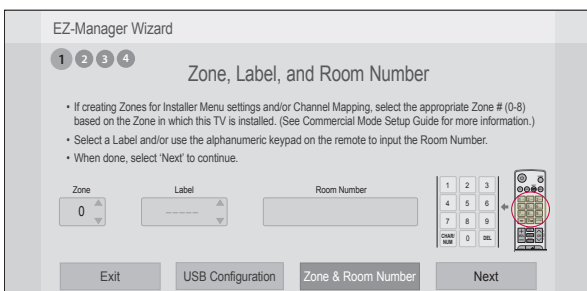
- To continue with Pro:Centric configuration, select **Next** (default) and press **OK** on the Installer Remote. Refer to “Configure Pro:Centric Settings” on pages 16 to 18 for additional information.
- Select **Zone & Room Number** to set the Zoning feature on this TV. See “Zone and Room Number Assignments” below for further information.
- Select **USB Configuration** to access the USB download options. See “USB Configuration” on pages 18 to 19 for further information.

Note: If you choose to exit the EZ-Manager Wizard from this point on, you will have the option to save any settings made by selecting **Save and Exit** in the exit confirmation pop-up window. Or, you can exit the wizard without saving any settings by simply selecting **OK** in the confirmation pop-up window.

Zone and Room Number Assignments

You may complete one or more of the fields in the Zone, Label, and Room Number screen or leave them at their default settings (Zone) or blank (Label and Room Number), as desired; however, if you intend to use the Zoning feature on this TV, you **MUST** specify the appropriate value in the Zone field as described below. See also Reference section, “Using the TV Zoning Feature,” for further information.

Note: The Zoning feature is only applicable for TVs that will be configured using a “.tlx” file (local or remote configuration).



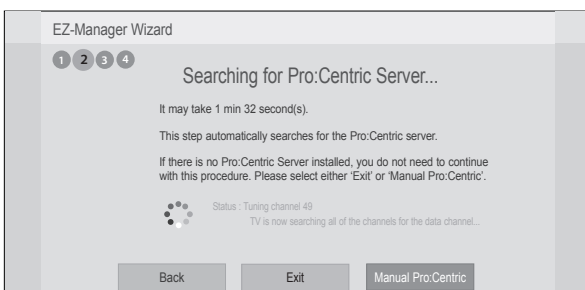
EZ-Manager Wizard (Cont.)

1. Complete the appropriate field(s) as described below. Use the Left/Right arrow keys on the Installer Remote to navigate between each of the fields.
 - **Zone:** Enables you to set a TV Zone # so that the TV can be configured with Installer Menu and/or TV Setup Menu settings intended only for the assigned Zone. The Installer Menu and/or TV Setup Menu settings may be provided in a Clone/Configuration (.tlx) file. If the TV is being configured for FTG Mode via CPU, the TV Zone # setting also allows the TV to omit channels that have been restricted in the FTG Channel Map.

To change the TV Zone from its default value (0), navigate to the Zone field at the left of the screen, and use the Up/Down arrow keys to specify the desired TV Zone # (1–8).
 - **Label:** Allows you to select a North, South, East, or West text label for this TV. In the Label field, use the Up/Down arrow keys to select the applicable label.
 - **Room Number:** Allows you to specify the number of the room—up to 16 characters—in which the TV is located. In the Room Number field, you can use the number keys on the Installer Remote to direct enter a room number. Use the Dash key on the Installer Remote as necessary to toggle between number and letter characters in the Room Number field. Also, you can use the Flashback key on the Installer Remote to delete characters in this field.
2. When you are ready to continue, select the appropriate option, as follows:
 - To proceed to the next EZ-Manager screen, use the arrow keys to select **Next**, and then press **OK** on the Installer Remote. Continue to “Configure Pro:Centric Settings” below.
 - To use a USB memory device to complete the configuration, continue to “USB Configuration” on pages 18 to 19.

Configure Pro:Centric Settings

Once you select “Next” from the TV Configuration Options screen, the Searching for Pro:Centric Server screen is displayed, and you have the following options:



Note: Select the “Back” button, where available, to check previous settings, as necessary.

- You can allow the EZ-Manager Wizard to proceed with a series of automated steps to configure the TV for Pro:Centric operation and then to look for the Pro:Centric application and maintenance (E-Z Installation) files to download. In this case, the wizard uses a search algorithm to determine the Data Channel and the Pro:Centric Application Mode to set in the TV.

Continue with the “Automated Pro:Centric Configuration” subsection on the following page.

- If you already know the settings (i.e., Data Channel and Pro:Centric Application Mode) that need to be configured in order for the TV to connect to the Pro:Centric server and/or if the Pro:Centric server is not yet installed, you may expedite the setup process by entering this data manually.

Continue with the “Manual Pro:Centric Configuration” subsection on the following page.

Automated Pro:Centric Configuration

Note: If the server is not yet configured on the system, use the manual configuration option to configure the Pro:Centric operation.

Once the Pro:Centric data channel is found (a Pro:Centric Server Was Found screen will be displayed) and the Pro:Centric Application Mode is determined, the wizard will advance to the Processing the Pro:Centric Configuration screen, which shows the progress of the data downloads (see example at right). Note that some steps may require a few minutes.

If the process is successful, no further user interaction is required, though, in some instances, where the option (for example “Next”) is available, you may manually move forward to subsequent steps within the wizard to speed up the process.

Note: If, after completing the search, the TV is unable to find the Pro:Centric data channel (while the Searching for Pro:Centric Server screen is on display), the wizard will stop and show a Diagnostics screen that enables you to manually return to the previous screen (to reinitiate the configuration) or exit the wizard.

When the Pro:Centric Configuration is complete, an EZ-Manager Configuration Complete screen is displayed, and after 10 seconds, the wizard exits, and the TV turns OFF.

Note: With the EZ-Manager Configuration Complete screen on display, you can also manually turn off or reboot the TV. If desired, select **Turn Off** or **Reboot**, respectively, and then press **OK** on the Installer Remote.

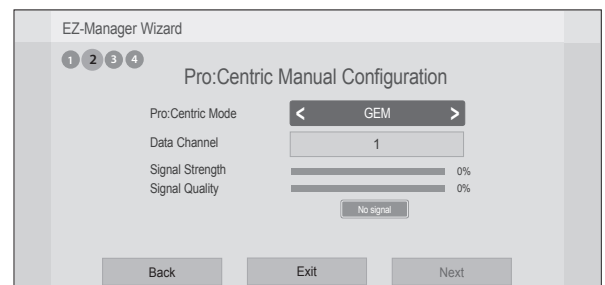
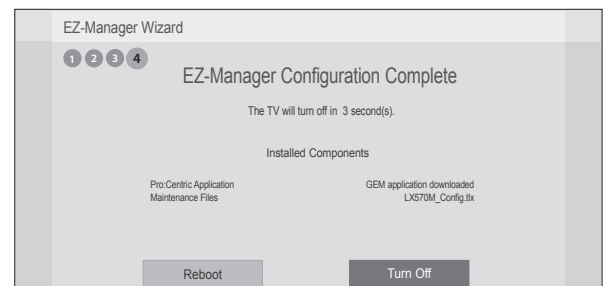
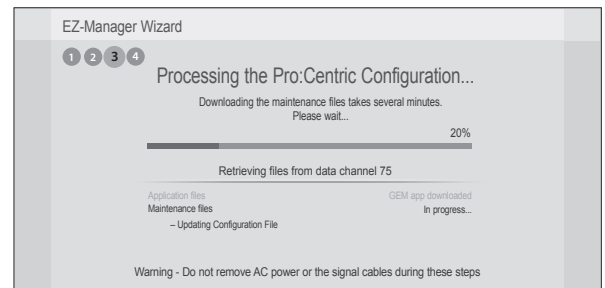
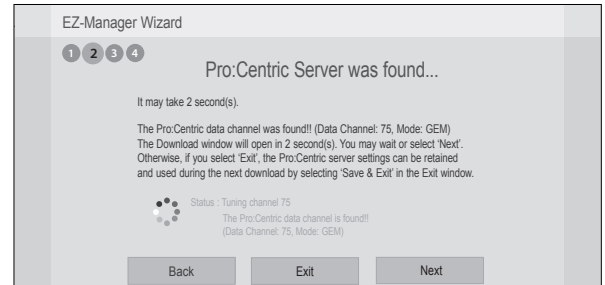
Manual Pro:Centric Configuration

1. With the Searching for Pro:Centric Server screen on display, use the Left/Right arrow keys on the Installer Remote to select **Manual Pro:Centric** at the bottom right of the screen, and then press **OK**.

In the Pro:Centric Manual Configuration screen (see example at right), you will be able to configure the appropriate Pro:Centric settings in the TV. Use the Up/Down arrow keys on the Installer Remote to navigate between fields.

2. In the Pro:Centric Mode field, use the Left/Right arrow keys to select the appropriate Pro:Centric Application Mode—FLASH, GEM, or Configuration Only.

Note: For remote management only, select **Configuration Only**. The TV will search for TV E-Z Installation data downloads; however, Pro:Centric application data will not be downloaded, i.e., Installer Menu item 098 PRO:CENTRIC will be set to 0.

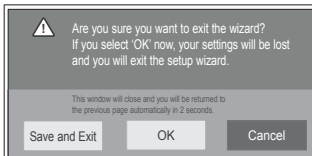


(Continued on next page)

EZ-Manager Wizard (Cont.)

(Continued from previous page)

3. In the Data Channel field, either key in or use the Left/Right arrow keys to select the RF channel number that will be used by the Pro:Centric server as its data channel. The Data Channel value can be set from 1 to 135. *
4. Once all fields are completed as required, you have two options (see also note below):
 - To save the data entered and exit the wizard, use the arrow keys to select **Exit** and then press **OK**. In the subsequent pop-up confirmation window, select **Save and Exit**, and then press **OK** once more. The Pro:Centric application and/or E-Z Installation data will be downloaded to the TV at a later time. This option is useful, in particular, if the Pro:Centric server has not yet been configured.



- To initiate a real-time download of Pro:Centric application and/or E-Z Installation data, use the arrow keys to select **Next**, and then press **OK**.

The EZ-Manager Wizard will proceed with the remaining Pro:Centric application and/or E-Z Installation data download steps (see Processing the Pro:Centric Configuration screen example on previous page).

Note: Pro:Centric server data must be present on the RF channel selected as the TV's Data Channel in order for you to select "Next" (you will see a "data channel found" message below the Signal Quality indicator).

When the Pro:Centric configuration is complete, an EZ-Manager Configuration Complete screen (see example on previous page) is displayed, and after 10 seconds, the wizard exits, and the TV turns OFF.

Note: With the EZ-Manager Configuration Complete screen on display, you also have the option to manually turn off or reboot the TV. If desired, select **Turn Off** or **Reboot**, respectively, and then press **OK** on the Installer Remote.

USB Configuration

TV Manager / USB Download Menu options enable you to download configuration or software files individually from a USB memory device to the TV. You can also use the Ez Download utility available from the menu to select one of each type of file to be downloaded at one time using one process.

Each of the USB download functions requires that you have the appropriate file(s) loaded on a USB memory device. If you wish to perform a software update or download a splash screen image, the software/image file(s) must be stored in a folder named "LG_DTV" in the root directory of the USB device. Clone/Configuration (.tlx) files should simply be stored in the root directory of the USB device. The procedure below assumes that the desired file(s) is/are already loaded onto the USB device. For further information on TV Manager / USB Download Menu functions and file requirements, and/or for information on creating Clone or FTG Configuration (.tlx) files, refer to the appropriate section(s) in this document.

* PCS150R and later Pro:Centric servers do not support HRC or IRC cable channel frequencies.

Before You Begin

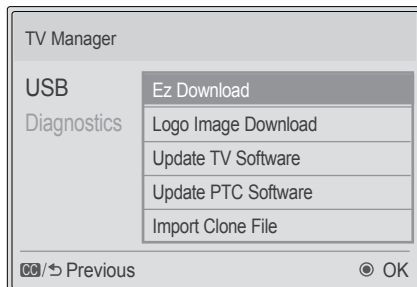
- If you intend to use the Zoning feature on this TV, make sure to assign the appropriate TV Zone # in the EZ-Manager's Zone, Label, and Room Number screen BEFORE continuing with USB Configuration. See "TV Configuration Options" on page 14 for further information.
- Ensure the USB device to be used has been formatted with FAT format.
- When creating files to be downloaded, avoid using special characters (?, &, @, etc.) in filenames.
- Refer to "Ez Download Utility" on pages 26 to 28 for further information on the Ez Download utility.
- Refer to "Custom Master TV Setup" on pages 40 to 42 for information on creating a Clone (.tlx) file, and/or refer to "Creating an FTG Configuration File" on pages 47 to 48 for information on creating an FTG Configuration (.tlx) file for FTG Mode via CPU configuration.
- See Reference section, "Downloading a Splash Screen Image using a USB Memory Device," for splash screen image guidelines.
- See Reference section, "Updating TV/PTC Software using a USB Memory Device," for further information on software updates.

USB Configuration via EZ-Manager Wizard

With either the TV Configuration Options or the Zone, Label, and Room Number screen on display, proceed as follows to configure the TV using the USB memory device.

1. Insert the USB memory device that contains the appropriate file(s) into the TV's USB port.
2. Use the arrow keys on the Installer Remote to select **USB Configuration**, and then press **OK**.

You will be redirected to the TV Manager / USB Download Menu (see example below).



Note: You can press **↶** on the Installer Remote at any time to return to the EZ-Manager Wizard.

3. Select the appropriate option from the TV Manager / USB Download Menu, and initiate the desired download(s).

Update progress will be displayed on the screen. Do NOT remove the USB device while updates are in progress. When the update process is complete, the TV will reboot. Upon restart, depending on the type of update(s) completed, either the EZ-Manager TV Configuration Options screen will be redisplayed (software and/or splash screen image updates only) or the TV will tune according to the Start Channel setting in the Installer Menu (TV configured with Clone/Configuration file).

Note: If the TV Configuration Options screen is redisplayed (software and/or splash screen image updates only), you can either proceed with configuration via the EZ-Manager Wizard or exit the EZ-Manager Wizard, as required.

4. Remove the USB memory device, and verify that the appropriate configuration/update(s) is/are resident on the TV.

Express Script

Initiate the Express Script

Note: While the Express Script enables you to set up TVs individually in lieu of cloning, you can also use the resulting Express Script TV Setup for cloning purposes, if desired (see “Exporting a Clone File” on pages 43 to 44 for further information). However, note that TV setup menu customization via the Express Script is limited to Channel Menu options.

After you select the “Express Script” option from the Setup Wizard Welcome screen, an Express Script Welcome screen provides a brief introduction to the Express Script.



From the Express Script Welcome screen, you have the following options:

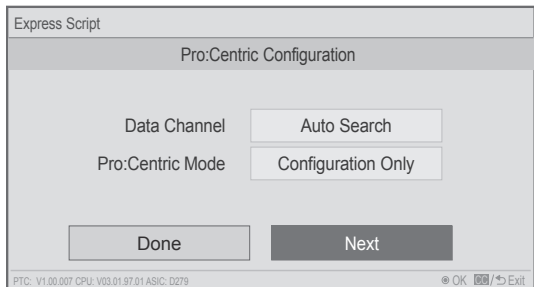
- To proceed with the Express Script, use the Left/Right arrow keys on the Installer Remote to select **Next**. Then, press **OK** on the Installer Remote.

Note: Select this option even if you only intend to configure Pro:Centric settings on this TV. After you configure the Pro:Centric settings, you will have the option to exit without completing the remainder of the wizard, if desired.

- To exit the Express Script without completing any configuration, use the Up/Down arrow keys on the Installer Remote to select **Exit**, and then press **OK**. In the confirmation pop-up window, select **OK**, and then press **OK** once more on the Installer Remote.

Configure Pro:Centric Settings

The next screen enables you to set up the Pro:Centric feature of the TV.



By default, the Data Channel is configured for Auto Search, which enables the TV’s Data Channel Auto Search feature to set the Data Channel value. See item 119 DATA CHANNEL description on page 38 for further information on the Data Channel Auto Search feature.

(Continued on next page)

(Continued from previous page)

The Pro:Centric Application Mode default setting is “Configuration Only,” which enables remote management only. That is, the TV will search for TV E-Z Installation data downloads; however, Pro:Centric application data will not be downloaded, i.e., Installer Menu item 098 PRO:CENTRIC will be set to 0.

If you wish to proceed with the wizard without changing the default values for the Pro:Centric settings, you can simply select **Next** and press **OK** on the Installer Remote. Or, if you wish to exit the wizard while retaining the default values for Pro:Centric settings, use the arrow keys on the Installer Remote to select **Done**, and then press **OK**.

If you already know the Pro:Centric settings that need to be configured in order for the TV to connect to the Pro:Centric server and/or if the Pro:Centric server is not yet installed, follow the procedure below to expedite the setup process. Use the Up/Down arrow keys on the Installer Remote to navigate between the fields.

Note: If you wish to disable the Pro:Centric feature of the TV, select the Data Channel field, and then use the Left/Right arrow keys on the Installer Remote to select **Disabled**. From here, you may opt to proceed with the wizard (select **Next**) or save this setting and exit the wizard (select **Done**). See also step 3 below.

1. In the Data Channel field, either key in or use the Left/Right arrow keys to select the RF channel number that will be used by the Pro:Centric server as its data channel. The Data Channel value can be set from 1 to 135.*
2. In the Pro:Centric Mode field, use the Left/Right arrow keys on the Installer Remote to select the appropriate Pro:Centric Application Mode—GEM, FLASH, or Configuration Only.

Note: For remote management only, select **Configuration Only**. The TV will search for TV E-Z Installation data downloads; however, Pro:Centric application data will not be downloaded, i.e., Installer Menu item 098 PRO:CENTRIC will be set to 0.

3. Once all fields are completed as required, you have two options:
 - To proceed with TV configuration via the Express Script, select **Next** and press **OK** on the Installer Remote. Continue to “Complete the TV Configuration” below.
 - To save the data entered and exit the Express Script, select **Done** and press **OK** on the Installer Remote. Remember, however, that if you do not complete the Express Script, pillow speaker functionality will not be enabled unless you set Installer Menu item 027 HOSPITAL MODE appropriately. See the “Installer Menu” section of this document for further information.

Complete the TV Configuration

The following procedure describes the remaining steps in the Express Script. You can select the “Back” button, where available, to check previous settings, as necessary.

Note: Typically, if you do not modify the default settings, the “Next” button is automatically selected when you proceed forward within the Express Script. Where appropriate, you can simply press **OK** on the Installer Remote to proceed to the next step if the default value(s) for the TV parameter(s) in question are applicable for your installation.

(Continued on next page)

* PCS150R and later Pro:Centric servers do not support HRC or IRC cable channel frequencies.

Express Script (Cont.)

(Continued from previous page)

 **Note:** If you choose to exit the Express Script from this point on, any settings made will not be retained.

1. Select the tuning band.

Use the Up/Down arrow keys on the Installer Remote to select the tuning band field, and then use the Left/Right arrow keys to select the appropriate tuning band option: Cable Standard (default), Cable HRC, Cable IRC, or Air. When you have made your selection, use the arrow keys to select **Next**, and then press **OK**.

2. Enable/disable Aux inputs.

If you simply select **Next** and press **OK** in this step, default values will be used, i.e., all Aux inputs will be enabled. To disable one or more of the TV's Aux inputs, use the Up/Down arrow keys on the Installer Remote to select **Enable/Disable Aux Inputs**, and then press **OK**. Aux input options will be displayed in a pop-up window, and you can use the arrow keys to select the input(s) to enable or disable. When you are finished, press **OK** on the Installer Remote. Then, continue with step 3.

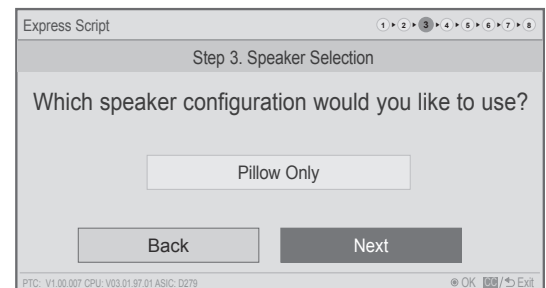
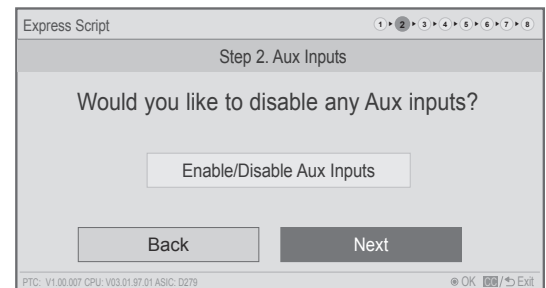
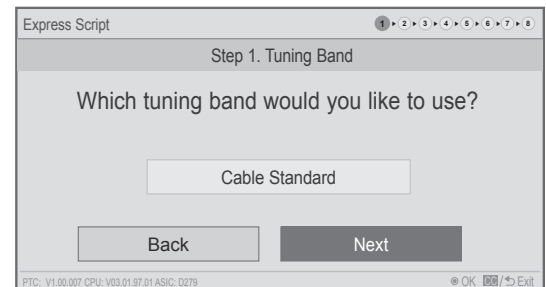
Enabled Aux inputs are included in the channel lineup. If an Aux input will not be used, it is typically advisable to disable it, though you may also simply delete it from the channel lineup in step 6, if you want to leave it enabled in the Installer Menu.

Note: After the TV setup is complete (see step 8), the only way to add or remove Aux inputs to/from the FTG Channel Map, is to edit the FTG Channel Map using the FTG Channel Map Editor in the FTG File Manager. Refer to the **Free-To-Guest (FTG) File Manager User Guide** for further information.

Note: Disabled Aux inputs are not included in the channel lineup. However, if you wish to enable a disabled Aux input in the future, you may do so by changing the applicable Installer Menu settings (see Installer Menu information in this document). See also note above.

3. Select the speaker configuration.

Use the Up/Down arrow keys on the Installer Remote to select the speaker configuration field, and then use the Left/Right arrow keys to select the appropriate speaker: Pillow Only (default), TV Only, or Pillow & TV. When you have made your selection, use the arrow keys to select **Next**, and then press **OK**.



(Continued on next page)

(Continued from previous page)

4. Select the pillow speaker code/voltage.

If using a Pro:Centric pillow speaker (LG IR codes) or a pillow speaker with Zenith IR codes, you can simply select **Next** and press **OK** on the Installer Remote to accept the Zenith pillow speaker code default.

Otherwise, use the Up/Down arrow keys on the Installer Remote to select the pillow speaker code field, and use the Left/Right arrow keys to select the appropriate option. When you have made your selection, use the arrow keys to select **Next**, and then press **OK**.

5. Run Auto Tuning.

This step gives you the option to initiate an automated channel scan that will search for all available digital and analog channels. Select **Run Auto Tuning** and press **OK** on the Installer Remote to start the channel scan.



Note: You **MUST** select **Run Auto Tuning** and press **OK** in order to run the channel scan. If you move on to the next step without running Auto Tuning, there will be no digital or analog channels in the channel lineup (Channel Map). In this case, upon completion of the Express Script, the only channels in the resulting FTG Channel Map will be any enabled Aux inputs.

Auto Tuning progress will be shown in a new pop-up window. The scan typically takes a few minutes. When the channel scan is complete, press **OK** on the Installer Remote to close the pop-up window. Then, continue with step 6.

Note: If you do not want to run Auto Tuning, use the arrow keys on the Installer Remote to select **Next** and press **OK**.

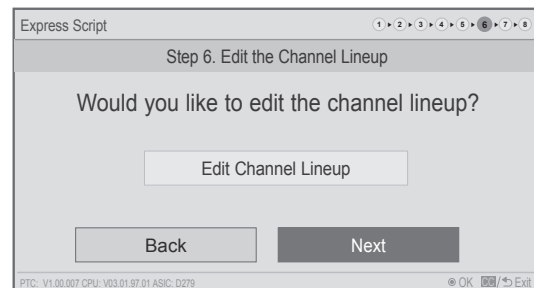
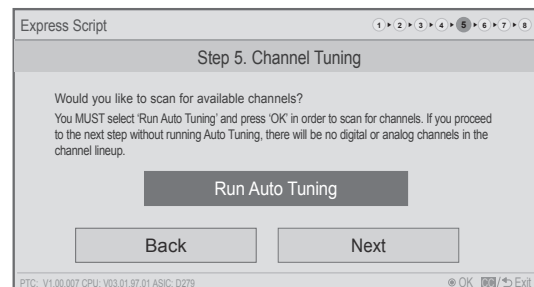
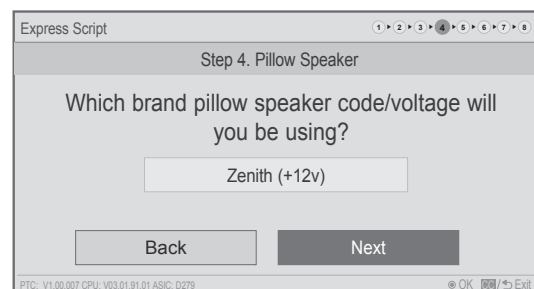
6. Edit the channel lineup.

This option enables you to customize the channel lineup, add channel labels and icons, etc., before the channel lineup is used to create an FTG Channel Map in step 8. You can also set up channel banks in this step.



Note: If, for any reason, you elect to re-run Auto Tuning after customizing channels in this screen, your current custom channel settings will be lost, and you will need to replicate the desired customization.

Select **Edit Channel Lineup** and press **OK** on the Installer Remote to edit the channel lineup. Channel edit options will be displayed in a pop-up window (see example on following page). Use the Up/Down arrow keys to navigate between fields.



(Continued on next page)

Express Script (Cont.)

(Continued from previous page)

- **Input & CH:** Edit the channel lineup, as necessary. Use the Left/Right arrow keys on the Installer Remote to select channels (including Aux inputs), and press **OK** to delete (or re-add) channels per the installation site requirements.

Note: When a channel is active in the channel lineup (i.e., added), all additional fields in this screen are selectable/available. If a channel is deleted, all other fields in this screen become inaccessible (grayed out).

- **Icon:** This field enables you to select the appropriate trademark/icon for each channel's Channel-Time on-screen display. If known, you can direct enter the icon number using the number keys on the Installer Remote. Otherwise, use the Left/Right arrow keys on the Installer Remote to select the desired logo. Icons are available for familiar channels, such as ABC, CBS, NBC, etc. Identifiable icons should enable the end user to readily know what common networks are available.
- **Label:** Press **OK** to display the pop-up virtual alphanumeric keypad, and add a custom text label for each channel/Aux input (up to 17 characters), as desired. Added custom labels will be displayed above the Label/Keypad field for each channel, as applicable.
- **Bank:** Use the arrow keys to define channel banks, as desired. See "Channel Banks Overview" on the following page for further information.

When you are finished, press **MENU** to close the pop-up window. Use the arrow keys to select **Next**, and then press **OK**.

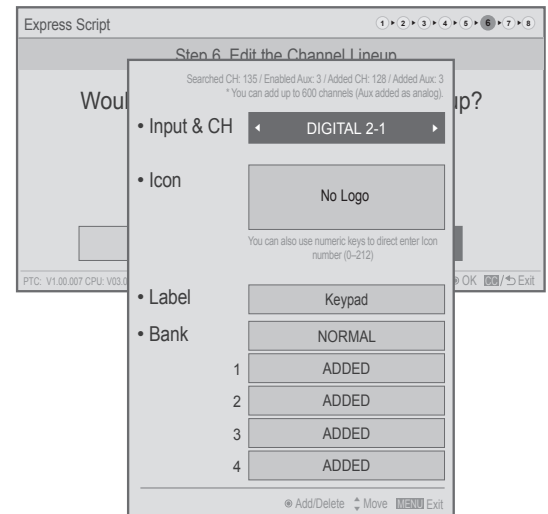
7. Select the channel tuning/channel banner display format.

If logical channel tuning (default) is appropriate for the installation site, you can simply select **Next** and press **OK**. Otherwise, use the Up/Down arrow keys on the Installer Remote to select the channel tuning/channel banner field, and then use the Left/Right arrow keys on the Installer Remote to select "Physical" for the channel tuning/channel banner display format. When you have made your selection, use the arrow keys to select **Next**, and then press **OK**.

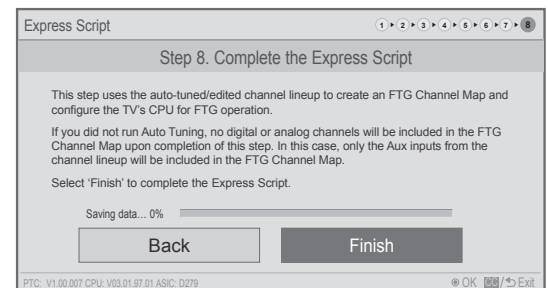
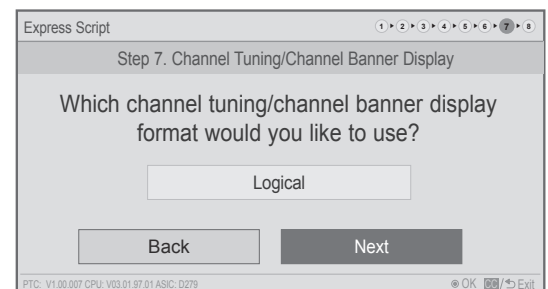
8. Completion.

As the final step of the Express Script, the TV saves your settings and uses the channel/Aux input lineup to create an FTG Channel Map before configuring the TV for FTG Mode via CPU (see also notes on following page). When you are ready to proceed, select **Finish**, and then press **OK**.

Configuration progress will be shown at the bottom of the screen. When this step is complete, the Express Script exits, and the TV tunes to the first channel in the FTG Channel Map.



Note: The total number of channels found ("Searched") during Auto Tuning is indicated at the top of the pop-up window.



If desired, the TV Setup created from the Express Script may also be saved to a USB memory device and used for cloning purposes (see “Cloning Procedures” on pages 43 to 46 for further information).

Note: Aux inputs (if enabled) will appear between the highest analog and lowest digital channel number in the FTG Channel Map when Channel Up/Down is used on the Installer Remote.

Note: If you did not run Auto Tuning and all Aux inputs are disabled, an FTG Channel Map will NOT be created and the TV will not be configured for FTG Mode via CPU.

Note: If required, you can set up/modify channel banks at a later time using the FTG File Manager. See “Channel Banks Overview” below for further information.

Channel Banks Overview

Channel Banks enable institution administrators to create tiered channel programming on patient in-room TVs. Each channel bank may offer a custom channel lineup for a pre-determined fee. The Express Script enables you to configure four channel banks (1, 2, 3, and 4) for the channel lineup (see step 6). The top tier generally contains the most programming (premium, etc.), 2nd tier = lesser programming, 3rd tier = basic programming, etc. It is also possible to create an Inactive TV display with Channel Bank 4, so that an “Inactive TV Call Attendant” message appears when the TV is turned ON. In this case, an administrator can then select another channel bank on the patient’s in-room TV depending on the programming tier requested by the patient.

All channels found during Auto Tuning automatically are added to and active in all four channel banks. See “Channel Attributes and Channel Bank Allocation” below for further information.

Channel Attributes and Channel Bank Allocation

Three attributes are available for each channel: Encrypted, OSD, and Blank Video. When the TV creates an FTG Channel Map upon completion of the Express Script, the OSD attribute (displays the channel number, label, and icon) is automatically assigned to all channels, and the Encrypted attribute is assigned to each Pro:Idiom encrypted channel detected during the channel scan. The Blank Video attribute is not assigned automatically to any channels; however, in step 6 of the Express Script, you have the option to assign the Blank Video (i.e., “BLANK”) attribute to channels, as required. When you assign the BLANK attribute to a channel (as opposed to the default “NORMAL” setting), this means that the channel audio will be audible; however, its video will be black (no picture). The NORMAL or BLANK attribute applies to the channel regardless of channel bank allocation.

Once you have set a channel’s NORMAL/BLANK attribute, determine the channel bank allocation for each of the four available channel banks: ADDED or DELETED. When DELETED, the channel will not appear in the channel lineup of the currently selected channel bank.

Updating Channel Attributes and/or Channel Bank Allocation

If you would like to modify channel attributes and/or channel bank allocation and/or update the FTG Channel Map in general, you can save (export) the FTG Channel Map to a USB memory device (see “Exporting a Clone File” on pages 43 to 44) and then use the FTG Channel Map Editor in the FTG File Manager to make the required changes. Refer to the “FTG Channel Map Editor” overview on page 51 and also the **Free-To-Guest (FTG) File Manager User Guide** for further information. FTG File Manager software is available at: www.lg.com/us/commercial/display-solutions/ftg.

Ez Download Utility

The Ez Download utility, available from the TV Manager / USB Download Menu, enables you to select multiple files (one of each file type) at one time from the files loaded on a USB memory device. You may use this utility to download any one or all of the following to a TV: a Clone or FTG Configuration (.tlx) file, a TV CPU or PTC software update, a splash screen image.

Before You Begin

- Ensure the USB device has been formatted with FAT format.
- Software update and splash screen image files must be stored in a folder named "LG_DTV" in the root directory of the USB memory device. Clone/Configuration (.tlx) files should simply be stored in the root directory of the USB device.
- If you have initiated the EZ-Manager Wizard, you can use the wizard's "USB Configuration" option to access the Ez Download utility, if desired (see "TV Configuration Options" and/or "USB Configuration" on pages 14 and 18, respectively, as necessary).
- If the TV is currently in Pass-through Mode and you intend to use the TV Zoning feature for location-specific configuration purposes, make sure to assign the appropriate TV Zone # in the TV when directed to do so in the procedure below.
- When creating files to be downloaded, avoid using special characters (?, &, @, etc.) in filenames.
- Refer to "Custom Master TV Setup" on pages 40 to 42 for information on creating a Clone (.tlx) file, and/or refer to "Creating an FTG Configuration File" on pages 47 to 48 for information on creating an FTG Configuration (.tlx) file for FTG Mode via CPU configuration.
- See Reference section, "Downloading a Splash Screen Image using a USB Memory Device," for splash screen image guidelines.
- See Reference section, "Updating TV/PTC Software using a USB Memory Device," for further information on software updates.



Caution: Do not unplug the TV power cord or remove the USB memory device during a data download, as doing so may cause the TV to malfunction or harm the USB device, respectively.

Accessing and Using the Ez Download Utility

1. If it is not ON already, turn ON the TV.
2. The next step depends on whether the LG Setup Wizard appears on the screen when you turn ON the TV:
 - If the wizard is displayed, you can access the Ez Download utility via the EZ-Manager Wizard, as indicated above (see "Before You Begin"). However, to continue with this procedure and access the Ez Download utility from the TV menus, exit the Setup Wizard. Then, continue with step 3.
 - If the wizard is not displayed, go directly to step 3.
3. If the TV is currently in Pass-through Mode, you would like to transfer (import) a ".tlx" file to the TV via the Ez Download utility, and you intend to use the TV Zoning feature, assign the appropriate TV Zone # in the TV at this time. See Reference section, "Using the TV Zoning Feature," for further information.

(Continued on next page)

(Continued from previous page)



Note: In order for the proper location-specific TV Zone profile data to be applied, the Zone designation must be assigned in the Target TV(s) **BEFORE** you continue with the Ez Download utility.

4. Insert the USB memory device with the appropriate file(s) into the TV's USB port.
5. To access the TV Manager / USB Download Menu from the TV menus:
 - Press **MENU** on the Installer Remote to display the TV setup menus (TV is in Pass-through Mode) or the Function Menu (TV is not in Pass-through Mode).
 - Use the arrow navigation keys to select/highlight either the **Option** menu icon from the TV setup menus or the **Lock** menu icon from the Function Menu. Then, press the number "7" key a total of seven times.
6. With the TV Manager / USB Download Menu on display (see example at right), use the Up/Down arrow keys to select **Ez Download**, and then press **OK**.

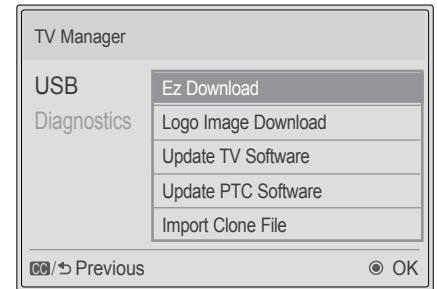
The Ez Download utility screen contains a listing of the TV software (EPK), PTC software (PTC), and splash screen image (LOGO) files stored in the LG_DTV folder and the Clone/Configuration (TLX) files stored in the root directory on the USB device.

Note: Press **↵** on the Installer Remote, as necessary, to exit the Ez Download utility and/or the TV Manager / USB Download Menu. If you accessed the TV Manager via the EZ-Manager Wizard, you will be returned to the last screen on display before you selected the "USB Configuration" option. If you accessed the TV Manager via the TV menus, you will be returned to program viewing.

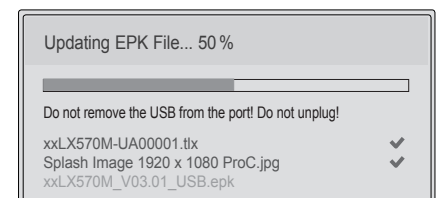
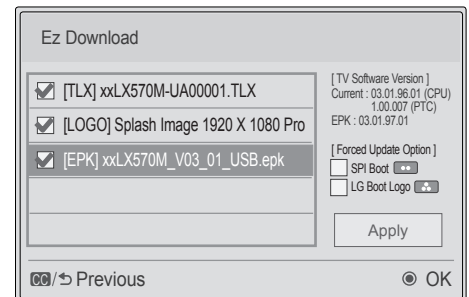
7. To select or de-select a file, respectively, use the Up/Down arrow keys on the Installer Remote to highlight the filename, and press **OK** to add or remove the checkmark at the left of the filename.

Note: The utility will only allow you to select one of each file type for downloading. For example, if there are two TLX files in the Ez Download list, you can only select one or the other of those two files.

Note: After the Ez Download utility is run, a file is automatically created and stored on the USB device that was used. The file, which will have a ".dzm" extension, maintains a history of the file(s) previously used with the Ez Download utility. The next time(s) you use this USB device with the Ez Download utility, the file(s) selected for the last download will be pre-selected for the current download, thus facilitating the process of configuring additional TVs of this model using the same USB device.





Note: TV Manager / Diagnostics is for service use only.



(Continued on next page)

Ez Download Utility (Cont.)

(Continued from previous page)

8. The fields at the right of the screen will change depending on the currently highlighted file. Select the appropriate option(s) for each file, as applicable.
 - For software and splash screen image files: The fields at the right of the screen show the TV software versions and any available Forced Update options. Do not select any Forced Update options unless you have been specifically instructed to do so or have previous experience with Expert Software Updates.
 - For Clone/Configuration (.tlx) files: If an FTG Channel Map is included in the selected Clone/Configuration (.tlx) file, a Channel Tuning / Channel Banner Display field at the right of the screen enables you to choose the format for the channel tuning/banner display. Press the green  button on the Installer Remote to select **Logical** tuning, or press the yellow  button on the Installer Remote to select **Physical** tuning. A checkmark will appear at the left of the selected option. Logical tuning is selected by default.

Note: If the selected “.tlx” file does not include an FTG Channel Map, the message, “No Channel Map in TLX file,” will be displayed at the right of the screen.
9. When you are ready to continue, use the arrow keys on the Installer Remote to select **Apply**, and then press **OK**.

Update progress will be shown in a new window. Do NOT remove the USB device while updates are in progress. When the Ez Download process is complete, an overview of the results will briefly be displayed and then, the TV will reboot.
10. Remove the USB memory device, and verify that the appropriate configuration/update(s) is/are resident on the TV.

Note: If you updated the TV configuration with a Clone/Configuration file, upon restart, the TV tunes according to the Start Channel setting in the Installer Menu. If a Start Channel is specified, the TV will tune to that channel, though in the case of FTG Mode via CPU configuration, a channel banner will only be displayed if the Start Channel is included in the FTG Channel Map (depending on your selection in step 8, the channel banner will display either the Start Channel's logical channel number or physical RF channel number). Otherwise, the TV will either return to the last channel tuned (TV in Pass-through Mode) or tune to the first channel in the FTG Channel Map (TV in FTG Mode via CPU). In the latter case, remember that the channels in the FTG Channel Map are always arranged in logical order, regardless of your selection in step 8.

Use the Installer Menu to set up, change, or view operational settings. This section describes how to access, use, and exit the Installer Menu from the TV itself. However, you should also refer to the Installer Menu descriptions in this document if you are configuring the TV CPU using an FTG Configuration (.tlx) file created using LG's FTG File Manager software or configuring the EBL locally (.rml) or remotely (via FMA-LG101 / .fma) using the FTG Device Configuration Application software.

Refer to the table on pages 31 to 33 for brief descriptions of Installer Menu items. More detailed descriptions follow the table listing.

Accessing the Installer Menu

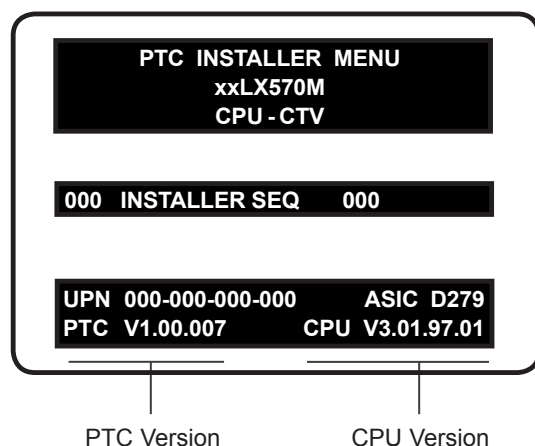
1. Turn ON the TV.

If the EZ-Manager Wizard appears on the screen when you turn ON the TV, exit the wizard.

2. Using an Installer Remote, press **MENU** repeatedly until the on-screen display of the TV setup menus (if the TV is in Pass-through Mode) or the Function Menu (if the TV is not in Pass-through Mode) no longer toggles, and then press the Installer Menu entry sequence (e.g., **9-8-7-6**) + **OK** to access the Installer Menu.

Note: The default Installer Menu entry sequence is "9876"; however, if Installer Menu item 000 INSTALLER SEQUENCE has been modified, the entry sequence may be one of three additional options. See Installer Menu detailed descriptions for further information.

The Installer Menu opens with item 000 INSTALLER SEQ 000.



Typical Installer Menu

The Installer Menu header will vary depending on the TV you are setting up. In the Installer Menu footer, you can see the current software versions of the TV, as indicated.

Note: If the password (entry sequence) is not entered or registered correctly, you will see the message "ENTER PASSWORD 0000" at the top of the screen instead of the Installer Menu header. Once you re-enter the correct password (e.g., press 9-8-7-6 + OK), the Installer Menu will display.

Note: If the TV is not in Pass-through Mode, the Installer Menu is accessible as read-only. Also, the TV Zone # will be indicated in the Installer Menu header under the configuration mode indicator described on the following page.

Installer Menu (Cont.)

As part of the Installer Menu header (in all modes), two 3-character acronyms are displayed to indicate the TV's current configuration mode. The table below lists all possible mode identifiers for these TV models.

Acronym	Description
CPU-CTV	Pass-through Mode with channel lineup in CPU
CPU-FTG	FTG Mode via CPU
CPU-P:C	Application Tuning Mode via CPU
EBL-FTG	FTG Mode via EBL
EBL-LNT	SONIFI PPV Mode
MPI-EXT	External MPI Control
PTC-CTV	Pass-through Mode with channel lineup in PTC

Using the Installer Menu

Refer to the table starting on the next page for an overview of the available Installer Menu items, including their item numbers, functions, value ranges, and default values.

Installer Menu items not relevant to these TV models are not present in the Installer Menu; therefore, some numbers are missing. For example, item 006 will not appear. In addition, items that are dependent on other Installer Menu item settings will not be initially accessible. For example, item 046 STRT AUX SRCE will not display in the Installer Menu unless item 004 STRT CHANNEL is set to 0. See Installer Menu detailed descriptions for further information.

Navigation within the Installer Menu

Use the Up/Down arrow keys on the Installer Remote to sequence through the available menu items, or access an item directly by keying in the item number and then pressing **MENU**. For example, to access the SLEEP TIMER option, which is item 015, press 0-1-5 + **MENU**.

Changing Installer Menu Settings

To change an Installer Menu item value, use the Left/Right arrow keys on the Installer Remote, or enter a valid value directly. To save the new setting, press **OK**, or use the Up/Down arrow keys to navigate to a new Installer Menu item if you have additional items to edit. Note that invalid values will not be saved.

Exiting the Installer Menu and Activating Settings

After you have adjusted all required Installer Menu item settings, press **OK** once on the Installer Remote to save your changes; then, press **OK** again to exit the Installer Menu. Any changes you make will be stored in non-volatile memory.

Note: Each time you exit the Installer Menu in Pass-through Mode, all V-Chip (Parental Control) settings in the TV are reset to their default values; that is, the Lock System, if previously enabled from the Lock setup menu, will now be disabled, and the individual Parental Control settings will be restored to default values.



Caution: Installer Menu settings may affect options available from the TV setup menus or the Function Menu.

Installer Menu Items 000 through 046

Item	Function	Value Range	Default Value	Brief Description of Function
000	INSTALLER SEQ	0 ~ 3	0	Leave default set to 0.
001	POWER MANAGE	0 ~ 7	0	Selects the number of hours of inactivity allowed before the TV automatically turns itself OFF. Set to 0 to disable power management.
002	AC ON	0 ~ 3	0	Set to 1 to enable TV to turn ON when AC power is applied. Set to 2 or 3 to enable Instant ON when AC power is applied. (See detailed descriptions.)
003	BAND/AFC	0 ~ 3	1	Selects Tuning Band: 0=Broadcast, 1=CATV, 2=HRC, 3=IRC
004	STRT CHANNEL	0 ~ 127, 255	255	Channel tuned when TV is turned ON. (Set to 255 to tune to channel tuned before TV turned OFF.)
005	CHAN LOCK	0 / 1	0	If set to 1, cannot tune from current channel.
007	STRT VOLUME	0 ~ 63, 255	255	Volume level when TV is turned ON. (Set to 255 to use volume level before TV turned OFF.)
008	MIN VOLUME	0 ~ 63	0	Sets minimum allowable volume setting.
009	MAX VOLUME	0 ~ 63	63	Sets maximum allowable volume setting.
010	MUTE DISABLE	0 / 1	0	Set to 1 to disable Mute Function.
011	KEY DEFEAT	0 / 1	1	If set to 1, joystick button menu navigation functions on display panel are not available.
012	IR BANKS EN.	0 / 1	0	Set to 1 to enable TV to respond to bank discrete IR codes.
013	SCAN MODE	0 / 1	1	Set to 1 to allow Channel Up/Down to turn ON TV. (See detailed descriptions.)
014	STRT CH IN SM	0 / 1	0	Set to 1 to use the Start Channel for the Channel Map pivot point in Scan Mode.
015	SLEEP TIMER	0 / 1	1	Set to 1 to enable Sleep Timer.
016	EN. TIMER	0 / 1	1	Set to 1 to enable On/Off Timers.
017	ALARM	0 / 1	1	Set to 1 to enable Alarm.
020	FEATURE LEVEL	0 ~ 1, 16 ~ 24, 64 ~ 65	1	Determines an additional IR code scheme to which the TV will respond.
021	V-CHIP	0 / 1	1	Set to 1 to enable V-Chip (Parental Control) functions.
022	MAX BLK HRS	0 ~ 99	12	Sets number of V-Chip blocking hours.
023	CAPTION LOCK	0 / 1	0	Set to 1 to retain caption setting set before TV turned OFF.
025	FUNCTION PRE.	0 / 1	1	Set to 1 to allow Channel Preview/Banks Setup Menu access via CH PREVIEW key on Installer Remote.
027	HOSPITAL MODE	0 ~ 162, 254	254	Set according to the speaker selection, the pillow speaker code/supply voltage, and the hospital IR code. See detailed instructions.
028	CH. OVERRIDE	0 / 1	1	If set to 0, user access to channel settings in the TV setup menus is restricted and users can only tune to channels that are included in the channel lineup.
029	OLD OCV	0 / 1	0	Set to 1 to remap the PTC's direct tune channels for Aux inputs from 13x to 9x.
030	ACK MASK	0 / 1	0	If set to 1, enables ACK feature of MPI.
031	POLL RATE	20 ~ 169	94	Selects poll rate for MPI.
032	TIMING PULSE	186 ~ 227	207	Sets baud rate for MPI.
035	HDMI1 ENABLE	0 ~ 2	1	Set to 0 to disable HDMI 1. Set to 1 (DTV Mode) or 2 (PC Mode), as applicable, to enable HDMI 1.
039	REAR AUX EN.	0 / 1	1	Set to 1 to enable display panel AV input jack.
041	SIMPLINK EN	0 ~ 3	0	Determines the status of the SIMPLINK feature. (See detailed descriptions.)
042	AUTO INPUTS	0 ~ 255	0	Determines the Aux inputs for which auto-sensing is enabled. (See detailed descriptions.)
046	STRT AUX SRCE	1, 3, 5, 255	255	Sets the starting Aux source (if item 004 STRT CHANNEL is set to 0).

Installer Menu (Cont.)

Installer Menu Items 047 through 119

Item	Function	Value Range	Default Value	Brief Description of Function
047	AUX STATUS	0 / 1	0	Set to 1 for MPI Aux source to be reported as a channel number instead of Channel 0.
053	DIS. CH-TIME	0 / 1	0	Set to 1 to disable Channel-Time display.
069	EN. CH-T COL.	0 / 1	1	Set to 1 to enable custom color for the Channel-Time display.
070	FOR. CH-TIME	0 ~ 7	2	Chooses custom foreground color for the Channel-Time display.
071	BCK. CH-TIME	0 ~ 7	2	Chooses custom background color for the Channel-Time display.
073	CH NOT AVBLE	0 / 1	0	If set to 1 and item 028 CH. OVERRIDE is set to 0, a "CHANNEL NOT AVAILABLE" message is displayed if user attempts to direct tune a channel that is not included in the channel lineup.
075	REVERT CH	0 / 1	0	If set to 1 and loss of MPI communication occurs, TV tunes to Start Channel.
077	QUICK SHUTOFF	0 ~ 17	0	Allows TV to be turned OFF with press and hold of pillow speaker channel buttons. Set to 0 to disable. Set from 1 to 17 to define hold time. (See detailed descriptions.)
078	UPN MSB	0 ~ 255	255	User programmable number, most significant byte.
079	UPN MSB-1	0 ~ 255	255	User programmable number, most significant byte - 1.
080	UPN MSB-2	0 ~ 255	255	User programmable number, most significant byte - 2.
081	UPN LSB	0 ~ 255	255	User programmable number, least significant byte.
082	CHKSM ERROR	0 / 1	1	Enforces rigid MPI checksum.
083	HANDSHK TIME	0 ~ 5	5	Relaxes MPI timing to be compatible with PC-based Windows-controlled systems.
084	PERMANENT BLK	0 / 1	0	Removes block hours setting for Parental Control and makes block permanent.
086	V. MUTE TIME	0 ~ 50	0	Use to extend the normal video mute time during channel change.
088	EN NOISE MUTE	0 / 1	1	(Analog channels only) If set to 1, audio is muted if no signal is present.
090	KEY LOCK	0 / 1	0	If set to 1, all display panel joystick button functions are locked. IR is still functional.
091	HDMI2 ENABLE	0 ~ 2	1	Set to 0 to disable HDMI 2. Set to 1 (DTV Mode) or 2 (PC Mode), as applicable, to enable HDMI 2.
094	SAP MENU EN	0 / 1	1	Set to 1 to enable SAP feature in Function Menu.
096	DEF. ASP. RATIO	0 ~ 4	2	Sets default aspect ratio at power up. See detailed descriptions and item 106.
097	AUDIO OUTPUT	0 ~ 9	7	Set as required in accordance with external audio equipment connected to the TV. See detailed descriptions.
098	PRO:CENTRIC	0 ~ 2	0	Set to 0 to disable Pro:Centric operation. Set to 1 for Flash Mode. Set to 2 for GEM (Java Application) Mode.
099	BACK LIGHTING	1 ~ 200, 255	255	Sets the level of the TV picture back lighting. (See detailed descriptions.)
102	ATSC BAND	0 ~ 4	4	Selects ATSC band.
103	ATSC TUNE MODE	0 / 1	1	Set to 1 (default) for Physical Channel scan. Set to 0 for Virtual Channel scan.
104	START MINOR CH	0 ~ 255	0	Selects Minor Start Channel. Set to 0 for NTSC.
106	ASP RATIO LOCK	0 / 1	0	To retain set aspect ratio on power cycle, set to 1. Set to 0 for default ratio on power cycle.
116	VIDEO MUTE EN	0 / 1	0	(Analog channels only) If set to 1, video mutes (blank screen) when no signal is present.
117	FACT DEFAULT	0 / 1	0	Set to 1 to restore the factory default settings of all Installer Menu items.
118	POWER SAVINGS	1, 3, 7	3	Determines the powered status of the embedded b-LAN module and the GAME CONTROL/MPI port. (See detailed descriptions.)
119	DATA CHANNEL	0 ~ 135, 255	255	Set to 0 to disable. Set from 1 to 135 to match the RF channel number used by the Pro:Centric server as its data channel. Set to 255 to use Auto Search to find the Pro:Centric RF channel. (See detailed descriptions.)

Installer Menu Items 121 through 122

Item	Function	Value Range	Default Value	Brief Description of Function
121	UPDATE TIME HR	0 ~ 23, 128	128	Sets the Wake For Update hour. The value "128" is displayed as "OFF." Directly entering 128 turns the Wake For Update feature OFF.
122	UPDATE TIME MN	0 ~ 59	0	Sets the minute for Wake For Update.

Detailed Descriptions of Installer Menu Items

000 - INSTALLER SEQUENCE

Specifies entry sequence to the Installer Menu.

0 = 9876 1 = 4321
2 = 1478 3 = 3698

001 - POWER MANAGE (Power Management)

Energy saving feature. Determines the number of hours, in the range 1 to 7, of inactivity allowed, either at the TV control panel or from the remote, before the TV automatically turns itself OFF. If set to 0, Power Management is disabled.

002 - AC ON (AC Power Switchable)

If set to 1, this allows the TV to turn ON when AC power is applied. Pressing the POWER button is not necessary. This is desirable if the TV is plugged into a switched AC outlet (i.e., a set-top box). Set to 2 or 3 to enable the Instant ON feature (see additional information below). Set to 0 (default) for standard TV turn ON/OFF operation.

The Instant ON feature allows the TV to turn ON when AC power is applied, but with video and audio muted (Muted ON). The TV retains its ON status while appearing to be OFF. Pressing the POWER button toggles Off/On the video and audio mutes, so that the TV appears to turn ON instantly.

- If this item is set to 2, the TV will reboot and, if applicable (i.e., item 119 DATA CHANNEL set from 1 to 135 or 253), check for and download any available updates from the Pro:Centric server at every turn OFF. This setting is not recommended if the TV will be configured with a resident application.
- If this item is set to 3, the TV will not reboot to check for and download updates at turn OFF, with the following exception: the first time the TV is turned OFF after this item is set to 3, the TV will reboot and initiate an update event (Data Channel Auto Search and/or check for and download of updates—see also paragraph below). This setting is recommended if the TV will be configured with a resident application. In this mode, the standard check for and download of updates is under application control. Refer to your site-specific documentation for further information on configuring the TV with a resident application.

When this item is set to 2 or 3, the TV also will reboot and initiate an update event once every 24 hours. During the update event, the TV, as applicable, performs a Data Channel Auto Search (item

119 set to 255) and/or checks for and downloads any available updates from the Pro:Centric server (item 119 DATA CHANNEL set from 1 to 135 or 253). The time at which this event occurs depends on the setting of item 121 UPDATE TIME HR. See item 119 and 121 descriptions for further information. Once the update cycle is complete, the TV completes the reboot and resumes its Muted ON state.

Note: If set to 1, the TV does not respond to ON/OFF commands from either the remote or the display panel, and the SLEEP TIMER is also nonfunctional.

003 - BAND/AFC (Band/Automatic Frequency Control)

There are four possible settings for this option:

0 = Broadcast 1 = CATV (default)
2 = HRC 3 = IRC

If some channels were not found by Auto Tuning (Channel Search), select the appropriate Band setting here, and add the channels using the Channel Edit option in the Channel Menu.

004 - STRT CHANNEL (Start Channel)

If active, this function allows you to determine the initial Major Start Channel number when the TV is turned ON. This feature is useful for an in-house information channel, since the TV would always select that channel when it is turned ON. If set to 255, the last channel tuned before the TV was turned OFF will be the channel tuned when the TV is turned ON again.

0 = Aux 127 = Map to Major CH 4
1 ~ 125 = Major CH # 255 = Last Channel
126 = Map to Major CH 3

Note: For a digital Start Channel, always remember to set item 104 to the Minor Start Channel number.

Note: 126 and 127 are mapped only in SONIFI PPV Mode.

005 - CHAN LOCK (Channel Lock)

Channel Lock is ideal if the system must always be on the same channel. Changing channels with the Channel Up/Down or keypad numbers is impossible. Channel Lock is inactive if set to 0 (default).

Generally, this feature is used in connection with item 004 STRT CHANNEL where the Start Channel may, for example, be set to 3 or 4. If the Start Channel is 3, then the TV will remain locked on channel 3.

Installer Menu (Cont.)

NOTE: For items 007, 008, and 009

For legacy reasons, the scale used is 0–63. The PTC software will translate this to the 0–100 scale used by the TV.

To translate a TV volume level to the Installer Menu value, use the following formula:

$$\text{Installer Value} = \frac{\text{TV Value} \times 63}{100}$$

Enter only the whole number (disregard fractions).

007 - STRT VOLUME (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 will always select that volume level when it is turned ON. The range of values is 0 to 63, 255. If set to 255, the last volume level before the TV was turned OFF will be the current volume level when the TV is turned ON again.

008 - 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 volume too low to hear. The value range is from 0 to 63. The factory default is 0, which provides the full range of volume control, if item 009 MAX VOLUME is set to 63. It is recommended to set the same value on every TV.

Note: The minimum volume level cannot have a value setting higher than the maximum volume level (described below).

009 - MAX VOLUME (Maximum Volume)

This function determines the maximum volume level allowable with the Volume (VOL) Up/Down control. In this way, for example, someone cannot set the volume level high enough to disturb others. The value range is 0 to 63, with 63 as the default, which gives the user the full range of volume control, if item 008 MIN VOLUME is set to 0. It is recommended to set the same value on every TV.

Note: The maximum volume level cannot have a value setting lower than the minimum volume level (described above).

010 - MUTE DISABLE

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

011 - KEY DEFEAT

If set to 1, Key Defeat is enabled, which means that end users cannot access or navigate within the on-screen menu(s) from the display panel; i.e., joystick button menu navigation functions will not be available. Set to 0 to disable Key Defeat. Note that all IR features remain functional regardless of this setting; users can always access the TV menus by pressing MENU on the remote.

012 - IR BANKS EN. (IR Banks Enable)

When enabled, you can direct access a particular channel bank by inputting the discrete IR code for that bank.

Note: This item is not available in the Installer Menu when item 027 HOSPITAL MODE is set to 0.

013 - SCAN MODE

When set to 1 (default), allows TV to be turned ON when Channel Up/Down buttons are pressed on pillow speaker. Also, TV will turn OFF when Channel Up/Down key is used to tune above or below Channel Map pivot point. By default, Channel Map pivot point is between the highest and lowest channel in the Channel Map (also see item 014 STRT CH IN SM). Set to 0 to disable.

Note: This item is only applicable when the TV is in PTC-CTV Mode or FTG Mode via CPU.

014 - STRT CH IN SM (Start Channel in Scan Mode)

Only valid when item 013 SCAN MODE is set to 1 (enabled). When set to 1, forces Channel Map pivot point to be between the RF channel designated in item 004 STRT CHANNEL and next lower channel in the Channel Map. Set to 0 to disable (default).

Note: This item is not available in the Installer Menu when item 013 SCAN MODE is set to 0.

015 - SLEEP TIMER

If set to 1, the Sleep Timer feature may be used. If set to 0, the Sleep Timer is not available.

016 - EN. TIMER (Enable On/Off Timers)

If set to 1, the Timer function is available to the end user and enabled continuously. Set to 0 to disable On/Off timers.

Note: The TV clock must be set in order for timers to be used.

017 - ALARM

Gives the installer the option of making the Alarm function available to the end user. If set to 1, the Alarm function is available to the end user. Set to 0 to disable the Alarm function.

Note: The TV clock must be set before the Alarm function will work.

020 - FEATURE LEVEL

Determines an additional IR code scheme to which the TV will respond, allowing for the use of unique IR codes based on “bed number” in a multi-TV single room installation. First determine the IR mode; then select the bed number.

Note: Item 027 HOSPITAL MODE must be set to 0 to enable Legacy Zenith Bed 1 or Bed 2 IR codes and Speaker selections.

Values	IR Mode	Bed #	Speaker
0–1	Legacy Zenith (Hospital)	1–2	TV
16–24	Multi-code Remote	1–9	TV
64–65	Legacy Zenith (Hospital)	1–2	Pillow

Note: For further information, see Reference section, “Pro:Centric Patient and Pillow Speaker Remotes.” Also, see documentation for the accessory package that includes the multi-code remote.

021 - V-CHIP (Parental Control)

Set to 1 to activate V-Chip (Parental Control) and have it available to the end user to filter and control or otherwise restrict programming content that can appear. Set to 0 to turn the V-Chip feature Off (not available to user); no programming restrictions can be set.

022 - MAX BLK HRS (Maximum Block Hours)

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

Note: This item is not available in the Installer Menu when item 021 V-CHIP is set to 0 or when item 084 PERMANENT BLK is set to 1.

023 - CAPTION LOCK

If set to 0, captions are OFF when the TV is turned ON. Set to 1 to use the caption setting configured before the TV was turned OFF when the TV is turned ON.

025 - FUNCTION PRE (Function Preview)

Set to 1 to allow access to the Channel Preview/Banks Setup Menu via the CH PREVIEW key on Installer Remote. Set to 0 to disable access to the Channel Preview/Banks Setup Menu.

Note: This item is only applicable when the TV is in PTC-CTV Mode.

027 - HOSPITAL MODE

Set according to the speaker selection, the pillow speaker code/ supply voltage and the hospital IR code. If using a Pro:Centric pillow speaker, select one of the Zenith codes in accordance with the desired speaker selection. See table below.

Value	Speaker	Pillow Speaker Code/Voltage	Hospital IR Code
000	Determined by item 020 setting	Zenith (+12v)	Determined by item 020 setting
001	Pillow Only	Zenith (+12v)	Zenith Bed #1
002	Pillow Only	Zenith (+12v)	Zenith Bed #2
017	Pillow Only	Philips (+5v)	Zenith Bed #1
018	Pillow Only	Philips (+5v)	Zenith Bed #2
033	Pillow Only	RCA (-5v)	Zenith Bed #1
034	Pillow Only	RCA (-5v)	Zenith Bed #2
065	TV Only	Zenith (+12v)	Zenith Bed #1
066	TV Only	Zenith (+12v)	Zenith Bed #2
081	TV Only	Philips (+5v)	Zenith Bed #1
082	TV Only	Philips (+5v)	Zenith Bed #2
097	TV Only	RCA (-5v)	Zenith Bed #1
098	TV Only	RCA (-5v)	Zenith Bed #2
129	Both Pillow & TV	Zenith (+12v)	Zenith Bed #1
130	Both Pillow & TV	Zenith (+12v)	Zenith Bed #2
145	Both Pillow & TV	Philips (+5v)	Zenith Bed #1
146	Both Pillow & TV	Philips (+5v)	Zenith Bed #2
161	Both Pillow & TV	RCA (-5v)	Zenith Bed #1
162	Both Pillow & TV	RCA (-5v)	Zenith Bed #2
254	TV Only	Disabled (0v)	Zenith Bed #2

When Hospital Mode is enabled, channel banks are also available. Refer to "Channel Banks Overview" on page 25 for further information.

Channel banks are not supported if Hospital Mode is set to 0 or on TVs that are configured for FTG Mode via EBL operation.

When Hospital Mode is set to 0 (disabled), both the IR code that will control the TV and the speaker selection depend on the Installer Menu item 020 FEATURE LEVEL setting.

Note: The default setting (254) is not selectable in the Installer Menu. If you ever need to restore the default setting, you must set item 117 FACT DEFAULT to 1 to reload the factory default settings. See item 117 description for further information.

Note: In the Installer Menu, an informational code is displayed at the right of each Hospital Mode value. Each code consists of three characters. The first character—T, P, or B—identifies the speaker: TV, Pillow, or Both. The second character—Z, P, R, or D—identifies the pillow speaker code: Zenith, Philips, RCA, or Disabled. The third character—1 or 2—identifies the bed number. In the table on the previous page, each bolded character represents an element of the Hospital Mode code.

028 - CH. OVERRIDE (Channel Override)

Applicable for Pass-through Mode only. If set to 1, users can select channels either with Channel Up/Down or by direct keypad entry. This setting also allows full access to channel settings in the TV setup menus (i.e., channels may be added or removed from the channel lineup, channel labels and icons may be edited, etc.). If set to 0, the channel lineup is locked. That is, user access to channel settings in the TV setup menus is restricted, and users can only tune to the channels that are included in the channel lineup. Also, in this case, users can only select channels using Channel Up/Down; direct keypad entry is not available.

029 - OLD OCV (On Command Video™)

Set to 1 to remap the PTC's direct tune channels for Aux inputs from 13x to 9x. This allows 2-digit only tuning systems (i.e., legacy OCV) to direct tune Aux inputs. See also Reference section, "TV Aux Input Configuration."

030 - ACK MASK

MPI Communication Parameter. When set to 1, enables ACK feature of MPI.

031 - POLL RATE

MPI Communication Parameter. Selects poll rate for MPI. Step size of 16 ms. Changing from default may affect communication via MPI.

032 - TIMING PULSE

MPI Communication Parameter. Sets baud rate for MPI. Step size of 4.3 uS. Changing from default may affect communication via MPI.

035 - HDMI1 ENABLE

Set to 1 to enable HDMI 1 input in DTV Mode. Set to 2 to enable HDMI 1 input in PC Mode. Set to 0 to disable display panel HDMI 1 input.

Installer Menu (Cont.)

039 - REAR AUX EN. (Rear Aux Enable)

Set to 1 to enable display panel rear Aux (AV) input. Set to 0 to disable display panel rear Aux (AV) input.

041 - SIMPLINK EN

Set to 0 to disable the SIMPLINK feature. Set to 1 to enable SIMPLINK functionality without enabling remote control access to the SIMPLINK Menu. Set to 2 to enable both SIMPLINK functionality and SIMPLINK Menu access, though note that the Speaker menu option will be inaccessible/grayed out. Set to 3 to enable all aspects of SIMPLINK feature and SIMPLINK Menu. If a home theater device is connected to the TV, users can select either the TV or HT (home theater) speaker.

Note: When both this item *and* item 042 AUTO INPUTS are enabled in the Installer Menu, HDMI inputs will be detected by SIMPLINK, but the Auto Input(s) Sensing Feature will not function.

042 - AUTO INPUTS

Determines the Aux inputs for which auto-sensing is enabled. Set to 0 to disable auto-sensing for all available inputs. Set to 255 to enable auto-sensing for all available inputs. For information on options for individual input settings, see Reference section, "Auto Input(s) Sensing Feature."

Note: In order for auto-sensing to be enabled for an input, that input must also be enabled in the Installer Menu. For example, to enable auto-sensing for HDMI 1, item 035 HDMI1 ENABLE must also be set to 1 or 2. Also, see note above regarding TV operation when both this item and item 041 SIMPLINK EN are enabled.

046 - STRT AUX SRCE (Start Aux Source)

Sets the starting Aux source. When turned ON, the TV will tune to starting Aux source if item 004 STRT CHANNEL is set to 0.

1 = AV 5 = HDMI 2 255 = Last Aux
3 = HDMI 1

Note: Above is applicable only if all Aux sources are enabled.

Note: This item is not available in the Installer Menu unless item 004 STRT CHANNEL is set to 0.

047 - AUX STATUS

Set to 1 for MPI Aux source to be reported as a channel number instead of channel 0. Set to 0 to disable Aux identification change. Controls MPI status channel response for Aux inputs.

053 - DIS. CH-TIME (Disable Channel-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.

069 - EN. CH-T COL. (Enable Channel-Time Custom Color)

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

070 - FOR. CH-TIME (Channel-Time Display Foreground Color)

Set according to Color Chart:

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

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

Note: Applies only to "Channel Not Available" message if item 073 CH NOT AVBLE is set to 1 (enabled). Also, items 070 FOR. CH-TIME and 071 BCK. CH-TIME are not available in the Installer Menu when item 069 EN. CH-T COL. is set to 0.

071 - BCK. CH-TIME (Channel-Time Display Background Color)

See description for item 070 FOR. CH-TIME above. The color chart is the same for both items.

073 - CH NOT AVBLE (Channel Not Available)

If set to 1 and item 028 CH. OVERRIDE is set to 0, a "CHANNEL NOT AVAILABLE" message is displayed when a user attempts to direct tune a channel that is not included in the channel lineup.

Note: This item is not available in the Installer Menu when item 028 CH. OVERRIDE is set to 1.

075 - REVERT CH (Revert to Start Channel)

If set to 1 and loss of MPI communication occurs, TV automatically tunes to the specified Start Channel.

Note: This item is not available in the Installer Menu when item 004 STRT CHANNEL is set to 255.

077 - QUICK SHUTOFF

Allows end user (patient) to turn OFF TV using mechanical (analog) Pillow Speaker Channel Up/Down buttons. Patient needs to press and hold either channel button for time determined by value set. Set to 0 to disable. Set from 1 to 17 to establish required hold time of button—from 2 seconds to 10 seconds in half-second increments.

Note: This item is not available in the Installer Menu when item 013 SCAN MODE is set to 0.

078 - UPN MSB (UPN Most Significant Byte)

User programmable number, most significant byte readable by MPI command. Note: Not linked to serial number.

079 - UPN MSB-1 (UPN Most Significant Byte-1)

User programmable number, most significant byte-1 readable by MPI command. Note: Not linked to serial number.

080 - UPN MSB-2 (UPN Most Significant Byte-2)

User programmable number, most significant byte-2 readable by MPI command. Note: Not linked to serial number.

081 - UPN LSB (UPN Least Significant Byte)

User programmable number, least significant byte readable by MPI command. Note: Not linked to serial number.

082 - CHKSM ERROR (Checksum Error)

Enforces rigid MPI checksum validation. Set to 1 for validation. Set to 0 to disable (does not check checksum on MPI async port). SPI is always checked.

083 - HANDSHK TIME (Handshake Time)

Adds an additional delay to the handshake time which is 64 msec, thus relaxing MPI timing requirements to be compatible with PC-based Windows controlled systems. Range is 0 - 5. (Timeout = 25.5MS + [25.5 MS* Handshake time].)

084 - PERMANENT BLK (Permanent Block)

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

Note: This item is not available in the Installer Menu when item 021 V-CHIP is set to 0.

086 - V. MUTE TIME (Video Mute Time)

Use to extend the normal video mute time during channel change. For example, you may wish to extend the normal video mute time to prevent the display of encrypted video (i.e., from a Pro:Idiom encrypted channel) that has not yet been decrypted. When set to 0, the normal video mute time is not extended. Set from 1 to 50 to increase the normal video mute time in 100 ms step increments up to a maximum of 5 seconds (e.g., the value of 25 represents 2.5 seconds, or 25 x 100 ms = 2.5 seconds).

088 - EN NOISE MUTE (Enable Noise Mute)

Applicable for analog channels only. If set to 1, audio mutes if no signal is present.

090 - KEY LOCK

If set to 1, Key Lock is enabled, which means that all display panel joystick button functions will be locked, i.e., non-functional. Set to 0 to disable Key Lock. Note that all IR features remain functional regardless of this setting.

091 - HDMI2 ENABLE

Set to 1 to enable HDMI 2 input in DTV Mode. Set to 2 to enable HDMI 2 input in PC Mode. Set to 0 to disable display panel HDMI 2 input.

094 - SAP MENU EN (2nd Audio Program)

Set to 1 to enable the SAP feature in the Function Menu, when the Function Menu is available (i.e., TV is not in Pass-through Mode). Set to 0 to disable the SAP feature in the Function Menu, when the Function Menu is available.

096 - DEF. ASP. RATIO (Default Aspect Ratio)

Selects default aspect ratio at power up:

0 = Set By Program	1 = 4:3
2 = 16:9 (default)	3 = Just Scan
4 = Zoom	

Note: This item is not available in the Installer Menu unless item 106 ASP RATIO LOCK is set to 0.

097 - AUDIO OUTPUT

Determines availability and signal type/level (fixed speaker, variable speaker, or fixed line level [amplifier]) of the audio output to be used by external audio equipment connected to the SPEAKER OUT / LINE OUT jack on the TV. Set to 0 to disable audio output. Otherwise, see the table below and set as required in accordance with audio equipment. See also Reference section, "External Stereo Speaker Specifications."

	Value	Status
Speaker Output	1	Fixed 0.01 Watts
	2	Fixed 0.03 Watts
	3	Fixed 0.05 Watts
	4	Fixed 0.10 Watts
	5	Fixed 0.20 Watts
	6	Fixed 0.50 Watts
	7	Fixed 1.00 Watt (default)
	8	Control with volume
Line Output	9	Fixed line level (typically 400 mVrms ± 100 mVrms @10KΩ) output

098 - PRO:CENTRIC

Selects the Pro:Centric Application Mode. Set to 0 (default) to disable the Pro:Centric application. Set to 1 for Flash Mode. Set to 2 for GEM (Java Application) Mode.

In order to retrieve the Pro:Centric application, when enabled (for Flash or GEM Mode), the TV must be turned OFF/ON two times. Once you exit the Installer Menu, turn OFF the TV for at least one minute. When you turn the TV back ON, the TV will start the appropriate library based on the setting of this item. Wait until TV programming appears on the display, and then turn the TV back OFF, this time for a few minutes, to initiate the application download. When you turn the TV back ON, press the PORTAL key on the Installer Remote, and verify that the Pro:Centric application appears on the display.

Note: This item is not available in the Installer Menu when item 119 DATA CHANNEL is set to 0.

Installer Menu (Cont.)

099 - BACK LIGHTING

Sets the TV screen brightness at power up. Default setting is 255.

- 1 - 100 Static Back Lighting
(1 = Dimmest picture, 100 = Brightest picture)
- 101 - 200 Dynamic Back Lighting
(101 = Dimmest picture, 200 = Brightest picture)

If set between 101 and 200, the TV automatically controls back lighting depending upon the picture level of the current program. If set to 255, back lighting is controlled via the Picture settings in the TV setup menus.

102 - ATSC BAND

Sets up TV to receive different types of incoming signals.

0 = Broadcast 1 = CATV 2 = HRC
3 = IRC 4 = Same as NTSC

103 - ATSC TUNE MODE

Sets ATSC tuning mode. Default set to 1 for Physical Channel scan. Set to 0 for Virtual Channel scan.

104 - START MINOR CHANNEL

Sets Minor Start Channel number at power up. 0 = NTSC. If not 0, number selected is the digital channel's Minor Start Channel number.

Note: This item is not available in the Installer Menu when item 004 STRT CHANNEL is set to 0 or 255.

106 - ASP RATIO LOCK (Aspect Ratio Lock)

Set to 1 to retain previous aspect ratio with power off. Set to 0 to retain default aspect ratio with power off. See item 096 DEF. ASP. RATIO above.

116 - VIDEO MUTE EN (Video Mute Enable)

Applicable for analog channels only. If set to 1, video mutes (blank screen) when no signal is present.

117 - FACT DEFAULT (Factory Default)

Set to 1 and press OK to restore the factory default settings of all Installer Menu items. Once complete, the value returns to 0.



Caution: If set to 1, this clears all Installer Menu custom settings and restores the factory default settings. It also clears the channel lineup, including any assigned channel icons and custom text labels.

Note: See also Reference section, "Restoring Factory Defaults on the TV(s)," for further information.

118 - POWER SAVINGS

Default set to 3—the power circuitry for both the embedded *b*-LAN module and the GAME CONTROL/MPI port is only powered when the TV is turned ON. When the TV is turned OFF, the embedded *b*-LAN and the GAME CONTROL/MPI port are not powered.

Note that the TV must be turned ON in order to communicate with the embedded *b*-LAN module for configuration and control when POWER SAVINGS is set to 3. If POWER SAVINGS is set to 1, the *b*-LAN module is always powered.

Similarly, if MPI communication is required for external MPI control, POWER SAVINGS should be set to 1 so that the GAME CONTROL/MPI port circuitry is always powered.

Note: See Reference section, "*b*-LAN Setup & Overview," for further information.



Caution: POWER SAVINGS should NEVER be set to 7. This setting is intended for factory use only.

119 - DATA CHANNEL

Set to 0 to disable. Set from 1 to 135 to match the RF channel number that will be used by the Pro:Centric server as its data channel.*

For TVs in Pass-through Mode or FTG Mode via CPU, if this item is left at its default value (255), the TV's Data Channel Auto Search feature will be enabled (see additional information below).

Note: The Data Channel Auto Search feature is not available when the TV's EBL is in FTG Mode. If the DATA CHANNEL value is 255 when the TV is configured for FTG Mode via EBL, DATA CHANNEL is defaulted to 0.

Data Channel Auto Search feature: When this item is set to 255 (default), once every 24 hours, the TV will initiate a search of 10 predefined channels (10, 20, 30, ... 100) and then, if necessary, perform a complete search of the RF channels (1 to 135) in an attempt to find the RF channel used by the Pro:Centric server as its data channel. If the Pro:Centric RF channel is found, the DATA CHANNEL value will be changed from 255 to match the server's RF channel number. The time at which the Auto Search occurs depends on the setting of item 121 P:C RF WAKE HR. See item 121 description for further information.

Note: Pro:Centric updates are downloaded from the Pro:Centric server to the TV when the TV is turned OFF. While E-Z Installation updates are in progress, it is not possible to turn ON the TV.

* PCS150R and later Pro:Centric servers do not support HRC or IRC cable channel frequencies.

121 - UPDATE TIME HR

Based on the settings of this item and item 122 UPDATE TIME MN, the Wake For Update feature wakes the TV once daily to check for and, if applicable, download updates from the Pro:Centric server.

Set the Wake For Update hour from 0 to 23. This item uses the 24-hour clock format. The value "128" (default) is displayed as "OFF." Directly entering 128 resets the default value (OFF) for this item, though note that this setting does not mean the TV will not initiate update events—see additional information below.

Under standard TV OFF/ON operating conditions (i.e., item 002 AC ON is set to 0), a Wake For Update event occurs when the TV is OFF and causes the TV's CPU to temporarily turn ON, perform the update cycle, and then turn back OFF, all while the TV appears to be OFF. If item 002 AC ON is set to 2 or 3 for Instant ON, then the TV's CPU is always ON and Wake For Update occurs when the TV is in its Muted ON state (i.e., the TV only appears to be OFF). The Wake For Update event causes the TV's CPU to reboot in order to perform the update cycle and then return to its Muted ON state. See also description for item 002.

If this item is set to 128 (OFF), the time at which a Data Channel Auto Search (item 119 set to 255) and/or an Instant ON update (item 002 set to 2 or 3) occurs is determined as follows: The TV initiates the search and/or checks for updates at 2:00 AM (if the TV clock is set) or after two hours of elapsed time from when AC power was applied (if the TV clock is not set). If the TV display is ON when a Wake For Update event is to occur, the update will take place the next time the TV is turned OFF.

Note: This item is not available in the Installer Menu when item 119 DATA CHANNEL is set to 0, except when item 002 AC ON is set to 2 or 3 for Instant ON.

Note: The TV clock must be set in order for a Wake For Update event to occur at the precise time of day in accordance with item 121 and item 122 settings.

122 - UPDATE TIME MN

Set the Wake For Update minute from 0 to 59. See also description for item 121 UPDATE TIME HR above.

Note: This item is not available in the Installer Menu unless item 121 UPDATE TIME HR is set from 0 to 23.

Note: The TV clock must be set in order for a Wake For Update event to occur at the precise time of day in accordance with item 121 and item 122 settings.

Custom Master TV Setup

This section describes how to create a customized Master TV Setup for cloning purposes when the TV is in Pass-through Mode. All cloning (export and import) processes on the TV are performed via USB memory device / “.tlx” file. The Master TV Setup may be exported to a Clone (.tlx) file, which can then used (i.e., imported) to configure either TVs that are to remain in Pass-through Mode or TVs that are to be configured for FTG Mode via CPU.

Cloning requirements and procedures are described in detail on pages 43 to 46.

Note: You can also use the FTG File Manager to create an FTG Configuration (.tlx) file for FTG Mode via CPU configuration/cloning purposes, if desired (see pages 47 to 48). However, it is not possible to customize TV setup menu settings in the FTG File Manager. If you wish to include customized TV setup menu settings in the TV configuration, in addition to the channel lineup and Installer Menu settings, perform the Master TV Setup procedure to create a Clone (.tlx) configuration file.

Before You Begin

- It is recommended that you disconnect all Aux inputs if you intend to run Auto Tuning (Channel Search). Under certain conditions, Auto Tuning is disabled if there is an Aux input active.
- A Clone (.tlx) file comprises Installer Menu settings and all TV sources’ (analog, digital, AV, HDMI, etc.) clonable setup menu settings. See also “Clonable TV Setup Menu Features” list below.
- If the “.tlx” file (either a Clone or FTG Configuration file) to be imported on the Target TV(s) contains an FTG Channel Map, the Target TV(s) will be configured for FTG Mode via CPU, though as part of the import process, you will have the option to select either logical or physical channel tuning. If you would like the Target TV(s) to remain in Pass-through Mode, the “.tlx” file should not include an FTG Channel Map.

Clonable TV Setup Menu Features

Channel Auto Tuning (Channel Lineup) Manual Tuning Channel Edit Channel Label	Audio Sound Mode Sound Effect Auto Volume Sound Out AV Sync Adjust Sound Optimizer	Time Clock – Clock Mode (Auto/Manual) – Time Zone – Daylight Saving Auto Off
Picture Picture Mode		Option Language Caption Standby Light

Note: Some menu options vary between digital and analog channels and Aux inputs.

Custom Master TV Setup Procedure

1. Turn ON the TV.

The next step depends on whether the LG Setup Wizard appears on the screen when you turn ON the TV:

- If the wizard is displayed, the TV is in the required factory default state. To continue with this procedure, exit the wizard, and then proceed to step 2.

Note: If desired, you may also use the LG Setup Wizard / Express Script to create an Express Script TV Setup for cloning purposes. See “Express Script” on pages 20 to 25 for further information. Note that TV setup menu customization via the Express Script is limited to Channel Menu options.

- If the wizard is not displayed, restore the TV to a factory default condition before continuing with this procedure. See Reference section, “Restoring Factory Defaults on the TV(s),” as necessary, for further information.

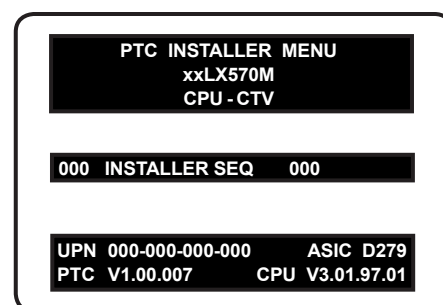
2. Set Installer Menu items.

This step provides specific instruction only on the Installer Menu items that should be set on a Master TV. Refer to pages 29 to 39 for detailed information on all Installer Menu items.

- Use the Installer Remote to access the PTC Installer Menu (see “Accessing the Installer Menu” on page 29 for further information).
- Set Installer Menu item **003 BAND/AFC**, as appropriate.
 - Broadcast: Set to 0.
 - CATV: Set to 1 (default).
 - HRC: Set to 2.
 - IRC: Set to 3.
- Set Installer Menu item **027 HOSPITAL MODE**, as appropriate, to select the speaker configuration.
- Set any other Installer Menu items that affect your TV programming network to the required configuration. For example, enable/disable Aux inputs, set a Start Channel, etc.
- After you have adjusted all Installer Menu item settings as required, press **OK** once on the Installer Remote to save your changes; then, press **OK** again to exit the menu.

3. Set up TV features.

On-screen setup menus control the features of the TV. Press **MENU** on the Installer Remote to access the TV setup menus, and then set Channel, Picture, Audio, Time, etc. options to the desired configurations. See “Clonable TV Setup Menu Features” list on previous page and also notes on following page.



Typical Installer Menu



Adjust the values for these Installer Menu items, as required.



Use the TV setup menus to set the TV features to the desired configuration for the end user.

(Continued on next page)

Custom Master TV Setup (Cont.)

(Continued from previous page)

Note: If you intend to use the TV Zoning feature, make sure to assign the appropriate TV Zone # at this time as described in Reference section, “Using the TV Zoning Feature.”

Note: If desired and if appropriate, you can run Auto Tuning (see step 4) prior to completing this step.

4. (Optional) Run Auto Tuning.

If you are creating a Master TV Setup for cloning purposes and you want the Target TV(s) to remain in Pass-through Mode, do NOT run Auto Tuning. If you export a Master TV Setup that includes an auto-tuned/edited channel lineup, thereby creating a Clone (.tlx) file with an FTG Channel Map, and then import the Clone file to a Target TV, this will put the Target TV in FTG Mode via CPU.

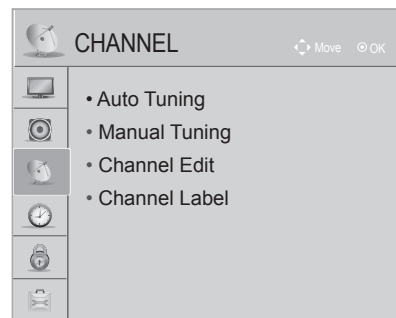
Note: When you import a Clone/Configuration (.tlx) file that contains an FTG Channel Map on a Target TV (for FTG Mode via CPU configuration), you will have the option to select either logical or physical channel tuning. For either selection, the channel sequence will be based on the order in which the channels appear in the FTG Channel Map. You can view and/or edit the channel sequence in the FTG File Manager, as required.

- a) Use the Installer Remote to access the Channel Menu. Then, select **Auto Tuning** and follow the on-screen instructions to search for all available digital and analog channels.
- b) Use the **Channel Edit** option in the Channel Menu to edit the channel lineup, as necessary. Add/delete channels per your system requirements.

5. Verify the TV setup.

Make sure the TV features are set per your requirements. Also, if applicable, verify that the channel lineup is correct.

The Master TV Setup is now ready to be saved (exported) to a USB memory device. See “Cloning Procedures” on pages 43 to 46.



(Optional) Use Channel Menu options to run Auto Tuning and edit the channel lineup.

Cloning typically refers to the process of using a Master TV Setup to configure a Target TV. This section describes how to save (export) a Master TV Setup and then transfer (import) it to a Target TV using a USB memory device / Clone (.tlx) file.

You can also create an FTG Configuration (.tlx) file using the FTG File Manager and then use the Import Clone File procedure to transfer the configuration to Target TVs. Refer to “Creating an FTG Configuration File” on pages 47 to 48, as necessary.

Exporting a Clone File

This section describes how to export Master TV Setup (including Express Script TV Setup) configuration to a USB memory device / Clone (.tlx) file.

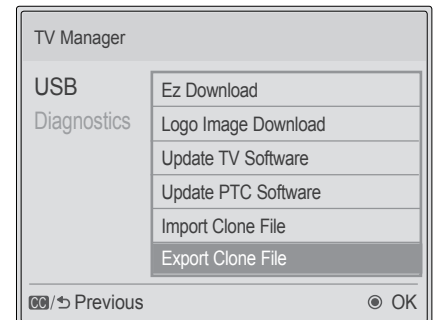
Before You Begin

- Ensure the USB device has been formatted with FAT format.
- If the TV is NOT already in FTG Mode via CPU, complete the Custom Master TV Setup procedure (see pages 40 to 42).
- If you would like the Target TV(s) to remain in Pass-through Mode after the Clone file is imported, ensure the Master TV does not have an auto-tuned/edited channel lineup; otherwise, importing the exported file will result in the Target TV(s) being configured for FTG Mode via CPU.
- If you intend to use the TV Zoning feature, make sure to assign the appropriate TV Zone # as described in Reference section, “Using the TV Zoning Feature,” BEFORE performing the procedure below.
- It is not possible to clone a Master TV’s clock. Either set a Target TV’s clock manually, or use the Auto Clock setting in the TV setup menus.
- Since the Export Clone File process retrieves the channel lineup from the CPU, if the TV is currently in FTG Mode via EBL (FTG Channel Map resides in EBL) it is not possible to export an FTG Channel Map.

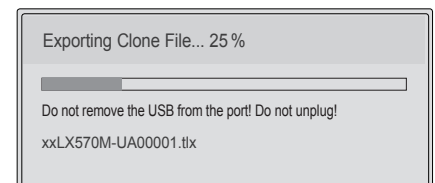
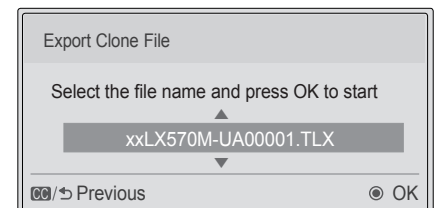
Caution: Do not unplug the TV power cord or remove the USB memory device while exporting is in progress, as doing so may cause the TV to malfunction or harm the USB device, respectively.

Export Clone File Procedure

1. Ensure the Master TV is set up completely and turned ON.
2. Insert the USB memory device into the USB port on the Master TV.
3. Press **MENU** on the Installer Remote to display the TV setup menus (TV is in Pass-through Mode) or the Function Menu (TV is already in FTG Mode).
4. Use the arrow navigation keys to select/highlight either the **Option** menu icon from the TV setup menus or the **Lock** menu icon from the Function Menu. Then, press the number “7” key a total of seven times to display the TV Manager / USB Download Menu.
5. To gain access to the “Export Clone File” option in the TV Manager / USB Download Menu, key in the following number sequence on the Installer Remote: **9-8-7-6**.



Note: TV Manager / Diagnostics is for service use only.



(Continued on next page)

Cloning Procedures (Cont.)

(Continued from previous page)

6. Use the Up/Down arrow keys to select **Export Clone File**, and then press **OK**.
7. In the Export Clone File window, to differentiate this Clone file from other LX570M Clone files, you can use the Up/Down arrow keys to change the last five digits of the filename. Press **OK** when you are ready to continue.

Export progress will be shown in a new window. Do NOT remove the USB device while exporting is in progress. When the export process is complete, the TV Manager / USB Download menu will reappear on the screen.

8. Press **↵** on the Installer Remote to exit the TV Manager / USB Download Menu, and remove the USB memory device from the Master TV.



Note: If the Master TV has a channel lineup, during the export process, logical channel numbers are automatically assigned in ascending order, starting with 0 (zero), to the physical RF channels of the TV channel lineup to create an FTG Channel Map. See also note below.



Note: If the exported Clone file is to be used for FTG Mode via CPU configuration (i.e., it contains an FTG Channel Map), it is highly recommended that you open the file in the FTG File Manager—BEFORE transferring (importing) the file to any Target TVs—to verify FTG Channel Map and FTG Installer Menu settings. This will also enable you to confirm channels and add channel attributes, labels, etc.

Importing a Clone File

This section describes how to transfer (import) a Clone or FTG Configuration (.tlx) file from a USB memory device to a TV using the TV Manager / USB Download Menu “Import Clone File” option. The “.tlx” file may be created either from a Master TV Setup that was saved (exported) from a Master TV or in the FTG File Manager.

Before You Begin

- Ensure the USB device has been formatted with FAT format.
- Avoid using special characters, such as ?, &, @, etc., in the Clone/Configuration (.tlx) filename.
- If you have initiated the EZ-Manager Wizard, you can use the wizard’s “USB Configuration” option to access the TV Manager / USB Download Menu and complete the import procedure, if desired (see “TV Configuration Options” and/or “USB Configuration” on pages 14 and 18, respectively, as necessary).
- You may also use the Ez Download utility to import the Clone/Configuration (.tlx) file. See “Ez Download Utility” on pages 26 to 28 for further information.
- If the Target TV is currently in Pass-through Mode and you intend to use the TV Zoning feature—i.e., the Clone/Configuration (.tlx) file you are importing contains an FTG Channel Map and/or FTG profile(s) with TV Zone assignments—make sure to assign the appropriate TV Zone # in the TV when directed to do so in the procedure below. See Reference section, “Using the TV Zoning Feature,” for further information.
- If you would like the Target TV(s) to remain in Pass-through Mode after the Clone/Configuration (.tlx) file is imported, ensure the “.tlx” file does not contain an FTG Channel Map; otherwise, the import will result in the Target TV(s) being configured for FTG Mode via CPU.

(Continued on next page)

(Continued from previous page)

- If a Clone (.tlx) file (exported Master TV Setup) contains an FTG Channel Map, the physical RF channels in the FTG Channel Map have been assigned logical channel numbers (see “Exporting a Clone File” above). When you import the Clone file with the FTG Channel Map on the Target TV(s), you will have the option to select either logical or physical channel tuning. Even if you select physical channel tuning, the (list of) physical RF channels in the FTG Channel Map will remain in logical order.
- If an FTG Configuration (.tlx) file (created in the FTG File Manager) contains an FTG Channel Map, each logical channel number in the FTG Channel Map has been assigned a physical RF channel or an Aux input (the latter designated by 130-0 through 137-0—see also Reference section, “TV Aux Input Configuration”).

Note: When you import the FTG Configuration file on the Target TV(s), you will have the option to select either logical or physical channel tuning. If you select physical channel tuning, the physical RF channels and Aux inputs in the FTG Channel Map will remain in logical order.

- If the Target TV EBL is already in FTG Mode, you cannot use this procedure to make changes to the FTG Channel Map and FTG Installer Menu settings. You must use a direct PC-to-TV connection as described in Reference section, “FTG Mode via EBL (Local Configuration),” or an FMA head end device to reconfigure the EBL.
- If the preceding condition applies, but you wish to switch the TV to FTG Mode via CPU, see Reference section, “Restoring Factory Defaults on the TV(s),” for further information before proceeding.
- If the Clone/Configuration (.tlx) file was edited/created in the FTG File Manager, it may contain multiple zoned FTG Installer Menu profiles for different TV models. Make sure it includes the appropriate Installer Menu profile(s) for the Target TV(s) before performing the procedure below.



Caution: Do not unplug the TV power cord or remove the USB memory device while importing is in progress, as doing so may cause the TV to malfunction or harm the USB device, respectively.

Import Clone File Procedure

1. Turn ON the Target TV.
2. The next step depends on whether the LG Setup Wizard appears on the screen when you turn ON the TV:
 - If the wizard is displayed, you can complete the import procedure via the EZ-Manager Wizard, as indicated above (see “Before You Begin”). However, to continue with this procedure and access the “Import Clone File” option from the TV menus, exit the Setup Wizard. Then, continue with step 3.
 - If the wizard is not displayed, go directly to step 3.
3. If applicable (see also “Before You Begin” above), make sure to assign the appropriate Zone designation in the Target TV at this time.



Note: In order for the proper location-specific TV Zone profile data to be applied, the Zone designation must be assigned in the Target TV(s) BEFORE importing is initiated.

4. Insert the USB memory device with the Clone/Configuration (.tlx) file into the USB port on the Target TV.

(Continued on next page)



Cloning Procedures (Cont.)

(Continued from previous page)

5. Press **MENU** on the Installer Remote to display the TV setup menus (TV is in Pass-through Mode) or the Function Menu (TV is already in FTG Mode).
6. Use the arrow navigation keys to select/highlight either the **Option** menu icon from the TV setup menus or the **Lock** menu icon from the Function Menu. Then, press the number “7” key a total of seven times to display the TV Manager / USB Download Menu.
7. With the TV Manager / USB Download Menu on display, use the Up/Down arrow keys to select **Import Clone File**, and then press **OK**.
8. In the Import Clone File window, use the Up/Down arrow keys to select the “.tlx” file you want to import.

Note: Filenames of exported Clone files are comprised of the TV model and a five-digit number, for example, xxLX570M-UA00001.TLX.

9. If the Clone/Configuration (.tlx) file includes an FTG Channel Map, select the desired Channel Tuning / Channel Banner Display option at the right side of the Import Clone File window:

- Press the green  button on the Installer Remote to select **Logical** tuning, or
- Press the yellow  button on the Installer Remote to select **Physical** tuning.

A checkmark will appear at the left of the selected option. Logical tuning is selected by default.

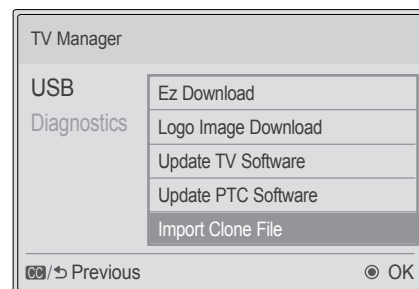
Note: If the “.tlx” file does not include an FTG Channel Map, the message, “No Channel Map in TLX file,” will be displayed at the right of the screen.

10. Press **OK** on the Installer Remote when you are ready to continue.

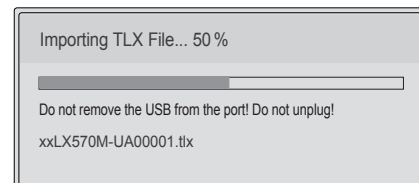
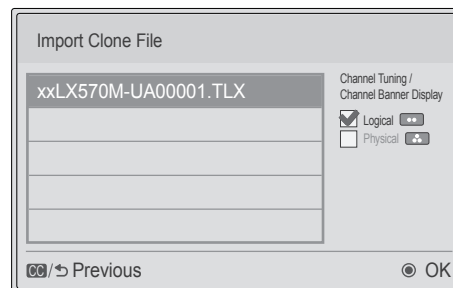
Import progress will be shown in a new window. Do NOT remove the USB device while importing is in progress. When the import process is complete, an “Updating Complete” window will briefly be displayed, and then, the TV will reboot.

11. Remove the USB memory device from the Target TV, and verify that the appropriate configuration is now resident on the Target TV.

Note: If the Target TV was previously in Pass-through Mode and the Clone/Configuration (.tlx) file that was imported contained an FTG Channel Map, the Target TV CPU is now in FTG Mode. Upon restart, the TV tunes according to the Start Channel setting in the Installer Menu. If a Start Channel is specified, the TV will tune to that channel, though, in the case of FTG Mode via CPU configuration, a channel banner will only be displayed if the Start Channel is included in the FTG Channel Map (depending on your selection in step 9, the channel banner will display either the Start Channel’s logical channel number or physical RF channel number). Otherwise, the TV will either return to the last channel tuned (TV in Pass-through Mode) or tune to the first channel in the FTG Channel Map (TV in FTG Mode via CPU). If the latter, remember that the channels in the FTG Channel Map are always arranged in logical order, regardless of your selection in step 9.



Note: TV Manager / Diagnostics is for service use only.



As indicated in the introduction to this document, there are two separate and distinct methods for configuring LX570M TVs for FTG Mode of operation: one method is to configure the TV CPU for FTG Mode operation, while the other is to configure the TV EBL for FTG Mode operation. FROM A LOCAL CONFIGURATION STANDPOINT, EACH OF THESE METHODS IS MUTUALLY EXCLUSIVE. IF THE CPU IS IN FTG MODE, THE EBL CANNOT BE SWITCHED TO FTG MODE. LIKEWISE, IF THE EBL IS IN FTG MODE, THE CPU CANNOT BE SWITCHED TO FTG MODE.

This section provides an overview of the FTG File Manager, which is used for FTG Mode via CPU configuration. The software is available online at: www.lg.com/us/commercial/display-solutions/ftg.

Creating an FTG Configuration File

The procedure below describes how to use the FTG File Manager utilities (see sample screens on pages 49 to 52) to create an FTG Configuration (.tlx) file that can be saved to a USB memory device. In order to enable decryption of Pro:Idiom encrypted channels, it is recommended that you create or view/edit an FTG Configuration file using the FTG File Manager.

Note: There is also an option to save (export) FTG Configuration from a TV, which may be desirable or required if you want to save customized TV setup menu settings to the FTG Configuration file and/or if you do not know the RF channels at the site. See “Exporting a Clone File” on pages 43 to 44 for further information.

This procedure provides an overview of the steps required to create an FTG Configuration (.tlx) file. Refer to the ***Free-To-Guest (FTG) File Manager User Guide*** for further information.

1. Install (if necessary) and launch the FTG File Manager (v1.3.2 or later) on the PC that will be used to create the FTG Configuration (.tlx) file.
2. You have a number of options:
 - To view and/or base a new FTG Configuration file on an existing FTG Configuration (.tlx) file, click the **Open** button in the TLX File command section of the FTG File Manager main screen, and select/double-click on the desired “.tlx” file.

A list of the file's contents will be displayed in the TLX File Contents window. Either double-click on an individual item to copy it, or click the **Copy All** button directly above the TLX File Contents window to automatically copy all the contents of the opened file to the FTG Configuration List and, if applicable, TV Setup Menu List. Note, though, that while TV setup menu settings can be included in the new FTG Configuration file, the TV setup menu settings are not available for editing.

Edit the configuration of the items in the FTG Configuration List as well as the FTG Configuration List itself and/or the TV Setup Menu List, as necessary, to create a new file. Then, proceed to step 3 when you are ready to continue.

- To open an existing FTG Configuration (.rml) file created in the FTG Device Configuration Application to use its FTG Channel Map and/or FTG Installer Menu settings, click **File** and then **Open** from the FTG File Manager menu bar, and select/double-click on the desired “.rml” file.
Edit channels and/or settings as necessary. Then, proceed to step 3 when you are ready to continue.
- Create a new FTG Channel Map using the FTG Channel Map Editor in the FTG Channel Map Configuration Utility. Up to 600 channels can be defined in the FTG Channel Map.
When you are ready to continue, click **Configure** and then **FTG File Manager** from the FTG File Manager menu bar to return to the FTG File Manager main screen, and then proceed to step 3.

(Continued on next page)

FTG File Manager Utilities Overview (Cont.)

(Continued from previous page)

Note: To remove an individual item from the FTG Configuration List or the TV Setup Menu List, click on/highlight the item to be removed, and then click the **Remove Item** button directly above the applicable “List” window. To clear both the current FTG Configuration List and TV Setup Menu List contents, click the **Clear** button in the List command section of the FTG File Manager main screen.

Note: To clear the current TLX File Contents, click the **New** button in the TLX File command section of the FTG File Manager main screen (above the TLX File Contents window).


3. To add an FTG Channel Map to the FTG Configuration List, click  under FTG Channel Map. This will copy the current mapped channels to the FTG Configuration List.

Note: If you make any change(s) in the FTG Channel Map Configuration Utility to the current data to be included in the FTG Configuration List, you will need to recopy the FTG Channel Map to the FTG Configuration List.

4. (Optional) Load default FTG Installer Menu settings for the TV. In the Installer Menu Templates section of the FTG File Manager main screen:

- If it is not already selected, click the down arrow at the right of the Region field, and select **North America**. Then, click the down arrow at the right of the Chassis field, and select the appropriate chassis (depending on the TV type) from the drop-down list of available models.
- Click the **Load** button.
- Use the FTG Installer Menu Configuration Utility to modify settings, if necessary. Then, return to the FTG File Manager main screen.

5. If you wish to change the Zone assignment for the current FTG Installer Menu settings, click on the down arrow at the right of the Zone field (below the FTG Installer Menu Settings field), and select the appropriate Zone (0–8). See Reference section, “Using the TV Zoning Feature,” for further information on the TV Zoning feature and setting the TV Zone # in the TV(s).

6. To add FTG Installer Menu settings to the FTG Configuration List, click  under FTG Installer Menu Settings. This will copy the selected model’s settings to the FTG Configuration List.

Note: If you make any change(s) in the FTG Installer Menu Configuration Utility to the current data to be included in the FTG Configuration List, you will need to recopy the FTG Installer Menu settings to the FTG Configuration List.

Note: At the top of both the FTG Configuration List and TV Setup Menu List windows, an Edit Zone field enables you to change the Zone assignment for each LX570M Installer Menu and/or TV Setup Menu profile, if desired. Select/highlight the desired profile, and then click on the down arrow at the right of the applicable Edit Zone field to select the appropriate Zone.

7. Click the **Save** button in the List command section of the FTG File Manager main screen to save the FTG Configuration List and, if present, TV Setup Menu List contents to an FTG Configuration (.tlx) file on the PC’s hard drive for later use.

In the Save As pop-up window, name the file (avoid using special characters, such as ?, &, @, etc.) and click **Save**. The default folder path is C:\Program Files\Zenith\FTG\TLX. Note that the FTG Configuration file will have a “.tlx” file extension.

Note: To remove an individual item from the FTG Configuration List or the TV Setup Menu List before saving the new file, click on/highlight the item to be removed, and then click the **Remove Item** button directly above the applicable window. To clear both the current FTG Configuration List and TV Setup Menu List contents, click the **Clear** button in the List command section of the FTG File Manager main screen.

8. Transfer the FTG Configuration (.tlx) file to a USB memory device, and proceed to “Importing a Clone File” on pages 44 to 46 to transfer the FTG Configuration file to an LX570M TV.

FTG File Manager Utilities Overview (Cont.)

FTG File Manager Main Screen

The FTG File Manager main screen enables you to compile, modify, and save FTG Configuration (.tlx) files. It also allows you to change the Zone assignment for each Installer Menu profile, if desired (see Reference section, “Using the TV Zoning Feature,” for further information).

The screenshot shows the FTG File Manager application window. The interface is divided into several sections:

- FTG File:** A text field for the filename of the opened FTG Configuration (.rml) file.
- FTG Channel Map:** A section with two lists: "21 Mapped RF Channels" and "0 Mapped IP Channels", each with a right-pointing arrow button.
- FTG Installer Menu Settings:** A section with a dropdown menu for "Zone" and a right-pointing arrow button.
- Installer Menu Templates:** A section with a "Region" dropdown (set to "North America"), a "Chassis" dropdown (set to "Select Model"), and a "Load" button. A note below states: "Note: A template contains the default settings pertaining to its chassis model".
- FTG Configuration List:** A list box containing "21 Mapped RF Channels" and "20 IMS (Items Default) 22/28LX570M". It has an "Edit Zone" dropdown and a "Remove Item" button.
- TV Setup Menu List:** A list box with an "Edit Zone" dropdown and a "Remove Item" button.
- TLX File:** A section with "New" and "Open" buttons.
- TLX File Contents:** A large list box with a "Copy All" button.
- Buttons:** "Clear" and "Save" buttons are located above the FTG Configuration List. "New" and "Open" buttons are located above the TLX File Contents.

Annotations with leader lines point to various elements:

- FTG CONFIGURATION LIST**: Data to be saved in FTG Configuration (.tlx) file.
- CLEAR/SAVE**: FTG Configuration and TV Setup Menu List options.
- NEW/OPEN**: TLX File options.
- Filename of opened FTG Configuration (.rml) file created using FTG Device Configuration Application.**: Points to the FTG File text field.
- Copy FTG Channel Map to and from FTG Configuration List.**: Points to the FTG Channel Map section.
- Copy FTG Installer Menu settings to and from FTG Configuration List. Assign Zone as applicable.**: Points to the FTG Installer Menu Settings section.
- Load default FTG Installer Menu for appropriate LX570M chassis.**: Points to the Installer Menu Templates section.
- TV SETUP MENU LIST**: Data to be saved in FTG Configuration file.
- TLX FILE CONTENTS**: Data contained in opened FTG Configuration (.tlx) file.

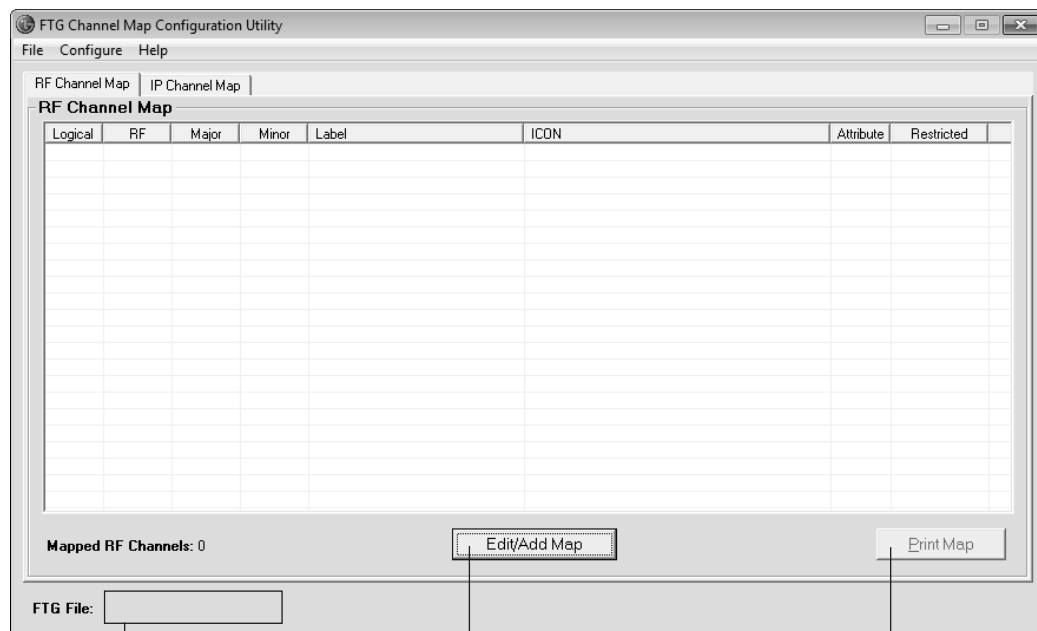


Note: The data referenced in the FTG Configuration List is only a snapshot of the current FTG Channel Map and FTG Installer Menu settings when copied to the list. If you make any change(s) to the current data to be included in the FTG Configuration List, you will need to recopy Channel Map and Installer Menu settings to the FTG Configuration List.

FTG File Manager Utilities Overview (Cont.)

FTG Channel Map Configuration Utility

The FTG Channel Map Configuration Utility enables you to create, view, edit, and print a Logical Channel Map.



Filename of opened FTG Configuration (.rml) file created using FTG Device Configuration Application.

EDIT/ADD MAP

Click to open the FTG Channel Map Editor to create or edit an FTG Channel Map (see next page).

PRINT MAP

Click to display a printable FTG Channel Map Report. The report can also be exported as an HTML or Text file.

FTG Channel Map Editor

The FTG Channel Map Editor shows a single Logical Channel's data and the FTG Channel Map.

LOGICAL CHANNEL MAPPING

Select a Logical Channel number. Then, assign the RF, Major, and Minor channel numbers to complete the mapping.

CUSTOM CHANNEL LABELS/ICONS

Enter custom labels and select icons by name on menu or by number.

SET CHANNEL ATTRIBUTES

Check/select Encrypted, OSD, or Blank Video.

Logical	RF	Major	Minor	Label	ICON	Attribute	Restricted
1	84	84	1	CBS	14 - CBS	EO	
2	20	20	5	NBC	15 - NBC	EO	
3	81	81	1	CNN	5 - CNN	EO	
4	18	18	1	ABC	13 - ABC	EO	
5	19	19	3	PBS	17 - PBS	EO	
6	68	68	1	MAX	47 - Cinemax	EO	
7	81	81	2	ESPN	2 - ESPN	EO	
9	61	61	1	HDNet	161 - HDNet	EO	
10	64	64	1	Nat Geo	145 - National Geographic Channel	EO	
18	65	65	1	Comedy	36 - Comedy Central	EO	
19	62	62	2	TBS	3 - TBS	EO	
20	19	19	1	wGN	89 - wGN	EO	
23	86	86	3	TNT	4 - TNT	EO	
24	62	62	2	HBO2	168 - HBO 2	EO	
25	59	59	2	HBO	12 - HBO	EO	

ZONE RESTRICTION

Select Zone (TV not in Hospital Mode) or channel bank (TV in Hospital Mode) restriction(s) for channel. See note below.

UPDATE

After editing an existing Logical Channel's data, click to commit the changes in the FTG Channel Map.

ADD

After defining a new Logical Channel, click to add channel to the FTG Channel Map.

DELETE

Click to remove highlighted channel from FTG Channel Map.

EXIT

Click to exit editor and return to FTG Channel Map Configuration Utility.

Note: The application of FTG Channel Map Zone restrictions in the TV (see Zone Restriction section in this screen) depends on the setting of Installer Menu item 027 HOSPITAL MODE (see item 027 description on page 35 for further details). If Installer Menu item 027 is set to 0, Hospital Mode is disabled, and TV Zoning / FTG Channel Map Zone restrictions may be set, as in Lodging models (see also Reference section, "Using the TV Zoning Feature"). When Hospital Mode is enabled, you can use Zones 1 to 4 to create custom channel lineups for channel banks 1 to 4 (see also "Channel Banks Overview" on page 25). In the latter case, a checked Zone Restriction (1 to 4) checkbox means that the selected channel is "deleted" from the same numbered channel bank.

FTG File Manager Utilities Overview (Cont.)

FTG Installer Menu Configuration Utility

CONFIGURATION SETTINGS

Select tabs for categories of Installer
Menu items to set up TV.

FTG Installer Menu Configuration Utility

File Configure Help

Index User Tuning Audio Aux Inputs STB I/O Video Hospital Pro:Centric LAN

Index

#1 Power Management	#17 Alarm	#41 SIMPLINK (HDMI)	#94 SAP Menu	#110 Panel Delay
#2 AC On	#20 IR Control	#42 Auto Input Sensing	#96 Default Aspect Ratio	#111 Panel Preset Volume
#3 Tuning Band	#21 V-Chip	#46 Starting Aux Source	#97 Audio Output	#112 Panel Start Volume
#4 Start Channel	#22 V-Chip Hours	#49 Disable Audio Menu	#98 Pro:Centric	#113 Panel Type
#5 Channel Lock	#23 Closed Caption	#73 Channel N/A	#99 Back Lighting	#114 Panel Minimum Volume
#7 Start Volume	#27 Hospital Mode	#77 Quick Shutoff	#100 Video Interface	#115 Panel Maximum Volume
#8 Minimum Volume	#28 Channel Override	#84 V-Chip Permanent	#101 IR Feedback	#116 Video Mute
#9 Maximum Volume	#34 AV2/CAM Port	#86 Video Mute Time	#103 ATSC Mode	#118 Power Savings
#10 Mute Disable	#35 DVI/HDMI 1	#87 RGB 1	#104 Start Ch Minor	#119 Data Channel
#11 Key Defeat	#36 Front S-Video	#88 Noise Mute	#105 Output Format	#120 Pseudo Power Off
#13 Scan Mode	#37 HDMI 4	#90 Key Lock	#106 Aspect Ratio Lock	#121 - #122 Update Time
#14 Start CH, Scan Mode	#38 Component 1	#91 HDMI 2	#107 Banner Mode	
#15 Sleep Timer	#39 AV1 Rear Aux	#92 RGB 2	#108 Panel Comm	
#16 On/Off Timer	#40 Auto CAM Port	#93 Remote Jack Pack	#109 Panel Handshake	

Pro:Centric IP Address Audio PTS Offset Wake On LAN IGMP Version

Pro:Centric Port # Video PTS Offset Wake On Wi-Fi Pre-loaded Apps

PCR Offset Media Share Wi-Fi Zones

Chassis: 109-2: 22/28LX570M

FTG File:

Restore Defaults

Filename of opened FTG Configuration
(.rml) file created using FTG Device
Configuration Application.

Notes:

- The Pro:Centric tab enables you to set up Pro:Centric-specific parameters. Refer to the **Free-To-Guest (FTG) File Manager User Guide** for further information.
- LAN parameters are not applicable for these TV models.

Reference: Updating TV/PTC Software using a USB Memory Device

This section describes how to update TV (CPU) and/or PTC software using the TV Manager / USB Download Menu “Update TV Software” and/or “Update PTC Software” option(s), respectively, though you may also use the Ez Download utility to update software, if desired. See “Ez Download Utility” on pages 26 to 28 for further information.

Before You Begin

- Software update files must be stored in a folder named “LG_DTV” in the root directory of the USB memory device.
- Ensure the USB device has been formatted with FAT format.

Update the TV/PTC Software

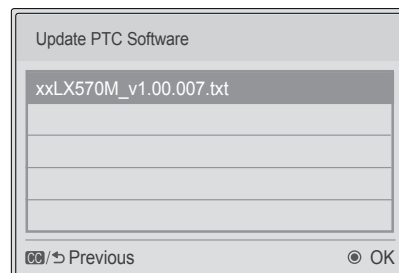
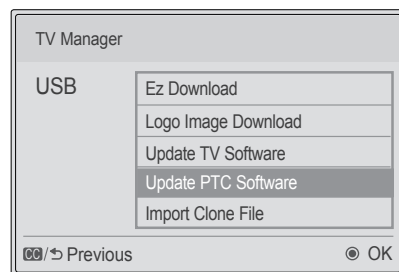
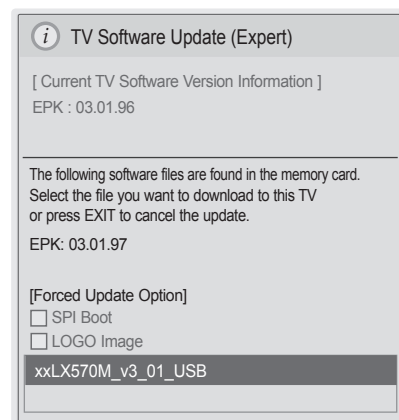
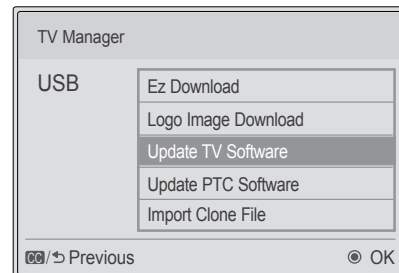
Note: You can check the TV/PTC software versions by accessing the Installer Menu with the Installer Remote. See “Accessing the Installer Menu” on page 29 for further information. PTC and CPU versions are displayed in the Installer Menu footer.

Note for TV CPU Software Update only: If the TV detects a later version of software on the USB device, it will automatically display a dialog from which you can start the software update immediately. Otherwise, you can close the dialog, and access the TV Manager / USB Download Menu as described below.

1. Turn ON the TV, and then insert the USB memory device into the TV’s USB port.
2. Press **MENU** on the Installer Remote to display the TV setup menus (TV is in Pass-through Mode) or the Function Menu (TV is not in Pass-through Mode).
3. Use the arrow navigation keys to select/highlight either the **Option** menu icon from the TV setup menus or the **Lock** menu icon from the Function Menu. Then, press the number “7” key a total of seven times to display the TV Manager / USB Download Menu.
4. With the TV Manager / USB Download Menu on display, use the Up/Down arrow keys to select **Update TV Software** or **Update PTC Software**, as applicable, and then press **OK**.
5. In the next window (TV Software Update or Update PTC Software depending on your selection in step 4—see also screen samples at right), use the Up/Down arrow keys to select/highlight the update file to download. Then, press **OK**.

Note: Do not select Forced Update options unless you have been specifically instructed to do so or have previous experience with Expert Software Updates.

The TV will show update progress in a new window. Do NOT remove the USB device until the software update is complete. When the software update is complete, an “Updating complete” window will briefly be displayed, and then, the TV will reboot.



Note: TV Manager / Diagnostics is for service use only.

Reference: Downloading a Splash Screen Image using a USB Memory Device

This section describes how to download a splash screen image using the TV Manager / USB Download Menu “Logo Image Download” option, though you may also use the Ez Download utility to download the splash screen image, if desired. See “Ez Download Utility” on pages 26 to 28 for further information.

Splash Screen Image File Guidelines

- The splash screen image must be a baseline (not progressive) JPEG.
- The image should be no larger than 1 MB.
- The maximum resolution allowed for a 22/28/32LX570M splash screen image is 1360 x 768 pixels (HD).
- The maximum resolution allowed for a 43LX570M splash screen image is 1920 x 1080 pixels (FHD).
- Avoid using special characters, such as ?, &, @, etc., in the splash screen image filename.

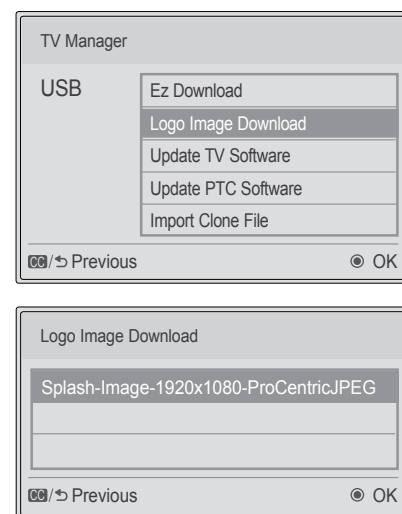
Before You Begin

- The splash screen image file must be stored in a folder named “LG_DTV” in the root directory of the USB memory device.
- Ensure the USB device has been formatted with FAT format.

Download the Splash Screen Image

1. Turn ON the TV, and then insert the USB memory device into the TV’s USB port.
2. Press **MENU** on the Installer Remote to display the TV setup menus (TV is in Pass-through Mode) or the Function Menu (TV is not in Pass-through Mode).
3. Use the arrow navigation keys to select/highlight either the **Option** menu icon from the TV setup menus or the **Lock** menu icon from the Function Menu. Then, press the number “7” key a total of seven times to display the TV Manager / USB Download Menu.
4. With the TV Manager / USB Download Menu on display, use the Up/Down arrow keys to select **Logo Image Download**, and then press **OK**.
5. In the Logo Image Download window, use the Up/Down arrow keys to select the image file to download, and then press **OK**.

The TV will show update progress in a new window. Do NOT remove the USB device until the splash screen image update is complete. When the image update is complete, an “Updating complete” window will briefly be displayed, and then, the TV will reboot. During the reboot, you should see the new splash screen.



Note: TV Manager / Diagnostics is for service use only.

Reference: Power Consumption Settings

The following tables assume that Installer Menu item 118 POWER SAVINGS is set to 3 (default) and Installer Menu item 099 BACK LIGHTING is set as shown below (default value is 255).

Item 099 Back Lighting (Static)	22LX570M		28LX570M		32LX570M		43LX570M	
	Power Consumption (Watts)	Percent Savings	Power Consumption (Watts)	Percent Savings	Power Consumption (Watts)	Percent Savings	Power Consumption (Watts)	Percent Savings
100	18.5	100.00%	23.6	100.00%	39.0	100.00%	55.6	100.00%
90	17.9	32.19%	22.6	40.65%	38.1	68.53%	52.1	93.71%
80	17.7	31.83%	22.3	40.11%	37.3	67.09%	51.3	92.27%
70	17.4	31.29%	21.8	39.21%	36.6	65.83%	49.3	88.67%
60	17.1	30.76%	21.4	38.49%	35.4	63.67%	47.8	85.97%
50	16.7	30.04%	20.7	37.23%	34.0	61.15%	45.5	81.83%
40	16.4	29.50%	20.2	36.33%	32.2	57.91%	43.6	78.42%
30	15.1	27.16%	18.2	32.73%	29.3	52.70%	36.9	66.37%
20	14.2	25.54%	16.8	30.22%	25.9	46.58%	31.5	56.65%
10	13.0	23.38%	14.9	26.73%	22.5	40.47%	24.9	44.78%
1	12.0	21.58%	13.4	24.10%	19.5	35.07%	19.7	35.43%

Item 099 Back Lighting (Dynamic)	22LX570M		28LX570M		32LX570M		43LX570M	
	Power Consumption (Watts)	Percent Savings	Power Consumption (Watts)	Percent Savings	Power Consumption (Watts)	Percent Savings	Power Consumption (Watts)	Percent Savings
200	18.5	100.00%	23.6	100.00%	38.9	100.00%	55.7	100.00%
190	17.9	32.14%	22.6	40.57%	38.1	68.40%	52.2	93.72%
180	17.7	31.78%	22.4	40.13%	37.3	66.97%	51.3	92.10%
170	17.3	31.06%	21.9	39.23%	36.6	65.71%	49.3	88.51%
160	17.1	30.70%	21.4	38.37%	35.4	63.55%	47.9	86.00%
150	16.7	29.98%	20.7	37.16%	34.4	61.76%	45.5	81.69%
140	16.3	29.26%	20.2	36.27%	32.6	58.53%	43.6	78.28%
130	15.0	26.93%	18.2	32.68%	29.6	53.14%	36.9	66.25%
120	14.2	25.49%	16.8	30.07%	26.3	47.22%	31.5	56.55%
110	13.0	23.34%	14.8	26.64%	22.9	41.11%	25.0	44.88%
101	12.1	21.72%	13.4	24.06%	19.8	35.55%	19.7	35.37%

Note: Values are results of controlled experiments under laboratory conditions.

Reference: TV Aux Input Configuration

DIRECT ACCESS Tuning *		TV		ENABLE					MPI DATA				Installer Menu Item 046 START AUX SRCE (Start Aux Source) Value
				Installer Menu			MPI DATA STATUS TYPE 0x41 SOURCES ENABLED (R/W)		DATA STATUS TYPE 0xD2 CURRENT AV SOURCE (R)		DATA STATUS TYPE 0x0D AUX SOURCE (R)		
Installer Menu Item 029 OLD OCV = 0	Installer Menu Item 029 OLD OCV = 1	Aux Input	Input Mode	Item	Function	Value	Enable Bit	Label	Value	Value	Description		
131-0	91-0	AV (Rear)	CV	39	REAR AUX EN	1	1	Rear Video (Aux)	1	0	VIDEO	1	
132-0	92-0	HDMI2	DTV	91	HDMI2 ENABLE	1	2	S-Video Rear	2	0	VIDEO	5	
			PC			2				2	COMPUTER		
133-0	93-0	HDMI1	DTV	35	HDMI1 ENABLE	1	3	Front Computer	3	0	VIDEO	3	
			PC			2				2	COMPUTER		

* Use Installer Remote to enter channel number indicated based on OLD OCV Installer Menu setting.

Reference: *b*-LAN Setup & Overview

The *b*-LAN module is internal to the TV. It allows hotel/institution head end equipment with *b*-LAN technology to communicate, via the institution's RF distribution system, with the TV for configuration and control.

Installer Menu item 118 POWER SAVINGS controls the power circuitry for both the embedded *b*-LAN module and the GAME CONTROL/MPI port. The default value is 3—the *b*-LAN module is only powered when the TV is turned ON. See chart below.

POWER SAVINGS	TV OFF	TV ON
	<i>b</i> -LAN & GAME CONTROL/MPI Port Power	<i>b</i> -LAN & GAME CONTROL/MPI Port Power
1	On	On
3 (default)	Off	On

A *b*-LAN enabled head end device, such as an LG FMA-LG101, broadcasts over the RF distribution system to communicate to multiple TVs. When the TV is first installed, it must be turned ON in order for its embedded *b*-LAN module to receive communication from the head end device. At this point, if it is desired for the *b*-LAN module to always be powered, including while the TV is turned OFF, set Installer Menu item 118 POWER SAVINGS to 1.

Also, if MPI communication is required for external MPI control, set Installer Menu item 118 POWER SAVINGS to 1 so that the GAME CONTROL/MPI port circuitry is always powered.



Caution: POWER SAVINGS should NEVER be set to 7. This setting is intended for factory use only.

Reference: FTG Mode via EBL (Local Configuration)

The following steps outline local FTG configuration of individual TV EBLs using a direct PC-to-TV (EBL) connection. Refer to the **Free-To-Guest (FTG) Device Configuration Application User Guide** for further information.

FTG Device Configuration Application software is available online at: www.lg.com/us/commercial/display-solutions/ftg.

Note: If the TV CPU is already in FTG Mode, you cannot use this procedure to make changes to the FTG Channel Map and FTG Installer Menu settings. Refer to FTG Mode information on pages 7 to 9 for further details.

Note: If the preceding condition applies, but you wish to switch the TV to FTG Mode via EBL, see Reference section, “Restoring Factory Defaults on the TV(s),” for further information before proceeding.

1. Install (if necessary) and launch the FTG Device Configuration Application (v5.5.1 or later) on the PC that will be used to configure the EBL.
2. Build an FTG Channel Map using the FTG Channel Map Editor in the FTG Channel Map Configuration Utility (or, if applicable, open an existing FTG Configuration [.rml] file).

Note: Up to 141 logical channels can be defined in the FTG Channel Map.

3. Connect the PC to the TV-LINK CFG jack on the TV's rear jack panel using a USB-to-TTL serial cable (TTL-232R-5V-AJ). If necessary, install the device driver on the PC.
4. Turn ON the TV.

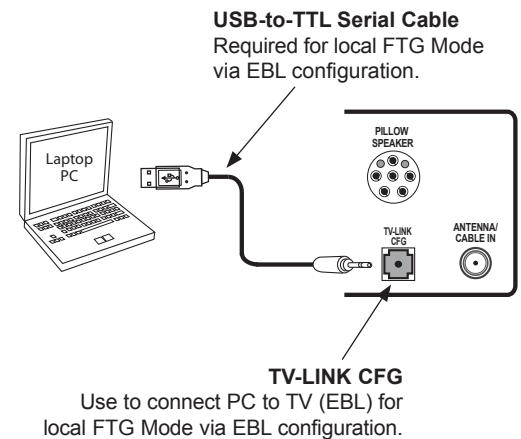
Note: If Installer Menu item 118 POWER SAVINGS is set to 3 (default), the TV must be ON in order for steps 5 and 6 below to be successful.

5. “Write” the FTG Channel Map to the EBL (switches the EBL from Pass-through Mode to FTG Mode).

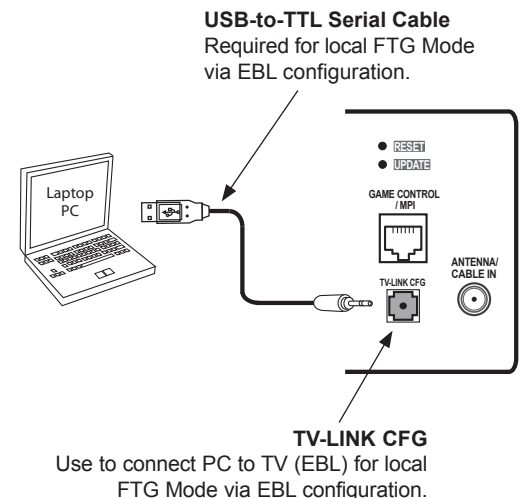
Note: After a “Write” of new data, the TV will briefly display a green text banner that shows the EBL firmware version and release date.

6. “Read” the current FTG Installer Menu settings from the EBL using the FTG Installer Menu Configuration Utility. If necessary to make changes to Installer Menu items, “Write” them back to the EBL in FTG Mode.
7. Save the FTG Channel Map and FTG Installer Menu settings to an FTG Configuration (.rml) file for future use.
8. Tune the TV to a logical channel in the FTG Channel Map.

22/28LX570M Jack Panel



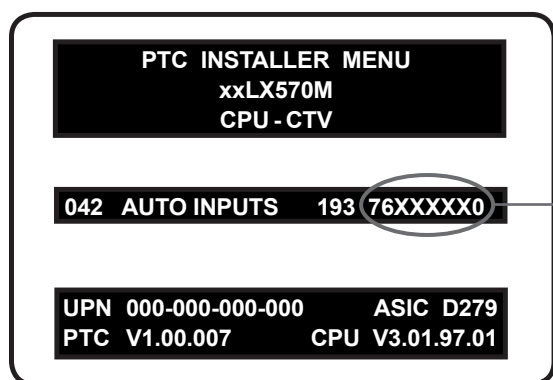
32/43LX570M Jack Panel



Reference: Auto Input(s) Sensing Feature

This section provides detailed settings information for Installer Menu item 042 AUTO INPUTS. In the Installer Menu, an informational code is displayed at the right of each Auto Inputs value (see example below).

Note: When both item 042 AUTO INPUTS *and* item 041 SIMPLINK EN are enabled in the Installer Menu, HDMI inputs will be detected by SIMPLINK, but the Auto Input(s) Sensing Feature will not function.



AUTO INPUTS Display Code

This example illustrates Installer Menu item 042 value 193, which enables auto-sensing for all available Aux inputs. The input #s in the display code (7, 6, 0 in this example) identify the enabled Aux inputs. See table below for a listing of the LX570M Aux inputs and their corresponding display code input #s. The table on the following page shows the display codes for all item 042 values.

Each code consists of eight characters that identify the Aux input(s) for which auto-sensing is enabled. The following table identifies the Installer Menu display code Input # for each Aux input that is available on the LX570M TV models. The table also identifies the Installer Menu item associated with each Aux input. Remember that in order for auto-sensing to be enabled for an input, that input must also be enabled in the Installer Menu.

Installer Menu Display Code Input #	Aux Input	Installer Menu	
		Item	Function
0	AV	039	REAR AUX EN
6	HDMI 1	035	HDMI1 ENABLE
7	HDMI 2	091	HDMI2 ENABLE

To disable auto-sensing for all available Aux inputs, set item 042 to 0. To enable auto-sensing for all available Aux inputs, set item 042 to 255. All other available settings (i.e., settings for individual inputs), are listed in the table below.

Item 042 Value	Inputs			Installer Menu Display
	AV	HDMI 1	HDMI 2	
001	Enabled	Disabled	Disabled	DDXXXXX0
064	Disabled	Enabled	Disabled	D6XXXXXD
065	Enabled	Enabled	Disabled	D6XXXXX0
128	Disabled	Disabled	Enabled	7DXXXXXD
129	Enabled	Disabled	Enabled	7DXXXXX0
192	Disabled	Enabled	Enabled	76XXXXXD
193	Enabled	Enabled	Enabled	76XXXXX0

X = Aux input source is Disabled or Not Available (i.e., on these TV models)

D = Auto-sensing for input is Disabled

Input # = Auto-sensing for input is Enabled

Reference: LX570M Hospital Operations

Hospital Features

The following table identifies when and how the LX570M hospital features are supported in three different TV configurations. As indicated in the introduction to this document, LG commercial TV functionality is based on “ownership” of the Channel Map. For the purposes of this table, “CPU” indicates that the TV is in Pass-through Mode with the Channel Map in the CPU (i.e., auto-tuned/edited channel lineup) and “PTC” indicates that the TV is in Pass-through Mode with the Channel Map in the PTC (PTC-CTV Mode).

		CPU		PTC		FTG/PPV Mode	
Hospital Mode State		Disabled	Enabled	Disabled	Enabled	Disabled	Enabled
Installer Menu	Item						
IR Banks Enable	012				X		
Scan Mode	013			X	X	X*	X*
Start Channel in Scan Mode	014			X	X	X*	X*
Feature Level	020						
Bed 1/Bed 2	020	X		X		X	
Multi-code IR	020	X	X	X	X	X	X
Speaker	020	X		X		X	
Function Preview	025			X	X		
Hospital Mode	027						
Bed 1/Bed 2	027		X		X		X
Pillow Speaker Voltage	027	(b)	X	(b)	X	(b)	X
Speaker	027		X		X		X
Quick Shutoff	077	(c)	(c)	(c)	(c)	(c)	(c)
Channel Banks							
Number of Banks Enabled				1	4	1	4*
Channel Preview/Banks Setup Menu				X	X		
Blanked Channel				X	X	X	X
Inactive TV					X		X*
SAP Key (special use in Channel Preview/Banks Setup Menu)					X		X*
Aux Input Sources							
Input List Menu		X	X	X		X	
Aux in Channel Lineup				X	X	(d)	X*/(d)
TV Setup Menus							
Audio (TV Speaker)		(e)	(e)	(e)	(e)		
Option (Power Indicator)		X	X	X	X		

* Applicable for FTG Mode via CPU only.

X = feature supported

a) Turn ON function only. Always goes to channel 2-0.

b) Defaults to Zenith pillow speaker code/(+12v) supply voltage.

c) Quick Shutoff feature only functions when Scan Mode is enabled and if you are using an analog pillow speaker.

d) Dependent upon installer-defined FTG/PPV Channel Map.

e) Audio Menu is only accessible when the speaker selected is TV Only or both TV & Pillow.

Reference: LX570M Hospital Operations (Cont.)

Speaker Selection

The following table outlines speaker settings as determined by Installer Menu items 027 HOSPITAL MODE and 020 FEATURE LEVEL.

Item 027 HOSPITAL MODE Value	Item 020 FEATURE LEVEL Value	Audio Menu TV Speaker	Speaker
0	0 ~ 24	OFF	None
0	0 ~ 24	ON	TV Only
0	64 ~ 65	N/A	Pillow Only
1 ~ 34	N/A	N/A	Pillow Only
65 ~ 98	N/A	OFF	None
65 ~ 98	N/A	ON	TV Only
129 ~ 162	N/A	OFF	Pillow Only
129 ~ 162	N/A	ON	Pillow & TV

Note: If the TV is in FTG Mode, the Audio Menu is no longer accessible.

Reference: Restoring Factory Defaults on the TV(s)

This section describes how to restore all factory defaults or just the Installer Menu factory defaults either on a single TV that is currently in Pass-through or FTG Mode or on multiple TVs that are currently in FTG Mode.

Restore All Factory Defaults

This section describes how to restore a single TV, regardless of its mode, to a factory default condition. The following procedure requires that you contact LG technical support to obtain a predefined value/password for Installer Menu item 117 FACT DEFAULT that enables access to initiate a factory “IN-STOP” process, which restores all factory defaults. This procedure will also reactivate the EZ-Manager Wizard.

1. Use the Installer Remote to access the TV’s Installer Menu.
2. Navigate to Installer Menu item 117 FACT DEFAULT, and key in the value provided by technical support. Then, press **OK**.
3. At the prompt for confirmation, key in the password provided by technical support. This will initiate the IN-STOP that restores the factory defaults on the TV.

Installer Menu Item 117 FACT DEFAULT

If the TV is currently in Pass-through Mode, you can set Installer Menu item 117 FACT DEFAULT to 1 to restore the Installer Menu factory defaults and clear the PTC Channel Map, including any assigned channel icons and custom text labels. Note, however, that if a complete restoration of the TV’s factory defaults is required, see “Restore All Factory Defaults” above.

Additional FTG Mode via CPU Options

There are two additional options for restoring Pass-through Mode/Installer Menu factory defaults on TVs that are in FTG Mode via the CPU. The first enables you to restore a single TV to Pass-through Mode, while the second enables you to restore multiple TVs to Pass-through Mode at one time. However, both options require that you create a “Zero Mapped Channels” FTG Configuration (.tlx) file, i.e., an FTG Configuration file with no data. Refer to the **Free-To-Guest (FTG) File Manager User Guide** for further information.

- Using a USB memory device, import a “Zero Mapped Channels” FTG Configuration (.tlx) file to the TV. Refer to “Importing a Clone File” on pages 44 to 46 for further information on the import procedure.
- If your system uses a Pro:Centric server for remote management, use the Pro:Centric server Admin Client to load a “Zero Mapped Channels” FTG Configuration (.tlx) file on the Pro:Centric server. Refer to the **Pro:Centric Server Admin Client User Guide** for further information.

Additional FTG Mode via EBL Options

There are two additional options for restoring Pass-through Mode/factory defaults on TVs that are in FTG Mode via the EBL. The first enables you to restore a single TV to Pass-through Mode, while the second enables you to restore multiple TVs to Pass-through Mode at one time.



Note: While the IN-STOP process described above will clear both the PTC and the CPU, both options below only clear the PTC. Thus, the current Channel Map and TV setup menu settings will remain in the CPU after the reset is completed.

- Using a direct PC-to-TV connection, “Write” an unpopulated Channel Map—that is, a Channel Map with 0 (zero) channels—to the TV. See Reference section, “FTG Mode via EBL (Local Configuration),” and/or the **Free-To-Guest (FTG) Device Configuration Application User Guide** for further information.
- If your system uses an FMA for remote management/broadcast configuration, configure the FMA device with an FMA Configuration (.fma) file that only contains a “0 Mapped Channels” FTG Channel Map to broadcast to the TV EBL(s). Refer to the **Free-To-Guest (FTG) Device Configuration Application User Guide** and/or the Installation & Configuration Guide for the FMA device for further information.

This section describes the TV Zoning feature available with the LX570M model TVs. The TV Zoning feature enables you to create localized configurations for TVs in selected locations, or “Zones,” within the installation environment, for example, a hotel lobby, fitness center, restaurant, etc. This feature is primarily intended for use when the TV is configured for FTG Mode via CPU operation. However, selected elements of TV Zoning (Installer Menu and TV Setup Menu profile Zone assignments) may also be used with TV cloning processes using a USB memory device / “.tlx” file.

Refer to the appropriate section(s) below for further information on the TV Zoning feature and how to set the TV Zone # in a TV that is currently in Pass-through Mode.

Using the TV Zoning Feature with FTG Mode via CPU Configuration

The FTG File Manager may be used to create an FTG Configuration (.tlx) file that contains multiple Installer Menu and TV Setup Menu profiles, each with its own Zone assignment. Up to nine unique Zones can be designated for LX570M FTG Installer Menu and/or TV Setup Menu profiles. Zone restrictions can also be placed on individual channels in the FTG Channel Map. Thus, for example, you may create an FTG Installer Menu and/or TV Setup Menu profile to specifically configure a TV in the hotel lobby and also restrict the channels that are available to be tuned on that TV.

The TV Zone # must be set appropriately on each TV in order for the TVs to be configured correctly. See “Set the TV Zone # in the TV” on the following page, and set the TV Zone # in all the TVs in a select area, so that the TVs are configured with corresponding FTG Installer Menu and/or TV Setup Menu settings and/or can omit channels that have been restricted in the FTG Channel Map. TV Zone 0 is the default TV Zone #.

The following subsections briefly describe how to assign Zone designations in the FTG File Manager. Refer to the ***Free-To-Guest (FTG) File Manager User Guide*** for further information.

FTG Installer Menu Profile Zone Assignments

The FTG File Manager main screen enables you to change the Zone assignment (default = Zone 0) for each Installer Menu profile to be included in an FTG Configuration (.tlx) file. For example, you may wish to create one LX570M Installer Menu profile for the hotel lobby and another LX570M Installer Menu profile for the fitness center, both of which are different from the FTG Installer Menu profile used for standard guest rooms. The TV Zoning feature enables you to save multiple LX570M FTG Installer Menu profiles, each with its own Zone assignment, in one FTG Configuration (.tlx) file. If each TV in the aforementioned locations (Zones) has had its TV Zone # set appropriately, as described in the procedure on the following page or via the EZ-Manager Wizard, the TV(s) will only be configured by the Installer Menu profile that matches its(their) Zone setting.

In the FTG File Manager main screen, you can also edit the Zone assignment for each Installer Menu profile and/or TV Setup Menu profile already present in the FTG Configuration List and TV Setup Menu List windows.

Note: See also the FTG File Manager main screen overview on page 49. In addition, note that TV Setup Menu profiles cannot be created in the FTG File Manager; they must be saved (exported) from a TV.

FTG Channel Map Zone Restrictions

The FTG Channel Map Editor in the FTG File Manager’s FTG Channel Map Configuration Utility enables you to place Zone restrictions on individual channels that may be prohibited or deemed unsuitable for selected locations. In the FTG Channel Map Editor, one or more Zone restrictions (1–8) may be placed on each channel that is to be restricted. For example, if you wish to restrict a channel from Zones 2 and 4, select both “Zone 2” and “Zone 4” in the Zone Restriction section of the FTG Channel Map Editor screen when defining or editing that channel.

Reference: Using the TV Zoning Feature (Cont.)

Note: While a channel can be restricted from up to eight Zones, a TV can only ever be in (set for) one Zone. See also the FTG Channel Map Editor overview on page 51.

At the same time, keep in mind that the TV Zone designations are not mutually exclusive. That is, you may opt to place Zone restrictions on selected channels in the FTG Channel Map, but at the same time, you can choose to configure all TVs at the site with the same Installer Menu and/or TV Setup Menu settings. For example, an FTG Configuration (.tlx) file being used to configure the TVs at a site may contain multiple Installer Menu and TV Setup Menu profiles with different Zone assignments, as well as an FTG Channel Map with Zone restrictions on several channels. Each TV that still has the default TV Zone 0 setting will *only* be configured by the Installer Menu and/or TV Setup Menu profile(s) with a Zone 0 designation. If, on the other hand, the TV Zone # is set to 1, the TV will first look in the file for the LX570M Installer Menu and/or TV Setup Menu profile(s) with a Zone 1 designation. If none of the LX570M Installer Menu and/or TV Setup Menu profiles has a Zone 1 designation, the TV will then look for the LX570M profile(s) with a Zone 0 designation. For the FTG Channel Map configuration, when the TV Zone # is set to 0, the TV will ignore any Zone restrictions (1–8) that may be placed on channels in the FTG Channel Map. However, when the TV Zone # is set to 1, the TV will omit any channels that have been restricted from Zone 1 in the FTG Channel Map.

Using the TV Zoning Feature with Cloning Configuration

A location-specific configuration / Clone (.tlx) file may be saved (exported) from a Master TV and then be used to configure Target TVs. For example, if the TV Zone # in the Master TV is set to 3 before the Clone file export is initiated, the Master TV's Installer Menu and TV Setup Menu profiles will be saved with the TV Zone 3 assignment. In order to configure the Target TVs with the Zone 3 Installer Menu and TV Setup Menu profiles exported from the Master TV, you must set the TV Zone # accordingly in the Target TVs before importing the Clone file. See "Set the TV Zone # in the TV" below. Also, see "Cloning Procedures" on pages 43 to 46 for additional information on the cloning processes. TV Zone 0 is the default TV Zone #.

Set the TV Zone # in the TV

You can set the TV Zone # in the EZ-Manager Wizard (see "EZ-Manager Wizard" on pages 14 to 19) or, if the TV is in Pass-through Mode, via the TV's setup menus as described below. Note that the following procedure can only be performed while the TV is in Pass-through Mode. You will also be able to specify a Label (North, South, East, West) and Room Number for this TV, if desired.

1. Turn ON the TV.
2. Press **MENU** on the Installer Remote, and use the arrow navigation keys to select/highlight the **OPTION** menu icon. Then, press **OK**.
3. Use the Up/Down arrow keys to select **Zones & Room Number**, and then press **OK**.
4. In the Zone, Label, and Room Number pop-up window, complete the appropriate fields as described below. Use the Left/Right arrow keys on the Installer Remote to navigate between each of the fields.
 - **Zone:** Enables you to set a TV Zone # so that the TV can be configured with Installer Menu and/or TV Setup Menu settings intended only for the assigned Zone. The Installer Menu and/or TV Setup Menu settings may be provided in a Clone/Configuration (.tlx) file. If the TV is being configured for FTG Mode via CPU, the TV Zone # setting also allows the TV to omit channels that have been restricted in the FTG Channel Map (see "FTG Channel Map Zone Restrictions" on previous page).

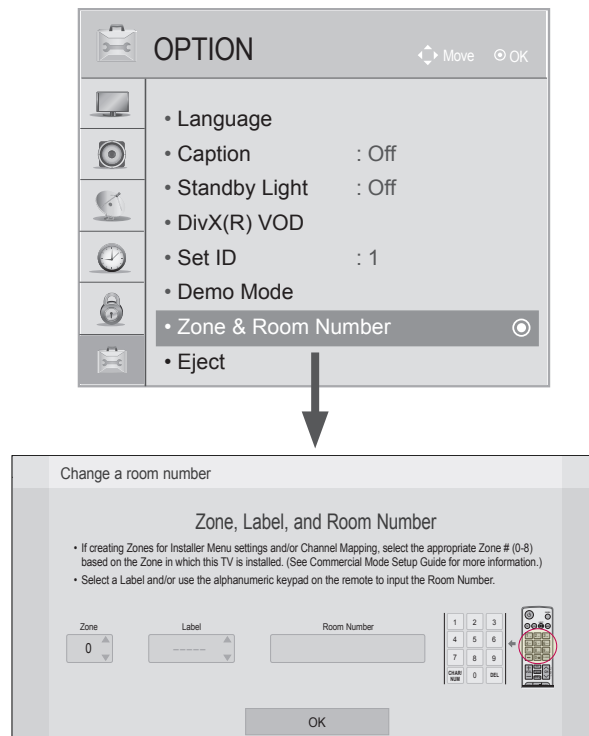
(Continued on next page)

Reference: Using the TV Zoning Feature (Cont.)

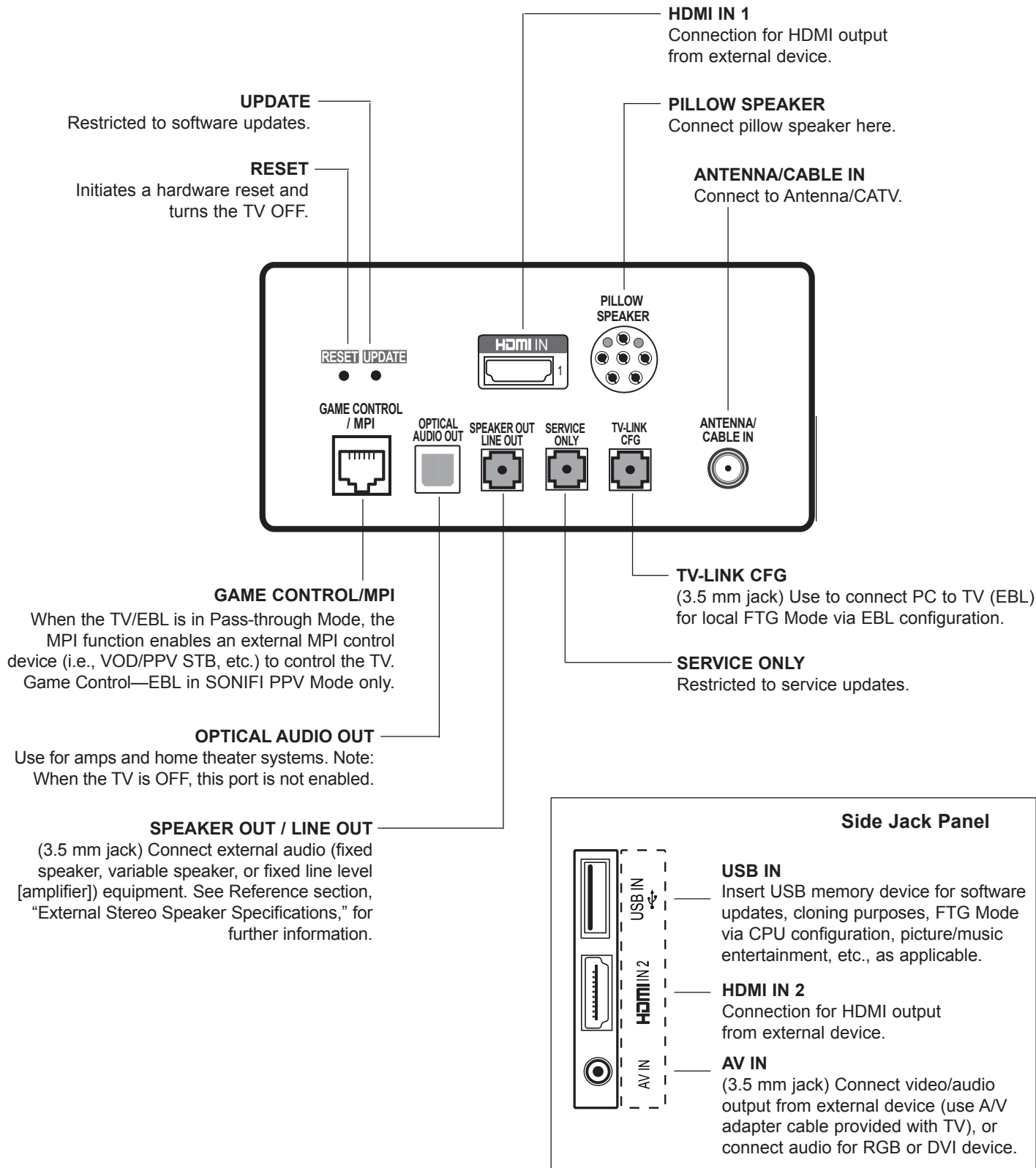
(Continued from previous page)

To change the TV Zone, navigate to the Zone field, and use the Up/Down arrow keys to specify the desired TV Zone # (0–8).

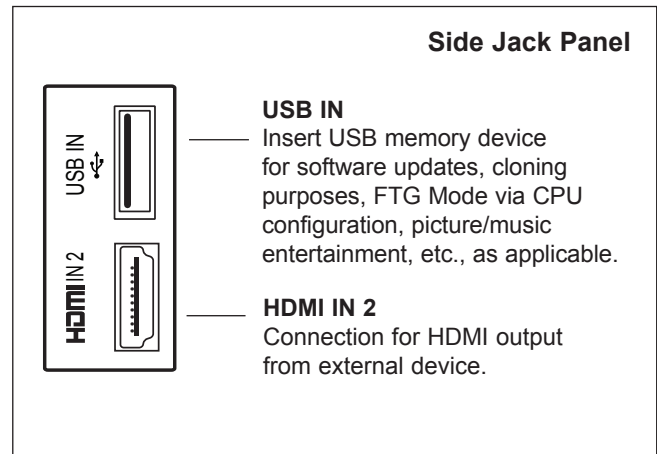
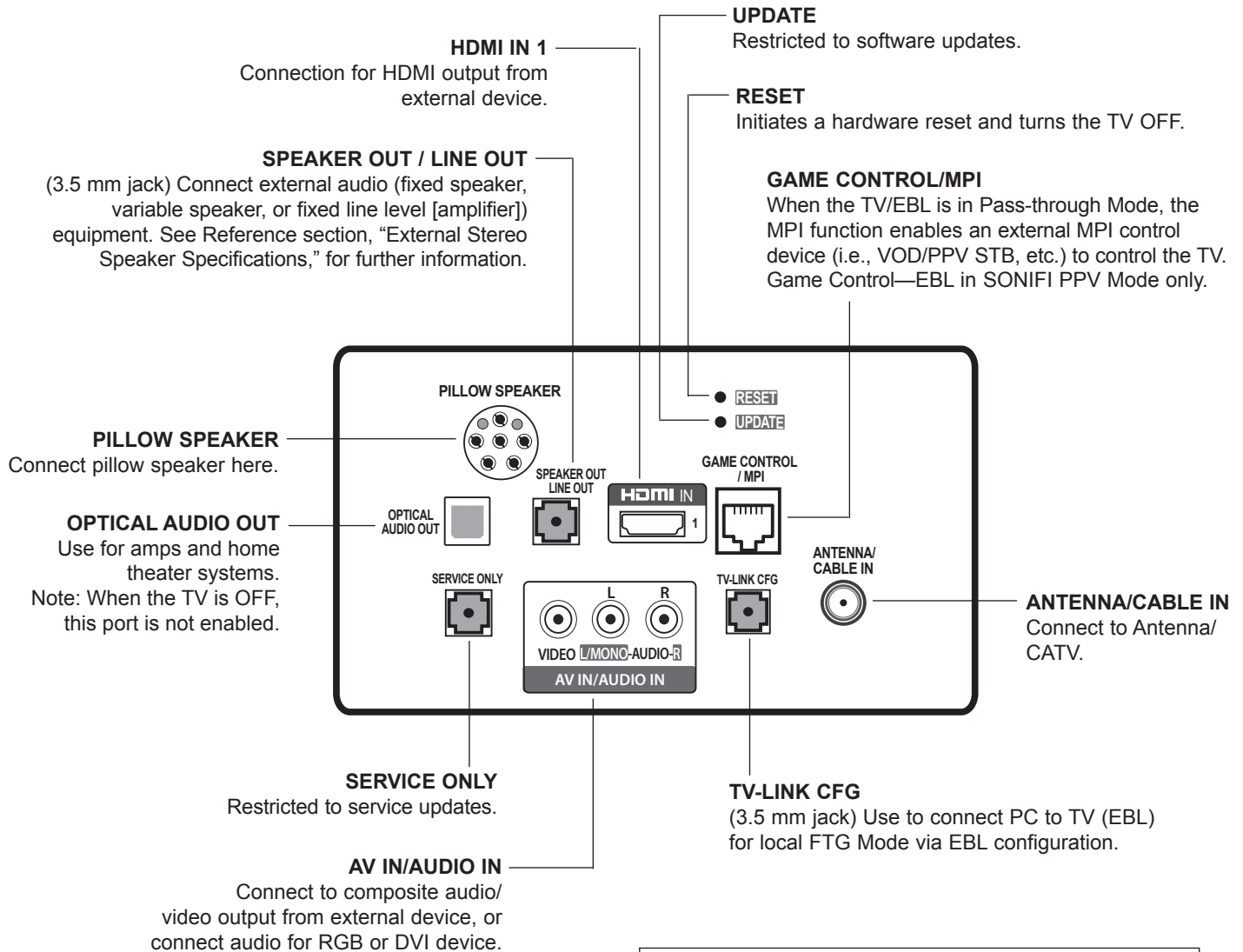
- **Label:** Allows you to select a North, South, East, or West text label for this TV. Use the Up/Down arrow keys to select the applicable label.
 - **Room Number:** Allows you to specify the number of the room in which the TV is located. You can use the number keys on the Installer Remote to direct enter a room number. Use the Dash key on the Installer Remote as necessary to toggle between number and letter characters in the Room Number field. Also, you can use the Flashback key on the Installer Remote to delete characters in this field.
5. When you have completed the fields as necessary, select **OK**, and then press **OK** on the Installer Remote to close the window and return to the Option Menu.
 6. Press **MENU** to return to program viewing.



Reference: 22/28LX570M Rear and Side Jack Panels



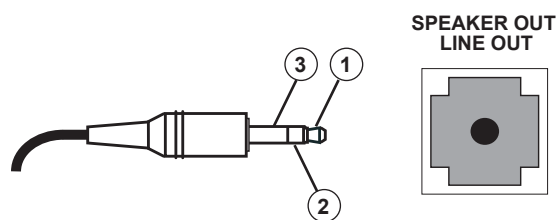
Reference: 32/43LX570M Rear and Side Jack Panels



Reference: External Stereo Speaker Specifications

The SPEAKER OUT / LINE OUT 3.5 mm stereo jack on the LX570M rear panel provides stereo speaker signal outputs (fixed speaker, variable speaker, or fixed line level [amplifier]) for external audio equipment. Set Installer Menu item 097 AUDIO OUTPUT as required in accordance with external audio equipment connected to the TV. Also, refer to the following diagram for pinout details.

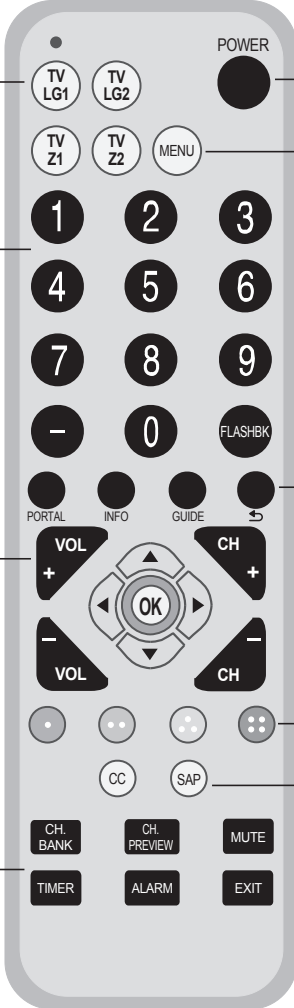
 **Caution: Do NOT plug in a mono connector, as this may damage the TV.**



-
- | | |
|---|-----------------|
| 1 | LEFT (Tip) |
| 2 | RIGHT (Ring) |
| 3 | GROUND (Sleeve) |
-

Reference: Installer Remote Control Typical Key Functions

An LG Installer Remote is required to set up and operate the TV. The LG Installer Remote illustrated below shows typical remote control functions and is provided for reference only.



TV LG1/TV LG2 & TV Z1/TV Z2
Selects the LG or Zenith IR codes sent by the remote. In order for the TV to respond, this setting must match the setting in the TV.

Numbers (0 - 9) & DASH
Use to enter a channel or program number. Dash is used for sub-channel numbers such as 9-1, 9-2, etc.

FLASHBK (Flashback)
Returns to the previously tuned channel.

CHANNEL UP/DOWN
Changes channels based on channels in the channel lineup.

VOLUME UP/DOWN
Increases/decreases sound level.

Arrows (Up/Down/Left/Right) & OK
Use to navigate on-screen menus, direct tune channels, and adjust TV settings.

CH. BANK
Selects Channel Bank 1, 2, 3, or 4 when Hospital Mode is enabled and the TV is in PTC-CTV Mode or FTG Mode via CPU. Otherwise, this button displays available Aux inputs.

CH. PREVIEW
Displays and exits the Channel Preview/Banks Setup Menu (TV in PTC-CTV mode only).

MUTE
Switches sound On or Off.

TIMER
Sets the amount of time before the TV automatically turns itself Off.

ALARM
Enables users to schedule a one-time "alarm" event, in which the TV turns itself On at the user-specified time.

EXIT
Clears all on-screen displays and returns to program viewing.

POWER
Turns the TV On or Off.

MENU
Displays and removes the TV setup menus (or, if applicable, the Function Menu).

PORTAL
Displays and removes the Pro:Centric interactive menu.

INFO
Displays channel information.

GUIDE
Displays and removes the Pro:Centric channel guide/EPG.

↩ (RETURN)
Returns one level to the previous menu/display.

Color buttons
Color buttons access special functions in some menus.

CC
Activates subtitles, unless the Channel Preview/Banks Setup Menu is currently on the screen (applicable for PTC-CTV Mode only), in which case this option displays the Lock (V-Chip) Menu.

SAP
Analog Mode: Selects MTS sound (Mono, Stereo, or SAP). DTV Mode: Changes the audio program language, if additional languages are available. *

*** SAP notes:**

- If SAP is selected and no SAP is provided, sound may not be heard on channel.
- Each channel may have its own SAP setting.
- Each time digital channels are tuned, the TV attempts to locate the default audio program language. If the default audio program language is not available, the TV will use the first available audio program.

Reference: LG Pro:Centric Patient Remote and Pillow Speaker

LG Pro:Centric patient remotes and/or pillow speakers are available for purchase (see patient remote example at right and pillow speaker example on following page). For additional information and/or to purchase an LG Pro:Centric patient remote or pillow speaker, please contact your LG service representative.

Patient Remote and Pillow Speaker Functionality

Both the LG Pro:Centric patient remote and the LG Pro:Centric pillow speaker provide access to Pro:Centric application features (via PORTAL, INFO, and GUIDE buttons). See also “Installer Remote Control Typical Key Functions” on the previous page for further information on button functions. The patient remote also provides multi-code capability as described below.

Programming the Patient Remote (Multi-IR Code Feature)

This section describes how to program the LG Pro:Centric patient remote to send unique IR codes based on “bed number” in a multi-TV single room installation. Up to nine beds can be programmed.

Note: The TV will always respond to the standard LG Installer Remote IR code scheme, regardless of its multi-code IR setting.

The following procedure describes how to program the bed number in the TV’s Installer Menu and in the patient remote.

1. Installer Menu item 020 FEATURE LEVEL determines the additional IR code scheme to which the TV will respond. Access the Installer Menu, and set item 020 to the desired value.

The patient remote must now be programmed to match the FEATURE LEVEL setting. That is, if item 020 is set to 17 for Bed 2, the patient remote must also be set to Bed 2.

Note: In its default state, the patient remote uses the standard LG Installer Remote IR code scheme.

2. On the patient remote, press and hold **OK** along with the desired (bed) number key.
The LED at the top left of the remote will light for three seconds and then turn OFF.
3. Once the LED turns OFF, release both keys on the remote.
4. Verify the remote functionality, based on your settings.

Note: If necessary, you can restore the default patient remote IR code scheme by pressing and holding OK on the remote along with the “0” key.



**Typical LG
Pro:Centric Patient
Remote**

Reference: LG Pro:Centric Patient Remote and Pillow Speaker (Cont.)

USB Media Navigation

This section provides a brief overview of the LG Pro:Centric patient remote and LG Pro:Centric pillow speaker navigation tools for use with USB media files (photos, videos, music, etc.).

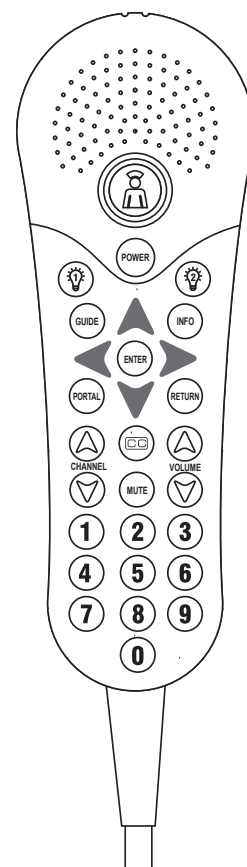
Note: The LG Pro:Centric pillow speaker is currently the only pillow speaker that enables users to navigate and play/view USB media files.

Note: Refer to the Owner's Manual for detailed information on USB memory device requirements and the types of media supported by the LX570M TVs.

1. Insert the USB memory device into the TV's USB port.

Once the TV detects the USB device, a SmartShare icon will be displayed on the screen. Press **OK** (patient remote) or **Enter** (pillow speaker) to access the Smart Share application.

2. Use the arrow keys on the patient remote /pillow speaker to select/highlight the desired option(s) in the Smart Share screen, and then press **Enter/OK**.
3. Within each USB media directory (Photos, Videos, or Music):
 - Use the arrow keys on the patient remote/pillow speaker to navigate from one folder or file to another, and press **Enter/OK** to open or play a selected folder or file.
 - Use the arrow keys on the patient remote/pillow speaker, as necessary, to scroll through all available files.
 - In View and Play modes, you typically can use the pillow speaker/patient remote to navigate to another directory level (without exiting the Smart Share application).
 - To exit the Smart Share application, press **↩** (patient remote) or **Return** (pillow speaker). The TV's Smart Launcher will be displayed along the bottom of the screen, and you can use the Left/Right arrow keys on the patient remote/pillow speaker to select **LiveTV** to return to program viewing. If you wish to relaunch the Smart Share application, you must physically remove and then reinsert the USB memory device.



Typical LG
Pro:Centric Pillow
Speaker


Reference: Pillow Speaker Setup

The pillow speaker will only be functional after the Express Script/Custom Master TV Setup and/or cloning procedures are complete.

Note: When Installer Menu item 027 HOSPITAL MODE is set to 254 (factory default value), there is no power (voltage) supplied to the pillow speaker.

Connecting a Pillow Speaker to the TV

Connect the pillow speaker (see example at right) to the PILLOW SPEAKER interface on the rear jack panel of the TV.

 **Caution:** Use a pillow speaker that is a UL recognized pendant control bearing the warning: “Risk of fire if used in oxygen enriched atmosphere. Keep pendant control away from oxygen equipment.”

Controlling the TV with Serial Data

These TV models are capable of being controlled by a single-wire, serial data signal. This is an LG patented technology and is being implemented by certain brands of “smart” pillow speakers.

Pillow Speaker Interface

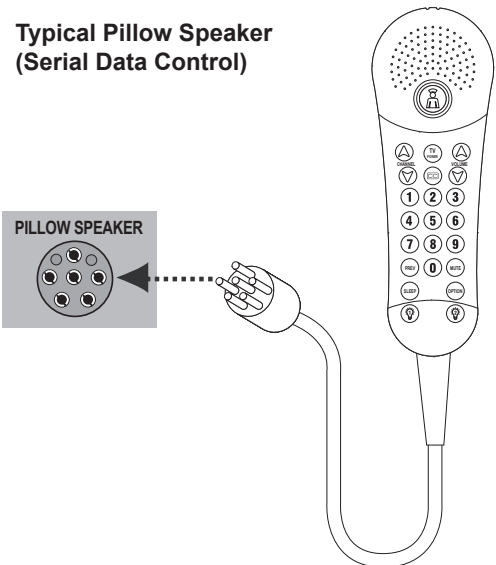
This connector provides an interface for patient-pendant remote control or entertainment audio and nurse call systems. All lines are isolated from the AC power line. (Optoisolators isolate the control lines, and a transformer isolates the audio.) Earth ground is provided on pin 4 (Common) in the default configuration (e.g., for Zenith/Philips pillow speakers). For negative voltage configuration (e.g., for RCA pillow speakers), +5 volts is provided on pin 4 (Common), with pin 3 (Channel Up/Data In) referenced to ground.

The following table describes the pillow speaker interface pinout (see also diagram at right).

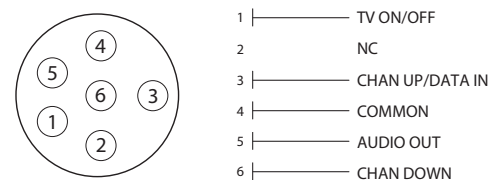
Pin No.	Description
1	Analog external control for TV ON/OFF.
2	No connection
3	Analog external control for Channel Up or Serial Data In.
4	Common connection for control, data, and audio output.
5	Isolated Audio Output. Nominal 14 ohm source impedance with short circuit protection. Intended for a pillow speaker with a low-impedance, pad-type volume control.
6	Analog external control for Channel Down.

Controlling the TV with Mechanical Switches

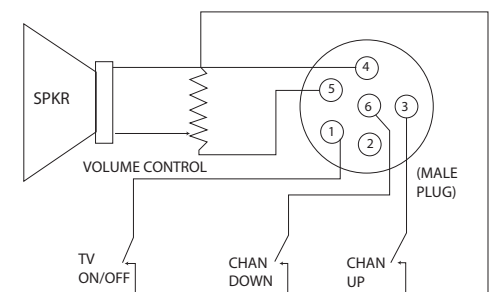
A typical analog pillow speaker with mechanical switches will momentarily connect pin 1, 3, or 6 to pin 4 (Common) to control Power ON/OFF, Channel Up, or Channel Down (see schematic at right). These pins are at +13 volts DC (when measured from pin 4) with the switches open. Typical current draw is 8 mA when a switch is closed. (This operation is identical to previous models using the 5-wire interface, except that only +7 volts DC was supplied and current draw was only 2.5 mA.)



Pillow Speaker Interface Pinout



Typical Schematic for Analog Pillow Speaker



General Guidelines: Choosing a Location for Installing a VESA Standard Mount

To the right are some examples of VESA standard mounts. Since there are numerous types of stands and mounts available, only a few are shown here. Refer to the instructions provided with the TV stand that will be used to mount the TV. Be sure the style of stand selected is capable of supporting the weight of the TV and is appropriate for the application.

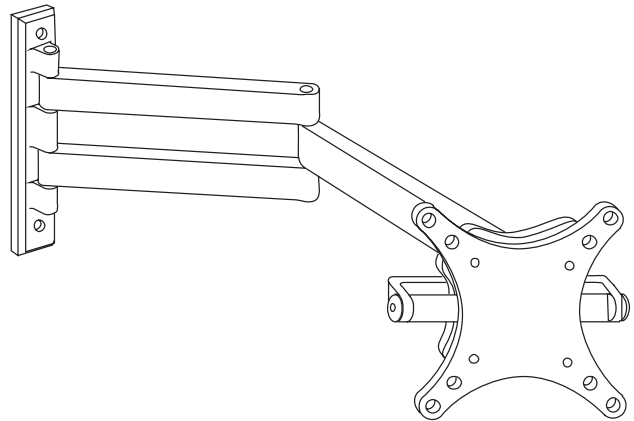
Wall Mounts

If the mount will be on a wall, a typical wooden stud behind the wall board would be the preferred choice for a location to attach the wall mount. The wall mount location chosen should be appropriate for drilling holes and have available the required power source as well as antenna/cable and any other equipment leads as necessary.

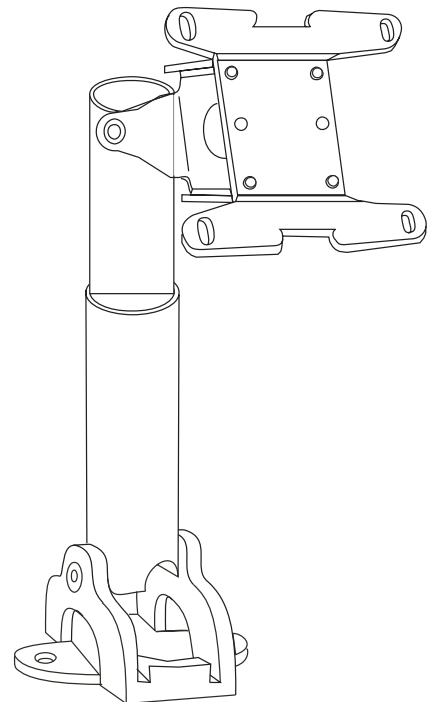
Pedestal Mounts and Stands

A sturdy surface on a desk or other similar flat table-like furniture would be the appropriate location for mounting a pedestal-style TV stand.

Most stands are designed so that the wiring is threaded through the stand itself or a loop-through style clamp so that the wiring is neatly bunched and not strung in such a way as to create a potential hazard to the user. (Some stands are portable and can be moved from one location to another.) Be sure all safety considerations are followed.



Typical Wall Stud Type Mount with Swivel Bracket



Typical Pedestal Type Mount with Swivel Bracket

Troubleshooting

General Troubleshooting (Some Quick and Easy Tips for Resolving Problems)

Installation

Symptom	Possible Cause(s)	Possible Solution(s)
Cannot direct enter channel number.	(TV in Pass-through Mode) Installer Menu item 028 CH. OVERRIDE is set to 0, i.e., disabled (recommended setting).	If the channel lineup is locked (recommended setting), only channels that are active in the TV's channel lineup can be selected. Set 028 CH. OVERRIDE to 1 to allow access for direct keypad entry to all channels.
	(TV in FTG Mode) The channel entered is not included in the FTG Channel Map.	Channel access is restricted to channels included in the FTG Channel Map. If necessary, make changes to the FTG Channel Map using the FTG File Manager or the FTG Device Configuration Application, as appropriate.
No channels present after Express Script.	Auto Tuning not run.	Refer to Express Script procedure. Auto Tuning must be run in order for the channel lineup to be populated. To reactivate the Express Script, restore the TV to a factory default condition.

Picture Reception and Sound

Symptom	Possible Cause(s)	Possible Solution(s)
No picture.	TV is turned OFF.	<ul style="list-style-type: none"> • Turn TV ON. • Power failure?
	Antenna/cable not connected.	Connect antenna/cable signal to TV.
	Connections incorrect.	Check connections on TV.
	MPI not connected.	If applicable, connect MPI cable to MPI device.
	Encrypted program.	Try another channel.
	Wrong tuning band.	Adjust Installer Menu settings.
Normal picture, poor or no sound.	Broadcast problem.	Try a different channel.
	Audio muted.	Press MUTE or use Volume Up key to increase sound level.
	Pillow/TV speaker not configured properly.	Check that Installer Menu items 020 FEATURE LEVEL and 027 HOSPITAL MODE are set as required. Also, if applicable, select TV Speaker in the Audio Menu.

Erratic Operation

Symptom	Possible Cause(s)	Possible Solution(s)
Installer Menu setup.	Wrong Installer Menu settings.	Adjust Installer Menu settings as required.

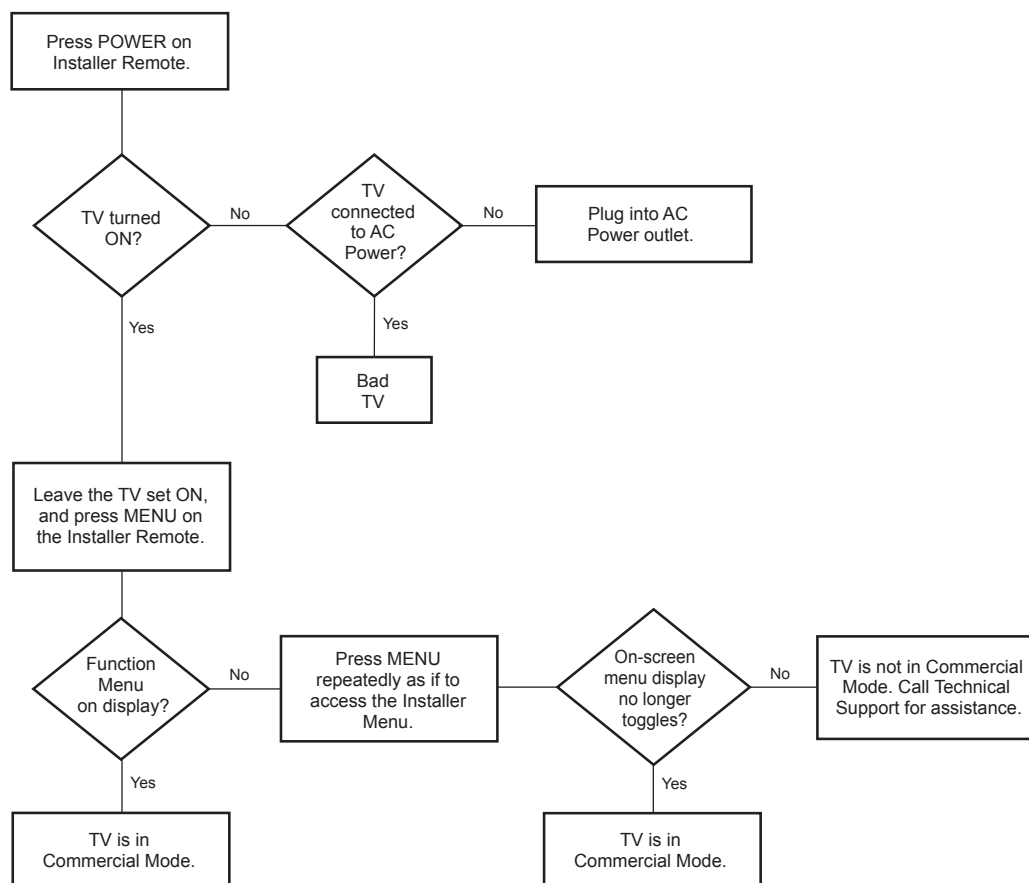
Installer Remote (not supplied with TV)

Symptom	Possible Cause(s)	Possible Solution(s)
Remote doesn't work.	Remote not in TV Mode.	Depending on the remote used, you may need to use a MODE key to put the remote into TV Mode.
	Not aimed at IR receiver.	Point remote at IR receiver on TV.
	Remote too far from IR receiver or IR path is obstructed.	Move remote closer to IR receiver on TV, darken room, and/or remove obstructions.
	MPI not connected.	If applicable, connect MPI cable to MPI device.
	Weak batteries.	Replace batteries.
	Wrong battery polarity.	Check that "+" and "-" match in battery compartment.
	Too much light in room.	Dim room light.
	Remote IR codes do not match setting(s) in TV.	Make sure the Installer Remote is compatible. Contact your LG representative, as necessary. Then, check settings both in the TV and on the remote. IR codes sent by the remote must match the setting(s) in the TV.

Commercial Mode Check / FTG Operation Troubleshooting

Commercial Mode Check

Use this flowchart to determine whether the TV is currently in Commercial Mode.



FTG Operation Troubleshooting

The following table provides troubleshooting information for when the EBL is configured for FTG Mode operation.

Symptom	Possible Cause(s)	Solution(s)
Communication Error ("Communications Timeout")	Cable(s) not connected.	Check and connect communication cables.
	TV not powered.	Check/connect the TV power cord.
	TV not turned ON.	TV needs to be turned ON (default setting of Installer Menu item 118 POWER SAVINGS).
	Wrong COM (communication) port.	In the FTG Device Configuration Application, select the correct COM port for the cable being used.

Troubleshooting (Cont.)

Channel Banks Setup Troubleshooting

Symptom	Possible Cause	Possible Solution
Channel is blanked in all channel banks.	Blanking a channel in one channel bank will make it blank in all channel banks.	Modify the channel attribute(s), if desired, using the FTG Channel Map Editor in the FTG File Manager. See also "FTG Channel Map Editor" overview on page 51. Restore normal operation by unchecking the "Blank Video" checkbox for the channel. Note that normal operation will be restored to the channel in all channel banks.
"Inactive TV" message appears and then TV turns OFF.	TV is set up to display "Inactive TV" message if all channels are deleted from Channel Bank 4.	Select another channel bank (1, 2, or 3) to return TV to normal operation.
Channel found during Auto Tuning does not tune in with Channel Up/Down.	Channel was deleted in currently selected channel bank.	Premium channels may only be available on another channel bank. Modify the channel bank allocation(s) for the channel, if desired, using the FTG Channel Map Editor in the FTG File Manager. See also "FTG Channel Map Editor" overview on page 51.
When CH. BANK on Installer Remote is pressed, TV shows Input List Menu.	Installer Menu item 027 HOSPITAL MODE is set to 0.	Set item 027 to appropriate setting for channel banks to appear with CH. BANK key presses.

b-LAN

SONIFI Solutions, Inc. proprietary RF communication system used to configure/control TV via RF distribution system.

Channel Lineup

Channels set in the TV memory, via Auto Tuning/manual editing.

Cloning

The process of capturing a Master TV Setup and transferring it to a Target TV using a USB memory device.

Commercial Mode

A mode of operation that provides a broad range of commercial TV features based on control (settings) provided by the PTC and/or an MPI control device.

CPU

The TV's Central Processing Unit. Responsible for the presentation of video and audio from content received via the TV's tuner or Aux inputs.

EBL

Embedded *b*-LAN module. See also *b*-LAN.

E-Z Installation

Enables splash screen image, TV configuration, and software/firmware file downloads to selected TV models from a Pro:Centric server. Managed and administered via the Pro:Centric Admin Client.

Express Script

Hospital model TV configuration script that guides the installer through the process of setting up essential hospital model features for a typical viewing application.

EZ-Manager Wizard

Lodging/hospital model TV configuration wizard that provides configuration options for Pro:Centric operation as well as an option for using a USB memory device to configure a TV.

FTG Channel Map

Typically refers to a logical channel mapping of physical RF channels. This allows digital channels, like analog channels, to be tuned without requiring the dash key. Also, channels (digital or analog) can be arranged in any order that seems logical for customer tuning/viewing.

FTG Mode

LG commercial TV mode that enables decryption of Pro:Idiom encrypted channels and uses logical channel mapping. Implementation and TV operation is based on the "owner" of the FTG Logical Channel Map—the CPU or the EBL. LG's proprietary PC software is required for configuration.

Function Menu

Available via Installer Remote "MENU" key. Indicates the TV is not in Pass-through Mode. Restricts menu options to a subset of the TV setup menus, allowing users to retain functional control, while disabling setup options.

Installer Menu

Defines commercial TV functionality based on the parameters set.

LG Free-To-Guest (FTG)

Refers to a particular commercial mode of operation within an LG TV. See also FTG Mode.

Logical Channel Number

A number assigned to either a physical or virtual channel number in a Logical Channel Map.

Major Channel Number

Typically, the RF channel number assigned to a digital video stream.

Master TV

A TV whose Channel Map and Installer Menu and TV setup menu settings have been configured as a Master TV Setup for cloning purposes.

Minor Channel Number

A sub-channel or program number assigned to the content embedded in the digital video stream.

MPI

Multiple Protocol Interface. An MPI port or, for some TV models, an MPI card slot provides external control options for solution providers.

Pass-through Mode

The TV's factory default mode of operation. TVs can be configured for stand-alone use or as Master TVs for cloning purposes, and/or TVs may be controlled externally in this mode.

Physical Channel Number

The major channel number assigned to represent a specific 6 MHz RF band as specified by either the broadcast or CATV channel plan. See CEA (formerly EIA) or NCTA specifications for further information.

Pro:Centric Application

LG content delivery and communication interface that provides interactive entertainment, weather, amenities, etc. information for end users. (Powered by Pro:Centric server.)

Pro:Centric Admin Client

Web editor/content wizard provided for service provider and customer configuration of Pro:Centric application elements.

Pro:Idiom

Zenith proprietary security software that unlocks access to premium content to help assure rapid, broad deployment of HDTV and other high-value digital content.

PTC

Protocol Translator Card. The commercial controller (microprocessor) of the commercial TV.

Target TV

A TV to which a Master TV Setup will be transferred.

TV Setup Menus

Available via Installer Remote "MENU" key in Pass-through Mode only. Menus provide access to setup and functional features of the TV.

USB Memory Device

A USB flash drive or USB storage device, etc. that can be used for TV configuration purposes (typically cloning or FTG Mode via CPU configuration) or for updating TV software.

Virtual Channel Number

An alias (virtual) channel number provided in the data stream, by the broadcaster, of a digital broadcast channel to be displayed by consumer TVs in place of the physical channel number. The major number is the same as the original analog channel number and the minor number is the *n*th program available in that digital video stream.

Document Revision History / Open Source Software Notice

Document Revision History

Date	Description
December 2015	Revision A: New document

Product documentation is available online at: www.lg.com/us/commercial.

Open Source Software Notice

To obtain the source code under GPL, LGPL, MPL and other open source licenses, that is contained in this product, please visit <http://opensource.lge.com>. In addition to the source code, all referenced license terms, warranty disclaimers and copyright notices are available for download. LG Electronics will also provide open source code to you on CD-ROM for a charge covering the cost of performing such distribution (such as the cost of media, shipping and handling) upon e-mail request to opensource@lge.com. This offer is valid for three (3) years from the date on which you purchased the product.



For Customer Support/Service, please call:

1-888-865-3026

www.lg.com/us/commercial

Pro:Idiom is a registered trademark of Zenith Electronics LLC. Pro:Centric and the "LG" logo are registered trademarks of LG Electronics Inc. *b*-LAN is a trademark of SONIFI Solutions, Inc. All other trademarks or registered trademarks are the property of their respective owners.