



# Free-To-Guest (FTG) Device Configuration Application User Guide

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Configuration Software  
For Pro:Idiom<sup>®</sup> Enabling Devices



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## Notes:

- This document provides examples of typical FTG Device Configuration Application screens. Your displays may vary from those shown in the document.
- Design and specifications subject to change without prior notice.

# FTG Device Configuration Application Overview

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This document describes how to use the FTG Device Configuration Application to configure Free-To-Guest (FTG) devices for FTG Mode of operation via an installed or embedded *b-LAN™* module. The FTG Device Configuration Application incorporates three utilities—the FTG Channel Map Configuration Utility and the FTG Installer Menu Configuration Utility for stand-alone configuration of FTG devices and the FMA Configuration Utility for configuring FMAs for broadcast configuration of FTG devices. FTG Mode enables the decryption of each Pro:Idiom® encrypted channel and also provides logical channel mapping of physical RF channels (analog and digital) and Aux inputs. TV/STB operation in FTG Mode is based on which element of the TV will “own” the FTG Logical Channel Map—the CPU or the *b-LAN* module. Refer to the Commercial Mode Setup Guide for the TV/STB model(s) in question, as necessary, to determine which of the FTG Modes of operation (FTG Mode via CPU and/or FTG Mode via *b-LAN*) is available and appropriate for your application.

**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.

**Note:** FTG devices cannot be stand-alone configured by the FTG Device Configuration Application and broadcast configured by an FMA at the same time.

## FTG Channel Map and FTG Installer Menu Configuration Utilities (FTG Configuration File)

The FTG Device Configuration Application enables you to create an FTG Configuration (.rml) file that contains the data to be transferred to and stored in an FTG device. An FTG Configuration file comprises both an FTG Channel Map and the FTG Installer Menu settings for a particular TV/STB model.

The FTG Channel Map Configuration Utility and the FTG Installer Menu Configuration Utility, respectively, enable you to create an FTG Channel Map and/or edit Installer Menu settings. Note, however, that before Installer Menu items can be edited, Installer Menu settings must be transferred to the application from an FTG device. Therefore, you can develop an FTG Channel Map, save it offsite, and then send it to the location of the TV/STB installation. Once onsite, the Installer Menu settings of the particular model(s) being installed can be “Read” and also saved in an FTG Configuration file. Both the FTG Channel Map and the FTG Installer Menu settings are read, edited, and then written separately to an FTG device. Always save an FTG Configuration file for use at a later time if changes become necessary or to configure additional FTG devices.

## FMA Configuration Utility (FMA Configuration File)

An FTG Management Appliance (FMA-LG101 or FMA-LG102) facilitates the delivery of the channel lineup and Installer Menu settings to guest room TVs via the RF distribution system, such that the channel lineup or Installer Menu settings can be updated without individual room visits.

The FMA Configuration Utility enables you to create an FMA Configuration (.fma) file for updating an FMA's broadcast data (FTG Channel Map and FTG Installer Menu settings). Every LG/Zenith TV/STB capable of receiving the Channel Map broadcast from the FMA will be configured with the same channel lineup. Installer Menu settings are dependent on chassis model IDs; only the model(s) whose Installer Menu settings are being broadcast will be affected. The FMA can broadcast multiple Installer Menu profiles to support the different chassis models connected to the RF distribution system. Always save an FMA Configuration file for use at a later time if changes become necessary.

## Navigation Between Utilities

While working in the FTG Device Configuration Application, you can navigate from one utility to another, thus facilitating the process of creating, editing, reading, writing, and learning the FTG Channel Map and FTG Installer Menu settings. The drop-down menu from the “Configure” option in the FTG Device Configuration Application menu bar always provides access to the utilities not currently in use. In addition, it is often possible to access one utility from a related field in another. Refer to information on each of the utilities in the remainder of this document for detailed instruction.

# FTG Device Configuration Application Installation

FTG software is available online at: [www.lg.com/us/business/display-solutions/ftg](http://www.lg.com/us/business/display-solutions/ftg).

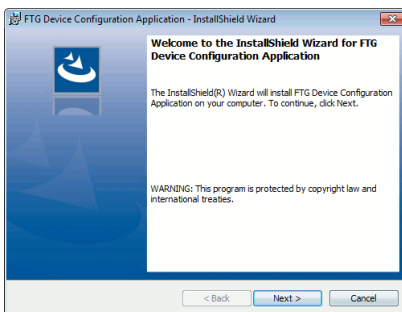
Depending on your web browser, you can run the setup executable directly from the FTG Software webpage (click on **Run** from the File Download pop-up window), or you can download the installation files (click on **Save** from the File Download pop-up window), and run the executable from your PC.

**Note:** If you opt to save the installation files to your PC, once the download is complete, double-click on **Setup.exe** to initiate the installation.

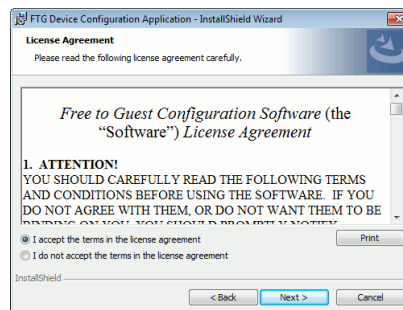
The following steps briefly describe the FTG Device Configuration Application InstallShield Wizard. See also sample screens below.

1. From the InstallShield Welcome screen, click **Next** to continue.
2. Read the license agreement, and select the option to indicate you agree to its terms. Then, click **Next**.
3. Enter your user name and organization name in the fields provided. Then, click **Next**.
4. Click **Install** to initiate the installation.
5. Click **Finish** to exit the InstallShield Wizard.

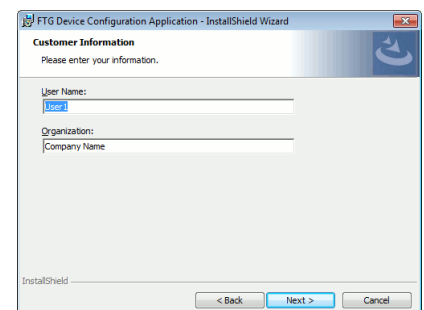
An FTG Device Configuration Application shortcut automatically will be placed on the desktop when the installation is complete.



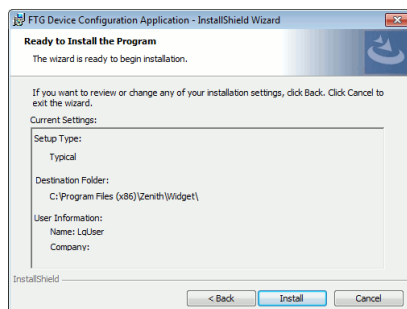
(1)



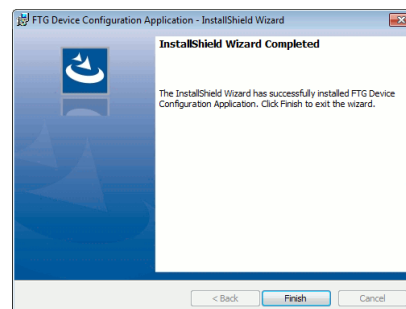
(2)



(3)



(4)



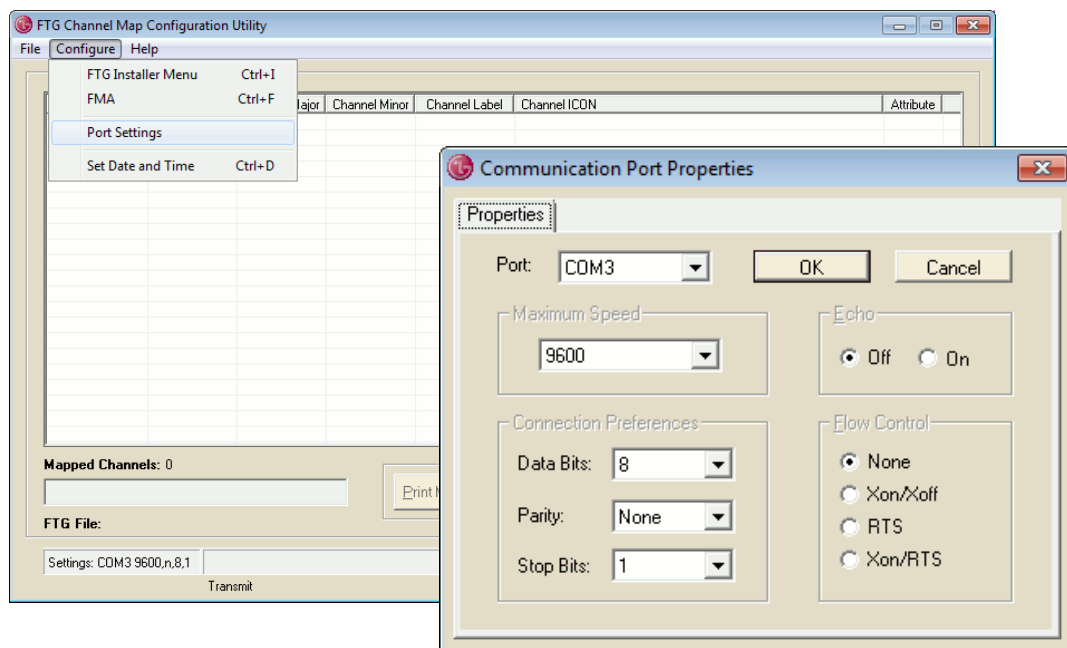
(5)

# FTG Device Configuration Application Setup

## Setting Up the Application and Communication for Stand-alone FTG Device Configuration

1. Connect the appropriate cable between the PC and the FTG device.
2. Double-click on the **FTG** shortcut on the desktop to launch the FTG Device Configuration Application. (The FTG Device Configuration Application will open in the FTG Channel Map Configuration Utility.)
3. To configure the communication port properties, click **Configure** and then **Port Settings** from the FTG Device Configuration Application menu bar.
4. In the Communication Port Properties pop-up window, select an available communication port in the Port field. All other properties in this dialog are preset and cannot be changed.

**Note:** If necessary, check the port number assigned by the virtual COM port driver. Access the Windows Device Manager in the Control Panel, and expand the Ports list to identify the assigned COM port.

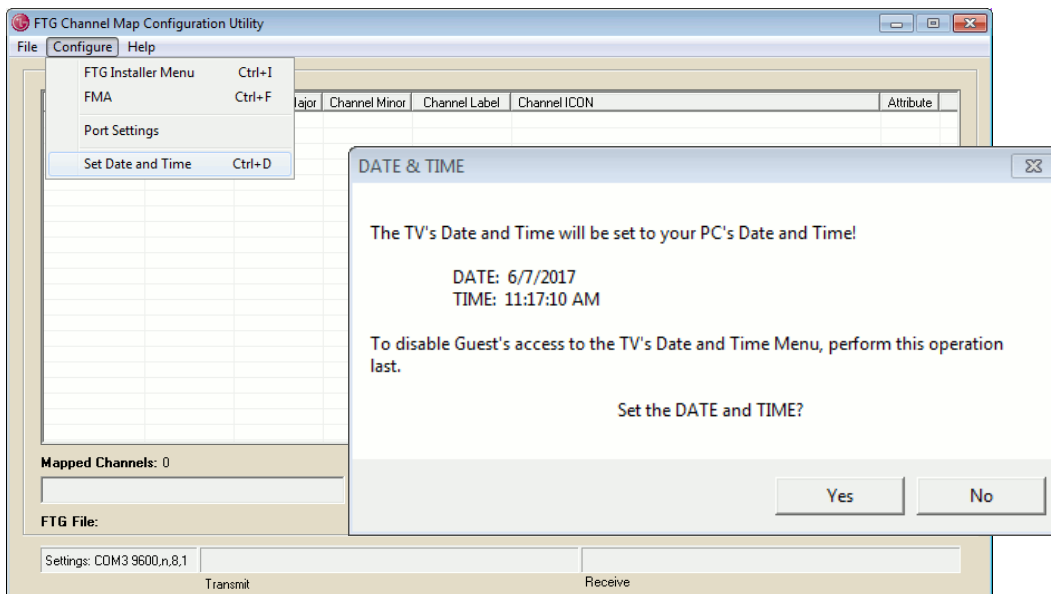


## Setting the TV/STB Clock for Stand-alone FTG Configuration

The TV/STB's clock can be set using the FTG Channel Map Configuration Utility. The TV/STB will be set to the same date and time as the PC. Be sure that the PC has the correct date and time.

 **Note:** To disable user access to the TV/STB clock settings, this operation must be the final FTG Device Configuration Application operation performed.

1. Click **Configure** and then **Set Date and Time** from the FTG Device Configuration Application menu bar.
2. In the Date & Time pop-up window, confirm the settings, and then click **Yes**.



# FTG Setup Overview

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This section provides an overview of the procedures to configure an LG/Zenith Pro:Idiom TV/STB with either an installed or embedded FTG device. Refer to the appropriate steps below, depending on whether you intend to:

- Stand-alone configure the FTG device(s) with a PC via a local cable connection.
- Broadcast configure the FTG device(s) with an FMA-LG101 or FMA-LG102 connected to the RF distribution system.

## Setup Overview for Stand-alone Configuration of an FTG Device

1. Install and launch the FTG Device Configuration Application on the PC that will be used to configure the FTG device.
2. Build a Channel Map using the FTG Channel Map Editor in the FTG Channel Map Configuration Utility.  
**Note:** If available, you can open an existing FTG Configuration (.rml) file.
3. If not already done, connect the appropriate cable between the PC and the FTG device.
4. “Write” the FTG Channel Map to the FTG device.



**Note: This step is essential for FTG Mode configuration. Once the FTG Channel Map is transferred, the device is switched to FTG Mode.**

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

## Setup Overview for FMA Broadcast Configuration of FTG Devices

1. Install and launch the FTG Device Configuration Application on the PC that will be used to configure the FTG device.
2. Build a Channel Map using the FTG Channel Map Editor in the FTG Channel Map Configuration Utility.  
**Note:** If available, you can open an existing FTG Configuration (.rml) file.
3. If not already done, make the appropriate connection either directly to the FMA or to the network on which the FMA resides.
4. In the FMA Configuration Utility, copy the current FTG Channel Map to the FMA Configuration List.
5. Also in the FMA Configuration Utility, either copy the current FTG Installer Menu settings to the FMA Configuration List and/or load Installer Menu default settings from a selected model or models. If necessary, use the FTG Installer Menu Configuration Utility to edit the settings.
6. “Write” the FMA Configuration List to the FMA.
7. Save the FTG Channel Map and FTG Installer Menu settings to an FMA Configuration (.fma) file for future use.
8. Tune the TV/STB to a logical channel in the FTG Channel Map.



The FTG Channel Map Configuration Utility allows you to view an FTG Channel Map and configure an FTG device with an FTG Channel Map. It is the screen initially displayed when you launch the FTG Device Configuration Application.



## FTG Channel Map Configuration Utility Functions

206-4081

# FTG Channel Map Configuration Utility (Cont.)

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**Note:** If it becomes necessary to restore TVs/STBs from FTG Mode to Pass-through Mode, there are options that will enable you to do so. See Reference section, “Restoring TVs/STBs to Pass-through Mode,” for further information.

## FTG Channel Map Editor

The FTG Channel Map stored in an FTG device provides the TV/STB with a list of channels (channel lineup) from which to tune and also provides an easy method for adding a label and/or icon to be displayed when a channel is tuned. If channels with Pro:Idiom-encrypted content are part of the channel lineup, define the channel(s) and set the “Encrypted” attribute to allow an LG/Zenith Pro:Idiom TV/STB to decrypt the content.

Refer to the appropriate subsection below for information on creating or editing an FTG Channel Map using the FTG Channel Map Editor.

### Create an FTG Channel Map

1. Click the **Edit/Add Map** button at the bottom of the FTG Channel Map Configuration Utility screen to open the FTG Channel Map Editor (see sample display and field descriptions on following page).  
**Note:** To clear an FTG Channel Map from a currently open FTG Configuration (.rml) file, click **File** and then **New** from the FTG Device Configuration Application menu bar.
2. An FTG Channel Map may include up to 141 channel entries (Logical Channels). Choose a Logical Channel number from 0 to 999, and then define the channel by setting its RF Channel, Channel Major, and Channel Minor numbers.
3. You can also enter a channel label and/or select a channel icon. The Channel Label field allows up to seven characters. Type the appropriate label directly in the field.
4. To select a channel icon, either:
  - Click the down arrow at the right of the Select Number field in the Channel ICON section of the screen, and select the number of the desired icon.
  - Click the **Lookup by Name** button in the Channel ICON section of the screen, and select an icon from the Alphabetical Icon Index pop-up window.The (non-editable) Description field identifies the name of the channel icon once selected.
5. Set channel attributes as required in the Attribute section at the top right of the display:
  - Select **Encrypted** if Pro:Idiom-encrypted content will be provided on that channel.
  - The **OSD** (On-screen Display) attribute, selected by default, displays the channel's Logical Channel number as well as the channel label and/or channel icon, if entered.
  - Select **Blank Video** when defining audio-only channels in order to display a blank screen.
6. Once you have defined a channel, click the **Add** button at the bottom of the screen, and the channel will appear in the FTG Channel Map displayed in the bottom panel of the FTG Channel Map Editor.
7. Continue adding channels to build the FTG Channel Map.
8. When the FTG Channel Map is complete, click the **Exit** button at the bottom right of the screen to close the FTG Channel Map Editor and return to the FTG Channel Map Configuration Utility screen.

## FTG Channel Map Configuration Utility (Cont.)

**FTG Channel Map Editor**

The following table provides an overview of the FTG Channel Map Editor channel fields.

Field	Range	Description
Logical Channel	0–999	Channels tuned by the user, defined by the system operator.
RF Channel *	1–137	RF channels designated at the head end.
Channel Major **	1–255	Same as RF Channel when Installer Menu item 103 ATSC Mode is set to “1” for Physical Channel number mapping (recommended).
Channel Minor	0–255	Set to “0” (zero) if the channel’s source is analog; 1–255 if the channel’s source is digital, minor number is assigned by the content provider.

\* RF Channel number 254 tells the TV/STB to tune the Aux input set by Installer Menu item 046 Starting Aux Source.

\*\* When Installer Menu item 103 ATSC Mode is set to “0” for Virtual Channel number mapping, the virtual Channel Major and Channel Minor mapping numbers are provided in the transport stream by the broadcaster.

# FTG Channel Map Configuration Utility (Cont.)

## Edit an FTG Channel Map

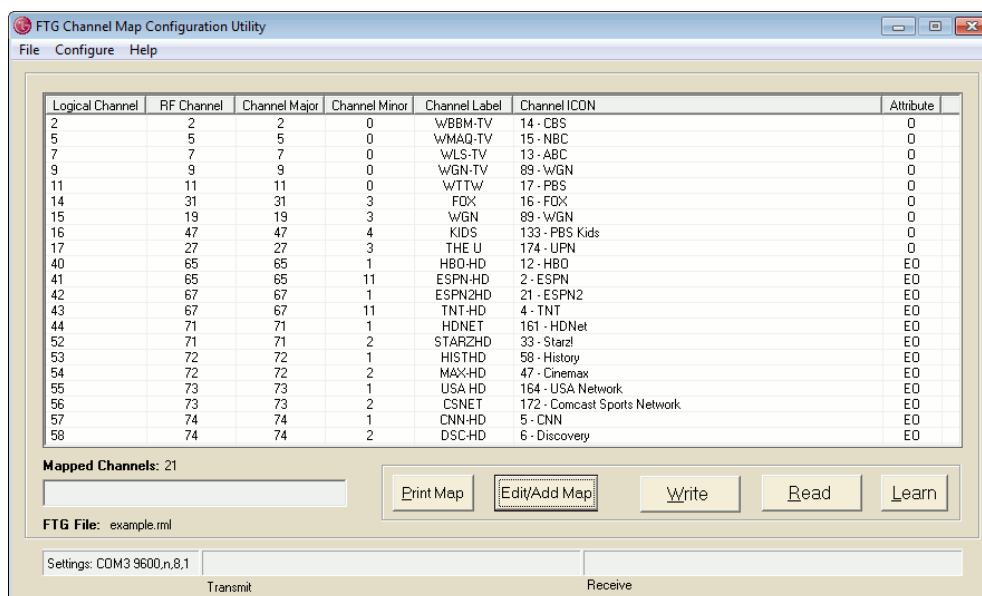
1. To open an existing FTG Configuration (.rml) file, click **File** and then **Open** from the FTG Device Configuration Application menu bar, and select/double-click on the desired “.rml” file. Then, click the **Edit/Add Map** button to open the FTG Channel Map Editor.
2. Click on/highlight the desired channel in the bottom panel of the FTG Channel Map Editor screen, or click its Logical Channel number above. The channel’s defining elements will be shown in the fields in the top panel of the screen, ready for editing.

**Note:** From the FTG Channel Map Configuration Utility, you can also double-click on an FTG Channel Map line item to open the FTG Channel Map Editor and edit the channel.

3. Either:
  - Edit the logical channel’s definition, and then click the **Update** button at the bottom of the screen to save the changes and update the bottom panel listing.
  - Note:** You must click the Update button to save one channel’s edits before you select another channel for editing; otherwise, you will lose the edits for the previously selected channel.
  - To remove the channel, click the **Delete** button at the bottom of the screen, and then click **Yes** in the Delete Channel pop-up window to confirm the deletion. Note that the Delete function will remove the channel permanently.
4. When the FTG Channel Map edits are complete, click the **Exit** button at the bottom right of the screen to close the FTG Channel Map Editor and return to the FTG Channel Map Configuration Utility screen.

## FTG Channel Map Read and Write Functions

Once created, an FTG Channel Map can be written to and read from an FTG device using the FTG Channel Map Configuration Utility. (An FTG device must be installed/embedded in a TV/STB, and a PC with the FTG Device Configuration Application installed must be connected to the FTG device as described in the “FTG Setup Overview” section on page 8.)



**FTG Channel Map Configuration Utility**  
(With Channel Data)

## FTG Channel Map Configuration Utility (Cont.)

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An FTG Channel Map must be stored in an FTG device to provide the TV/STB with a list of channels to tune. If an FTG device has an FTG Channel Map, the Channel Map can be transferred to the FTG Channel Map Configuration Utility and saved in an FTG Configuration (.rml) file. An FTG Channel Map that has been saved can be used at a later time, and the FTG Configuration file may be opened for reference or editing purposes.

If changes are made to the FTG Channel Map, the FTG Configuration file can be saved again—with the same name (to replace the existing file) or with a new name (to preserve the previous file). The saved FTG Configuration file can also be opened and used to configure additional FTG devices at a later time.

### Write an FTG Channel Map



**Note:** This step is essential for FTG Mode configuration. Once the FTG Channel Map is transferred, the device is switched to FTG Mode.

To transfer an FTG Channel Map to an FTG device, click the **Write** button at the bottom of the FTG Channel Map Configuration Utility screen. This action transfers the FTG Channel Map from the PC to the FTG device and stores the FTG Channel Map in both the FTG device and TV/STB. The logical channels will be tuned exactly as they appear in the FTG Channel Map.

**Note:** It is also possible to “Write” an FTG Configuration file containing the FTG Channel Map and/or both the FTG Channel Map and FTG Installer Menu settings data by clicking **File** and then **Write** from the FTG Device Configuration Application menu bar.

### Read an FTG Channel Map

To transfer an FTG Channel Map from an FTG device, click the **Read** button at the bottom of the FTG Channel Map Configuration Utility screen. This action transfers the FTG Channel Map stored in the FTG device from the FTG device to the PC. The FTG Channel Map will appear exactly as it did when it was originally stored in the FTG device. To transfer a TV/STB Channel Map to an FTG device and the FTG Device Configuration Application, see “TV/STB Channel Map Learn Function” information below.

### TV/STB Channel Map Learn Function

**Note:** This function requires that the TV/STB (CPU) channel lineup has been transferred to the PTC memory (see Reference section, “2-5-5 + MENU Mode,” for further information).

**Note:** Although it is not recommended, it may be necessary to run Auto Tuning (channel search) on the TV/STB to determine the channels available on the RF feed. Refer to the Master TV/STB Setup procedure in the Commercial Mode Setup Guide for the TV/STB for further information on Auto Tuning.

It is recommended that the following procedure be performed prior to installing or configuring the FTG device; however, it is possible to perform the procedure after the FTG device installation or configuration (see “Enable/Disable TV/STB Setup Menu Access” on page 17).

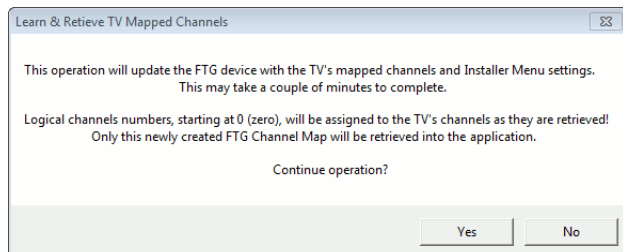
If it is necessary to transfer a TV/STB channel lineup to the PC:

1. Click the **Learn** button at the bottom of the FTG Channel Map Configuration Utility screen.
2. Click **Yes** in the confirmation pop-up window to continue.

(Continued on next page)

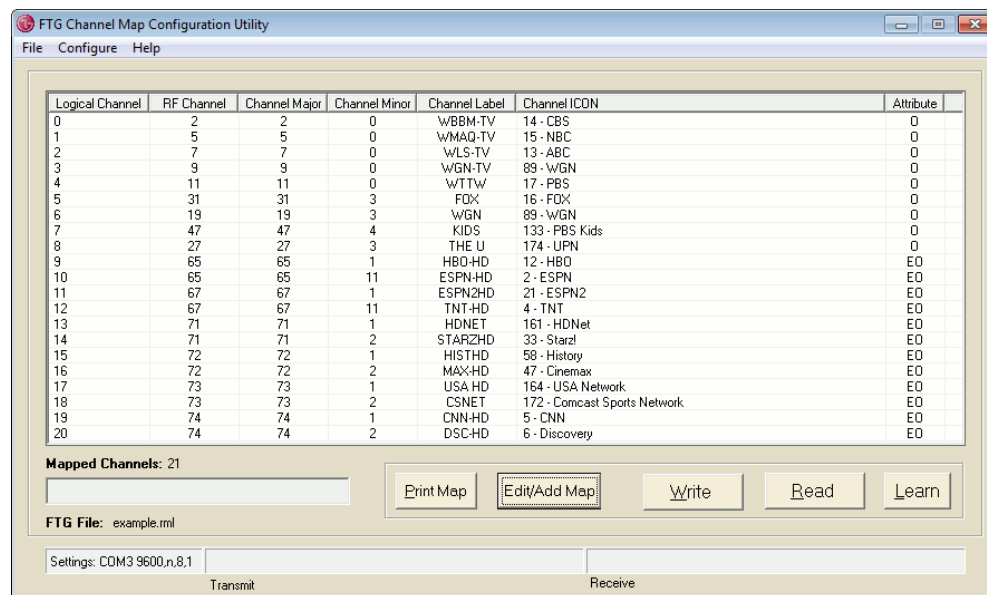
# FTG Channel Map Configuration Utility (Cont.)

(Continued from previous page)



Logical channel numbers automatically will be assigned in ascending order, starting with 0 (zero), to the physical RF channels from the TV/STB channel lineup. All the channels will have Encrypted and OSD attributes set. During the transfer, the FTG device's Channel Map is also updated. If the FTG device was storing an FTG Channel Map from a previous "Write" operation, that Channel Map's logical channel numbers will be reassigned in ascending order, starting with 0 (zero) (see example below). This new FTG Channel Map can also be edited using the FTG Channel Map Editor as described previously.

**Note:** If the FTG device was not already in FTG Mode, the Learn function will also switch the device to FTG Mode.



**FTG Channel Map Configuration Utility (Logical Channels Reassigned)**

## Save an FTG Channel Map

These steps enable you to save an FTG Configuration (.rml) file, which typically comprises both the FTG Channel Map and FTG Installer Menu settings

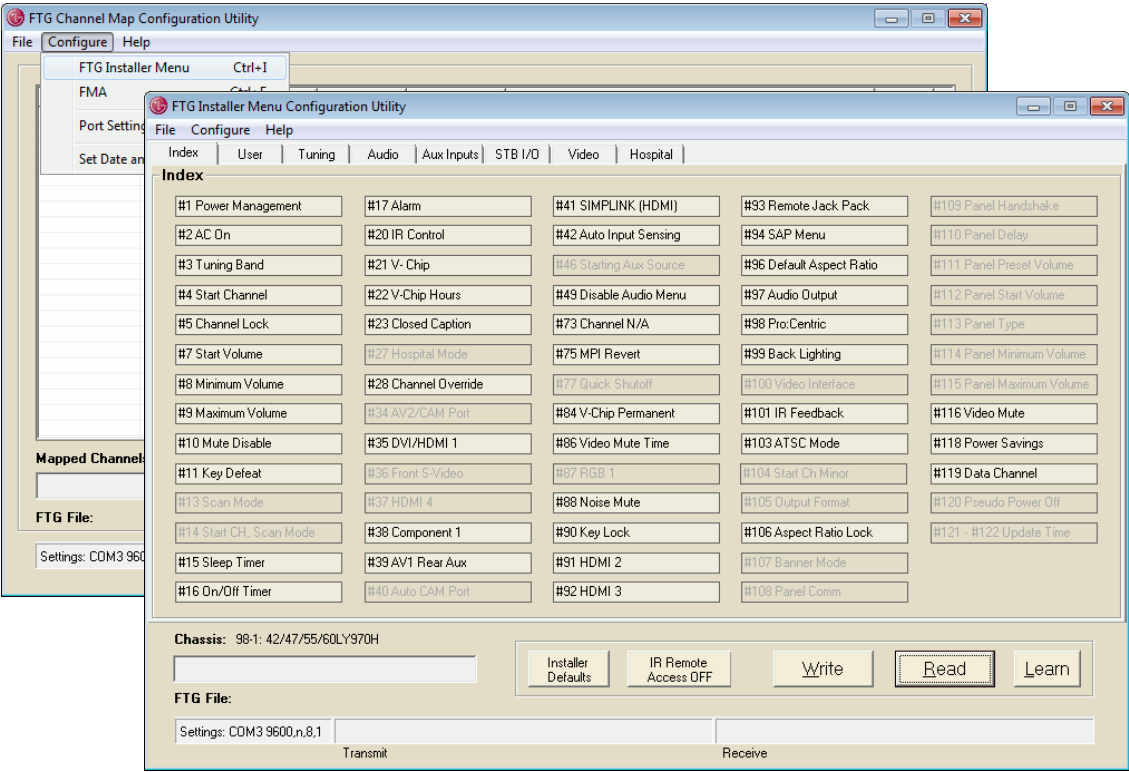
1. Click **File** and then **Save** from the FTG Device Configuration Application menu bar.
2. In the Save As window, name the file (avoid using special characters, such as ?, &, @, etc.) and click **Save**. The default folder path is C:\Program Files\Zenith\Widget. Note that the FTG Configuration file will have an ".rml" extension.

# FTG Installer Menu Configuration Utility

The FTG Installer Menu is used to configure the commercial features of the TV/STB, for example, the Tuning Band, Start Channel, Start Volume, Aux Source, etc. The FTG Installer Menu Configuration Utility allows access to changeable FTG Installer Menu items.

To access the FTG Installer Menu Configuration Utility, click **Configure** and then **FTG Installer Menu** from the FTG Device Configuration Application menu bar. The Index tab of FTG Installer Menu Configuration Utility shows the features that are available for configuration. The Chassis field at the bottom left of the screen identifies the TV/STB model to which the available Installer Menu items pertain, while the FTG File field identifies the name of the open FTG Configuration file, if applicable.

**Note:** Refer to the Commercial Mode Setup Guide for the TV/STB model(s) in question for detailed descriptions of Installer Menu items.



FTG Installer Menu Configuration Utility

Refer to the table on the following page for an overview of the FTG Installer Menu Configuration Utility functions.

Use the FTG Installer Menu Configuration Utility to change available Installer Menu settings (see “Edit FTG Installer Menu Settings” on page 19). Note that a generic Installer Menu cannot be created using the FTG Installer Menu Configuration Utility; an Installer Menu must first be transferred from an installed and active FTG device to the FTG Installer Menu Configuration Utility. This ensures that only the Installer Menu items pertaining to the model in which the FTG device is active are available for editing.

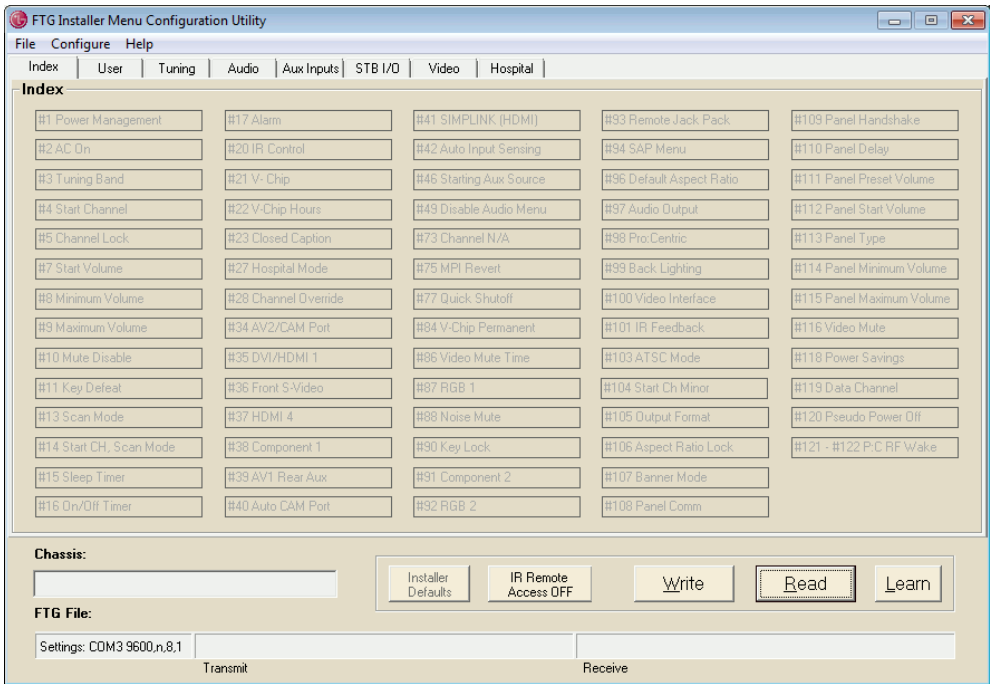
Installer Menu items that are not changeable are shown in gray and cannot be accessed—see sample screen above. The sample screen on the following page shows the FTG Installer Menu Configuration Utility Index tab prior to a transfer from an FTG device.

# FTG Installer Menu Configuration Utility (Cont.)

## FTG Installer Menu Configuration Utility Functions

FTG Installer Menu Function	Description
Installer Defaults	Resets the currently active FTG Installer Menu items in the application to their default values.
IR Remote Access	(Toggle OFF/ON) Allows access to TV/STB setup menus with IR remote.
Write	Transfers FTG Installer Menu settings to the FTG device.
Read	Transfers FTG Installer Menu settings from the FTG device to the FTG Device Configuration Application.
Learn	Transfers the TV/STB's Installer Menu settings from the TV/STB to the FTG device and the FTG Device Configuration Application. This function requires that the TV/STB's (CPU) Channel Map has been transferred to the PTC memory (2-5-5 + MENU Mode). If the FTG device was not already in FTG Mode, the Learn function will also switch the device to FTG Mode.

**Note:** FTG Installer Menu Configuration Utility functions are always available regardless of which tab is currently selected.



**Index Tab**  
(Prior to Transfer from FTG Device)

The Index tab provides an overall list of the FTG Installer Menu items; each of the remaining tabs contains Installer Menu items grouped by category.



# FTG Installer Menu Configuration Utility (Cont.)

## Enable/Disable TV/STB Setup Menu Access

In normal operation, with an active FTG device, access to the TV/STB's setup menus is not allowed (IR Remote Access is OFF). Click the **IR Remote Access OFF** button at the bottom of the FTG Installation Menu Configuration Utility, and the button text will change to "IR Remote Access ON."

The IR Remote Access ON function allows users to access the TV/STB's setup menus with an IR remote, which in turn allows users to access the TV/STB's Installer Menu while the FTG device is active. Refer to the Commercial Mode Setup Guide for the TV/STB for complete instructions.

While in this mode, the FTG Device Configuration Application will not function. The IR Remote Access must be turned OFF to return functionality to the FTG Device Configuration Application. Click on the **IR Remote Access ON** button, and the button text will change to "IR Remote Access OFF." Any changes made to the TV/STB Installer Menu by an IR remote will NOT be retained if AC power is cycled unless the Installer Menu is transferred to the FTG device. See "TV/STB Installer Menu Learn Function" on page 18.

## FTG Installer Menu Read and Write Functions

When power is applied to a TV/STB and an FTG device is active, a transfer of data occurs between the TV/STB and the FTG device. Use the FTG Installer Menu Configuration Utility to make changes to Installer Menu settings after the FTG device is active (requires FTG Channel Map in FTG device). To be available for editing, the FTG Installer Menu items must first be transferred ("read") from the FTG device to the PC. All FTG Installer Menu item(s) changes must then be transferred back ("written") to the FTG device and TV/STB before the changes will take effect.

**Note:** If the TV/STB is equipped with an embedded b-LAN (EBL) module, the TV/STB must also be turned ON for data to be transferred successfully.

The following sample screen shows the FTG Installer Menu Configuration Utility User tab after a transfer from an FTG device.

FTG Installer Menu Configuration Utility

File Configure Help

Index **User** Tuning Audio Aux Inputs STB I/O Video Hospital

**User**

#1 Power Management  
Hours of Inactivity  
Off Hrs

#15 Sleep Timer  
☐ Disabled  
☒ Enabled

#20 IR Control  
IR Mode  
☒ Disabled  
☐ Multi-code 1

#21 V-Chip  
☐ Disabled  
☒ Enabled

#99 Back Lighting  
Manual Setting  
None

#2 AC On  
☒ Standby/Normal  
☐ TV always ON  
☐ Instant-ON (OFF w/ reboot)  
☐ Instant-ON (OFF w/o reboot)

#16 On/Off Timer  
☒ Disabled  
☐ Enabled

Bed/TV # 1

#22 V-Chip Hours  
Maximum Blocking  
12 Hrs

#99 Back Lighting  
☐ Auto Static  
☐ Auto Dynamic  
☒ User Set

#17 Alarm  
☐ Disabled  
☒ Enabled

#84 V-Chip Permanent  
☒ Disabled  
☐ Enabled

#118 Power Savings  
TV Standby Mode Only  
☒ MPI Slot  
☒ Embedded b-LAN

#11 Key Defeat  
☐ Disabled  
☒ Enabled

#23 Closed Caption  
☒ Normal  
☐ Locked

#90 Key Lock  
☒ Disabled  
☐ Enabled

#101 IR Feedback  
☐ Bluetooth  
☐ Disabled

#120 Pseudo Power Off  
☐ Disabled

Chassis: 98-1: 42/47/55/60LY970H

FTG File: Settings: COM3 9600,n,8,1

Transmit Receive

Installer Defaults IR Remote Access OFF Write Read Learn

**User Tab**  
(After Transfer from  
FTG Device)

# FTG Installer Menu Configuration Utility (Cont.)

---

## Read FTG Installer Menu Settings

To transfer FTG Installer Menu settings from an FTG device, click the **Read** button at the bottom of the FTG Installer Menu Configuration Utility screen. The FTG Installer Menu settings stored in the FTG device are transferred from the FTG device to the PC. The appropriate Installer Menu items will now be available for editing and/or saving to an FTG Configuration (.rml) file. See “TV/STB Installer Menu Learn Function” below for information on transferring the TV/STB’s Installer Menu settings to an FTG device and the FTG Installer Menu Configuration Utility.

## Write FTG Installer Menu Settings

To transfer FTG Installer Menu settings to an FTG device, click the **Write** button at the bottom of the FTG Installer Menu Configuration Utility screen. The FTG Installer Menu settings are transferred from the PC to the FTG device and stored in both the FTG device and the TV/STB.

## TV/STB Installer Menu Learn Function

**Note:** This function requires that the TV/STB (CPU) Channel Map has been transferred to the PTC memory (see Reference section, “2-5-5 + MENU Mode,” for further information).

The FTG Installer Menu Configuration Utility Learn function allows changes that are made to the TV/STB’s Installer Menu by an IR remote to be transferred to the FTG device and the FTG Installer Menu Configuration Utility. Only certain circumstances require this action; for example, if it is necessary to reset all of the TV/STB Installer Menu settings to the factory defaults. This action requires the use of the IR remote. Refer to the Commercial Mode Setup Guide for the TV/STB for complete instructions.

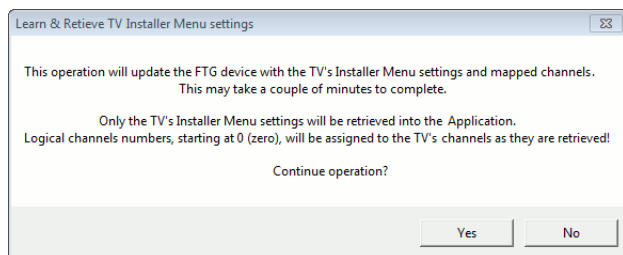
- To enable IR Remote Access, while the FTG device is installed, set **IR Remote Access ON** (see “Enable/Disable TV/STB Setup Menu Access” on page 17).
- When you have made all Installer Menu changes (using the IR remote) as required, set **IR Remote Access OFF**.

The Installer Menu settings must be transferred to the FTG device before the changes will take effect. To do this, the TV/STB’s Installer Menu settings must be “learned” by the FTG device and the FTG Installer Menu Configuration Utility.

## Learn TV/STB Installer Menu Settings

If it is necessary to transfer the TV/STB’s Installer Menu settings to the FTG device and the FTG Installer Menu Configuration Utility:

1. Click the **Learn** button at the bottom of the FTG Installer Menu Configuration Utility screen.
2. Click **Yes** in the confirmation pop-up window to continue.



(Continued on next page)

# FTG Installer Menu Configuration Utility (Cont.)

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(Continued from previous page)

The TV/STB's Installer Menu settings are stored in the FTG device and transferred to the FTG Installer Menu Configuration Utility. The appropriate Installer Menu items will now be available for editing and/or saving to an FTG Configuration file. If additional changes are made, the Installer Menu settings must be transferred back to the FTG device (see "Write FTG Installer Menu Settings" on previous page).

During the transfer, the FTG device's Channel Map is also updated. If the FTG device was storing an FTG Channel Map from a previous Channel Map "Write," that Channel Map's logical channel numbers will be reassigned in ascending order, starting with 0 (zero). All the channels will have Encrypted and OSD attributes set. This new FTG Channel Map can also be transferred to the PC and edited. See "FTG Channel Map Editor" and "FTG Channel Map Read and Write Functions" sections for further information.

**Note:** If the FTG device was not already in FTG Mode, the Learn function will also switch the device to FTG Mode.

## Edit FTG Installer Menu Settings

The Index tab provides an overall list of the FTG Installer Menu items; each of the remaining tabs contains Installer Menu items grouped by category.

1. To open an existing FTG Configuration (.rml) file, click **File** and then **Open** from the FTG Device Configuration Application menu bar, and select/double-click on the desired ".rml" file.
2. Click on the desired Installer Menu item in the Index tab to open the tab with that item, or click the tab with the category of items you want to view/edit.
3. Make changes to the Installer Menu items, as required. If the FTG Installer Menu Configuration diagnostic feature (see note below) is enabled, each time you set an Installer Menu item to a value that is not its default setting, a red dot will appear to the lower right of the item's options. The item(s) will also be highlighted in red on the Index tab (see example on following page).
4. Transfer the Installer Menu settings back to the FTG device (see "Write FTG Installer Menu Settings" on previous page).

**Note:** The diagnostic feature described in step 3 is an FTG Installer Menu Configuration Utility default. However, there is an option in the FTG Device Configuration Application Help menu to disable this feature. Click **Help** and then **Troubleshooting** from the menu bar; if the "Mark when NOT the default" option is not checked, Installer Menu item non-default settings will not be highlighted.

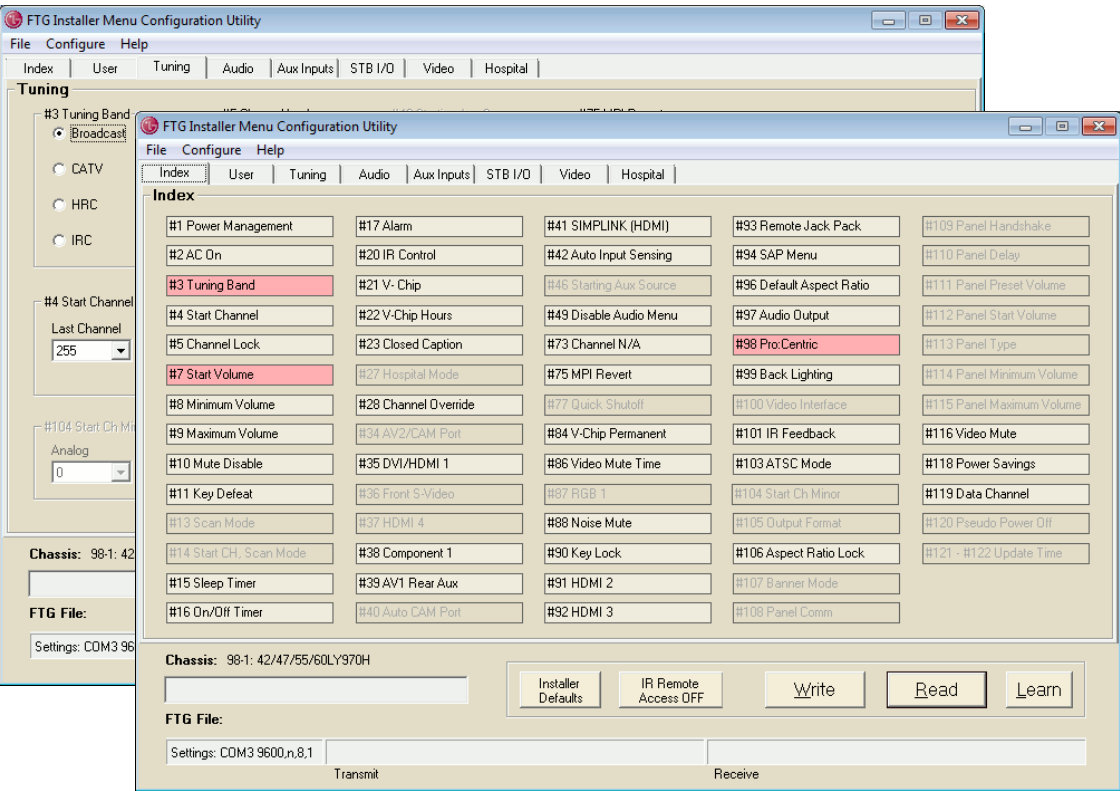
**Note:** Refer to the Commercial Mode Setup Guide for the TV/STB model(s) in question for detailed information on Installer Menu items.

## Save FTG Installer Menu Settings

These steps enable you to save an FTG Configuration (.rml) file, which typically comprises both the FTG Channel Map and FTG Installer Menu settings.

1. Click **File** and then **Save** from the FTG Device Configuration Application menu bar.
2. In the Save As window, name the file (avoid using special characters, such as ?, &, @, etc.) and click **Save**. The default folder path is C:\Program Files\Zenith\Widget. Note that the FTG Configuration file will have an ".rml" extension.

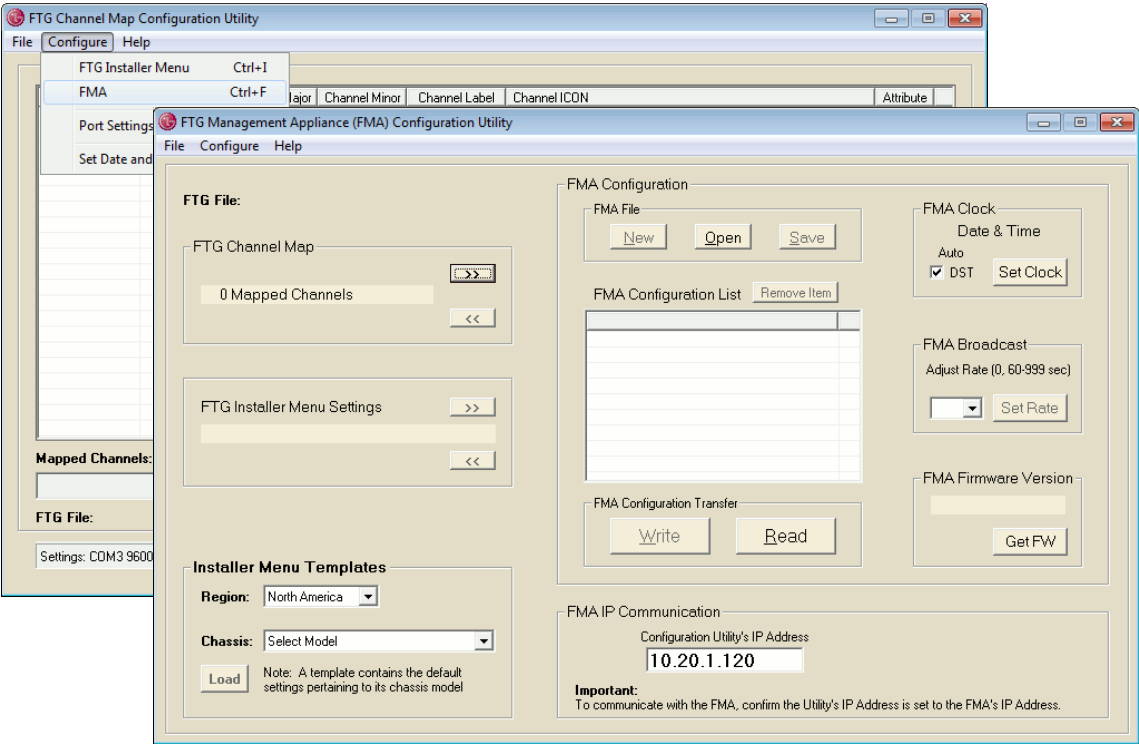
# FTG Installer Menu Configuration Utility (Cont.)



Index Tab  
(With Modified Items)

An FMA Configuration (.fma) file is required to update the FMA's (FMA-LG101 or FMA-LG102) broadcast data. The file must contain data from one FTG Channel Map and may also contain FTG Installer Menu profile data from one or more TV/STB models. The FMA Configuration Utility enables you to create and/or edit an FMA Configuration file at any time on any PC on which the FTG Device Configuration Application (v5.0.0 or later) is installed. The FMA Configuration Utility also enables you to set the FMA's date and time and broadcast rate.

To access the FMA Configuration Utility, click **Configure** and then **FMA** from the FTG Device Configuration Application menu bar.



FMA Configuration Utility

Refer to the table on the following page for an overview of the FMA Configuration Utility fields and functions.

**Note:** If it becomes necessary to restore TVs/STBs from FTG Mode to Pass-through Mode, there are options that will enable you to do so. See Reference section, "Restoring TVs/STBs to Pass-through Mode," for further information.

**Note:** If the configuring PC is running Windows Home Premium software, you must run the FTG Device Configuration Application as an administrative user in order to communicate with and configure the FMA-LG101 or FMA-LG102.

## FMA Configuration Utility (Cont.)

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### FMA Configuration Utility Functions

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<b>FMA Configuration Field/ Function</b>	<b>Description</b>	
FTG File	Identifies, if applicable, an FTG Configuration (.rml) file that is currently open in the FMA Configuration Utility. The FTG Channel Map and/or FTG Installer Menu settings from an FTG Configuration (.rml) file may be incorporated into an FMA Configuration (.fma) file.	
FTG Channel Map	Identifies the number of channels mapped either in the currently open FTG Configuration (.rml) file or added via the FTG Channel Map Editor in the FTG Channel Map Configuration Utility.  The FTG Channel Map, along with the FTG Installer Menu settings, provides the basis of FMA Configuration file data.	
FTG Installer Menu Settings	Identifies the model for which FTG Installer Menu settings are loaded (default or user-defined).  These settings, along with the FTG Channel Map, provide the basis of FMA Configuration file data.	
Installer Menu Templates	Enables you to load default FTG Installer Menu settings for a selected model.	
FMA Configuration	FMA File	Command options enable you to create a new or open an existing FMA Configuration (.fma) file or save the current contents of the FMA Configuration List to an FMA Configuration file.
	FMA Configuration List	Provides a snapshot, in a list format, of the FTG Channel Map and FTG Installer Menu settings data to be saved or already saved in an FMA Configuration file.
	FMA Configuration Transfer	Command options enables you to read or write FMA Configuration file data from/to the FMA.
	FMA Clock	Sets the FMA clock to the PC's date and time.
	FMA Broadcast	Sets the FMA's broadcast rate.
	FMA Firmware Version	Displays the current version of FMA firmware.
FMA IP Communication	Sets the FMA Utility's IP address to enable communication with the FMA for configuration updates/transfers.	

---

### Network/Communication Prerequisites

FMA Configuration files can be created/edited at any time using the FMA Configuration Utility; however, the PC must be connected to the FMA, either via a network Ethernet connection or via a direct Ethernet connection, for all data transfers. Refer to the applicable FMA (FMA-LG101 or FMA-LG102) Installation & Configuration Guide for further information.

- Network Ethernet connection: If the FMA is connected to a network (i.e., the FMA is a DHCP client), consult the network administrator for proper network settings, and set the PC's network connections to provide access to the network. You will also need to know the IP address that has been assigned by a DHCP server to the FMA in order to initiate communication.
- Direct Ethernet connection: If you are using a direct Ethernet connection between the FMA and the configuring PC, you must complete the "PC Network Connections" procedure below to set the PC network connections. Also note that the FMA will use its default IP address (10.20.1.120) for communication purposes.

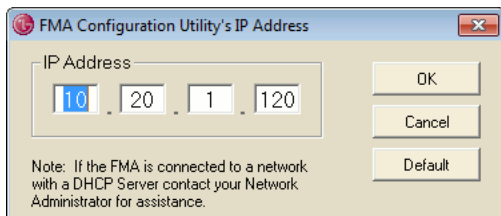
### PC Network Connections (required for direct Ethernet connections only)

1. On the PC, navigate to the Local Area Connection Properties window, per your operating system, e.g., Windows XP, Windows 7, etc. Refer to IT personnel or Windows documentation for further information.
2. In the Local Area Connection Properties window Double-click on **Internet Protocol (TCP/IP)**.
3. In the Internet Protocol Properties window, select the **Use the following IP address:** radio button. Then:
  - In the IP Address field, type an IP address from the following range: 10.20.1.81 to 10.20.1.92.
  - In the Subnet Mask field, type **255.255.248.0**.
4. Click **OK** to close the Internet Protocol Properties window. (You can also close any additional network connections windows at this time.)

### Set the FMA Utility's IP Address

To enable communication, the IP address specified in the FMA IP Communication section at the bottom right of the screen must be set to the FMA's current IP address—either the IP address assigned by a DHCP server to the FMA (network Ethernet connection) or the FMA's default IP address (direct Ethernet connection).

1. If you need to modify the FMA Utility's IP address, double-click anywhere within the IP Address field.
2. In the pop-up window, type the appropriate IP address, and then click **OK**. Or, to restore the IP address to the default value (10.20.1.120), click **Default** and then **OK**.



# FMA Configuration Utility (Cont.)

---

## FMA Configuration File Options

Refer to the following sections for information on creating or editing an FMA Configuration file.

### Create an FMA Configuration File

1. To begin, there are several options:

- To view and/or base a new FMA Configuration file on an existing FMA Configuration file, click the **Open** button in the FMA File command section of the FMA Configuration Utility (above the FMA Configuration List), and select/double-click on the desired “.fma” file.  
A list of the file's contents will be displayed in the FMA Configuration List window. Edit the configuration of the items in the FMA Configuration List, as necessary, to create a new file. Then, proceed to step 2 when you are ready to continue.
  - To open an existing FTG Configuration (.rml) file to use its FTG Channel Map and/or FTG Installer Menu settings, click **File** and then **Open** from the FTG Device Configuration Application menu bar, and select/double-click on the desired “.rml” file.  
Edit channels and/or settings as necessary, and then proceed to step 2 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 (see pages 9 to 14 for information on the FTG Channel Map Configuration Utility). Up to 141 logical channels can be defined in the channel lineup to be broadcast by the FMA.  
When you are ready to continue, click **Configure** and then **FMA** from the FTG Device Configuration Application menu bar to return to the FMA Configuration Utility, and then proceed to step 2.
- Note:** To remove an individual item from the FMA Configuration List, click on/highlight the item to be removed, and then click the **Remove Item** button directly above the FMA Configuration List window. To clear the current FMA Configuration List contents, click the **New** button in the FMA File command section of the screen (above the FMA Configuration List window).

2. To add the current FTG Channel Map to the FMA Configuration List, click **>>** under FTG Channel Map. This will copy the current mapped channels to the FMA 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 FMA Configuration List, you will need to recopy the FTG Channel Map to the FMA Configuration List.

3. (Optional) Load default FTG Installer Menu settings by model. In the Installer Menu Templates section of the FMA Configuration Utility screen:

- If necessary, click the down arrow at the right of the Region field, and select the region in which the Installation site is located. The available models listed in the Chassis field below have been designed specifically for operation in the selected region.
- Click the down arrow at the right of the Chassis field, and select the appropriate chassis from the drop-down list of available models.
- Click the **Load** button. The selected chassis model/chassis ID will now appear in the FTG Installer Menu Settings field.
- Use the FTG Installer Menu Configuration Utility to modify settings, if necessary (see pages 15 to 20 for information on the FTG Installer Menu Configuration Utility). Then, return to the FMA Configuration Utility.

(Continued on next page)



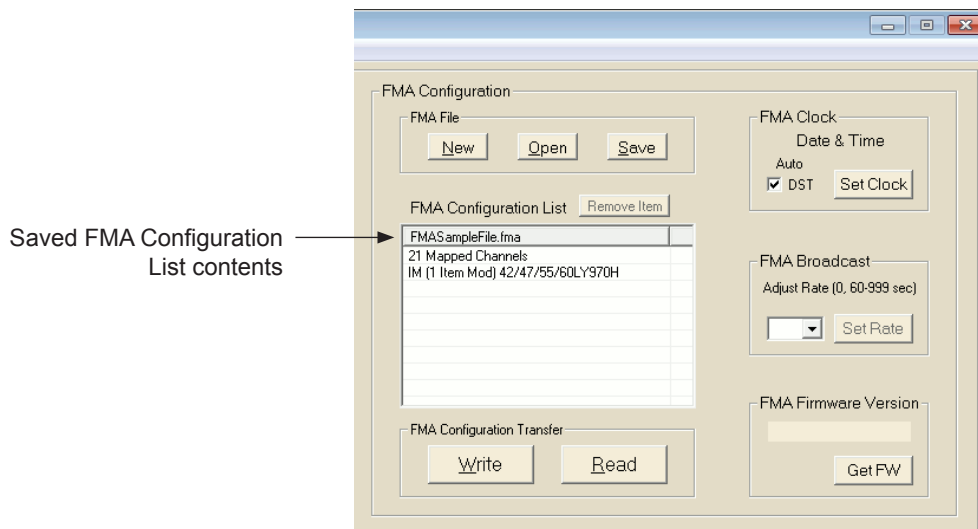
(Continued from previous page)

- To add the current FTG Installer Menu settings to the FMA Configuration List, click **>>** under FTG Installer Menu Settings. This will copy the selected model's settings to the FMA 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 FMA Configuration List, you will need to recopy the FTG Installer Menu settings to the FMA Configuration List.

- Repeat steps 3 and 4 as necessary to add additional Installer Menu profiles to the FMA Configuration List. Then, click the **Save** button in the FMA File command section of the FMA Configuration Utility screen (above the FMA Configuration List) to save the FMA Configuration List contents to an FMA Configuration (.fma) file on the PC's hard drive for later use.
- In the Save As window, name the file (avoid using special characters, such as ?, &, @, etc.) and click **Save**. The default folder path is C:\Program Files\Zenith\Widget. Note that the FMA Configuration file will have an ".fma" extension.

After you save the file, the filename specified will appear in the header space just above the FMA Configuration List.



**Note:** To remove an individual item from the FMA Configuration List before saving the new file, click on/highlight the item to be removed, and then click the **Remove Item** button directly above the FMA Configuration List window. To clear the current FTG Configuration List contents, click the **New** button in the FMA File command section of the FMA Configuration Utility.

### Edit an FMA Configuration File

- Click the **Open** button in the FMA File command section of the FMA Configuration Utility screen (above the FMA Configuration List), and select/double-click on the desired ".fma" file. Once the file is opened, a list of the file's contents is displayed in the FMA Configuration List window, and the filename appears in the header space just above the FMA Configuration List.

(Continued on next page)

## FMA Configuration Utility (Cont.)

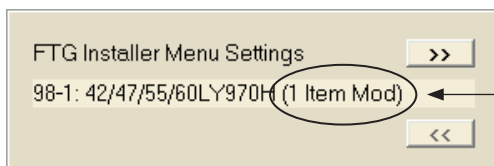
(Continued from previous page)

2. There are several options at this time:

- Add items to the FMA Configuration List. Load default Installer Menu settings for a selected model if desired, and/or click **>>** under FTG Channel Map and/or FTG Installer Menu Settings to copy the current settings to the FMA Configuration List.
- Remove items from the FMA Configuration List: Click on/highlight the item to be removed, and then click the **Remove Item** button directly above the FMA Configuration List window.
- To review an item from the FMA Configuration List, either:
  - Click on/highlight the desired item (i.e., the Mapped Channels or an Installer Menu [IM] entry), and then click **<<** under the appropriate section of the screen to make its data accessible by the applicable utility.
  - Double-click the desired item to copy it automatically to the appropriate section of the screen and make its data accessible by the applicable utility.
- To view FTG Channel Map details, double-click the **Mapped Channels** text on the screen. This opens the FTG Channel Map Configuration Utility, and you can use the FTG Channel Map Editor to edit the FTG Channel Map, as necessary (see pages 9 to 14 for information on the FTG Channel Map Configuration Utility).
- To view FTG Installer Menu settings, double-click in the FTG Installer Menu Settings field. This opens the FTG Installer Menu Configuration Utility, and you can edit Installer Menu settings, as necessary (see pages 15 to 20 for information on the FTG Installer Menu Configuration Utility).

**Note:** Make sure to recopy updated FTG Channel Map and/or FTG Installer Menu settings to the FMA Configuration List. Click **>>** under FTG Channel Map and/or FTG Installer Menu Settings, respectively.

**Note:** If you set any of the FTG Installer Menu items differently from their defaults, the number of non-default items will be reflected in the FTG Installer Menu Settings field, for example:



This example shows that one Installer Menu item has been modified.

3. When FMA Configuration File edits are complete, click the **Save** button in the FMA File command section of the FMA Configuration Utility screen (above the FMA Configuration List) to save the FMA Configuration List contents to an FMA Configuration (.fma) file.

Save the FMA Configuration file with the same name (to replace the existing file) or with a new name (to preserve the previous file).

**Note:** The default folder path is C:\Program Files\Zenith\Widget\FMA. Always avoid using special characters, such as ?, &, @, etc., in filenames.

### FMA Configuration Read and Write Functions \* †

Once created, an FMA Configuration file can be opened and a list of its contents shown in the FMA Configuration List (see “Edit an FMA Configuration File” above). The FMA Configuration List contents then can be transferred to and from an FMA-LG101 or FMA-LG102 using the FMA Configuration Utility.

#### Write an FMA Configuration List to an FMA

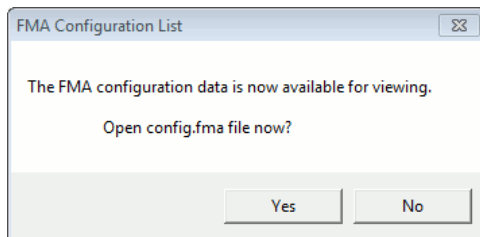
To transfer the data represented in the FMA Configuration List to an FMA, click the **Write** button in the FMA Configuration Transfer command section of the FMA Configuration Utility screen. The FMA Configuration List must contain data for an FTG Channel Map and can also include one or more FTG Installer Menu profiles.

Once the system processes the request, a pop-up report message indicates success. Click **OK** to close the pop-up window.

**Note:** When opening an existing FMA Configuration file, reconfirm the FMA Utility’s IP address, since the FMA file, when saved, had an IP address associated with it.

#### Read the Configuration Data from an FMA

To transfer the configuration data from an FMA to the FMA Configuration List window, click the **Read** button in the FMA Configuration Transfer command section of the FMA Configuration Utility screen. This transfers the configuration data stored in the FMA to the PC. When the “Read” is complete, an FMA Configuration List pop-up window indicates that the configuration data from the FMA is available for viewing. If desired, click **Yes** to display a listing of the data in the FMA Configuration List window. Otherwise, an auto-generated FMA Configuration file (config.fma) can be opened and its content viewed at a later time.



### Set the FMA Clock \* †

The facility for setting the FMA clock is located on the right side of the FMA Configuration Utility screen. Date and time must be set on the PC running the FTG Device Configuration Application prior to an attempt to set the FMA clock.

1. In the FMA Clock section of the FMA Configuration Utility screen:

- If desired, click the Auto DST checkbox. When checked, the FMA’s clock automatically observes Daylight Saving Time.
- Click the **Set Clock** button to set the date and time of the FMA to the PC’s date and time.

(Continued on next page)

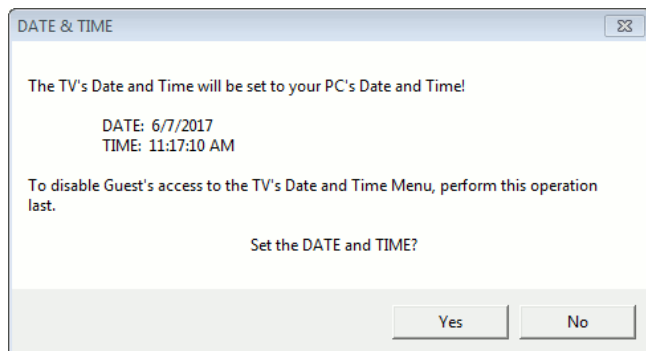
\* Before performing any FMA communication and/or configuration functions, confirm that the FMA Utility’s IP address is set correctly (see “Set the FMA Utility’s IP Address” on page 23).

† If the configuring PC is running Windows Home Premium software, you must run the FTG Device Configuration Application as an administrative user in order to communicate with and configure the FMA-LG101 or FMA-LG102.

## FMA Configuration Utility (Cont.)

(Continued from previous page)

2. In the Date & Time pop-up window (displays a snapshot of the PC's current date and time), confirm the settings, and then click **Yes** to synchronize the FMA's clock with the PC's clock.



Once the system processes the request, a pop-up report message indicates success. Click **OK** to close the pop-up window.

### Set the FMA Broadcast Rate\*†

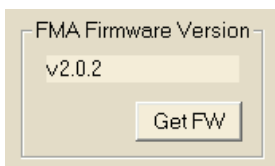
The facility for setting the FMA broadcast rate is located on the right side of the FMA Configuration Utility screen. The broadcast rate determines the interval, in seconds, at which to repeat the broadcast of the date & time, the FTG Channel Map, and the FTG Installer Menu profile(s).

1. Click the down arrow at the right of the FMA Broadcast field, and select desired the number of seconds (0, 60–999) for the broadcast rate ("0" disables data broadcasting).
2. Click the **Set Rate** button to set the selected rate of broadcast in the FMA.

Once the system processes the request, a pop-up report message indicates success. Click **OK** to close the pop-up window.

### Display the FMA Firmware Version\*†

To display the version of firmware currently loaded on the FMA, click the **Get FW** button in the FMA Firmware Version section located on the right side of the FMA Configuration Utility screen.



\* Before performing any FMA communication and/or configuration functions, confirm that the FMA Utility's IP address is set correctly (see "Set the FMA Utility's IP Address" on page 23).

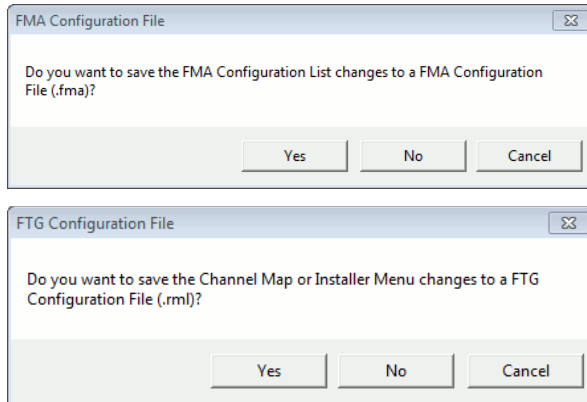
† If the configuring PC is running Windows Home Premium software, you must run the FTG Device Configuration Application as an administrative user in order to communicate with and configure the FMA-LG101 or FMA-LG102.

# Exit the FTG Device Configuration Application / Display the FTG Device Configuration Application Version

## Exit the FTG Device Configuration Application

1. Click **File** and then **Exit** from the FTG Device Configuration Application menu bar.

If you have saved your updates to FTG and/or FMA Configuration files, the FTG Device Configuration Application will close immediately. Otherwise, the application will prompt for confirmation in accordance with the applicable configuration file (or both).



2. Either:

- Click **Yes** to save your changes. In the Save As window, name the file (avoid using special characters, such as ?, &, @, etc.) and click **Save**. An FTG Configuration file will have an “.rml” extension, and an FMA Configuration file will have an “.fma” extension. The FTG Device Configuration Application will close immediately after you save the file(s).
- Click **No** to continue exiting without saving your changes.
- Click **Cancel** to return to the FTG Device Configuration Application.

## Display the FTG Device Configuration Application Version

Click **Help** and then **About** from the FTG Device Configuration Application menu bar to display the FTG Device Configuration Application version (see example below).

*Example: FTG Device Configuration Application “About” Screen*



# System Requirements / Operation

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## System Requirements

### FTG Device Configuration Application Requirements

- PC System running Windows XP operating system or later
- Minimum of 16 MB of RAM
- Minimum of 64 MB free HDD space for FTG Device Configuration Application Installation (Setup.exe) file
- Minimum of 6 MB for FTG Device Configuration Application (FTG.exe) file and support files
- Additional space required for FTG Configuration file storage
- 800 x 600 SVGA display
- COM port set to 9600 baud, 8 data bits, no parity, 1 stop bit

### FTG Device Requirements

- LG/Zenith Pro:Idiom TV/STB with FTG MPI card installed  
or
  - LG/Zenith Pro:Idiom TV/STB with Embedded *b*-LAN module (EBL)
- 

## System Operation

When an LG/Zenith Pro:Idiom TV/STB is tuned to a channel that has Pro:Idiom-encrypted content and that channel is defined in the FTG Channel Map with the Encrypted attribute set, the FTG device enables the TV/STB to decrypt the content.

### System Planning and Tips

- Before setting up the system, devise a Channel Mapping Plan and a Master TV/STB Setup.
- The plan should have a layout that determines whether Physical or Virtual Channel numbers will be used and the sequence in which the channels will appear on the TV/STB.
- It is necessary to know the Physical or Virtual Channel number mapping of each channel to be included in the FTG Channel Map. If digital channels are to be included, both the Channel Major and Channel Minor mapping numbers are required. For analog channels, the minor channel number is always 0 (zero).
- (Recommended) When Installer Menu item 103 ATSC Mode is set to “1” for Physical Channel number mapping, the RF Channel and Channel Major mapping numbers are the same.
- When Installer Menu item 103 ATSC Mode is set to “0” for Virtual Channel number mapping, the Channel Major and Channel Minor mapping numbers are provided in the transport stream by the broadcaster.

This section describes how to transfer the TV/STB (CPU) channel lineup to the PTC memory. The transfer process is known as 2-5-5 + MENU Mode. You must perform the transfer before you can use the Learn function in either the FTG Channel Map Configuration Utility or the FTG Installer Menu Configuration Utility. See also “TV/STB Channel Map Learn Function” on pages 13 to 14 and/or “TV/STB Installer Menu Learn Function” on pages 18 to 19, as required.

**Note:** The FTG device must be in the Pass-through Mode prior to the transfer.

**Note:** If necessary, to determine the channels available on the RF feed, run Auto Tuning (channel search) on the TV/STB before performing the procedure below. Refer to the Master TV/STB Setup procedure in the appropriate Commercial Mode Setup Guide for further information on Auto Tuning.

**Note:** The maximum number of channels (analog and digital) that can be transferred to the PTC is 141. An attempt to transfer more than 141 channels of any combination will result in a PTC channel list of exactly 141 channels; any extra channels will not be available in the PTC memory. For Hospital TV/STB models, the 141 channel limit includes Aux inputs. For example, on Hospital models, if three Aux inputs are enabled in the Installer Menu and there are 141 RF channels in the TV/STB (CPU) channel lineup, you must edit the channel lineup to decrease the number of RF channels to (at most) 138 in order to accommodate the Aux inputs in the PTC memory.

1. Use an Installer Remote to access the Installer Menu on the TV/STB from which you intend to Learn the Channel Map. (Refer to the section on “Accessing the Installer Menu” in the appropriate Commercial Mode Setup Guide for further information.)
2. With the Installer Menu on display, press **2-5-5 + MENU** on the Installer Remote to initiate the transfer of the channel lineup to the PTC.

During the transfer, the TV/STB exits the Installer Menu and then tunes through the channels in the channel lineup. When the transfer is complete, the TV tunes back to the channel that was tuned before the transfer began.

# Reference: Restoring TVs/STBs to Pass-through Mode

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This section describes how to use the FTG Device Configuration Application to restore Pass-through Mode/Installer Menu factory defaults on TVs/STBs that are in FTG Mode via *b*-LAN. The first option enables you to restore a single TV/STB to Pass-through Mode, while the second enables you to restore multiple TVs/STBs to Pass-through Mode at one time.

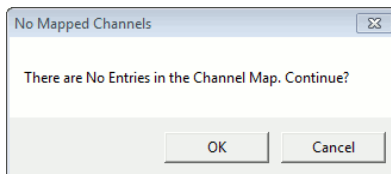
## Restore Individual TVs/STBs using the FTG Channel Map Configuration Utility

Use a direct PC-to-TV/STB connection to “Write” an unpopulated FTG Channel Map, i.e., a Channel Map with 0 (zero) channels, to the FTG device. Refer to “FTG Channel Map Configuration Utility” information in this document, as necessary, for further instruction.

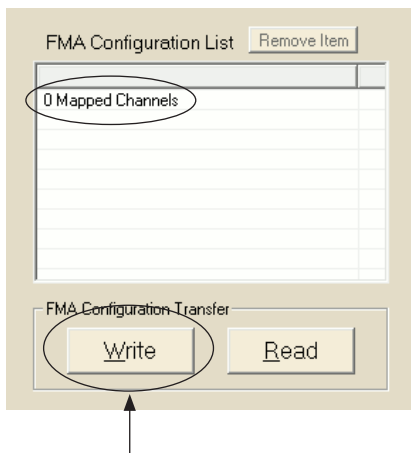
## Restore Multiple TVs/STBs using the FMA Configuration Utility

If your system uses an FMA for remote management/broadcast configuration, you can configure the FMA device with a “0 Mapped Channels” FTG Channel Map. The following procedure provides an overview of the steps to configure the FMA for the purpose of restoring TVs/STBs from FTG Mode to Pass-through Mode. Refer to “FTG Channel Map Configuration Utility” and/or “FMA Configuration Utility” information in this document, as necessary, for further instruction.

1. Make sure the FTG Channel Map is unpopulated. If necessary, clear the current FTG Channel Map using the FTG Channel Map Configuration Utility. Then, access the FMA Configuration Utility.
2. Click **>>** under FTG Channel Map to add the “0 Mapped Channels” to the FMA Configuration List.
3. Click **OK** in the No Mapped Channels confirmation window to continue. This will copy the “0 Mapped Channels” to the FMA Configuration List.



4. “Write” the FMA Configuration List data to the FMA.





## Document Revision History

Date	Description
April 2008	Revision A: New document for FTG Configuration Application v3.0.35 and HCS1410 FTG card
February 2009	Revision B: Updates for FTG Configuration Application v4.0.0
July 2009	Revision C: Updates for LMT7Z7 FTG card (replaces HCS1410)
May 2010	Revision D: Updates for FTG Device Configuration Application v5.0.0; FTG card hardware information now in separate documentation
April 2012	Revision E: Updates for FTG Device Configuration Application v5.3.3 and later
November 2013	Revision F: Updates for FTG Device Configuration Application v5.4.1 and later
September 2015	Revision G: Updates for FTG Device Configuration Application v5.5.0 and later
June 2017	Revision H: Updates for FTG Device Configuration Application v5.5.8 and later

FTG documentation is available online at: [www.lg.com/us/business/display-solutions/ftg](http://www.lg.com/us/business/display-solutions/ftg).

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## Notes



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