



Free-To-Guest (FTG) File Manager User Guide

Pro:Idiom[®] Enabling Configuration Software
For FTG Mode via CPU



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Notes:

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

FTG File Manager Overview

This document describes how to use the FTG File Manager to create and/or edit an FTG Configuration (.tlx) file that can be used to configure TVs/STBs for Free-To-Guest (FTG) Mode of operation via the CPU.

FTG Mode enables the decryption of each Pro:Idiom® encrypted channel and also provides logical channel mapping of physical RF channels (analog and digital), IP channels, and Aux inputs. TV/STB operation in FTG Mode is based on which element of the TV will “own” the FTG Channel Map—the CPU or an installed/embedded *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, IP 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).

Note: For selected models, depending on the types of channels included in the FTG Channel Map, FTG Mode via CPU also provides the option to select either logical or physical tuning (see note above). However, physical channel tuning is not available when IP channels are included in the FTG Channel Map.

The FTG File Manager is applicable only for FTG Mode via CPU configuration and only for those TVs/STBs that support the FTG Configuration (.tlx) file format.

FTG Configuration (.tlx) File / FTG File Manager Utilities

An FTG Configuration (.tlx) file contains the FTG Channel Map and FTG Installer Menu settings data to be transferred to the TV(s)/STB(s). While the FTG File Manager main screen provides the facilities for compiling and saving an FTG Configuration file, the FTG File Manager also incorporates two utilities—the FTG Channel Map Configuration Utility and the FTG Installer Menu Configuration Utility—that enable you to define the FTG Channel Map and FTG Installer Menu settings to be saved to the FTG Configuration file. Note that to enable decryption of Pro:Idiom encrypted channels, you must use the FTG Channel Map Configuration Utility in the FTG File Manager to set the appropriate channel attributes.

The saved FTG Configuration file is then used to configure individual or multiple TVs/STBs at a later time. For individual TV/STB configuration, the FTG Configuration file must be saved to a USB memory device and then transferred to the TV(s)/STB(s). See also note below.

Note: USB memory device / FTG Configuration (.tlx) file configuration is only available for TVs/STBs that are currently in Pass-through Mode or FTG Mode via CPU. If you wish to configure a TV/STB that is currently in another mode (e.g., FTG Mode via *b*-LAN, PPV Mode, etc.) for FTG Mode via CPU, you will need to reset the factory defaults on the TV/STB. Refer to the appropriate Commercial Mode Setup Guide for further information. See also Reference section, “Restoring TVs/STBs to Pass-through Mode,” in this document for information on restoring TVs/STBs from FTG Mode via CPU to Pass-through Mode.

Navigation Between Utilities

While working in the FTG File Manager, you can navigate from one utility to another or to the FTG File Manager main screen, thus facilitating the process of creating and editing the FTG Configuration file. The drop-down menu from the “Configure” option in the FTG File Manager 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.

Zoning Features

With newer TV/STB models, each Installer Menu profile is assigned a Zone (0–8), which allows you to create up to nine different configurations for a single chassis model or chassis ID. This TV Zoning feature enables you to designate “Zones” within the installation site, and each TV/STB located within and assigned to a selected Zone can be configured with location-specific settings. The Wi-Fi Zoning feature enables you to configure an individual TV/STB or a group of TVs/STBs with a particular Wi-Fi access point’s login data to create “Wi-Fi Zones” within the installation environment. See Reference section, “Using Zoning Features,” for additional information on the TV Zoning and Wi-Fi Zoning features.

Remote Management

Remote management and distribution of the FTG Channel Map and FTG Installer Menu settings to guest room TVs/STBs may be provided by a Pro:Centric® server (Example: PCS200R) connected to the RF distribution system or IP distribution network. In the case of remote management/distribution, every LG TV/STB capable of downloading an FTG Configuration (.tlx) file from the Pro:Centric server will be configured with the same channel lineup (minus any channels that have been restricted from selected TVs/STBs in accordance with Zone assignments), and the FTG Channel Map and/or FTG Installer Menu settings can be updated without individual room visits. Installer Menu settings are dependent on chassis model IDs; only the models whose Installer Menu settings are included in the FTG Configuration (.tlx) file will be affected. The FTG Configuration (.tlx) file can contain multiple Installer Menu profiles, each with a unique chassis ID and/or Zone, if applicable, to support the different chassis models connected to the RF or IP distribution system/network.

FTG File Manager Installation

FTG File Manager software is available online at: www.lg.com/us/business/display-solutions/ftg.

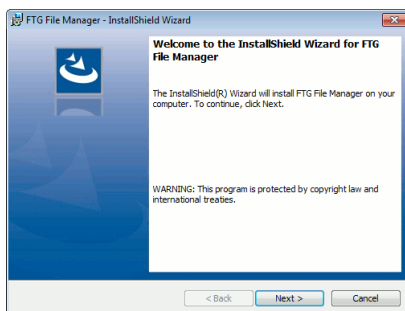
Depending on your web browser, you can run the setup executable directly from the FTG Software webpage (click on **Run** from the File Download pop-up window), or you can download the installation files (click on **Save** from the File Download pop-up window) and run the executable from your PC.

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.

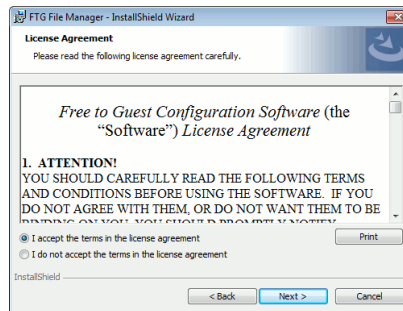
The following steps briefly describe the FTG File Manager InstallShield Wizard. See also sample screens below.

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.

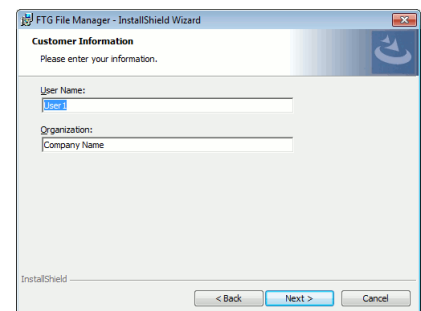
An FTG File Manager shortcut automatically will be placed on the desktop when the installation is complete.



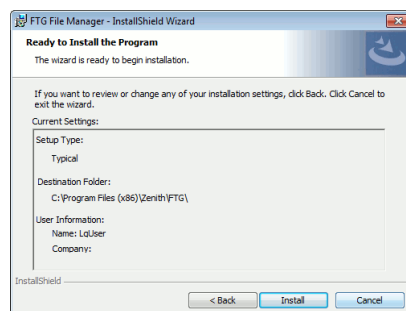
(1)



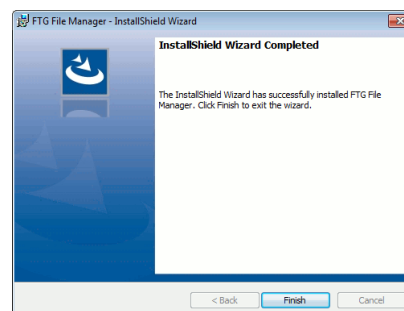
(2)



(3)



(4)



(5)

Setup Overview for FTG Mode of Operation via CPU

This section provides an overview of the steps to configure an LG Pro:Idiom TV/STB for FTG Mode of operation via its CPU. With the exception of FTG File Manager installation (described on the previous page), detailed instructions for each step are provided in the pages that follow.

1. Install and launch the FTG File Manager on the PC that will be used to create the FTG Configuration (.tlx) file for the TV(s)/STB(s).

The next five steps briefly describe how to create the FTG Configuration (.tlx) file to be used for configuration purposes. If available, you can open an existing FTG Configuration file (either .rml or .tlx) to use its FTG Channel Map and FTG Installer Menu settings. If an existing FTG Configuration (.tlx) file includes TV/STB setup menu settings, you may also add the Setup Menu profile(s) to the new FTG Configuration file.

2. Build a new or modify an existing FTG Channel Map, as required, using the FTG Channel Map Editor in the FTG Channel Map Configuration Utility.
3. From the FTG File Manager main screen, copy the current FTG Channel Map to the FTG Configuration List.
4. (Optional) From the FTG File Manager main screen, load Installer Menu default settings for a selected model. If necessary, use the FTG Installer Menu Configuration Utility to edit the Installer Menu settings.

Note: The default Zone 0 is assigned automatically to the loaded Installer Menu profile.

5. Copy the current FTG Installer Menu settings to the FTG Configuration List.

Note: When applicable, by model, you can change the Zone assignment for the current Installer Menu settings before copying the profile to the FTG Configuration List, or you can edit the Zone assignment after the profile is in the FTG Configuration List. Also, an existing FTG Configuration (.tlx) file may contain TV/STB setup menu settings. If desired and if applicable, by model, you can edit the Zone assignment for each Setup Menu profile in the Setup Menu List window.

6. Repeat steps 4 and 5, as necessary, to add additional Installer Menu profiles to the FTG Configuration List, and then save the contents of the FTG Configuration List and, if applicable, the Setup Menu List to an FTG Configuration (.tlx) file.

7. Either:

- Save the FTG Configuration file to a USB memory device to be used for individual TV/STB configuration. Refer to the Commercial Mode Setup Guide for the TV/STB model(s) in question for further information on the process of transferring an FTG Configuration file to a TV/STB.
- Use the Pro:Centric Admin Client to load the FTG Configuration file on to the Pro:Centric server and administer its distribution to the TVs/STBs. Refer to the **Pro:Centric Server Admin Client User Guide** for further information.

FTG File Manager Main Screen

The FTG File Manager main screen provides the means for compiling, modifying, and saving FTG Configuration (.tlx) files. It is the screen initially displayed when you launch the FTG File Manager.

**FTG File Manager
Main Screen**

Refer to the table on the following page for an overview of the FTG File Manager main screen fields and functions. This section also provides detailed instruction on creating and/or editing an FTG Configuration (.tlx) file.

File Manager Notes

- If an FTG Configuration (.tlx) file that does not contain an FTG Channel Map is transferred to a TV/STB, the TV/STB will not be configured for FTG Mode.
- On TV/STB models that support the “.tlx” file format, there is an option to save a “.tlx” file from the TV/STB, which may be desirable or required if you want to save customized TV/STB setup menu settings to the FTG Configuration file in addition to the FTG Channel Map and FTG Installer Menu settings and/or if you do not know the RF channels at the site. If saved from a TV/STB, the “.tlx” file will also contain setup menu settings for that model TV/STB (based on its chassis ID and Zone, if applicable). While these settings cannot be modified using the FTG File Manager, they can be incorporated and/or compiled into a new FTG Configuration file, along with the FTG Channel Map and FTG Installer Menu settings. Refer to the Commercial Mode Setup Guide for the TV/STB model(s) in question for further information.
- 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.
- For TV/STB models that support Zoning features, Zone assignments enable you to configure the TVs/STBs with location-specific settings. See Reference section, “Using Zoning Features,” for further information.

FTG File Manager Main Screen (Cont.)

FTG File Manager Main Screen Fields/Functions

FTG File Manager Field/ Function	Description
FTG File	Identifies, if applicable, an FTG Configuration (.rml) file that is currently open in the FTG File Manager. FTG Configuration files with an “.rml” extension are created using the FTG Device Configuration Application. The FTG Channel Map and/or FTG Installer Menu settings from an FTG Configuration (.rml) file may be incorporated into an FTG Configuration (.tlx) file.
FTG Channel Map	<p>Mapped RF Channels and Mapped IP Channels fields identify the number of RF and IP channels, respectively, mapped either in the currently open FTG Configuration (.tlx or .rml) file or added via the FTG Channel Map Editor in the FTG Channel Map Configuration Utility.</p> <p>The FTG Channel Map, along with the FTG Installer Menu settings, provides the basis of FTG Configuration (.tlx) file data.</p>
FTG Installer Menu Settings	<p>Identifies the model for which FTG Installer Menu settings are loaded (default or user-defined). To support the TV Zoning feature, the current Installer Menu profile is accompanied by a Zone number. Default Installer Menu settings are automatically assigned the default Zone number 0. When applicable, by model, you can change the Zone assignment for the Installer Menu settings before copying the profile to the FTG Configuration List.</p> <p>These settings, along with the FTG Channel Map, provide the basis of FTG Configuration (.tlx) file data.</p>
Installer Menu Templates	Enables you to load default FTG Installer Menu settings for a selected model.
FTG Configuration List	<p>Provides a snapshot, in list format, of the FTG Channel Map and FTG Installer Menu settings data to be saved in an FTG Configuration (.tlx) file. Each Installer Menu profile in the FTG Configuration List includes a Zone assignment, and when applicable, by model, you can edit the Zone assignment(s), as required.</p> <p>The following List command options are available above the FTG Configuration List:</p> <ul style="list-style-type: none">• Clear: Enables you to clear the current contents of the FTG Configuration List and, if applicable, the Setup Menu List.• Save: Enables you to save the current contents of the FTG Configuration List and, if applicable, the Setup Menu List to a new FTG Configuration (.tlx) file.
Setup Menu List	<p>An opened FTG Configuration (.tlx) file may contain TV/STB setup menu settings if the file was initially saved from a TV/STB. The Setup Menu List provides a snapshot, in list format, of the TV/STB setup menu settings data to be saved in an FTG Configuration (.tlx) file. Each Setup Menu profile in the Setup Menu List includes a Zone assignment, and when applicable, by model, you can edit the Zone assignment for each Setup Menu profile. However, note that apart from the Zone assignment (which is set in the TV/STB before the file save is initiated and is assigned to the Setup Menu profile), TV/STB setup menu settings are not editable.</p>

FTG File Manager Main Screen (Cont.)

FTG File Manager Main Screen Fields/Functions (Cont.)

FTG File Manager Field/ Function	Description
TLX File Contents	<p>Provides a snapshot, in list format, of the data saved in the opened FTG Configuration (.tlx) file.</p> <p>The following TLX File command options are available above the TLX File Contents list:</p> <ul style="list-style-type: none">• New: Enables you to clear the TLX File Contents window.• Open: Enables you to open an existing FTG Configuration (.tlx) file and display its contents in the TLX File Contents window. <p>When the TLX File Contents window is populated, you can double-click on an item individually to copy it to the FTG Configuration List or, if applicable, the Setup Menu List, or you can click the “Copy All” button directly above the window to automatically copy all of the contents of the opened FTG Configuration (.tlx) file to the FTG Configuration List and, if applicable, the Setup Menu List.</p>

Create an FTG Configuration (.tlx) File

1. Launch the FTG File Manager on your PC.
2. There are several options at this time:
 - 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 (above the TLX File Contents window), 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 in the TLX File Contents window 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, Setup Menu List (see also “Edit an FTG Configuration (.tlx) File” on pages 13 to 15). Note, though, that while TV/STB setup menu settings can be included in the new FTG Configuration file (i.e., the settings can be copied to the Setup Menu List), the TV/STB 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 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 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, and then proceed to step 3 when you are ready to continue.

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FTG File Manager Main Screen (Cont.)

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- Create a new FTG Channel Map using the FTG Channel Map Editor in the FTG Channel Map Configuration Utility (see pages 16 to 21 for information on the FTG Channel Map Configuration Utility). Up to 600 logical channels—combined total of both RF and IP mapped 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.

Note: To remove an individual item from the FTG Configuration List or the 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 Setup Menu List contents, click the **Clear** button in the List command section of the FTG File Manager main screen (above the FTG Configuration List window).

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 the current FTG Channel Map to the FTG Configuration List, click **>>** under FTG Channel Map. This will copy the current Mapped RF Channels and Mapped IP 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 by model. In the Installer Menu Templates section of the FTG File Manager main 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. Also, the default Zone 0 will be assigned automatically to the profile, though if applicable, by model, the Zone assignment can be changed at a later time as described in the procedure steps below.
- Use the FTG Installer Menu Configuration Utility to modify settings, if necessary (see pages 22 to 30 for information on the FTG Installer Menu Configuration Utility). 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).

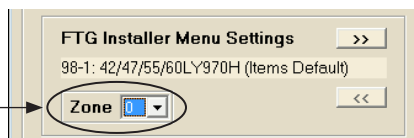
Note: The TV Zoning feature is not available on all TV/STB models. For models on which TV Zoning is not supported, the default Zone 0 is assigned and the Zone field is grayed out (inaccessible), indicating that it is not applicable. Refer to the Commercial Mode Setup Guide for the TV/STB model(s) in question for information on setting the TV Zone # in the TV(s)/STB(s). See also Reference section, “Using Zoning Features,” in this document for further information on the TV Zoning feature.

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FTG File Manager Main Screen (Cont.)

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Change the Zone assignment for the current FTG Installer Menu settings, as applicable.

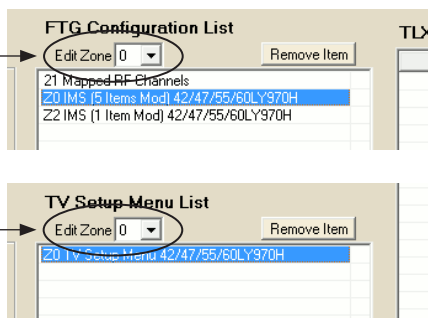


6. To add the current FTG Installer Menu settings to the FTG Configuration List, click **>>** under FTG Installer Menu Settings. This will copy the selected model's settings to the FTG Configuration List.

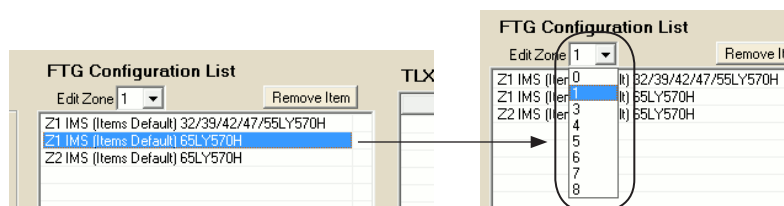
Note: If you make any change(s) in the FTG Installer Menu Configuration Utility to the current data to be included in the FTG Configuration List, you will need to recopy the FTG Installer Menu settings to the FTG Configuration List.

Note: Each FTG Installer Menu and Setup Menu profile includes a Zone assignment (Z0 [default], Z1, Z2, etc.). At the top of the FTG Configuration List and Setup Menu List windows, an Edit Zone field enables you to edit the Zone assignment for each Installer Menu and/or each Setup Menu profile, as required, for those models on which the TV Zoning feature is supported. Click on/highlight the desired profile, and then click on the down arrow at the right of the applicable Edit Zone field to select from the available Zones (0–8).

If applicable and if required, edit FTG Configuration List and/or Setup Menu List profile Zone assignments.



Note: For those models on which the TV Zoning feature is supported, although the same Zone (0–8) can be assigned to different profiles (i.e., with unique chassis IDs), each chassis ID can only be assigned up to nine different Zones (0–8), both in the FTG Configuration List and in the Setup Menu List, and the Edit Zone drop-down lists will only show Zone numbers that are as yet unassigned. For example, if an FTG Configuration List contains two 65LY570H Installer Menu profiles, one with a Zone 1 assignment and a second with a Zone 2 assignment, the Edit Zone drop-down list for the first 65LY570H profile will not include “2” as an available Zone option since a 65LY570H profile with a Zone 2 assignment is already listed. On the other hand, you can still assign either Zone “1” or “2” to a 32/39/42/47/55LY570H chassis model since it has a chassis ID (91-1) that is different from the 65LY570H (97-1).



The Edit Zone drop-down list for the selected 65LY570H profile will not include Zone “2” since a 65LY570H profile with a Zone 2 assignment is already listed.

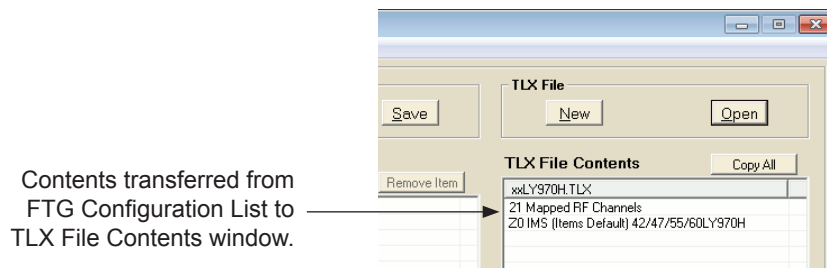
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FTG File Manager Main Screen (Cont.)

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- Repeat steps 4 to 6 as necessary to add additional Installer Menu profiles to the FTG Configuration List. Then, click the **Save** button in the List command section of the FTG File Manager main screen (above the FTG Configuration List window) to save the FTG Configuration List and, if present, Setup Menu List contents to an FTG Configuration (.tlx) 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\FTG\TLX. Note that the FTG Configuration file will have a ".tlx" extension.

In the FTG File Manager main screen, the FTG Configuration List contents will immediately be transferred to the TLX File Contents window, and the filename specified will appear in the header space just above the TLX File Contents list.



Note: To remove an individual item from the FTG Configuration List or the 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 Setup Menu List contents, click the **Clear** button in the List command section of the FTG File Manager main screen.

- If you intend to use it to configure individual TVs/STBs, save the FTG Configuration (.tlx) file to a USB memory device, and then refer to the appropriate Commercial Mode Setup Guide for information on transferring the file from the USB device to the TVs/STBs. Otherwise, use the Pro:Centric Admin Client to load the FTG Configuration file on to the Pro:Centric server and administer its distribution to the TVs/STBs (see the **Pro:Centric Server Admin Client User Guide** for further information).

Edit an FTG Configuration (.tlx) File

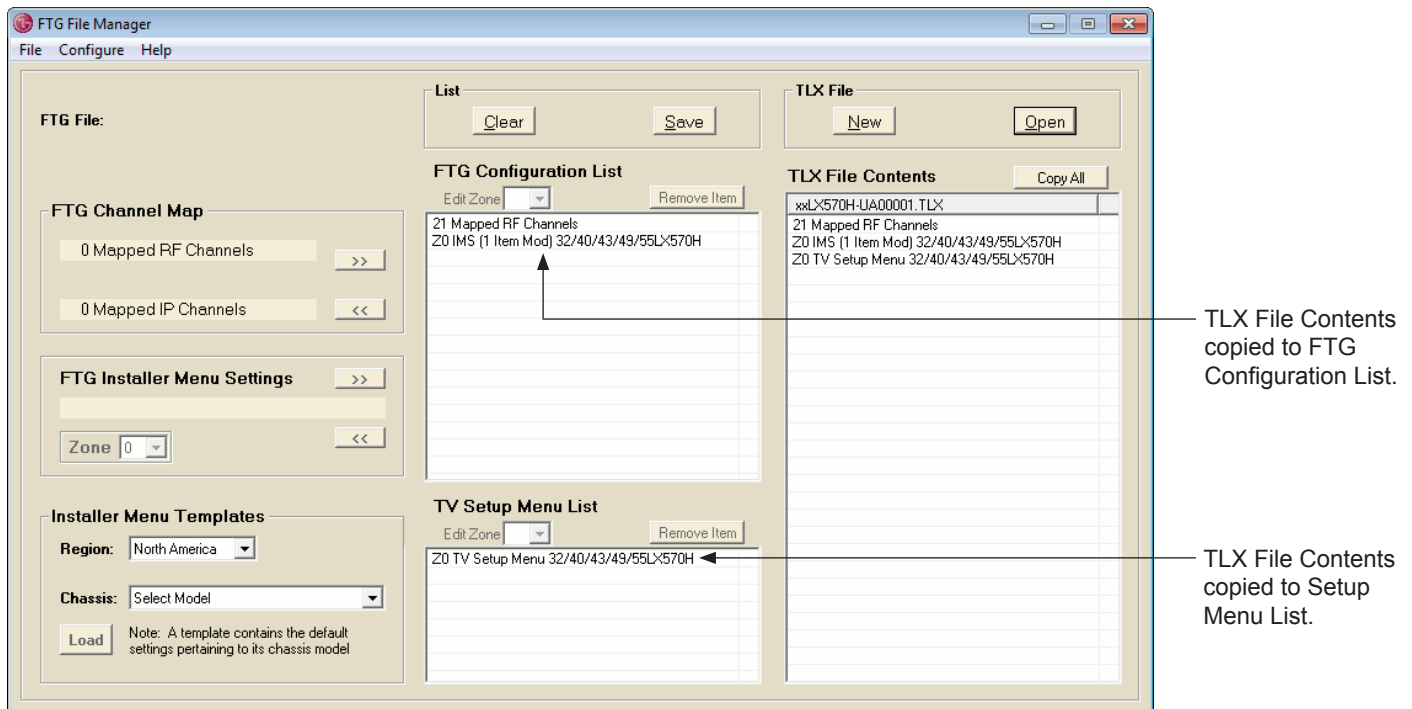
- Launch the FTG File Manager on your PC.
- Click the **Open** button in the TLX File command section of the FTG File Manager main screen (above the TLX File Contents window), and select/double-click on the desired ".tlx" file. Once the file is opened, a list of the file's contents is displayed in the TLX File Contents window, and the filename appears in the header space just above the TLX File Contents list.
- Either double-click on an individual item in the TLX File Contents window to copy it to the FTG Configuration List or, if applicable, the Setup Menu List, 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, Setup Menu List (see sample screen on following page).

Note: While TV/STB setup menu settings can be included in the FTG Configuration file (i.e., the settings can be copied to the Setup Menu List), the setup menu settings are not available for editing.

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FTG File Manager Main Screen (Cont.)

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4. There are several options at this time:

- Add items to the FTG 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 FTG Configuration List.

Note: If required and if applicable, change the Zone assignment for the current FTG Installer Menu settings by selecting a Zone (0–8) in the Zone field below the FTG Installer Menu Settings field.

- Remove items from the FTG Configuration List and/or the Setup Menu List: To remove an individual item, click on/highlight the item to be removed, and then click the **Remove Item** button directly above the FTG Configuration List or the Setup Menu List window, as applicable. To clear both the current FTG Configuration List and Setup Menu List contents, click the **Clear** button in the List command section of the FTG File Manager main screen (above the FTG Configuration List window).
- To review an item from the FTG Configuration List, either:
 - Click on/highlight the desired item (i.e., the Mapped Channels or an Installer Menu [IMS] 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.

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FTG File Manager Main Screen (Cont.)

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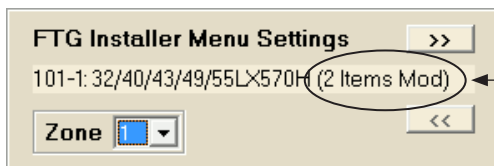
- To view FTG Channel Map details, double-click either the **Mapped RF Channels** or **Mapped IP Channels** text, as desired, on the main screen. This opens the FTG Channel Map Configuration Utility, and you can use the FTG Channel Map Editor to edit the FTG Channel Map, as necessary (see pages 16 to 21 for information on the FTG Channel Map Configuration Utility).

Note: If this FTG Configuration file was saved from a TV/STB, it is highly recommended that you verify the file contents/settings. For selected (older) TV models, you must set the “Encrypted” attribute for each encrypted channel in the FTG Channel Map to enable Pro:Idiom decryption of those channels in the TV.

- 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 FTG Installer Menu settings, as necessary (see pages 22 to 30 for information on the FTG Installer Menu Configuration Utility).
- To edit the Zone assignment (as applicable) for any of the profiles included in the FTG Configuration List and/or the Setup Menu List, click on/highlight the desired profile, and then click on the down arrow at the right of the applicable Edit Zone field to select from the available Zones (0–8).

Note: Make sure to recopy updated FTG Channel Map and/or FTG Installer Menu settings to the FTG 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 two Installer Menu items have been modified.

5. When FTG Configuration file edits are complete, click the **Save** button in the List command section of the FTG File Manager main screen (above the FTG Configuration List window) to save the FTG Configuration List and, if present, Setup Menu List contents to an FTG Configuration (.tlx) file.

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

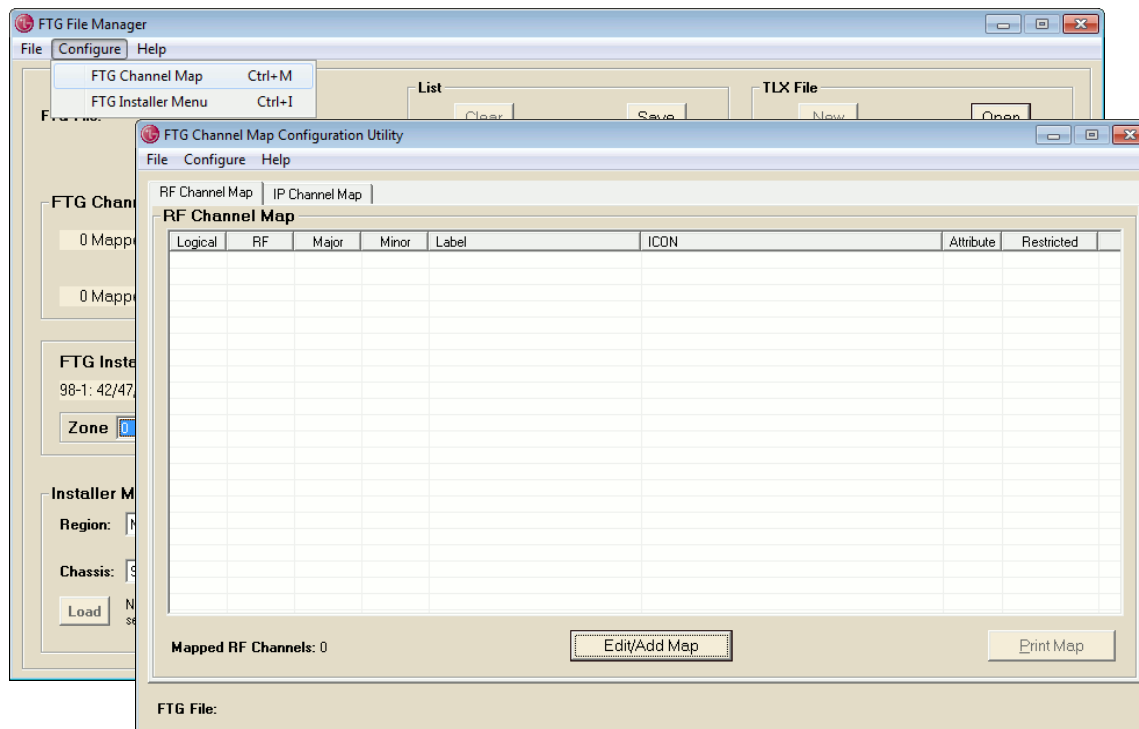
Note: The default folder path is C:\Program Files\Zenith\FTG\TLX. Always avoid using special characters, such as ?, &, @, etc., in filenames.

6. If you intend to use it to configure individual TVs/STBs, save the FTG Configuration (.tlx) file to a USB memory device, and then refer to the appropriate Commercial Mode Setup Guide for information on transferring the file from the USB device to the TVs/STBs. Otherwise, use the Pro:Centric Admin Client to load the FTG Configuration file on to the Pro:Centric server and administer its distribution to the TVs/STBs (see the **Pro:Centric Server Admin Client User Guide** for further information).

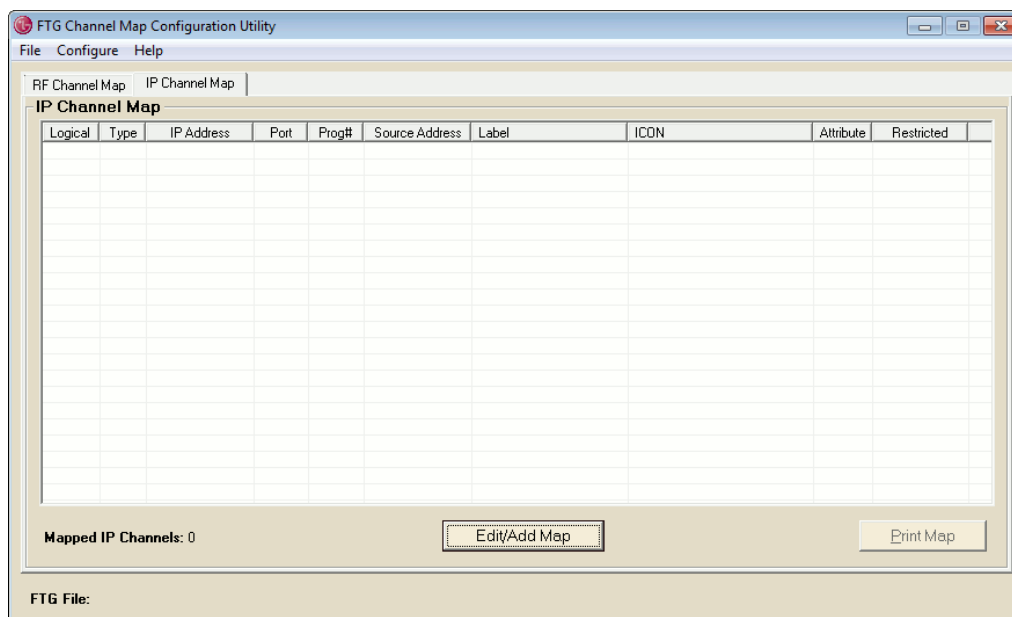
FTG Channel Map Configuration Utility

The FTG Channel Map Configuration Utility is used to configure the Channel Map for the TV/STB and enables you to assign channel numbers, attributes, and restrictions to RF or IP channels.

To access the FTG Channel Map Configuration Utility, click **Configure** and then **FTG Channel Map** from the FTG File Manager menu bar. The FTG Channel Map Configuration Utility opens initially with the “RF Channel Map” tab on display. Simply click the “IP Channel Map” tab to display the IP Channel Map.



FTG RF Channel Map Tab



FTG IP Channel Map Tab

FTG Channel Map Configuration Utility (Cont.)

The Mapped Channels field at the bottom of the screen identifies the number of mapped RF or IP channels, depending on which tab—RF or IP—is currently selected, while the FTG File field identifies the name of the open FTG Configuration (.rml) file, if applicable.

FTG Channel Map Configuration Utility Functions

FTG Channel Map Function	Description
Edit/Add Map	Opens the FTG Channel Map Editor, in which you can create or edit an FTG Channel Map. See “FTG Channel Map Editor” below for detailed information.
Print Map	Displays an FTG Channel Map Report for either the RF or IP channels, depending on which tab is currently selected. You can view and print the FTG Channel Map Report and/or export the FTG Channel Map Report as an HTML or Text file.

FTG Channel Map Editor

The FTG Channel Map 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 Pro:Idiom TV/STB to decrypt the content. Similarly, if channels with content that should be restricted from selected locations, or “Zones” (for example, a hotel lobby), are part of the channel lineup, define the channel(s), and set the Zone restriction(s) as required.

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. With either the RF Channel Map or the IP Channel Map tab on display, 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 displays and field descriptions on the following pages).

Note: The channel fields initially available in the FTG Channel Map Editor display depend on the tab selected/on display in step 1; however, once in the FTG Channel Map Editor, you may also switch between the RF Channel Map and IP Channel Map tabs.

Note: To clear an FTG Channel Map from a currently open FTG Configuration (.rml) file, click **File** and then **New** from the FTG File Manager menu bar.

2. An FTG Channel Map may include up to 600 channel entries (Logical Channels—RF and IP channels combined). Choose a Logical Channel number from 0 to 999, and then define the channel:
 - For each RF channel: Set the channel's RF Channel, Channel Major, and Channel Minor numbers. See RF channel field descriptions on following page.
 - For each IP channel: Specify the IP address, the IP type, and the IP port number of the multicast data stream carrying the video transport stream. Also, enter the program number of the program in the transport stream. See IP channel field descriptions on page 19.

(Continued on page 20)

FTG Channel Map Configuration Utility (Cont.)

The screenshot shows the 'FTG Channel Map Editor' window. It has a 'Logical Channel' list on the left (0-6). The main area is divided into 'RF Channel Map' and 'IP Channel Map' tabs. The 'RF Channel Map' tab is active, showing a table with columns: Logical, RF, Major, Minor, Label, ICON, Attribute, and Restricted. The table lists channels like WBBM-TV, WMAQ-TV, WLS-TV, WGN-TV, WTTW, FOX, WGN, KIDS, THE U, HBO-HD, ESPN-HD, ESPN2HD, TNT-HD, HDNET, and STARZHD. The bottom shows 'Mapped RF Channels: 21' and buttons for Update, Add, Delete, and Exit.

**FTG Channel Map Editor
(RF Channel Map Fields)**

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

Field	Range	Description
Logical Channel	0–999	Channels tuned by the user, defined by the system operator. By default, the Logical Channel numbers automatically increment as they are added. To disable this feature, click the Auto checkbox in the Increment field below the Logical Channel field.
RF Channel	1–137	RF channels designated at the head end.
Channel Major *	1–999	Same as RF Channel when Installer Menu item 103 ATSC Mode is set to “1” for Physical Channel number mapping (recommended).
Channel Minor	0–999	Set to “0” (zero) if the channel’s source is analog; 1–999 if the channel’s source is digital, minor number is assigned by the content provider.

* 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.)

FTG Channel Map Editor

Logical Channel: 0, 1, 2, 3, 4, 5, 6

Increment: ☒ Auto

IP Address: 1.2.3.4

IP Type: UDP

IP Port: 0

Prog #: 0

IGMPv3 Source Address: 0.0.0.0

Channel Label: 17 Character Limit: History

Channel ICON: 58 OR Lookup by Name

Description: History

Attribute: ☒ Encrypted, ☒ OSD, ☐ Blank Video

Zone Restriction: ☐ Zone 1, ☐ Zone 2, ☐ Zone 3, ☐ Zone 4, ☐ Zone 5, ☐ Zone 6, ☐ Zone 7, ☐ Zone 8

RF Channel Map | IP Channel Map

Logical	Type	IP Address	Port	Prog#	Source Address	Label	ICON	Attribute	Restricted
0	UDP	1.2.3.4	0	0	0.0.0.0	History	58 - History	E0	
1	UDP	10.20.30.40	0	1	0.0.0.0	Discovery	6 - Discovery	E0	
3	UDP	50.60.70.80	0	3	0.0.0.0	CNN	5 - CNN	E0	

Mapped IP Channels: 3

Update Add Delete Exit

FTG Channel Map Editor
(IP Channel Map Fields)

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

Field	Description
Logical Channel	Range = 0–999. Channels tuned by the user, defined by the system operator. By default, the Logical Channel numbers automatically increment as they are added. To disable this feature, click the Auto checkbox in the Increment field below the Logical Channel field.
IP Address	The IP address of the multicast data stream. Note that the IP address must be an IPv4 multicast address within the designated range of 224.0.0.0 to 239.255.255.255.
IP Type	UDP or RTP, depending on the protocol type required for the delivery system. Click the down arrow at the right of the field, and select the appropriate type from the drop-down list.
IP Port	The IP port number of the multicast data stream.
Prog #	The program number of the program in the transport stream.
Source Address	(Optional) The IP address of the IGMPv3 source, if applicable.

FTG Channel Map Configuration Utility (Cont.)

(Continued from page 17)

3. You can also enter a channel label and/or select a channel icon. The Channel Label field allows up to 17 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. Set Zone restrictions for the channel, as required, in the Zone Restriction section of the display. You can place Zone restrictions (1–8) on channels that may be prohibited or deemed unsuitable for selected locations, or “Zones,” within the installation environment, for example, a hotel lobby. Note that you can select multiple Zones from which to restrict the channel. Click the checkbox at the left of each applicable Zone to select or de-select it, as necessary. A checkmark indicates that a Zone restriction has been applied. Each Zone from which the channel is to be restricted will be identified in the Restricted column of the Channel Map.

Note: Refer to the Commercial Mode Setup Guide for the TV/STB model(s) in question for information on setting the TV Zone # on each TV/STB in a select location so that the TV /STB can omit channels that have been restricted in the FTG Channel Map. However, note that while a channel can be restricted from up to eight Zones, a TV/STB can only ever be in (set for) one Zone. See also Reference section, “Using Zoning Features,” in this document for further information on the TV Zoning feature.

7. 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.

8. Continue adding RF and/or IP channels (in their respective channel editor) to build the FTG Channel Map.

9. 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.

Note: To return to the FTG File Manager main screen, click **Configure** and then **FTG File Manager** from the FTG File Manager menu bar.

FTG Channel Map Configuration Utility (Cont.)

Edit an FTG Channel Map

1. If necessary, open the FTG Channel Map you intend to edit, for example, from an existing FTG Configuration (.tlx or .rml) file.
2. Open the FTG Channel Map Editor, and make sure the appropriate FTG Channel Map—RF Channel Map or IP Channel Map—is on display in the bottom panel of the screen. (You can select the appropriate tab in the FTG Channel Map Configuration Utility screen or in the FTG Channel Map Editor.)
3. 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.

4. 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.
5. 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.

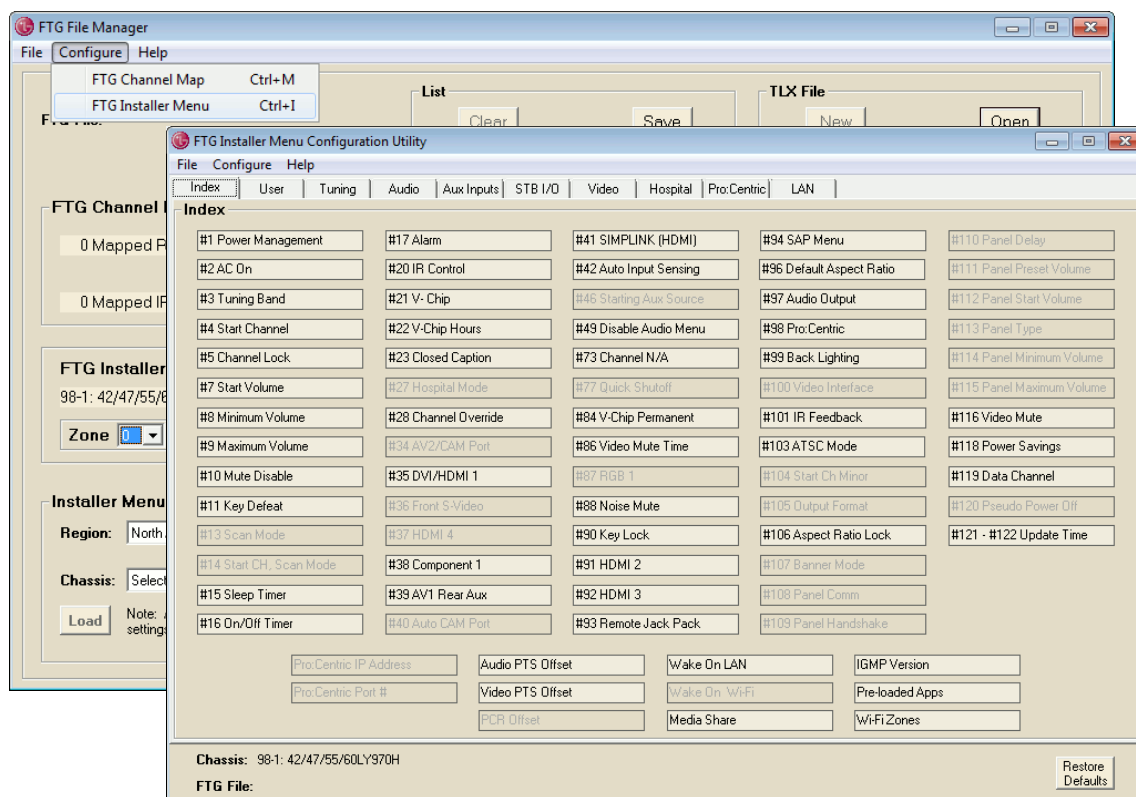
Note: To return to the FTG File Manager main screen, click **Configure** and then **FTG File Manager** from the FTG File Manager menu bar.

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 File Manager 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 (.rml) file, if applicable.

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



FTG Installer Menu Configuration Utility Index Tab

Use the FTG Installer Menu Configuration Utility to change available Installer Menu settings (see “Edit FTG Installer Menu Settings” on the following page). Note that a generic Installer Menu cannot be created using the FTG Installer Menu Configuration Utility; an Installer Menu must first be loaded, based on a TV/STB model (chassis ID), from the FTG File Manager main screen (e.g., default settings) or from an existing FTG Configuration (.rml or .tlx) file. This ensures that only the Installer Menu items pertaining to a particular TV/STB model are available for editing.

Installer Menu items that are not changeable are shown in gray and cannot be accessed—see sample screen above. If Installer Menu settings have not been loaded from the FTG File Manager main screen or if an open FTG Configuration (.rml or .tlx) file does not contain Installer Menu settings, all Installer Menu items will be grayed out.

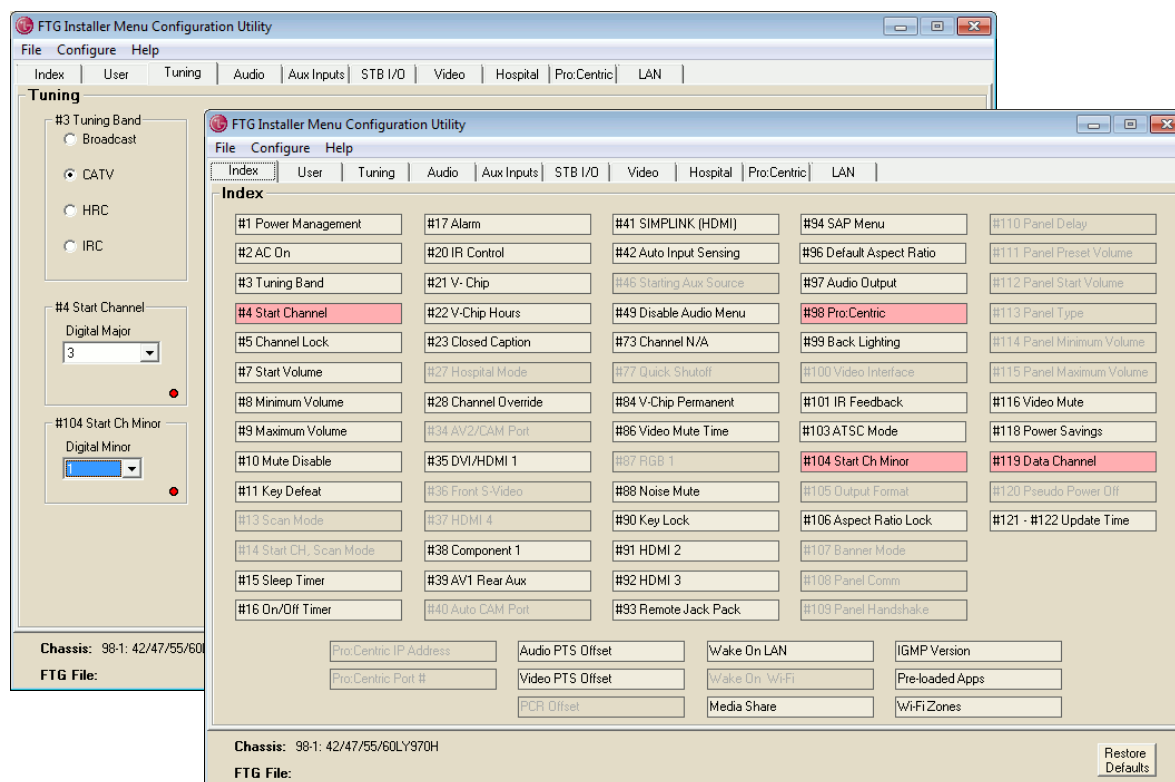
FTG Installer Menu Configuration Utility (Cont.)

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. 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.
2. 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.

Refer to the Commercial Mode Setup Guide for the TV/STB model(s) in question for detailed information on Installer Menu items. However, for information on start channel settings and requirements in the FTG Installer Menu Configuration Utility, refer to “Start Channel Configuration” on the following page. Also, refer to “Pro:Centric Setup” and “LAN Setup” on pages 25 to 30 for information, respectively, on Pro:Centric and LAN settings and requirements in the FTG Installer Menu Configuration Utility.



Note: The diagnostic feature referenced in step 2 is an FTG Installer Menu Configuration Utility default. However, there is an option in the FTG File Manager 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: If you wish to restore the currently active FTG Installer Menu items to their default values, you can click the **Restore Defaults** button at the bottom right of the FTG Installer Menu Configuration Utility.

FTG Installer Menu Configuration Utility (Cont.)

Start Channel Configuration

The default setting for the Start Channel is “Last Channel,” i.e., the last channel tuned before the TV/STB was turned OFF will be the channel tuned when the TV/STB is turned ON again. This section describes configuration requirements if you wish to specify an Aux input or RF analog, RF digital, or IP channel as the Start Channel.

1. Click on the #4 Start Channel item in the Index tab to open the Tuning tab, or simply click the Tuning tab (see sample screen below).
2. Click on the down arrow at the right of the Start Channel field to display the drop-down list of Start Channel options, and set the Start Channel as follows:
 - To select an Aux input as the Start Channel, click **Aux Input**. Then, select the appropriate Starting Aux Source (item #46) option.
 - To select an IP channel as the Start Channel, click **IP Channel**. Then, complete the Start IP Channel fields in the Tuning tab (refer to FTG Channel Map Editor IP channel field descriptions on page 19 for information on IP parameters). Note that “IP Channel” is only available as a Start Channel option for TVs/STBs that support IP connectivity.
 - To select an RF analog channel as the Start Channel (Major), click the appropriate channel number (see note below). Ensure that the Start Channel Minor (item #104) is set to “0” (zero).
 - To select an RF digital channel as the Start Channel (Major), click the appropriate channel number (see note below). Then, select the appropriate value (1–999) for the Start Channel Minor (item #104).

Note: If ATSC Mode (item #103) is set to “1” for Physical Channel number mapping (recommended), the RF Start Channel may be any number from 1 to 135. If the ATSC Mode is set to “0” for Virtual Channel number mapping, the RF Start Channel may be any number from 1 to 999.

FTG Installer Menu Configuration Utility

File Configure Help

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

Tuning

#3 Tuning Band
☐ Broadcast
☒ CATV
☐ HRC
☐ IRC

#5 Channel Lock
☒ Disabled
☐ Enabled

#28 Channel Override
☐ Disabled
☒ Enabled

#103 ATSC Mode
☐ Virtual
☒ Physical

#73 Channel N/A
☒ Disabled
☐ Enabled

#4 Start Channel
Last Channel

#104 Start Ch Minor
0

Start IP Channel

IP Address
0 0 0 0

IP Type
UDP

Port Addr
0

Prog #
1

IGMPv3
Source Address
0 0 0 0

#46 Starting Aux Source
☐ Video 1
☐ HDMI 1
☐ HDMI 2
☐ Component 1
☐ HDMI 3
☐ Last Aux

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

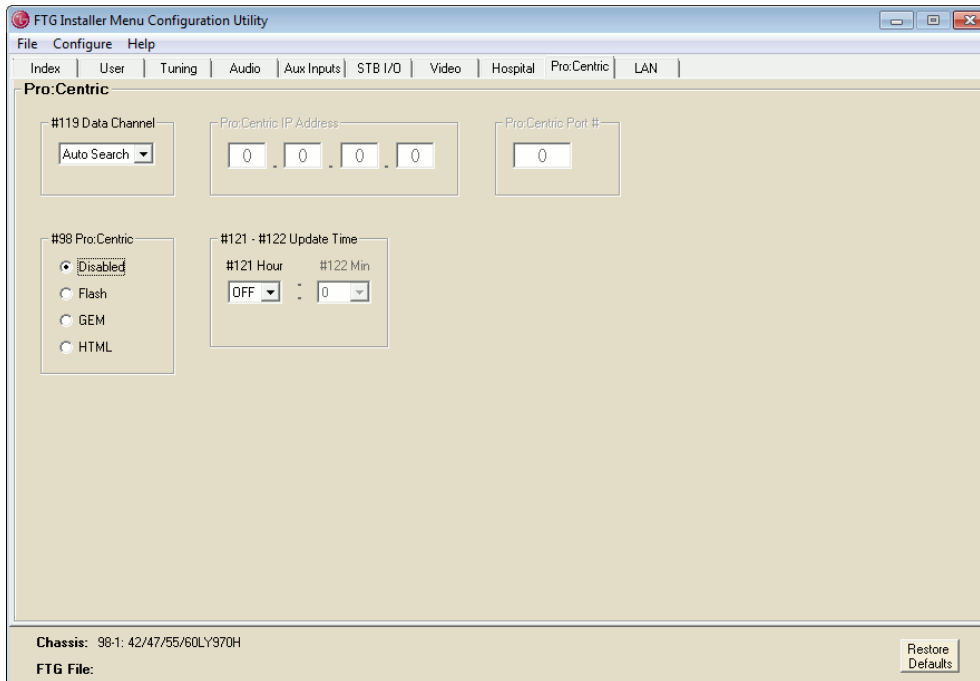
Restore Defaults

FTG Installer Menu Configuration Utility Tuning Tab

FTG Installer Menu Configuration Utility (Cont.)

Pro:Centric Setup

The Pro:Centric tab in the FTG Installer Menu Configuration Utility enables you to configure Pro:Centric server settings in the TV/STB. This section provides basic information on the settings. Refer to the Commercial Mode Setup Guide for the appropriate TV/STB model(s) for additional information on the Installer Menu items.



**FTG Installer Menu
Configuration Utility
Pro:Centric Tab**

As with all FTG Installer Menu Configuration Utility tabs, items that are initially grayed out/inaccessible in the Pro:Centric tab are either dependent upon other item settings in the tab or not applicable for the TV/STB model that is currently active in the utility. For example, the Pro:Centric IP Address and Pro:Centric Port # items are inaccessible unless the Data Channel is set to "IP Address." At the same time, "IP Address" is available as a Data Channel value only for TVs/STBs that support IP connectivity.

Data Channel Auto Search Feature

On Pro:Centric TVs/STBs, the Data Channel must be set appropriately to enable Pro:Centric remote management/administration facilities. The latest Pro:Centric TVs/STBs support the RF Data Channel Auto Search feature, which allows the TV/STB to initiate a search of 10 predefined channels (10, 20, 30, ... 100) and then, if necessary, a complete search of the RF channels (1 to 135), once every 24 hours 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, Installer Menu item 119 DATA CHANNEL in the TV/STB will be changed to match the server's RF channel number.

For TVs/STBs in Pass-through Mode or FTG Mode via CPU that support this feature, if item #119 Data Channel is left at its default value (Auto Search), the TV's/STB's Data Channel Auto Search feature will be enabled. The time at which the Auto Search is initiated depends on the setting of items #121 and #122, as well as the TV/STB clock. Refer to the Commercial Mode Setup Guide for the TV/STB model(s) in question for additional information.

FTG Installer Menu Configuration Utility (Cont.)

Configure Pro:Centric Settings

1. Click on the Down arrow at the right of the item #119 Data Channel field, and select the appropriate option from the Data Channel drop-down list:
 - To enable the Data Channel Auto Search feature, select **Auto Search**. See also “Data Channel Auto Search Feature” information above. Note that “Auto Search” is only available as a Data Channel value for Pro:Centric TVs that support this functionality.
 - To disable the Pro:Centric feature of the TV/STB, select **Disabled**. No further settings in this tab are required when the Pro:Centric feature is disabled.
 - If using RF delivery of Pro:Centric and/or E-Z Installation data, set the Data Channel from 1 to 135 to match the RF channel number that will be used by the Pro:Centric server as its data channel. *
 - If using IP delivery of Pro:Centric and/or E-Z Installation data, select **IP Address**. Then, enter the Pro:Centric IP address and port number, respectively, in the now accessible Pro:Centric IP Address and Pro:Centric Port # item fields. The Pro:Centric IP address must be an IPv4 multicast address within the designated range of 224.0.0.0 to 239.255.255.255. Note that “IP Address” is only available as a Data Channel value for TVs/STBs that support IP connectivity.

Note: (IP Configuration only) If you attempt to enter a value in the IP Address or Port # fields that is out of the allowed range of values, the application will display an invalid entry notice. Also, the port number (0–65535) must match exactly the port number that has been set in the Pro:Centric “RF/IP Configuration” display in the Pro:Centric Admin Client (refer to the *Pro:Centric Server Admin Client User Guide* for further information).

Note: If “Disabled,” the Data Channel will display as “0” in the Installer Menu on the TV/STB. When “Auto Search” is selected in the Pro:Centric tab, the Data Channel will display as “255” in the Installer Menu on the TV/STB (until the Data Channel is determined). When “IP Address” is selected in the Pro:Centric tab, the Data Channel will display as “253” in the Installer Menu on the TV/STB.

2. Set the item #98 Pro:Centric value as required by clicking on the radio button at the left of the appropriate option.
3. As required, select the appropriate values for items #121 Hour and #122 Minute. Note that item #121 is based on a 24-hour clock.

Note for TVs only: The labeling of items #121 and #122 in the Pro:Centric tab depends on the TV model currently being configured and its supported functionality. P:C RF Wake for Update enables TVs with Wake On RF functionality to receive updates from a Pro:Centric server over the RF distribution system at a specified time while the TV is turned OFF. Similarly, Update Time enables TVs with Wake For Update functionality to receive updates from a Pro:Centric server over the RF or IP distribution system (depending on Data Channel setting) at a specified time while the TV is turned OFF. Refer to the Commercial Mode Setup Guide for the TV for additional information.

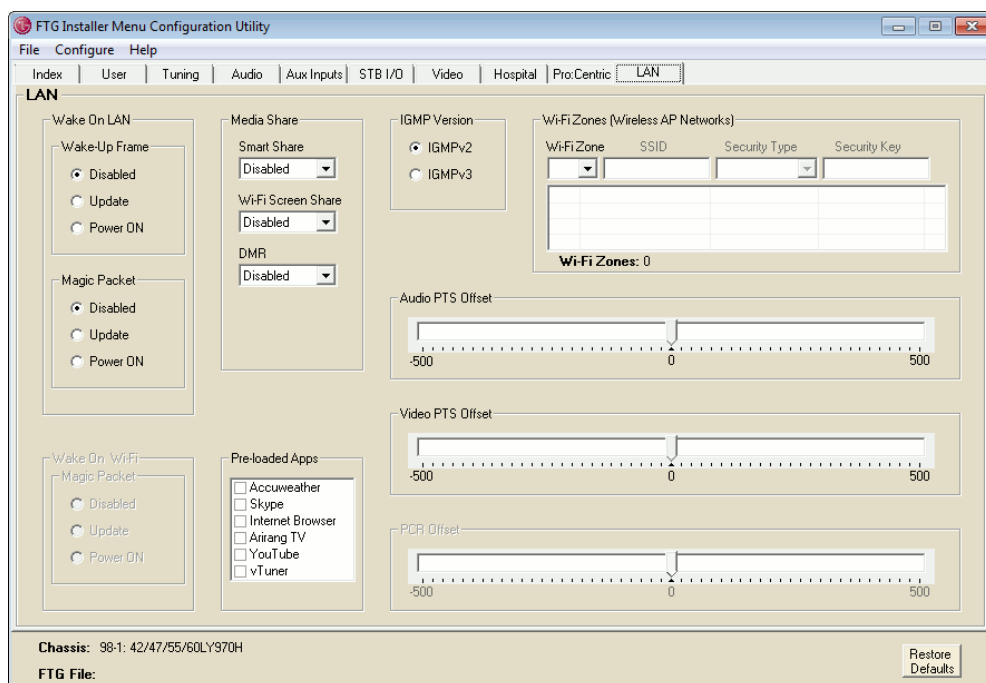
LAN Setup

The LAN tab (see sample screen on following page) in the FTG Installer Menu Configuration Utility enables you to set up the network features of TVs/STBs that support IP connectivity. Each of these features is described in the subsections that follow.

Note: Features that are not supported for a currently selected TV/STB model will be grayed out/inaccessible in the LAN tab.

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

FTG Installer Menu Configuration Utility (Cont.)



FTG Installer Menu Configuration Utility LAN Tab

Wake On LAN

The Wake On LAN feature enables the TV(s)/STB(s) to receive software updates and/or be powered ON upon receipt of Wake Up Frame packets and/or Magic Packet data via the wired LAN. By default, Wake On LAN is disabled.

Note: To facilitate use of this feature, the appropriate wired connection must be made to the TV/STB.

- To enable software updates upon receipt of Wake Up Frame packets and/or Magic Packet data, click the radio button at the left of the “Update” option in the Wake On LAN/Wake-Up Frame and/or Wake On LAN/Magic Packet section(s) of the LAN tab.
- To enable the TV/STB to power ON upon receipt of Wake Up Frame packets and/or Magic Packet data, click the radio button at the left of the “Power ON” option in the Wake On LAN/Wake-Up Frame and/or Wake On LAN/Magic Packet section(s) of the LAN tab.

Wake On Wi-Fi

The Wake On Wi-Fi feature enables the TV(s)/STB(s) to receive software updates and/or be powered ON upon receipt of Magic Packet data via a wireless network connection (Wi-Fi access point). By default, Wake On Wi-Fi is disabled.

Note: This feature is currently only available with LP870H TVs. To facilitate use of this feature, a wireless network connection should be configured in the Wi-Fi Zones section of the LAN tab—see also “Wi-Fi Zones” on pages 29 to 30). The appropriate TV Zone # and Wi-Fi Zone # also must be set in the TV so that the TV is configured with the proper access point login information.

- To enable software updates upon receipt of Magic Packet data, click the radio button at the left of the “Update” option in the Wake On Wi-Fi/Magic Packet section of the LAN tab.
- To enable the TV/STB to power ON upon receipt of Magic Packet data, click the radio button at the left of the “Power ON” option in the Wake On Wi-Fi/Magic Packet section of the LAN tab.

FTG Installer Menu Configuration Utility (Cont.)

Media Share

In the Media Share section of the LAN tab, you can enable selected Media Share features on the TV(s)/STB(s).

Note: Some TV/STB models support additional Media Share features, such as SoftAP and DIAL (Discovery and Launch), that must be enabled or disabled on location via the TV/STB's IP Environment Menu BEFORE the TV/STB is configured for FTG Mode. Refer to the applicable Commercial Mode Setup Guide for further information on Media Share features and the IP Environment / Media Share Menu.

- The LG Smart Share feature allows guests to use the TV/STB to access and view data shared either by wired DLNA Certified® devices connected to the same LAN as the TV/STB or by wireless LG devices using LG's Smart Share application with Wi-Fi Direct®.
- Wi-Fi Screen Share enables screen sharing with a Miracast® or Wireless Display (WiDi) capable device (e.g., a laptop with Intel® hardware).
- DMR enables the TV/STB to act as a Digital Media Renderer (DMR) device to receive content from DLNA Certified devices on the same network.
- (webOS models only) Bluetooth Sound Sync allows guests to listen to audio from a Bluetooth-enabled mobile device through the TV's/display panel's speakers. See also note regarding Bluetooth Sound Sync below.

To enable or disable a feature, click on the down arrow at the right of the appropriate field, and select **Enabled** or **Disabled**, as appropriate, from the drop-down menu list.

Note: Bluetooth Sound Sync is enabled by default on all webOS 3.5 and later models and so will not appear in the Media Share section of the FTG File Manager (or in the Media Share Menu on the TV/STB).

Note: For webOS 2.0 and later models, Screen Share MUST be enabled in addition to Smart Share in order for guests to use Wi-Fi Direct. Refer to the applicable Commercial Mode Setup Guide for further information and/or simply enable both features.


Pre-loaded Applications

For selected TV/STB models (see note regarding webOS 3.0 and later models below), in the Pre-loaded Apps section of the LAN tab, you can choose which of the pre-loaded application icons to make available on the TV(s)/STB(s), either in the Application Launch bar or the Smart Launcher, depending on the TV/STB model. When the Pro:Centric application is disabled, the Application Launch bar/Smart Launcher is available to end users via the PORTAL button on the remote control and appears along the bottom of the display screen.

Each available application for the selected TV/STB model is listed in the Pre-loaded Apps section. Click the checkbox at the left of any option you wish to select or de-select, as necessary. A checkmark indicates that an application is selected.

Note: On webOS 3.0 and later models, pre-loaded application settings are not editable via the FTG File Manager. For these models, pre-loaded applications must be selected on location via the TV/STB's IP Environment Menu BEFORE the TV/STB is configured for FTG Mode. If the TV/STB has already been configured for FTG Mode and you would like to add or remove applications in the future, you will need to import a new ".tlx" file with the appropriate model profile. That is, you will need to use a Master TV/STB to create and export a ".tlx" file with the desired pre-loaded application selections (along with any other applicable Installer Menu settings), which can be transferred (imported) to this TV/STB. Refer to the applicable Commercial Mode Setup Guide for further information on pre-loaded applications and the IP Environment / Pre-loaded Apps Menu.

FTG Installer Menu Configuration Utility (Cont.)

Note: Depending on the remote control being used with webOS models, the Smart Launcher may also be available to end users via a SMART or  button on the remote control. In addition, though not included in the list, Screen Share, Bluetooth Sound Sync, and SoftAP (as Wi-Fi Service) applications are available in the Smart Launcher once they are enabled (as applicable) in the Media Share section of the LAN tab (see “Media Share” above, including note regarding Bluetooth Sound Sync).

IGMP Version

Note: Modifications to IGMP version settings should be performed by qualified personnel only.

Select the IGMP version by clicking the radio button at the left of the appropriate option in the IGMP Version section of the LAN tab—IGMPv2 (default) or IGMPv3.

Offset Modifications

Note: Modifications to offset settings should be performed by qualified personnel only.

If necessary, due to an audio and/or video stream delay over the IP distribution network, the Offset options at the bottom right of the LAN tab enable you to compensate for synchronization irregularities by allowing audio PTS, video PTS, and (for selected models) PCR offset modifications. Note that any offset modifications should be performed by qualified personnel only.

Select the appropriate offset value in each field. Offset values are represented in 10 ms intervals to 500 ms or -500 ms.

Wi-Fi Zones

The Wi-Fi Zones section at the top right of the LAN tab provides a listing of all defined Wi-Fi access points. The Wi-Fi Zones numeric field below the Wi-Fi Zones list indicates the number of Wi-Fi Zones that have been defined; up to 100 Wi-Fi Zones (1–100) can be added for each FTG Installer Menu profile. When the Wi-Fi Zones list exceeds four entries, the list becomes scrollable.

See Reference section, “Using Zoning Features,” for further information on the Wi-Fi Zoning feature functionality. Note that you must set the TV Zone # appropriately and also set the Wi-Fi Zone # in each TV/STB. That is, to configure a TV/STB with a particular access point’s login information, the TV/STB must be configured with the proper FTG Installer Menu profile, along with the proper Wi-Fi Zone data.

At the same time, note that Wi-Fi Zone 100 represents a “global Wi-Fi Zone,” which, if defined, enables TVs/STBs with the default Wi-Fi Zone # assignment (0) to obtain access point settings from the Installer Menu profile with which it is configured. Similarly, any TV/STB that does not find its matching Wi-Fi Zone # in the FTG Configuration (.tlx) file, but that does find the global Wi-Fi Zone 100, will be configured with the global access point login data.

Define a Wi-Fi Zone

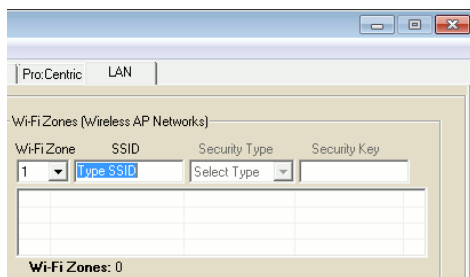
The following procedure describes how to add a Wi-Fi Zone to an FTG Installer Menu profile.

1. Select the Wi-Fi Zone # to be added. Click the down arrow at the right of the Wi-Fi Zone field, and select the desired Wi-Fi Zone # from the Wi-Fi Zone drop-down list.
2. Enter the SSID of the access point. Once you select the Wi-Fi Zone #, the SSID field becomes accessible, and you can type the appropriate SSID directly into the SSID field.

(Continued on next page)

FTG Installer Menu Configuration Utility (Cont.)

(Continued from previous page)



3. Select the type of security set in the access point. Click the down arrow at the right of the Security Type field, and select the appropriate security option—None, WEP, WPA-PSK (AES), WPA-PSK (TKIP), WPA2-PSK (AES), WPA2-PSK (TKIP), or WPA Auto Detect.
4. If you selected “None” in the Security Type field (see previous step), the new Wi-Fi Zone parameters will be displayed immediately in the Wi-Fi Zones list below the data entry fields. Otherwise, type the security key or password for the access point in the Security Key field. As you complete the Security Key field, the new Wi-Fi Zone parameters will be displayed in the Wi-Fi Zones list.

Edit a Wi-Fi Zone

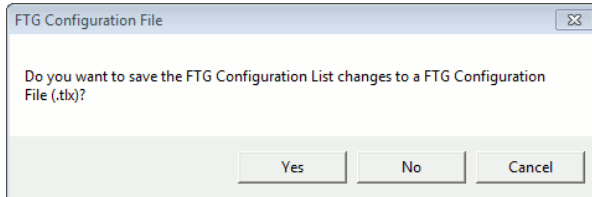
To edit an existing Wi-Fi Zone definition, click on/highlight the desired entry in the Wi-Fi Zones list, or select the Wi-Fi Zone # to edit in the Wi-Fi Zone field drop-down list. The selected Wi-Fi Zone’s parameters will be displayed in their respective fields, and you can then make any changes as necessary. To delete an entry, simply click on/highlight it and press the **Delete** key on the PC keyboard.

Exit the FTG File Manager / Display the FTG File Manager Version

Exit the FTG File Manager

1. Click **File** and then **Exit** from the FTG File Manager menu bar.

If you have saved your updates to an FTG Configuration (.tlx) file, the FTG File Manager will close immediately. Otherwise, the application will prompt for confirmation, for example:



2. Either:

- Click **Yes** to save your changes to an FTG Configuration (.tlx) file. In the Save As window, name the file, and click **Save**. The FTG File Manager will close immediately after you save the file.
 - Click **No** to exit without saving your changes.
 - Click **Cancel** to return to the FTG File Manager.
-

Display the FTG File Manager Version

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

Example: FTG File Manager “About” Screen



System Requirements / Operation

System Requirements

FTG File Manager Requirements

- PC running Windows XP operating system or later
- Minimum of 16 MB of RAM
- Minimum of 64 MB free HDD space for FTG File Manager Installation (Setup.exe) file
- Minimum of 6 MB for FTG File Manager (FTG Manager.exe) file and support files
- Additional space required for FTG Configuration file storage
- 800 x 600 SVGA display

TV Requirements

- LG Pro:Idiom capable TV/STB that supports the “.tlx” file format for configuration of FTG Mode via CPU
-

System Operation

When an LG 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 configuration 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 RF 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.
- For IP channels, you will need to specify the IP settings of their source(s). Check with your content provider for information on the source(s) of the IP content settings.

This section describes how to use the TV Zoning and Wi-Fi Zoning features, when supported, for FTG Mode via CPU configuration.

Note for TVs only: All TVs that can be configured using the FTG File Manager allow Zone restrictions to be placed on channels in the FTG Channel Map. However, additional Zoning features are not supported on all TV models. For (older) models on which TV Zoning is not supported, the default Zone 0 is assigned to each Installer Menu and Setup Menu profile and the applicable fields in the FTG File Manager are grayed out (inaccessible).

Note: For TV/STB models on which Wi-Fi Zoning is not supported, the Wi-Fi Zones section in the LAN tab will be grayed out.

Note: While Zoning features are primarily intended for use when the TV/STB is configured for FTG Mode via CPU operation, Wi-Fi Zoning, along with selected elements of TV Zoning (Installer Menu and Setup Menu profile Zone assignments), when supported, may also be used with TV/STB cloning processes using a USB memory device / “.tlx” file. Refer to the appropriate Commercial Mode Setup Guide for further information.

TV Zoning Feature

The TV Zoning feature enables you to create localized configurations for TVs/STBs in selected locations, or “Zones,” within the installation environment, for example, a hotel lobby, a fitness center, etc. The FTG File Manager may be used to create an FTG Configuration (.tlx) file that contains multiple Installer Menu and Setup Menu profiles, each with its own Zone assignment. When supported, up to nine unique Zones can be designated for both the FTG Installer Menu and Setup Menu profiles for a single chassis model or chassis ID. On all TVs/STBs, 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 Setup Menu profile to specifically configure a TV/STB in the hotel lobby and also restrict the channels that are available to be tuned on that TV/STB. The following subsections describe each facet of the TV Zoning feature.

FTG Installer Menu Profile Zone Assignments

For those chassis models on which this feature is supported, default FTG Installer Menu profiles are assigned the default Zone 0. The FTG File Manager main screen enables you to change the Zone assignment for each Installer Menu profile to be included in an FTG Configuration (.tlx) file. For example, you may wish to create one FTG Installer Menu profile for a TV in the hotel lobby (Zone x) and another FTG Installer Menu profile for a TV in the fitness center (Zone y), both of which are different from the FTG Installer Menu profile used for TVs in standard guest rooms (Zone z). The TV Zoning feature enables you to save multiple FTG Installer Menu profiles for the same chassis model or chassis ID, each with its own Zone assignment, in one FTG Configuration file. If each TV in the aforementioned Zones has had its TV Zone # set appropriately (see appropriate Commercial Mode Setup Guide), the TV(s) will only be configured by the Installer Menu and/or Setup Menu profile that matches its(their) Zone setting.

Refer to “FTG File Manager Main Screen” information on pages 8 to 15, in particular, the procedure for creating an FTG Configuration (.tlx) file, for further details on assigning Zones to FTG Installer Menu profiles. In the FTG File Manager main screen, you can also edit the Zone assignment for each Installer Menu profile and/or Setup Menu profile already present, respectively, in the FTG Configuration List and Setup Menu List windows.

Note: An opened FTG Configuration (.tlx) file may contain TV/STB setup menu settings if the file was initially saved from a TV/STB. Setup Menu profiles cannot be created in the FTG File Manager.

Reference: Using Zoning Features (Cont.)

FTG Channel Map Zone Restrictions

The FTG Channel Map Editor in the FTG Channel Map Configuration Utility enables you to place Zone restrictions on individual channels that may be prohibited or deemed unsuitable for certain 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.

Refer to “FTG Channel Map Editor” on pages 17 to 21 for further information on placing Zone restrictions on channels.

Note: While a channel can be restricted from up to eight Zones, a TV/STB can only ever be in (set for) one Zone.

Setting the TV Zone # in the TV/STB

The TV Zone # must be set appropriately on each TV/STB in order for the TVs/STBs to be configured correctly. Refer to the Commercial Mode Setup Guide for the TV/STB model(s) in question, and set the TV Zone # in all applicable TVs/STBs, so that the TVs/STBs are configured with corresponding FTG Installer Menu and/or 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 #.

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 FTG Installer Menu and/or Setup Menu settings. For example, an FTG Configuration (.tlx) file being used to configure the TVs at a site may contain multiple FTG Installer Menu and 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 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 its matching Installer Menu and/or Setup Menu profiles with a Zone 1 designation. If none of the Installer Menu and/or Setup Menu profile(s) for its chassis model or chassis ID has a Zone 1 designation, the TV will then look for matching profile(s) with a Zone 0 designation. See also example below. 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.

Example:

The following table illustrates the distribution of Installer Menu settings on 32/39/42/47/55LY570H TVs (Chassis ID 91-1) depending on the TV Zone # and the Zone assignments of the Installer Menu profiles included in the FTG Configuration file.

TV Zone #	Installer Menu Profile Zone Assignment in FTG Configuration File			
	0	1	3	5
Zone 0	X			
Zone 1		X		
Zone 2	X			
Zone 3			X	

X = Installer Menu settings received

Wi-Fi Zoning Feature

The Wi-Fi Zoning feature enables you to use a “.tlx” file to configure an individual TV/STB or a group of TVs/STBs with a particular Wi-Fi access point's login data to create “Wi-Fi Zones” within the installation environment.

The FTG File Manager may be used to create an FTG Configuration (.tlx) file with an FTG Installer Menu profile that contains login data for multiple Wi-Fi access points, each assigned a Wi-Fi Zone #. Up to 100 Wi-Fi Zones can be designated within each FTG Installer Menu profile, thus allowing for distribution of the Wi-Fi network load. For example, if a site has 50 identical model TVs within close proximity, you may wish to designate 10 different Wi-Fi Zones, each with its own access point that has unique login data, so that no more than five of the TVs are connected to one access point at any given time.

Wi-Fi Zone Assignments

Each Wi-Fi access point's login data must be defined in the Wi-Fi Zones section of the LAN tab in the FTG Installation Menu Configuration Utility. Refer to “Wi-Fi Zones” on pages 29 to 30 for information on defining Wi-Fi Zone parameters.

Setting the Wi-Fi Zone in the TV/STB

In order for a TV/STB to be configured by the proper FTG Installer Menu profile with the desired Wi-Fi access point login data for wireless networking (i.e., SSID, security type, and security key), on location, you must set both the TV Zone # and the Wi-Fi Zone # in the TV/STB. If the Wi-Fi Zone # in the TV/STB is set to 0 (default), the TV/STB will not obtain access point login data from the Installer Menu profile with which it is configured unless the profile contains the global Wi-Fi Zone 100. Similarly, any TV/STB that does not find its matching Wi-Fi Zone # in the “.tlx” file, but that does find the global Wi-Fi Zone 100, will be configured with the global access point login data.

For example, if the FTG Installer Menu profile in which Wi-Fi Zones are defined has been assigned Zone 3, the TV Zone # must be set to 3 (on location) in order for the TV/STB to be configured by the proper profile. At the same time, the Wi-Fi Zone # in the TV/STB must be set to match the Wi-Fi Zone assignment for the access point login data you wish the TV/STB to use to connect to the wireless network. Thus, if you want the TV/STB to connect to a particular Wi-Fi access point that has had its login data assigned Wi-Fi Zone 2 (as part of the Installer Menu profile that has been assigned Zone 3), you must set the TV Zone # to 3 and the Wi-Fi Zone # to 2 in the TV/STB. On the other hand, if Wi-Fi Zone 100 has been defined within the Zone 3 Installer Menu profile, you may leave the TV's/STB's Wi-Fi Zone # set to 0, and the TV/STB will be configured with the global access point login data.

Refer to the Commercial Mode Setup Guide for the TV/STB model(s) in question, and set the TV Zone # and the Wi-Fi Zone # in all applicable TVs/STBs.

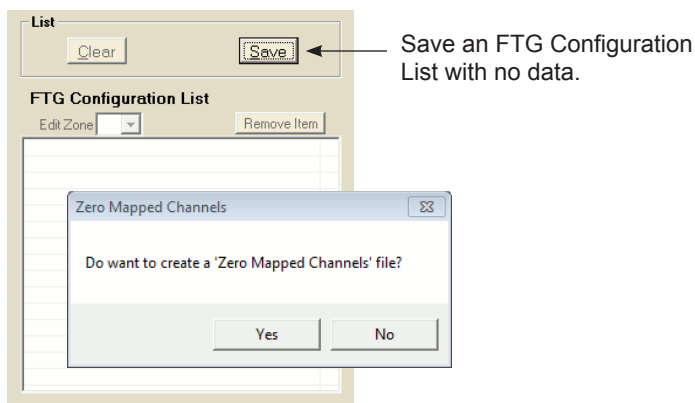
Reference: Restoring TVs/STBs to Pass-through Mode

This section describes how to use the FTG File Manager to restore Pass-through Mode/Installer Menu factory defaults on TVs/STBs that are in FTG Mode via CPU. 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 a USB Memory Device

Use a USB memory device to transfer an FTG Configuration (.tlx) file that only contains a “Zero Mapped Channels” FTG Channel Map to the TV/STB. The following procedure provides an overview of the steps to create the FTG Configuration file with the “Zero Mapped Channels” FTG Channel Map. See “Create an FTG Configuration (.tlx) File” on pages 10 to 13 for further information.

1. Make sure the FTG Configuration List is cleared. Then, click the **Save** button in the List command section of the FTG File Manager main screen (above the FTG Configuration List window).
2. Click **Yes** in the Zero Mapped Channels confirmation window to continue.



3. 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\FTG\TLX.
4. Save the FTG Configuration (.tlx) file to a USB memory device, and then refer to the appropriate Commercial Mode Setup Guide for information on transferring the FTG Configuration file from the USB device to the TV/STB.

Restore Multiple TVs/STBs using a Pro:Centric Server

If your system uses a Pro:Centric server for remote management, use the Pro:Centric Admin Client to load an FTG Configuration (.tlx) file that only contains a “Zero Mapped Channels” FTG Channel Map on the Pro:Centric server and administer its distribution to the TVs/STBs. See the procedure above for information on creating the FTG Configuration file with the “Zero Mapped Channels” FTG Channel Map. Refer to the ***Pro:Centric Server Admin Client User Guide*** for further information on the Admin Client.

Document Revision History

Date	Description
January 2012	Revision A: New document
April 2012	Revision B: "Zero Mapped Channels" file information added
November 2013	Revision C: Updates for FTG File Manager v1.1.2 and later
October 2014	Revision D: Updates for FTG File Manager v1.2.0 and later
June 2015	Revision E: Updates for FTG File Manager v1.2.5 and later
September 2015	Revision F: Updates for FTG File Manager v1.3.1 and later
June 2017	Revision G: Updates for FTG File Manager v1.3.9 and later

FTG File Manager documentation is available online at: www.lg.com/us/business/display-solutions/ftg.

Notes



For Customer Support/Service, please call:

1-888-865-3026

www.lg.com/us/business

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