SOFTWARE CONFIGURATOR REFERENCE

Version 5.4

Contents

Part 1:
Common Applications

Common Resource Library

The Common Resource Library (CRL) is an invaluable tool for the dealer setting up a **g!** system. The library is downloaded to your PC from the ELAN dealer website which allows you to bring just about everything contained on the ELAN site with you, without the need for an internet connection.

The Common Resources Library contains:

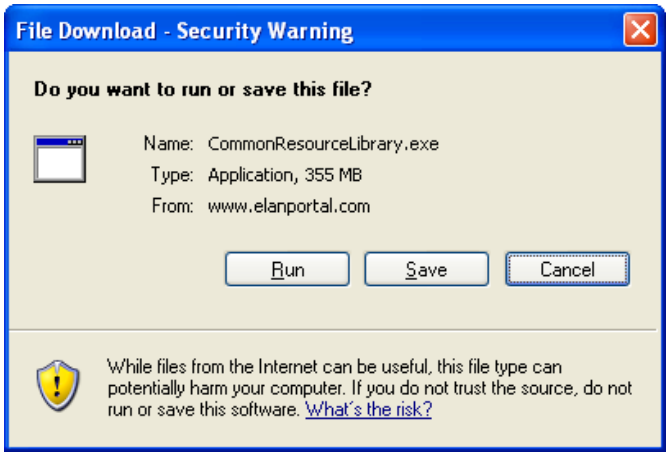
- Manuals, Integration Notes and other documentation
- IR and Serial Codes
- TV Channel icons
- Firmware for ELAN equipment

The library is used not only as a resource tool, but as the storage area for icons and codes used in the **g!** Configurator. When you import IR codes, serial codes and TV Channel icons into the **g!** Configurator, the software will check to see if the Common Resource Library is installed on your computer, and if so, will automatically take you to the correct directory where the type of file you need is stored.

Installation

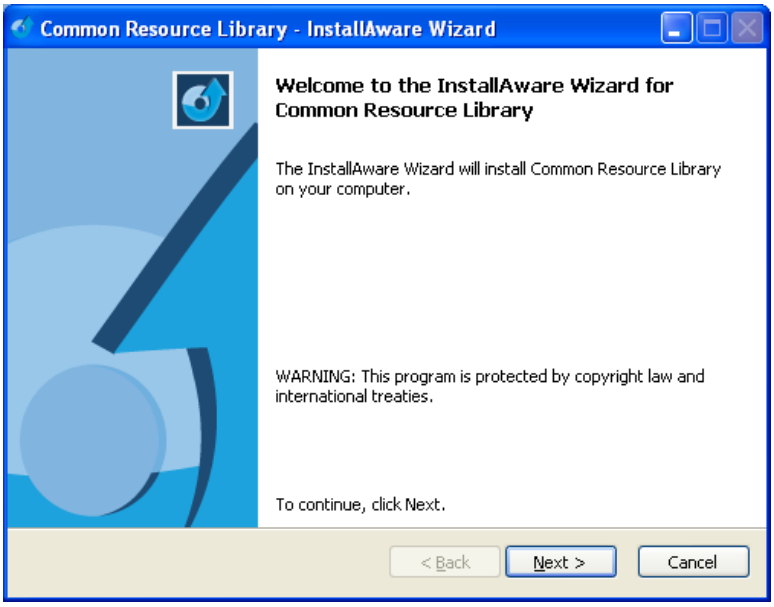
To install the Common Resource Library:

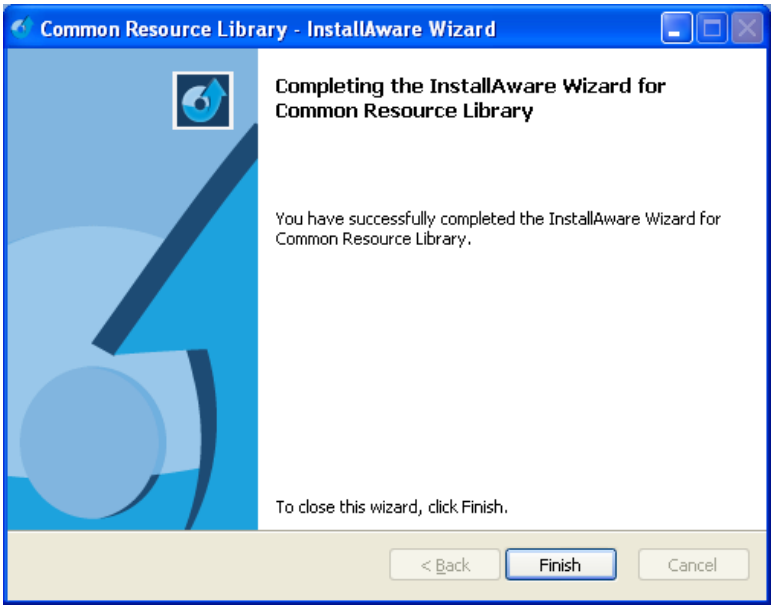
1. Navigate to the Support Downloads page on the ELAN Dealer website.
2. Locate the Common Resource Library section on the far right of the page and click DOWNLOAD.
3. A File Download Security window opens. Click **Run**.



Note: This will install the application, but not the content. Once you open the Common Resource Library, you will "Update" each library to retrieve the content.

4. When the installation file is done downloading, the Installation Wizard opens.
   - Click **Next>** to proceed through the installation windows
   - Provide information as needed.
   - Click **Finish** when the installation is complete.





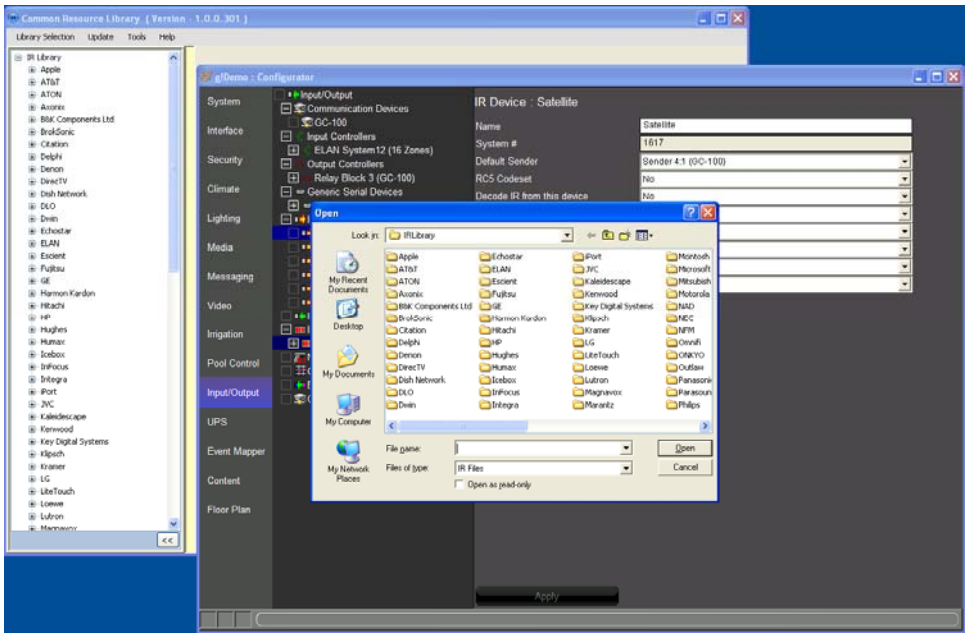
Using the Common Resource Library

Click the icon on your computer's desktop to open the Common Resource Library (CRL). The CRL is a two pane window that contains a navigation tree on the left and the content display on the right. *The window initially opens with Document library displayed.*

You can also open the CRL from the programs list on your computer. Navigate to Start> All Programs> Common Resource Library.

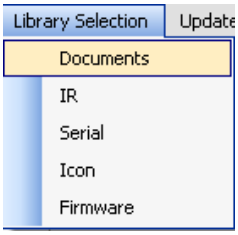
Use this window to read documents, and also to manage the IR, serial and icon files that will be accessed by the Configurator during system setup. By managing the files with the Common Resource Library, you can be confident that the files accessed by Configurator are up to date.

The Common Resource Library is utilized by Configurator even when the Library is not open on your desktop. For example, when setting up an IR device, you may want to import an IRF file for that device. When you select **Import From File…** for the IR display, Configurator will automatically browse to the Common Resource Library IR folder for you to make your selection.

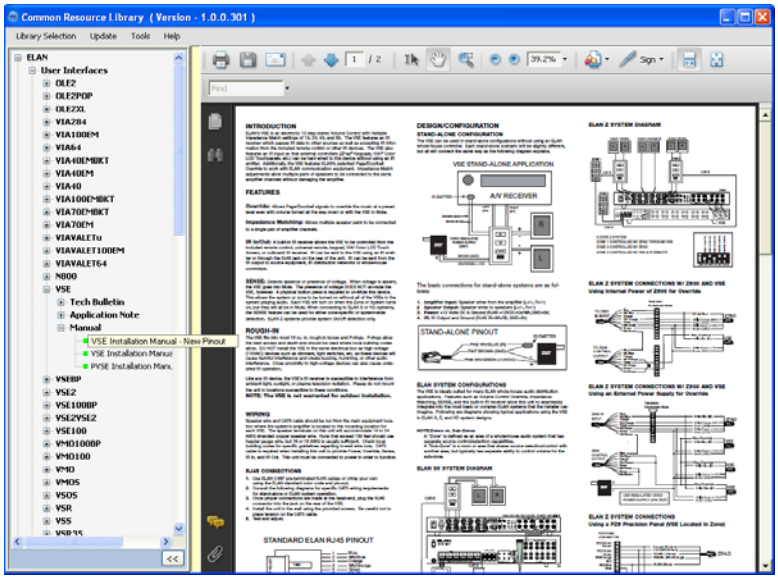


Library Selection

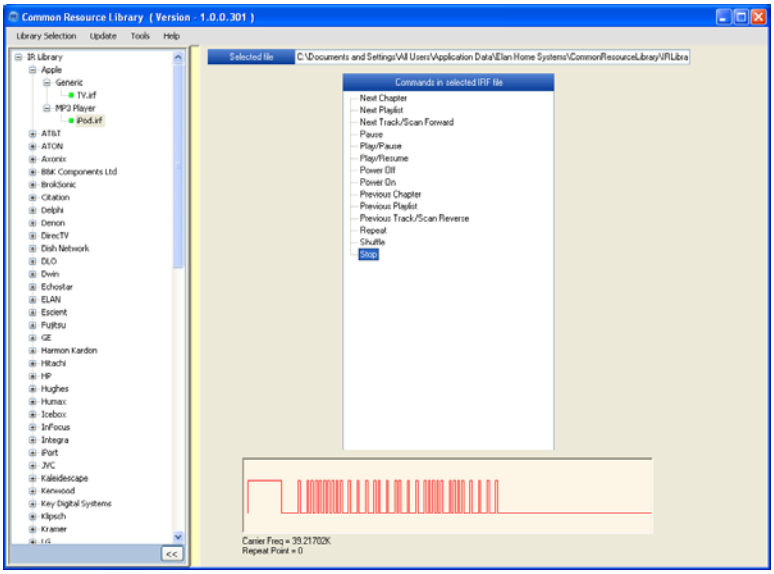
Use **Library Selection** menu at the top of the window to control the content being displayed. The options are as follows:



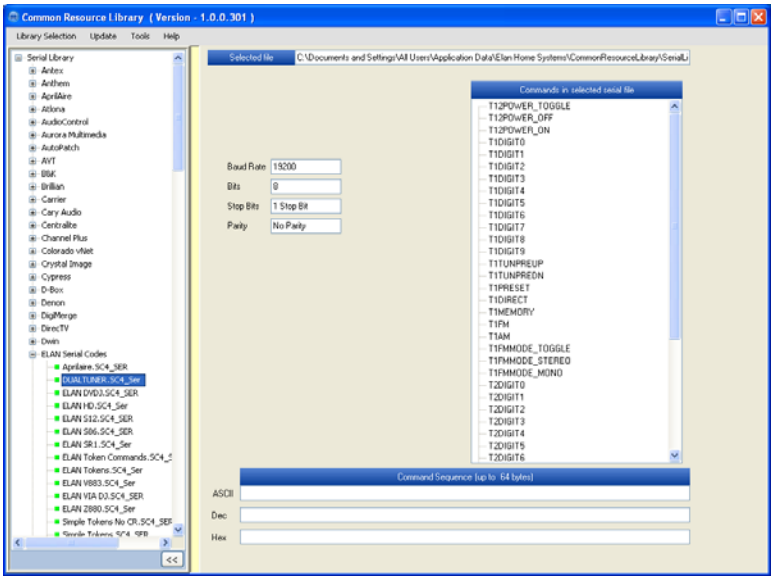
Documents: Integration Notes, Technical Notes, Manuals, etc. for each product



IR: IRF files for several manufacturers with which ELAN integrates. Use these for media setup. Click the file name to preview the list of commands in that file.

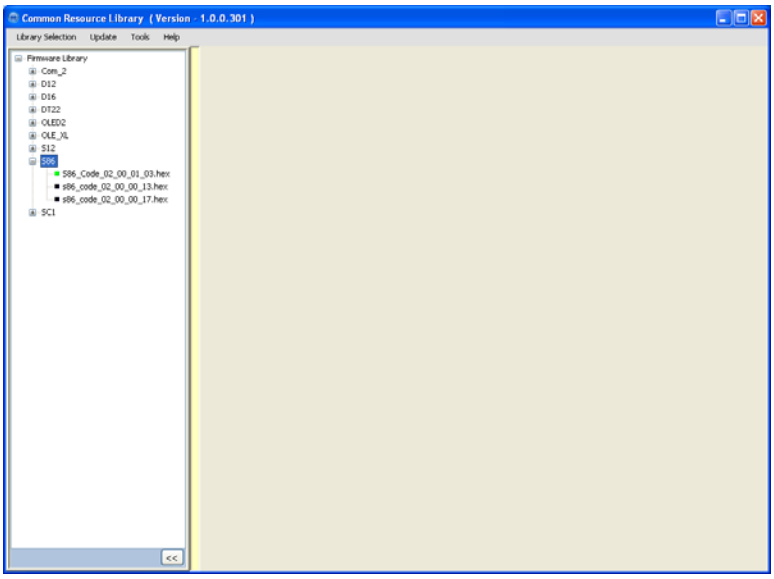


Serial: Serial files (SC4, HSR, MCR, etc.) for several manufacturers with which ELAN integrates. Use these for media setup. Click the file name to preview the list of commands in that file.

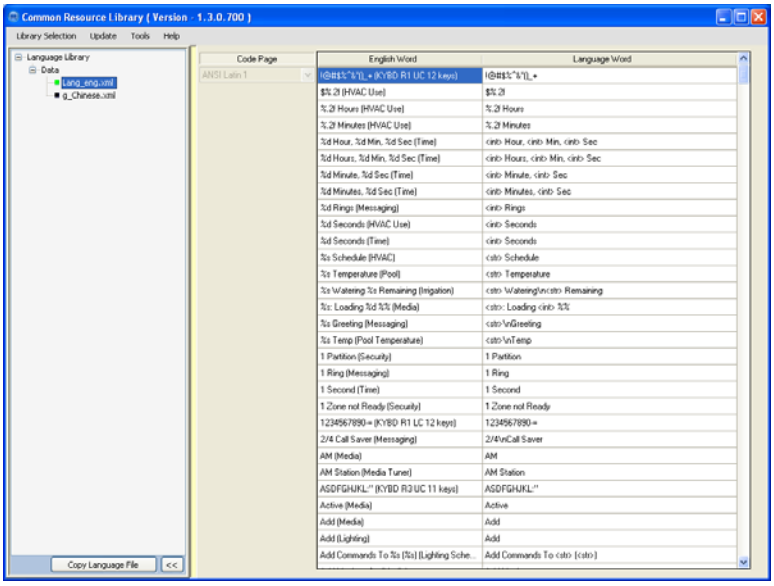


Icons: TV and radio channel icons used in media setup. The icons are sorted by country. For US TV, national networks are sorted alphabetically, and local networks are by state. Click the folder name to see a preview of the icons in that folder.

Firmware: Updates to the firmware needed for proper integration with certain devices. There is no preview available for firmware files.



Language: XML-based language files to change the language used in the Viewer. See Lesson 2, **Configurator Overview** in the ***g!*** *Configurator Training Guide* for more information.



Color Coding

The Common Resource Library uses a color-coded system to indicate the status of the file in your computer's repository. The indicators are as follows:

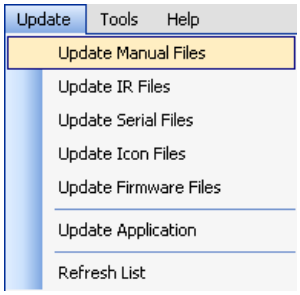
Green	File is up to date
Red	File is missing from this computer.
Yellow	There is a more recent version of the file available from ELAN.
Black	This file was created locally and is not maintained by ELAN. Updating the Common Resources library will not cause any changes to these files.

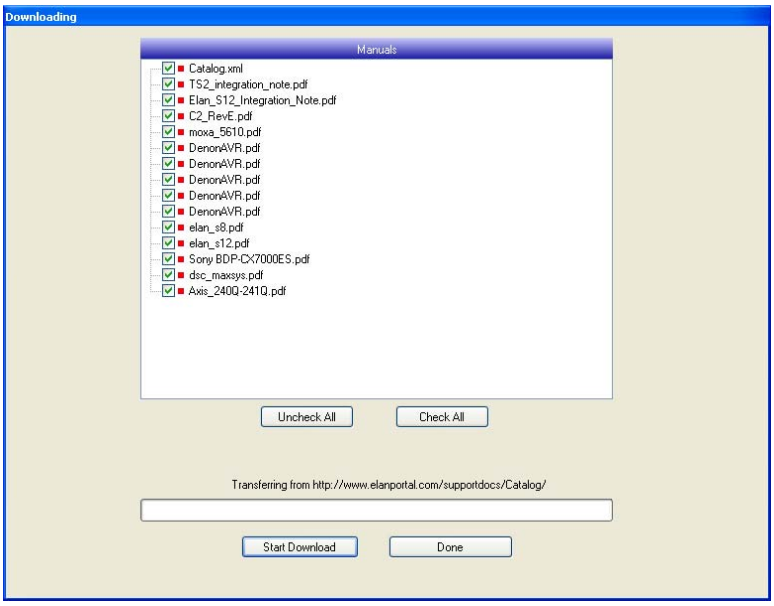
Updating the Common Resource Library

ELAN recommends that you run an update periodically to ensure that the files in your Common Resource Library are the most up-to-date.

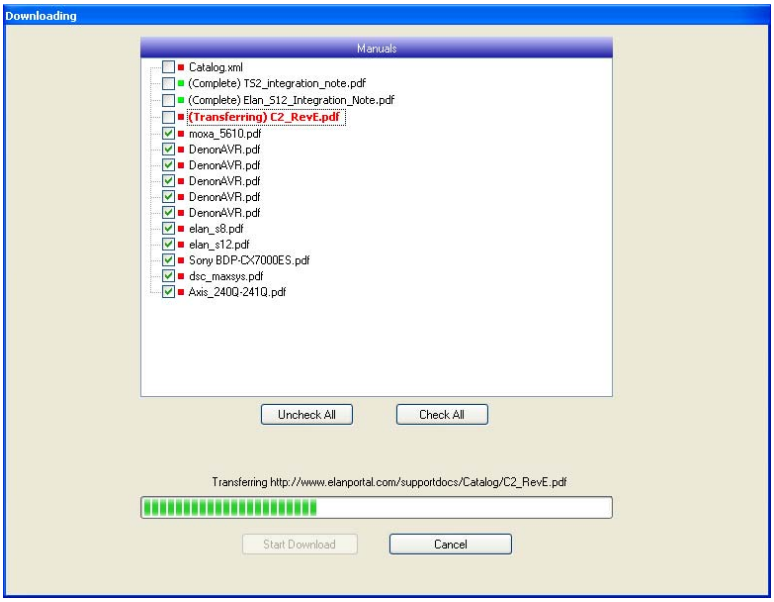
To update files in the CRL:

1. From the Updates menu, select the type of files you want to update (manuals, IR, Serial, Icons Firmware, and Language). *A window opens displaying the list of files that are out of date.*





2. Select (check) the files from the list that you want to update.
3. Click **Start Download**. The files download from ELAN. *As each file downloads, the display updates.*



4. Click **Done** when the download is complete to close this window.

System Tab

The System tab includes overall system settings, software version, date and time, user configuration, and system modes.

For more information about working with the System tab see Lesson 2, **Configurator Overview** in the ***g!*** *Configurator Training Guide.*

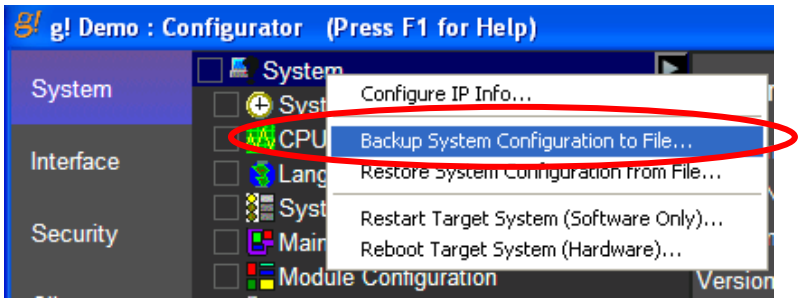
This section provides additional information on working with the System tab.

Backing up the System

Backup files can be created either on-site or remotely; but on-site is recommended. Remote backups take significantly longer, and are more likely to be interrupted due to connection problems. Keep in mind that performing any backup operation essentially shuts down the system so that it can copy files that might otherwise be in use. This might interrupt customer use of the system.

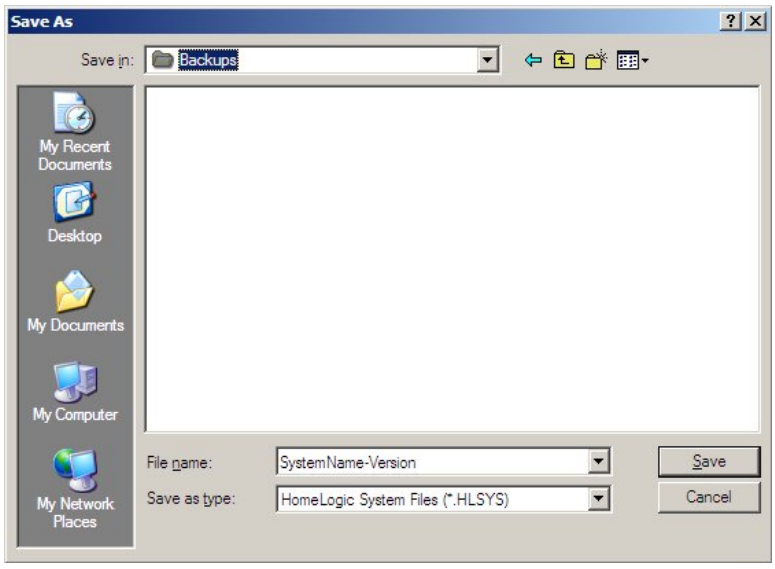
Note: The **g!** software provides for the backup of many individual components. Right-click items in the Configurator to access the Import/Export function. This can be used on components such as Custom Tabs, Display Settings, TV Channel Favorites and IR Devices and is useful for copying and backing up the settings of devices or settings you use frequently.

1. In Configurator, navigate to the System tab, then right-click **System** at the top of the system tree. *A selection menu appears*.



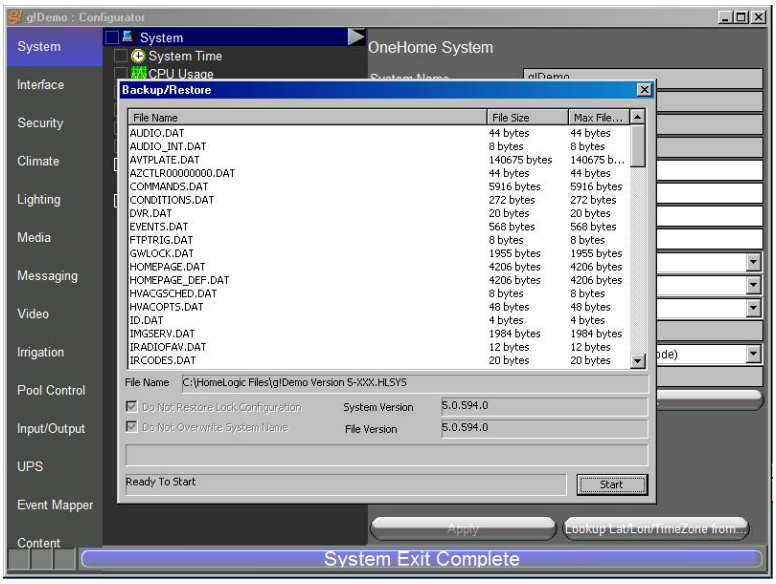
Quick Reference	
Configure IP Info	View/edit the current IP Settings of the ELAN Controller. *Note: clicking OK in the IP Settings dialog ALWAYS results in a hardware reboot. If you make no changes remember to click Cancel.*
Backup System Configuration to File	Create a **System Configuration** backup. Creates a backup file containing all data relevant to system configuration. This type of backup file can be used to restore into the original system or another system; which is important in the unlikely event of controller failure. This type of backup will not alter the version of software on the ELAN Controller and is intended to be used on the same version software. **Note:** This backup will not ill include pictures or music added to network share folders.
Restore System Configuration to File	Restore a previously created System Configuration or Full System backup to the ELAN Controller
Restart Target System (Software Only)	Restart the **g!** software on an ELAN Controller.
Restart Target System (Hardware)	Perform a full hardware reboot of the ELAN Controller.

2. Select **Backup System Configuration to File…** *You will be prompted to choose a save location and file name.*



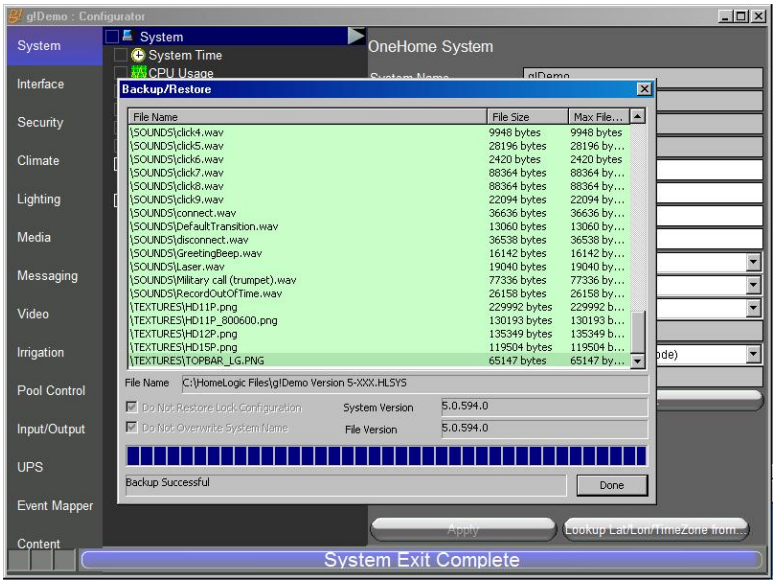
Notes about Backup Files:
The backup file name should be descriptive, and should include the system name and version.
ELAN recommends that you create a new file for each backup, rather than continuously overwriting the same file.

3. Navigate to a directory for the backup, enter a name for the backup file, and click **Save**. *The system will now open a Backup/Restore window and should quickly populate the list of files to backup. A red bar will also draw across the bottom of the Configurator window indicating System Exit progress.*



4. When the data gathering process is complete and files have fully populated the Backup/Restore window (usually a few seconds), click **Start**.

5. Wait a moment while the backup completes. *During backup, you will see the files color as they are completed and blue progress bar will draw along the bottom indicating the progress of each file. When file backup is complete, verify that the status line on the bottom indicates* ***Backup Successful****.*



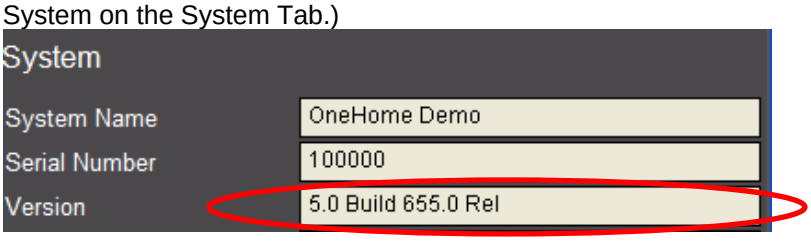
6. Click **Done** to exit the *backup* dialog.

Updating the Software on Your Controller

You will need to occasionally update the software on your ELAN controller to take advantage of new features. After downloading a new **g!** software executable, you can update systems on-site or remotely; though updating on-site is recommended.

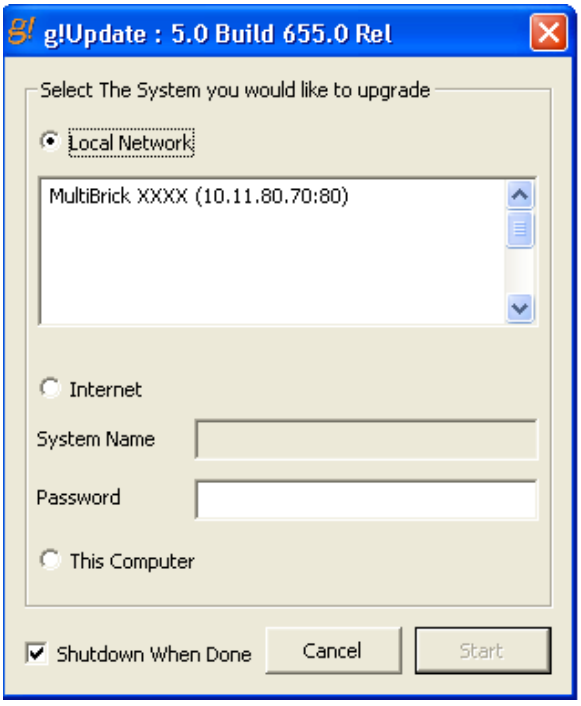
Note: Although updating should not impact your system configuration, it is always a good idea to create a new backup prior to making large system changes like a software upgrade.

1. Check the version of software currently on your ELAN Controller (check the Configurator within System on the System Tab.)



2. Close the Configurator and the Viewer.
3. Download an appropriate **g!** software upgrade executable from ELAN's dealer website.
4. Run the executable. After extracting for a moment, the System Update dialog opens.

Note to Vista and Windows 7 Users: Remember to run **g!** Demo and **g!** Connect as Administrator.



- If you are on the same network as the ELAN Controller, select the correct system name from the Local Network list, enter a password below (if necessary), and click the **Start** button.

- If you wish to perform a remote update, select **Internet** and enter the System Name, and password (if necessary).

Note: If you are running **g!Demo**, the update installer detects the software running on the local machine and will automatically begin updating, so this screen will only appear briefly before the update process begins.

5. Click **OK** to continue. The update process might remind you to perform a backup.

   While the update process is running, you will see a list of file actions. The process will complete automatically, and the updater window will close when finished. Following the software update, your controller will restart.

Note: If you are running **g!Demo**, you will need to shut down the monitor and gateway windows and restart them from the **g!Demo** icon on the desktop.

6. Once your system has restarted, login into Configurator and verify that the update was successful by checking the software version in the System properties window.

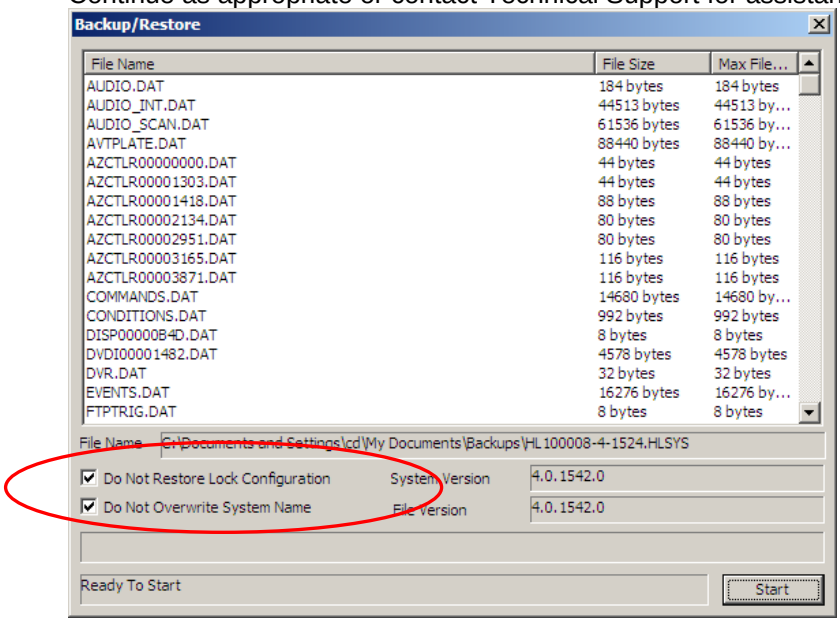
Performing a System Restore

System Restore is used to restore previously generated backup files into a **g!** Software system. The restore function can be used to restore system configuration backups.

Note: System configuration backups can be “restored” on a system to populate the system with a file from another system.

To perform a System Restore:

1. On the System tab, right-click **System** at the top of the tree.
2. Select **Restore System Configuration From File**.
3. Browse to the backup file (extension: .HLSYS) and click **Open**.
4. The Backup/Restore window opens, displaying a list of files and current file information. As this window opens, warning dialogs will display if there is a System Name or File Version Mismatch. Continue as appropriate or contact Technical Support for assistance.



Important Notes:

1) Verify that the **Do Not Restore Lock Configuration** and **Do Not Overwrite System Name** check boxes are selected.

******Failure to check these boxes will erase the installed Apps and overwrite the System Name and could render the system unusable!******

5. Click **Start.** The files will process in the reverse order that they were backed up. Once complete, the system will automatically restart.

System Modes

System Modes are the different states that the **g!** Software can be set to; for example, “Home” when the homeowner is present, and “Away” for when the house is empty. System Modes are primarily used to set up schedules for lighting and climate control, but can also be configured through the Event Mapper to add additional functions; allowing the homeowner one-touch control for several sub-systems.

Although most installations use the default number of two modes, up to ten can be configured through the System tab.

Adding and Editing System Modes

To Add System Modes:

1. In Configurator, navigate to the System> System Modes.
2. Select the desired number of system modes from the **Number of Modes** drop-down list.
3. Type the name for each mode in the text box next to the **Mode #**.

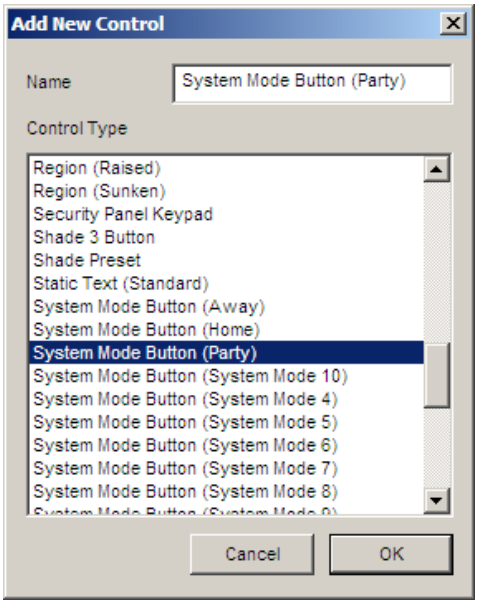
Note: You can edit the Mode Name in this text box at anytime.

4. Click **Apply**.

Note: Adding additional System Modes on this screen will not automatically create new mode buttons in the Viewer. You must manually add a new button for each new system mode using the **Interface** tab, **Home Pages** options in the Configurator.

Using System Modes

- To use System Modes, add or edit Home Pages, Interfaces, or Custom pages and add the **System Mode Button** control for the appropriate system mode.
- To Event Map off of System Modes, use the Event Trigger: **General System>System Notifications>*System Mode***

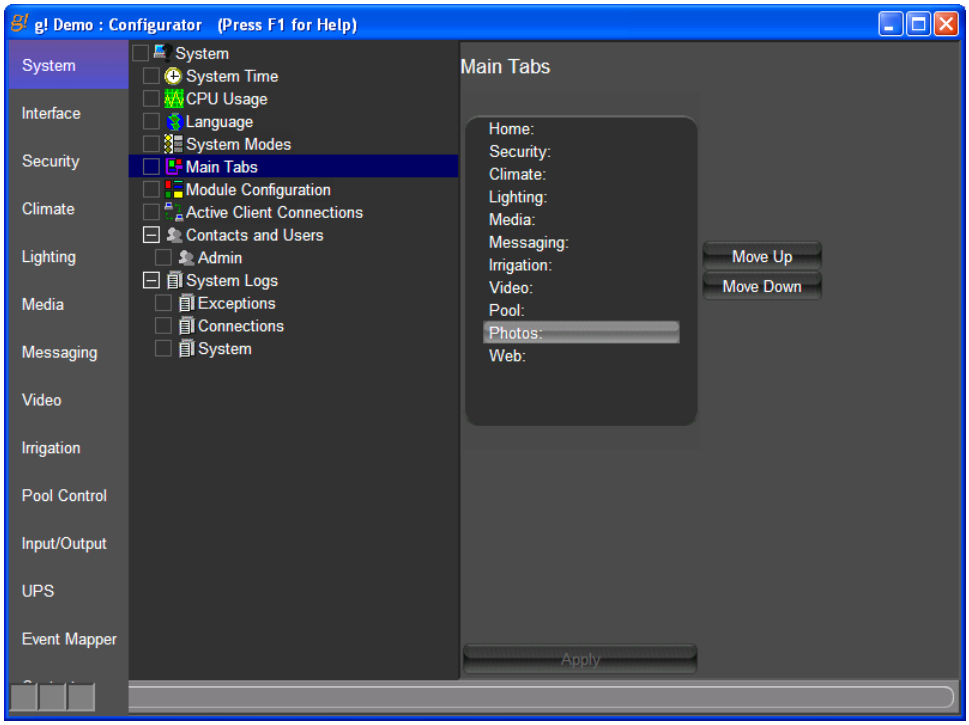


Main Tabs

"Main Tabs" are the icons that represent an app on the main menu page of the Viewer interface. You can change the order of the icons, and change the text that appears above each icon.

Working with Main Tabs:

1. In Configurator, navigate to **System>Main Tabs** to display the Main Tabs properties.



2. Click a tab in the Tab list to select it, then:
   - Use the **Move Up** or **Move Down** buttons to change the tab's positioning in the Viewer main menu page.

Note: The Home tab will always be the first tab on the list. It cannot be moved.

3. Click **Apply**.

Communication Settings

Communication Devices

The Communication Device is the bridge between the **g!** software and a device, and is where you will specify how the systems are physically connected and what communication protocol should be used.

When adding a communication device in an actual system, choose the appropriate **type** that represents how the communication connection is made from the controller to the device. Depending upon the type selected, you may need to select additional information about the device.

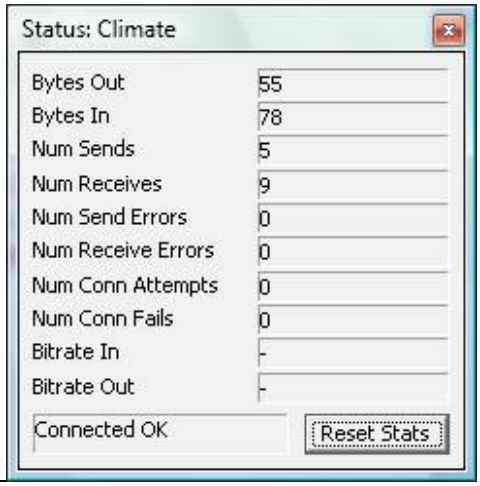
- (IP to Serial) Global Cache: Device is connected to a serial port on a Global Cache device. When this type is selected, you will also need to select the Global Cache Port. In addition, the Global Cache must be configured on the Input/ Output tab in the Configurator.
- (IP to Serial) Lantronix UDS10: Device is connected to a serial port on a Lantronix device.
- (IP to Serial) SerialBrick: Device is connected to a serial port on a SerialBrick. When this type is selected, you will also need to select the appropriate Edge Brick.
- Ethernet: Device communicates via Ethernet over the network.
- Serial Port: Device is connected to a serial port in one of three ways:
    - Directly on a HomeBrick or Controller,
    - USB to Serial on the HomeBrick or Controller,
    - Serial port on the network assembly.
- MOXA 5610/5410 Port: Device is connected to a serial port on a MOXA device. When this type is selected, you will also need to select the MOXA Port and configured the MOXA on the Input/ Output tab. Refer to the *MOXA Integration Note* for more information.

See Part 2, **Configurator Field-Level Reference** in this manual for a complete description of the Communication Device fields.

Communication Status

To verify the communication status of the **g!** system with an integrated device, right-click the **Communication Device** and then select **Show Communication Status**.

The Communication Status window opens. See *Communication Status Troubleshooting Tips* on page 175 for additional information.



Customization

The **g!** Configurator provides many options for customizing the user's experience. Many of these are discussed in the ***g!*** *Configurator Training Guide* in Lesson 12, **Interfaces**.

This section provides instructions for adding custom pages for apps and importing/exporting customized objects.

Other information about customization can be found as follows;

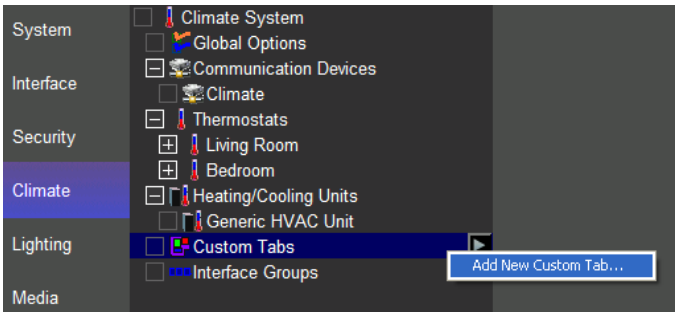
Topic	**Heading**	**Page**
Custom tab controls	Climate Custom Tab Controls	47
	Lighting Custom Tab Controls	52
	Media Custom Tab Controls	65
	Video Custom Tab Controls	129
Custom sounds	Adding Custom Sounds	35
Custom images	Adding Custom Images	36
Custom Home Pages	See Lesson 12, **Interfaces** in the ***g!*** *Configurator Training Guide*	
Custom lighting scenes	Customizing Scenes	50
Custom source icons	Custom Source Icons	57
TV Channel Favorites	TV Channel Favorites	165

Custom Pages for Apps

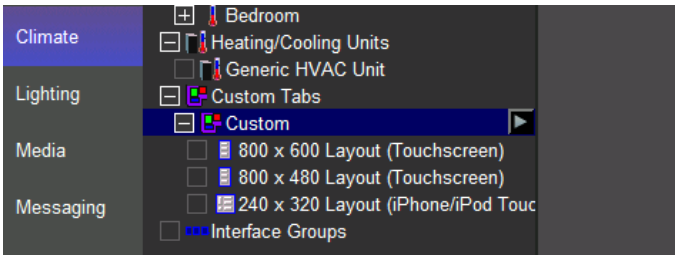
Custom pages can optionally be added to the Climate, Lighting, Video and Media apps in the Viewer interface. These pages can be configured with any of the available controls to provide a custom interface. .

To configure a custom page:

1. In the appropriate sub-system tab, right-click **Custom Tabs** and click **Add New Custom Tab**.



2. Enter a name for the custom page, and then click **OK**. The new page will display in the list view below Custom Tabs.



3. Select the new page from the list view then click the **+** symbol to display the available resolutions:

   - **800 x 600** Viewer running on **g!**ConnectPro, ELAN 8.4” in-wall, and 8.4” wireless tablets.
   - **800 x 480** Viewer running on a Profile 700 in-wall touchscreen
   - **240 x 320** Viewer running on iPhone/ iPod Touch (portrait)
   - **TS2** Viewer running on a TS2 in-wall touchscreen
   - **OSD (On Screen Display)** Modified Viewer running on a television screen, accessed with OSD or H2 WiFi remote.

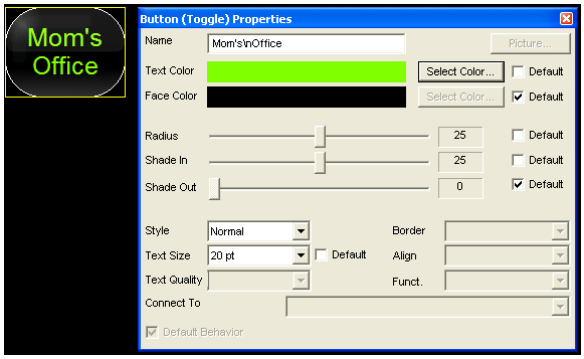
Note; Not all resolutions will be available for all subsystems.

4. Select the appropriate resolution for the Viewer you are using. The properties window at the right will display a blank page for adding controls.

Add a Control

After the custom tab is created, add controls to the tab. See the appropriate section for each tab in this reference guide for a list of the custom controls that are available per tab

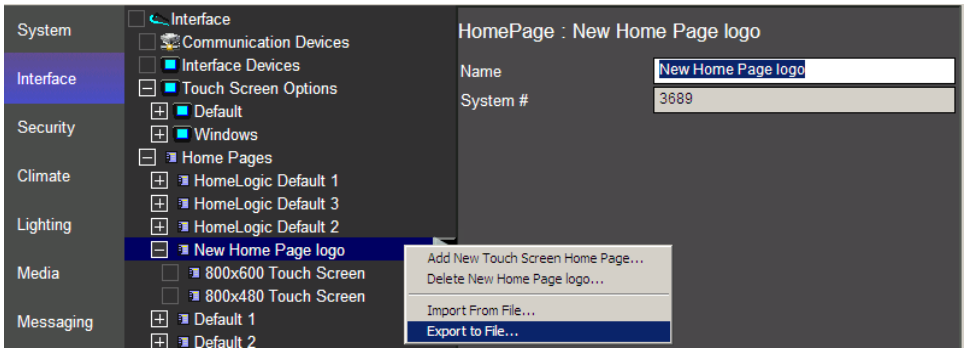
1. Right-click in the blank area and select **Add New Control**.
2. Select the desired control from the list. *The selected control type is added to the custom tab, and the Properties window for that control opens.*

Quick Reference: Control Properties	
Name	Type the name that will appear on the control or label. To wrap the label text to another line, use **\n** to insert a new line break. 
Text Color Face Color	ELAN recommends that you leave the Default settings selected. To change the color of the button face or text, clear the corresponding Default checkbox, then click the **Select Color…** button. Choose a new color from the color palette, then click OK.
Radius Shade In Shade Out	ELAN recommends that you leave the Default settings selected. To change the button radius or shading, clear the corresponding **Default** checkbox, then click and drag the appropriate slider to change the button's appearance.
Style	The style further refines the behavior of the control. (e.g. normal, indicator only, etc.) The options in this list vary by sub-system and control type.
Text Size	To change the size of the label text, clear the Default checkbox, then select a new text size from the drop-down list.

3. Place and configure controls to create custom page.
4. Check the new page in the Viewer to verify it displays properly.

Import/Export Customized Objects

Display settings, Home Pages and many other customized objects can be imported to and exported from the **g!** software. To export an object such as Display Settings, right-click on the name of the Display Settings and choose Export to File.



Use the Navigation prompt to locate an appropriate save location and name your file, then click OK to export. This file can later be imported on this or another system by using the Import option.

Note: Exported files may require the destination system to be on the same or similar version of software for importing.

Interface Tab

Use the options on the Interface tab to customize the appearance of the Viewer on various interfaces, such as individual touch screens and keypads.

See Lesson 12, **Interfaces** in the ***g!*** *Configurator Training Guide* for information on how to configure and change basic settings for each interface and how to configure and customize Home Pages.

This section provides the following information on working with the Interface tab:

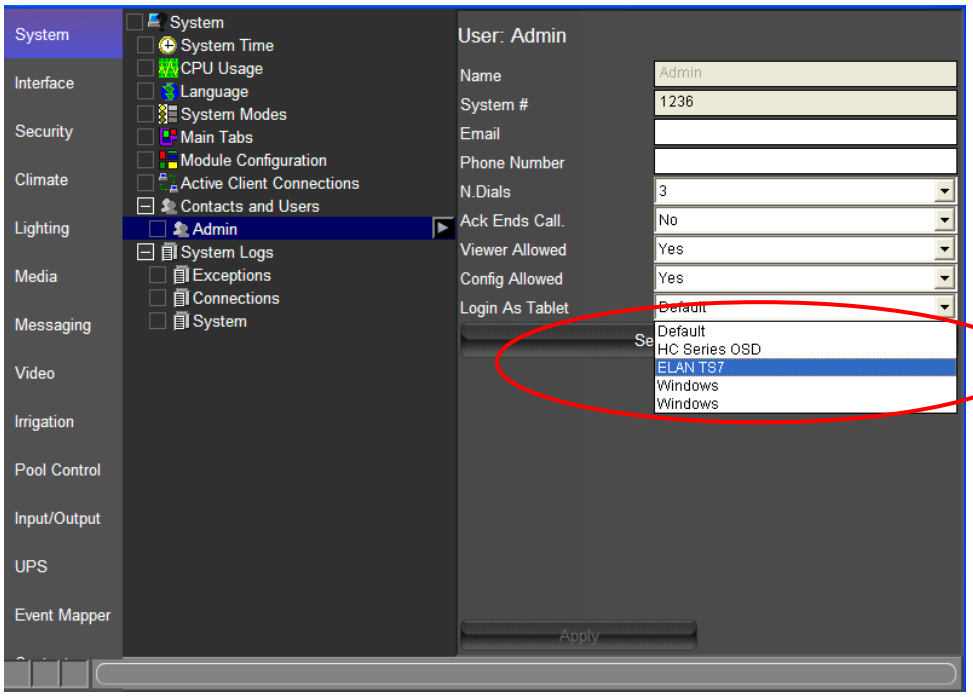
- Remote User Interface Settings
- Adding Custom Sounds
- Adding Custom Images
- Running g!Connect on a MAC

Remote User Interface Settings

Users logging into their **g!** system remotely will see the default interface unless another interface is configured for them in the **Login as Tablet field** on the user's **Contacts and Users** page.

To configure a remote login interface:

1. Select the user under **System | Contacts and Users.**
2. In the **Login as Tablet** field, select the desired Interface Device for this user to view on remote login from the drop-down list, and then click **Apply**.



Note: The choices that appear in this list are pulled from the **Interface** tab, **Interface Devices**.

Creating a Touch Screen Interface

Use the **Add New Touch Screen** option on the **Interface** tab to create a custom tablet with specific settings to view when logging in remotely, without editing an existing touch screen configuration (which may affect the settings on screen(s) installed in the home).

To do this:

1. Navigate to the Interface tab.
2. Right-click **Interface Devices** (**TouchScreen)**, and select **Add New Touch Screen…**
3. Name the new interface, then use the on-screen options to configure the display.

See Chapter 13: **Interfaces** in the ***g!*** *Configurator Training Guide*, or use the online help for more information about configuration.

Adding Custom Sounds

Sound files should be in WAV format, and sized appropriately. As a best practice, ELAN recommends that you upload only short files as system sounds. Longer sound files may not be desired or pleasant for the homeowner for daily use.

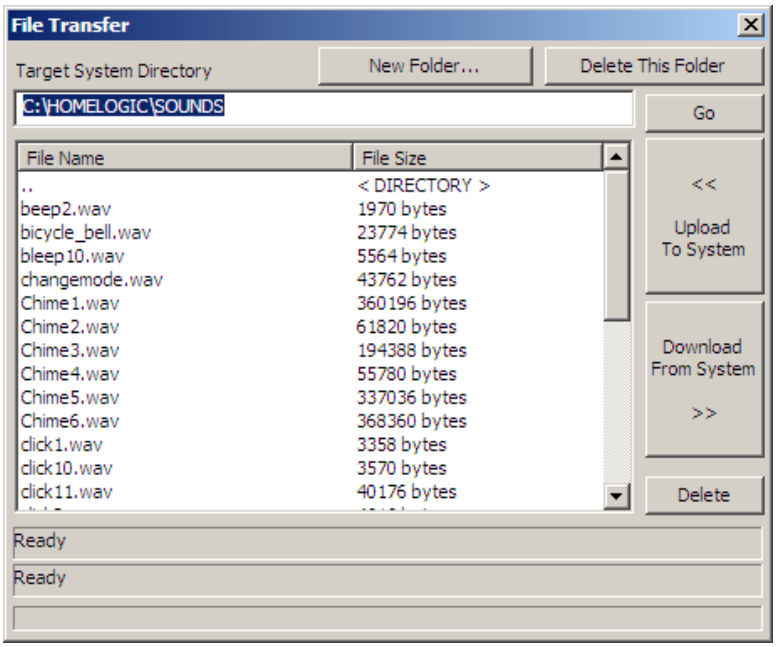
Verify that files are trimmed to the correct length as well; the **g!** software does not include sound editing functions and will play the entire sound file. File quality should be only as high as necessary to conserve file space and improve playback performance.

General guidelines:

- WAV format
- 8 or 16-bit
- 11-44khz Sampling (44khz is typically higher quality than needed)
- Interface sounds (button noise): Less than 50ms long
- Event sounds: Variable length

To Add Sounds:

1. In Configurator, navigate to the **Interface** tab, and then right-click **System Sounds**.
2. Select **Browse Sounds Folder….**
3. Click **<< Upload to System** button, and then navigate to the directory where the sound files are stored. Click **OK** to upload.



4. Once the files are uploaded to the system, click on the System tab and then right-click on System at the top and choose Restart Target System (Software Only). Following restart, the new sounds will be available to use.

Adding Custom Images

The following demonstrates how to add your own custom icons.

To Add Graphics:

1. Navigate to Interface | System Images.
2. Right-click System Images and select Browse Images Folder. The File Transfer window opens.
3. Double-click the folder to which you would like to copy the icon: Channels for TV Channel Icons, Media for Source Icons, etc.
4. To upload new icons, click the Upload to System button, and then navigate to the directory where your icon files are stored. Click OK to upload.
5. Once all files have been uploaded to the system, click on the System tab and then right-click on System at the top and choose Restart Target System (Software Only). Following restart, the new icons will be available to use.

Running g!Connect on a Macintosh Computer

g!Connect is the recommended way to connect to the **g!** system, but there is not currently a native Mac version of **g!**Connect.

This section explains some of the software and methods available to allow you to install **g!**Connect onto your Mac. **It is important to note that since ELAN does not provide a native software application, all the below methods involve using third party software for which ELAN cannot provide support.**

Virtualization*: Run a virtual desktop of Windows XP in OSX.

Using virtual Machine software to run a virtual copy of Windows XP in a window on top of OSX can be accomplished through third-party software that may be purchased separately. With a virtual XP window on OSX, **g!**Connect may be installed as normal within the virtual desktop.
This solution blends reliability and ease of use, but also can have a higher cost. See the software developers for information on the software packages as ELAN cannot provide you with detailed information. Please be aware that additional fees on top of the virtual software application for the OS license may apply. To our knowledge, these products are only compatible with intel-based MAC's [†].

Examples of virtual Machine software for the MAC:

VMware Fusion*

http://www.vmware.com/products/fusion/

Parallels* Desktop for MAC

http://www.parallels.com/en/products/desktop/

Comparison of VMWare Fusion and Parallels:
http://en.wikipedia.org/wiki/Comparison_of_VMware_Fusion_and_Parallels_Desktop

Installation Overview:

1. Obtain virtual Machine software of your choice. (We recommend using a trial version whenever possible prior to purchase. This will allow you to fully test the product and ensure both compatibility and customers' expectations are satisfied.)
2. Install virtual Machine software according to developer specs.
3. Run Windows XP virtual Machine using virtual Machine software.
4. Download **g!**Connect setup from ELAN Dealer Site
5. Run the setup program in your virtual XP.
6. Once installed, run and operate as normal.

[†]**Virtual PC*** is available for Motorola (PowerPC) Mac's. This program may no longer be supported and ELAN cannot make any statements about its compatibility.

http://www.oldversion.com/program.php?n=virtualpc

Crossover for Mac*

Run WINE on OSX to enable windows program compatibility.

WINE is a reconstructed Win32 API originally created to allow Linux users to run Windows applications under Linux without using a virtual machine. Crossover is a commercialized product based on WINE and written to work on Intel-based Mac computers. Crossover's functionality may be imperfect and is recommended for more technically savvy customers due to this fact. Crossover does not necessitate the purchase of a windows license on top of the program price, and at this time is a less expensive alternative. To our knowledge, this product is **only** compatible with Intel-based Macs.

Codeweavers Crossover for Mac*:

http://www.codeweavers.com/products/cxMac/

Installation Overview:

1. Obtain Crossover software. (We recommend using a trial version whenever possible prior to purchase. This will allow you to fully test the product and ensure both compatibility and customers' expectations are satisfied.)
2. Install per Codeweavers instructions.
3. Download **g!**Connect setup from ELAN Dealer Site
4. Run the setup program to install ***g!****Connect* in Crossover per Codeweavers instructions.
5. Run ***g!****Connect* in Crossover per Codeweavers instructions.

Boot Camp*

Utilize Apple's Boot Camp software to setup a dual boot pc.

MAC OSX has a feature built-in to it to allow you to setup your MAC as a dual boot computer. Boot Camp will enable the ability to install a fully copy of Windows XP onto your MAC. This will allow you to reboot your computer into Windows to install and run **g!**Connect. Unlike using a virtual Machine, setting up a dual boot will require you purchase a copy of Windows XP, fully install the 2nd OS on your computer, and reboot your computer into XP every time you wish to run Windows programs. Please see Apple's Boot Camp information page or search the internet for detailed information on installing and setting up your dual boot install. This solution should both perform well and be reliable, but requires more setup and a full system reboot every time one wants to switch between OSX and XP tasks. The cost can also be higher if XP must be purchased. To our knowledge, this product is **only** compatible with intel-based MAC's.

http://www.apple.com/Macosx/features/bootcamp.html

Installation Overview:

1. Follow Apple's instructions to prepare and setup up Boot Camp for the installation of your copy of Windows XP.
2. Install XP as advised in Apple's documentation.
3. Boot into XP through Boot Camp.
4. Download **g!**Connect setup from ELAN Dealer Site
5. Run the setup program in XP.
6. Once installed, run and operate as normal.

IMPORTANT! *ELAN neither develops nor supports these products, and cannot provide support to customers choosing to use third-party software to enable the use of **g!**Connect on a Mac. ELAN has **not** tested or evaluated these products, and recommends experimentation with trial/free versions of the software whenever possible prior to purchase, to ensure satisfactory usage and compatibility.

Security

Integrating the security panel with **g!** software provides the homeowner access to their security system through the **g!** Viewer. For each security partition in their home, they can:

- Arm and Disarm the system.
- View partition and zone status and optionally bypass faulted zones.
- Review zone fault and armed status history.
- Use security panels and sensors with the ELAN Event Mapper to provide additional automated functionality.

For information on how to configure a lighting system, see Lesson 3, **Security Systems** in the ***g!*** *Configurator Training Guide.*

This section provides the following information about working with security systems:

- Manually Adding Zones
- Editing Partition or Zone Names
- Changing Zone Display Order

Manually Adding Zones

Some security panels do not provide a method for the **g!** software to query all zone information within a partition. In these cases, the zone information can be added manually using one of the method described below.

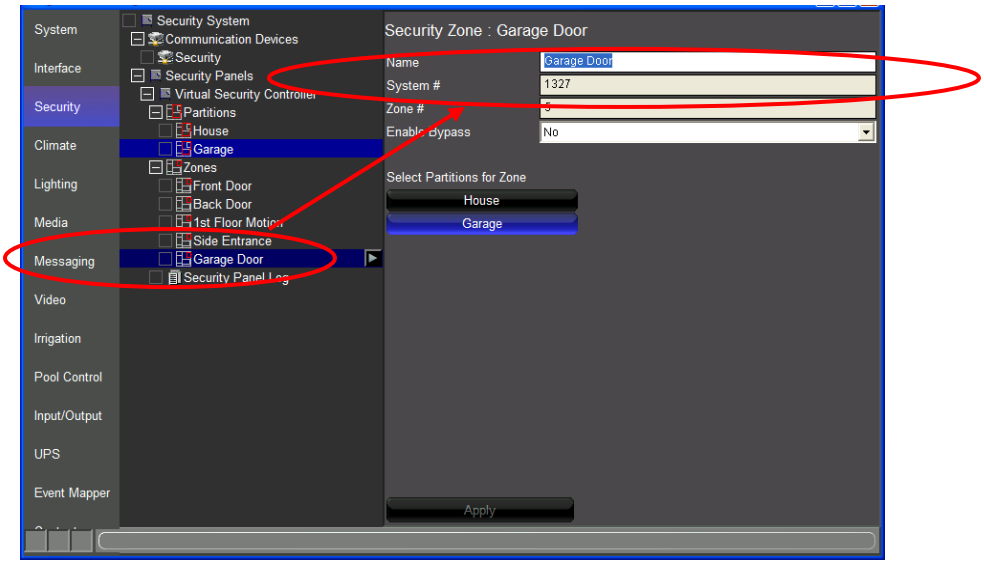
There are two options:

1. Manually “trip” or fault the sensor, to have the security panel send the zone information to the Configurator.
2. Right-click **Zones** in the System Tree and select **Add New Zone**. You will then need to identify the zone name and zone number in the properties window.

Note: Refer to appropriate *Integration Note* for the specific panel for more detailed information.

Editing Partition or Zone Names

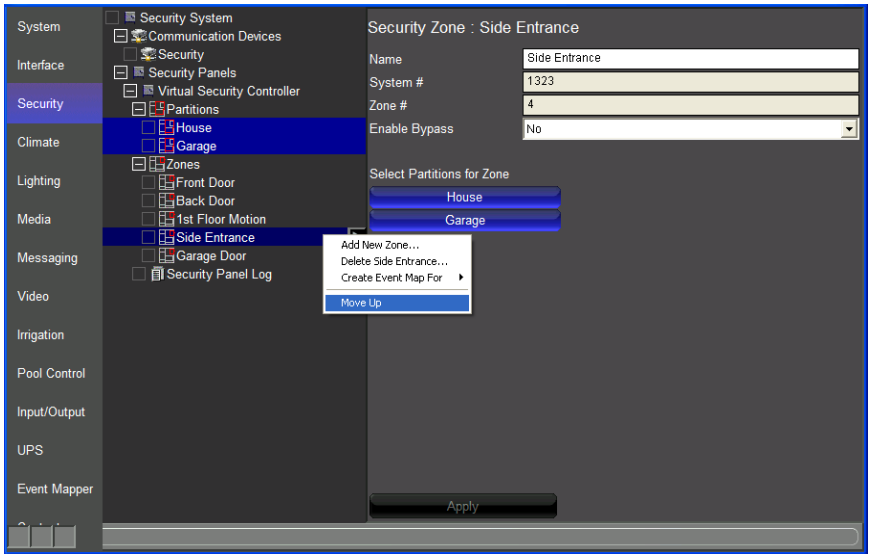
Partition and zone names can be changed in the Configurator. To do this, select the partition or zone in the System Tree, and then edit the text in the **Name** field in the properties window. Click **Apply** to save changes.



Security History: Changing Zone Display Order

The Viewer's History tab Zone list is populated in the same order that the zones are listed in the Configurator.

To change this order, right-click on the zone to be moved and select **Move Up** or **Move Down**. Repeat for any zones that you want to reorder.



Climate

Integrating a climate system with the **g!** software provides the homeowner access to their climate system through the **g!** Viewer. For each thermostat in their home, they can:

- Turn on and off the heating and cooling system
- Adjust the heating and cooling set points
- Adjust the heating and cooling schedule
- View the heating and cooling history
- Control fans

For information on how to configure a climate system, see Lesson 4, **Climate Systems** in the ***g!*** *Configurator Training Guide.*

This section provides the following additional information about working with climate systems:

- Manually Adding Thermostats
- Configuring an Outside Temperature Sensor
- Working with the Climate History Tab
- Fahrenheit/Celsius Selection
- Hold Modes
- Custom Controls for the Climate Tab

Manually Adding Thermostats

Some climate systems do not provide for automatic detection of thermostats. In these cases, it you will need to manually add the thermostats to the Configurator.

To manually add a thermostat:

1. Navigate to the Climate tab in the Configurator, right-click on **Thermostats,** and select **Add New Thermostat**.
2. Select the appropriate thermostat from the list and click OK.
3. Identify the Thermostat ID and Communication Device in the properties window.

Note: Refer to appropriate *Integration Note* for the thermostat with which you are working for more detailed information.

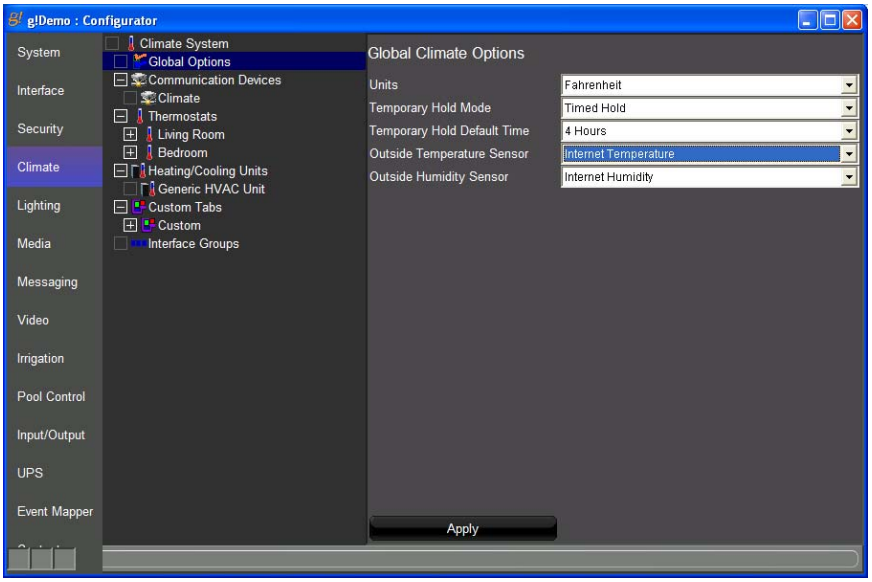
Outside Temperature

Each thermostat in the Viewer will display an Outside Temperature value. By default, this value is obtained from the internet and is based on regional settings configured on the System tab.

If you have installed additional sensors into your system, or have a thermostat located in an outdoor area such as a garage, you can configure the outside temperature to pull the reading from a different device in Global Options, if this functionality is supported by the thermostat. See the *Integration Note* for your particular device for more details.

To configure the outside temperature sensor:

1. Navigate to the Climate tab in the Configurator, then select **Global Options**.
2. Set the Outside Temperature Sensor field to the appropriate thermostat (or internet).
3. Click **Apply**.



Climate History

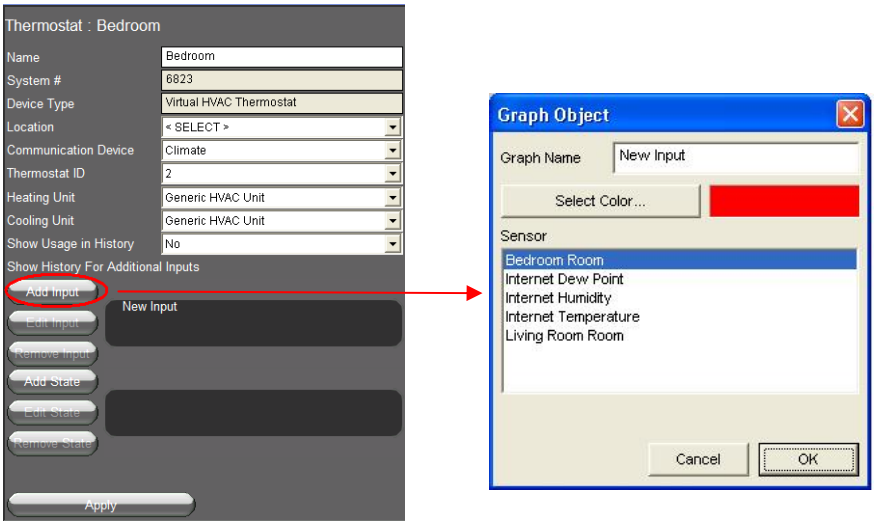
Adding Values

The History page in the Viewer tracks historical information so that homeowner can see what has been happening with their system. Additional information about inputs and the state of equipment can be added to the history graphs on each thermostat.

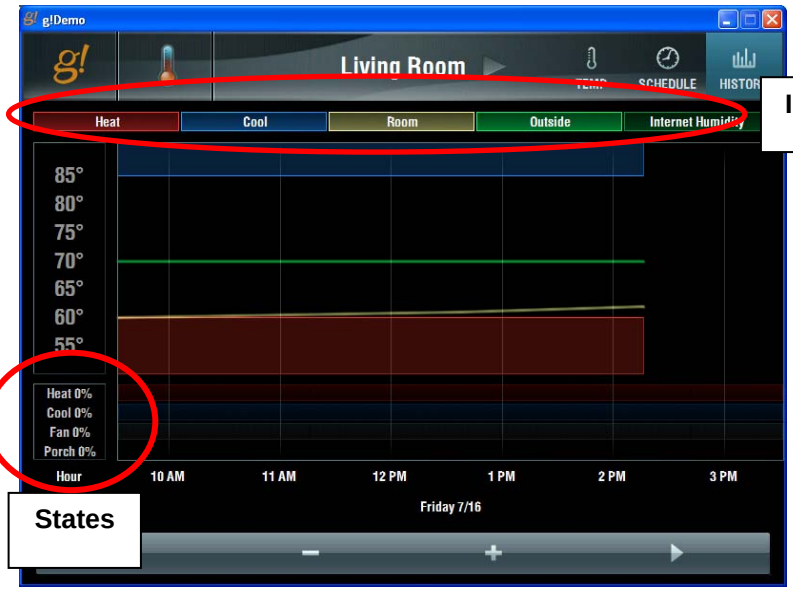
Note: Each thermostat will have its own set points, temperature readings and states by default.

To add information to the history page:

1. Select the thermostat in the System Tree and click **Add Input** in the Show History For Additional Inputs section of the properties window. *The Graph Object window opens.*



2. Select the thermostats, remote sensors, and other internet readings to display in the history graph, and select the color(s) that will represent the new input, then click **OK**. The inputs are shown across the top of the History page in the Viewer
3. Click **Add State** to add the on/off status of things like light switches and contact closures.
4. Select the appropriate sensor from the list, and then click OK. The states are shown to the left of the history graph.



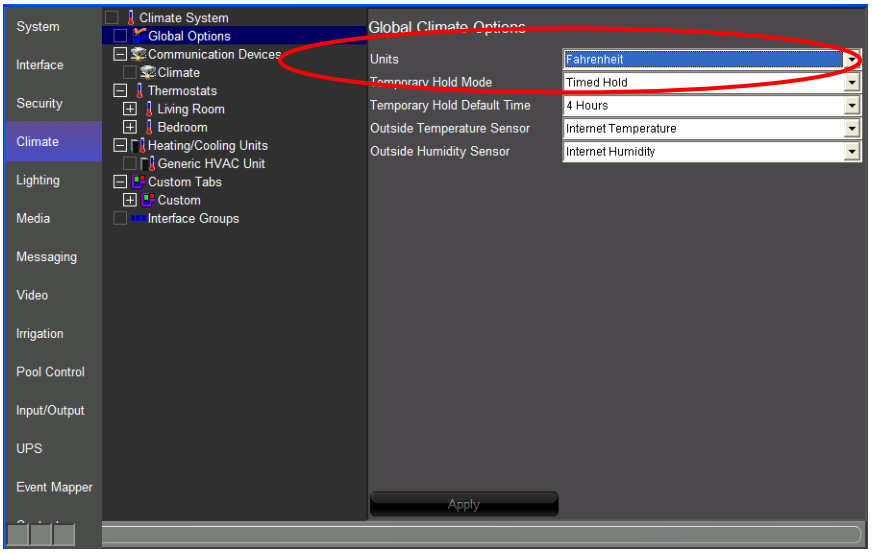
Fahrenheit/ Celsius Selection

By default, the temperature in the Viewer is displayed in Fahrenheit degrees, however it can be changed to Celsius.

Note: Changing the temperature scale is a global setting that will affect all temperature displays in the Viewer.

To change the temperature units:

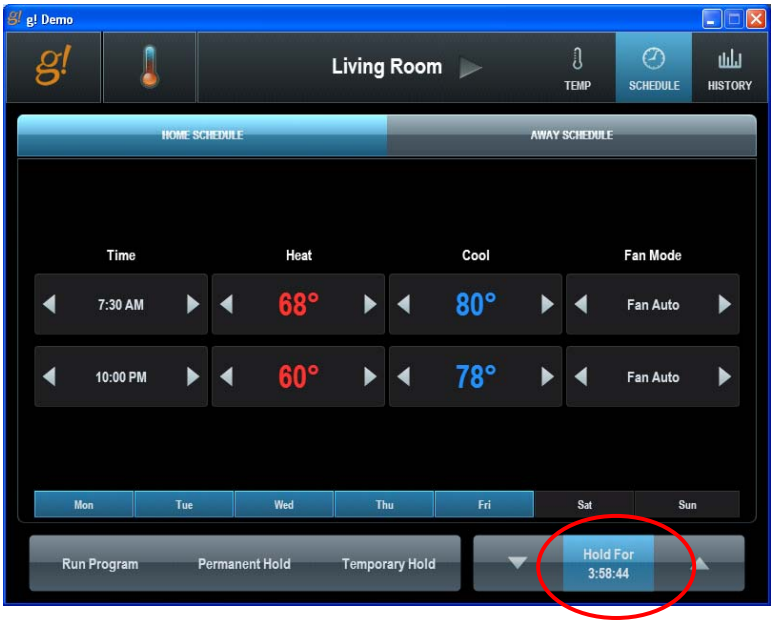
1. Navigate to the **Climate** tab in the Configurator and select **Global Options**.
2. Set the **Units** field to Fahrenheit or Celsius, then click **Apply**.



Hold Modes

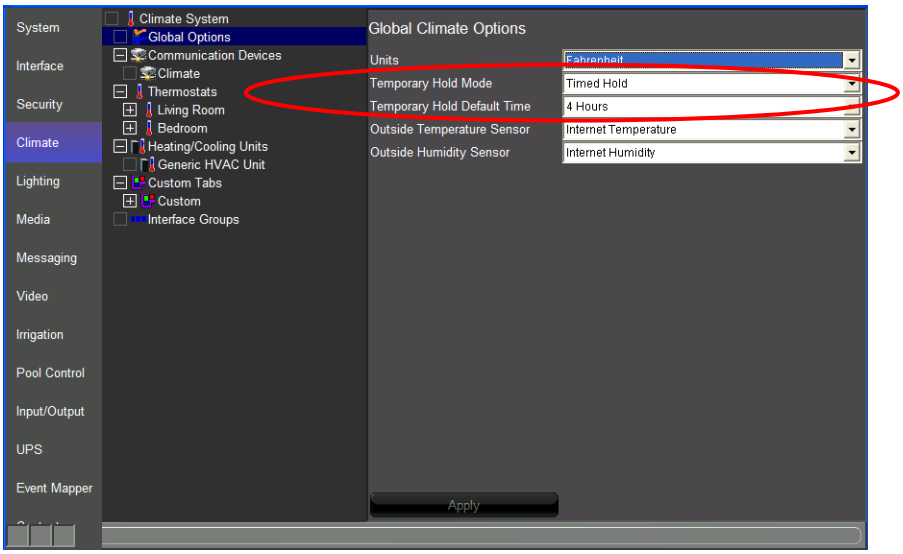
By default, when the temperature is manually changed in the Viewer, the new set point is held for four hours and then reverts back to the scheduled setting. If scheduling is disabled, these settings have no effect.

During this time, the Viewer interface shows that the system is in “Timed Temporary Hold”, and shows a countdown timer to indicate when the system will return to the scheduled temperature.



To change the default of the temporary hold for Timed Hold mode:

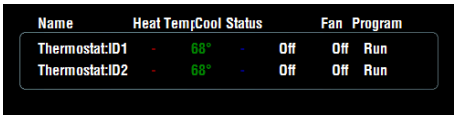
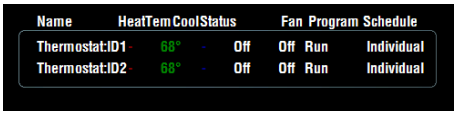
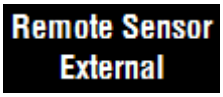
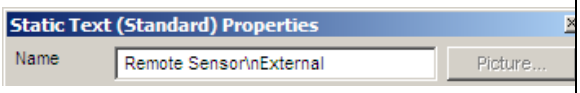
1. Navigate to the **Climate** tab in the Configurator and select **Global Options**.
2. Select a new default time from the **Temporary Hold Default Time** field list, and then click **Apply**.

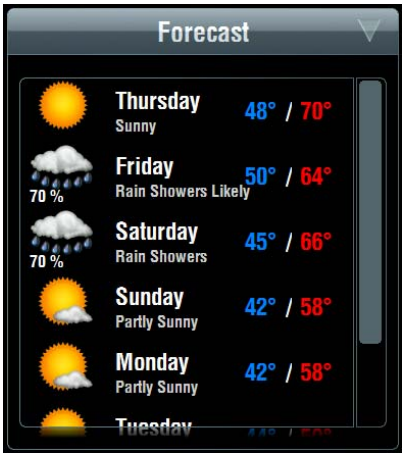


Note: Another hold mode, **Hold Until Next Period,** is available on the Temporary Hold Mode drop-down list. This option will keep the manual setting until the next schedule change.

Climate Custom Tab Controls

There are many types of custom tab controls available to use for climate and weather. Below is a reference table for common controls and their usage. Note that many custom controls have settings available in their Properties window that allow you to modify the name, look, style and connected thermostat or sensor. For information on how to set up a custom page with custom controls, see the Customization section on page 30 of this Guide.

Control	Description
Climate Summary (Standard) 	Displays a table of Climate devices in the system and system properties such as current temperature reading, set points, current mode/status, and run mode.
Climate Summary (Extended) 	Variant of Climate Summary that also includes schedule information.
Numeric Text 	This control can be **Connected** to a sensor, thermostat, or internet reading to display the numeric output. This is usually used along with a Static Text control for labeling.
Static Text 	Used to add labels on Custom Tabs. Enter text in the Name field exactly as it should appear on the tab. To wrap text onto the next line, enter “\n” (without the quotes) into the name, as shown below: 

Control	Description
Weather Control 	Displays the weather forecast for the zip code entered on the System tab. Can be set for up to five days. Click the drop-down arrow at the top to display Current Conditions for the zip code, gathered from the NOAA website. **Note:** The system must have internet access for this to function.
Website Picture Link 	Commonly used on the Climate tab to link to a refreshing JPEG satellite or other weather image. See the ***g!*** *Configurator Training Guide* for more information. **Note:** The system must have internet access for this to function.

Lighting

Integrating a lighting system with the **g!** software will provide the homeowner access to their system through the Viewer. This will enable them to:

- Turn loads on and off
- Set the brightness of loads controlled by dimmers
- Actuate pre-programmed scenes
- Set up a lighting schedule
- View status of the loads in the lighting system

For information on how to configure a lighting system, see Lesson 5, **Lighting Systems** in the ***g!*** *Configurator Training Guide.*

This section provides the following additional information about working with lighting systems:

- Adding Lighting Manually or by Reading a Config File
- Customizing Scenes
- Custom Controls for the Lighting Tab

Adding Lighting

Often, adding the lighting system to the Configurator is a easy as adding a communication device for the system, and then clicking “Discover Devices” to load the devices into the Configurator. Sometimes though, a lighting system may use a protocol that doesn’t support the use of the Discover Devices button in the Configurator.

In these cases, you may need to add the lighting manually using one of the methods described below. In any case, be sure to see the Integration Notes for the specific lighting system you are working with for more detailed information.

Manually Adding Lighting

In some cases, the **g!** software may be able to detect and populate lighting devices when they change state (turn on/off).

Typically this involves hitting switches, or toggling the state of scenes, dimmers and loads through lighting programming software. The **g!** software will learn the devices when their state changes and automatically add the device. See the *Integration Notes* for the specific lighting system for further details.

Read Config File

In some instances, it may be possible to export the programming configuration from the lighting configuration software and then read that file into Configurator to automatically add lighting devices. See the *Integration Notes* for or the specific lighting system for further details.

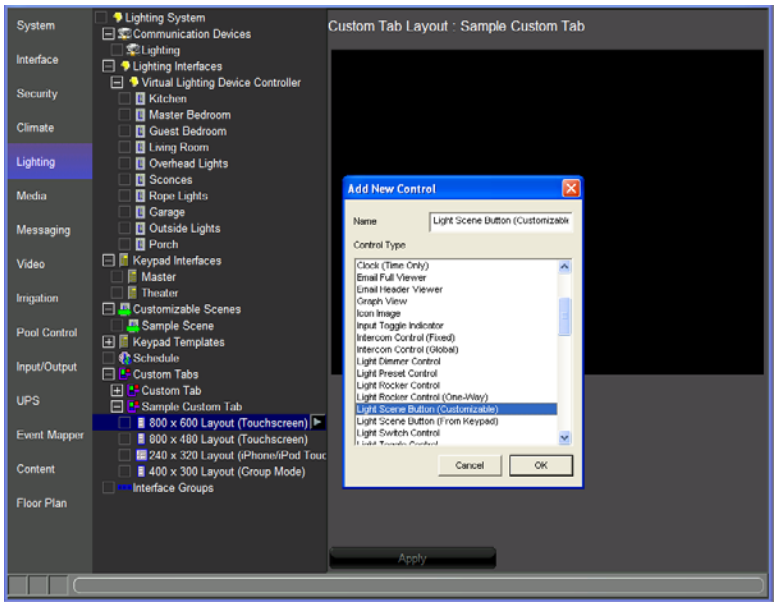
Customizing Scenes

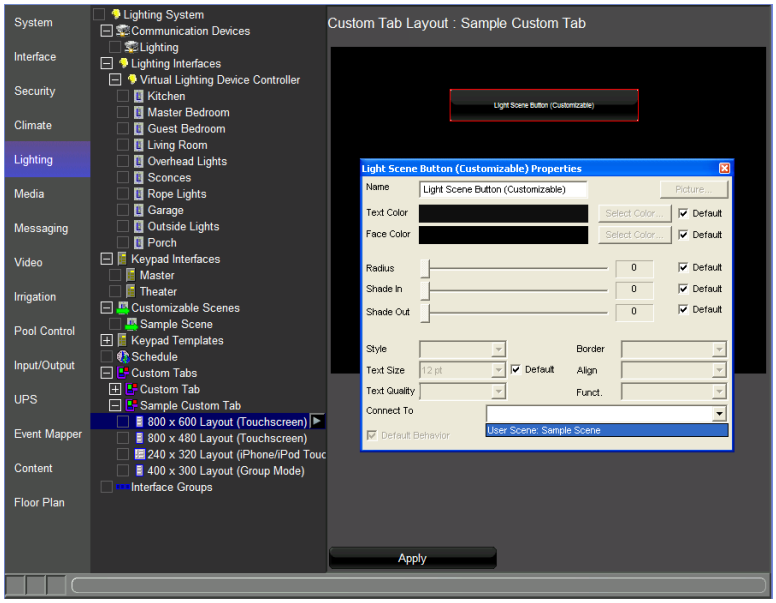
The **g!** software provides a Customizable Scene feature that enables you to create custom lighting scenes that can be edited in the Viewer.

To add a customizable scene:

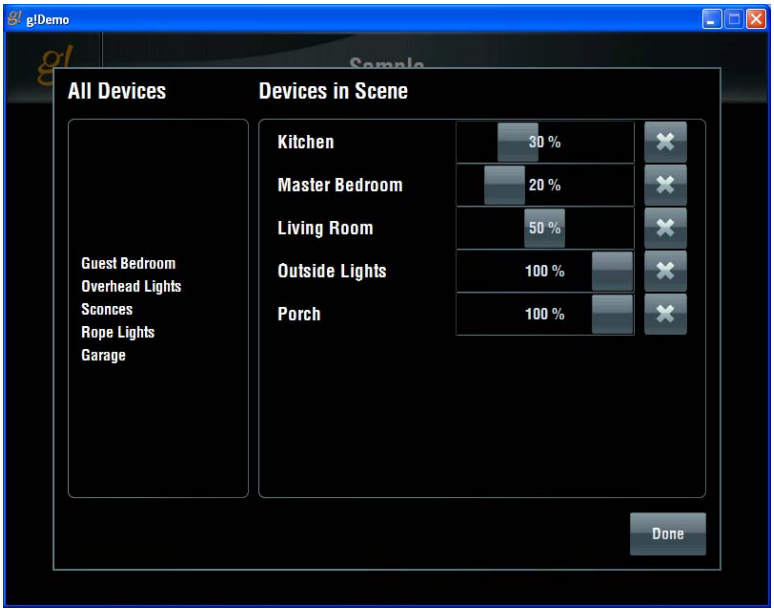
- On the Configurator Lighting tab, right-click **Customizable Scenes**, and select **Add New Scene**.

- Name the scene something descriptive. You will use this scene as the back-end to connect a Custom Lighting Control. *In the screens that follow, the customizable scene is "Sample Scene."*
- Add a **Light Scene Button** (Customizable) control to a Custom Tab and set the **Connect T**o dropdown in the Button Properties to connect to the Sample Scene created in step 1.





- Go into the Viewer and open the custom Lighting tab you created in Step 3.
- To edit the scenes or loads associated with the Customizable Scene, press and hold the scene button. The button will begin to flicker after a moment and then a menu box will appear allowing you to add and edit current loads/scenes associated with the control.



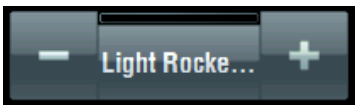
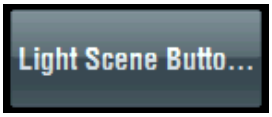
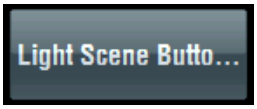
- Once the control is configured, use it like a typical scene button—tap the button to activate the scene.

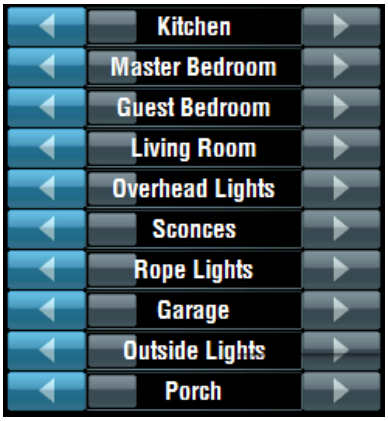
Note: You can edit the Customizable Scenes at any time by pressing and holding the button in the Viewer, as in Step 5.

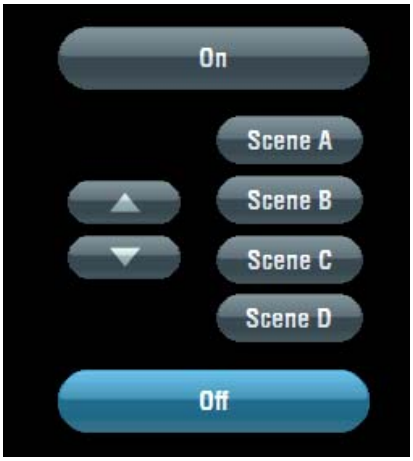
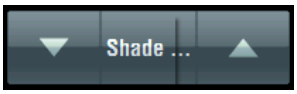
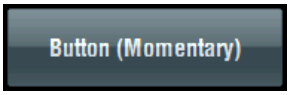
Lighting Custom Tab Controls

When creating custom lighting interfaces, there are multiple types of control that can be used to control lighting devices and shades. Below is a reference table for common controls and their usage. Note that many custom controls have settings available in their Properties window that allow you to modify the name, look, style and connected lighting device.

For information on how to set up a custom page with custom controls, see the Customization section on page 30 of this Guide.

Control	Description
Light Dimmer Control 	Ramping dimmer control **Connected** to individual loads.
Light Preset Control 	Preset level control **Connected** to individual loads that use a series of preset levels as opposed to a true dimming ramp. (X-10)
Light Rocker Control 	Ramping control **Connected** to individual loads similarly to Light Dimmer control.
Light Rocker Control (One-way) 	Ramping control **Connected** to individual loads that support ramping control but do not provide feedback. (X-10)
Light Scene Button (Customizable) 	Toggle control that allows the creation/edit of custom scenes in the Viewer. Multiple lighting commands can be stacked behind this single toggle button. Note that these controls must be **Connected** to a Customizable Scene (created separately in Configurator).
Light Scene Button (From Keypad) 	Individual scene control button from an existing Keypad.

Control	Description
Light Scene Buttons (Recall/Save)	These two stage buttons have different behavior on Press and Press-and-Hold. On press, the "recall scene" is called and sets the lights to the stored level. If load levels/states are changed with other controls to new levels, Press and Hold memorizes the new level for next recall. **Note:** For KNX systems only.
Light Switch Control 	On/Off control **Connected** to individual loads or scenes with separate buttons for On and Off as opposed to a single toggle button.
Light Toggle Control 	Toggle button **Connected** to individual loads or scenes.
Lighting Global Control 	Global display and control that can be configured to show all lighting loads, all lighting scenes or both. Typically this control has **Text** size set to **Auto** and is maximized to fill the page. A grey box appears in Configurator for sizing and layout; the control will auto-populate in the Viewer with Light Dimmer Controls for loads and Light Toggle Controls for scenes. Intended for use with small systems. Use the **Style** drop-down list in the **Lighting Global Control Properties** window to select whether to display All Devices, Dimmers Only, or Non-Dimmers Only.

Control	Description
Lighting Keypad 	Place a resizable Lighting Keypad for an existing Keypad into a Custom Tab with other controls. This is useful when creating tabs based on areas in the house where control of both scenes and individual loads is desired. A grey box appears in Configurator for sizing and layout; the control will auto-populate in the Viewer.
Shade Control (Momentary) 	This control is intended to move the shade up and down. You press on the up or down button and hold it for the duration of travel. When you let go, the shade stops. **Note:** For KNX systems only.
Shade Button Latching 	This control also moves the shade, but the up and down buttons start motion, and motion is stopped by pressing either button (or when the shade reaches the end position). **Note:** For KNX systems only.
Shade Louvre Control 	This control adjusts the louvers. It is a momentary, and each press moves the louvers one step (this step size is configured in KNX with ETS). **Note:** For KNX systems only.
Shade Preset 	Preset control for shades which allows preset selections such as Open, Close and Preset. Feedback is provided for current shade position, but no momentary control is possible.
Button (Momentary) 	Standard button can be used with Event Maps to send commands when pressed and stop sending commands when released. Typically this is used to control contact closures, shades, or other ramping devices that require momentary control action.

Control	Description
Button (Standard) 	Standard button can be used with Event Maps to activate various functions which may include setting lighting loads to specific levels, activating scenes, setting shade presets, or opening contact closures. This is a single-action button.
Button (Toggle) 	Standard toggle button can be used with Event Maps to activate various functions which may include setting lighting loads to specific levels, activating scenes, setting shade presets, or opening contact closures. This button allows for a set of commands to be set when it is activated and second set of commands to be sent when it is deactivated.
Button (Image) 	Variant of Button (Standard) that allows the button to display an image (JPG) from Picture share folders.

Media

Use the features on the Media tab to configure and view the status of zone controllers, receivers, 2-way sources and other interfaces pertinent to audio and home theater control. See Lessons 7 through 9, **Configuring Distributed AV & Home Theater Systems** for more information.

For information on how to work with the Media tab, see Lesson 7, **Distributed A/V Systems, Part 1**, Lesson 8, **Distributed A/V systems, Part 2**, and Lesson 9, **Configuring Home Theater** in the ***g!*** *Configurator Training Guide.*

This section provides the following additional information about working with the Media tab:

- Configuring Custom Icons for Sources
- Creating Source Interfaces for the Viewer
- Setting Default Devices and Buttons for an Interface
- Manually Remapping Button Commands
- Custom Controls for the Media tab
- Configuring audio Library sorting options for a built-in Source
- Working with generic Single Zone Controllers
- Output from whole House Audio
- Switching Volume between Local and Distributed Audio in a Single zone
- Setting up Two Displays in one Zone
- Bar Setup: Multiple displays with one audio zone

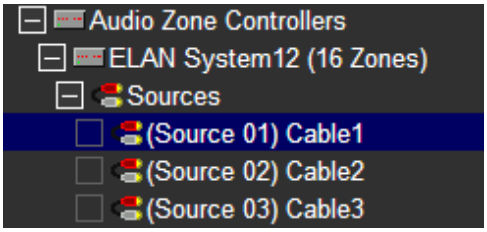
Custom Source Icons

The icons that appear on the source buttons in the Viewer can be changed in the Configurator. The **g!** software provides a number of icons, and you can also add your own.

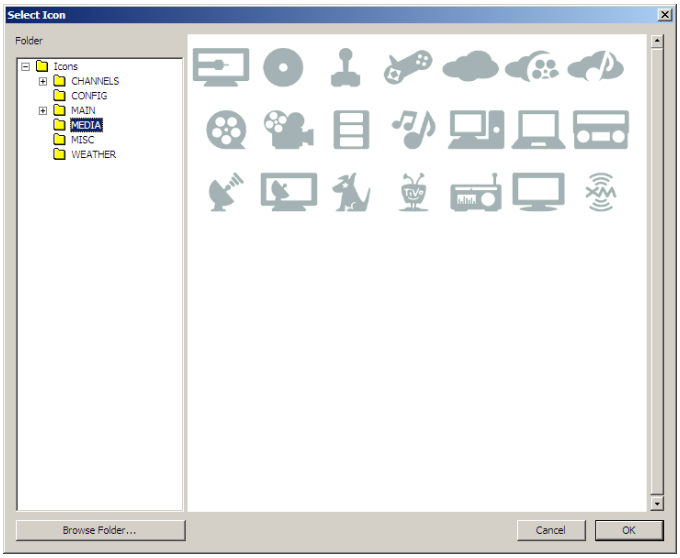
Note: The source icons are not stored in the Common Resource Library; they are installed on your local drive with Configurator.

To change a source icon:

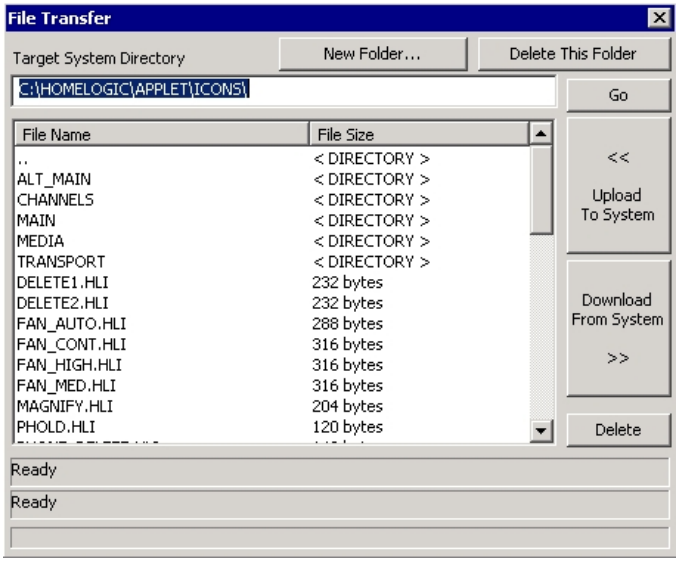
1. Select a configured source in the zone controller:



2. In the Properties window, click the **Select Icon** button. *The Select Icon window opens.*



3. Click the **Browse Folder…** button at the bottom of the window. The File Transfer Window opens.



4. Click the **Upload to System** button to see an Explorer view of the files on your computer. Navigate to the folder where your icons are stored, and select the appropriate icon.
5. Select the desired icon file and click **Open** to transfer the file to the system and add your custom icon to those displayed.
6. Click **Apply**.

Note: Icon files should be saved as either .png or .jpg, with 32-bit color depth, and a white or transparent background.

7. Select the desired icon and click **OK**. *The image next to the heading "Display Icon" will change to reflect your choice. This icon will appear in the Viewer on the source button, and also on the zone name tab when that source is active in the zone.*

Interfaces

Source devices added to an ELAN controller need an interface to show in the Viewer. Many supported two-way devices provide a built-in interface that cannot be modified. However, in some cases it is necessary to add or create an interface for the device. IR or Generic Serial Devices, for example, must have interfaces created.

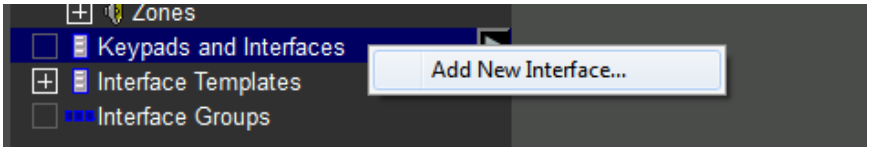
ELAN provides several templates to make adding devices easier. Once added, the interface can be modified to suit the needs of the installation. Refer to the *Integration Note* for the specific source device to determine if you need to add an interface.

Examples:

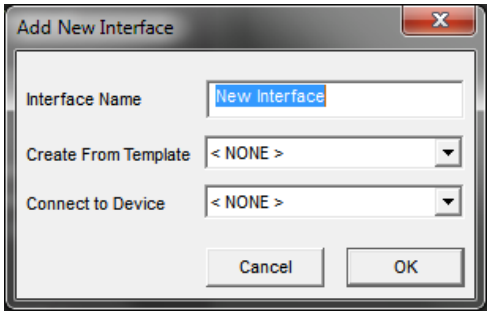
- ELAN ViaMigo requires the addition of a Keypad Controller and a Keypad Interface.
- An IR controlled Blu-Ray player must have a Keypad Interface in which the buttons are mapped to specific IR commands.

To add a keypad interface:

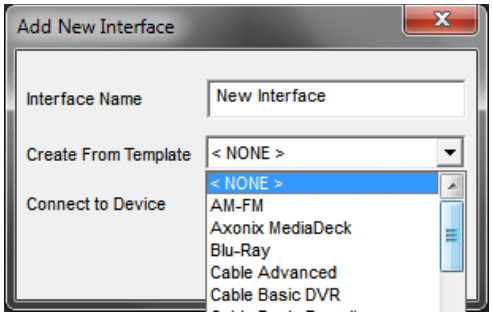
- Navigate to the Media tab, right-click **Keypads and Interfaces,** and then select **Add New Interface…**.



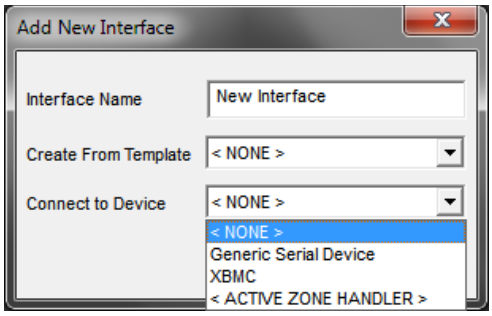
- In the **Add New Interface** window:
  a. Enter a Name for the interface



  b. Select the template to use as a starting point for the interface.



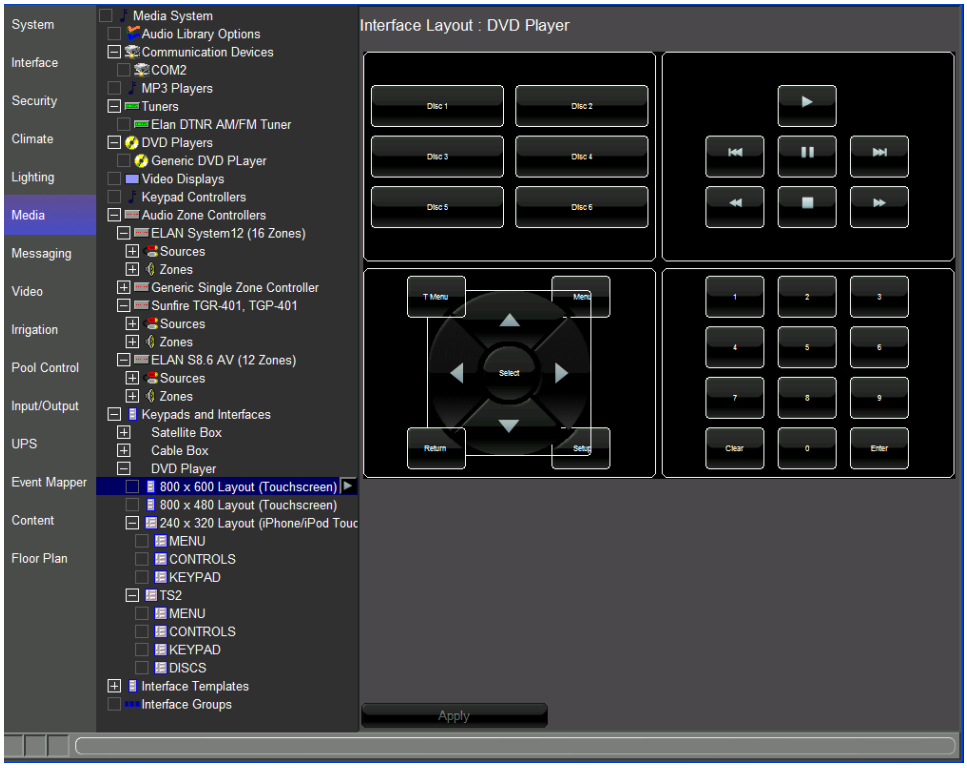
c. Specify the device that the interface will connect to.



- Click **OK**. The new interface is added to the System Tree, and its properties display in the pane on the right.

Quick Reference: Audio Interface	
Name	The interface name; can be edited.
System Number	Unique, read-only number assigned by the **g!** software for internal use
Default Device	Device to which the interface is connected. Initially assigned when the device is created, but can be changed in this screen.

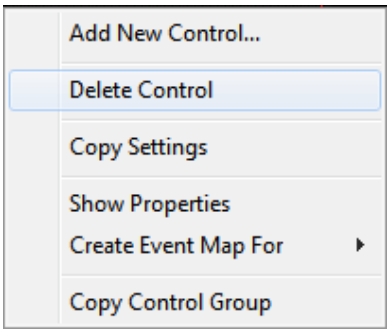
- In the System Tree, select the appropriate resolution. Each interface contains four separate resolutions that can be viewed by clicking the plus (+) sign next to the device name. Each resolution is the interface for a specific type of device, and may contain multiple pages of controls for the interface.



Quick Reference: Interface Resolutions	
800x600 Layout (Touchscreen)	Standard resolution for Wireless Touchscreens, 8.4” Inwall Touchscreens, and PC Viewers
800x480 Layout (Touchscreen)	Standard resolution for Profile 700 and TS7 Inwall Touchscreens
240x320 Layout (iPhone/iPod)	Standard resolution for iPhone and iPod (Also for iPad)
TS2	Layouts for the TS2

- **To customize the interface for the selected device:**
  a. **Delete a control:** Right-click the control and select **Delete Control** from the pop-up menu

  b. **Add a control:** Right-click inside the template and select **Add New Control…** from the pop-up menu. See *Add* a Control on page 32 for more information.



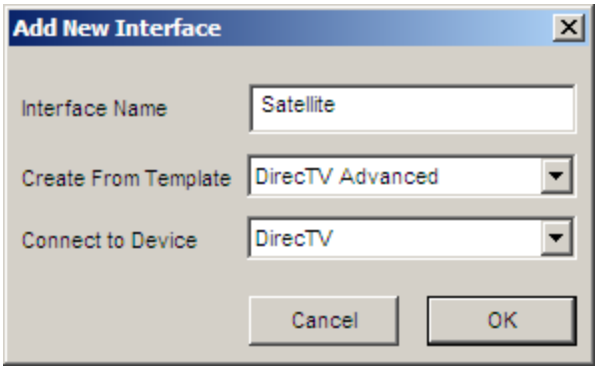
Configure Interface Settings

After IR codes have been properly configured, verify that the settings on the Media tab are correct. Interfaces that are created on the Media tab must be configured with the proper settings to send the correct IR codes and use correct default behavior (momentary control).

Set Default Device when Adding New Interface

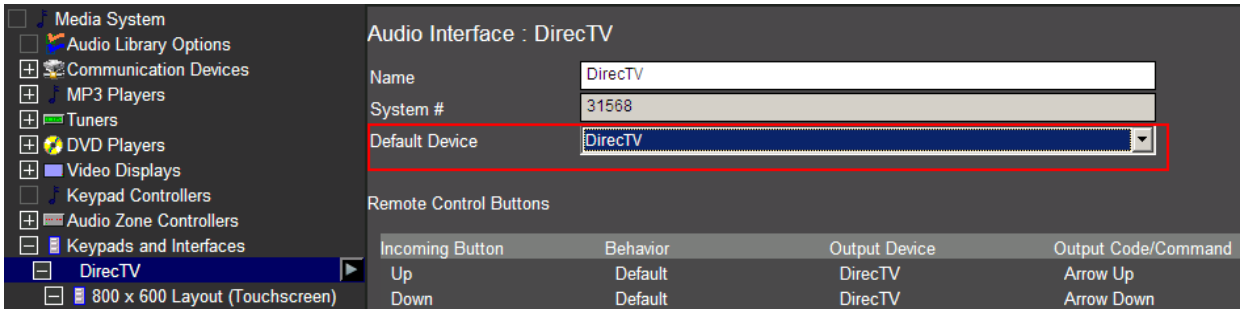
When adding Interfaces to Configurator, the Add New Interface dialog box sets up the Name, button layout (Template), and the device (Connect to Device) for the interface. The **Connect to Device** field is the link between the graphical interface and the IR codes, and when selected, automatically maps all buttons to IR codes based on Universal Functions.

Note: Be sure to set this correctly when adding new interfaces or your buttons will not map to the appropriate commands!



Checking Default Device on Existing Interfaces

In **g!** software, the Default Device for any Interface automatically maps all commands to the IR device based on Universal Functions. Default Device is an active setting that continuously re-maps commands as needed in case changes are made to the configuration. Generally, all Media Interfaces should have a Default Device set. To check the current Default Device, navigate to the Media tab and select the desired interface (main heading) under Keypads & Interfaces.



Default Behavior on Individual Buttons

g! Software provides the ability to enable or disable default behavior on a per-button basis. Default Behavior should generally be checked to allow **g!** software to automatically remap commands based on universal functions, and to allow standard momentary-style button features to function in the **g!** Viewer interfaces.

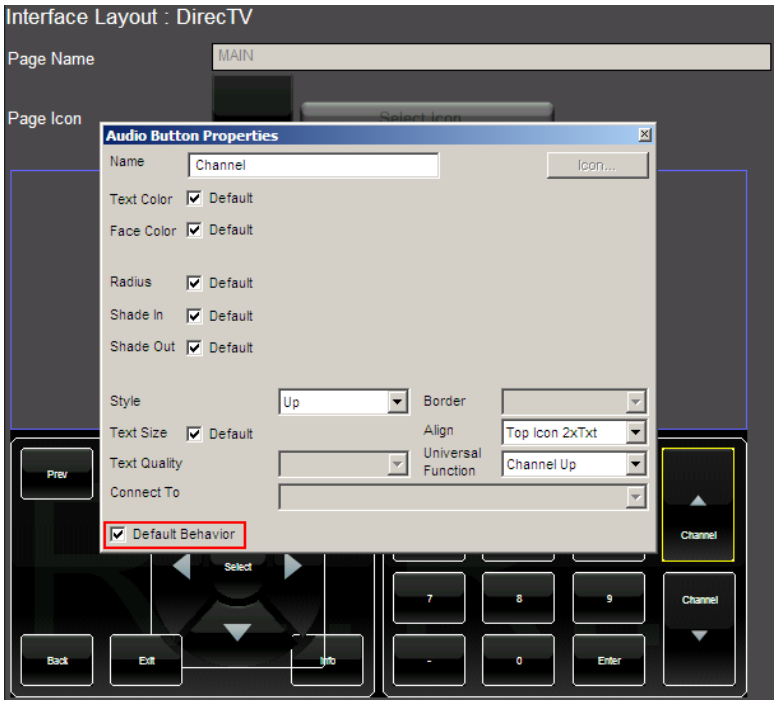
Notes:

1) This setting is *per button*, and *per resolution*, and will only affect touch screen interfaces, the PC Viewer, and iOS devices. This process will **not** affect the HR2 hard buttons.

2) In most instances, default behavior should be checked on all buttons. Default Behavior is the default setting on all buttons created from **g!** templates.

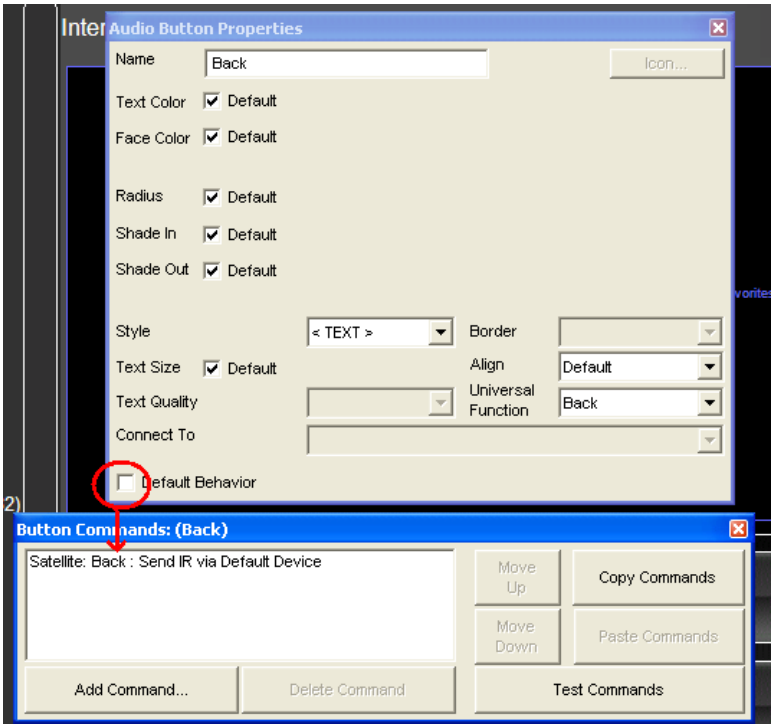
To enable/disable default behavior for a button:

1. In Configurator, navigate to the Media tab and select the interface you want to work with.
2. Expand the desired resolution under the Interface and click on a button you wish to edit; for example: Channel Up. *The Button Properties window displays*.
3. Verify the state of the **Default Behavior** check box; checked to enable the default behavior, or unchecked to disable to default.



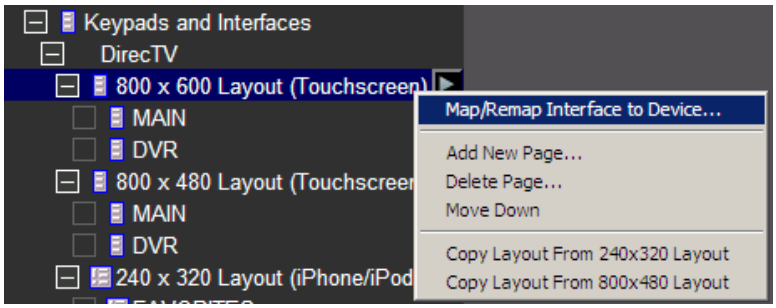
Typically the Default Behavior should be enabled; disabling this feature will disable momentary action on this button, causing the commands window to display (on most controls). *Note that any changes to the code sent will now have to be done manually, as disabling Default Behavior also disables the* ***g!*** *software's automatic re-map function.*

Note: You can disable the Default Behavior checkbox temporarily to verify that commands appear correctly in the commands box.



Manually Map/Remap Commands

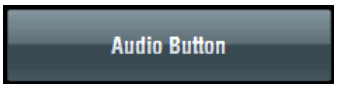
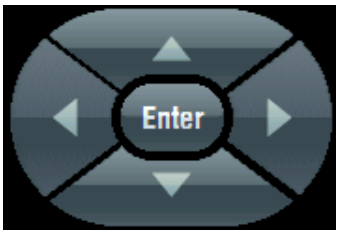
The **g!** software supports the ability to map all appropriate buttons with Universal Functions set in their properties to IR codes within your selected IR Device with matching Universal Functions on demand. To do this, right-click the desired resolution and select **Map/Remap Interface to Device** to force the interface to remap to the selected IR device.

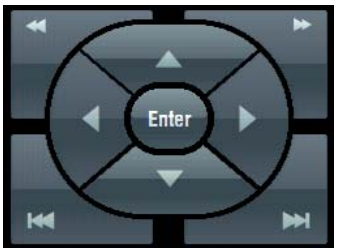
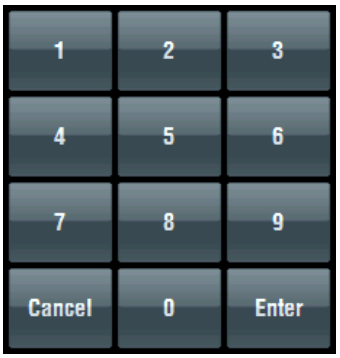


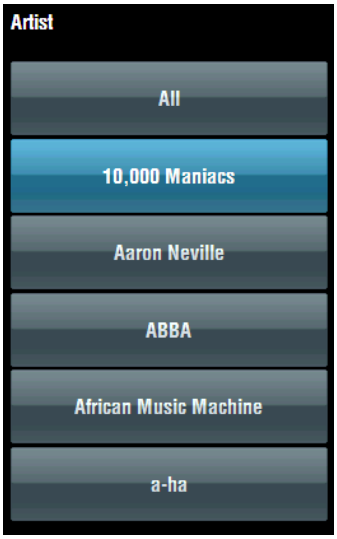
Media Custom Tab Controls

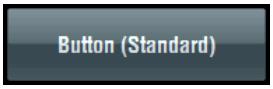
There are many types of controls you can use for AV devices when creating custom keypads or interfaces. Below is a reference table for common controls and their usage. Note that many custom controls will have settings available in their Properties window that will allow you to modify the name, look, style and connected media device.

For information on how to set up a custom page with custom controls, see the Customization section on page 30 of this Guide.

Control	Description
Audio Button 	Single action buttons that allows placement of commands directly onto it through the commands box, and does not require event mapping. This is the most common control used on custom media interfaces.
Audio Button (Recessed)	Variant of Audio Button that appears recessed (sunken) rather than raised.
Audio Toggle Button 	Dual-action variant of Audio Button that allows different commands to be executed when it is activated and de-activated. The button will “Light” in the Viewer when activated.
Hatswitch 4-Button 	Built-in Hatswitch or cursor control. This rounded control resembles common remote control type for up/down/left/right and enter (or select). This special built-control has predefined interactions that will change the shape of buttons automatically as it is resized; including changing buttons not part of the control. Note that commands cannot be mapped to this control manually. Instead, the Hatswitch Connects to a device (ex. IR Device) that has Universal Function mapping to send commands. From the Style options list, you can choose either Enter or Select as the center button. Note that you must select the command that corresponds to Universal Function commands.
Hatswitch 4-Button (Recessed)	Variant of the standard 4-Button Hatswitch, that appears recessed (sunken) rather than raised.

Control	Description
Hatswitch 8-Button 	Built-in Hatswitch or cursor control. This rounded control resembles common remote control type for up/down/left/right and enter (or select). The 8-button version adds Skip Fwd/Skip Back, and FF/ REW buttons to the cursor control. This special built-control has predefined interactions that will change the shape of buttons automatically as it is resized; including changing buttons not part of the control. Note that commands cannot be mapped to this control manually. Instead, the Hatswitch Connects to a device (ex. IR Device) that has Universal Function mapping to send commands. From the Style options list, you can choose either Enter or Select as the center button. Note that you must select the command that corresponds to Universal Function commands.
Hatswitch 8-Button (Recessed)	Variant of the standard 8-Button Hatswitch that appears recessed rather than raised in the Viewer.
Numeric Keypad 	Built-in Numeric Keypad control that displays numeric digits, plus enter and/or cancel buttons. This is a special built-in control, and commands cannot be mapped to it manually. Instead, the Numeric Keypad Connects to a device (ex. IR Device) that has Universal Function mapping to send commands. The Style options allow for a combination of Digits, Enter, and Cancel buttons to appear. Note that Universal Functions must be set on all commands.
Audio Sound Adjust 	Slider control used to adjust the bass or treble for compatible built-in zone controllers. Choose whether slider sends Bass or Treble commands in the **Style** dropdown.
Audio Mode Control  **Note:** Display Varies, but follows this basic layout.	Auto-populating zone-based control that provides buttons for supported audio modes (Pro Logic, DTS etc.) or EQ settings (Rock, Jazz etc.) on supported Zone Controllers. This control Connects to the desired zone and provides 2-way feedback where available. Note that each Zone on a Zone Controller may populate different fields based on what commands are available for that particular zone controller.

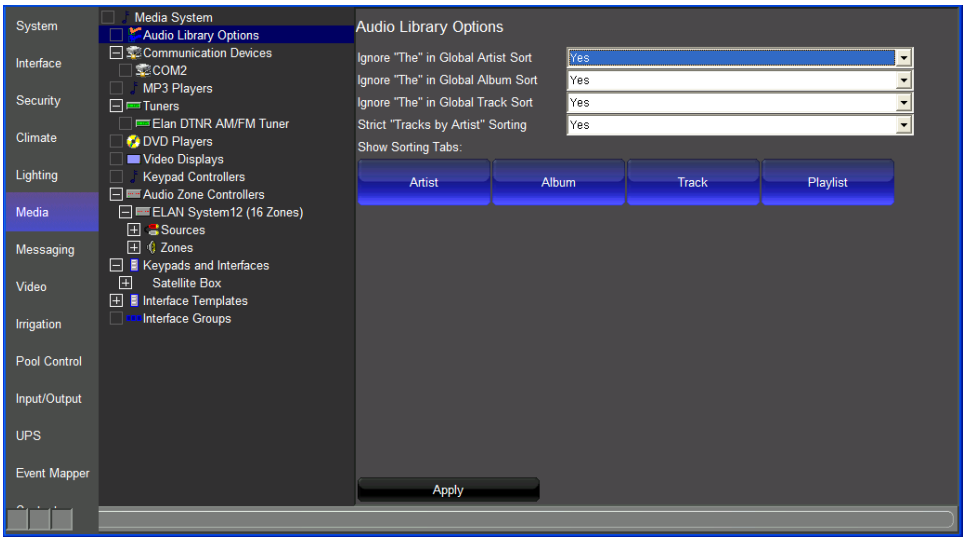
Control	Description
Audio Keypad Text View  **Note:** Display Varies, but follows this basic layout.	Specialized control used on certain Zone Controllers for metadata/status feedback. Audio Keypad Text View is typically used for feedback of devices that cannot be controlled directly, but can be controlled through their parent Zone Controller. These devices commonly include iPod Docks and Music Servers. This control is Connected to a Keypad Controller. It is not commonly used outside of predefined, device specific interfaces.
Audio Keypad  **Note:** Display Varies.	Specialized control used on certain Zone Controllers for simple auto-populating keypads. Audio Keypads are typically used for feedback and to control devices that cannot be controlled directly, but can be controlled through their parent Zone Controller. These devices commonly include iPod Docks and Music Servers. This Control is Connected to a Keypad Controller. It is not commonly used outside of predefined, device specific interfaces.
Audio Zone Keypad  (Display Varies based on unit)	Specialized control used on certain Zone Controllers for auto-populating keypads. Keypads typically are used for feedback and to control devices that cannot be controlled directly, but can be controlled through their parent Zone Controller. These devices commonly include iPod Docks and Music Servers. Note that this control automatically links to the Active Zone. This control is typically only used for specific Zone Controllers, and its use will typically be mentioned in the device's Integration Note.

Control	Description
Button (Momentary) 	Standard button that can be used with Event Maps to send commands when pressed and stop sending commands when released. Typically used to control contact closures, projector screens, or other ramping devices that require momentary control action.
Button (Standard) 	Standard button that can be used with Event Maps to activate various functions. This is a single-action button. Typically, it is preferred to use the Audio Button and directly map the commands to the button, rather than use Standard Buttons and Event maps on Media Interfaces.
Button (Toggle) 	Standard toggle button that can be used with Event Maps to activate various functions. This dual-action button allows for a set of commands to be set when it is activated and second set of commands to be sent when it is deactivated. Typically, it is preferred to use the Audio Toggle Button and directly map the commands to the button, rather than use Standard Buttons and Event maps on Media Interfaces.
Button (Image) 	Variant of Button (Standard) that allows the button to display an image (JPG) from Picture share folders.
DVD Browser 	DVD Cover Art browser used with supported DVD Changers and Movie Servers. The DVD Browser automatically loads cover art from the server and displays it in an All Movies section, and also sorted by genre. Highlight a movie and press the play button that displays to play a movie from the interface. Where supported, films will be highlighted to indicate current playing and previous playing states.

Control	Description
DVD Carousel Selector 	DVD Text browser for selection of movies in a supported DVD Changer or Movie Server. The DVD Carousel Selector loads the names of movies from the server and displays the listing in an All Movies section, also sorted by genre. Highlight a movie and press the play button that displays to play a movie from the interface.
TV Channel Favorites  (Tab layout)  (List layout)	Built-in control that displays image buttons for one-touch selection of favorite TV channels. This control Connects to a device (ex. IR Device) that has proper Universal Function mapping to send commands, and also leverages settings created for TV Channels on the Content tab. This control displays icons in customizable groups of favorites. The Style drop-down allows selection of different icon sizes. For full details on using this control, see the ***g!*** *Configurator Training Guide,* Lesson 9, **Configuring Home Theater Systems**.
TV Channel Favorites	See *TV Channel Favorites* on page 165

Configure Audio Library Sorting Options for a Built-In Source

Use the Library Sort Options on the Media tab to change the sorting options that appear within MP3 Players such as **g!** Internal Player, Sonance iPort, ELAN ViaDJ etc.



Quick Reference: Audio Library Options	
Ignore “The” in … Sort	From the drop-down lists, select **Yes** to ignore or **No** to use the word “The” when sorting by Artist, Album or Track.
Strict “Tracks by Artist” Sorting	Controls the filtering of tracks to display on the Artist tab in the Viewer’s Music Library. When set to Yes, only tracks that are solely by the artist display. This mostly affects tracks on compilation albums and is rarely needed.
Show Sorting Tabs:	Select the sorting tabs that will be available on the Music Library tab in the Viewer. All are selected by default.

Generic Single Zone Controllers

The Generic Single Zone Controller is a tool that controls A/V devices that do not have drivers available in the Configurator. These devices can be controlled through either IR or Generic Serial commands.

Examples:

1. A legacy Theater Receiver that must be controlled using IR.
2. A video display in a bar. In this scenario, the homeowner would like to have a news or sports channel showing on the display while listening to the audio programming from the Whole House Audio system. Here, the Generic Single Zone Controller would be configured to control the display itself, and the "Bar TV" zone would act just like any other zone in the Viewer software.

Note: As the name implies, the Generic Single Zone Controller can only control and display a single zone. To control a device such as a matrix video switcher, one Generic Single Zone Controller must be added for each zone you want to control.

ELAN does not recommend controlling any device through one-way IR or Serial. Using supported equipment is always the preferred method. These instructions are provided for those situations where controlling unsupported gear is unavoidable.

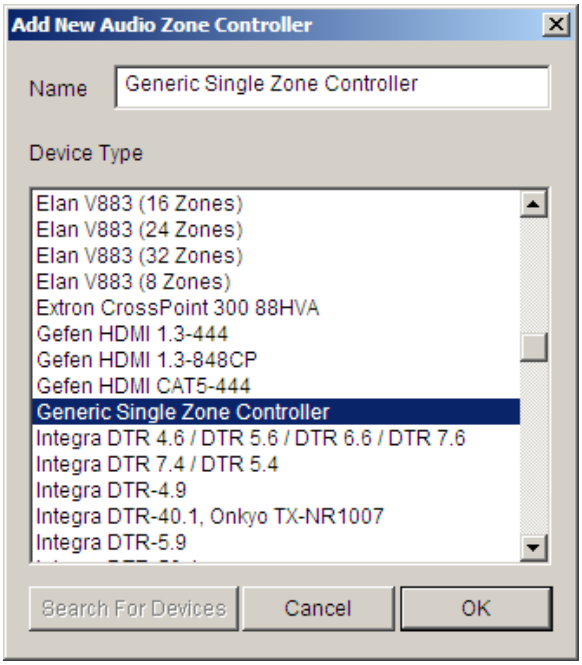
Add a Generic Single Controller

1. Learn Control codes:

In Configurator, Learn or Import valid IR or Serial codes for your device on the Input/Output tab. This is necessary whether you are controlling an AVR, multi-zone switcher, Display, Amp, Volume Control (sub-zone) or any other AV hardware—to control the device you must first get valid control codes into the **g!** system. See Lesson 10, **IR Control** or Lesson 11, **Generic Serial Control** in the ***g!*** *Configurator Training Guide* for instructions on how to learn or import codes.

2. Add a Generic Single Zone Controller:

To use the Generic Single Zone Controller, add a new Audio Zone Controller in the Media Tab. From the list, select **Generic Single Zone Controller** and click OK. *A Generic Single Zone Controller will be added to the system.*

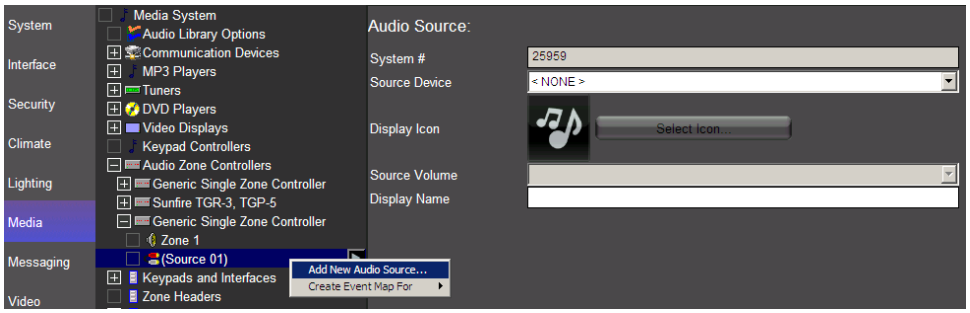


Quick Reference: Generic Single Zone Controller	
Name	Enter a name for the Zone Controller. This can be any name, but should be descriptive so this specific device can be identified in the Configurator.
System #	Unique, read-only number assigned by the **g!** software for internal use.
Device Type	Read-Only that identifies the type of zone controller that was added.
Location	Optional field used to track the location of equipment with the Floor Plan tab. This field is currently used for reference only.
On Off Control Type	Drop-down field used to select the type of On/Off control available for the Zone Controller. *Cycling*- Indicates that the Controller does not have discrete codes for on and off, just a single "Power" command. The **g!** software will **attempt** to track the state of the controller and send commands when appropriate. ELAN recommends not using this option. *Discrete*- Indicates that there are separate commands for "On" and "Off". When using this setting, the **g!** software will send the "On" command once when a source is selected, and not send another command to the controller until a different source is selected or the zone is turned off. *Discrete Verify (Always Send)*- Indicates that there are separate codes for "On" and "Off". When using this setting, the **g!** software will send the "On" or "Off" command each time a source button is pressed.
Source Control Type	Drop-down field used to select the type of Source control available for the Zone Controller. *Cycling*- Indicates that the Controller does not have discrete commands for each source, just a "Next Source" toggle. ELAN recommends not using this option. *Discrete*- Indicates that there are separate commands for each source. When using this setting, The **g!** software will send the source command once when a source is selected, and not send another command to the controller until a different source is selected or the

Quick Reference: Generic Single Zone Controller	
	zone is turned off. *Discrete Verify (Always Send)*- Indicates that there are separate commands for each source. When using this setting, The **g!** software will send the "On" or "Off" command each time a source button is pressed. **Note:** After changing Source to Discrete or Discrete Verify, the Next Source Command entry will disappear and it may seem like no Source commands are added in its place. This is because Source Commands pull their name from the name of the Source assigned to them, and sources may not be added to the Zone Controller yet. The entry is actually there, but the name is blank until sources are added and configured.
Delay After On/Off	Drop-down field used to select the delay between an On/Off command and the next command sent to the Zone Controller. Use this setting if the controller needs time after turning on before it will accept another command. Increments are in milliseconds.
Delay After Source	Drop-down field used to select the delay between a source command and the next command sent to the controller. Use this setting if the controller needs time after selecting a source before it will accept another command. Increments are in milliseconds.
Volume Control Type	Drop-down field used to select the type of volume control available for the Zone Controller. *Pass to Active Source*- Indicates that the **g!** software will attempt to pass volume commands to whichever source is selected in the zone. This functionality is only supported on specific sources, such as HomeLogic Internal Player, and typically is not used. *Mappable Ramp*- Allows commands to be entered in such a way that ramping the volume by holding a finger on the "Volume Up" or "Volume Down" buttons is possible. *Pass to Display*- Used with specific built-in display drivers. Indicates that The **g!** software will attempt to pass volume commands to whichever display is assigned to the zone. *None*- Removes the volume bar from the right side of the display.
Controller Commands	These provide a list of commands based on the selections made in the Generic Single Zone Controller Properties. As the settings change for the controller, the options in this section will change as well. For example, if **On Off Control Type** is changed from **Cycling** to **Discrete**, the power options in Controller Commands change from **Power On/Off** to separate commands for **Power On** and **Power Off**.

Add Sources to a Generic Single Zone Controller

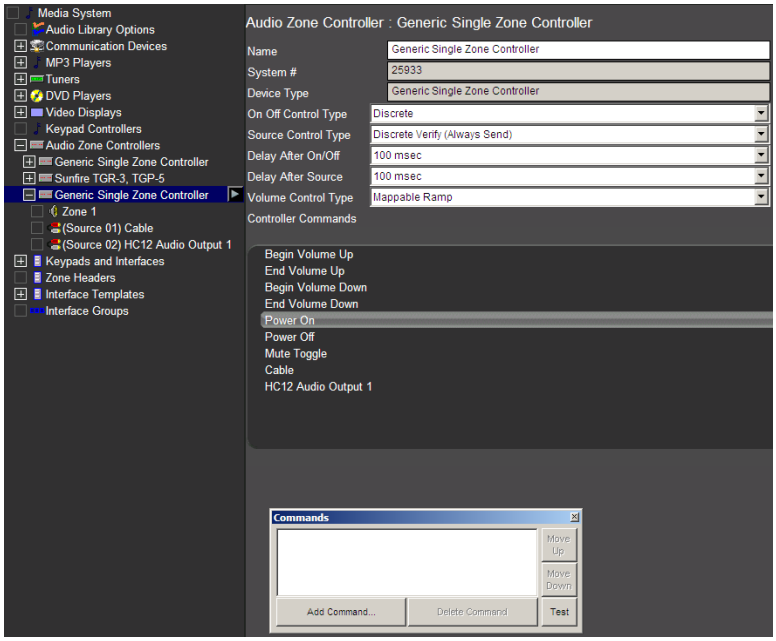
Add the desired number of sources to the Generic Single Zone Controller. By default, the Generic Single Zone Controller is added to the system with only one Source. Additional sources may be added by simply right clicking the existing source and choosing **Add New Audio Source**.



Assign Commands to a Generic Single Zone Controller

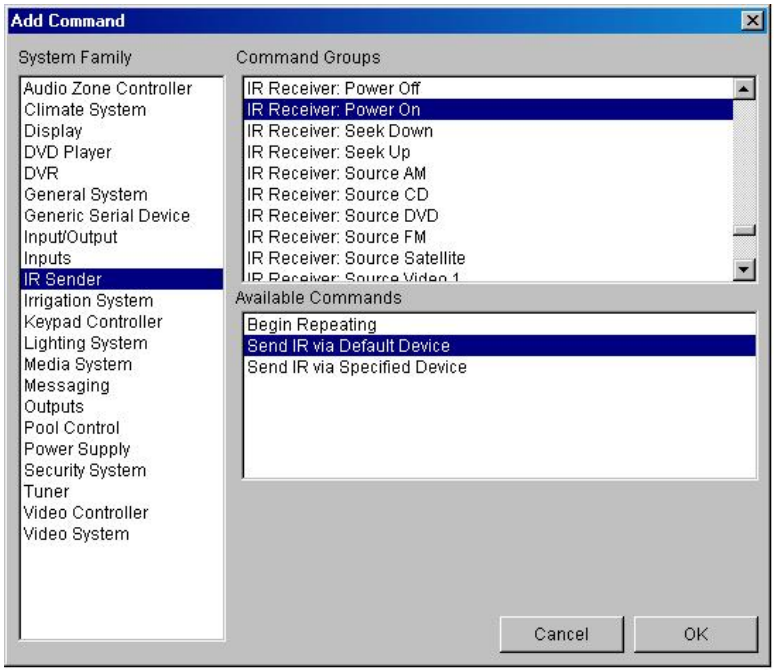
Adding controller commands for your Generic Single Zone Controller is the same for both IR and Generic Serial control.

1. Click on an available Controller Command, such as Power On. *The Commands dialog box appears.*

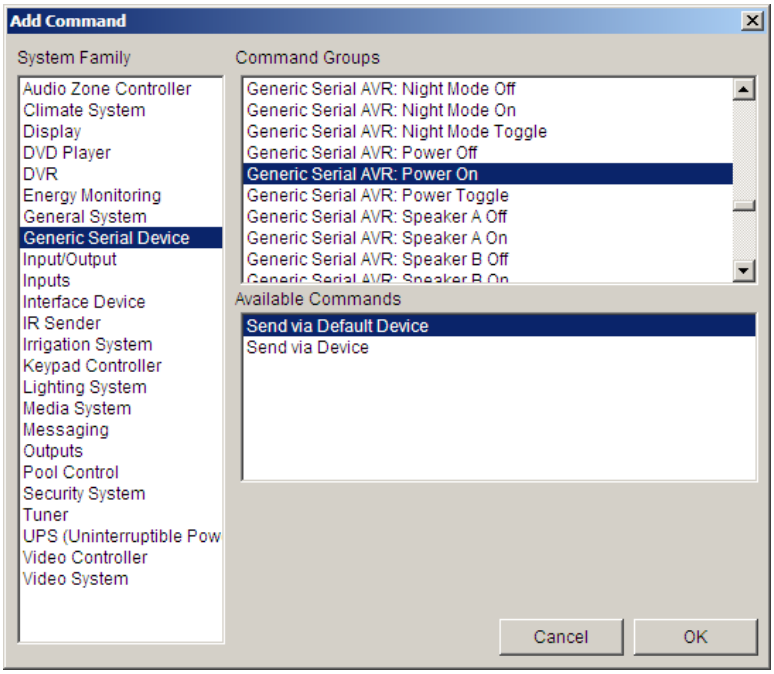


2. Click the **Add Command…** button in the Commands dialog box. *The Add Command dialog box appears.*

   For an IR controlled device, select **IR Sender** from **System Family**. Select the desired command from **Command Groups**, then choose **Send IR via Default Device** and click **OK**. *The command will be added to the Commands window.*



For a Generic Serial controlled device, select **Generic Serial Device** from **System Family**. Select the desired command from **Command Groups**, then choose **Send via Default Device** and click **OK**. *The command will be added to the Commands window.*



3. Add commands as needed for all power, source and mute commands. See *Configure Volume Commands* below.

Note: To add multiple commands in the Commands window, click the **Add Command…** button again for each command you want to add. Commands will be executed in the order they appear in the Commands window.

Configure Volume Commands

The most common method of volume control is to configure a “Mappable Ramp.” Use this method to control:

- Pressing and holding a volume button to repeatedly send volume commands until button release. (For IR Devices)
- Sending an isolated volume increment (For IR and Generic Serial Devices)

> **IMPORTANT:** The device being controlled must have a command that will increase or decrease volume in increments. **Devices that only allow volume to be set to specific levels (10%, 20% etc) are not compatible.** You should also size of the volume increment (1% increment, 5% increment etc.) is appropriately, and use the Incrementing method rather than Volume Ramping method as needed. For example, you would not want to repeat a 15% jump in volume every 300ms.

The instructions for configuring volume ramping are different for IR and Generic Serial devices. Be sure to review the proper set of instructions for your device.

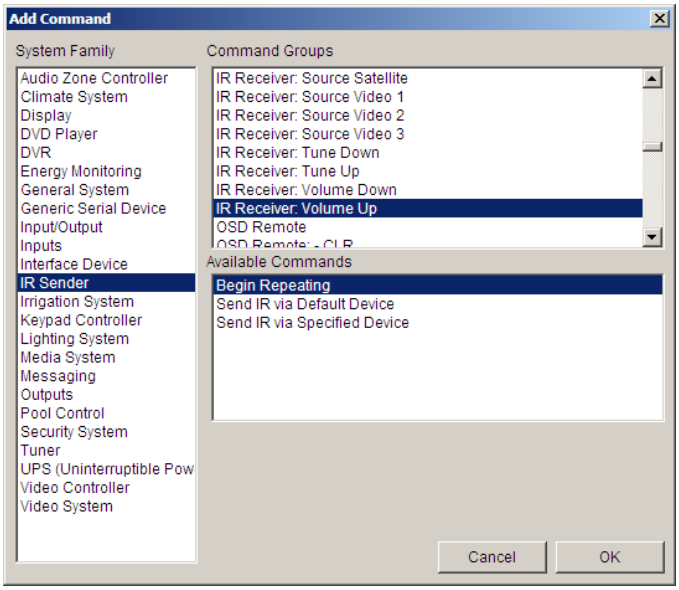
Volume Commands for a Generic Single Zone Controller- (IR devices):

Volume is typically controlled so that pressing and holding a volume button will result in volume commands being sent repeatedly until button release. You can also use Mappable Ramp to send an isolated volume increment. Both methods using Mappable Ramp are explainedd below. Note that this section deals with adding Volume commands for an IR controlled device. For notes on volume control for a Generic Serial Controlled device, see below.

Volume ramping can be set up for an IR controlled receiver or display by setting the Volume Control Type to **Mappable Ramp** and inserting the appropriate commands. Ramping volume is the standard behavior for most volume controls. When used, the operator is able to hold down the volume up or volume down button, and the commands will continue to be sent until the desired volume is reached and the button is released.

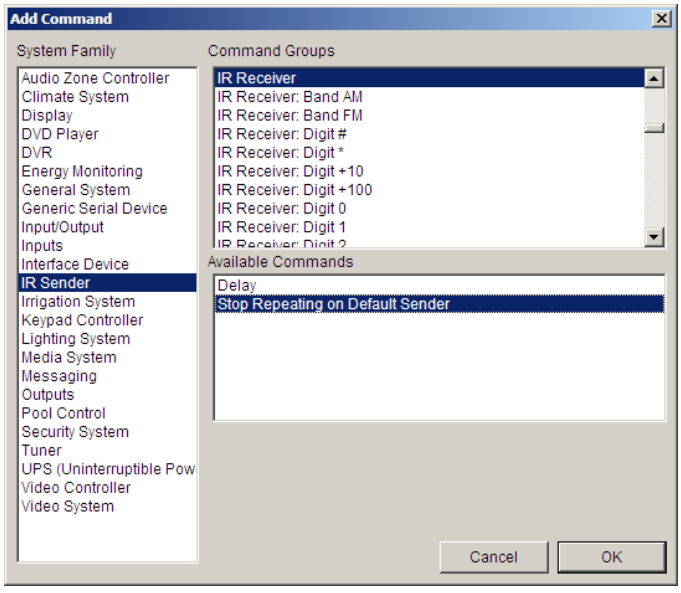
To set up “Press-and-Hold” volume control for an IR Device:

1. From the **Controller Commands** list, select the command labeled “**Begin Volume Up**”.
2. In the **Add Command** window, select **IR Sender** from **System Family**, then select the **Volume Up** command appropriate to the device from the **Command Groups** list, then choose the option “**Begin Repeating**” from the “**Available Commands**” list.



3. From the **Controller Commands** list, select the command labeled "**End Volume Up**".
4. In the **Add Command** window, select **IR Sender** from the **System Family** list, then find the block of commands relating to the device you are controlling in the **Command Groups** box.

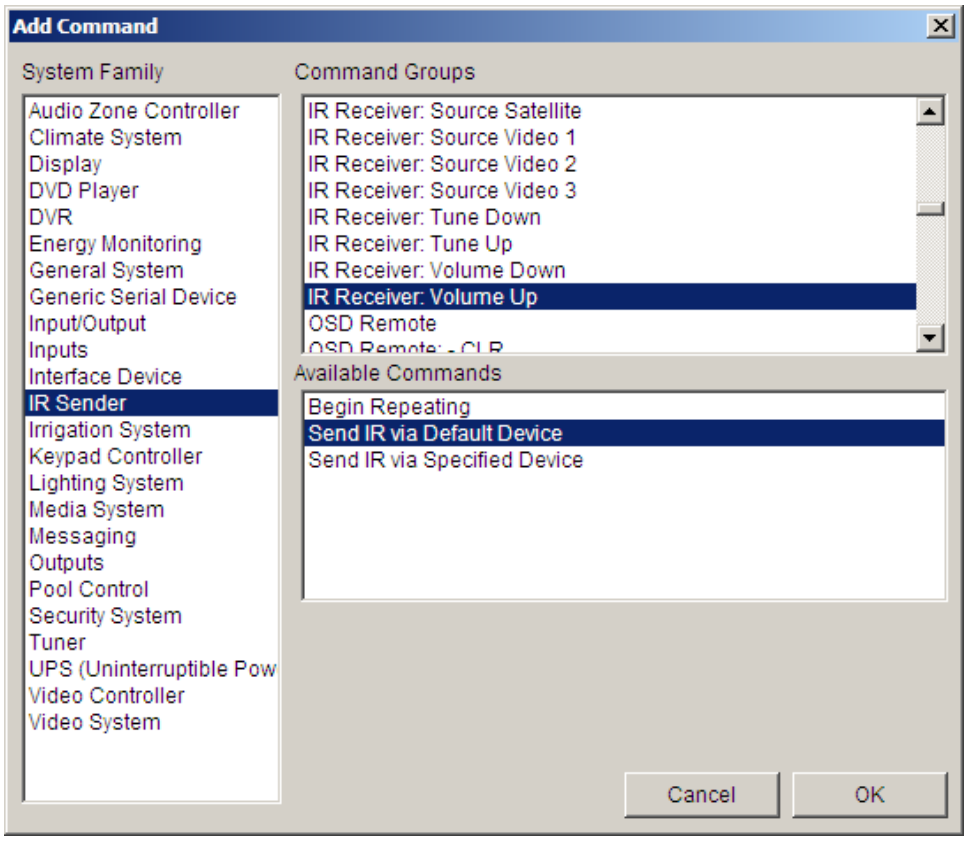
   The top command in the block will show the device name with no command after it. Select this command, and then select **Stop Repeating on Default Sender** from the **Available Commands** box. Click **OK**.



Note: The other available option when the top level command is selected is **Delay**. Use this command to insert a delay between commands. When Delay is selected, a Time field becomes available, allowing you to enter a delay time using hours, minutes, seconds and milliseconds. Typically the Delay is inserted between two commands in the Commands box to add a pause between them.

To set up incremental volume control for an IR device:

To send **increments** of volume, *without* the press-and-hold behavior, add a Volume command to the **Begin Volume…** command, and do not add any codes to the **End Volume…** command.

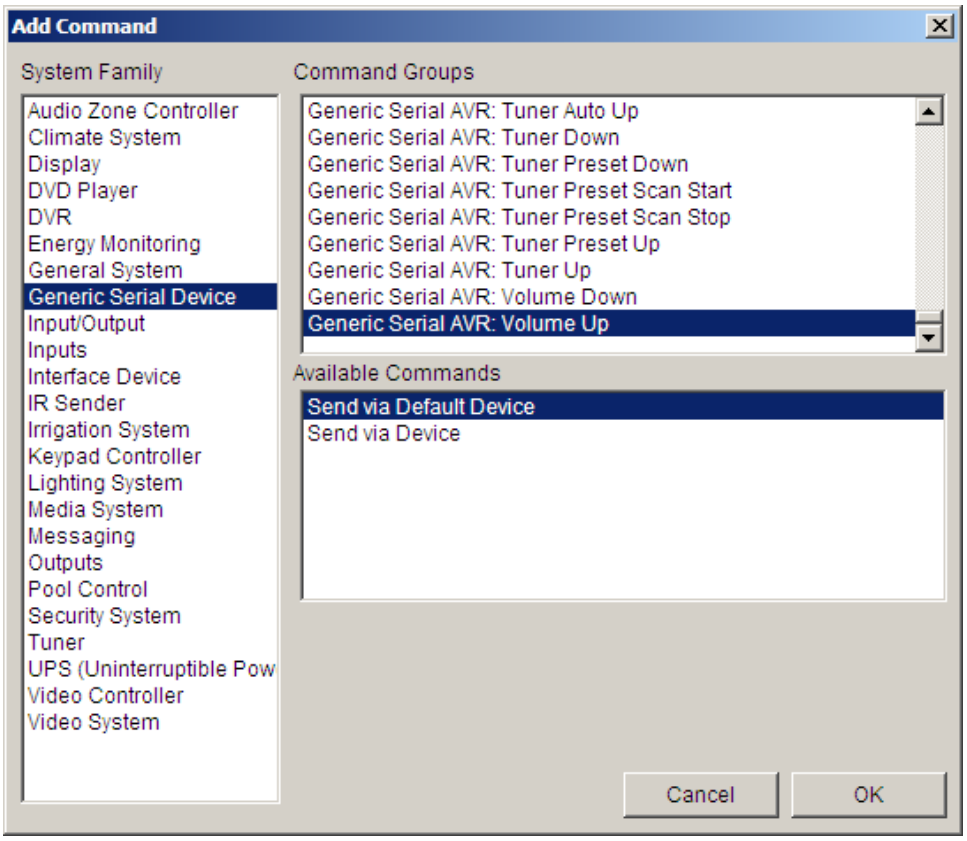


IMPORTANT: If you intend to use only volume increments, be sure to select **Send IR via Default Device** rather than "Begin Repeating". Selecting a code to "Begin Repeating" with no command in "End Volume..." will start a ramp cycle that never stops, which can damage speakers.

Configure Volume Commands for a Generic Single Zone Controller- (Generic Serial):

While adding commands to a Generic Single Zone Controller is the same whether you are controlling IR or Generic Serial, Volume control is not.

To increase volume with serial, ELAN recommends using the **Incrementing** method. Use **Mappable Ramp** to send increments of volume, *without* the press-and-hold behavior. To do this, add a **Volume** command to the **Begin Volume**… command, and do not add any codes to the **End Volume…** command.



IMPORTANT: Ramping volume with repeating Generic Serial is ***not*** recommended, although it is possible through the use of timers and event maps. If you need to set up a manual repeat for Generic Serial, contact Technical Support for more information.

Other Uses for Generic Single Zone Controllers

- **Using Generic Single Zone Controller to Control a Multi-Zone Switch:**

Note: As the name implies, the Generic Single Zone Controller can only control and display a single zone. There is no Generic Multi-Zone Controller, nor is there any way to add zones to a Generic Single Zone Controller.

While ELAN does not recommend attempting to control unsupported Multi-Zone units, the best way to handle this situation is to add a Generic Single Zone Controller for each zone on the multi-zone unit. This will ensure that everything is coded the same way and is easiest to come back to a few years down the road and remember the control scheme, and is easier to troubleshoot than Event Maps.

The basic steps above should be followed for adding *each* zone of your Multi-Zone Switch. If this is a Video Switch, you may wish to skip Volume control steps and set Volume Control Type to None. Once added, Generic Single Zone controllers can be slaved to your audio switch just like any other zone controller as needed.

- **Using a Generic Single Zone Controller to Control a TV:**

Generic Single Zone Controllers can used to control a TV where there is no zone controller. In this situation the television itself is the "zone controller", and is added as a zone rather than separately as a display.

In this configuration, you will add a Generic Single Zone controller and configure Power, Source, and Volume commands on the Generic Single Zone Controller to send commands to the display directly. Adding a Video Display on the Media tab is not needed (unless ELAN has a built-in driver you wish to leverage), and you do not need to add a Video Display to the Zone Properties as the commands are already being sent directly by the Generic Single Zone Controller.

- **Using a Generic Single Zone Controller to Control Amps/VSE/Sub-Zones:**

In this scenario, the setup is almost entirely identical to the way a standard AVR is configured, as we are simply routing Power/Volume commands to a different device. The one likely difference is that the sources are identical to an existing zone, likely fed from a pre-out into a single input on the amplifier. In this instance, rather than add multiple sources to the Generic Single Zone Controller, simply add a single source using the special function "Output from Zone". This will automatically populate all sources from the desired zone pre-out, and will also automatically switch sources as needed on the zone feeding the output.

- **Using a Generic Single Zone Controller to add Interfaces to the Media Tab:**

There may be occasions where you have no need to control a piece of third party A/V gear, but you want to add additional interfaces to the Media tab to allow expanded control options. This would be like adding a "Custom Tab" to Media.

One example of this use is on an iPhone, where there is no support for Settings pages, and you want to add the interface to the iPhone (Viewer) to allow control from normally unsupported interfaces. In other scenarios, you may have multiple displays in one area, and wish to send commands to a cable box or other source device without changing the audio/video switch state.

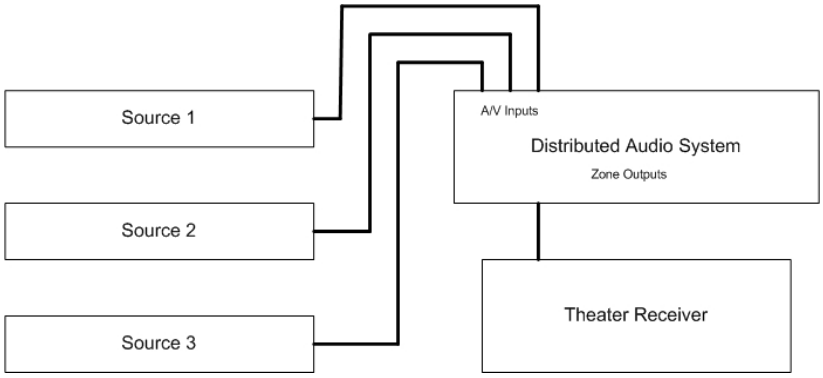
To use a Generic Single Zone Controller in this manner, simply add a Generic Single Zone Controller. Configuration of power, source and volume type options is not needed, though you may wish to set volume type to *None* to hide the volume bar. *(Note: there is no way to hide the power/source buttons).* Adding commands to any of the controller commands is not needed. Simply add the desired interfaces as

Sources, and change the name of the zone to something appropriate such as “Settings”, and advise your customer on its proper use.

Output from Whole House Audio

The **g!** software uses the concept of **Output From (zone)** to allow for the Whole House Audio (WHA) to be played through another device without the need to write complex macros. For example, a homeowner may want to play the WHA through a Surround Sound Receiver in a theater or bedroom.

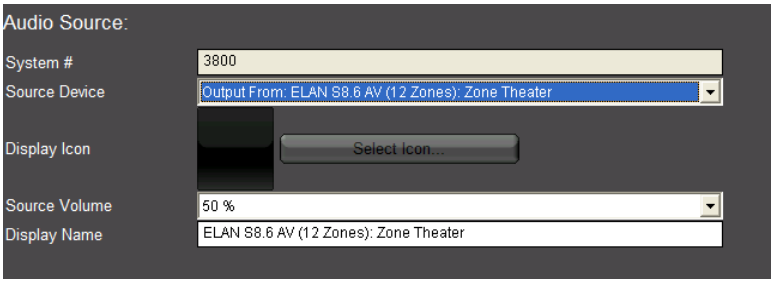
An output zone from the WHA system is assigned as a *source* on the receiver. The Viewer then populates the available audio sources from the WHA zone controller in the zone (or zones) for the surround receiver. If a source from the WHA is selected in the Viewer, **g!** will send a signal to the WHA system to switch to that source. Any local sources on the receiver will still function as expected.



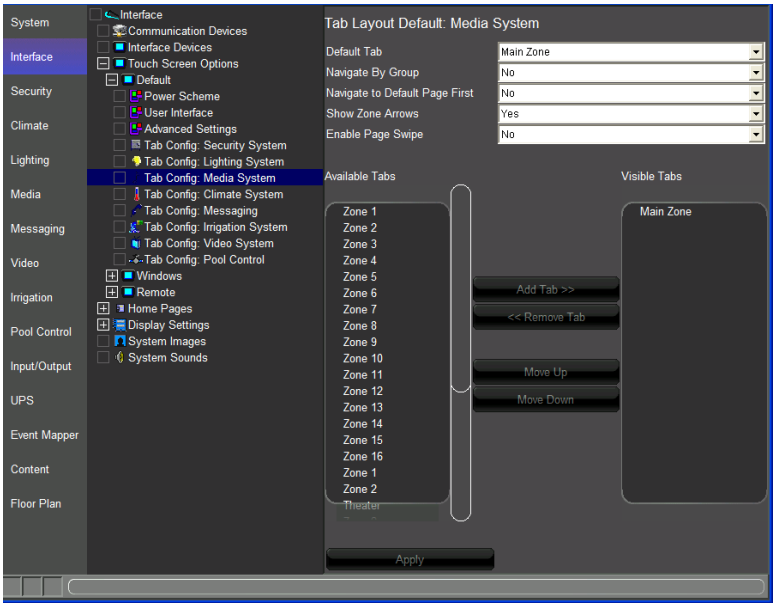
Example Configuration

Set up an ELAN S8.6 with a zone output to a Sunfire TGR-401 Surround Sound receiver:

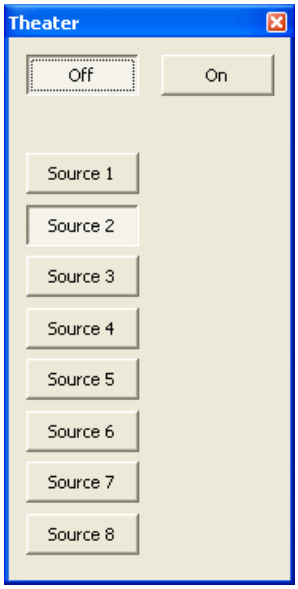
1. Add two zone controllers, an **ELAN S8.6** and a **Sunfire TGR-401.**
2. Add a DVD Player and a Cable Box, and assign them as sources 1 and 2 on the **S8.6**.
3. Rename the first zone on the S8.6 “**Theater**”. This will make it easier to assign and remove in later steps.
4. Navigate to the “**CD”** source on the Sunfire TGR-401. In the **Source Device** dropdown, select “**Output From: ELAN S8.6AV (6 Zones): Zone Theater”**:



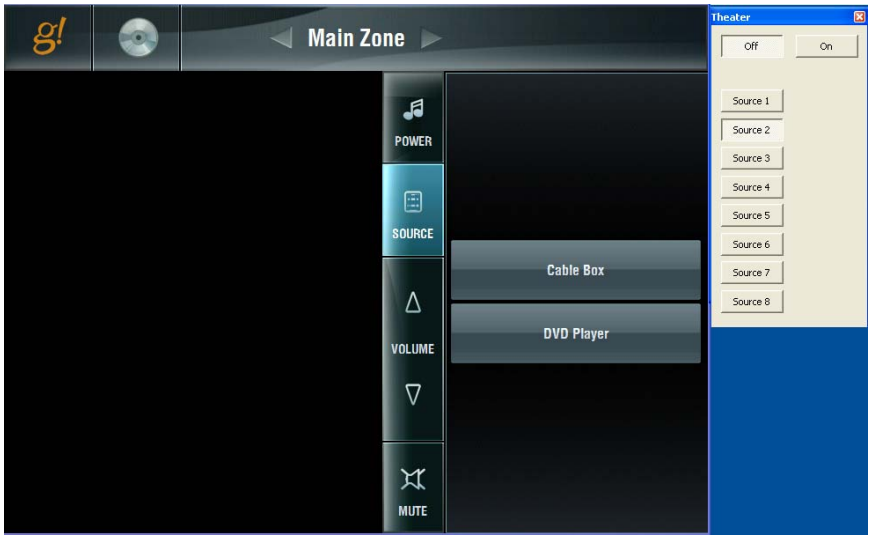
5. Go to the Configurator **Interface** tab. Remove all tabs but the **Main Zone** from the **Visible Tabs** column. *This will show only the Sunfire's Main Zone in the Viewer interface.*



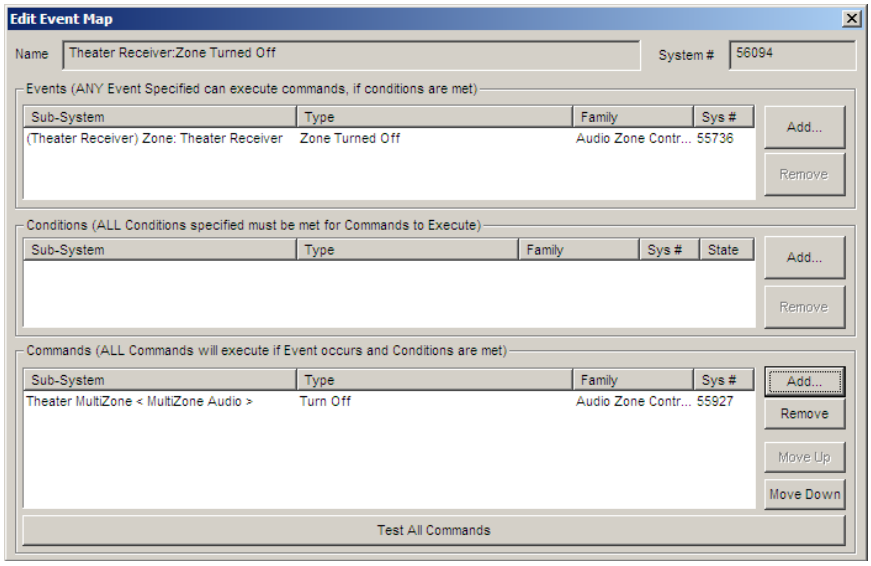
6. Return to the **Media** tab and expand the zones on the **ELAN S8.6 AV**. Right-click the **Theater** zone and select "**Show Virtual Zone**" from the pop-up options. *The Virtual Theater Zone is displayed:*



7. Open the **Viewer** interface and go to the **Media** tab. Arrange the desktop so that you can see both the Viewer interface and the Virtual Theater Zone. Notice that even though the DVD Player or Cable Box were not configured as sources on the Sunfire, they are shown as sources in the zone:

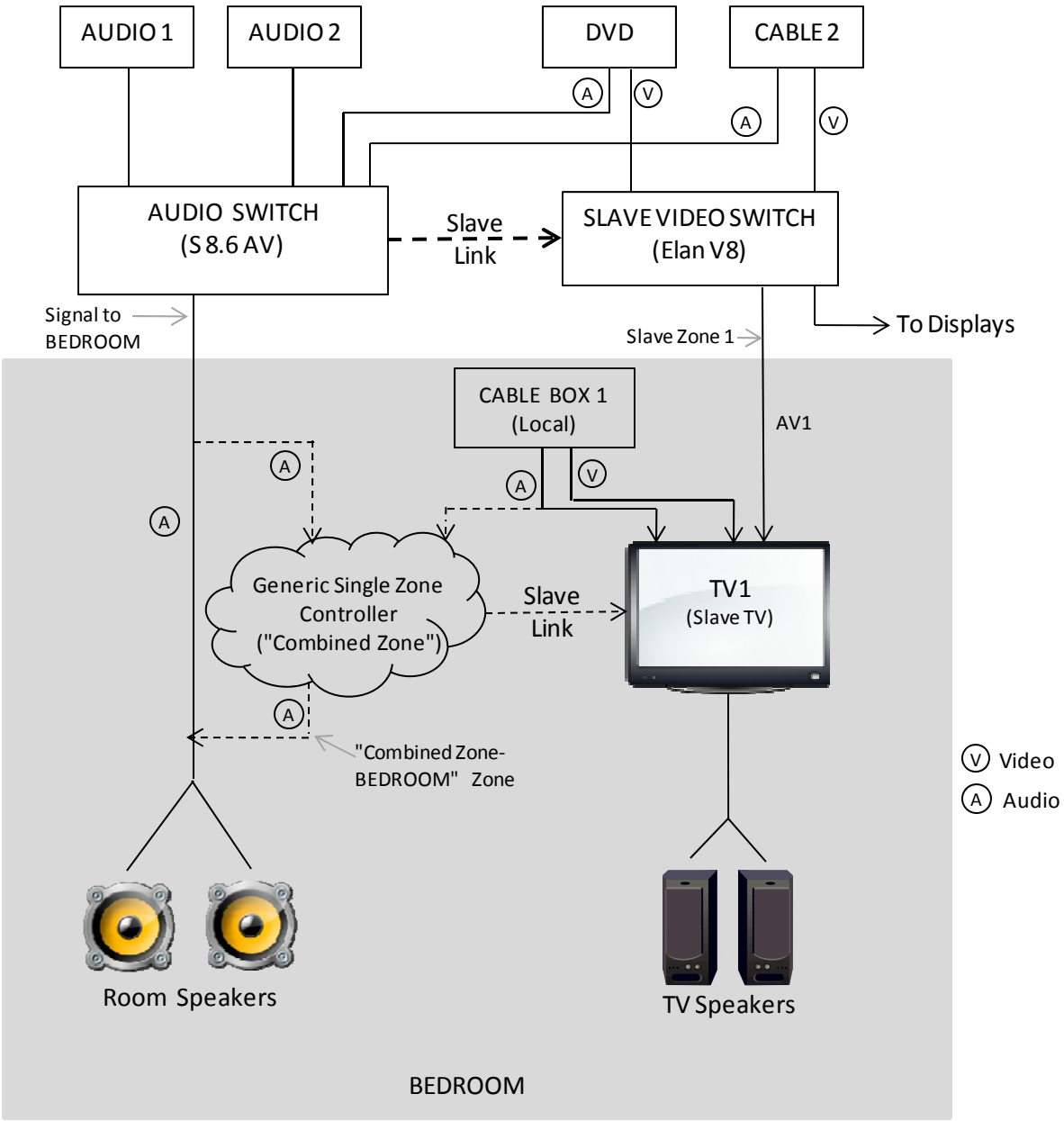


8. Select the **DVD Player** in the Viewer. Notice that the Theater Virtual Zone window shows that the S8.6 turns on and switches to **Source 1**. Switch to "**Cable Box"** in the Viewer, the Source Selection in the Theater Virtual Zone window will change to "**Source 2"**.
9. Click the "**Off**" button in the Viewer. Notice that the S8.6 Theater zone **does not shut off**. This is to prevent an interruption in the case that the speaker outputs from the zone or the second zone on the Sunfire are in use as well.
10. To turn off the S8.6 Theater zone when it is not in use by the Sunfire, set up an Event Map:



Switching Volume between Local and Distributed Audio Systems in a Single Zone

This section describes how to configure the g! software to allow volume control in a room that contains both a “local zone” such as for a television’s speakers, and the integrated whole house zone speakers in the same room. The television is connected to a local video signal (such as a cable box in that room) and video that is “slaved” to the whole house audio. When the television is using the local cable box, audio plays directly from the TV. When the television is using a source that is part of the whole house system, the audio will play from the room speakers. The diagram below shows the sample configuration that will be discussed in this section:



This diagram shows:

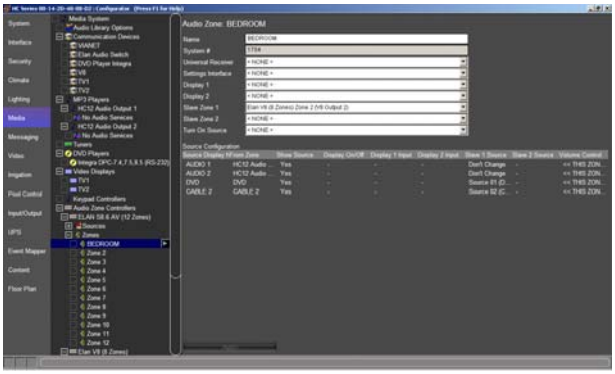
A *distributed* (whole house) audio system with:

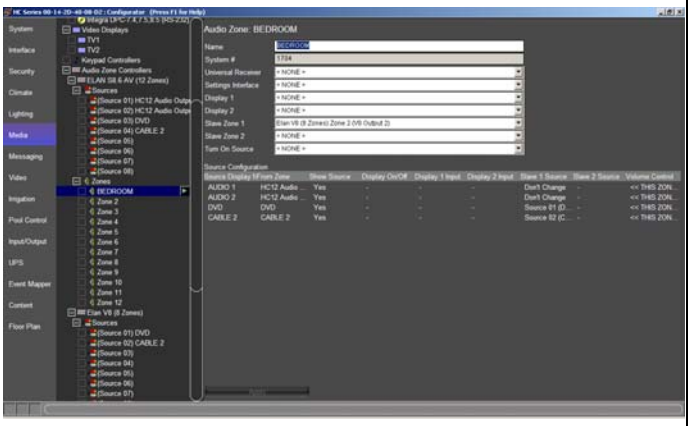
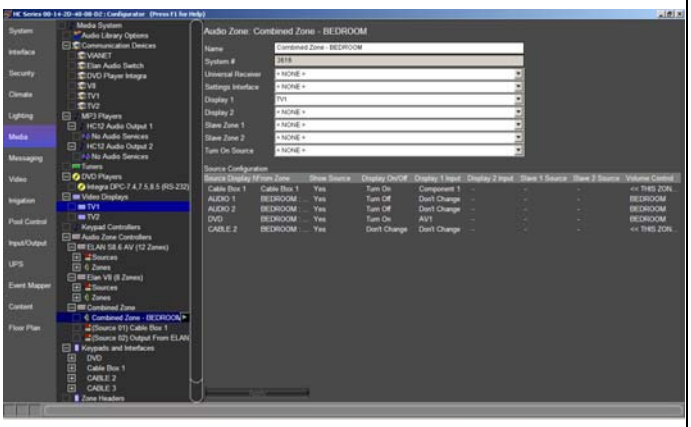
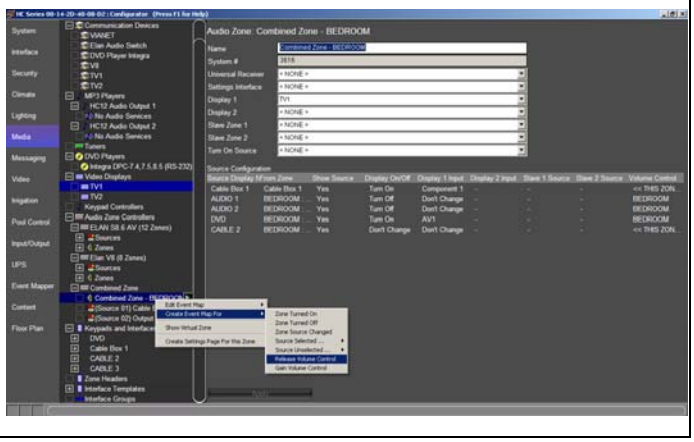
- Two audio sources (Audio 1 and Audio 2),
- Two video sources (DVD and Cable 2)
- Video Displays (not used in these instructions)
- An Audio Zone Controller (Audio Switch S 8.6 AV)
- A Video Switch (Elan V8)
- Room Speakers

A *local* system (Room) with:

- A video source (Cable Box 1)
- A video display (TV1)
- A local zone controller (Generic Single Zone Controller). Note: This is a virtual controller, not an actual piece of hardware.

The following table is a general overview of the steps that need to occur:

Step	**Where to find instructions**
Configure all audio and video sources for the house.	See Lessons 7 and 8, **Distributed A/V Systems I & II and** , in the ***g!*** *Configurator Training Guide*
Add Interfaces for the Video Sources (under keypads and Interface)	See Lessons 7 and 8, **Distributed A/V Systems I & II**, in the ***g!*** *Configurator Training Guide*
Add Video Display(s)	Lesson 8, **Distributed A/V Systems II** in the ***g!*** *Configurator Training Guide.*
Add: "Master" Audio Switch (S 8.6 AV) • Add all the audio inputs from audio sources and all the audio outputs of video sources	See Lessons 7 **Distributed A/V Systems I** in the ***g!*** *Configurator Training Guide* 

Step	Where to find instructions
Add “Slave” Video Switch (Elan V8). Note: This is called a slave because it switches video sources in reaction to the audio selection from the audio switch. • Add all the “Distributed” video sources • Add all the video outputs • Configure the master/slave relationships to specify which audio zone will control the video switch for the source in the local video zone.	Lesson 8, **Distributed A/V Systems II** in the ***g!*** *Configurator Training Guide* 
Add a Generic Zone Controller- (to combine the local source and the whole house audio) • Add “Cable Box 1” as source 1 • Add the distributed AV output “BEDROOM” as source 2 • Set the display to TV1 (the TV in the Room) • Select display on/off and display input settings in the ‘source configuration” matrix.	This section 
Create an Event Map to control the on/off state of the speakers from the distributed zone. • Use the “Released Volume Control” of the BEDROOM event map to toggle the room speakers on and off.	This section 

Note: Zones that are configured with Local Systems do not support two displays in a zone, and they are not intended to be setup like a bar.

Configure Generic Single Zone Controller

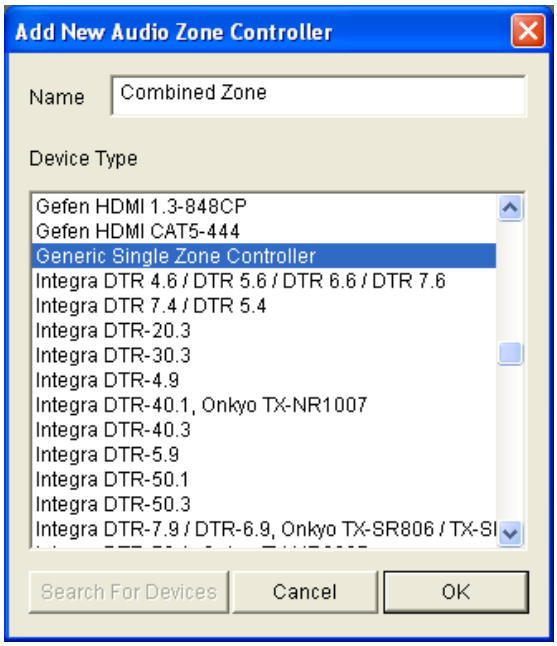
To configure a Generic Single Zone Controller with a local source and output from the audio zone controller:

In the example screens below, there is a local source (Cable 1) and the Elan S 8.6 AV audio zone controller.

- **ELAN 8.6 AV** with Audio Output 1, Audio Output 2, DVD and Cable 2 as sources
- **Cable Box 1**, a source connected to a video display and cable box interface.

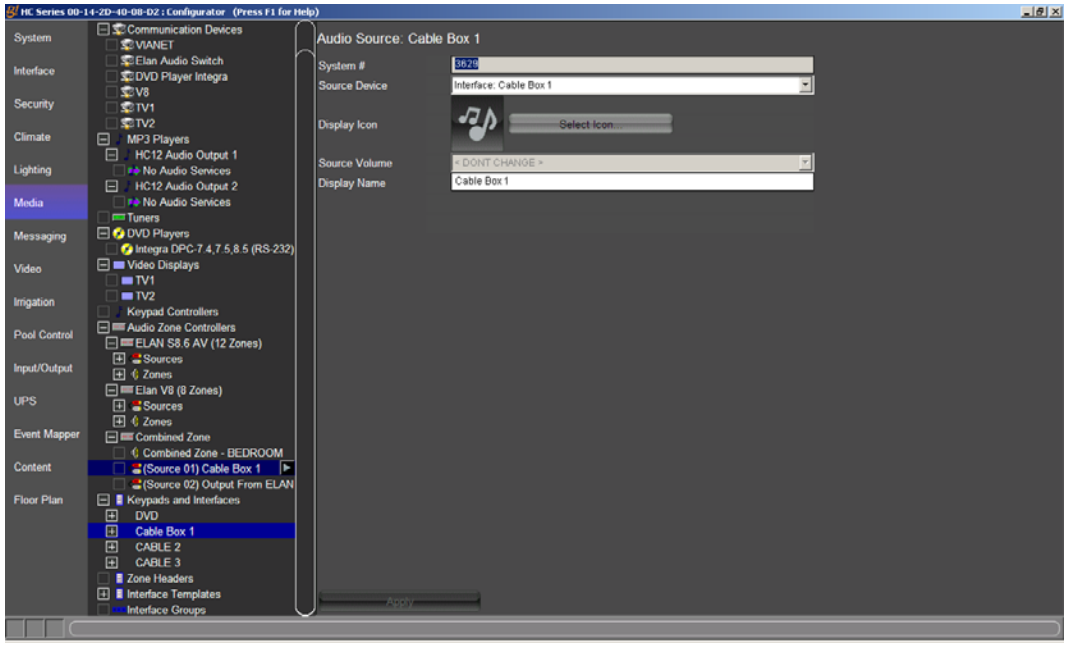
1. Navigate to the Media tab. Right-click Audio Zone Controllers and select **Add New Zone Controller…**. *The Add New Audio Zone Controller window opens.*

   Name the Controller, select **Generic Single Zone Controller** as the Device Type. Click **OK**.

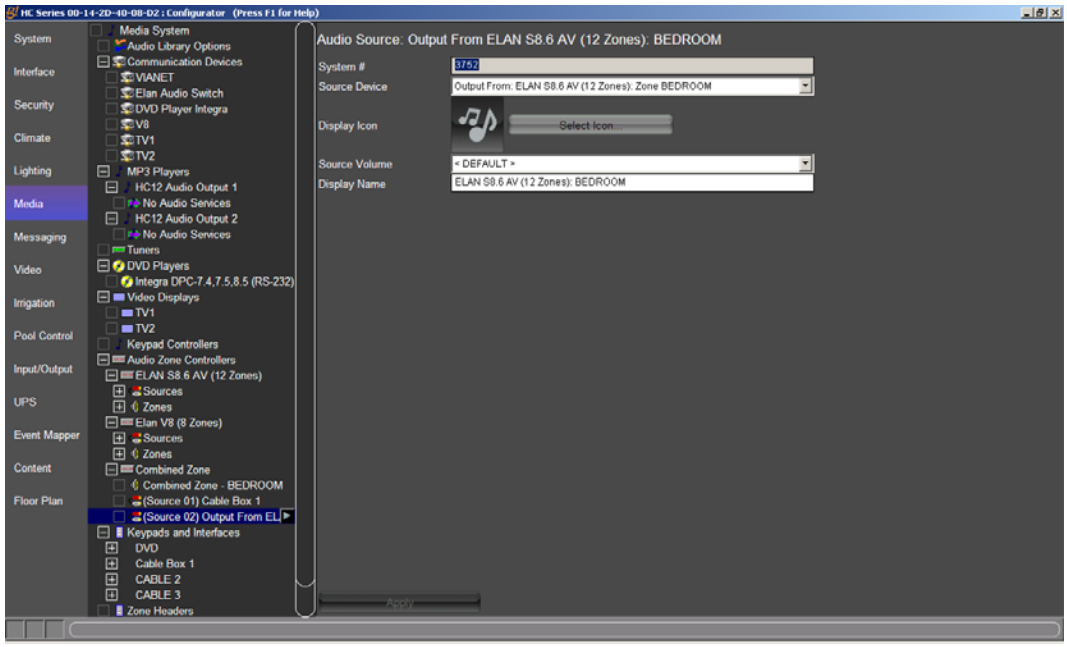


2. The new Audio Zone Controller (Combined Zone) is added to the list. Click the + sign next to the controller to expand the zones and sources. Right-click **Source 1** and select **Add New Audio Source**. You need two sources because you will map one source to the local cable box, and the other to the distributed audio system zone output.

3. Map **Source 1** to the cable box, **Cable Box 1**.

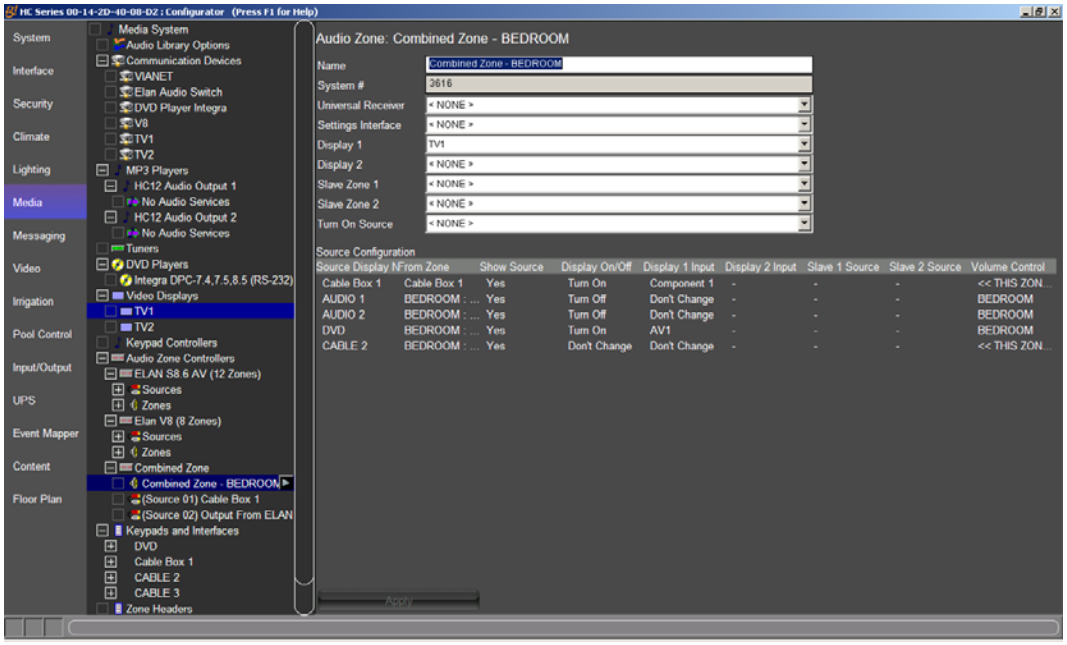


4. Map **Source 2** to the output from the distributed audio system (BEDROOM).



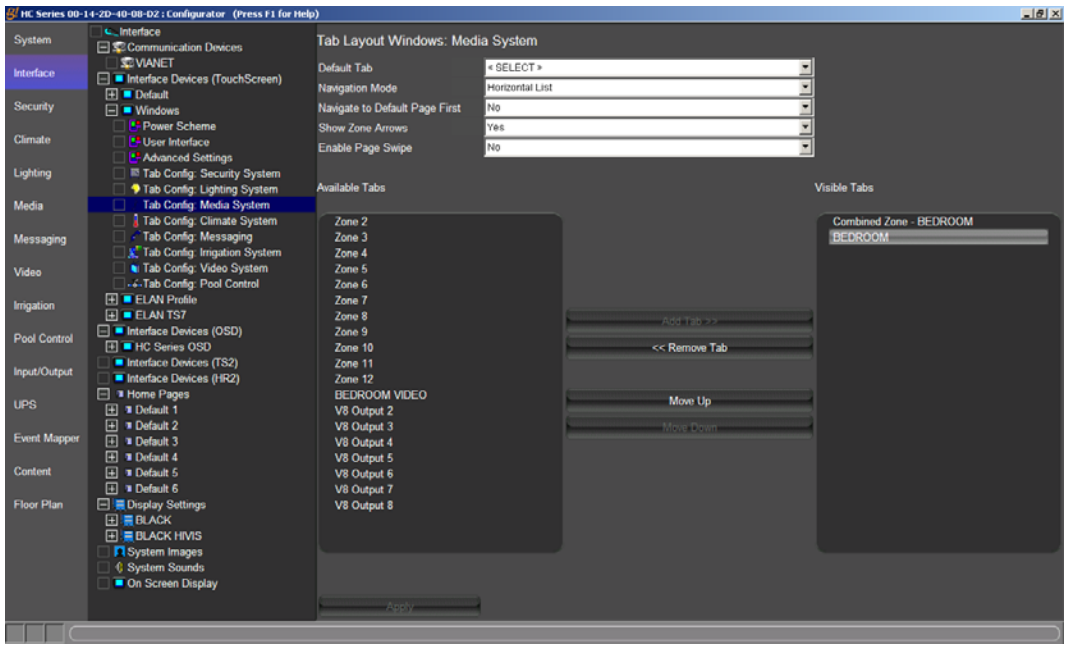
5. Click the **Zone 1** for the new Audio Zone Controller (Combined Zone-BEDROOM). The properties display in the pane on the right.

    - **Name the Zone**. This is the name that will appear in the Viewer interface.
    - **Set up the Display**. Select the Display in the combined zone (TV1), and then configure the display on/off state and the input for each source.
    - **Map each source to the appropriate audio zone controller/audio zone for volume control**. To do this, select each source on the list, then right-click the **Volume Control** column for the source.

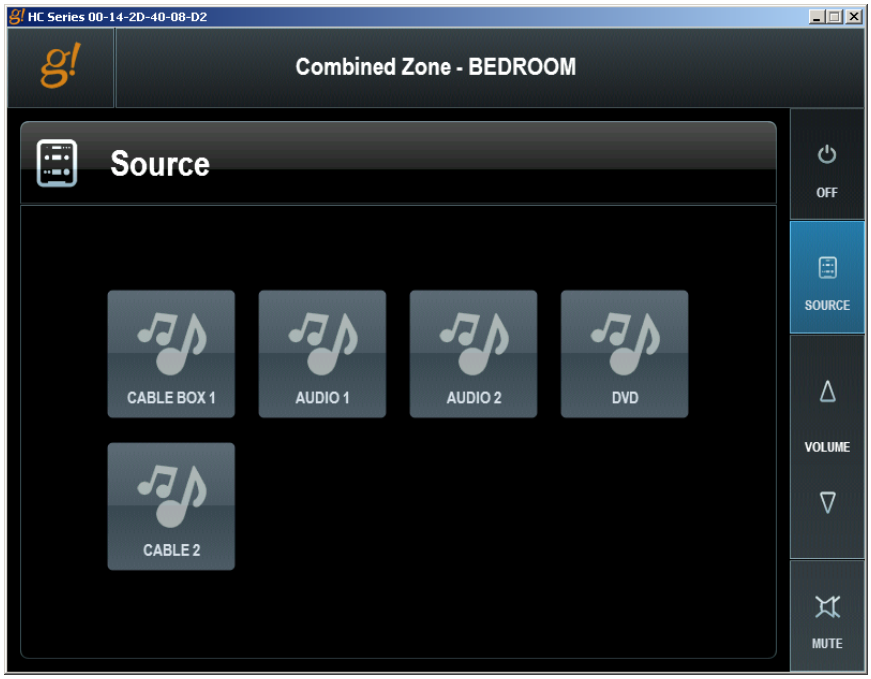


6. If you were to look at the Viewer at this point, you would see tabs for the “BEDROOM” zone and the “Combined Zone- BEDROOM” zone.

To hide the individual tabs for the distributed audio system (BEDROOM), navigate to the **Interface** tab. Interface Devices. For each UI device used in the zone, select the BEDROOM tab in the **Visible Tabs** list, and then click **<< Remove Tab**. Click **Apply**.



7. The Viewer interface now shows only the Combined Zone- BEDROOM zone, from which the homeowner can access all the sources.



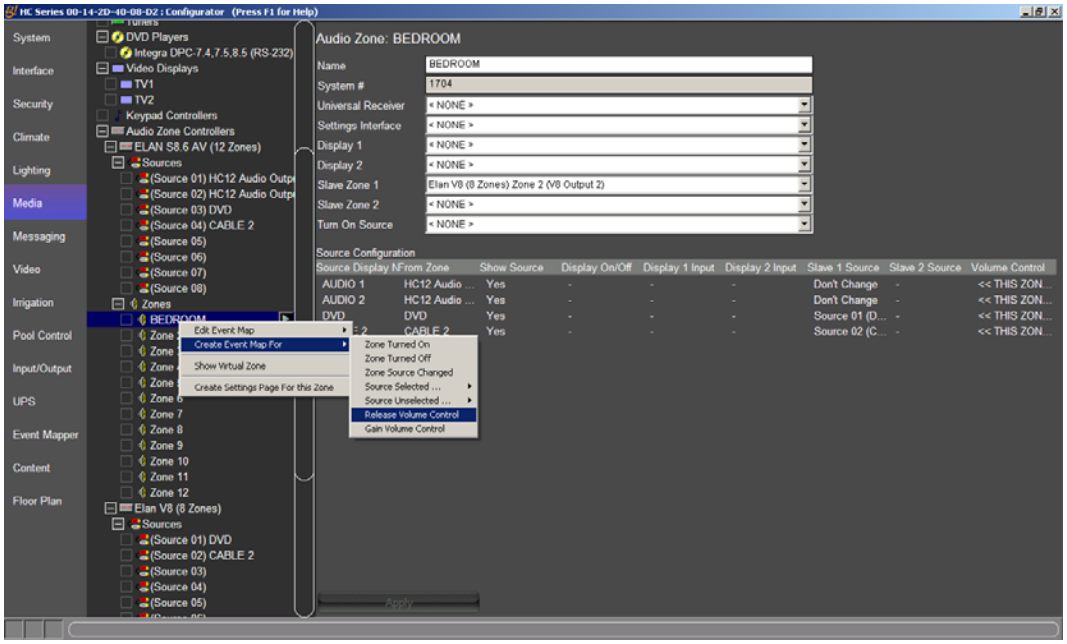
Create an Event Map to Release Volume Control

The last step that needs to be configured to switch from distributed audio (Room Speakers) to local audio (Cable Box 1) in a single zone, is to “release the volume control” from the distributed audio when the local audio is selected. This is accomplished through an event map that will turn off the distributed audio zone when the local zone is selected.

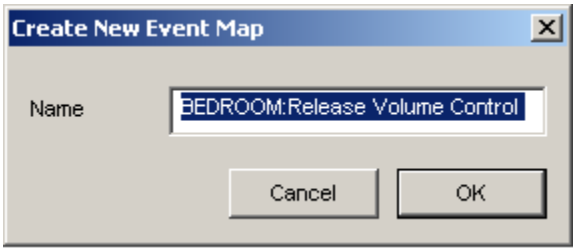
To create a “Release Volume Control” Event Map:

1. Navigate to the appropriate distributed audio zone (in this example, the BEDROOM zone under the Elan S 8.6 AV).

2. Right-click the zone, and then select **Create Event Map For> Release Volume Control**.



3. Name the **Event Map** and then click OK. The Edit Event Map window opens.



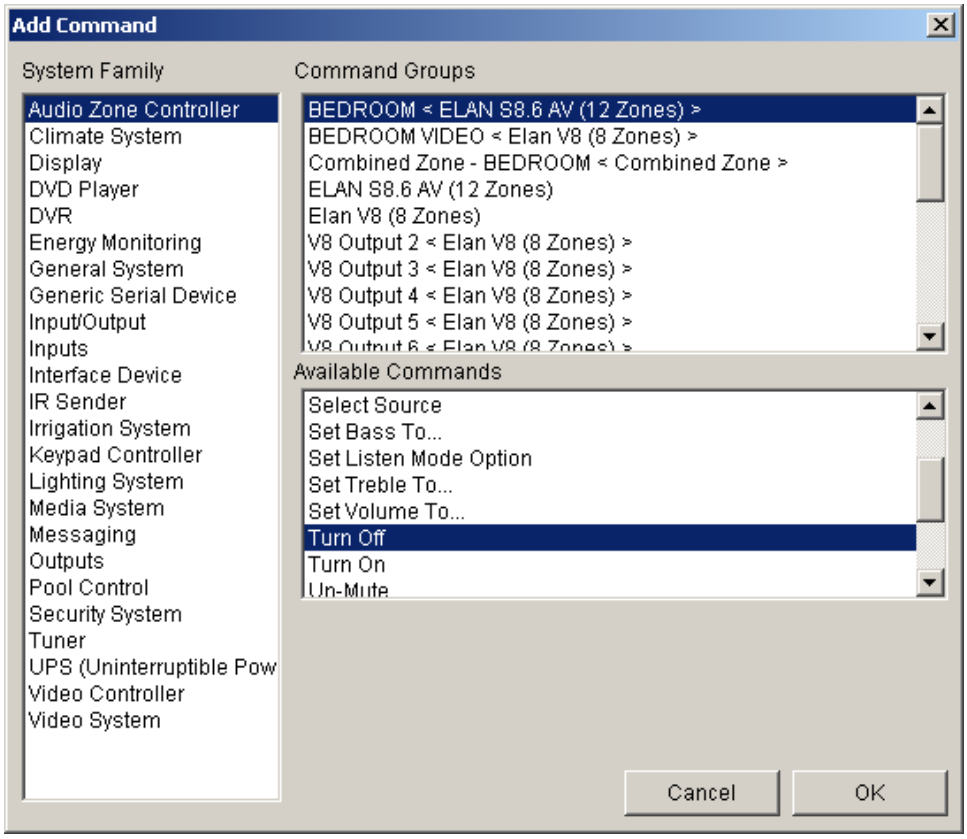
4. Add the **command** as follows, then click **OK**:

   System Family: Audio Zone Controller

   Command Group: (audio zone name) in this example, BEDROOM

   Available Commands: Turn Off.

Note:The audio zone will automatically turn back on when one of its sources is selected in the Viewer.



Note: This command can also be set to “Mute”; however, the audio zone won’t automatically “Un-Mute” when one of its sources is selected. To do this, you will need to create another event map using the “Gain Volume Control” trigger and the Zone Un-Mute Command.

Two Displays in one Zone

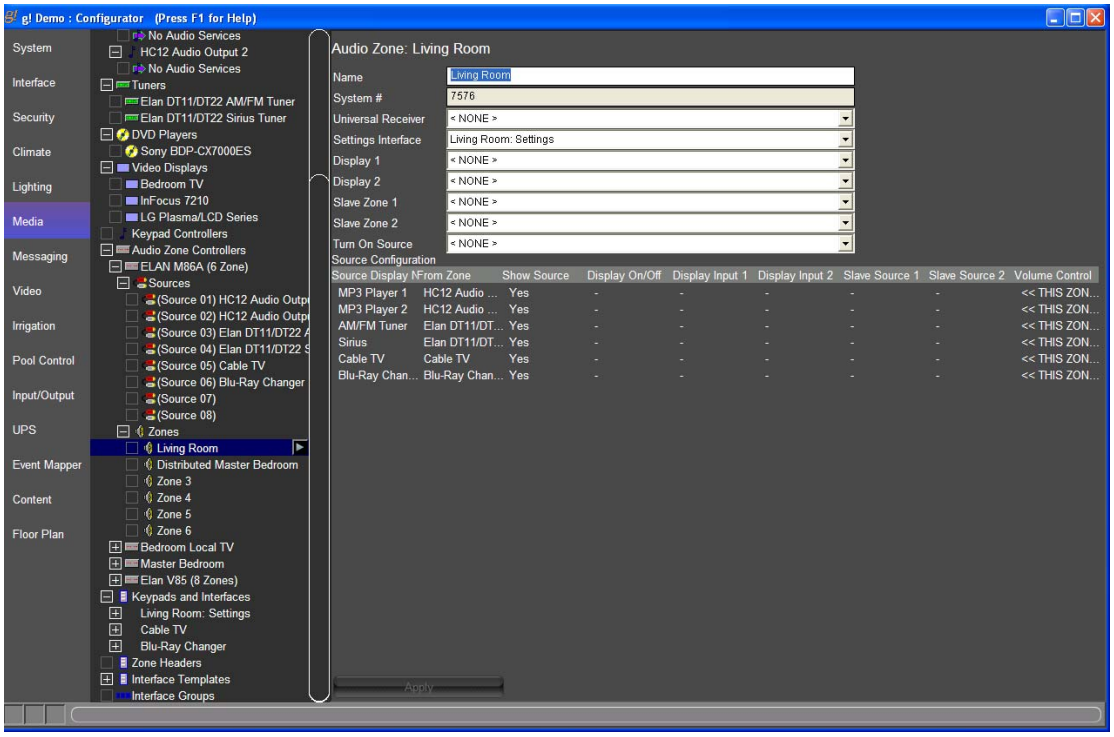
This section discusses how to set up a zone that contains two displays, but only one is active at a time. The most common example of this is a theater or living room that has a plasma TV mounted on the wall as a primary display, and also a screen and projector that are used less frequently. The video displays, zone controller(s), and video switcher(s) (if applicable) must be set up and working.

Note: The two displays in one zone feature is currently only supported on the TS Viewer family (TS7/TS10, VL10 and PC Viewer).

The steps for configuring two displays in a zone will differ, depending on whether the displays are directly input to the source(s), connected to a video switch (such as the ELAN V85) or incorporated into an AVR system. For information on working with A/V systems and slave zones, review the information on Lesson 8, **Distributed A/V Systems II**, in the ***g!*** *Configurator Training Guide*.

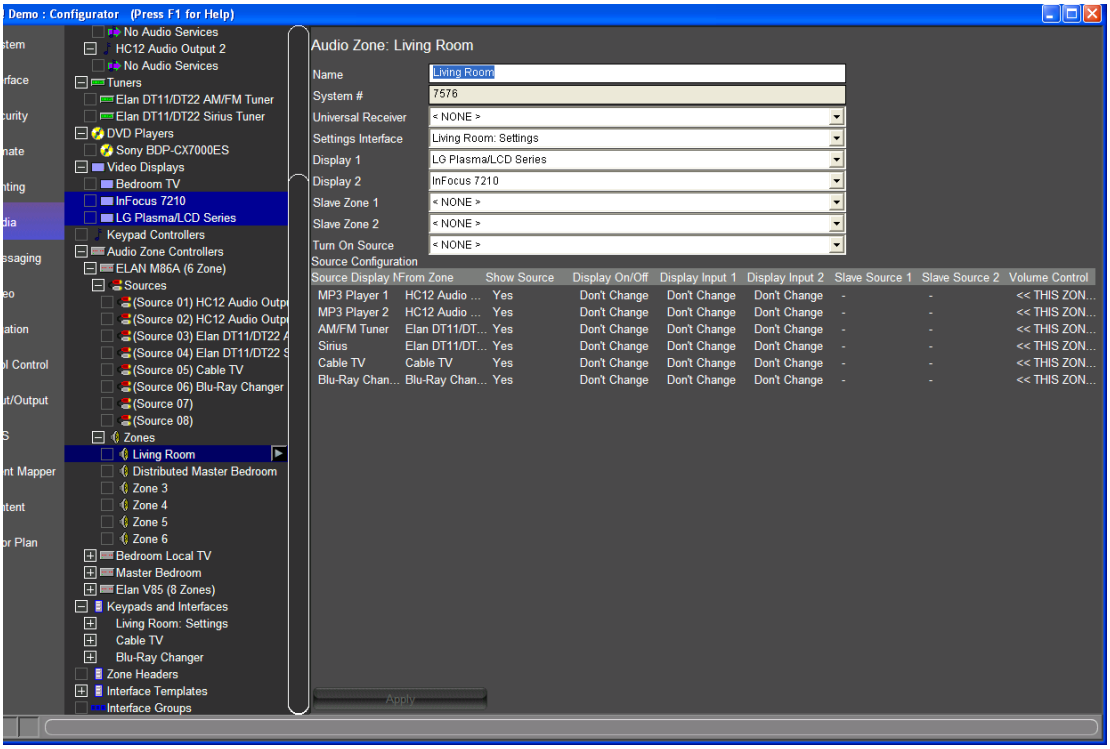
Setting up Two Displays: Direct Source Input to Display

1. On the Media tab, navigate to the **Audio Zone Controller>Zone** that you want to set up. *The Audio Zone properties display in the pane to the right.*



2. Select the primary video display for the zone from the **Display 1** drop-down list. *This will appear as TV1 in the Viewer.*

3. Select the additional video display from the **Display 2** drop-down list. *This will appear as TV2 in the Viewer.*



4. Use the **Source Configuration** section to configure the behavior of the display for each source listed in the Source Display Name.

To change any of the settings listed below, right-click the setting to pop up a list of options, then select the appropriate option from the list.

a. **Show Source**: Set to **Yes** for each source that should appear in the Viewer.

b. **Display On/Off**: Typically set the display to **Turn Off** for audio only sources and to **Turn On** for sources with a video feed.

c. **Display 1 Input**: Select the input that **Display 1** should switch to for the selected source device.

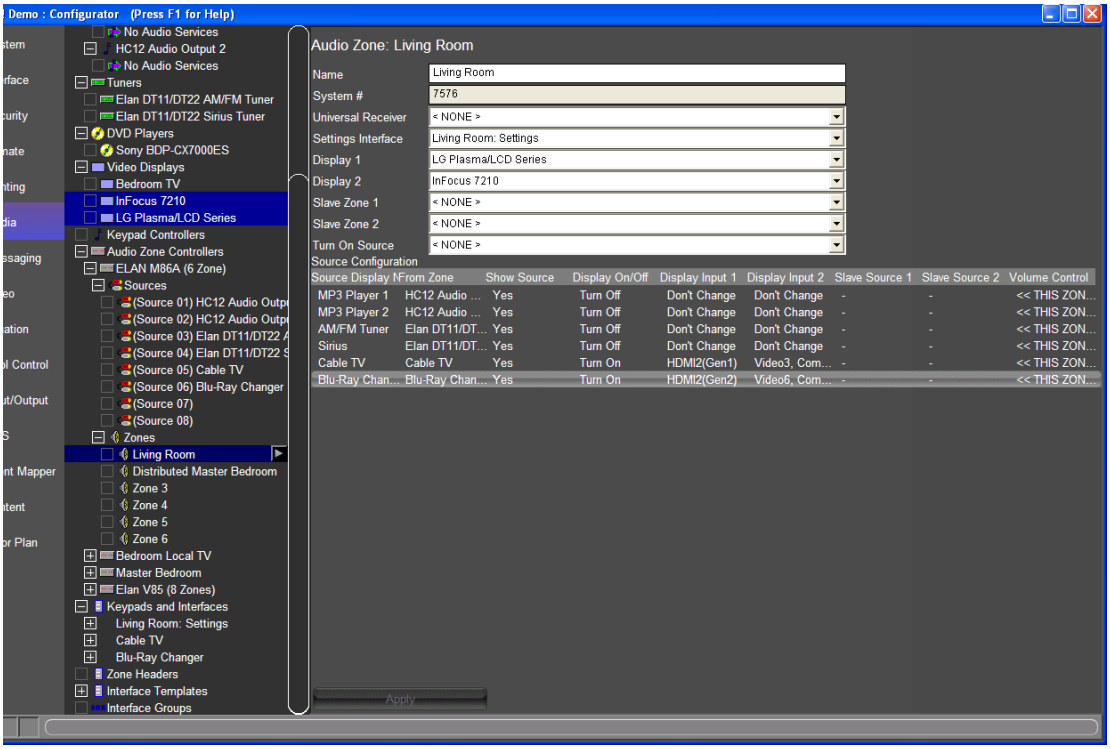
d. **Display 2 Input**: Select the input that **Display 2** should switch to for the selected source device.

e. **Slave 1 Source**: Since there is no slave source for a direct-input configuration, these fields are all empty and cannot be set.

f. **Slave 2 Source**: Since there is no slave source for a direct-input configuration, these fields are all empty and cannot be set.

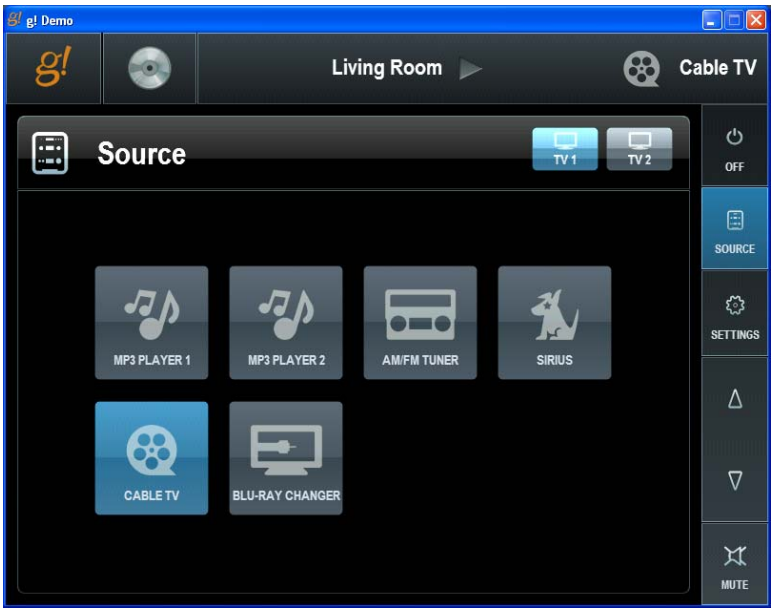
g. **Volume Control**: Leave this column set to <<THIS ZONE>>. See the previous section **Switching Volume between Local and Distributed Audio Systems in a Single** Zone for more information on the Volume Control column.

h. Click **Apply** when you are done configuring the displays for the sources.



5. The Media Source page in the Viewer now shows buttons **TV1** and **TV2**. Select the desired display, and then select the source to watch on that display. To switch displays at any time, return to the media source page and select the other display.

   The most recently watched display will remain selected, even if the user turns everything off or switches to an audio-only source. The display will turn off, but will remain selected as the display to use the next time a video source is selected.



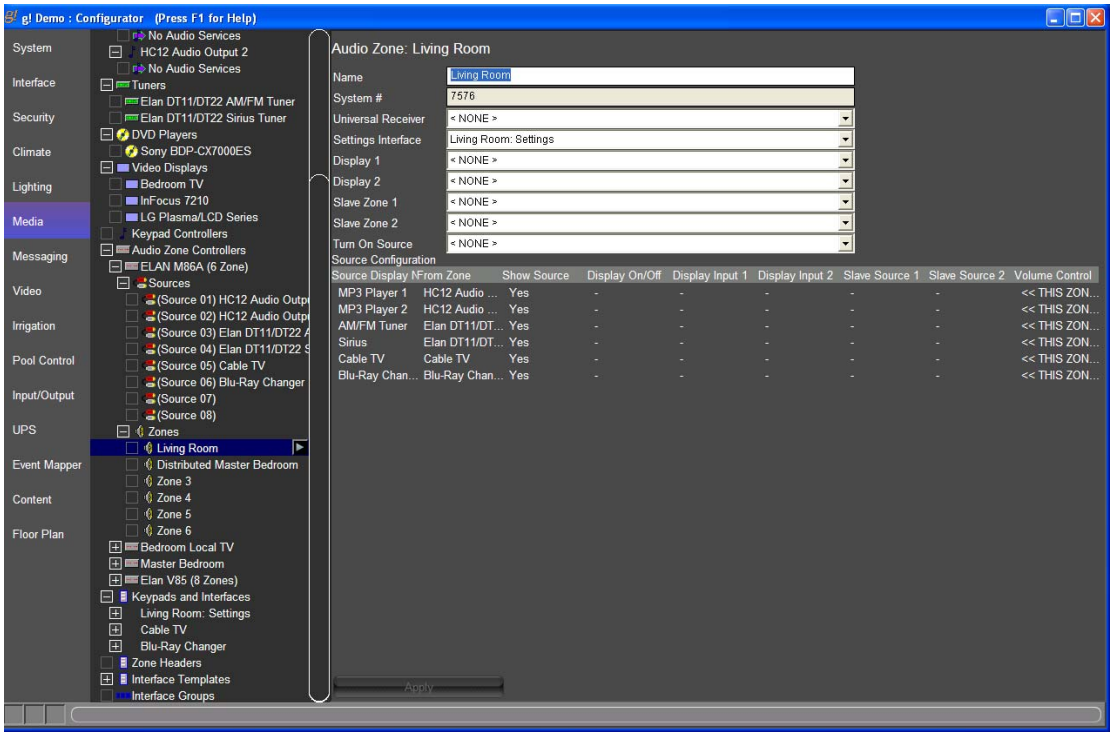
Setting up Two Displays: Video Switch

In the case where a video switch is controlling the input to the display, some additional configuration is required to map the appropriate slave zones for the displays.

The g! software uses the concept of *slave zones* to sync the video sources from the video switch with the audio sources from the audio zone controller without needing to write complex macros. A slave zone is assigned to an audio zone via a drop-down list in the master zone's properties. Then, in the Source Configuration matrix, you can specify the source to which the slave zone should change when a particular audio source is selected. This allows you to hide the video switch's zone by removing it from the Viewer, and configure automated switching based on the selected source.

Note: Although it is possible to slave any zone in the system to any other, typical configurations will have the audio zone act as the "master" and the video zone as the "slave." Controlling the audio zone automatically selects the appropriate video source, and also provides volume control.

1. On the Media tab, navigate to the **Audio Zone Controller>Zone** that you want to set up. *The Audio Zone properties display in the pane to the right.*

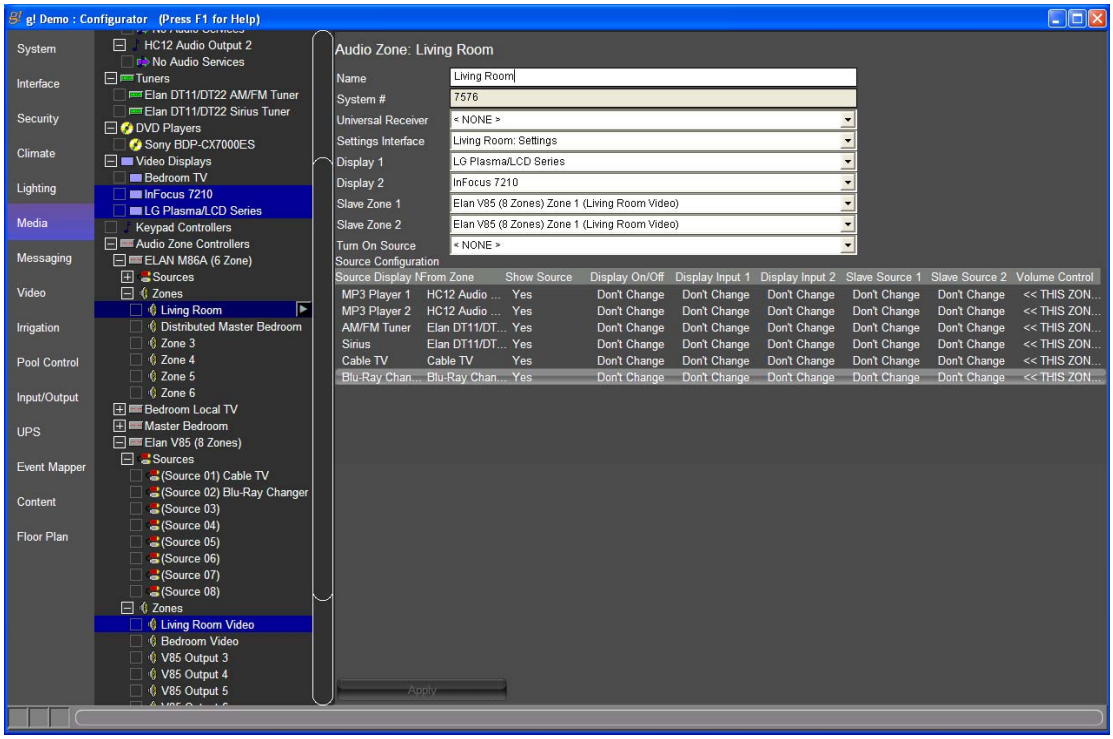


2. Select the primary video display for the zone from the **Display 1** drop-down list. *This will appear as TV1 in the Viewer.*

3. Select the additional video display from the **Display 2** drop-down list. *This will appear as TV2 in the Viewer.*

4. Select the appropriate zone from the Video Switcher as **Slave Zone** 1, the video zone for Display 1.

5. Select the appropriate zone from the Video Switcher as **Slave Zone 2**, the video zone for Display 2.



6. Use the **Source Configuration** section to configure the behavior of the display for each source listed in the Source Display Name.

To change any of the settings listed below, right-click the setting to pop up a list of options, then select the appropriate option from the list.

a. **Show Source**: Set to **Yes** for each source that should appear in the Viewer.

b. **Display On/Off**: Typically set the display to **Turn Off** for audio only sources and to **Turn On** for sources with a video feed.

c. **Display 1 Input**: Since the input is being controlled by the video switcher, you can leave this set to **Don't Change**, or you can set it to the input that the video signal is connected to.

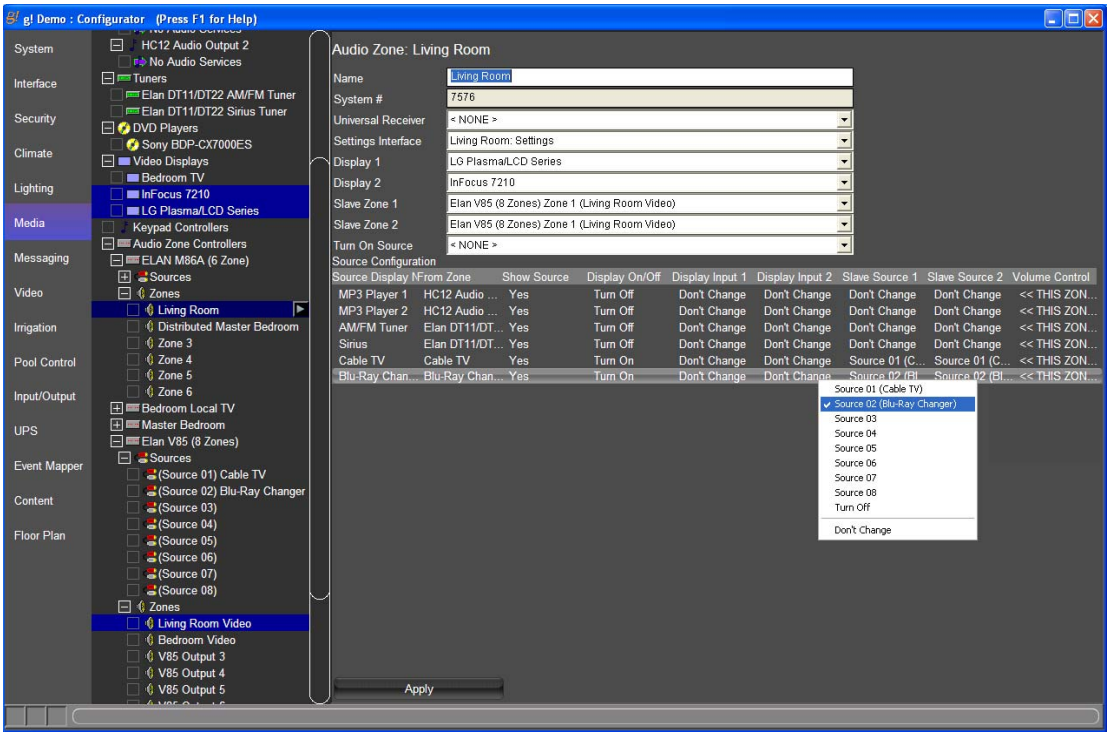
d. **Display 2 Input**: Since the input is being controlled by the video switcher, leave this set to **Don't Change**, or you can set it to the input that the video signal is connected to.

e. **Slave 1 Source**: Map the appropriate source from the video switcher to show on Display 1 when this "Source Display Name" is selected.

f. **Slave 2 Source**: Map the appropriate source from the video switcher to show on Display 2 when this "Source Display Name" is selected.

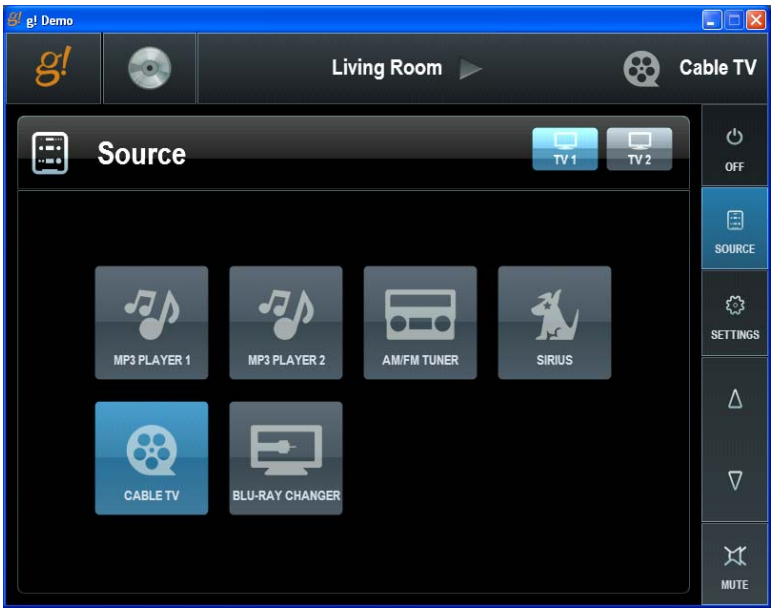
g. **Volume Control**: Leave this column set to <<THIS ZONE>>. See the previous section **Switching Volume between Local and Distributed Audio Systems in a Single** Zone for more information on the Volume Control column.

h. Click **Apply** when you are done configuring the displays for the sources.



7. The Media Source page in the Viewer now shows buttons **TV1** and **TV2**. Select the desired display, and then select the source to watch on that display. To switch displays at any time, return to the media source page and select the other display.

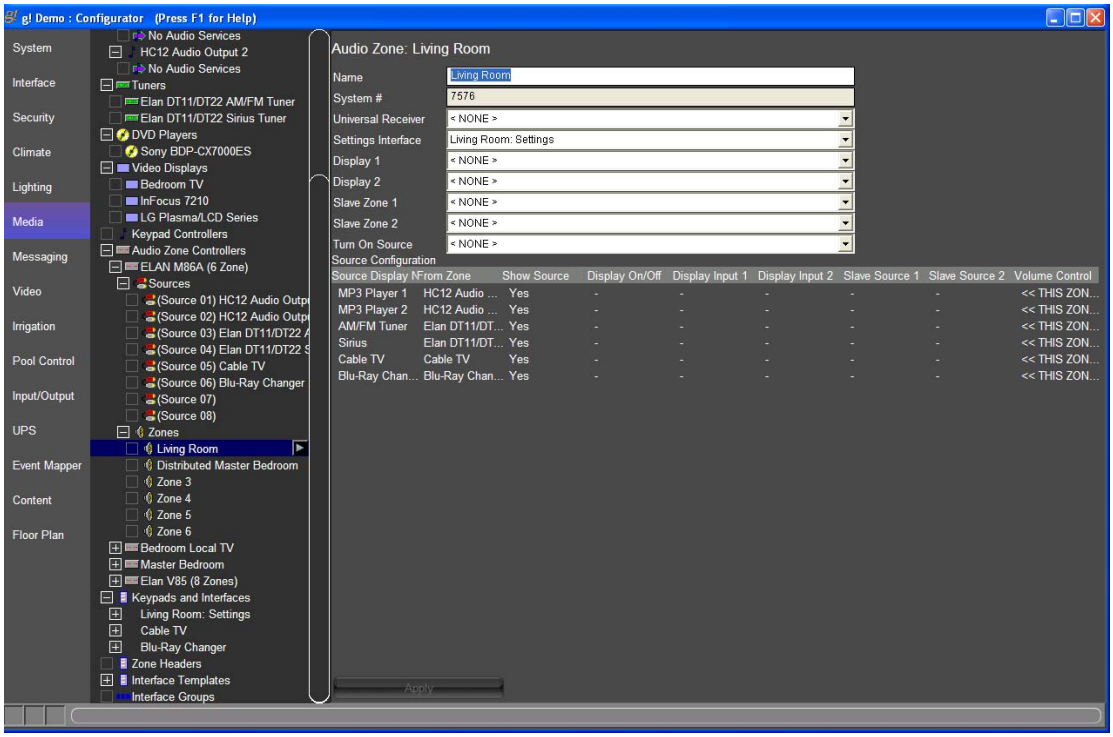
   The most recently watched display will remain selected, even if the user turns everything off or switches to an audio-only source. The display will turn off, but will remain selected as the display to use the next time a video source is selected.



Setting up Two Displays: AVR

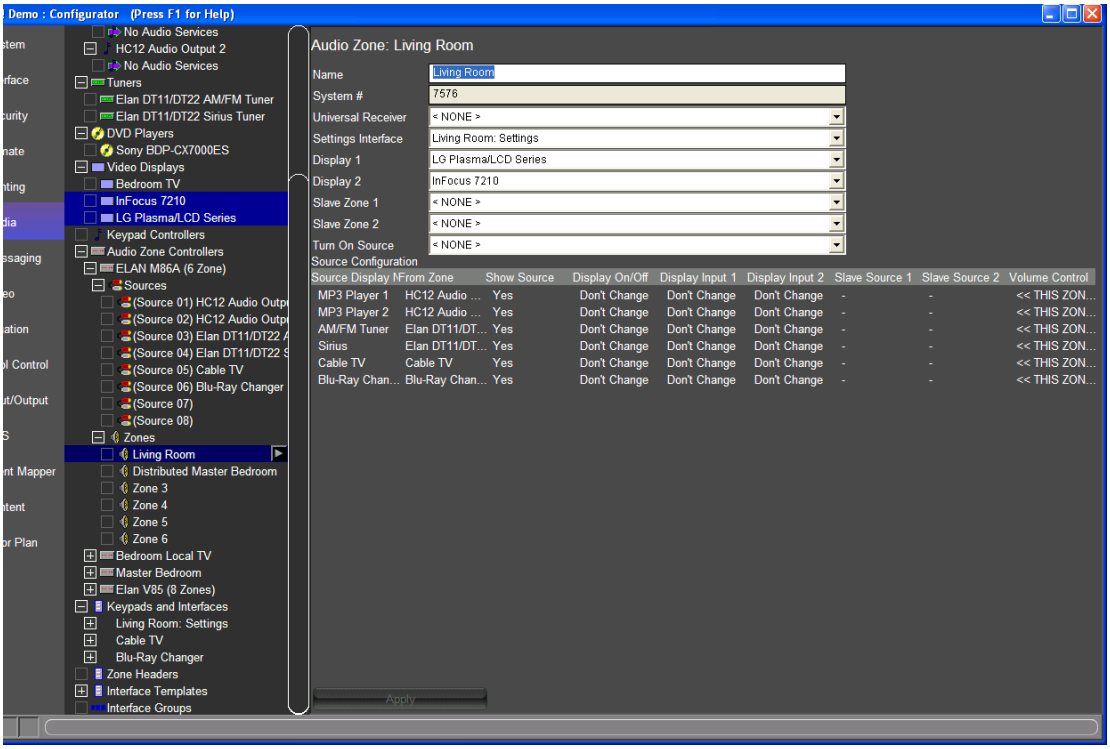
Use the procedure below for applications where a receiver has been programmed to control the sources in your system.

1. On the Media tab, navigate to the **Audio Zone Controller>Zone** that you want to set up. *The Audio Zone properties display in the pane to the right.*



2. Select the primary video display for the zone from the **Display 1** drop-down list. *This will appear as TV1 in the Viewer.*

3. Select the additional video display from the **Display 2** drop-down list. *This will appear as TV2 in the Viewer.*



4. Use the **Source Configuration** section to configure the behavior of the display for each source listed in the Source Display Name.

To change any of the settings listed below, right-click the setting to pop up a list of options, then select the appropriate option from the list.

a. **Show Source**: Set to **Yes** for each source that should appear in the Viewer.

b. **Display On/Off**: Typically set the display to **Turn Off** for audio only sources and to **Turn On** for sources with a video feed.

c. **Display 1 Input**: Since the receiver has been programmed with the appropriate source inputs you can leave this column set to **Don't Change**, or you can set it to the input that the video signal is connected to.

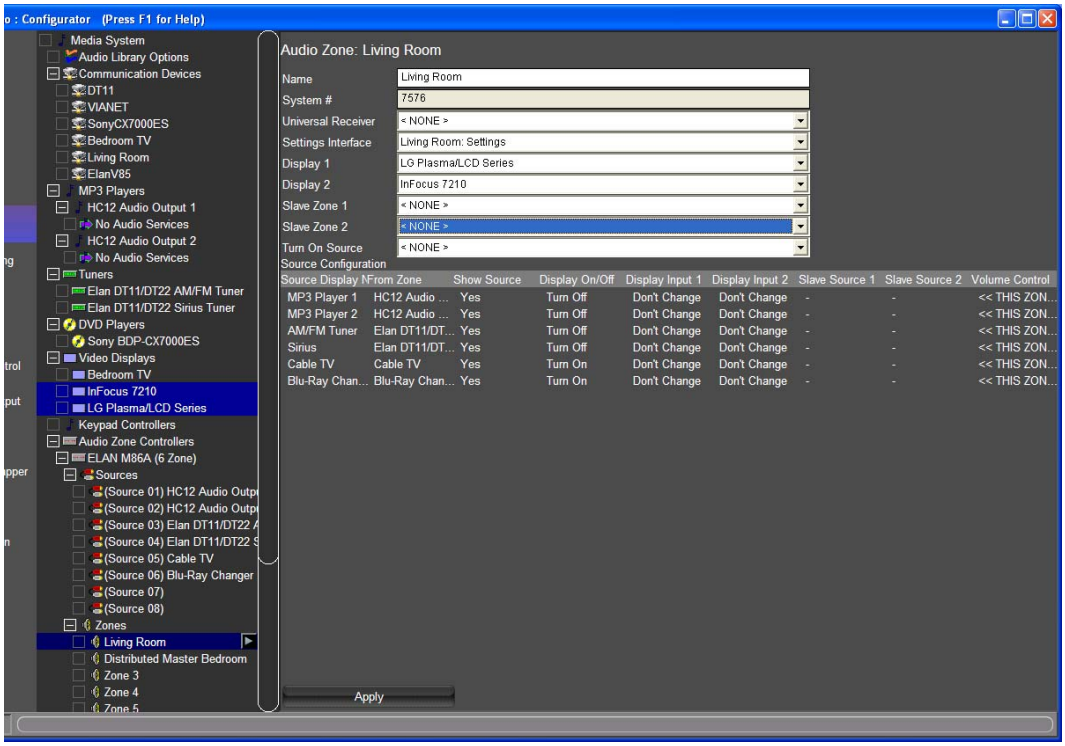
d. **Display 2 Input**: Since the receiver has been programmed with the appropriate source inputs you can leave this column set to **Don't Change**, or you can set it to the input that the video signal is connected to.

e. **Slave 1 Source**: Since there is no slave source for a direct-input configuration, these fields are all empty and cannot be changed.

f. **Slave 2 Source**: Since there is no slave source for a direct-input configuration, these fields are all empty and cannot be changed.

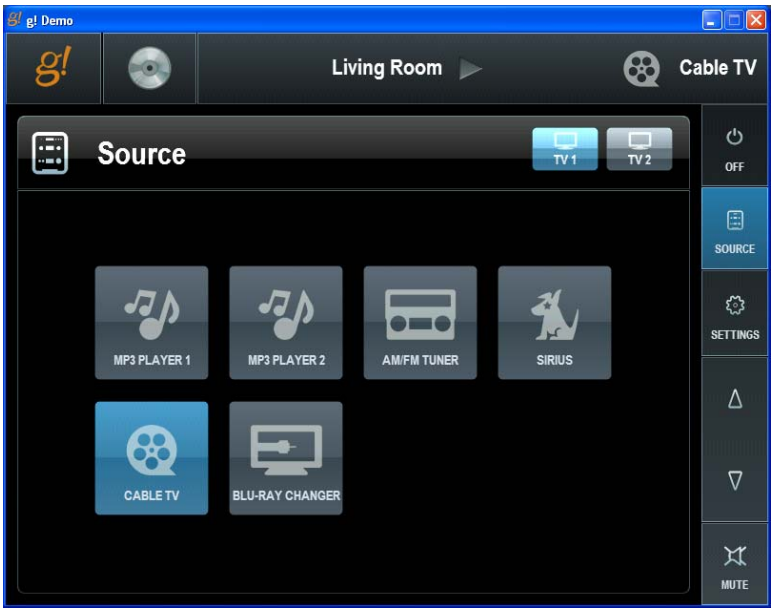
g. **Volume Control**: Leave this column set to <<THIS ZONE>>. See the previous section **Switching Volume between Local and Distributed Audio Systems in a Single** Zone for more information on the Volume Control column.

h. Click **Apply** when you are done configuring the displays for the sources.



5. The Media Source page in the Viewer now shows buttons **TV1** and **TV2**. Select the desired display, and then select the source to watch on that display. To switch displays at any time, return to the media source page and select the other display.

   The most recently watched display will remain selected, even if the user turns everything off or switches to an audio-only source. The display will turn off, but will remain selected as the display to use the next time a video source is selected.



Bar Setup

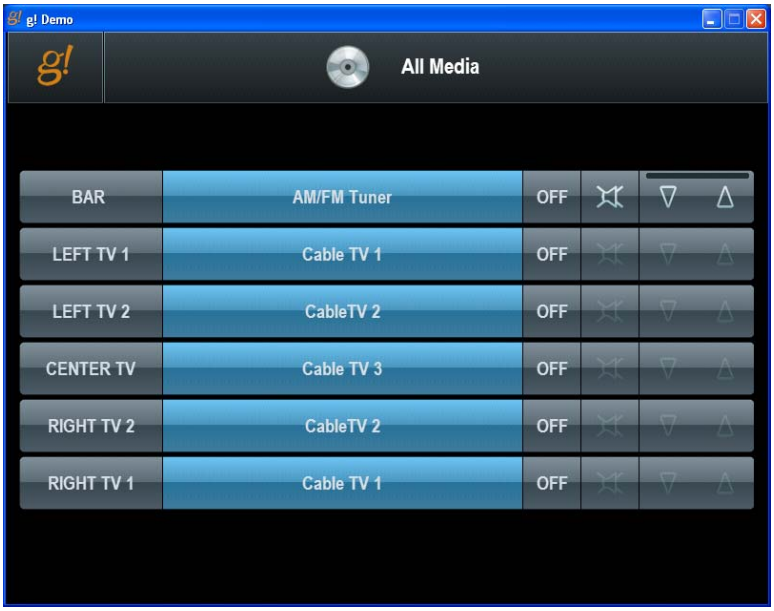
This section describes how to install multiple TVs in a zone where there is only one audio source. This is most commonly found in a ‘bar” like room where there are several screens showing different things at the same time, and one set of speakers in the room for audio.

To configure the bar setup, you will need to set up the audio zone first, and then configure each of the displays as individual zones (see **Using a Generic Single Zone Controller to Control a TV** on page 79). Then, each should be tested to verify the desired sources appear and that control is correct.

Once the zones have been configured and tested, you need to decide how the setup should appear and be controlled in the Viewer. There are two options, “Vertical List” and “Interface Groups”

Vertical List

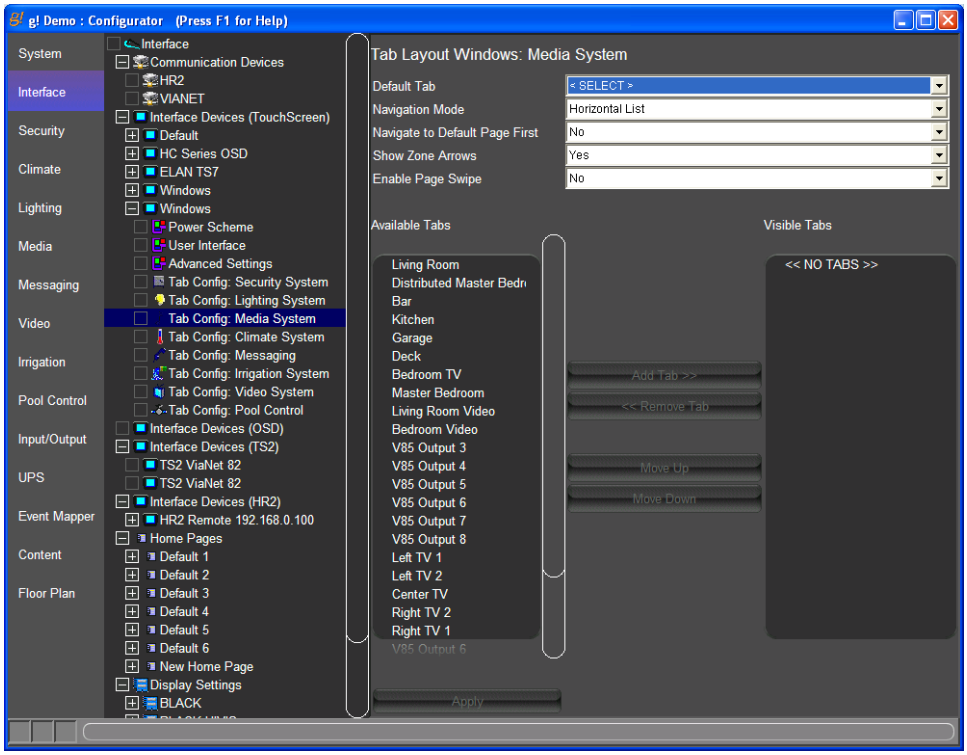
The vertical list displays all the TV and Audio zones in a single list. The vertical list would be a good choice when the homeowner only wants to control the media in that room, and doesn’t need to control the settings in another area of the house. The screen below is an example of a Viewer configured with a vertical list for the bar:



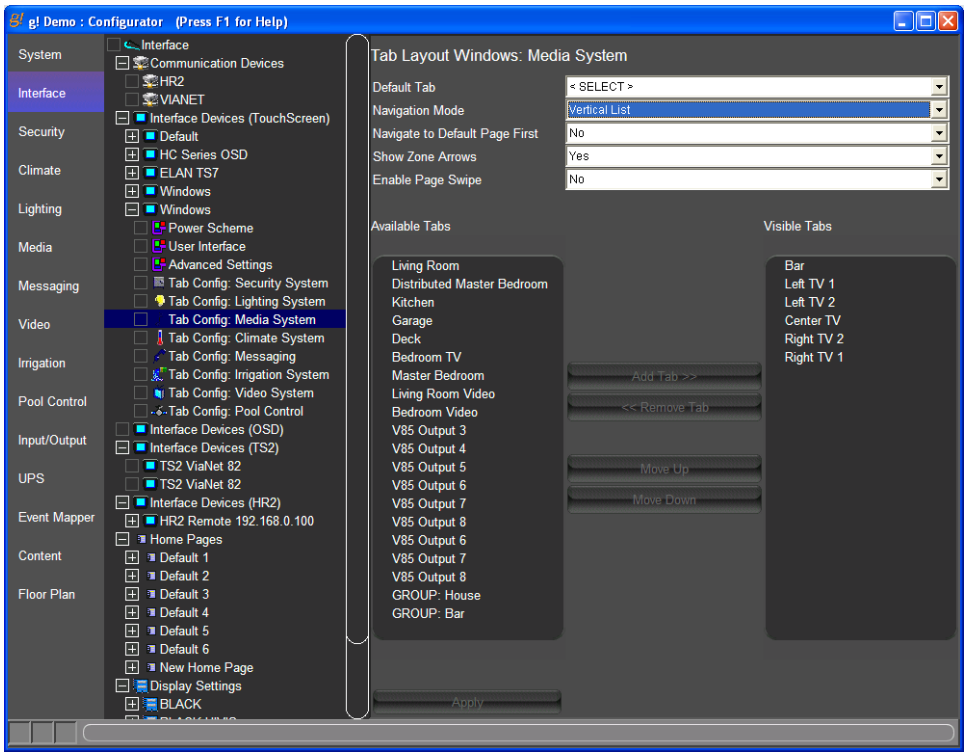
To configure the Vertical List display for the Viewer:

1. Navigate to the **Interface** tab in the Configurator, and select the desired Viewer from the **Interface Devices** group.

2. Select Tab Config: Media System for the Viewer. *The Tab Layout: Media System properties display in the right pane*.



3. Set the **Navigation Mode** to **Vertical List**, and then move the appropriate zones from the Available Tabs list to the **Visible Tabs** list.



4. Click **Apply**. The Media page in the Viewer will now display six bar zones (audio and five displays).

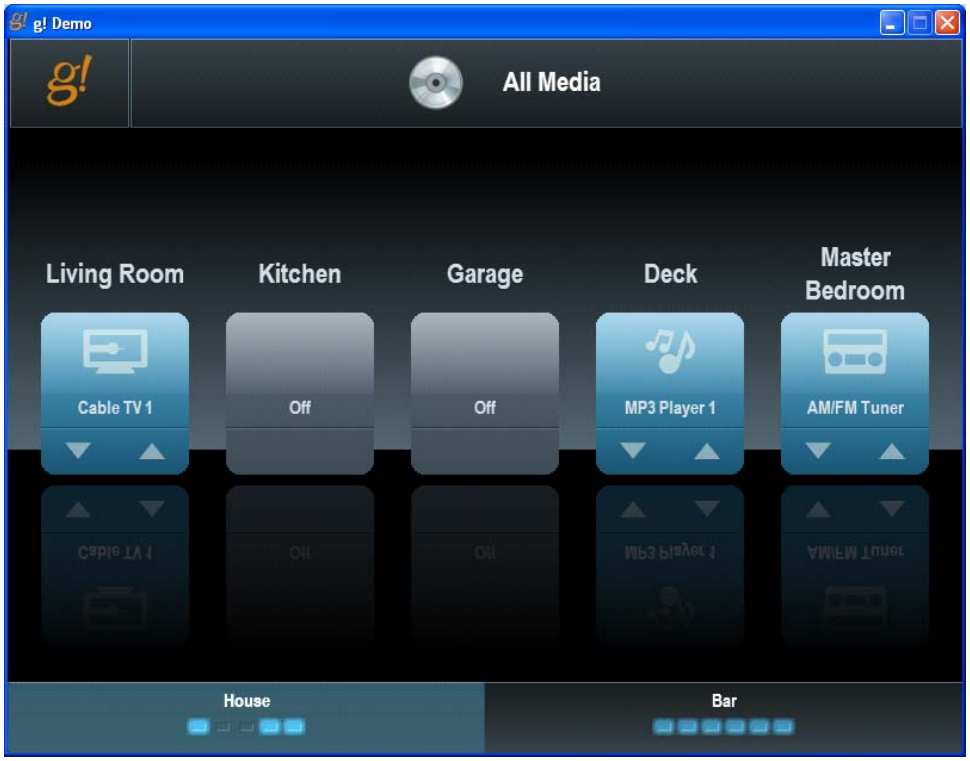
Using the Vertical List Interface

The “vertical list” organizes the zones in a top to bottom display. The zones are presented in whatever order they were configured on the Visible Tabs column on the Interface tab in the Configurator.

Interface Groups

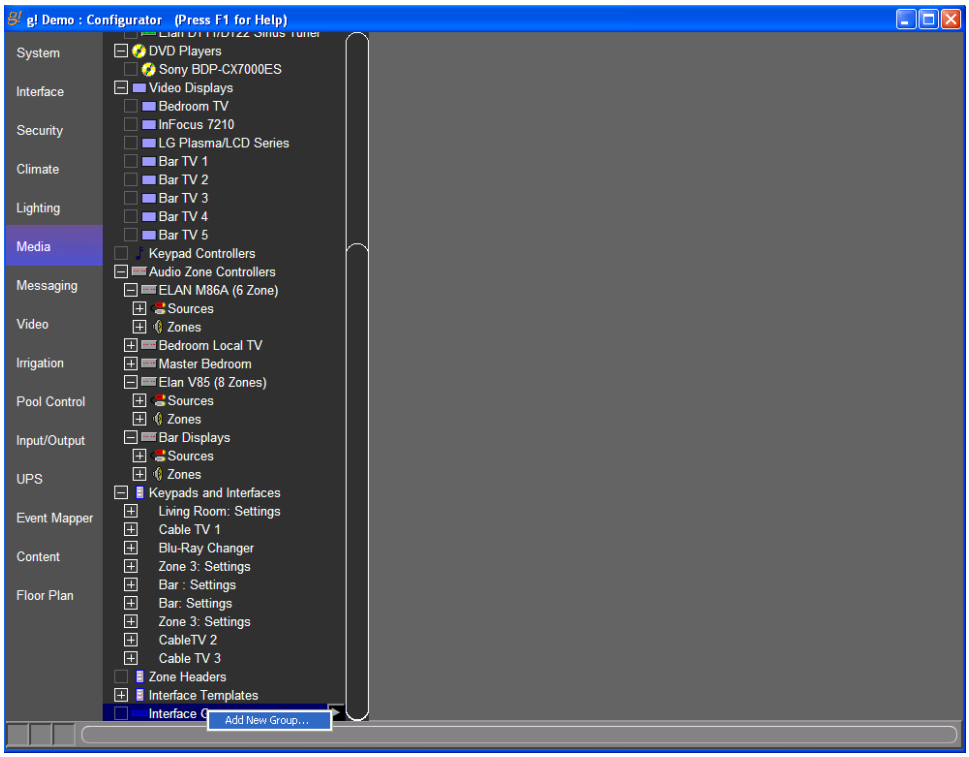
Setting up Interface Groups provides the homeowner with control for the media in different areas of the house. The screen below shows an example of a Viewer that has two interface groups set up, one for the Bar (media zones) and one for the House (media zones). The homeowner can easily access the media in each group by clicking the desired tab at the bottom of the screen. Indicator lights show the status of each media zone, whether or not its group is selected.

Note: When you choose to display Groups in the Viewer, only the zones that belong to an interface group will display. You cannot display standalone zones along with the groups.



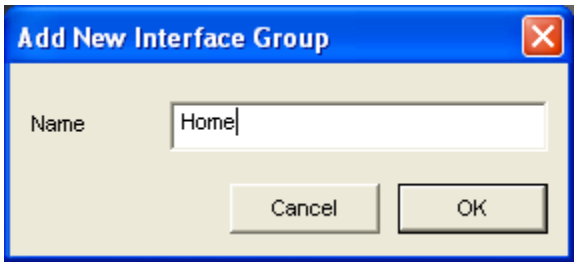
To set up Interface Groups:

1. Navigate to the Media tab in Configurator, and then right-click on **Interface Groups** at the bottom of the System Tree.

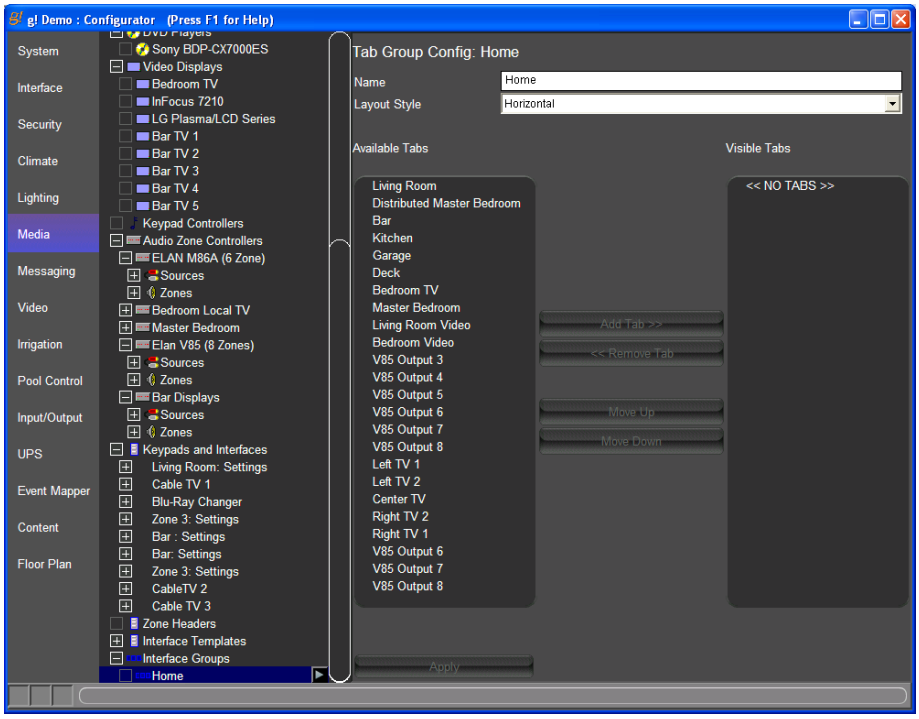


2. Select **Add New Group…** enter a name for the Interface Group, and then click **OK**.

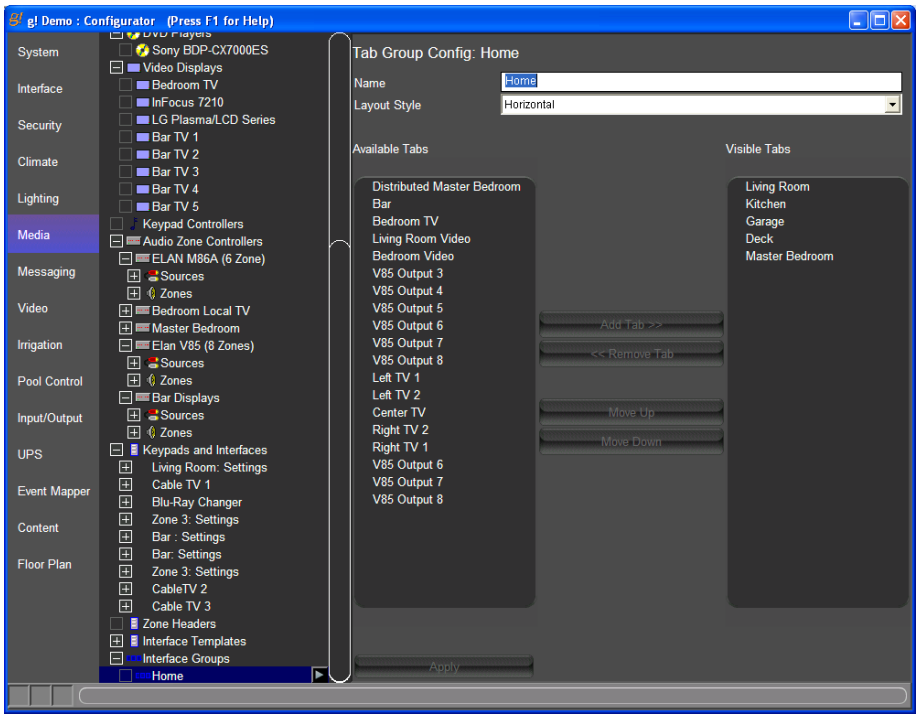
Note: The name you enter here will display in the Viewer.



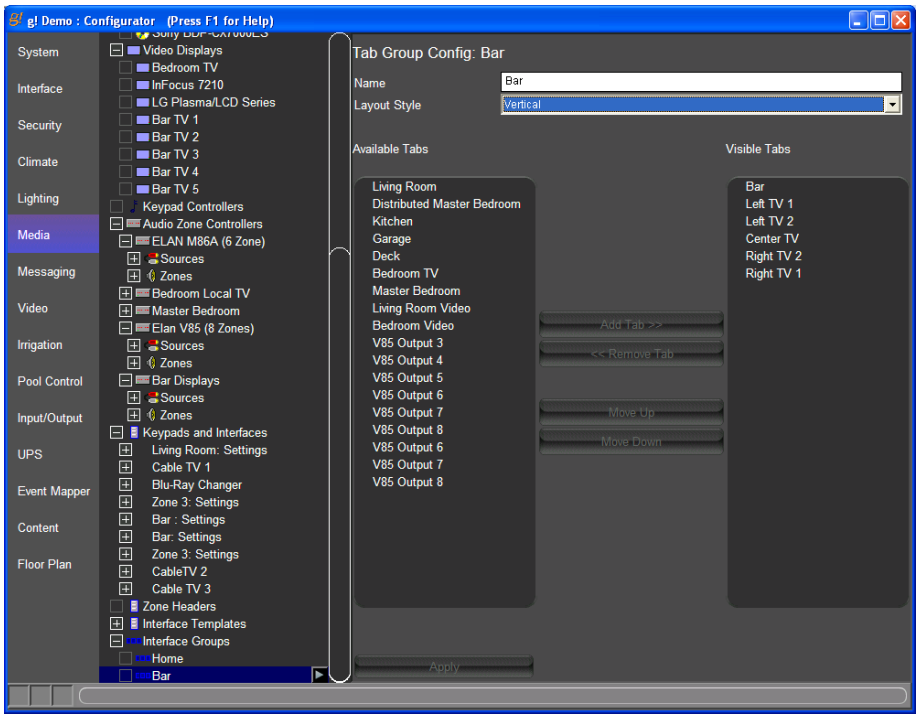
3. The Tab Group Config: properties tab for the new group displays in the right pane.



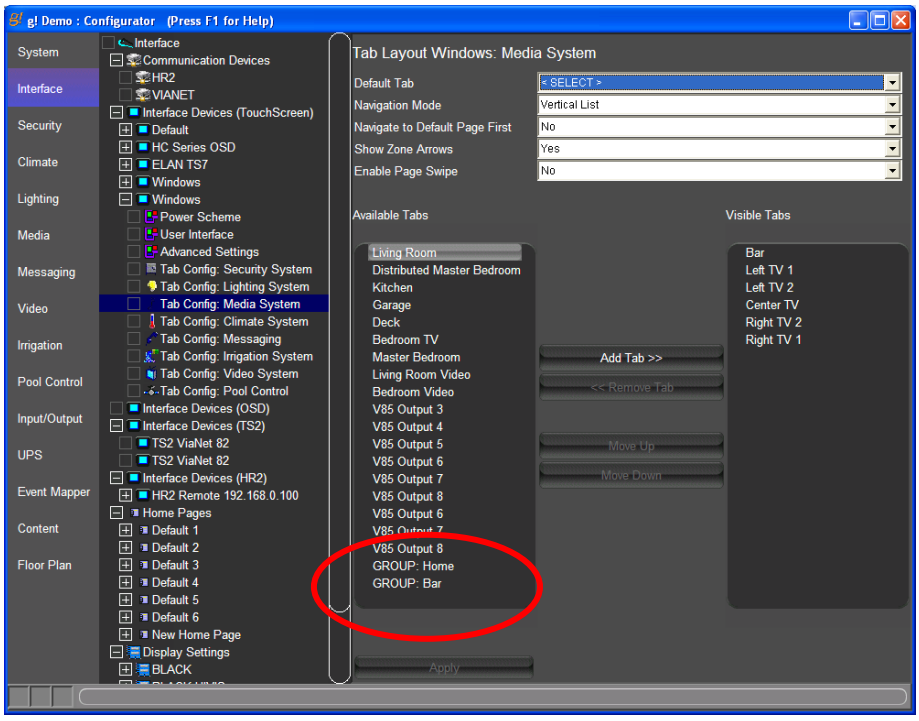
4. Select the **Layout Style**, either Horizontal (default) or Vertical. Then, select the zones that should display in this group and use the **Add Tab>>** button to move them to the **Visible Tabs** column. Use the **Move Up** or **Move Down** buttons as needed to organize the zones into the order that they should display in the Viewer. Click **Apply**.



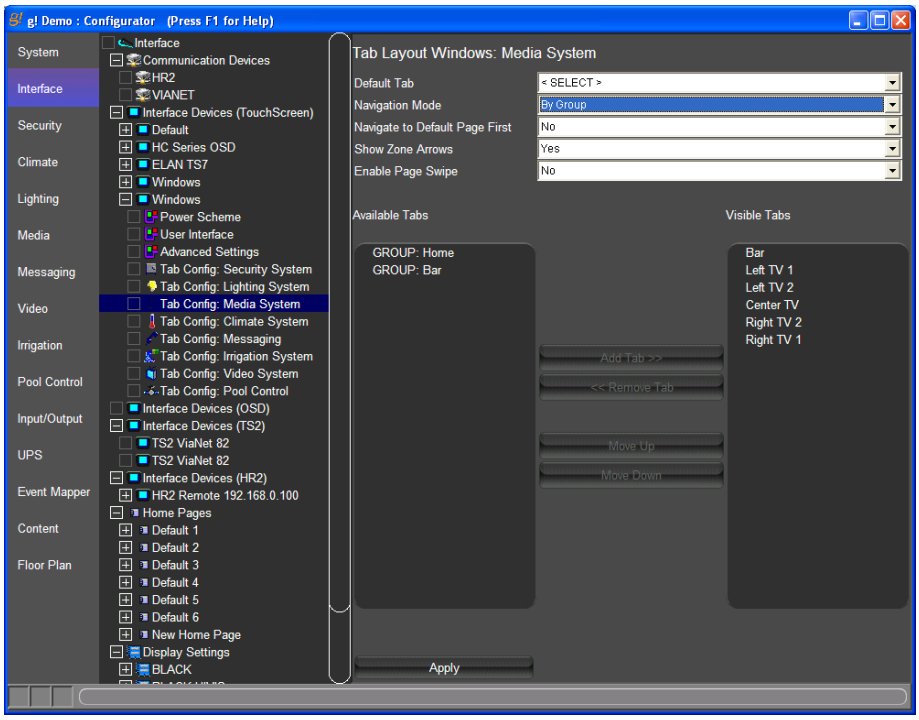
5. Repeat Steps 1-4 to configure additional Interface Groups.



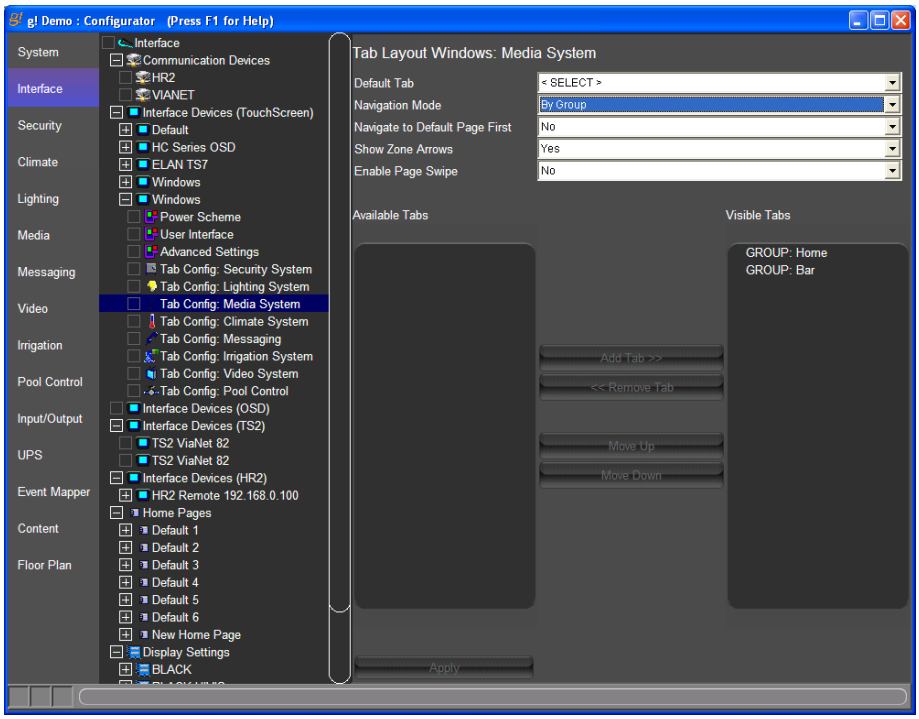
6. Navigate to the **Interface** tab, and select the **Tab Config: Media System** entry for the Viewer you want to configure under **Interface Devices**. Notice that the interface groups are listed in the **Available Tabs** column.



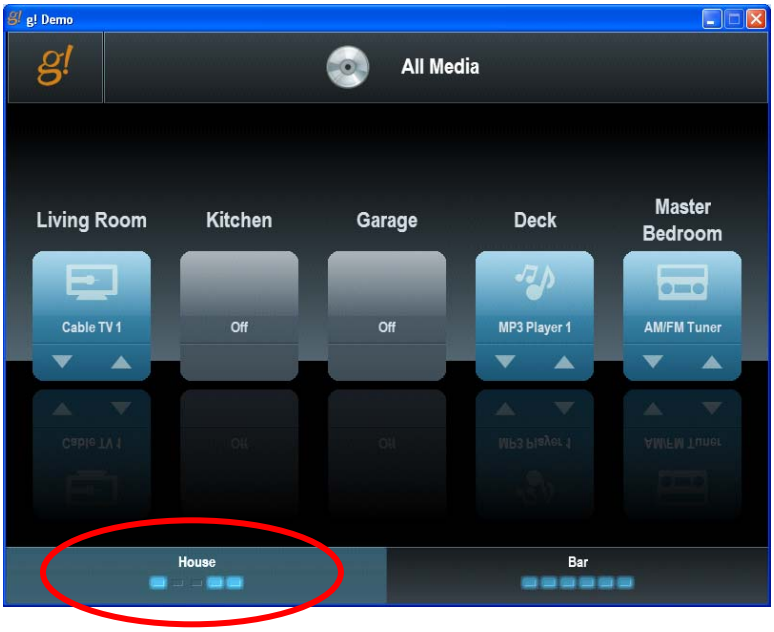
7. In the **Navigation Mode** drop-down list, select **By Group**. The Available Columns list will change to display only Interface Groups.



8. Select the desired groups from the **Available Tabs** list and click the **Add Tab>>** button to move them to the **Visible Tabs** list. Use the **Move Up** and **Move Down** buttons to arrange the groups in the order you want them to display in the Viewer.



9. Click **Apply**. The Media page in the Viewer will now display the Interface Groups at the bottom of the screen.

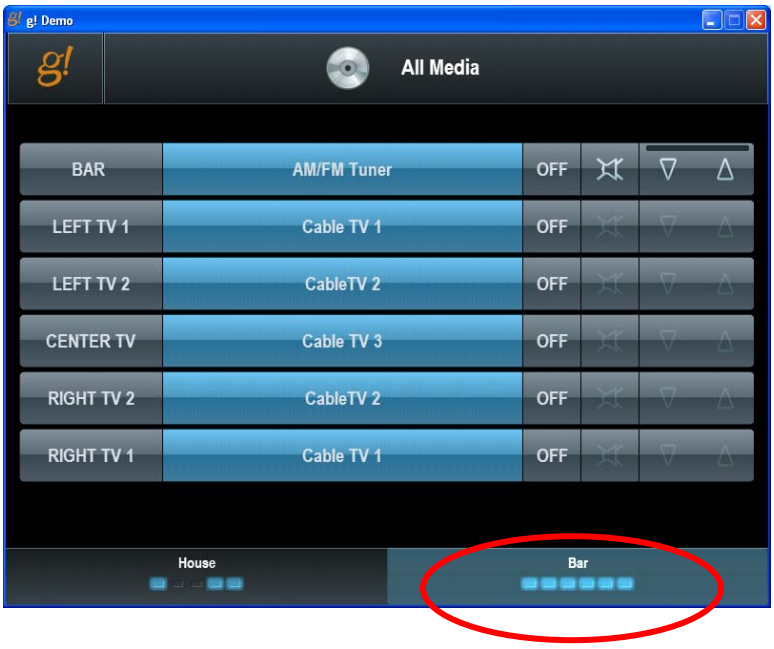


Interface Group for the **House** media zones.

House group is selected at the bottom of the screen. The zones in the house are displayed in the traditional “Horizontal” format.

Indicator lights provide on/off status for the zones in each interface grouping.

In this example, 3 of the House zones have sources that are “on”, and all the Bar zones are on.



Interface Group for the **Bar** media zones.

Bar group is selected at the bottom of the screen. The zones in the bar are displayed in the Vertical List format.

Messaging

The Messaging tab can be used to provide a number of communication features to the Home Owner by using a modem to integrate with the phone line; providing both answering service and remote telephone-based access to home control features. Voice mail messages and call logs can be accessed through the **g!** Viewer. The Messaging tab also can be used to send alerts via phone, e-mail or text messages to multiple contacts based on system events. For systems using **g!** software version 5.2 and higher, a 'pop" message can also be set up to display a message onto an ELAN Touch screen.

See Lesson 14, **Messaging** in the ***g!*** *Configurator Training Guide* for more detailed information on setting up telephone controllers, setting up mailboxes, and system alerts.

This section provides the following additional information on working with the Messaging tab:

- Using Dial Up Login
- Setting Up Event-based Alert Messages via Phone, Email or Viewer Popup

Dial up Login

In addition to standard answering machine (voice mail) functionality, the **g!** software also supports access to messages and Home Automation functions over a standard phone line.

To access these features:

1. Dial the phone number associated with the Controller and wait for ELAN to answer the call.
2. When the Greeting begins to play, press the # key.
3. Enter the correct PIN code to login into the system
4. Follow the voice prompts to listen to voice messages, check status on integrated sub-systems such as Thermostat temperature, and control integrated subsystems such as Security Panels.

Note: Use the **Messaging | Telephone Controller** properties to set the PIN number, but **be aware that this number is not displayed**.

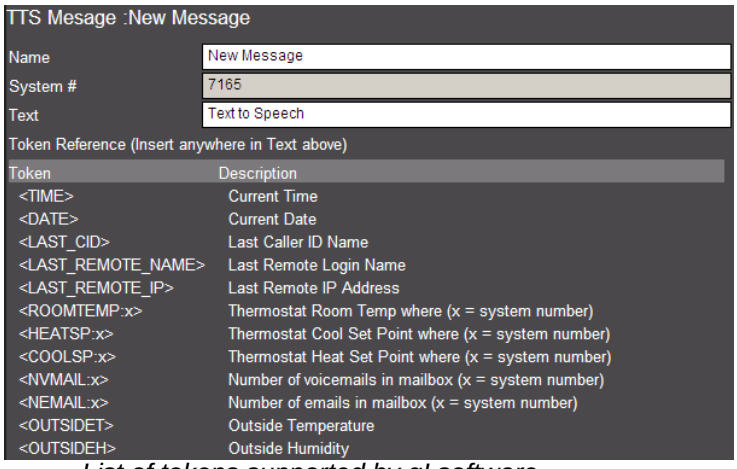
Messaging Alerts

This section describes how to set up Event Based Messaging Alerts in the **g!** System. These alerts include the ability to call, email and text message a single contact or list of contacts based on event triggers. In addition, **g!** Version 5.2 and higher supports the ability to "Pop" a message onto an ELAN Touch Screen.

Event Triggers come from an array of internal triggers in the **g!** System, and external triggers from controlled devices such as security zone faults, or thermostat temperature readings. Alerts can be stacked, so that multiple alert types (phone & email, for example) are sent from a single trigger. Alerts can also be added to existing event maps.

Using Tokens

Alerts can be sent out by the system to specific contacts based on certain system events, such as a security alarm, a temperature reading, or even a certain A/V zone being activated after a certain time. These alerts can be sent as text via email or text messaging or via voice over a telephone. The alert messages themselves can be customized and support the use of "tokens" to include specific system details.
See Lesson 14, **Messaging** in the ***g!*** *Configurator Training Guide* for more detailed information on setting up system alerts.



List of tokens supported by g! software

To use tokens:

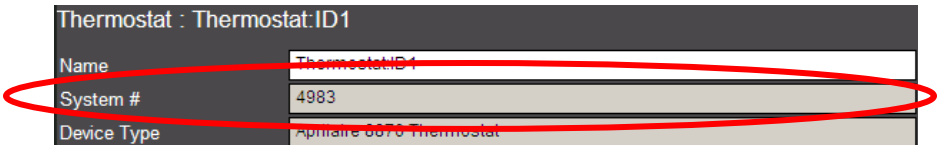
- Type the text as entered in the message.

Example: Security Alarm Active <DATE> will send message Security Alarm Active June 10 2010.

- On tokens that require the system number (<ROOMTEMP:x>, <HEATSP:x>,etc.) replace the 'x' with the system number for that device.

  You can find and copy the system number for a device by navigating to the device properties.

  For example:



  Use the system number in a token such as: *Living Room Temperature <ROOMTEMP:4983>*

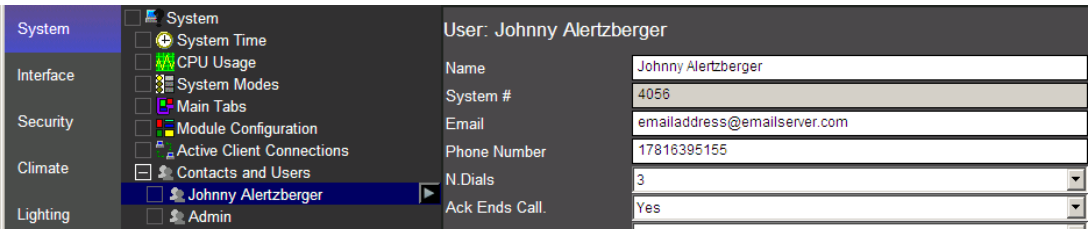
Phone Alerts

Note: The Messaging Pro App is **REQUIRED** for phone features such as phone alerts. Phone alerts are not available on the MultiBrick.

Phone alerts allow the **g!** controller to dial out and deliver a TTS (Text-To-Speech) message over the phone.

To configure Phone Alerts:

1. **Setup Contacts with phone numbers on the System Tab under Contacts and Users.**
   - Enter the phone number as it should be dialed, including any prefix or area code information.
   - Do not use punctuation such as dashes or parentheses.
     For example:

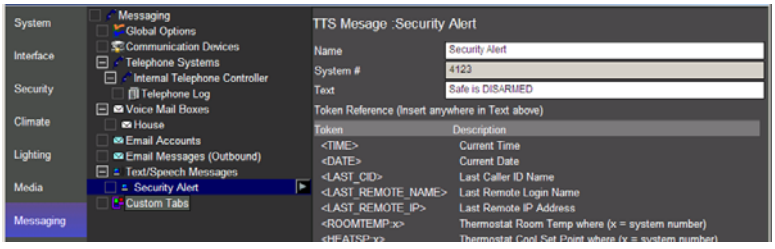


   Under this tab you will also see settings for the Number of Dials (N.Dials) how many times the Controller should attempt to call this contact; and Ack Ends Call--which prompts for the contact to acknowledge receipt, so the Controller will stop attempting calls for this alert.

2. **Set up the Controller modem so the Controller can interface with the phone line and dial out.** (If you have already set up your Modem as part of Messaging configuration, skip to Step 3.)
   a. Connect the phone line to the modem as appropriate.
   b. In Configurator, under the Messaging Tab, right-click **Telephone Systems** and select **Add New Device**.
   c. Add an **Internal Telephone Controller**. (Note: This was called the Generic Telephone Controller in version prior to 4.0 Build 1512).

3. **Configure a TTS message on the Messaging Tab.** This will be read by the Controller using its Text-to-Speech engine, and will be read as typed.
   a. Add a new Text/Speech message by right-clicking on **Text/Speech Messages** and selecting **Add New Text/Speech Message**.
   b. Name the message something memorable as to the type of the alert it will be, for example name a security panel related message something like “Security Alert” or “Security Alarm”.

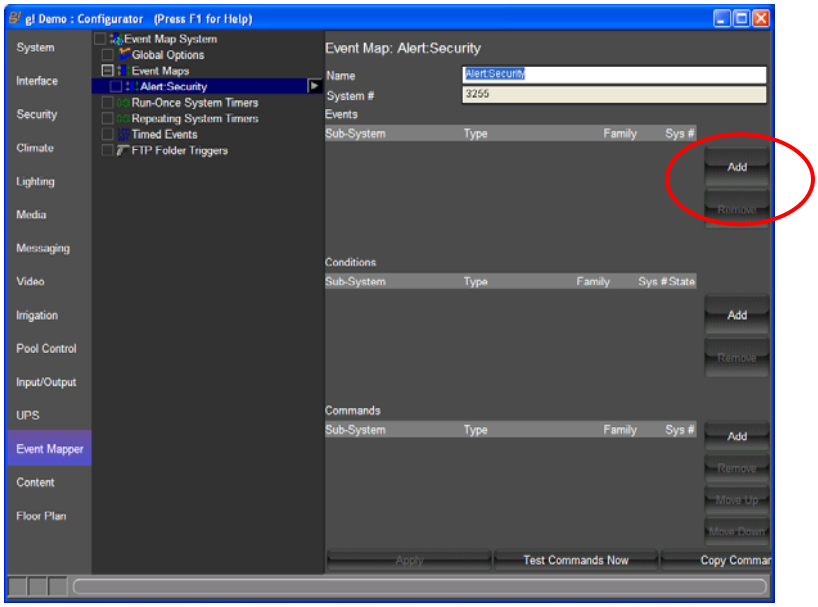
4. **Type in text to be read by the Controller to your contact when triggered**.



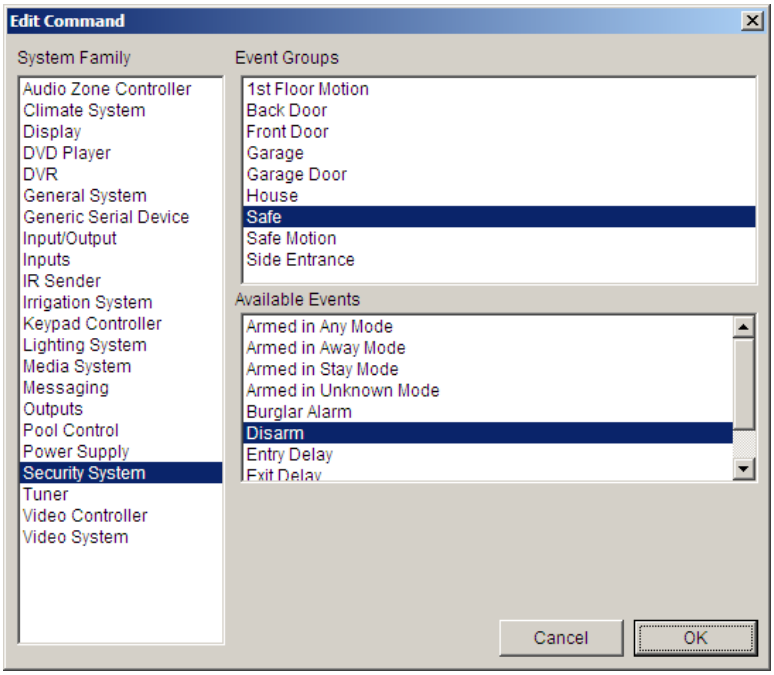
5. **Create an Event Map to set the Controller to send the message when a specified system event occurs.**

   a. Under the Event Mapper tab, right-click **Event Maps** and **Add New Event Map**.

> **Note:** We recommend naming all your messaging alert event maps with the prefix Alert: to keep them organized.

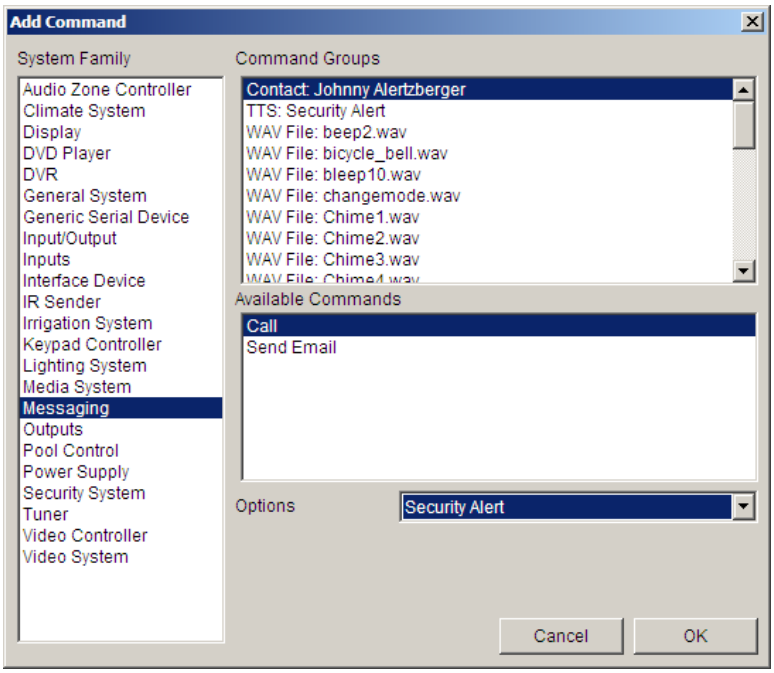


   b. In the Event Mapper screen, click the **Add** button in the **Events** section to an event that will trigger sending the message. For this example, we want to send a message when the Safe Security Partition is disarmed:



c. Click the **Add** button in **Commands** section of the Event Map screen to set up the action of sending your message. In this example, we are sending our Security Alert Text/Speech message to Contact Johnny Alertzberger.

- Select the System Family: Messaging
- Select your contact under Command Groups
- Select **Call** under **Available Commands**, and then pick the appropriate message from the **Options** list.
- Click **OK t**o save the command and return to the Event Map screen.

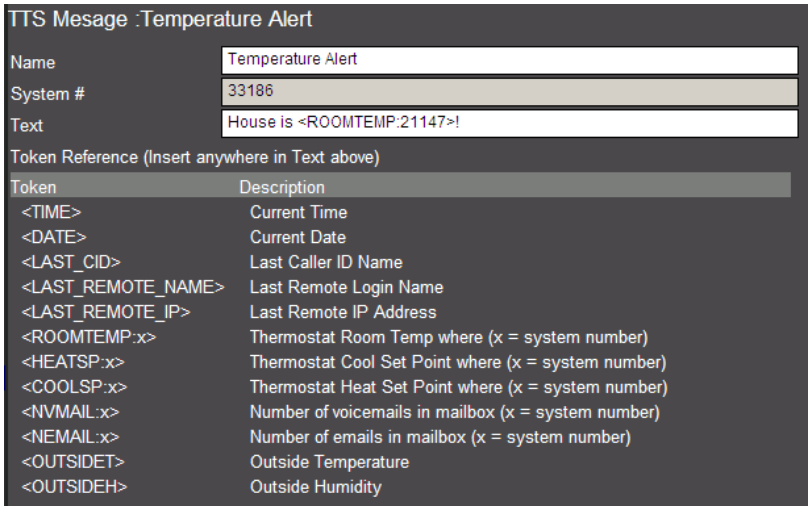


6. **Click the Test Commands Now button on the Event Map screen to test the alert.** It is important to keep in mind that this will only test that the message is sent correctly (the outgoing phone call). It does not test that the message is being *triggered* correctly.

Pop Message Alerts

Pop Message Alerts allow a pre-configured message to “pop up” on an ELAN **g!** Touch Screen. The Pop Message will appear as text inside a bubble on top of the current Viewer screen. Pop Messages can interrupt the screen saver, and will wake up a screen that is asleep. The pop message will disappear after about 10 seconds, or the user can tap anywhere on the screen to dismiss it right away. Pop Message is not available on OSD or iOS devices. To Configure a Pop Message Alert, you must add a TTS message to provide the text content for the Pop Message, and create an Event Map to trigger the Pop Message to appear.

1. **Configure a TTS message on the Messaging Tab.** This will be displayed on the touch screen as Pop Message.
    a. Add a new Text/Speech message by right-clicking on **Text/Speech Messages** and selecting **Add New Text/Speech Message**.
    b. Name the message something memorable as to the type of the alert it will be, for example name a HVAC-related message something like “Temperature Alert”.
    c. Type in **text** to be display by Touch Screen as a Pop Message when triggered.

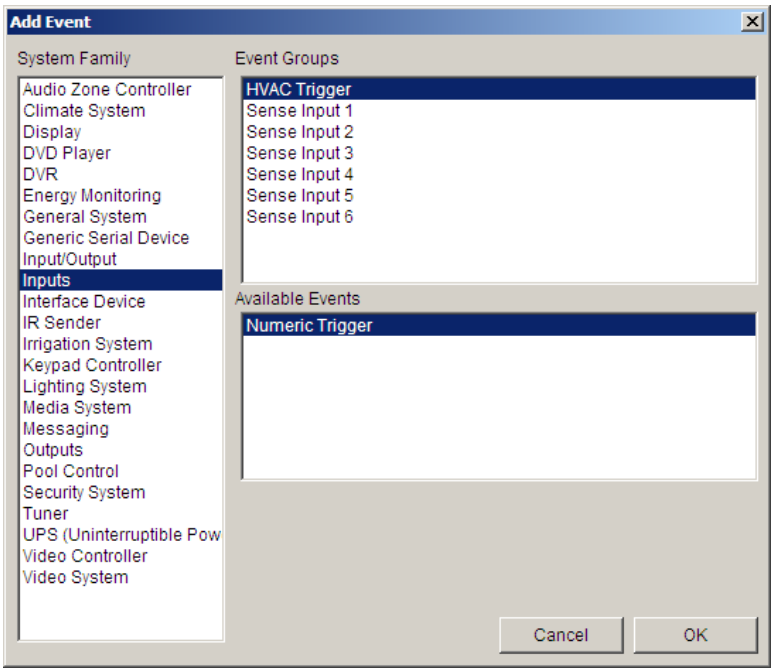


2. **Create an Event Map to set the Controller to send the message when a specified system event occurs.**
    a. Under the Event Mapper tab, right-click **Event Maps** and **Add New Event Map**.

> **Note:** We recommend naming all your messaging alert event maps with the prefix Alert: to keep them organized.

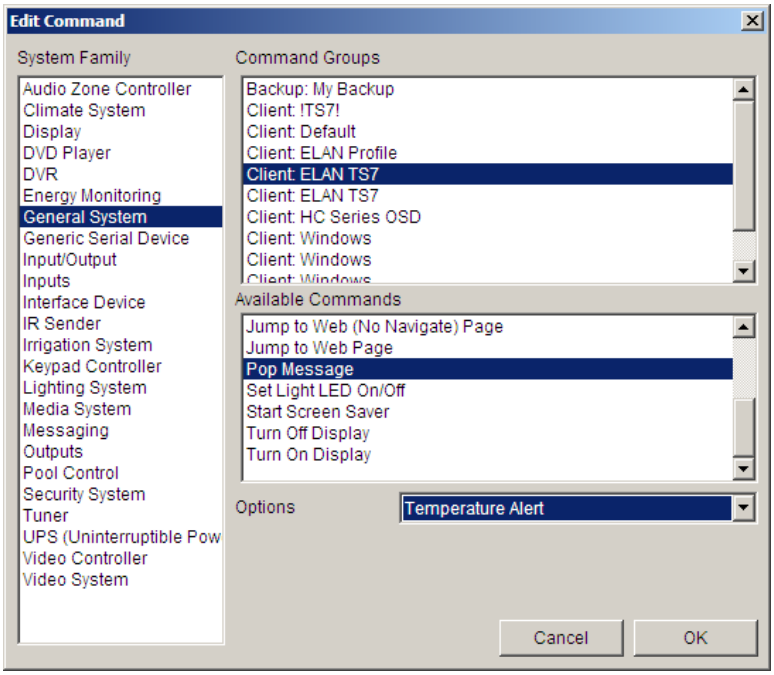
b. In the Event Mapper screen, click the **Add** button in the **Events** section to an event that will trigger sending the message. For this example, we want to send a message when the House temperature sensor is too hot or cold.

Note: Numeric Trigger setup is explained in Event-Based Messaging Examples at the end of this section.

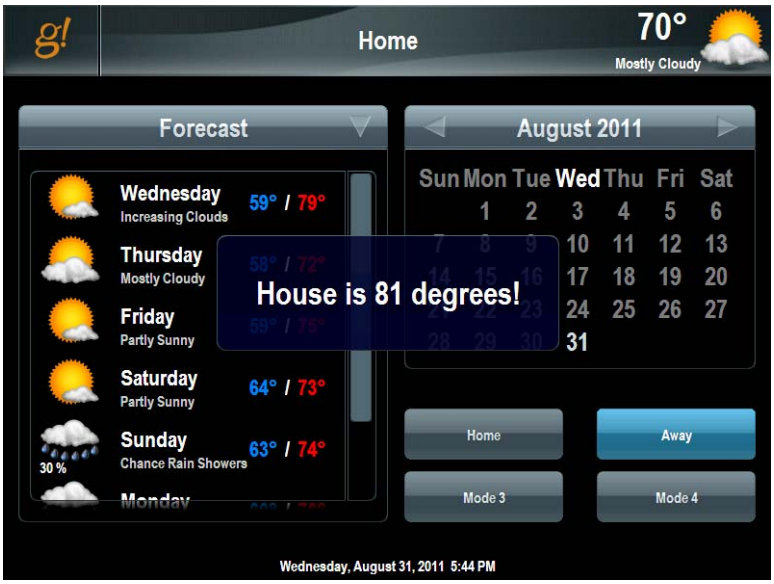


c. Click the **Add** button in **Commands** section of the Event Map screen to set up the action of Pop Message. In this Example, we are displaying the message on an In-Wall Touch Screen.

- Select the System Family: **General System**,
- Select the desired Touch Screen under Command Groups.
- Select **Pop Message** from the Available Commands group, and then select the specific message to send from the **Options** list.
- Click **OK t**o save the command and return to the Event Map screen.



3. **Click the Test Commands Now button on the Event Map screen to test the alert**. It is important to keep in mind that this will only test that the Pop Message appears as desired on the appropriate touch screen. It does not test that the message is being *triggered* correctly.



Email Alerts

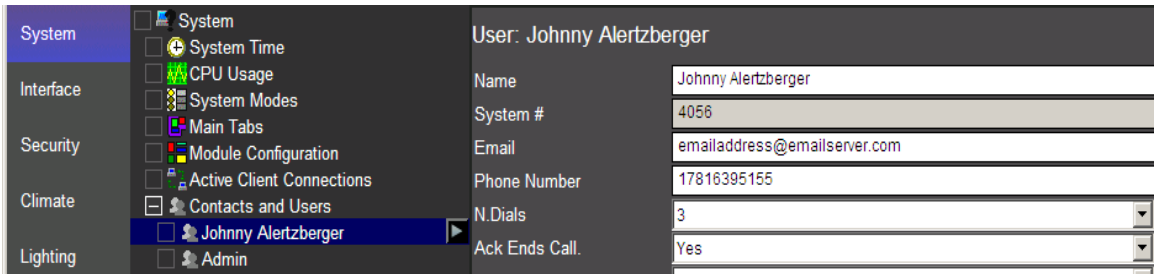
Note: The messaging tab is NOT required for email/text message alerts. The Controller/MultiBrick must have internet access to send an alert via Email.

Email alerts allow the **g!** controller to connect to the internet and send a pre-configured email message to desired recipients. The basic steps to set up Email Alerts are as follows;

- On the System tab, configure Contacts with Email address
- On the Messaging tab, configure the outgoing server so the **g!** System can send Email
- On the Messaging tab, configure the Email messages (outbound) for the controller to send
- Create Event Maps to trigger sending the Email when a specific event happens

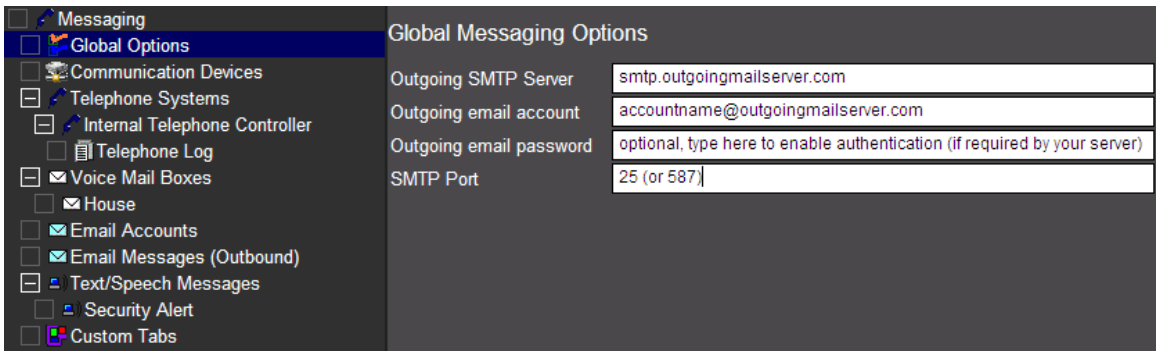
To configure Email alerts:

1. **Setup Contacts with e-mail addresses on the System tab under Contacts and Users.**



2. **Configure the outgoing mail server on the Messaging tab under Global Options**.

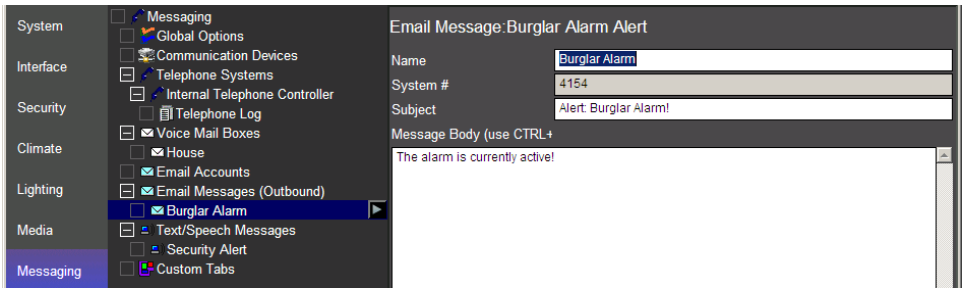
   You will either need to find out the customers email server information to set this up, or you can use your own if your company has its own outgoing server.



   The default address included in this field does not work. Enter your own server here. If you do not have one of your own, you can use a free account, however, only standard SMTP is supported currently, and there is no support for SSL encryption used by services like hotmail or gmail. GMX.com is a free e-mail provider that is known to work. You may also wish to set up a company alert e-mail if you have your own hosting (website) provider.

Note: Many internet service providers (ISPs) block SMTP transmissions on port 25 that are not going to their server in order to prevent spam. GMX.COM is known to support access on port 587 as well as port 25, or you can use your customer's ISP e-mail account instead.

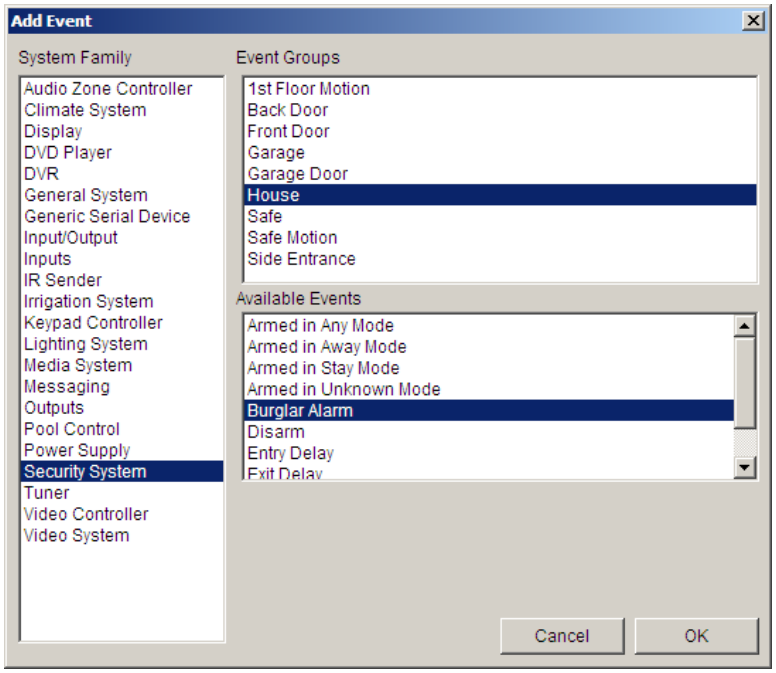
3. **Configure E-mail messages to send out when triggered.**
    a. Add a new E-Mail Message by right-clicking on E-Mail Messages (outbound) and choosing "Add New E-Mail Message".
    b. Name your message something memorable as to the type of the alert it will be, for example name a security alarm message something like "Burglar Alarm".
    c. Format the E-Mail like you would normally with a subject and a message body. (Note that Tokens may be used here as well)



4. **Create an Event Map to set the Controller to send the message when a specified system event occurs.**
    a. Under the Event Mapper tab, right-click Event Maps and Add New Event Map.

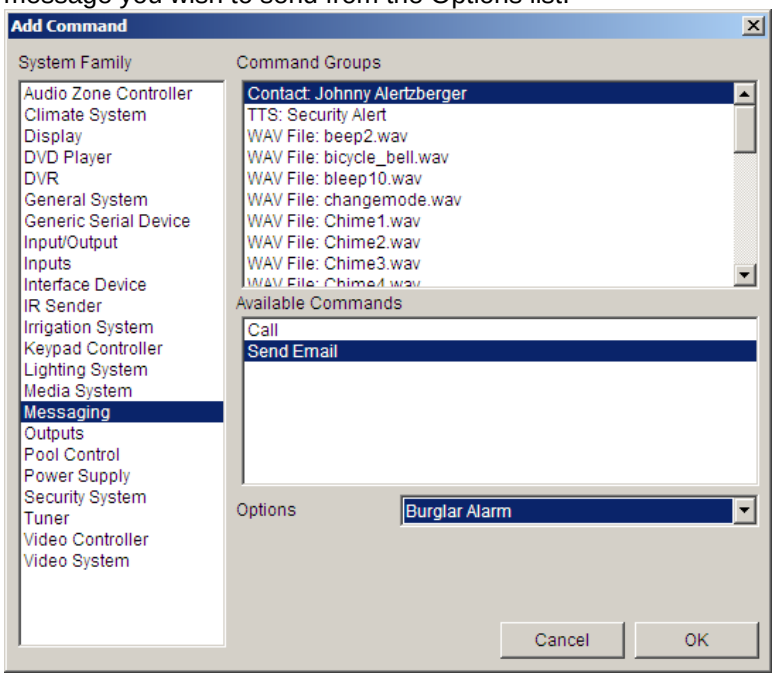
Note: We recommend naming all your messaging alert event maps with the prefix Alert: to keep them organized.

    b. In the Event Mapper screen, click the **Add** button in the **Events** section to an event that will trigger sending the message. For this example, we want to send a message when the House Security Partition is in a Alarm State:



c. Click the **Add** button in **Commands** section of the Event Map screen to set up the action of Send Email. In this Example, we are sending our Burglar Alarm E-Mail message to Contact Johnny Alertzberger.

- Select the System Family: Messaging
- Select your contact under Command Groups
- Select Send Email from the Available Commands list, and then select the specific message you wish to send from the Options list.



5. **Click the Test Commands Now button on the Event Map screen to test the alert.** It is important to keep in mind that this will only test that the message is sent. It does not test that the message is being *triggered* correctly.

Text Message Alerts

Note: The messaging tab is NOT required for email/text message alerts. The Controller/MultiBrick must have internet access to send a text message.

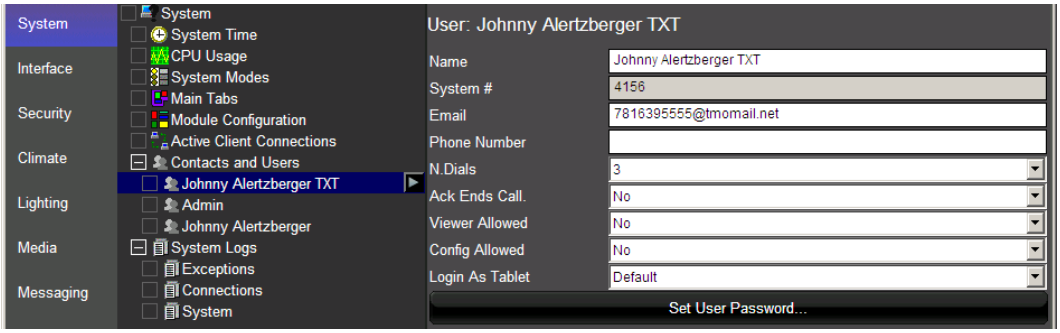
Text Message Alerts use the email feature to send SMS messages to available cell phone. Setting up Text Message Alerts, is the same process as setting up Email Alerts:

- On the System tab, configure Contacts with Email address formatted for text messaging
- On the Messaging tab, configure the outgoing server so the **g!** System can send Email
- On the Messaging tab, configure the Email messages (outbound) for the controller to text message
- Create Event Maps to trigger sending the text message when a specific event happens

To configure Email alerts:

1. **Set up a new Contact with the text messaging email address on the System Tab under Contacts and Users.**

Note that you need to create separate contact entries for each email address (email, text, multiple accounts). For example, if the homeowner should receive both an email and a text message for an event, they will need 2 contact entries.

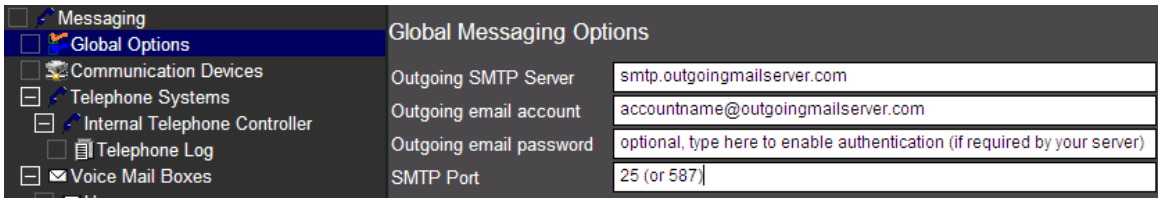


Note: You'll need to format the email address as specified for your particular provider. See the table below for major wireless carriers, or consult with the customer's wireless service provider for this information. This information can also be found on the internet at http://www.notepage.net/smtp.htm

Carrier	Format
T-Mobile	phonenumber@tmomail.net
Virgin Mobile	phonenumber@vmobl.com
Cingular	phonenumber@cingularme.com
Sprint	phonenumber@messaging.sprintpcs.com
Verizon	phonenumber@vtext.com
Nextel	phonenumber@messaging.nextel.com
ATT	phonenumber@txt.att.net

phonenumber = 10 digit phone number

2. **Configure the outgoing mail server on the Messaging Tab under Global Options.** You may need to find out the customer's email server information to set this up, or you can use your own if your company has its own outgoing server.



Note: the default address included in this area does not work. You must enter your own server here. If you do not have one of your own, you can use a free account, however, only standard SMTP is supported currently, and there is no support for SSL encryption used by services like hotmail or gmail. GMX.com is a free email provider that is known to work. You may also wish to setup a company alert email if you have your own hosting (website) provider.

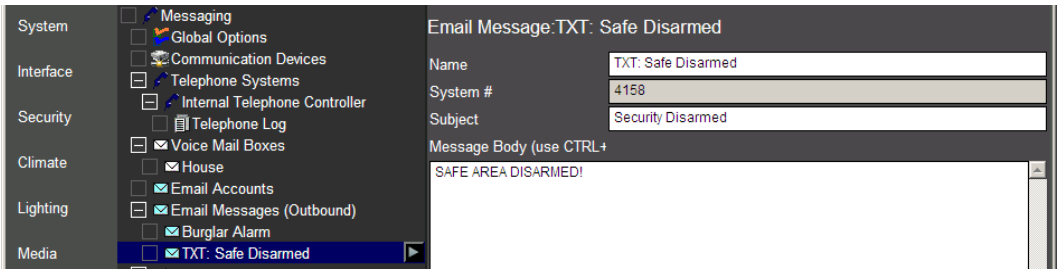
NOTE: Many internet service providers (ISPs) block SMTP transmissions on port 25 that are not going to their server to prevent spam. GMX.COM is known to support access on port 587 as well as port 25, or you may use the customer's ISP e-mail account instead.

3. **Configure Email messages to send out when triggered.**

    a. Add a new Email Message by right-clicking on Email Messages (outbound) and choosing “Add New Email Message”.

    b. Name your message something memorable as to the type of the alert it will be, for example name a security disarmed message something like “Security Disarmed” or “Disarm Alert”. You may also wish to add a TXT: prefix to all the Email Messages you intend to text message. Note that you should be able to get double duty out of Email Messages sent through email or sent as a text message.

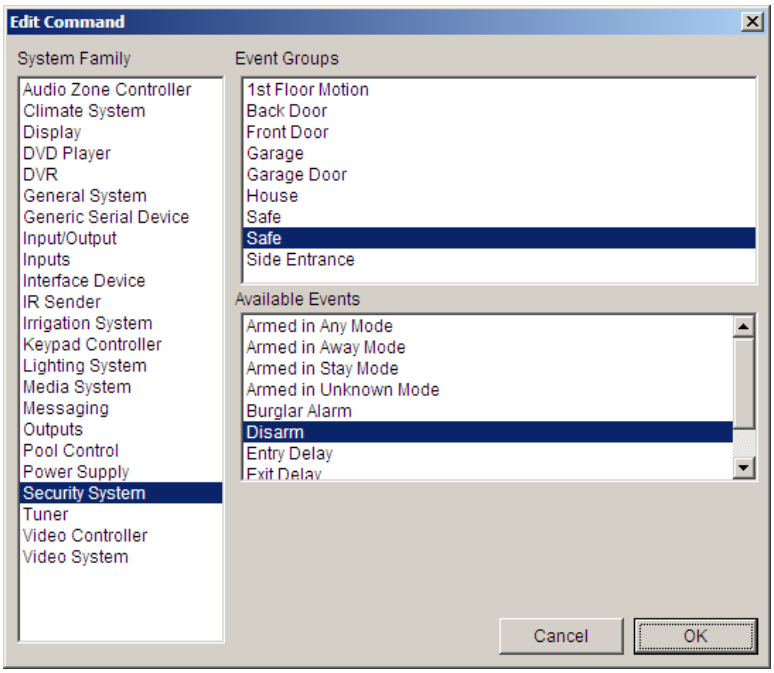
    c. Format the Email like you would normally with a subject and a message body. When E-Mails are sent as text, it is common for the Text Message to be delivered with all text in one area, but the subject text contained in parentheses.



4. **Create an Event Map to set the Controller to send the message when a specific system event occurs.**

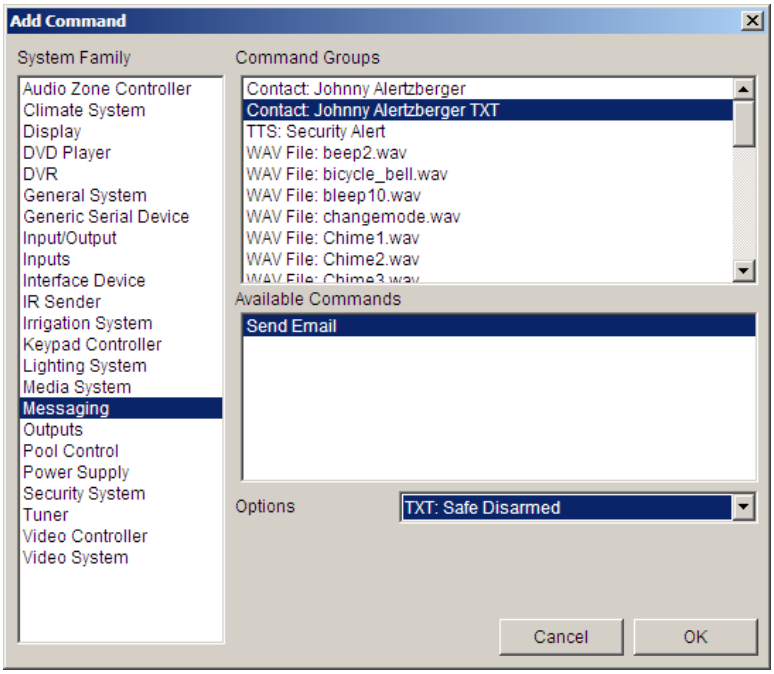
    a. Under the Event Mapper tab, right-click Event Maps and select Add New Event Map. We recommend naming all your messaging alert event maps with the prefix Alert: to keep them organized.

    b. Add an Event to trigger sending your message in the first box, labeled Events. For this example, we want to send a message when the Safe Security Partition has been disarmed:



c. Add a Command to select the action of sending your message in the 3rd box, labeled Commands. In this Example, we are sending our Safe Disarmed E-Mail message to Contact Johnny Alertzberger TXT.

- Select the System Family: Messaging, and then
- Select your contact under Command Groups.
- Select Send E-Mail in the Available Commands list, and then select the specific message you wish to send from the Options list.



5. **Click the Test Commands Now button on the Event Map screen to test the alert.** It is important to keep in mind that this will only test that the message is sent. It does not test that the message is being *triggered* correctly.

Other Event-Based Messaging Examples

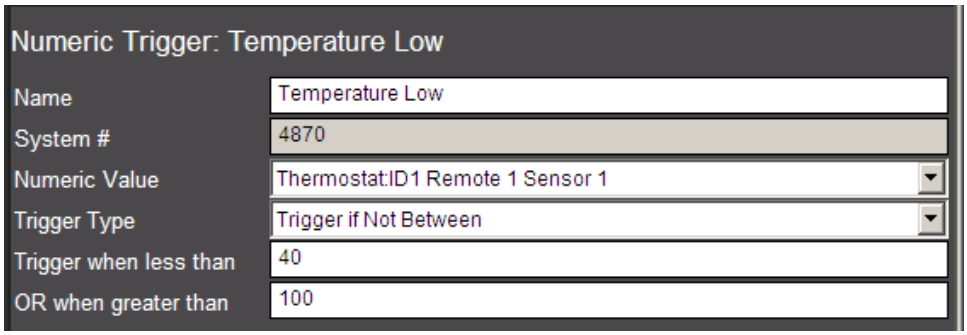
System alert triggers can be configured in the **g!** software for many different events such as a thermostat malfunction, or a temperature reaching a specific value. The following examples show how to set up two events; however there are many others available to you.

For each alert, you will need to create a message to send and an Event Map to send it. Browse through the list of commands in the Event Map dialog box for ideas of applications that will be useful to your homeowner.

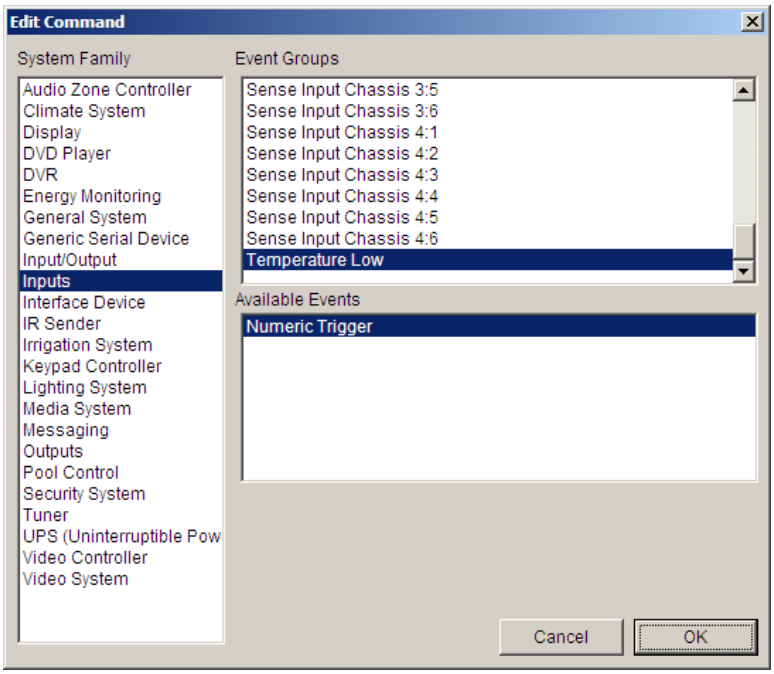
Trigger: Temperature

To trigger alerts based on temperature, you must setup a **Numeric Trigger**. Numeric Triggers are configured on the Input/Output tab and can be attached to a specific thermostat, temperature sensor, or internet temperature reading. Each Numeric Trigger can only be attached to a single source however, so remember to create Triggers for each Thermostat or Sensor you wish to trigger an Alert from.

1. On the Input/Output Tab, right-click Numeric Triggers and select **Add a New Numeric Trigger**.
2. Edit the properties of the Numeric Trigger as appropriate for your situation. We recommend that you name the trigger something distinctive such as “Basement Stat: Temp Low” for a basement low temperature trigger, or “Nursery Room: Temp Range” for a Trigger that will alert on a high or low value for the Nursery. This will be helpful, especially in instances where you have multiple triggers.
3. Select a thermostat, sensor, internet reading or other source from the **Numeric Value** list.
4. Select a **Trigger Type** as appropriate.
5. Select appropriate values for the Trigger Source (Numeric Value) and Trigger Type. For example:



6. Create an Event Map where the System Family is **Inputs**, and then choose the appropriate Numeric Trigger. For Example:

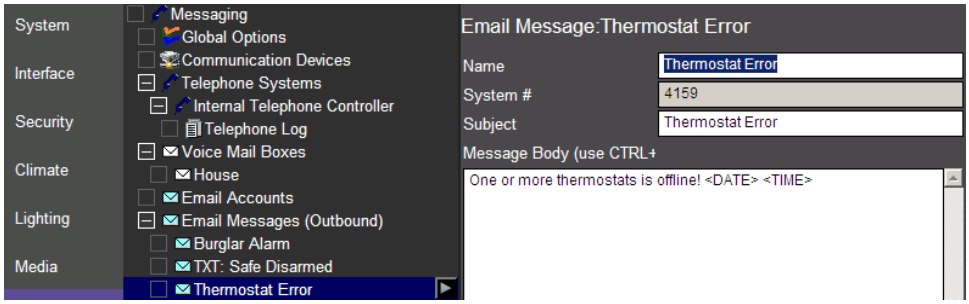


Trigger: Climate System Error

Note: This feature is currently only supported on Aprilaire communicating thermostats and requires **g!** software version 4.0 Build 1619 or later.

Another useful event map is to notify you if supported thermostats stop responding, lock up or go offline. The event will occur when the red “Connecting to Thermostat” box appears on the Viewer. This event can enable you to be notified if a thermostat locks up or otherwise stops communicating, which could prevent a “stuck” HVAC call from the thermostat or other undesirable operation of the climate control.

1. Set up supported thermostats as per the appropriate *Integration Note*.
2. Create email or TTS message(s) on the Messaging tab. Name the alert something specific like “Thermostat Error”, and set up an alert to state “One or more thermostats is offline <DATE> <TIME>” or something similar.



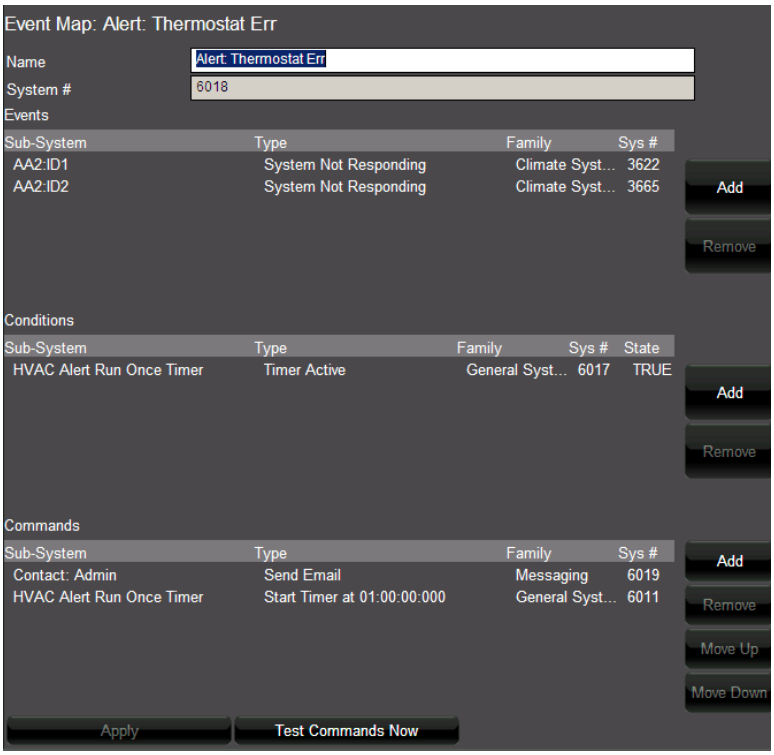
3. (Optional) On the Event Mapper tab, create a **Run-Once System Timer**. This will be used to prevent a flood of messages and only allow the system to alert once during the specified time period. This is useful if the thermostats drop off in sequence, as each thermostat will generate a new event and potentially a new message.
4. Create a new event map named **Alert: Thermostat Error**, or something similar.
5. Add an Event trigger for each thermostat in the system;
    - System Family: Climate System,
    - Event Group: *Thermostat Name*
    - Event: System Not Responding.

    Note: You should be creating ONE event map with MANY event triggers. Events will trigger as OR, so if any of the events occur, it will trip the event map.

6. (Optional) Add a **Condition** for the Run-Once Timer from **System Family: General System**, **Event Group: *Run Once Timer Name***, with the **Condition: Timer Active = FALSE**. This will prevent the event map from tripping if the timer is running.
7. Add Commands to send the message alert from System Family: Messaging, Command Group: Contact *Contact Name,* Command: Send *Message.*
8. (Optional) Add a 2nd command to **start** the Run-Once System Timer from **System Family: General System**, **Command Group: Run Once Timer Name**, and select **Start Timer At…** to manually enter the desired run time.

This will start the timer after the alert is sent, and while the timer is still running, the event map will not trip again due to the Timer Active condition.

The final event map should look something like the following:



Note: You can create individual messages and event maps for each thermostat, to get specific information about which thermostat has failed. However, one event map when any thermostat is offline will likely be sufficient to prompt an inquiry into the system.

Video

For information on how to configure IP video cameras and servers to provide live video to a connected Viewer, see Lesson 6, **Configuring Video Systems** in the ***g!*** *Configurator Training Guide.*

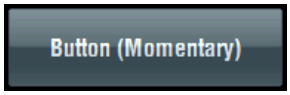
This section provides the following additional information about working with Video systems:

- Custom Controls for the Video Tab

Video Custom Tab Controls

When creating custom video interfaces, there are many types of controls that you can add to the page. Below is a reference table for common controls and their usage. Note that many custom controls have settings available within their properties windows that allow you to modify the name, look, style, resolution, and behavior of connected video devices.

Control	Description
Video Full Screen Button 	Video Full Screen Button can be used to view video from any one of the configured video sources as full screen video on the Viewer interface. This control adds a button that, when clicked, shows the configured video steam at full-screen size. Click again anywhere on the screen to return to the Viewer interface.
Video Position Control (Preview not available)	Video Position control can be used to adjust pan/tilt/zoom of supported cameras via camera view grid map. Refer to your specific camera integration to see if this control is supported.
Video Res. Control 	Video Resolution control can be used to create buttons on a custom page to change the resolution of any one of the configured video sources.
Video Stream 	Video Stream control can be used to insert a video stream from any one of configured video sources. It can be placed and resized on the custom tab as desired.
Video Stream Volume	Video Stream Volume control can be used to create buttons to change the volume of the audio available from a configured video source's audio input. (cameras or servers with integrated audio only)

Control	Description
	
Video Zoom Control (Preview not available)	Video Zoom control can be used to create buttons to adjust the zoom level of any one configured video source. (cameras with supported zoom control only)
Button (Momentary) 	Standard button that can be used with Event Maps to send commands when pressed and stop sending commands when released. Typically this is used to control contact closures, shades, or other ramping devices that require momentary control action.
Button (Standard) 	Standard button that can be used with Event Maps to activate various functions. This is a single-action button.
Button (Toggle) 	Standard toggle button that can be used with Event Maps to activate various functions. This button allows for a set of commands to be set when it is activated and second set of commands to be set when it is deactivated.
Button (Image) 	Variant of Button (Standard) that allows the button to display an image (JPG) from any of the picture files in the Picture share folders.

Irrigation

Integrating the irrigation panel with the **g!** software provides the homeowner access to their irrigation system through the Viewer. They are able to:

- View system status
- Manually activate individual zones
- Manage watering schedules and seasonal adjustments
- Review watering history.

For information on how to set up the Irrigation tab, including irrigation groups, zones and watering schedules, see Lesson 15, **Irrigation Systems** in the ***g!*** *Configurator Training Guide*.

This section provides the following additional information about working with the Irrigation tab:

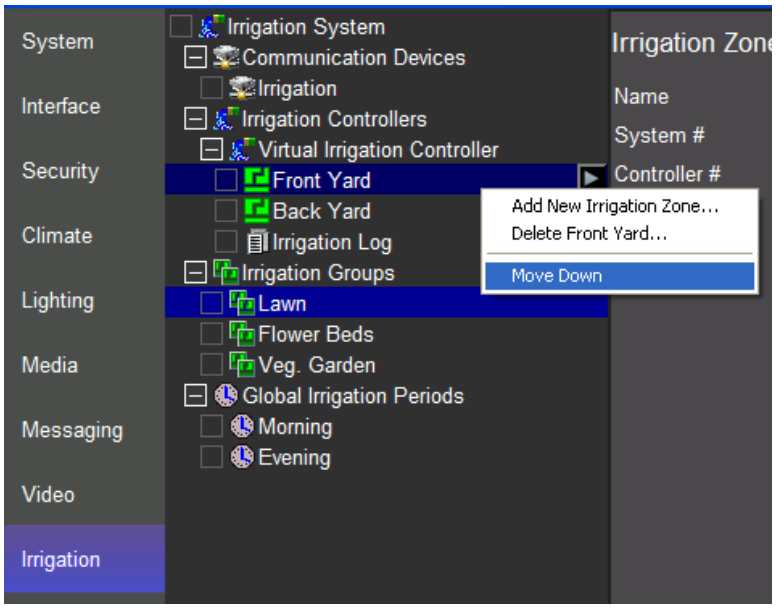
- Changing the Watering Order by Zone
- Work with the Seasonal Map
- View Irrigation History
- Manually Activate zones

Changing Zone Watering Order

The watering schedule will execute one irrigation zone at a time in the same order that the zones are listed in the Configurator and displayed on the Viewer.

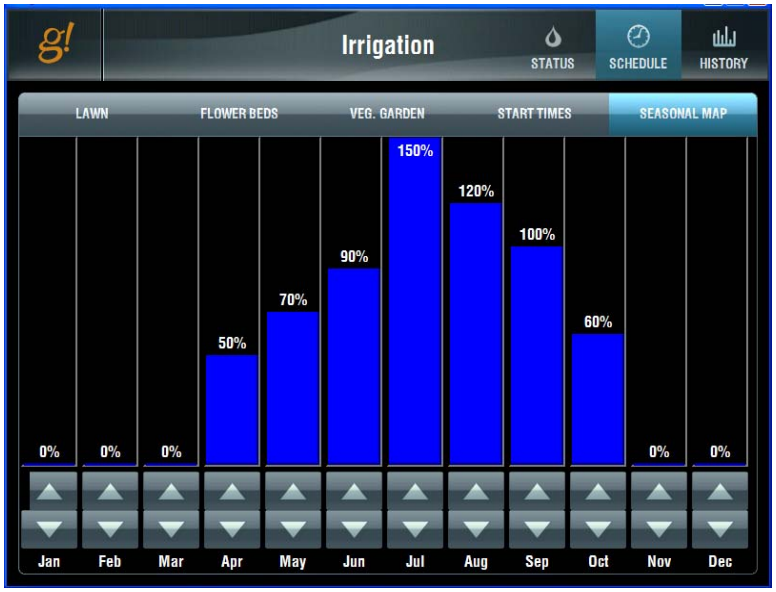
To change the display order of the irrigation zones:

1. Navigate to the Irrigation tab the **Configurator**
2. Right-click on the zone to be moved, and then select **Move Up** or **Move Down**.
3. Repeat for each zone that you want to reorder.



Seasonal Map

The Seasonal Map page allows you to adjust the watering times on a monthly basis to provide both water conservation and appropriate watering levels without constantly making schedule adjustments to the system.

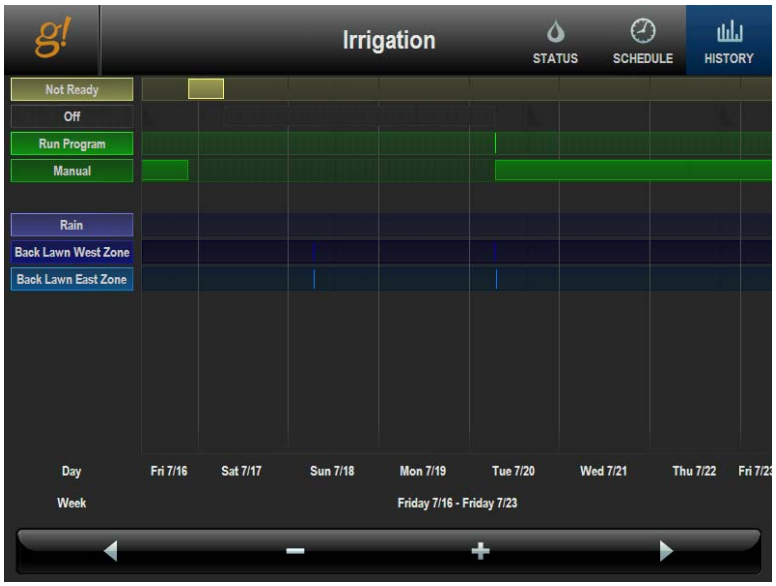


For example, during the early spring and late fall when the weather is damp these may be set to a percentage less than the base time to conserve water. Alternatively, during the mid-summer when the weather is driest, these might be set to a percentage greater than the base time to provide adequate water for the plantings.

In the Viewer, access the **Irrigation** app, and then navigate to the **Schedule, Seasonal Map**. Use the arrows for each month to set the percentage of base time that the system should water for each month.

Irrigation History

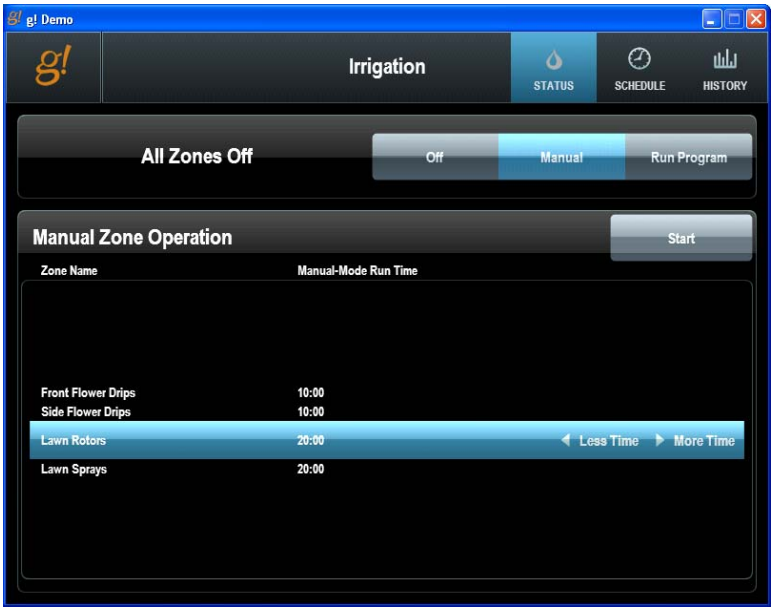
The Viewer's Irrigation History page provides an historical view of zone watering. The arrows and zoom level can be adjusted with the controls at the bottom of the screen to view history for a specific time frame.

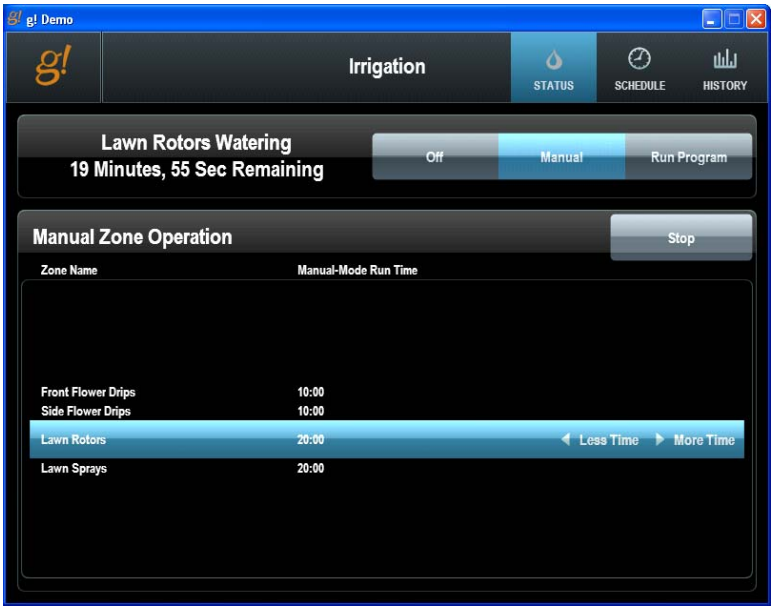


Manually Activate Zones

The Manual tab provides you with the ability to manually activate zones. First set the system mode at the top to manual by clicking the **Manual** button. Then, select the System tab, then the Manual tab. All of the zones should be displayed.

Select the zone to activate, then use the **Less Time**/**More Time** buttons to set the desired run time and click the **Start** button at the bottom left of the screen. The Zone will start and the Zone Status box will show the current watering zone and will display a countdown of the remaining watering time. To stop the zone immediately, click the **Stop** button. See the sample screens below.





Pool Control Tab

Integrating a Pool System with the **g!** software provides the home owner with access to control pool features, pool function scheduling and a history of pool pumps and circuits. Pool Integration can control, schedule, and report history for many pool devices, including: Filter Pumps, Water Features, Heaters, Chlorinators, Pool Lights, Spa Jets and more.

Note: Specific features available in the **g!** software will vary depending on the Pool System installed. Please review the Integration Notes for the specific system for more information.

Typically, the pool controller is installed by a pool system professional, and is a fully functional independent system prior to integration with the **g!** software. In most instances, the Pool & Spa are controlled by a single control board, and an interface adapter is used to connect the ELAN controller electrically with this controller.

See Lesson 16, **Configuring Pool Systems** in the ***g!*** *Configurator Training Guide* for information on setting up the Pool Control tab. See Section 2 of this manual, **Field-Level Descriptions** for a reference of each of the fields used in the Configurator.

This section provides the following additional information for working with the Pool Control Tab:

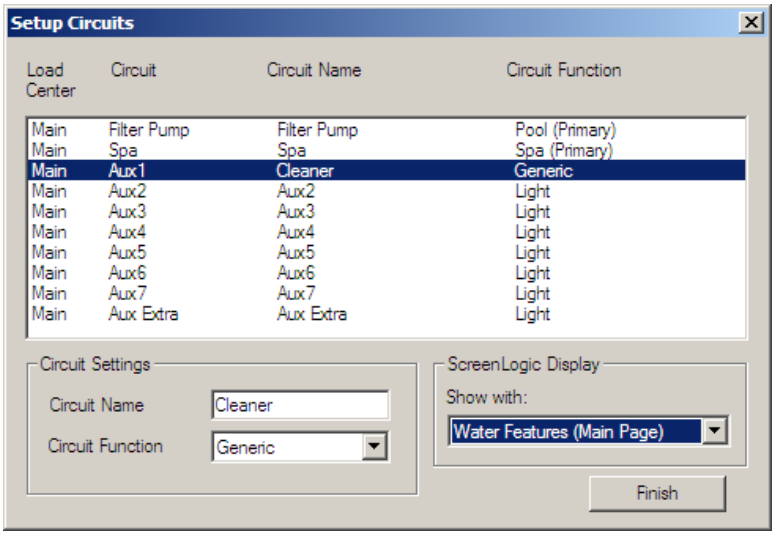
- Setting Up Light and Water Features
- Configuring Pentair Pool Systems

Configure Circuits

In addition to controlling filter pumps and heaters, Pool Controllers may also control lights and water features through **Circuits** (relays). Use the **Configure Circuits** function in the Configurator to designate where controls for these circuits will display in the Viewer.

To Configure Circuits:

1. Right-click the **Pool Controller** in the Pool Control System Tree and select **Configure Circuits**. *The Setup Circuits window opens*.



2. To change the name, function and display of a particular circuit, click on the desired circuit in the list. The **Circuit Settings** fields will become editable.

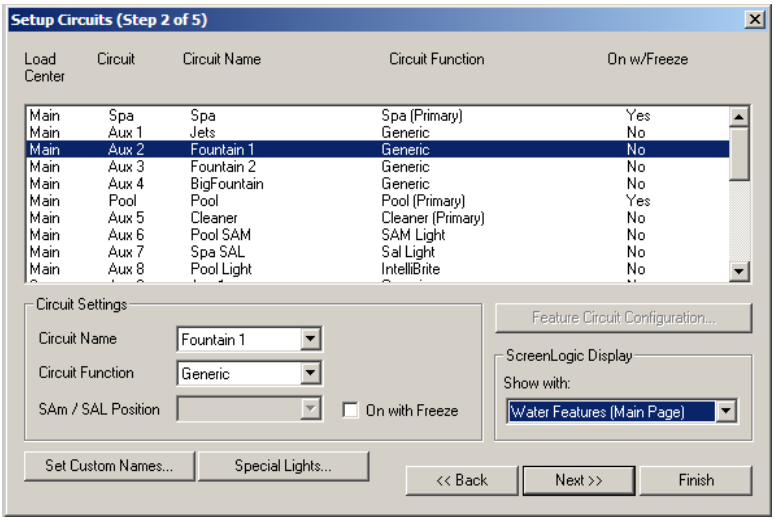
Quick Reference: **Setup Circuits**	
Circuit Name	Edit the name by typing in the field under Circuit Settings
Circuit Function	Change the setting by making a selection from the drop-down list. Note that certain Circuit Functions, like Lights, will hard code where the Circuit appears and the Screen Logic Display "Show with:" field will be unavailable.
Show with:	Use the Screen Logic display section on the right to change where the circuit appears. Note that you may need to change the Circuit Function of certain circuits in order to change where they will appear.

3. Click **Finish** to save your settings.

Note: On some Pool Systems clicking Finish will not save the settings to the Pool Controller, and is used only in the **g!** software.
In Pentair systems these changes will write down to the controller. You may want to discuss modifications with your pool installer before making major changes.

Pentair Pool Systems

For users of Pentair Pool Systems, many additional configuration options are available for programming the Pentair Controller through the **g!** software. See Pentair's website for IntelliTouch ScreenLogic manuals and User Guides (http://www.pentairpool.com/techinfo) for full details on these features.



Input/Output Tab

Use the Input/Output tab to configure and view the status for input/output devices such as contact closures, sense inputs, custom serial drivers, IR devices and other system objects.

See Lesson 8, **Distributed A/V Systems, Part 2**; Lesson 9, **Configuring Home Theater**; Lesson 10, **IR Control** and Lesson 11, **Generic Serial Control** in the ***g!*** *Configurator Training Guide*, for more information. See Section 2 of this manual, **Field-Level Descriptions** for a reference of each of the fields used in the Configurator.

This section provides the following additional information about working with the Input/Output Tab:

- One Way RS-232 Control
- Setting up an IR Device
- Setting Up and Scheduling Backup Objects

One-Way RS-232 Control

The Generic Serial Device driver is used for sending one-way commands to a serial controllable device that either does not benefit from a full 2-way driver in the **g!** software, or for which a 2-way driver is not available. The Generic Serial Device driver is not intended to support full two-way communication, and is primarily used for devices that do not provide feedback.

Examples of devices that are well suited as Generic Serial Devices are audio and video sources (such as DVD players) and video displays (televisions or projectors).The Generic Serial Device driver is not intended for devices like tuners and receivers, where the two-way feedback (the current station on a tuner or the active source on the receiver) is important.

Review Lesson 11, **Generic Serial Control (One-way**) in the ***g!*** *Configurator Training Guide* for information on:

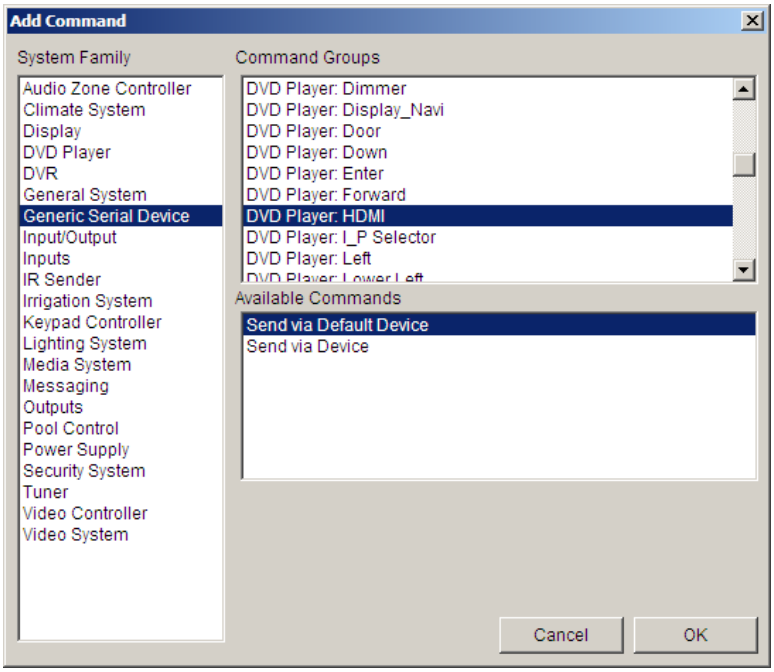
- How to add serial commands for one-way control of serial devices.
- Universal Functions and how they apply to Generic Serial Devices and Interfaces.
- How to use Generic Serial Device commands to control devices from the **g!** software.
- How to export and import Generic Serial Devices.

See Section 2 of this manual, **Field-Level Descriptions** for a reference of each of the fields used in the Configurator.

Event Mapping for a Generic Serial Controller

Control

You can use Event Maps to control Generic Serial Devices without adding an Interface or Generic Display. Commands added to a Generic Serial Device are present in the commands menu under the System Family Generic Serial Devices, and codes are organized by the name of the Generic Serial Device.



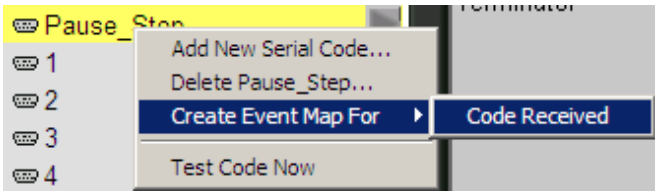
React

You can react to an incoming Generic Serial code much the same way you can to incoming IR codes, and prompt an action through event mapping.

An example of this setup is an AV Theater controlled through a third party remote (RTI, URC, etc.) which uses a connection block sending custom serial out to provide feedback in the **g!** software when specific buttons are pressed on the remote.

To use this type of function:

1. Add a Generic Serial Device that includes the codes you want to use to trigger Event Maps, and a corresponding Communication Device.
2. Right-click on the individual codes and select **Create Event Map For > Code Received**.
3. Add commands as desired.



Add Commands to an Existing Driver through Generic Serial

Codes can be sent through Event Mapper or a button press to a device with an existing 2-way driver. This is typically set up to add in one or two special use commands that may not be supported within the **g!** software's 2-way driver. In this case, ELAN typically does not recommend that you create a new Communication Device for the Generic Serial Device. Instead, create the Generic Serial Device *without* a Communication Device, and use the **Send Via Device** option to select an existing Communication Device in the system to send the commands.

Note: Inserting serial strings on your own to devices otherwise controlled by an ELAN built-in driver may cause unexpected behavior.

IR Control

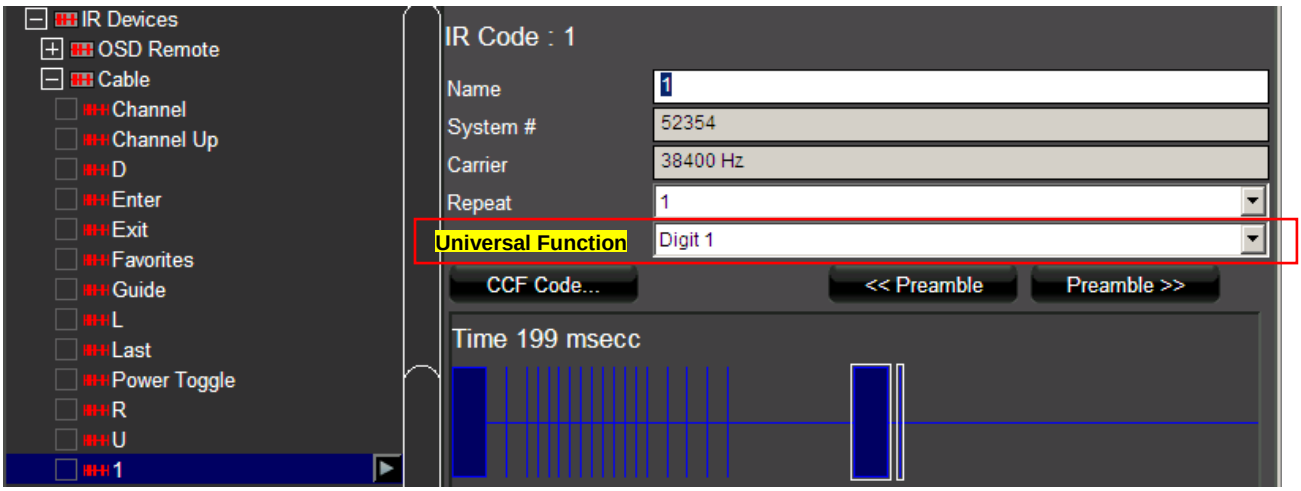
See Lesson 10, **IR Control** in the ***g!*** *Configurator Training Guide* for the following information:

- Learn about the built in IR outputs and IR input on the HC controllers
- Learn how to build an IR Driver
  - Learn how IR Devices and IR Codes are organized in the configurator.
  - Learn how to import an IR file, ELAN IRF or HIR, to build an IR Driver.
  - Learn how to use the IRL2 to learn IR codes directly into the **g!** software when building an IR Driver.
  - Learn how to check, test and optimize an IR device.
  - Understand Universal Functions and how they apply to IR devices and Interfaces.
  - Learn how to export and import IR Devices.
- Add IR Controlled Displays.
- Create and Customize Interface for IR Source
- Learn how to configure the built-in TV Channel Favorites interface.

For information about troubleshooting IR devices, see the section **Troubleshooting** on page 174 of this manual.

Set up an IR Device

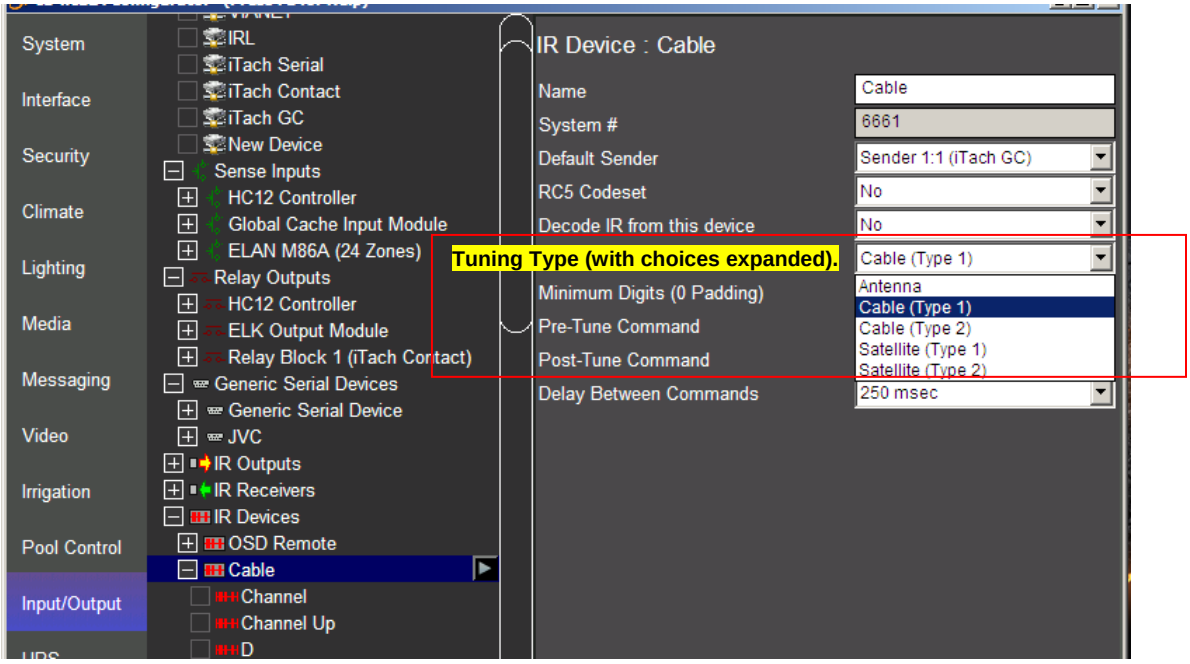
1. **(Legacy Controllers) Setup a Global Cache:** follow the *Global Cache Integration Note*. HC Controllers have built-in IR that is pre-configured, and this step may not be needed.
2. **Add an IR device.** You can import or learn codes. If learning codes, you can choose to start from a code set to insert the blanks for your commands, or manually add blanks to learn commands into. If you choose to manually add commands or you will be importing a set of IR commands, verify that all of your IR Codes have their **Universal Functions** set correctly. We also recommend setting all digits Repeat to 1.



Note: Best Practice is to always set ALL universal functions, but typically Digits (0, 1, 2 etc.), Up/Down/Left/Right, Select/Enter, Power and Source functions are used most often.

For the TV Channel Interface to function correctly, all **digits** must be set to utilize Universal Functions.

3. **Configure your IR device.** Click on the device name under IR Devices. It is important that you set both a **Default Sender** and choose a **Tuning Type**.



Note: Choose a different Tuning Type for every channel lineup needed.
For example: 2 Standard Cable and 1 HD Cable boxes on-site will require 2 tuning types due to different channel numbers. Set the Standard cable boxes Tuning Type to **Cable (Type 1)** and the HD cable box Tuning Type to **Cable (Type 2)**.

4. **Learn IR codes**. Setup and test IR codes to confirm proper operation before proceeding.

Backup Objects

Backup Object function in the **g!** system can duplicate any folder on the local hard disk, usually through the Event Mapper. This can be useful when you are remote and want to create a duplicate of your installation folder before applying a beta update. This can also be used to set up an automated backup.

Note: Backup folders will contain all configuration files, but are typically only useful on the system they were created on. You may need to contact technical support to actually use the configuration files.

Backup Objects can be used to backup any folder, including pictures, DVR or Music. It is important to keep in mind, however, that like any file duplication, they will use significant system resources.

Important Notes about the Backup Object function:

- Backup Object is a recursive copy and will copy the subfolders specified as the source.
- Backup Object will overwrite any files in the destination folder with the same name.

- Backup Objects are not compatible with network shares that require authentication.
  The following steps describe how to create a folder on the Controller and then use Backup Objects with an Event Map to duplicate a folder.

Creating a Backup Object

1. **Create a Destination Folder for the Backup Object**. The easiest way to do this is to use the **local network shares** provided by the **g!** Controller. **This must be done on-site.** This procedure is written as if the backup is for the main system folder; though it could be used for other file types.

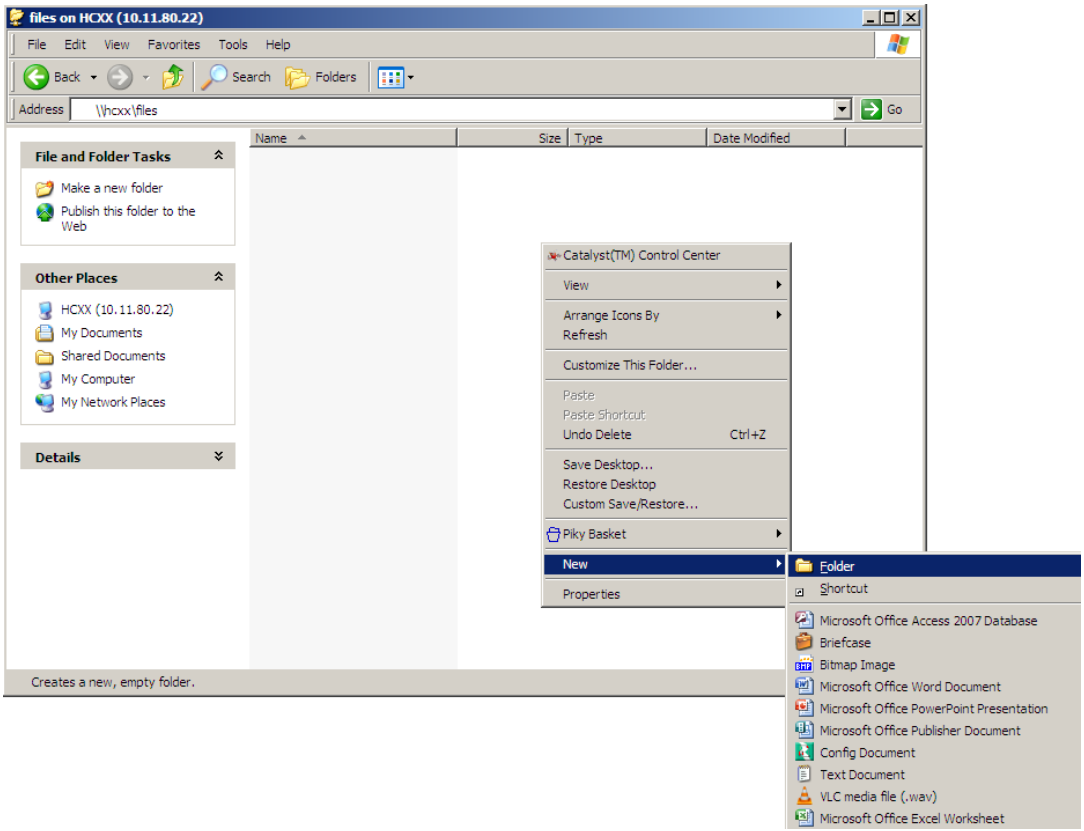
Note: This step only applies to Controllers with local storage. If using an HC without a Hard Disk or a MultiBrick, create a folder on your network storage as appropriate and skip to step 2.

   a. **For an HC Controller**, open "My Computer" (or Computer on Win7/Vista) on your computer and type into the address bar, "\\hcxx "(without the quotes). This will display the local share folders for Music, Pictures, and Files.

   b. **For a HomeBrick Controller**, open "My Computer" (or Computer on Win7/Vista) on your computer and type into the address bar, "\\hlgateway"(without the quotes). This will display the local share folders for Music, Pictures, and Files.

   c. Open the FILES share folder, which may be empty or may contain a "DVR" subfolder.

   d. Create a new subfolder under FILES by right-clicking the white space in My Computer and choosing **New > Folder.**

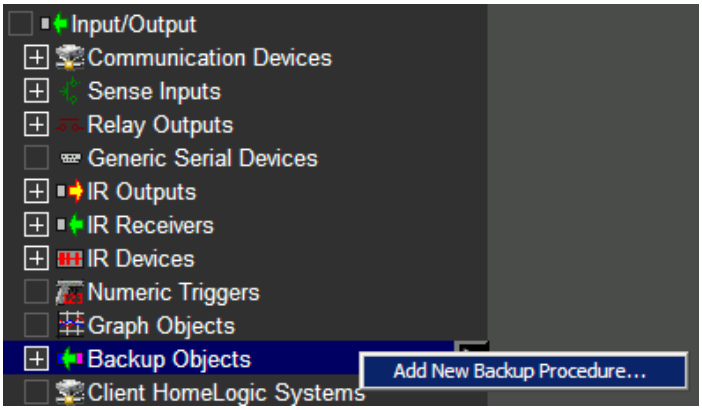


e. Name the folder appropriately; for example “Backup”.

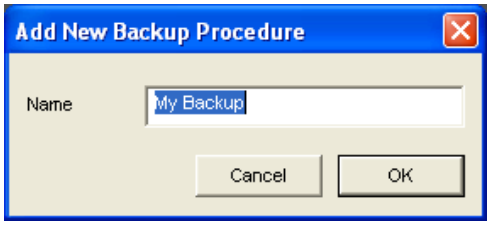
Note: If you are not on site, it is possible to use the default “FILES” folder as a destination, but it is strongly recommended to create subfolders so you have a clean, organized directory structure.

2. **Create the Backup Object Procedure**. Once we have a folder created to use as our destination folder, click on the Input/Output tab to create the Backup Object.

   a. Right-click on **Backup Objects** and select **Add New Backup Procedure**.

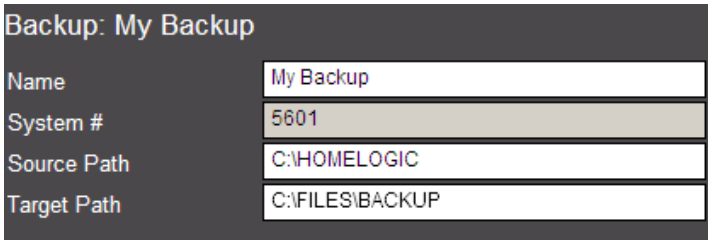


   b. Name the backup if desired and click **OK**.

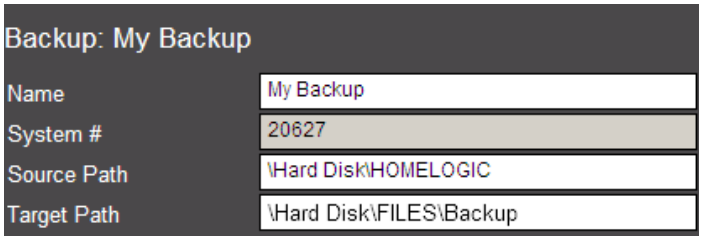


   c. Edit the settings for the Backup Object as appropriate for your controller. In this example, we are backing up the Homelogic/**g!** software folder to the local hard disk.

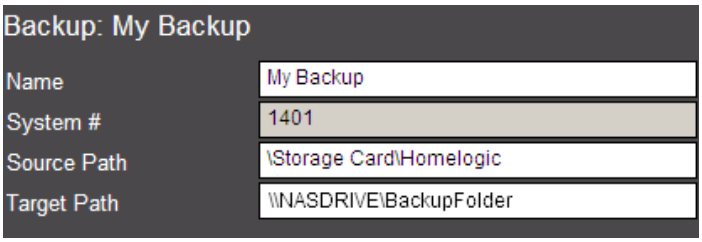
HomeBrick:



HC-12/HC-8:

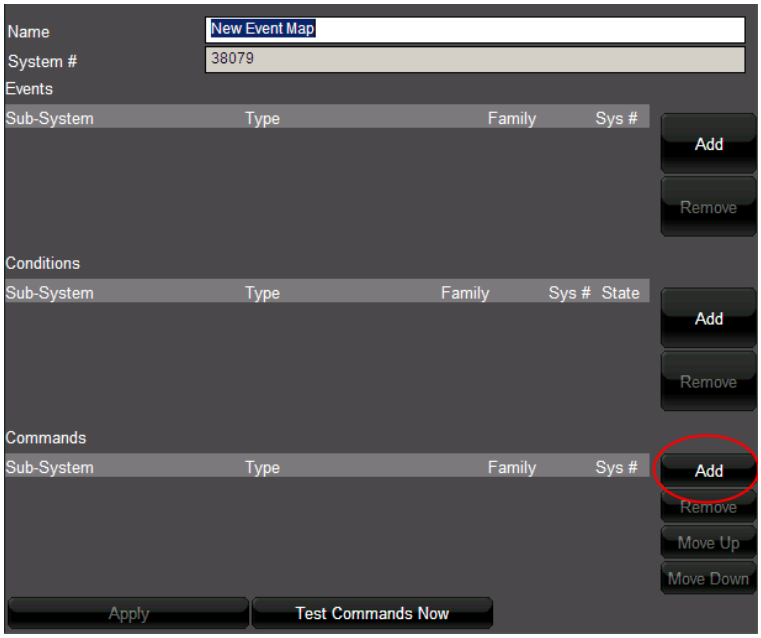


HC6/HC4/MultiBrick (Network Path Example; for reference only—your path may vary):



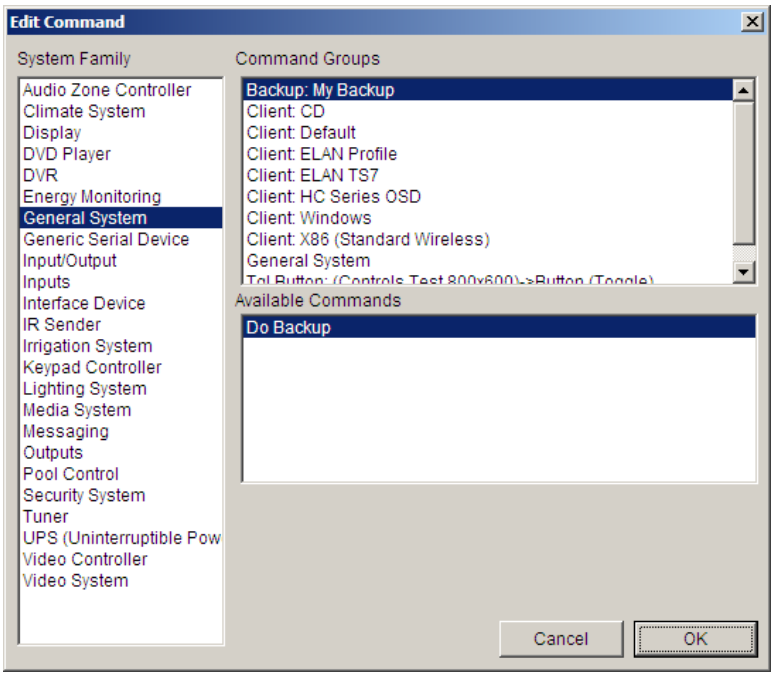
3. Trigger the backup with an Event Map:
   a. Click on the Event Mapper tab, right-click **Event Maps** and select **Add New Event Map**.

   b. Name the Event Map “Backup” or something similar.
   c. ***If this is a one-time backup, no events are needed.*** Add a Command in the third row (under Commands) by clicking the **Add** button on the far right. *The Edit Command window opens.*

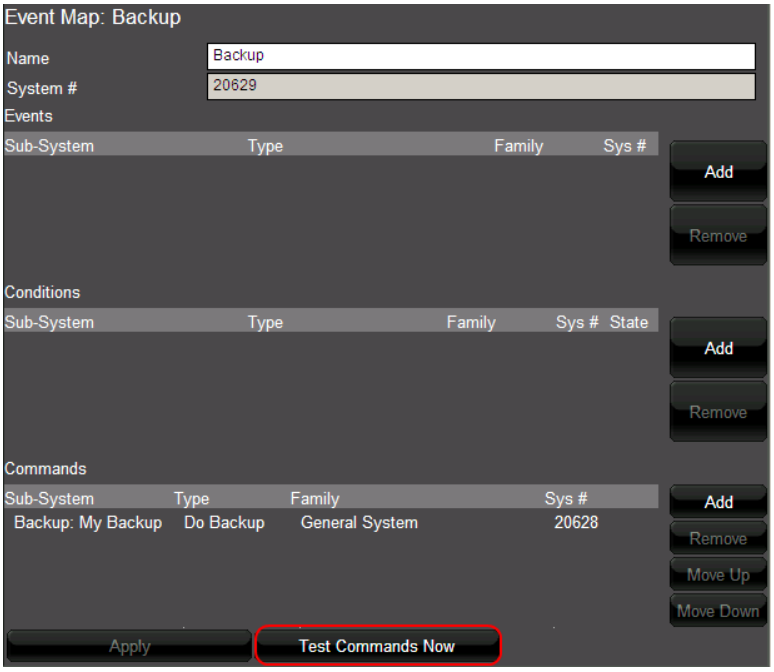


d. Add the Command as follows:

- System Family= General System
- Command Groups= Backup: *Backup Object*:
- Available Command= Do Backup



e. To execute this as a *one-time backup*, click **Test Commands Now** at the bottom of the Event Map window.

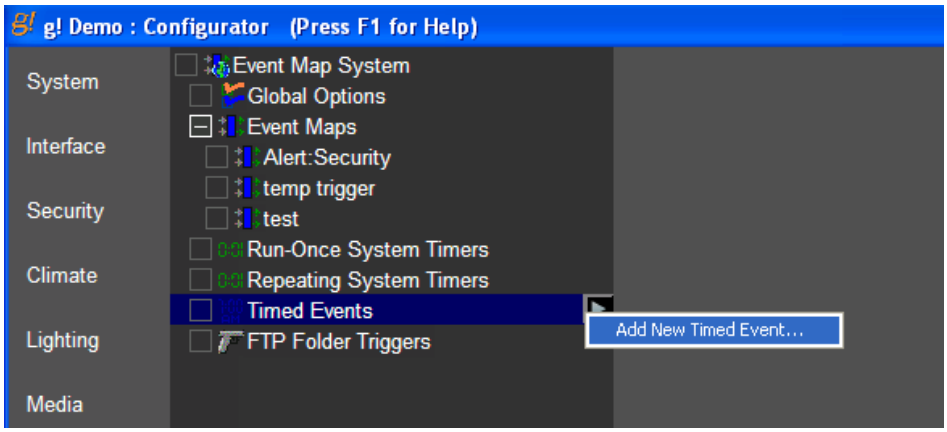


Setting up a regular backup object

The following describes how to set up a “timed event” Event Map to run the Backup Object function on a recurring basis.

To set up a Timed Event:

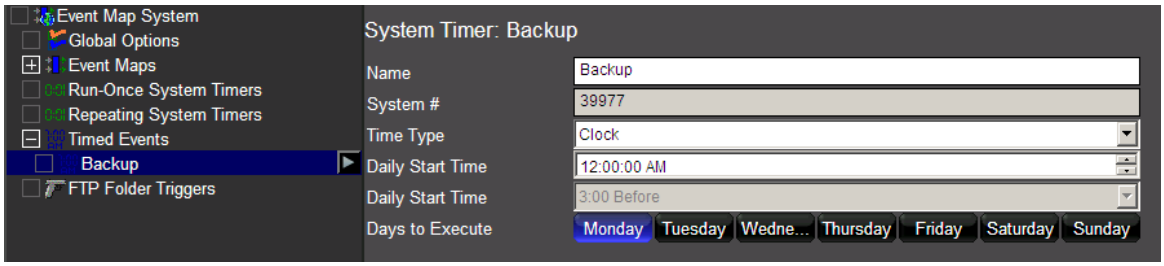
- On the Event Mapper tab, right-click **Timed Events**, and then select **Add New Timed Event…**.



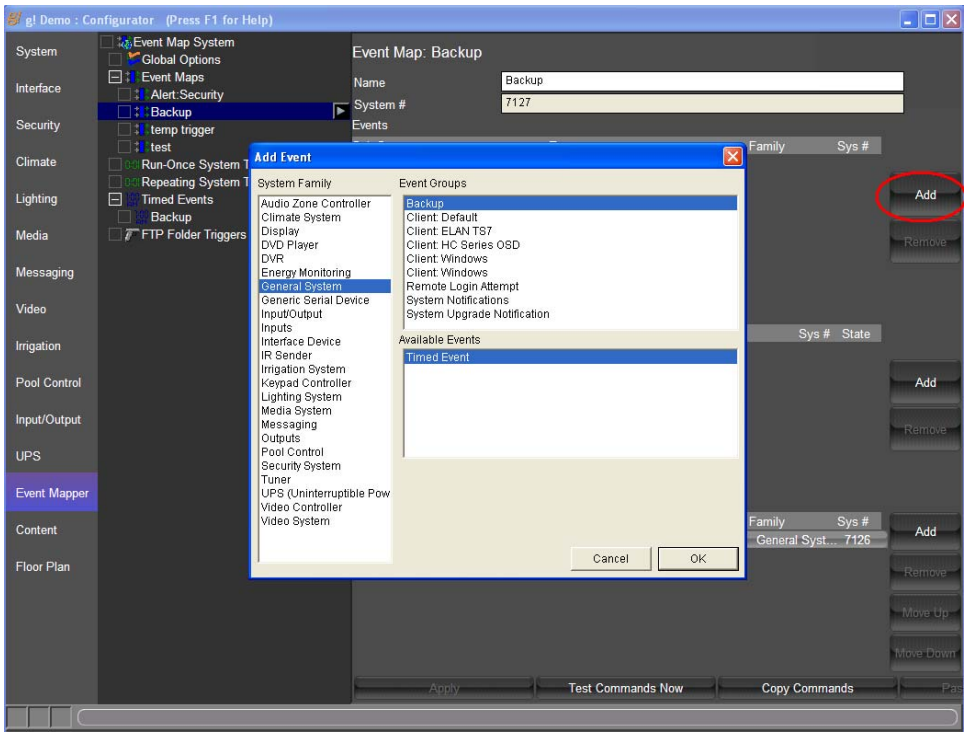
- Name the new event Backup, or something similar. Click OK. *The new Timed Event is added to the System Tree*.

- Set the timer properties for the backup:

    1. Enter a Daily Start Time
    2. Select the day(s) to run the backup



- Add the **Event** to Backup Event Map:



a. Click the Add button next to the Events section. The Add Event window opens.

b. Add the event as follows, and then click **OK**:

- System Family= General System
- Event Groups= Backup
- Available Events= Timed Backup

- The Event Map will now backup the folder every Monday at midnight.

Note: The Backup Object function will always overwrite files in the destination folder: the example given above will overwrite the previous week's backup the next time it runs.

UPS Tab

This tab is used for the configuration and status of integrated Uninterruptable Power Supplies.

Integrating a UPS with a g! system will provide the following benefits:

- Email notification if power goes out (through Event Map feature)
- Shut down system remotely
- Some UPS provide switchable outlets, allowing you turn on/off/reboot devices attached to outlets.

See the *Integration Note* for your specific UPS device for more information.

Event Mapper Tab (Macros)

The Event Mapper is the area of the Configurator where advanced custom programming is performed. It allows you to execute commands in response to events detected by the system. Because each event map is custom, and unique for its particular system it's not possible to provide instructions for every scenario.

Review the information in Lesson 13, Event Mapper in the g! Configurator Training Guide for information on how to create Event Maps and some basic scenario samples.

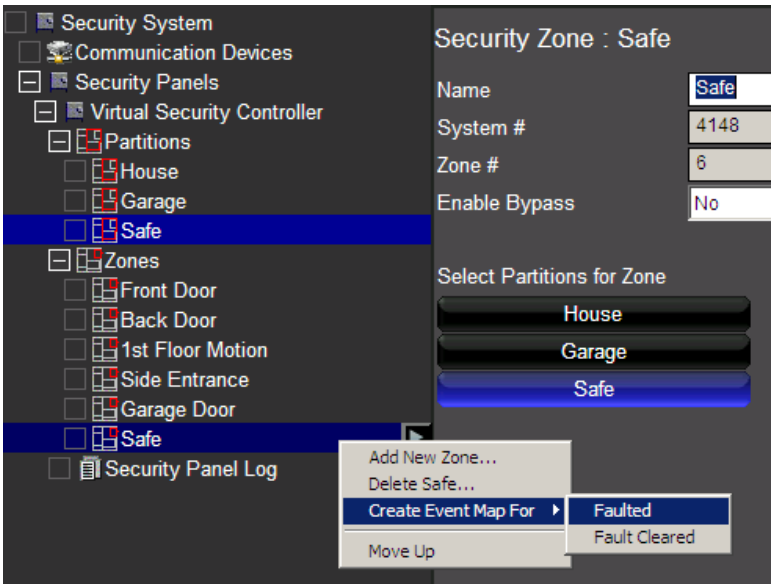
This section provides the following additional information for working with the Event Map Tab:

- Right-Click to add an Event Map
- System Timers
- System Delays (including IR delays)
- Testing Event Map Commands

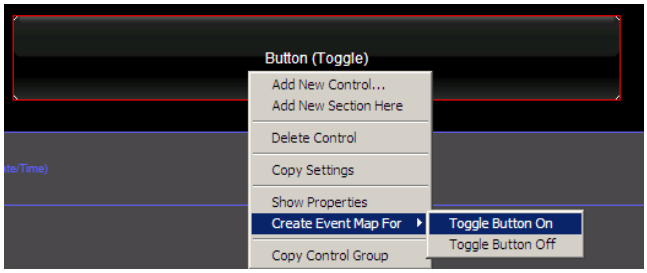
Add Event Map with Right-Click

If you cannot find the trigger you want looking through System Families and Event Groups on the Event Mapper Tab, it may be easier to go the appropriate subsystem and create the Event Map from there. The event maps created through this method will be saved to the Event Mapper tab.

For example, if you want to trigger a messaging alert from a specific security zone fault, find the zone you want in the list on the Security Tab, right-click and choose **Create Event Map For> Faulted**:



The right-click to create Event Map feature is also available for specific controls on custom interfaces:



System Timers

The **g!** software provides several types of timers that can be configured for system events depending upon the homeowner's needs. They are:

- "Run-Once" System Timer
- "Repeating" System Timer
- Timed Events

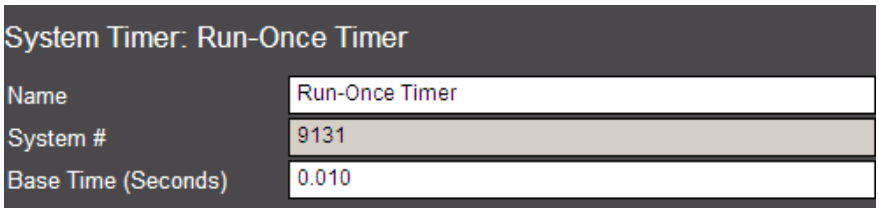
Run-Once System Timer

A Run-Once System Timer will not run until it is initiated by an Event Map or button press, and when the timer expires, it will not automatically restart.

Run-once System Timers can be cancelled before they expire. This type of timer is usually used when a command needs to send again after a specified amount of time; or, if after a specified amount of time, you want to send another command.

To configure a Run-Once System Timer:

1. Navigate to the Event Mapper tab and right-click **Run-Once System Timers**.
2. Select **Add New Run-Once Timer**, enter a name for the new timer, and then click **OK**.
3. Configure a Base Time (in seconds). Base time will affect the interval options available when starting the timer from an Event Map.
   - To *Start* a timer, add a Command from the **System Family: General System** and find the **timer name**. Choose the timer value to start at. Notice running timers may also be cancelled prior to expiry from the same Command area.
   - To trigger another event off the *expiration* of the timer, add an Event from the **System Family: General System** and find the **timer name**. Choose the event **Timer Expired**. (A timer "expires" when it has counted down to zero)
   - Conditions for **Timer Active** are also available under General System.

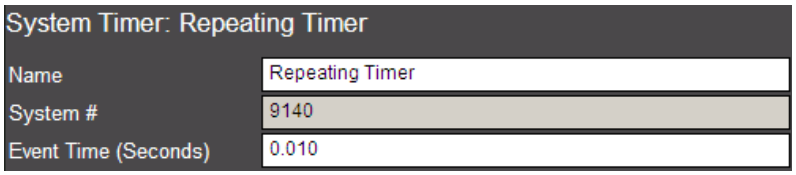


Repeating System Timer

Repeating System Timers constantly repeat and do not need to be initiated. They are typically used for checking status on something at set intervals, or with conditions to cause a repeating trigger under certain circumstances. These timers run for the specified amount of time and then generate a Timer Expired event that you can use to trigger commands. When the repeating timer expires, it immediately restarts. Therefore, Repeating System Timers cannot be used as Conditions because they are almost always running.

To configure a Repeating System Timer:

1. Navigate to the Event Mapper tab and right-click **Repeating System Timers**.
2. Select **Add New Repeating System Timer**, enter a name for the new timer, and then click **OK**.



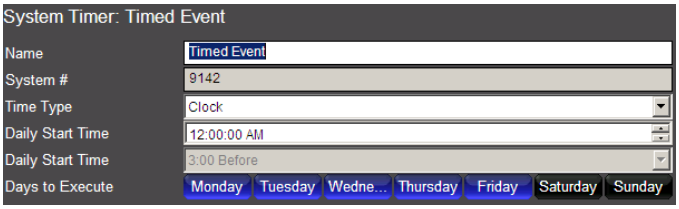
3. Configure an **Event Time** (in seconds). This will control how long the timer runs (in seconds).
4. Use the Repeating System Timer Expired Event, found in **System Family: General System** under the timer name, to trigger Event Maps. Unless used with conditions, Repeating System Timers will trip the Event Map **every** time they expire.

Timed Events

Timed Events can be used as events to trigger Event Maps based on specific times of day. Timed Events support day of week settings and can also be used with astronomical sunrise/sunset settings to effectively schedule events that do not include normally Viewer-scheduled systems like Lighting or Climate.

To configure a Timed Event:

1. Navigate to the Event Mapper tab and right-click **Timed Events** and **Add New Timed Event**.
2. Name the Timed Event, then click **OK**.
3. In the **System Timer** properties:
   - Select whether the event should occur at a specific time or in relation to sunrise/sunset.
   - Select the days of the week the timer should occur.



System Delays

The Event Mapper provides two types of delay to use between commands:

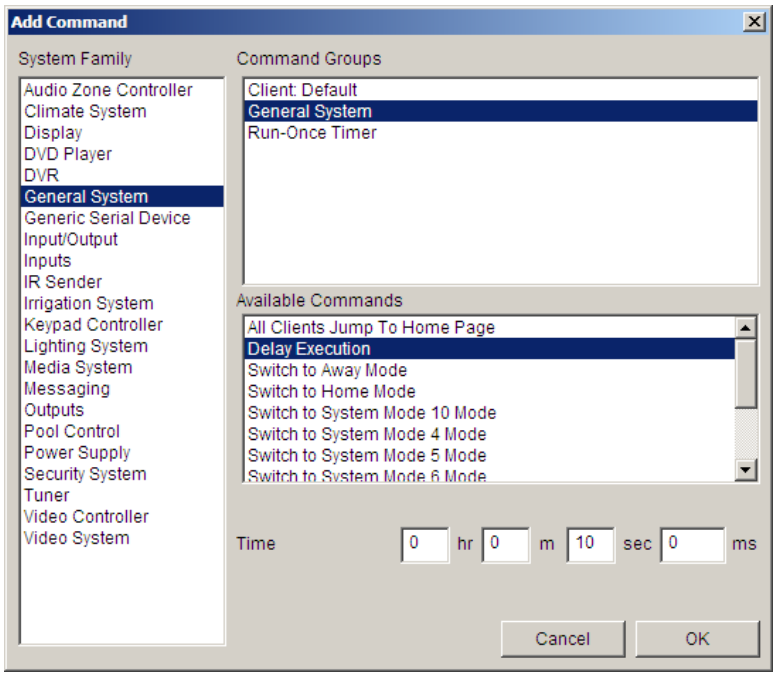
General System Delays set a countdown timer between commands, allowing time to elapse before sending the command after the timer. It is important to note that the general system delay begins to count down immediately after executing the command that precedes it—it does not wait for the command to complete. For commands that need time to finish sending (such as IR commands), use subsystem delays instead.

Subsystem Delays also allow you to insert a delay into the middle of a string of commands. However, unlike General System delays, the subsystem delay is sent directly to the subsystem to manage. This usually means that the subsystem will complete any preceding commands, delay for the specified amount of time, and then execute the next command. Subsystem delays are recommended for IR commands.

General System Delays

To insert a delay into the middle of a string of commands, there is a general Delay Execution function available. The General System Delay will set a countdown timer between commands, allowing time to elapse before the command following it is sent. A General System Delay will insert the delay and begin counting down immediately following the command in front of it, and does not wait for the previous command to complete (or finish sending) if the preceding action takes time to complete. For this reason, it is recommended to use a subsystem specific delay for items such as IR commands, which may be sending for 200msec and throw off the timing of delays.

General System Delays can be added to any string of commands, and should function as desired for most system commands and 2-way integrated devices, as the speed of action and communication is such that these commands are generally almost instantaneous.



To insert a General System Delay into a command string, click **Add** next to the **Command** section of an Event Map and select:

- System Family: General System,
- Command Group: General System
- Available Command: Delay Execution

This will open a time field and allow you to enter a specified time in hours, minutes, seconds, or milliseconds (or any combination those intervals).

Commands

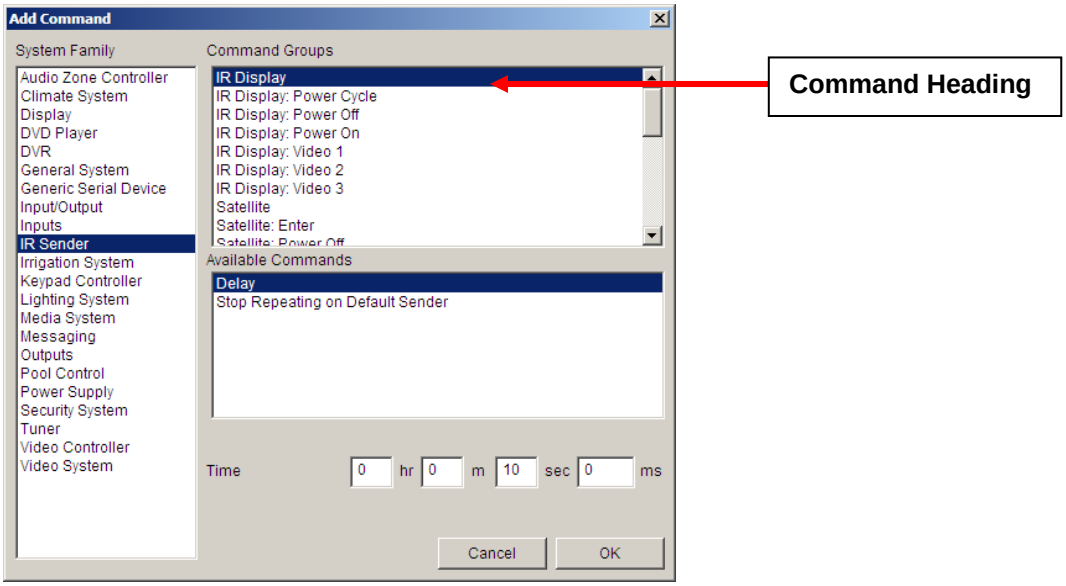
Sub-System	Type	Family	Sys #
Kitchen	Set Source to Source 01	Audio Zone Controller	8923
Delay Execution	00:00:10:000	General System	1042
Global Cache Output Module : New IO	Turn Output On	Outputs	9150

Note: It is important to place the delay in the correct spot in the Event Map. You may need to highlight the delay in the list of commands and use the Move Up/Move Down buttons at the right to arrange commands in the correct order. Remember, all commands will trigger in sequence.

Subsystem (IR) Delays

To insert sub-system specific delays (between IR commands, for example), navigate to the appropriate System Family, and then within Command Group, find the **command heading** for the specific device and then select Delay from the Available Commands list. This will open a time field and allow you to enter a specified time in hours, minutes, seconds, or milliseconds (or any combination those intervals).

The "command heading" is the 1st item in the list for a specific IR Device. Each IR Device will list the device as a standalone item, and then follow with specific codes for that device, indicated by the structure *<ir device name>* ***:*** *< code name>.* Special functions for the *IR Device* (not a specific code within the IR Device), are contained with the command heading.



Commands

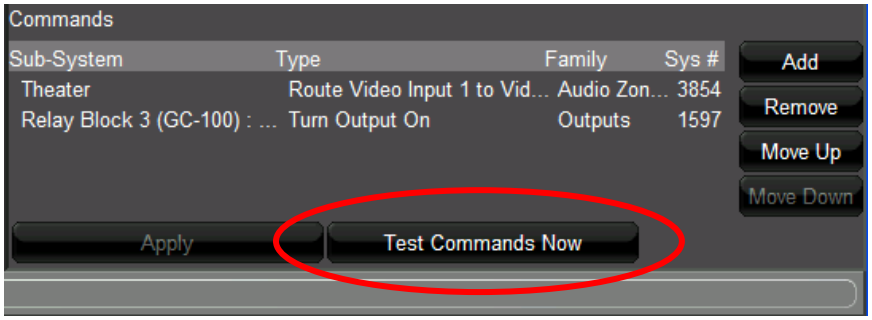
Sub-System	Type	Family	Sys #
IR Display: Power On	Send IR via Default Device	IR Sender	9158
IR Display	00:00:10:000	IR Sender	9154
IR Display: Video 1	Send IR via Default Device	IR Sender	9291

Note: It is important to place the delay in the correct spot in the Event Map. You may need to highlight the delay in the list of commands and use the Move Up/Move Down buttons at the right to arrange commands in the correct order. Remember, all commands will trigger **in sequence**.

Test Commands

Use the **Test Commands Now** button to test the commands arranged within an Event Map to verify you have entered commands to perform the desired function correctly.

Note that this will only send the **commands** in sequence and will **not** test if the event map is triggered by events/conditions correctly



The Test Commands function can also be used to send one-time commands to a device during setup or troubleshooting, by creating an Event Map with no Events or Conditions.

Content Tab

The Content tab is used to configure media content used by the **g!** system. Use this tab to set up options for editing music share folders for the internal player, picture folders for the photo screensaver, TV channel favorites and web pictures.

For information on working with the Content tab, see Lesson 7, **Distributed A/V Systems, Part 1**; Lesson 10, **IR Control** and Lesson 12, **Interfaces** in the ***g!*** *Configurator Training Guide*. See Section 2 of this manual, **Field-Level Descriptions** for a reference of each of the fields used in the Configurator.

This section provides the following additional information for working with the Content Tab:

- Adding New Network Music Shares
- Adding Music or Pictures to a Controller
- Setting up TV Channel Favorites
- Adding icons for TV Channels

Adding New Network Music Shares

Notes:

1) Files must be MP3, WAV or .M4A format to be read into the Music Library.

2) iTunes is supported.

3) All network music shares appear as one library in the Viewer.

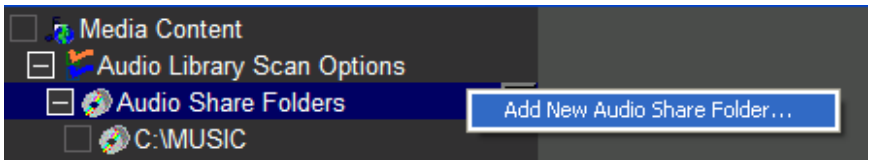
The controller can aggregate music content from multiple sources and display all of them within the Music Library tab of the **g!** Internal Player and/ or Squeezebox. This can be very useful if your customer has an existing music library they would like to use instead of, or in addition to, music uploaded to the controller. This is also helpful when using a controller (such as the MultiBrick) that doesn't have internal storage for media files.

To add music folders, you must first set up sharing for the desired directories with read access from unauthenticated users (no login required). Shares can be created on the hard drive of a computer on the network, a NAS drive. Refer to the appropriate Windows documentation for more information.

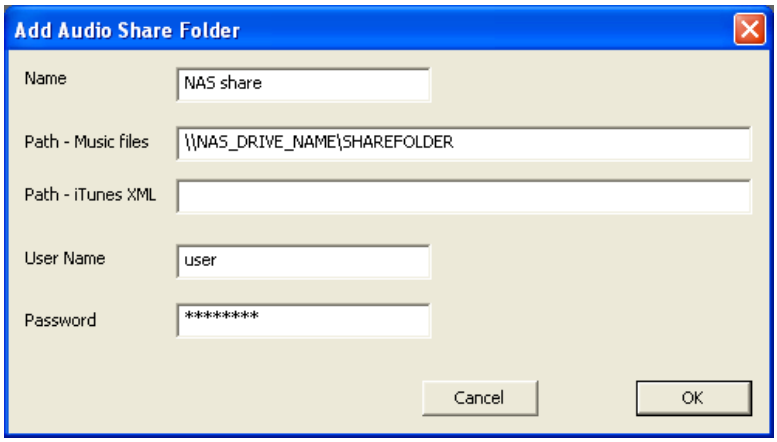
Note: See the ***HC Series Internal Player*** - *Digital Music Server Integration Note* for detailed instructions on setting up an iTunes library, and a list of supported/unsupported features.

To set up a new Audio Share folder:

- Once sharing is configured, go into the Configurator and click on the **Content** tab. Right-click **Audio Share Folders** and select **Add New Audio Share Folder**.



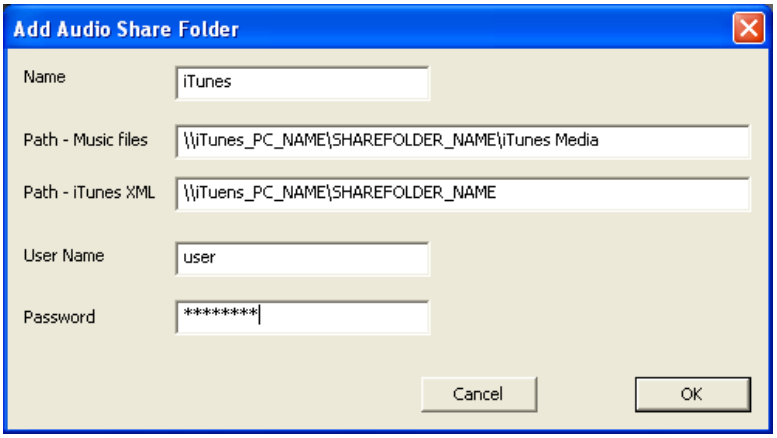
- For music stored on a **NAS drive**, enter the information as below:



Name	Enter a name for your reference, or duplicate the path.
Path- Music Files	Enter the network path. Typically this is formatted like \\computername\sharefoldername.
Path- iTunes XML	Leave Blank for non-iTunes libraries. (see iTunes below for iTunes libraries)
User Name	This is an unsupported feature. Use open shares. <Login Name for a protected share>
Password	This is an unsupported feature. Use open shares. <Login Password for a protected share>

- For music stored in an **iTunes library**, enter the information as below:

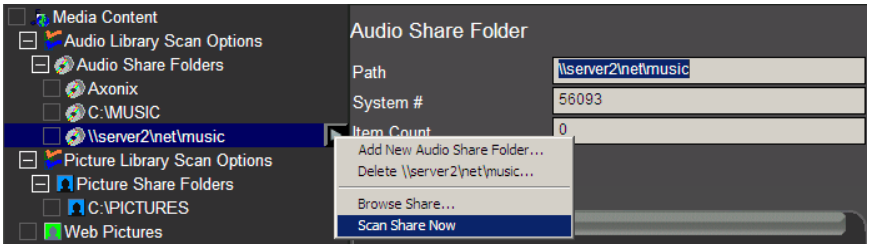
  a. Set the name to "**iTunes**".
  b. Set the "Path- Music Files" field to point to the iTunes Media folder within iTunes using the following format: **\\computername\sharename\iTunes Media**, where "computername" is the UNC network name of the computer upon which iTunes resides, and "sharename" is the name given to the iTunes folder when it was shared.
  c. Set the "Path- iTunes XML" field to point to the root of the share you created above, **\\computername\sharename**, as this is where the iTunes Library.xml file should reside in a default installation.
  d. The username and password authentication feature is unsupported. Protected shares SHOULD NOT BE USED and are not supported at this time.



Name	Enter a name for the iTunes library.
Path- Music Files	Enter the path to the iTunes Music files. Typically this is formatted like \\computername\sharefoldername\iTunes Media. See the iTunes integration section for details.
Path- iTunes XML	Enter the path to the iTunes folder which contains the “iTunes Library.xml” file.
User Name	This is an unsupported feature. Use open shares. <Login Name for a protected share>
Password	This is an unsupported feature. Use open shares. <Login Password for a protected share>

Note: If the network path is incorrect, sharing is not enabled properly, or the drive is unavailable the share will fail to add.

Once the share has been added, right-click on the share path and select **Scan Share Now** to scan the media files and add them to the library (or to sync with iTunes). They will appear in the Music Library in the Viewer in addition to files from other share directories.



Add Music or Pictures to a Controller

This section explains how to access the share folders on controllers with internal Hard Drives for use with Music, Pictures, or DVR. Controllers with internal hard drives include all versions of the HomeBrick, the HC-12 and HC-8.

Note: The MultiBrick, HC-6, and HC-4 do not have an internal hard drive. These instructions do not apply to those controllers.

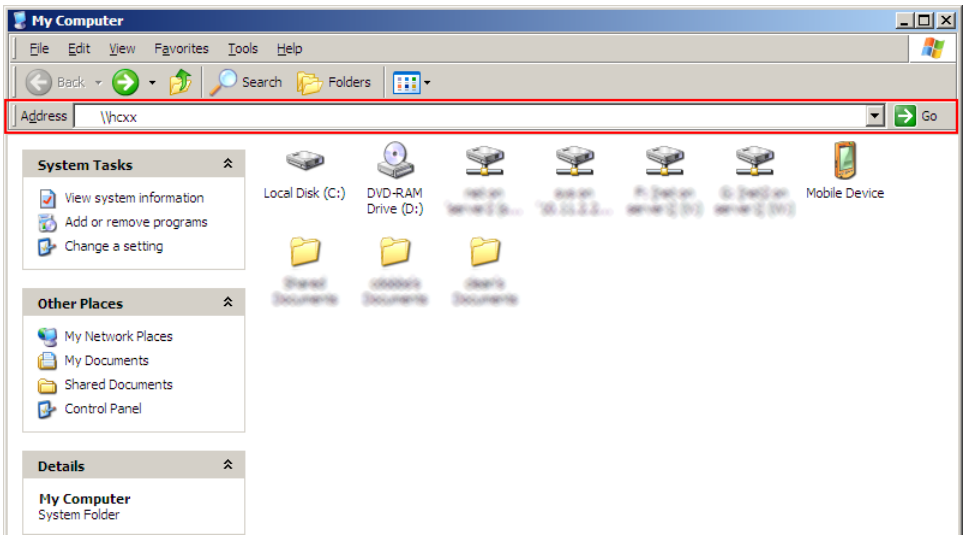
You will need the following:

- Windows Computer connected to same LAN as Controller

Accessing HC/HomeBrick Network Shares

Open My Computer (Win7/Vista: Computer) to browse system folders.

1. In the Address bar, type in the appropriate Controller network name*:

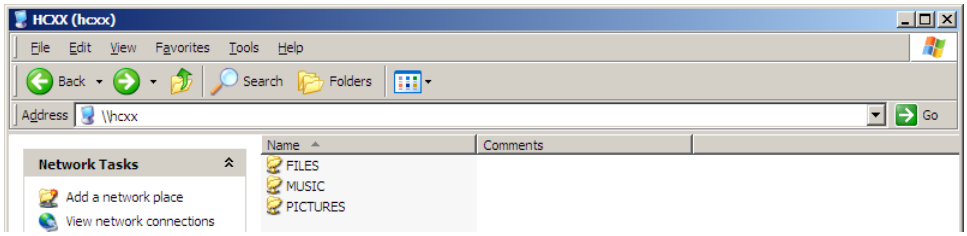


HC Controller	\\hcxx
HomeBrick Controller	\\hlgateway

Note: You can also type in the local IP, for example: \\192.168.0.2

*The network share can also be mapped as a network drive to make it easier for the homeowner. See Mapping Network Drives for details.

2. A list of share folders is displayed for the controller:



3. Use the network shares:

   - **To add Music or Pictures**:

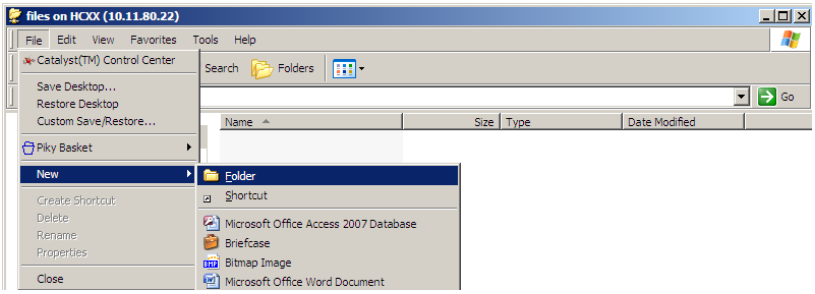
     1) Drag & drop or copy & paste desired content into the appropriate folder on the Controller just as you would move any other files in Windows.

     2) Note that files will not appear in the libraries until they have been scanned. See **Scanning Music** or **Scanning Pictures** below for more detail.

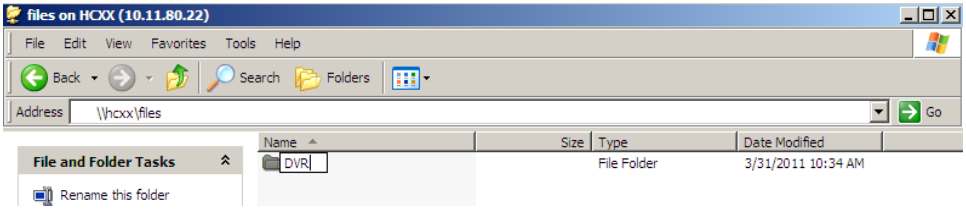
   - **To Create a Folder for DVR** (see the Local Paths reference for more info on using this path in Configurator):

     1) Enter the FILES subfolder by double-clicking on it. Generally there is no content in this folder by default.

     2) Click File at the top of the window, then choose New> Folder.



     3) Name the folder “DVR”.



Note: If you are using a system running the legacy HomeLogic software version 4.0, you can repeat these steps to create a second folder for “Saves.”

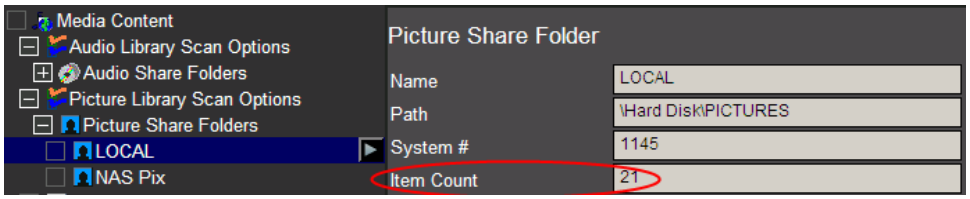
Scanning Pictures

After adding JPG content to a picture share, you must re-scan the share for the photos to appear on the screensaver or in the Photos tab. There are two ways to do this:

One time scan:

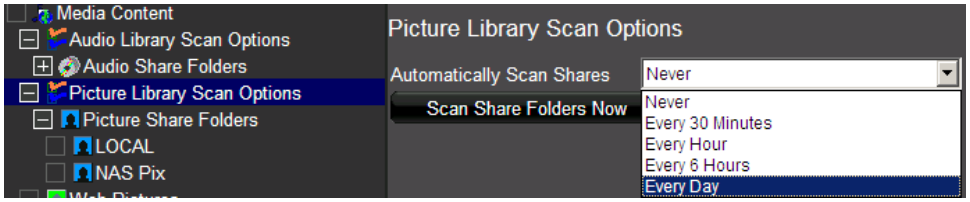
1. To initiate a scan on the pictures share, enter Configurator.
2. Click on the Content Tab, and then click Picture Library Scan Options.
3. Click the Scan Share Folders Now button to initiate the scan. Typically a picture scan will take only a moment.

4. You may verify the Item Count for your share has changed by clicking on your Picture Share Folders.



Regular Scan: Configurator may be set to scan the Pictures share(s) at a regular interval. This allows a customer without Configurator access to upload pictures on their own, and have the pictures show up in the system within a period of time after they were added.

1. To configure a regular scan on the pictures share, enter Configurator.
2. Click on the Content Tab, and then click Picture Library Scan Options.
3. Click the Automatically Scan Shares drop down box and choose your desired scan interval. A picture scan is generally not very intensive and can be set to a high frequency with little worry of impacting system resources.



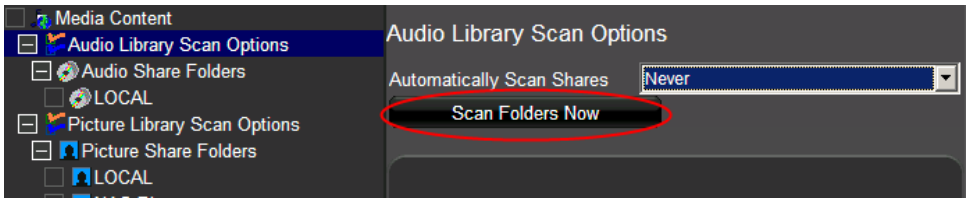
Scanning Music

After adding media to the Audio Shares, the share folder must be scanned to add the new files to the Music Library. There are three ways to do this:

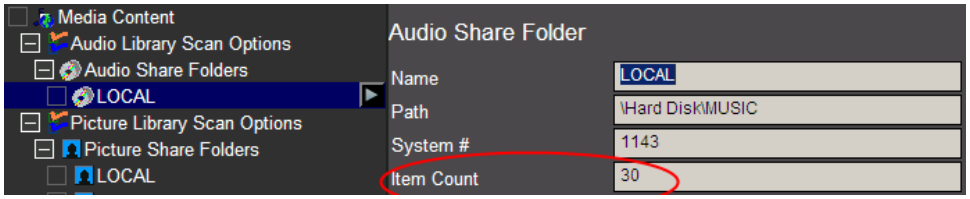
One time scan:

To initiate a scan on the Audio Share:

1. Navigate to the **Content** Tab, and then click **Audio Library Scan Options**.
2. Click the **Scan Share Folders Now** button to initiate the scan. Note that a Music scan may take some time. You can watch its progress in the window below the Scan… button.



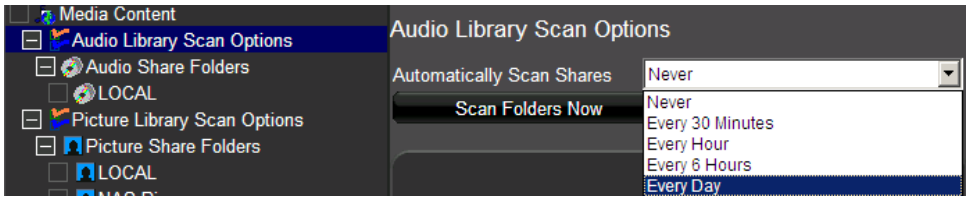
3. You may verify the Item Count for your share has changed by clicking on your Audio Share Folders.



Regular Scan: Configurator may be set to scan the Audio share(s) at a regular interval. This allows a customer without Configurator access to upload Audio on their own, and have the Audio show up in the system within a period of time after they were added.

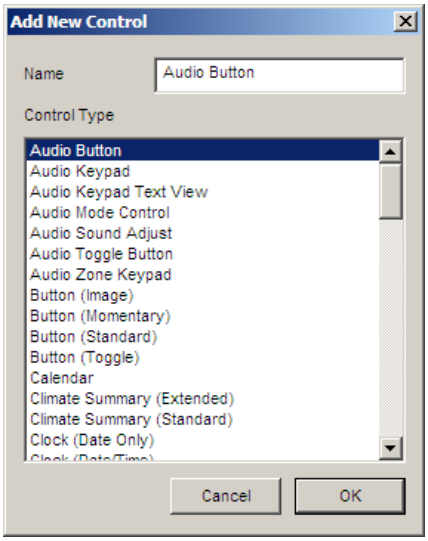
To configure a regular scan on the Audio Share:

1. Navigate to the **Content** Tab, and then click **Audio Library Scan Options**.
2. Click the **Automatically Scan Shares** drop down box and choose your desired scan interval. Note an audio scan can be somewhat intensive and should be set to run as infrequently as possible to avoid impacting system resources.

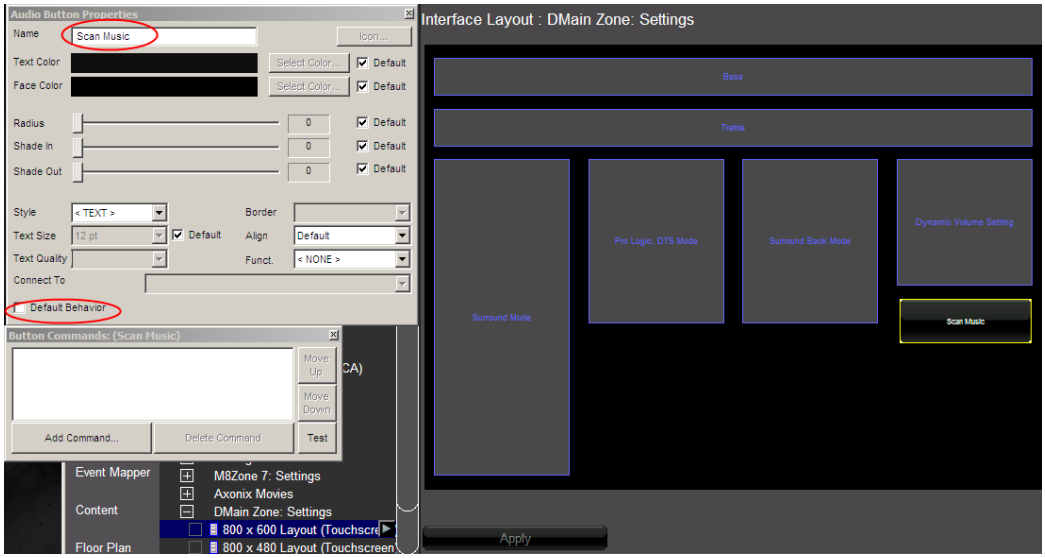


On Demand Scan from Viewer/Event Map: A button can be placed on a custom interface that initiates a scan on all media. This same function can easily be added from any Event Map using a process similar to that described below. In this example, an Audio Button will be added to an existing Settings interface for an AVR. These steps should be easy to adapt to other situations as needed.

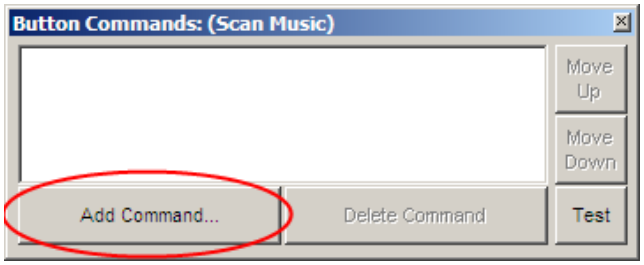
1. On the **Media** Tab in Configurator, open the **Interface Layout** for the desired resolution on the interface desired.
2. Right-click on an open space and **Add New Control: Audio Button**.



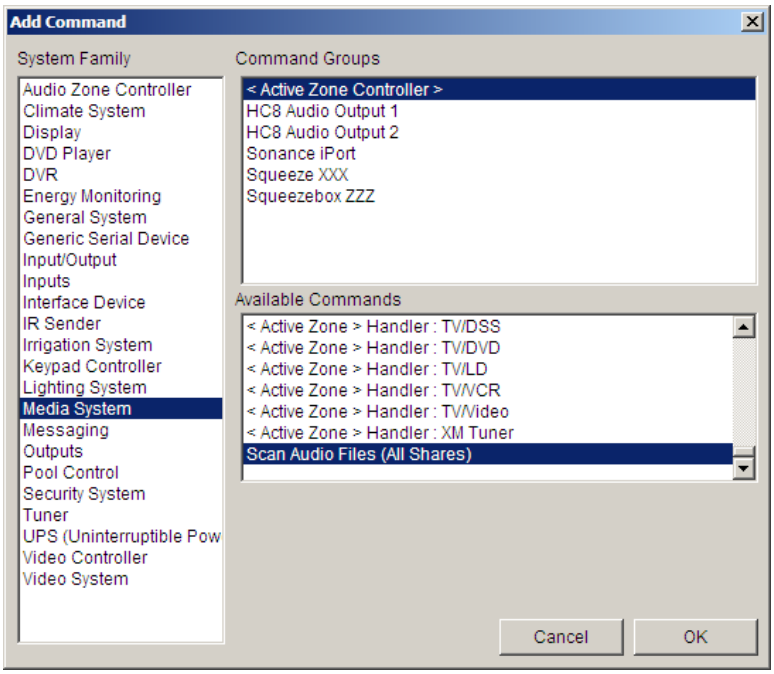
3. In the Audio Button Properties window, rename the button to something appropriate, such as “Scan Music” and uncheck the “Default Behavior” check box on the lower left (**g!** systems).



4. The Button Commands window appears. Click the **Add Command…** button to add a command to the button.



5. Add the command from **System Family: Media System**, **Command Groups: <Active Zone Controller>**, and scroll down to select the **Scan Audio Files (All Shares)** command.



6. The scan can now be initiated from the Viewer.

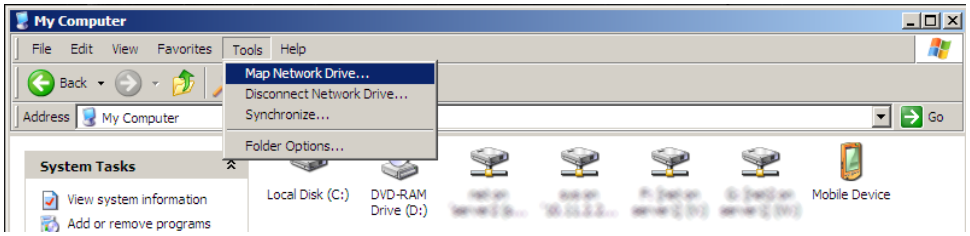
Note: An audio scan can be take some time to complete on large databases, and will take longer if a lot of new media is present. It is important to set expectations with your client that pressing this button will start a scan, and it may take some time for new music to show up in the Viewer.

Map the Controller Shared Folders as Network Drives

To provide the homeowner with easier access to the media (music, pictures and DVR) on their controller, we recommend that you map the network path(s) as local drive(s) on their Windows computer.

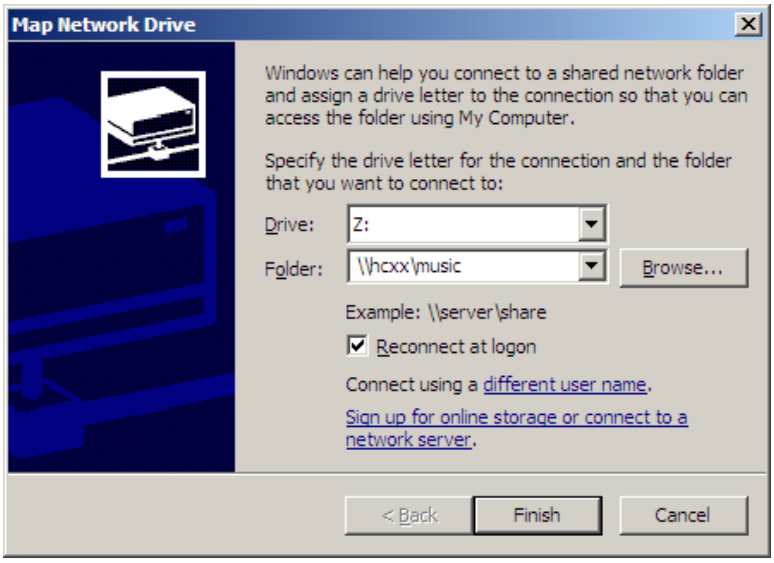
To map a network path:

1. Open My Computer (Win7/Vista: Computer) to browse system folders.
2. Click the Tools menu from the top, then **Map Network Drive…** (Win7/Vista: Map Network Drive is an option along the top—there is no Tools menu).



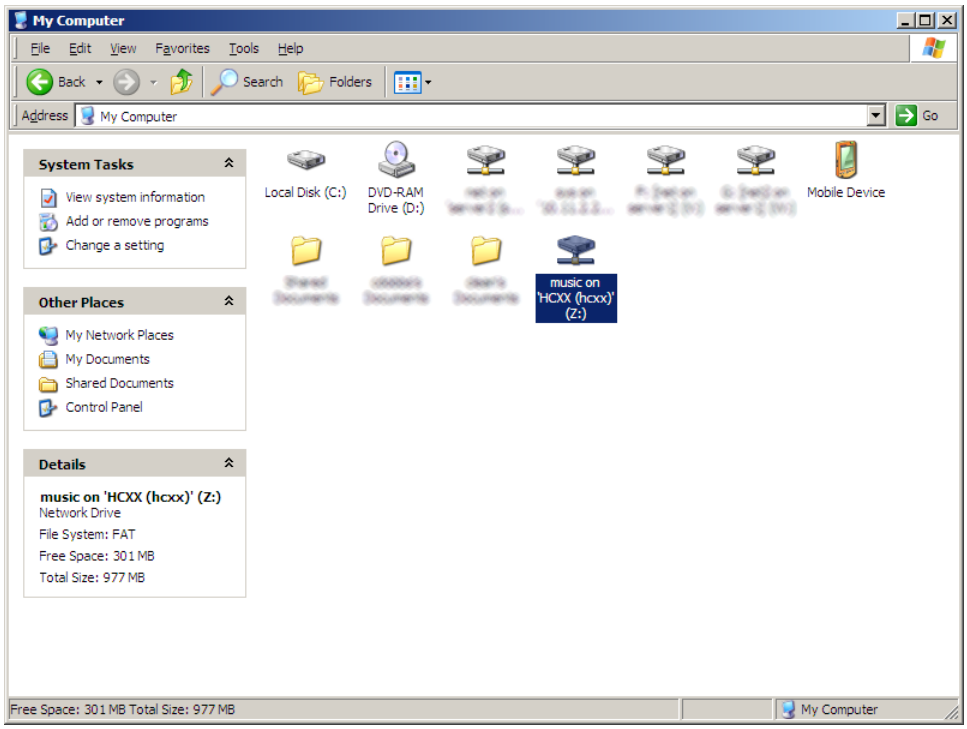
3. Configure settings for the appropriate controller type and folder as shown (the drive letter used is not important and can be set to any unused letter).

Note: You should map separate local drives to store music and pictures.



Network "Folder" Path Reference	Music	Pictures	DVR
HC Controller	`\\hcxx\music`	`\\hcxx\pictures`	`\\hcxx\DVR`
HomeBrick	`\\hlgateway\music`	`\\hlgateway\pictures`	`\\hlgateway\dvr`

4. The folder is now easily available to the homeowner (end-user) as a local drive(s) for them to import new pictures and music.



Default Paths in Configurator for Local Media

The file structure below is the default file structure for local shares used in Configurator for the appropriate controller. Typically these paths are present by default (with the exception of DVR). This information is a reference in case they are deleted.

Note: Path names used in Configurator are not typically case-sensitive.

Audio Shares	**HC Controller (HC8 and HC12 only)**	**HomeBrick**
	\Hard Disk\Music	C:\MUSIC
Picture Shares	**HC Controller**	**HomeBrick**
	\Hard Disk\Pictures	C:\PICTURES
DVR	**HC Controller**	**HomeBrick**
example	\Hard Disk\Files\DVR	C:\Files\DVR

TV Channel Favorites

This section describes how to configure TV Channel Favorites control, including setting up the IR Device, Universal Functions, Viewer Interface, Channel number setup, and custom Channels, groups and icons.

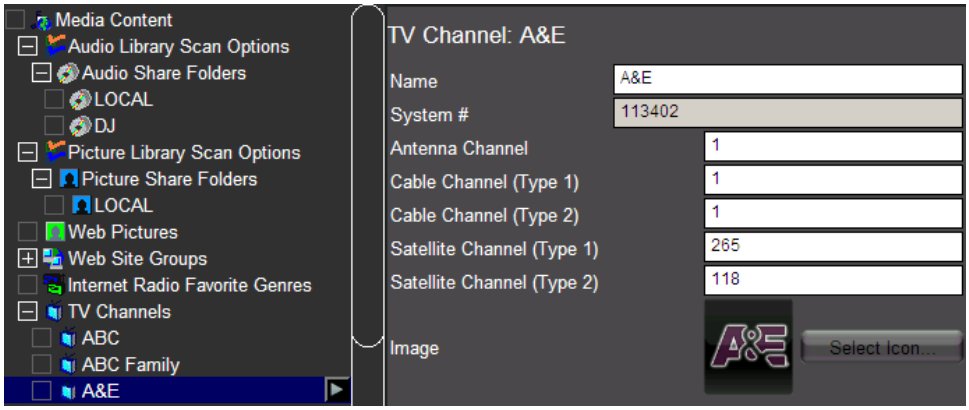
Note: Importing Icons requires 4.0 Build 1417 or later.

Overview of steps required for configuration:

1. Setup an IR Device for your Cable or Satellite box. See *Set up an IR* Device on page 139.
2. Configure Channel information on the Content tab
3. Add TV Channel Favorites control to a custom interface on the Media tab, and map to the appropriate device.
4. Add the interface as a source on a zone controller.

Configure Channels on the Content Tab:

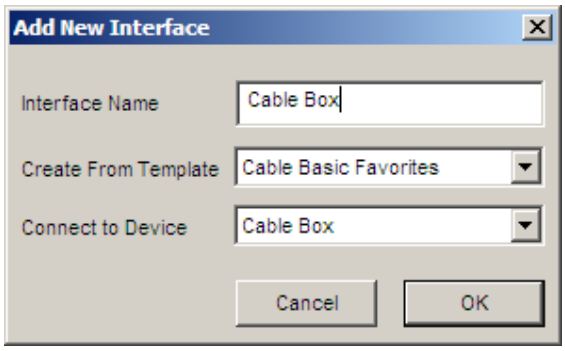
Edit Channel Information. On the content tab, scroll down to **TV Channels** and click on a channel name to edit its properties. You will see options for inputting a channel number for each Tuning Type.



Note: if you wish to have a specific channel not visible for a certain tuning type, delete all data from the channel number field for that tuning type.

Configure Control on the Media Tab

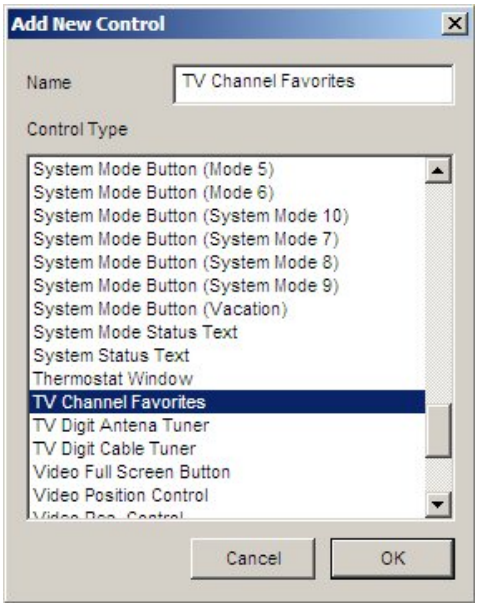
1. **Create a custom interface.** Under Keypads & Interfaces on the Media Tab, choose one of the following options:



   a. Right-click and select **Add New Interface**, then select an appropriate interface, such as Cable Basic Favorites. Make sure to Connect To the correct IR Device

> **Note:** Templates for multiple Satellite and Cable variants are available and typically the "*xxx* Basic Favorites" or "*xxx* Advanced" template includes the TV Channel Favorites control..

   b. Alternatively, leave "Create from Template" set to NONE to create a blank custom interface, and add the Control named **TV Channel Favorites**.



2. **Add the Interface as a Source.** Once you have created and customized your interface, add the interface as a source to your **Audio Zone Controller**.
3. **Enter the Viewer and Confirm Proper Operation.**

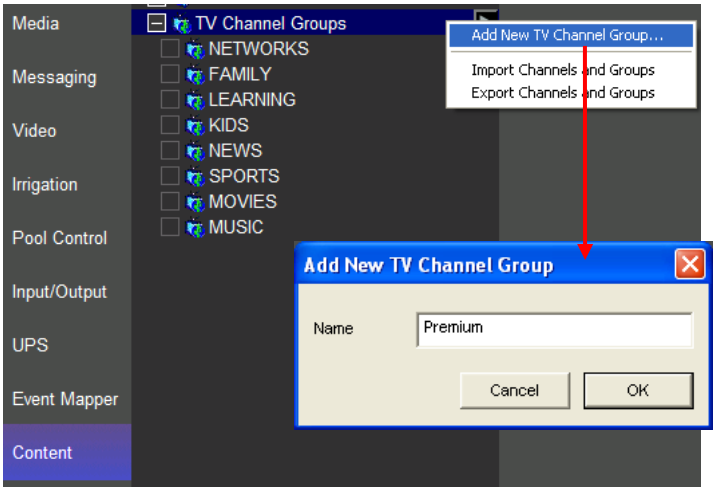
Modify TV Channel Groups

TV Channel Groups are a way to organize TV Channels into sub-sets that will help the homeowner browse channels more efficiently. Examples of TV Channel Groups are News, Sports, Family, Networks, etc. On the Media app page, each TV Channel Group displays as a separate tab containing the appropriate TV Channel icons.

Add a TV Channel Group

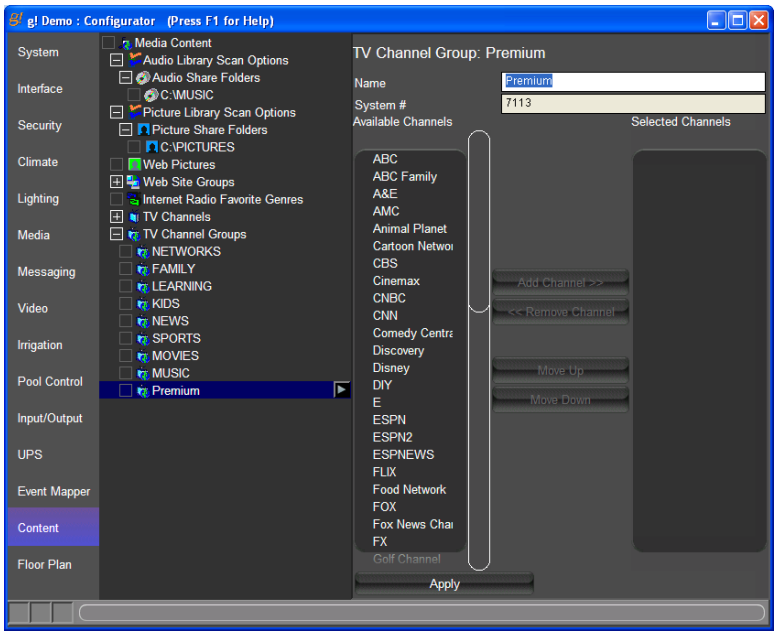
To add a TV Channel Group:

1. Navigate to the **Content** tab, and right-click **TV Channel Groups**.
2. Select **Add New TV Channel Group…**
3. Type a name for the new TV Channel Group, then click **OK**. *The group is added to the TV Channel Group list and the right-pane displays a list of channels that can be added to the group.*

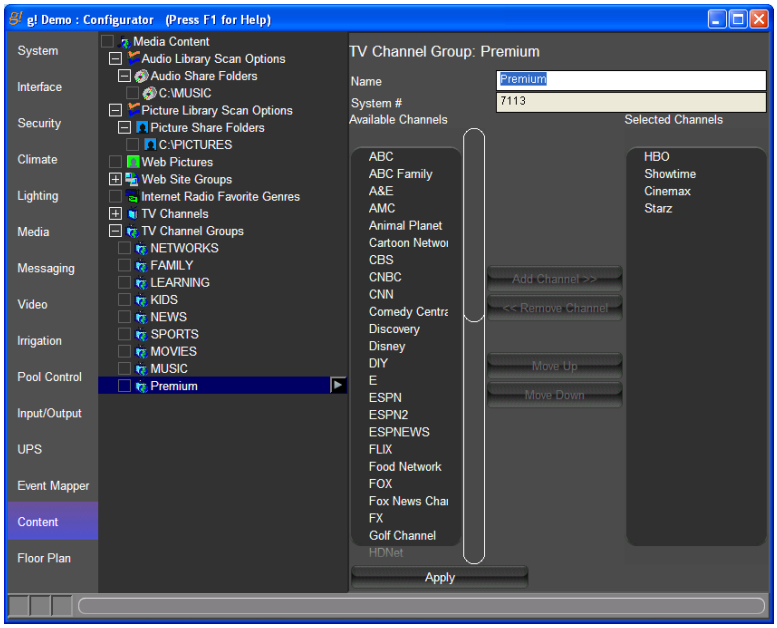


Add Channels to/ Remove Channels from a Group

1. From the **Content** tab, select the **TV Channel Group** to work with.



2. Select a channel to add from the **Available Channels** list, then click the **Add Channel>>** button to move the channel to the **Selected Channels** list. Do this for each channel you want to add to the group.



3. To remove a channel from the group, select the channel from the Selected Channels list, then click the **<< Remove Channel** button.
4. The channels icons in the Viewer are displayed in the order that they appear in the Selected Channels list for the TV Channel Group. To move a channel up or down in the list, select the channel in the Selected Channels list, then click the **Move Up** or **Move Down** button.
5. Click **Apply**.

Delete a TV Channel Group

1. Right-click the desired TV Channel Group from the list on the Content tab.
2. Select the **Delete [*group name*]…** option.
3. Click **Yes** in the confirmation dialog box.

Advanced Options

Adding Channel Icons

Additional channels and icons can be added on the **Content** tab.

To add an icon, you will first need to find or create an icon graphic file. Files should be:

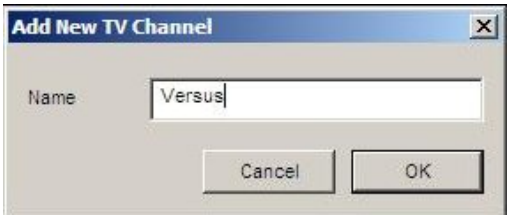
- PNG or JPEG
- 32-Bit color depth.
- Have transparent backgrounds (JPEG images with white backgrounds are treated as transparent).
- Maximum pixel height: 200 pixels

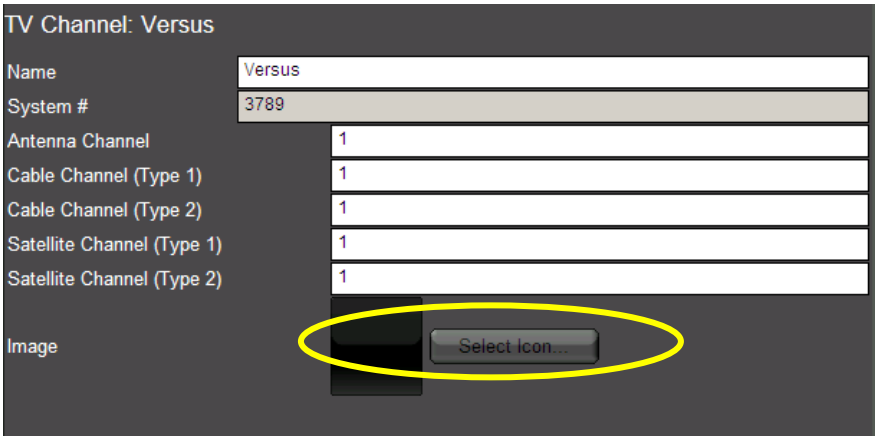
Note: If you are having trouble finding logos online, we recommend: http://www.lyngsat-logo.com/

To add a New TV Channel and Icon:

1. Navigate to the **Content** tab, and right-click on **TV Channels** (or on an existing channel) in the System Tree, and select **Add New TV Channel**.

2. Type in the Name for the new channel.

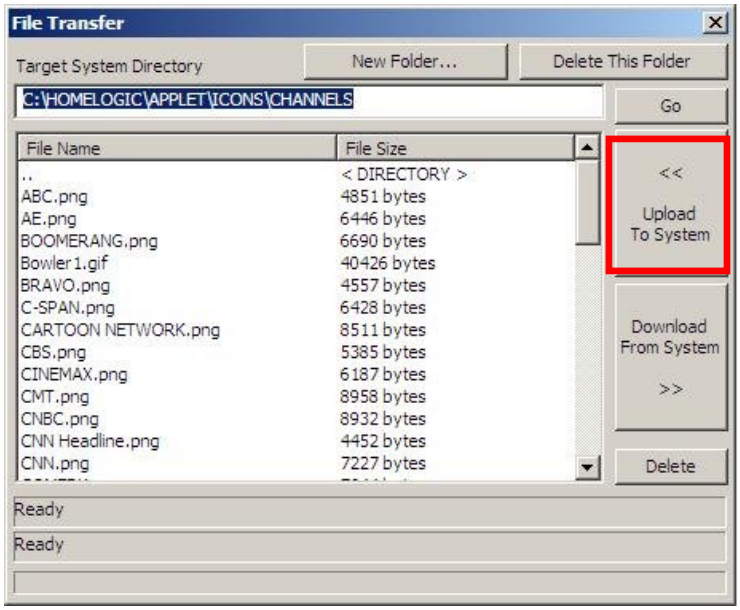




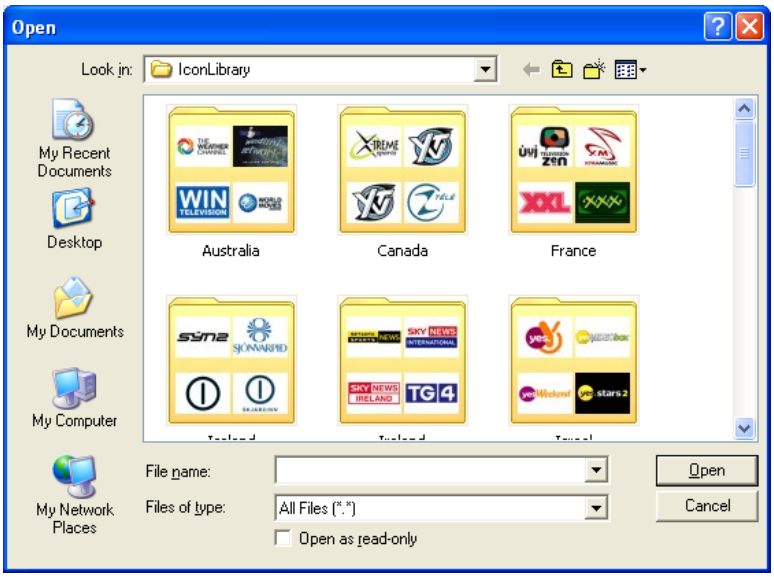
3. Enter Channel Numbers for the appropriate **Tuning Types**.

4. To add in a new icon, click the **Select Icon…** button.

5. Expand the Icon Folder listing, and select the CHANNELS folder. Click **Browse Folder….**



a. To add additional icons, select the **Upload To System** button. If the Common Resource Library is installed, you are automatically directed to CRL IconLibrary folder. Otherwise, browse to the folder on your computer where you have icon files saved.



b. Click on an image file (or hold down the Ctrl key and select multiple image files), then click **Open** to upload the files.

Note: Icons must be PNG, JPG or GIF files.

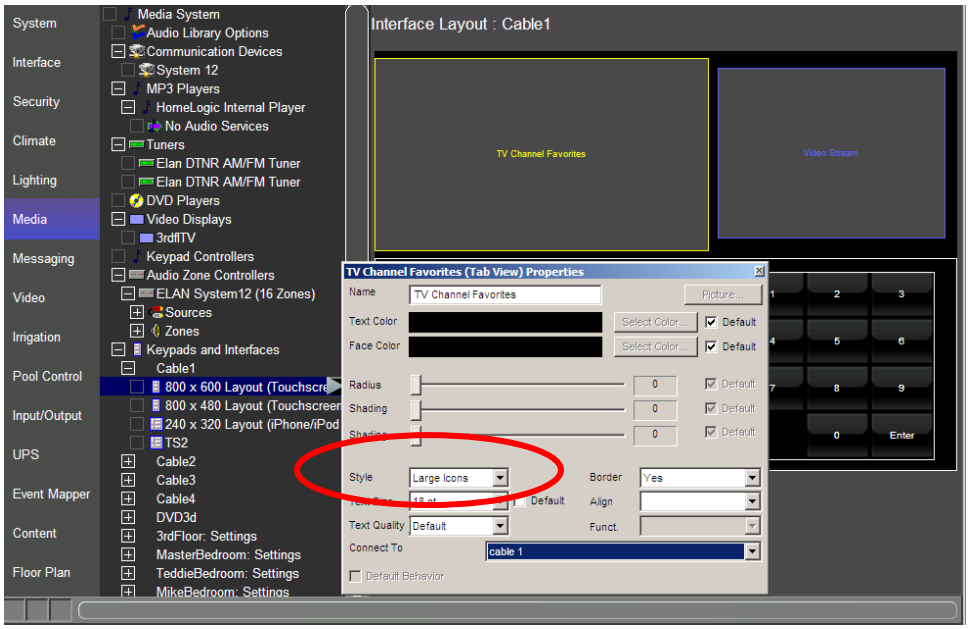
6. Close the **Browse** window and select the desired icon from the list.

Note: You must add your new channel(s) to a group for them to appear in the Viewer (see next section).

Resize TV Channel Favorite Buttons

To change the size of the TV Channel icons displayed in the Viewer, edit the Interface properties on the Media tab.

1. Navigate to the **Media** tab, and then select the appropriate interface and resolution from the **Keypads and Interfaces** list. *The interface will display in the right pane.*
2. Click the **TV Channel Favorites** control in the interface to open its Properties window.



3. From the **Style** drop-down field, select Large, Medium or Small icons, then click **Apply**. Examples of each icon size are shown below.

Large TV Channel Icons

Medium TV Channel Icons

Small TV Channel Icons

Troubleshooting

This section provides information about standard configurations and troubleshooting tips for communication status and IR devices and codes.

Standards

The following provides information about standard configurations for the **g!** system. Is intended to be a general guide, and may not include specific detail on all situations. See the *Standards and Reference* Tech Note for more information including pin-outs and settings for the **g!** system and other wiring/devices you may use and encounter when installing a **g!** system.

IP Standards:

The following table lists components that may be present in a **g!** installation, and the default IP addresses for each. If you are not using an ELAN Network Assembly you may use this table as a guide to configuring your own networking equipment. **Note** that HC Controllers are typically DHCP out of the box, and recommended to be set to static as listed below.

Router	192.168.0.1
Static IPs	192.168.0.100 – 192.168.0.149
DHCP	192.168.0.150 – 192.168.0.250
Controller (e.g.: HC-12)	192.168.0.2
Access Points	Start at 192.168.0.10
Climate – SerialBrick or Ethernet	192.168.0.25
Lighting – SerialBrick or Ethernet	192.168.0.30
SerialBrick - Irrigation	192.168.0.35
SerialBrick - General	192.168.0.40
SerialBrick – Pool / Spa	192.168.0.45
Audio Zone Controllers	Start at 192.168.0.50
MP3 Players	Start at 192.168.0.60
Static IP Tablet / Touch Screen*	Start at 192.168.0.70
Video Cameras	Start at 192.168.0.80

Note: Typically Touch Screens are configured to DHCP. The above range is a recommendation if you choose to configure as static.

Standard Ports:

*Default Ports for Port Forwarding in a **g!** System*	
Default External Listening Port (HC):	2198* (TCP)
Terminal Server (HC/MultiBrick):	2199 (TCP)
Default External Listening Port (HomeBrick/MultiBrick):	443* (TCP)
Terminal Server (HomeBrick):	5001 (TCP and UDP)
*Can be changed on the System>System tab in Configurator.	

Communication

Communication Status Troubleshooting Tips

Symptom	Cause	Fix
Bytes out and no bytes in	Typically a communication or continuity problem. **g!** can open the port and send messages but is not receiving replies from the target device.	Check that the correct type and COM port are selected. Check all physical connections and test wiring continuity. Verify device is powered on and component is enabled.
Connection Attempts and Fails- steadily increasing values.	Typically a communication problem. Steadily increasing values in this field indicate **g!** is unable to create a connection to the device.	Check all settings such as baud rate, handshaking/parity and physical connections, and the power state of the target device. (ex. Master Off versus Standby).
Connection Attempts without fails- number is low (single digits, or more if built up over a period of days/weeks)	This may not indicate any problem. Some devices close the connection normally periodically, or these may occur over time due to various interruptions in the communication. If accompanied by Connection Fails or Send/Receive errors this may be a communication problem.	See Connection Fails
Send/Receive Errors	Usually accompanied by Connection Attempts and Fails, but on some devices this may be normal behavior (ex. Napco) due to frequent transmission of unsolicited and unused communication. Send and Receive errors usually mean bad, malformed or otherwise “garbage” data was received or transmitted, usually due to a connection problem.	See Connection Fails
Bytes Out and In are identical	Possible loopback.	Check for wiring errors such as bad terminations or cross-wired connections.
Bytes In never cease	Possible short in connection causing noise to simulate data incoming.	
Bytes Out and In but no communication	Possible incorrect baud rate or login for device.	
No bytes out or in	This can be evidence of a communication device that is not linked to any sub-system device in Configurator, or the wrong type of communication device is added. However, on some devices this may not necessarily indicate a problem.	Try to control the device by changing source, or toggling on a light. See if the bytes change when control is attempted.

Status Errors. If communication status indicates problems, check for the following:	
Improper or unseated connections.	
Bad cable, or bad conductor in cable.	Use a tester wherever possible for Cat-5 connections, and sound other wires for continuity
Bad terminations or cross wiring	In most cases, both ends of a Cat-5 should be terminated to the same standard (usually 568A or 568B).
Bad/Wrong RJ45-to-DB9 adapters.	Replace and verify correct type (null modem vs straight, ELAN/HL adaptor versus Moxa etc)
COM Port	Incorrect COM port, same COM port used on multiple devices or bad COM port.
Wrong settings for device	Examples include wrong baud rate/serial settings, or login.
If using a network assembly, verify the pigtails between the network assembly and the HomeBrick are connected correctly.	Changing the COM port in Configurator without changing the wiring can help troubleshoot pigtails that are connected improperly or may have been mislabeled.
Bad serial adaptor or module on sub-system device.	Some devices use an interface module, serial adaptor board or similar to allow control. Verify connections, dip switches and settings are correct.
Communication errors or partial control/transmission could be indicative of bad cabling or interference (rarely).	Check for potential interference sources such as power transformers, noisy dimmers, generators, or fluorescent lights close to the wire run.
Wiring length.	Check the Integration Note or manufacturer manuals for any specification regarding maximum wiring lengths or wiring considerations.
IP Conflict, or bad piece of networking gear.	Examples include a bad port on a switch, or a defective switch/router.

IR Troubleshooting

This section provides a general troubleshooting guide for issues with IR control from the **g!** system. It is intended as a general troubleshooting guide and may not cover all possible problems. Before using this section, we recommend that you review Lesson 10, **IR Control** in the ***g!*** *Configurator Training Guide* which describes:

- Built in IR outputs and IR input on the HC controllers
- How to build an IR Driver
- How IR Devices and IR Codes are organized in Configurator.
- How to import an IR file, ELAN IRF or HIR, to build an IR Driver.
- How to use the IRL2 to learn IR codes directly into the **g!** software when building an IR Driver.
- How to check, test and optimize an IR device.
- Universal Functions and how they apply to IR devices and Interfaces.
- How to export and import IR Devices.
- How to add IR Controlled Displays.
- How to create and Customize Interface for IR Source
- How to configure the built-in TV Channel Favorites interface.

See Section 2 of this manual, **Field-Level Descriptions** for a reference of each of the fields used in the Configurator.

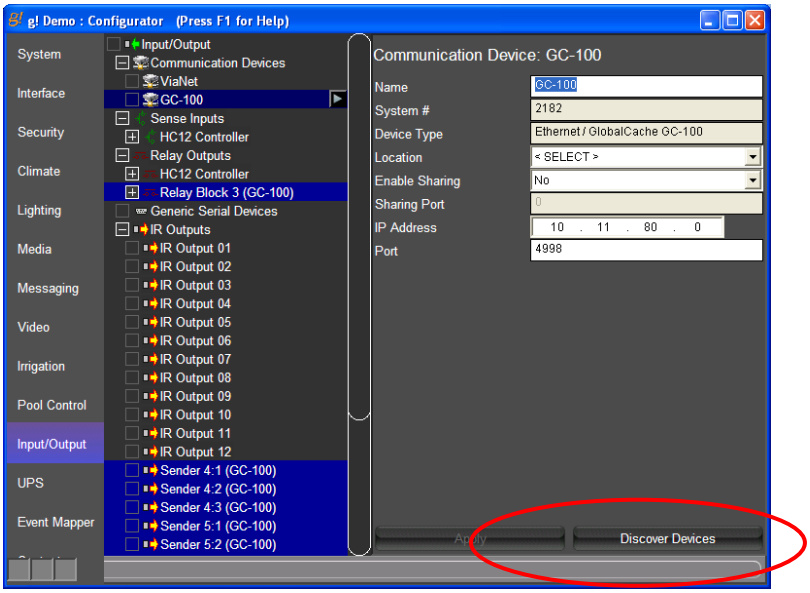
If you are unable to reach a resolution to IR issues after reading this information, please contact ELAN Technical Support.

Verify Setup

IR Adapter added (*if needed)*.

Global Cache. If using a Global Cache network IR Adapter, it must be properly configured as a network device and added to Configurator prior to using it for IR. See troubleshooting

- At a basic level the GC typically requires an *Ethernet: Global Cache GC-100* Communication Device added to the Input/Output tab.



- Click the Discover Devices button on the GC Communication Device.
- The GC will typically populate IR *Outputs* (previously known as IR Senders) and Relays on the Input/Output tab as appropriate.

> See the Integration Note for full details.

HC Controllers. HC Controllers have internal IR Outputs that should be pre-configured and do not require additional setup.

IR Device added with IR codes and basic configuration.

a. IR Devices should be added on the Input/Output tab.

b. IR Devices should have basic configuration correctly configured, such as Default Sender (IR Output port), and whether the device uses RC5 (toggle-bit) code sets.

c. IR Devices should have valid IR codes imported or learned, and correct Universal Function information and repeat counts configured for each code.

d. After learning or importing IR codes, always test codes for function.

Interface added with appropriate command configuration.

See the information below as pertains to your installation specifics:

a. Typically with Media sources (DVD player, cable box and so forth) you must add a Custom Keypad/Interface to the Media tab.

- When adding Media Interface, use the *Connect To* option to link the template and all buttons to appropriate IR codes. (Note all pre-made interfaces include proper Universal Function mapping for all buttons to assist with mapping)

- Check the Default Device on existing Interfaces to ensure it points to the correct IR device.
- All Audio buttons and special controls like the number pad and hatswitch rely on the Universal Functions of the buttons matching Universal Functions within your IR Device.
- If you have added controls or built a custom interface from scratch, remember to set Universal Functions appropriately, and leave Default Behavior checked in the Properties dialog box for each control.
- If you are using any other controls besides the special media buttons (Audio Buttons, Hatswitch, Number Pad and all variants), note that they do not allow addition of Universal Function settings, and cannot auto-map to the IR Codes based on Universal Functions. You must manually create the proper code association for these devices, sometimes through Event Maps.
- If you have built custom interfaces, remember to create them on all appropriate resolutions for the device (for example, the 800x600 resolution displays on a PC Viewer or 8.4" tablets only). Remember to check commands are added to all resolutions as well.

See the Lesson 9, **Home Theater Systems** in the ***g!*** *Configurator Training Guide* for more information.

b. For Media devices that are not sources, add the appropriate Generic device to the Media tab.
   - Displays are typically added as Generic Video Displays within the Displays area of the Media tab. Set the drop downs as required to allow the proper Controller Commands to populate, and manually map the correct IR codes to each source and power command.
   - AVR's or other zone switching devices are typically added as Generic Single Zone Controllers within the Audio Zone Controller area of the Media Tab. Set the drop downs as required to allow the proper Controller Commands to populate, and manually map the correct IR codes to each source, volume and power command. See the Generic Single Zone Controller Integration Note and Tech Note for more information.

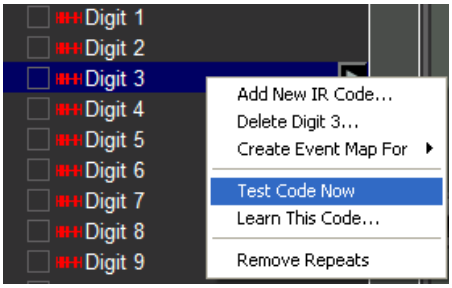
c. For IR Devices being used with Interfaces not on the Media tab, Custom Tabs must be added on the appropriate sub-system tab.
   - All commands will typically be attached to buttons and sent through the Event Mapper based on the event for button is pressed (and similar).
   - If you have built custom interfaces, remember to create them on all appropriate resolutions for the device (for example, the 800x600 resolution displays on a PC Viewer or 8.4" tablets only). Remember to check commands are added to all resolutions as well.

Test Codes.

Testing an IR Code can be performed directly from the Configurator. **It is vitally important to test your codes after importing or learning them to ensure proper operation.** *Note that when testing codes, the code will always be sent once and does not necessarily duplicate the circumstances you may experience when pushing a button in the **g!** Viewer. This function is purely to test whether the IR code itself works.*

Note you cannot use the HR2 blaster for testing codes. See below for more info.

a. Right-click the code you wish to send, and select **Test Code Now**. *The IR Code will be sent using the Default Sender port.*



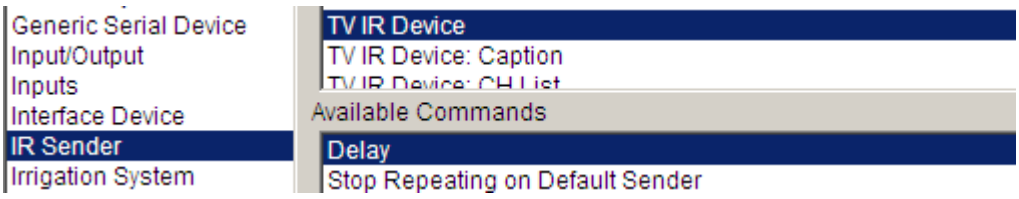
b. Verify that the device responds to the code properly and does not repeat the command.

c. If the command does not work then review the information in the next section, **IR Output Issues**.

d. If the command works, but does not work as desired from the Interface, see sections **IR Code Issues** and **Check Interface Settings** for troubleshooting steps.

e. Sometimes if you are controlling a device such as a Generic Display or Generic Single Zone Controller, each code works when tested individually but not when used together in your media setup.

   In this instance, you may have a power command followed by a source command (for example), and the power command works but the source does not. It is possible the device being controlled requires more time after a power/source command to warm up and will not respond to other commands immediately. Try inserting more delay using the drop down fields for the Generic Display or Generic Single Zone Controller (Delay after On/Off and Delay after Source). If you have multiple commands stacked within one Controller Command block, try inserting a manual delay in between commands as described in *Subsystem (IR) Delays* on page 152. (Add commands dialog shown below; use the IR Device header to find Delay)



f. If you have an HR2, it is not possible to test using the HR2 blaster. Instead, attach an emitter to the HC and temporarily set the desired IR Output as the Default Sender for testing purposes. Remember, this test is solely to evaluate if the IR codes are valid.

IR Output Issues

Check Device Settings:

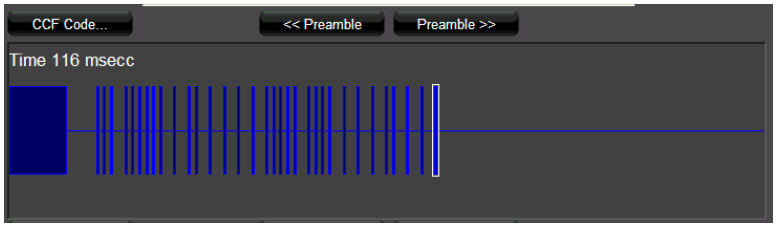
- Make sure that the IR Device you are using had a "Default Sender" selected and you have your emitter connected to the correct port on the HC or GC-100.
- Check that "RC5 Codeset" is set to "No"- unless you know for a fact that your device uses RC5 and you have learned in two codes for each command. See Section III for more info.
- Eliminate any variables- Connecting blocks, cable splices, etc.

Check Emitter Operation

- Connect a flashing emitter to the port the device is configured to use. If a flashing emitter is not available, you may be able to use the camera on your cell phone to watch a non-flashing emitter and see the signal; however this is not always 100% reliable. The below steps assume you have an emitter that will flash when sending a code.
- On the Input/Output tab of the Configurator, right click the IR Code that is giving you trouble and select "Test Code Now" while watching the emitter. The Emitter should flash.
- If the emitter did not flash, and you are using a GC-100, repeat the above test while watching the LED on the GC which corresponds to the port you are using. If the LED does not flash, go to **Global Cache IR Troubleshooting** on page197.
- If the emitter did not flash and you are using an HC Series controller to generate IR, repeat the above test while watching the "IR Out" LED near to the Ethernet port on the unit. If this LED does not flash, go to **HC Controller IR Troubleshooting** on page 198.
- If the emitter did not flash, but the LED on the GC or HC did flash, try replacing the emitter and removing any interconnects (splices, dual head emitters, connecting blocks) if you have not already done so. “Short-Leashing” a factory emitter (un-modified) to check for flash is recommended for test purposes.
- If the Emitter flashed but the device did not respond, verify correct emitter placement on the device. It may be useful to use a flashlight to find the IR Receiver on the device. You may also try moving the emitter off to the side, or holding it a little bit away from the device to check for a situation where the emitter is overloading the devices IR input. If this seems to be the case, you may wish to try an IR attenuator such as the Xantech 28ADJ to dial in the IR emitter strength. Note there are some devices, such as super thin LED TV’s, that are difficult to control with IR. It is recommended to use serial if possible.
- IR Interference: It is recommended to install a “hood” over the IR emitter to verify no external light or IR is interfering with the signal, such as the Xantech 28DES.
- If the Emitter flashed but the device did not respond and you have ruled out emitter placement issues, or the device did not respond as expected, go to **Check IR Codes** on page 182.
- If the Emitter flashed and the device responded as expected, proceed to **Check Interface Settings** on page 193.
- If using an HR2 blaster: Try creating a dummy code within an IR Device and “learning” the IR output of the HR2 to verify it is shooting the code as desired. See Section III if you need assistance with learning codes.

Check IR Code

- If you are unable to get a satisfactory (non-repeating) result with a code, it may be necessary to adjust the preamble so that code sent on repeat is invalid and will not be recognized by the IR device. This is typically accomplished by using the preamble buttons on the desired code to highlight only the last sliver of waveform as below:



Note: This method can be used with both terminator and non-terminator codes.

Check Mapping

- Select the code on the Input/Output tab and verify that the Universal Function is set correctly for the code.
- On the Media tab, check the interface for the device. Make sure the "Default Device" dropdown is set correctly.
- See Universal Functions in **Configure IR Codes,** and see **Configure Interface Settings** for more information**.**

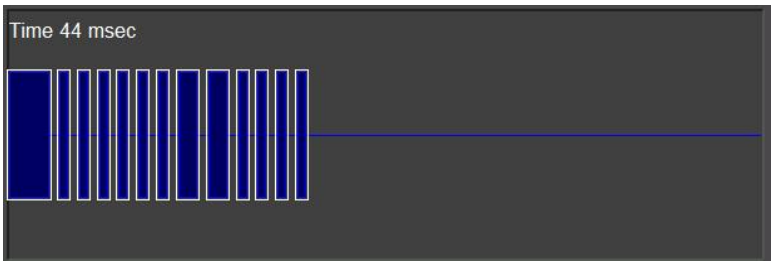
IR Code Issues

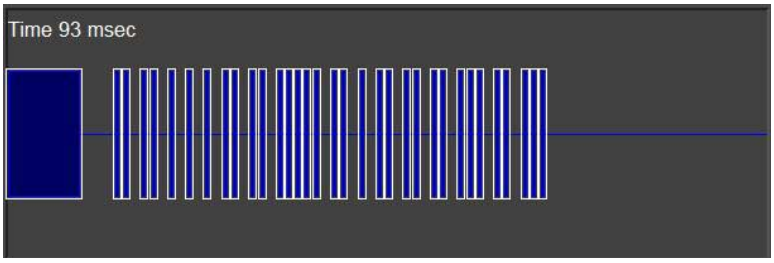
Check IR Codes

The following images are some examples of the waveform view of proper IR codes. Note that there are many typical waveforms and not all proper waveforms are shown in these examples.

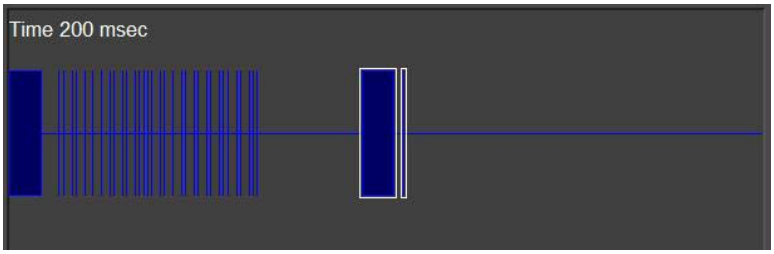
In the following examples, please note:

- The IR code time is typically less than 200 msec.
- The white outline (preamble) on the IR codes indicates the part of the code that will be repeated by the **g!** software in the case of a button hold from a user interface or the OSD remote. In the first two images the entire waveform will be repeated. In the third image the entire code will be sent once, and then the smaller repeating section will be repeated. For more information, see the section on Setting Preamble below.
- The first two images are basic code waveform examples. When these codes are sent from the **g!** software, the entire waveform will be repeated when the command button is pressed and held down.





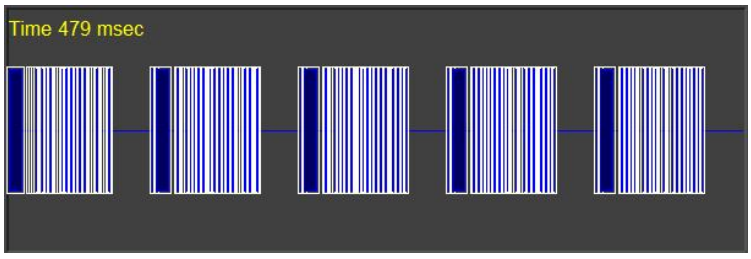
- The third image is an example of an IR code that includes the basic waveform and a separate smaller waveform that is its repeating section. When this IR code is sent, the software will first send the entire code then continue to send the small repeating section until the command button is released.

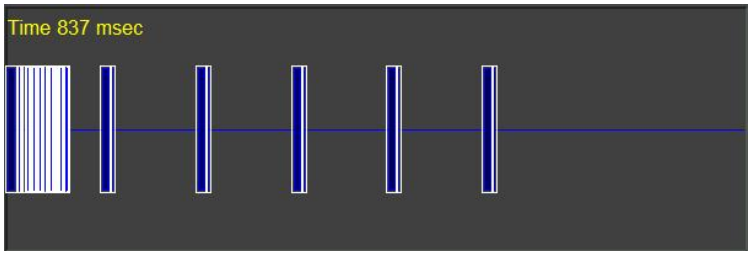


Check for Bad IR Codes that Contain Repeats

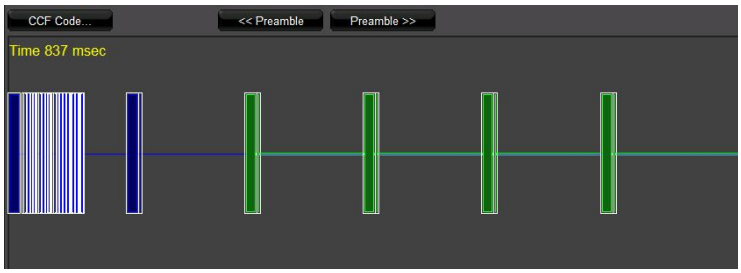
IR codes learned into **g!** software must be valid codes that do not contain extraneous terminators, or contain the same code learned multiple times as a single code. *Either situation can cause the code to not function, or create bad behavior such as repeating.*

- *How to spot:* The following image is an example of a **bad** IR code. Note that the time is well *over* 200 msec, and the font color of the displayed time has turned yellow. In the first image below, the code itself is repeated multiple times. In the second image the repeating section has been captured multiple times.

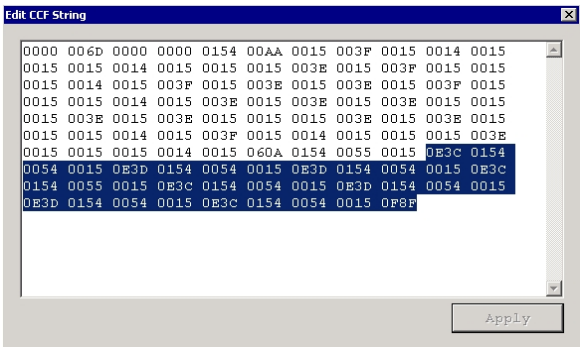




- *Why it happens:* Codes like this can occur when the button is held too long when learning, or when the End Time on the Learn IR Codes window is set too high, or if they were imported this way.
- *How to fix:* The Configurator provides a built-in IR Code editor to fix codes such as this.
- The large block at the beginning of the line is the actual code. The vertical line groupings after the first block are multiple repeating sections sent by the remote and erroneously learned by the software. To fix a code that looks like this, use the mouse to perform the following steps:
- Click the horizontal center line at the **far right** of the waveform.
- Continue to hold down the mouse button, and drag the mouse to the left. *The waveform will begin to highlight green:*

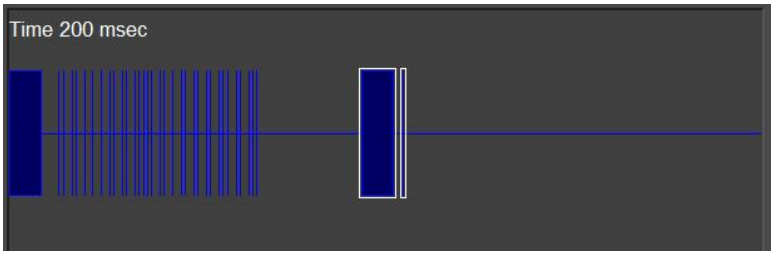


- Continue to highlight the waveform, **leaving the last repeating section and end pause unselected** as shown in the image above.
- Click the CCF Code button above the image. The CCF Code Window will open:



The highlighted text in the CCF code string corresponds to the highlighted portion of the waveform view.

- Press the **Delete** key on your keyboard, and then click **Apply**.
- Close the window and observe that section of the CCF Code was removed and the waveform is changed:

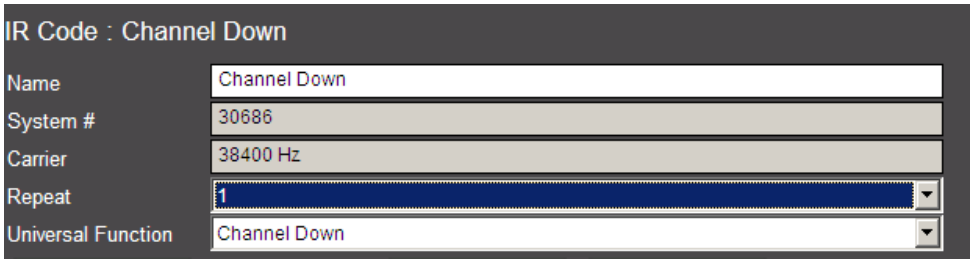


IMPORTANT: If you cannot get codes to work after editing out suspected bad sections using the steps above, try re-learning the code.

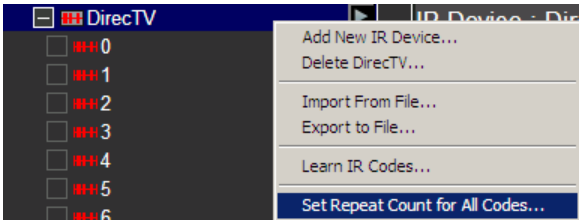
Check IR Repeats Counts

g! software includes the ability to always send any IR code multiple times in a row to improve control reliability. *On many codes, this has no adverse affect, but it may cause issues if the code in question will cause different behavior if received multiple times.*

- On the Input Output Tab of Configurator, go to the IR Device where the codes for the problem device are stored.
- Select the desired code, and check the properties window on the right for the current Repeat setting, and set as desired.



- Optionally, you may right click on the IR device name and “Set Repeat Count for All Codes” and set all codes to the same repeat count.



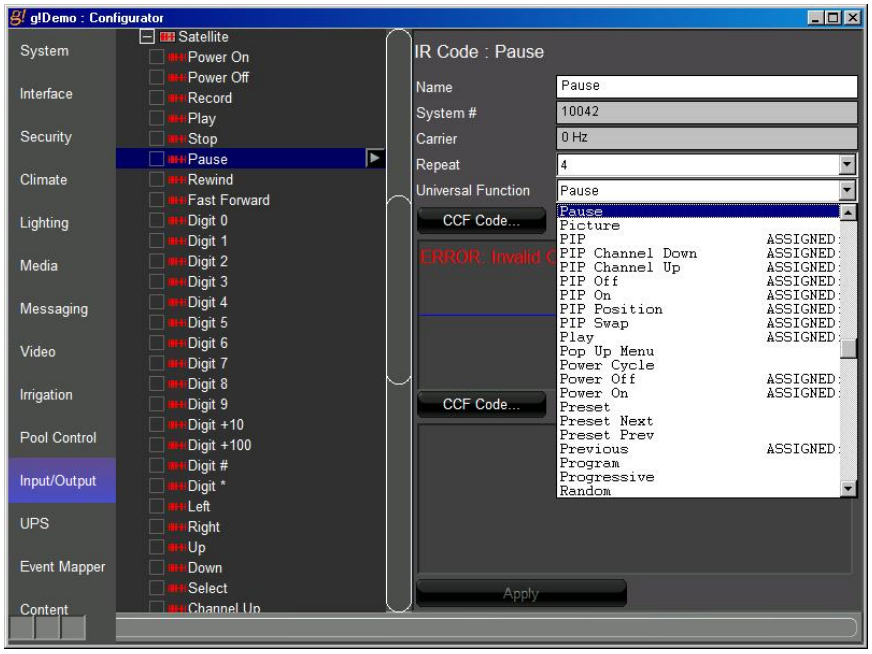
Note: Do not set all codes to repeat 0, as this will cause the codes to repeat indefinitely!

Check Universal Functions

The **g!** software uses a concept called Universal Functions to help when mapping interface buttons to their respective commands. In the following steps, you will verify that all the Universal Functions are set correctly. *If Universal Functions are not set correctly, buttons on the Media Interface will not map correctly and may not send the correct IR codes.*

- Select the first command in the list. The properties window for the IR Code is displayed on the right:

- In the IR Code: properties window, select the appropriate item from the Universal Function drop-down, and then click Apply. If there is not a match for the code you are using you can either set it to <None> or you can assign it to one of the User functions.



- Confirm that the Universal Function for all codes are all set correctly to ensure proper mapping.

Notes:
1) Codes added as part of a Default Code Set should already have proper mapping.
2) The drop down list indicates which functions have already been mapped within the IR Device to help avoid setting duplicate functions (*ASSIGNED*).

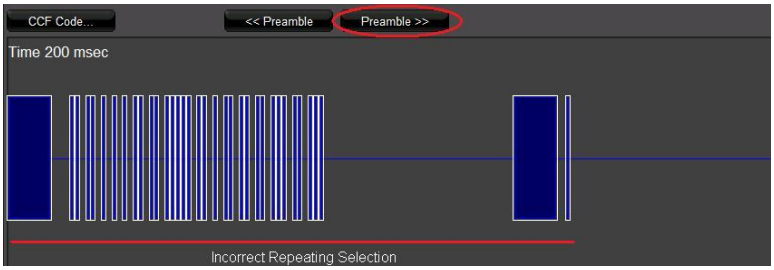
- Remember: setting Universal Functions on the IR codes is just half the equation. You must also configure the Interfaces to use the same Universal Functions on appropriate buttons, and map them to this IR Device. For more information, see *Configure Interface Settings* on page 62.

Set Preambles correctly (5.1 or later)

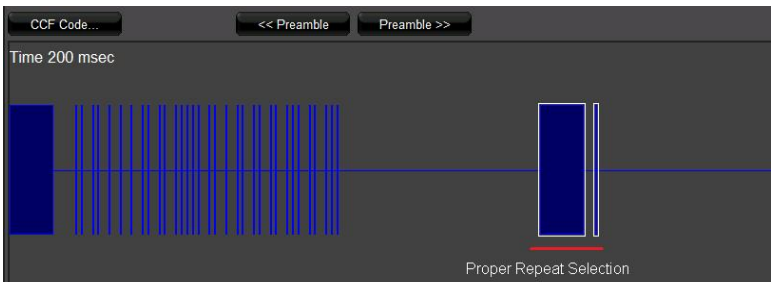
One of the most common causes of incorrect repeating code behavior is due to incorrectly repeating the entire code, instead of just the terminator. When you press and hold a button on a physical remote, in many cases it sends the whole code once, and then repeats the terminator (end of the code) for as long as you hold down the button. If **g!** is repeating the entire code when it should not, this can cause repeating problems. By default, all Media Sources in **g!** utilize Default Behavior to emulate the press-and-hold function found on most remotes, and setting preamble is critical to the correct function of this feature. Generally speaking there are two types of code structures you will encounter, as not all IR devices use a terminator.

Note: g! core module 5.2 or later will detect preamble when learning with codes, and you may wish to try re-learning the code if you are unable to resolve incorrect repeating behavior with the steps below. Core module 5.0 does not include preamble support.

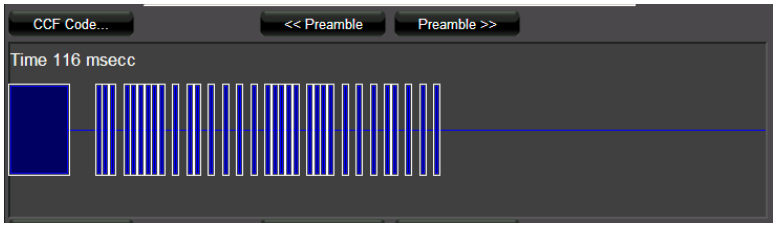
- The first image shows an IR code that includes a separate repeating section (terminator), but the **g!** software is configured incorrectly, repeating the entire waveform. Use the Preamble adjustment buttons to move the white outline and edit the selected repeat area. Note you may press and hold the preamble button to quickly change the section of repeating code.



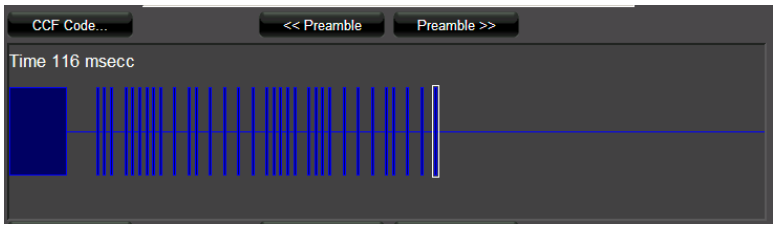
- The second image shows the proper repeat area selection after the correction was made.



- Some codes do not include a repeating section, or terminator, such as below:



- If you are unable to get a satisfactory (non-repeating) result with a code, it may be necessary to adjust the preamble so that code sent on repeat is invalid and will not be recognized by the IR device. This is typically accomplished by using the preamble buttons on the desired code to highlight only the last sliver of waveform as below:



Note: This method can be used with both terminator and non-terminator codes.

Re-learn Codes

In some cases, the codes may be causing the issue due to bad import, device mismatch, or bad learning. In many cases re-learning the codes may solve the issues. In addition, **g!** core module 5.2 and above include new learning parameters that better detect IR codes and set preamble correctly when learned with the ELAN IRL2. Note when learning with the IRL2 and **g!** core module 5.2 or later, the correct learning process has changed and you should hold down each button during learning for 2 seconds. This allows **g!** to see the IR code repeat and better determine the correct code/preamble settings. It may also be helpful to try learning codes with a GC-IRL if you are using an IRL2, or vice versa. You can also import codes or paste CCF as described below.

- Attach the IR Learned to the programming computer.
    a. Attach the IRL2 to a USB port on your PC. The red PWR light on the IRL2 lights up, indicating it is on.
    b. Attach the GC-IRL to a com port on your PC.
- Right-click the desired IR device and select Learn IR Codes from the menu. The IR Learning window is displayed, with the words “Ready, Press Start to Begin” at the top:

Note: By default, the End Time is set to 100 msec. This value can be reduced to help capture codes from remotes with shorter pauses between repeated commands.

- From the Local Receiver drop-down, select the appropriate com port.
    a. For the IRL2, choose the Silicon Labs CP210x USB to UART Bridge. This is the driver for the IRL2 learning device.
    b. For the GC-IRL, choose the desired com port on your PC.
- Click Start. The dialog changes to Learning Code Mode and prompts you for the code to learn in its Title Bar and Status window as shown.

- Holding the remote 3-6” from the learner, point the remote control at the IR IN Sensor on the learner, then press the button that corresponds to the key referenced in the title bar and at the bottom of the learning window for **two seconds**, and release. The IR IN Detect LED will blink on the IRL2 and the IR waveform will flash in the background of the Configurator as the code is learned.

- When the code is received, the learning utility captures and processes the code, then automatically advances to the next code in the list. Be sure to wait to be prompted for the next code prior to pressing the next button. Continue until all codes are learned, and then click Done.

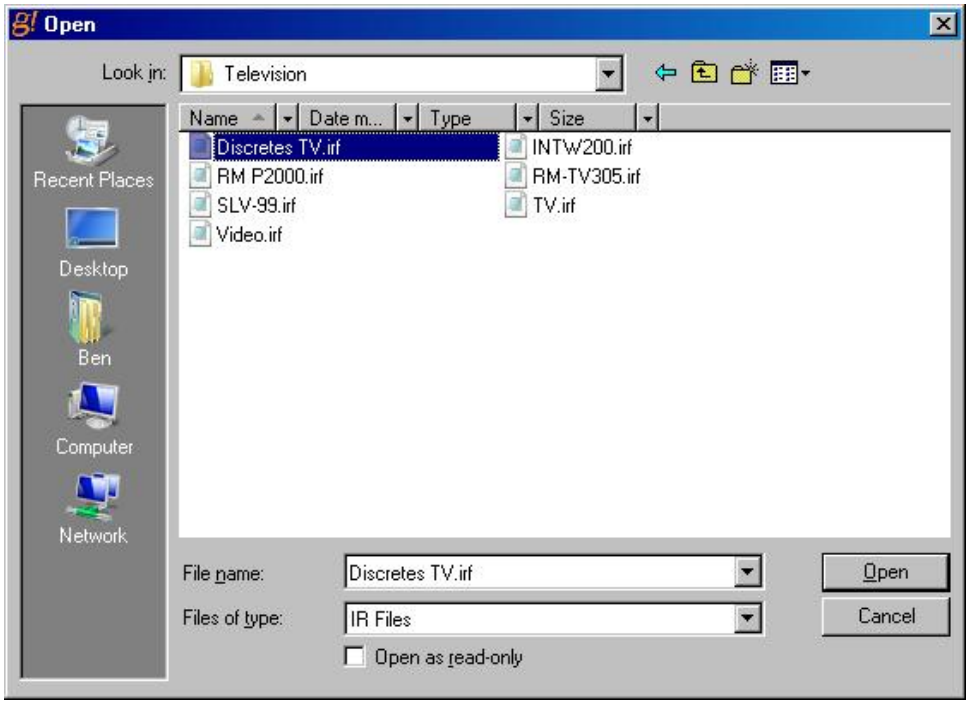
Note: If you make a mistake and learn a code into the wrong spot, you can go back and re-learn the individual codes one at a time. To do this, first complete learning the remaining codes in the list and click Done. Then, right-click the individual code in the system tree and select Learn this Code.

Re-Import Codes

In some cases, you may have learned codes when there may be a set of codes in the ELAN database you could try to import instead. If you are unable to achieve a working set of codes with learning, try importing files from the ELAN database. Note: you may need the Common Resource Library installed for this function. Note you may also learn codes or paste CCF as described above and below, respectively.

- Right-click the desired IR Device and select Import From File… The Windows File Open window opens into the Common Resource Library IR Folder.

- Navigate to the desired brand folder and choose the desired IRF or HIR file to import:



- Click Open. After a moment, the Configurator refreshes, and the imported codes are shown under the IR Device:

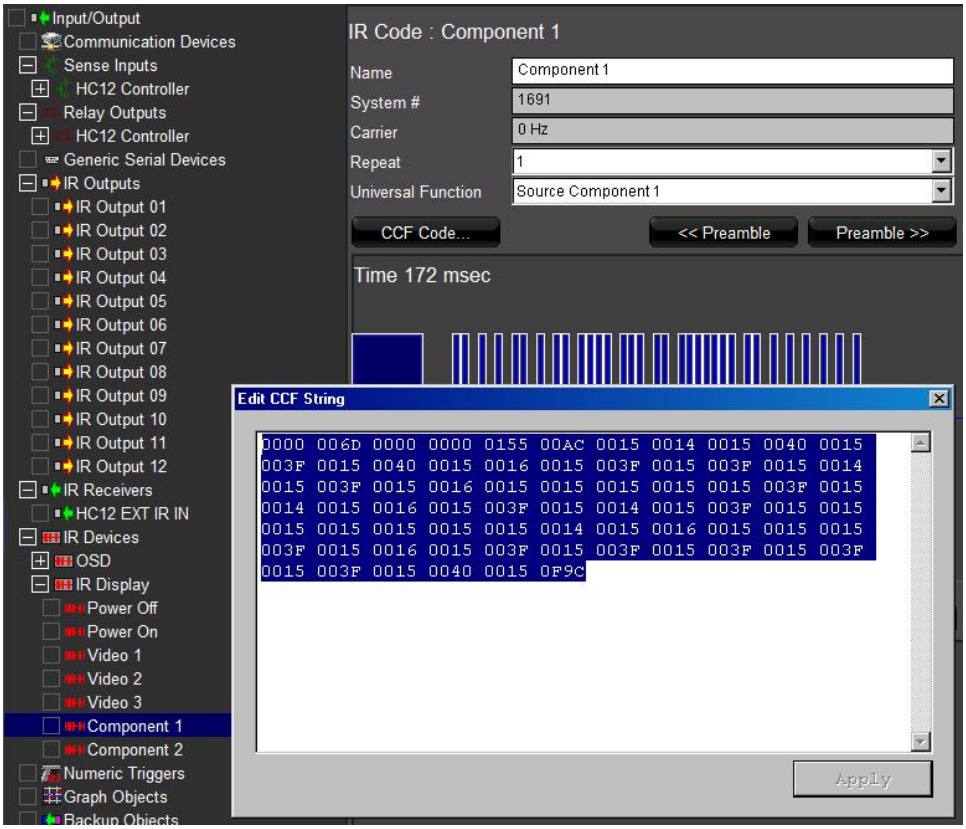
- On the Input/Output tab in the Configurator, if necessary, click the "+" sign next to the IR Device to expand the commands list and check the imported codes.

Note: When importing IRF files from the ELAN Database, you must verify all files have appropriate Universal Functions, as IRF files do not store this information. **g!** attempts to auto-populate the Universal Function based on the name of the code, but will not always find a match.

Paste CCF:

In many cases you may have access to a universal remote database such as RTI files, or have found CCF (HEX) for individual codes from the manufacturer, or from an online source (such as http://remotecentral.com). Sometimes the manual copy and paste of such codes into Configurator is the best way to get working codes; though it should be noted this method can be tedious for a large number of codes. Note you may also learn or import codes as described above.

1. Using your source for the hex codes, highlight and copy the hex information for the desired code.
2. Return to the Configurator and select the desired command within the **IR Device**.
3. Click the **CCF Code** button. *The Edit CCF String window opens.*
4. Right-click inside the Edit CCF String box and select **Paste**. *The text from the Windows Clipboard is pasted into the box:*

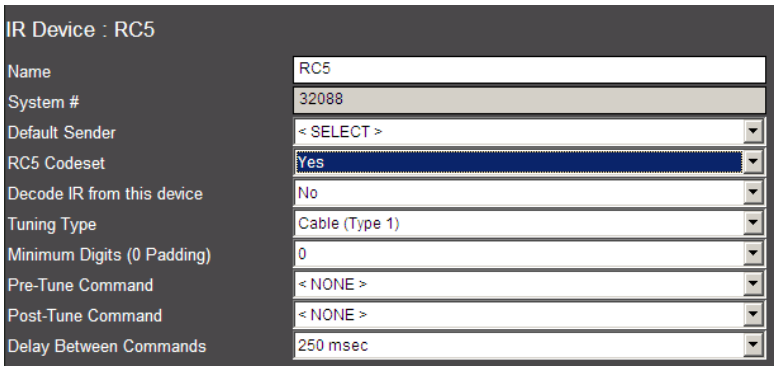


5. Click **Apply**. *The Waveform View will be generated from the CCF Code.*
6. Repeat steps above to copy and paste the CCF for any additional codes.

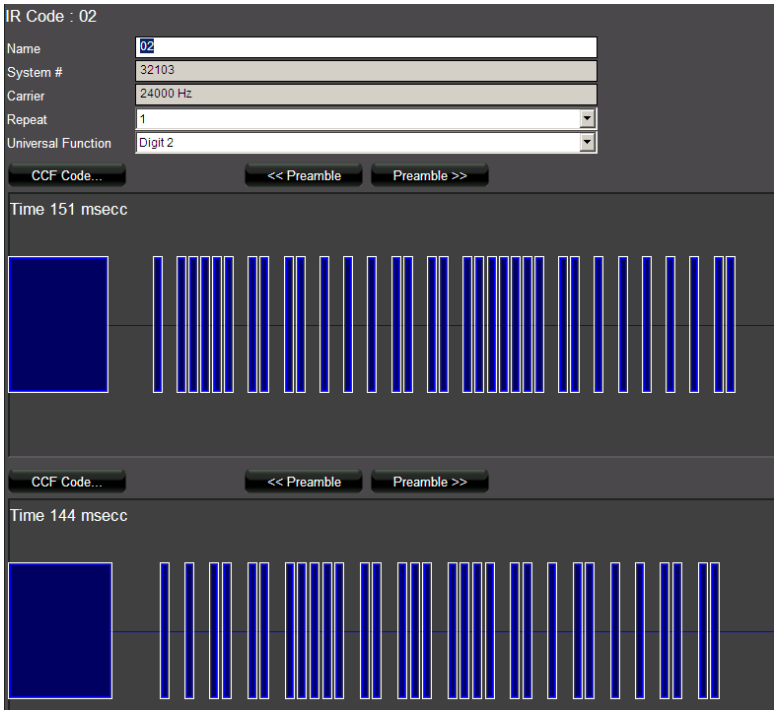
RC-5 (Toggle Bit) Codes:

Though uncommon, some devices use RC5 or toggle-bit codes. A RC5 codeset will include two variations of each code which are alternated each time the code is sent. Pressing a button on the device remote for Power, for example, will send the code in the first code box below on the first press, and the code in the second code box on the second press. If you are experiencing issues where codes work *occasionally*, it may be that you have RC5 enabled or disabled improperly. Typically RC5 issues can be detected when a code works on 1st test, but not on the 2nd, yet the device remote works fine.

Enable/Disable RC5 by selecting the IR Device, and changing the properties for the RC5 Codeset dropdown:



Example of RC5 IR Codes: Note that the codes are slightly different.



Check Interface Settings

Review the information in *Configure Interface Settings* on page 62 of this manual

IR Input Issues

This section discusses troubleshooting IR issues. For information about the operations used by IR Input, please see the **g!** Online Help (F1 in Configurator) or the ***g!*** *Configurator Training Guide*.

HC Controllers include a 3.5mm mini-jack that allows for either the connection of an IR Receiver such as an ELAN IRS5, or the attachment of an IR Input cable from a connecting block or base station. IR Input is typically used for input of IR from the **g!** Remote for OSD control, or for reacting to incoming IR codes for Universal Receiver or Event Map functions. Note you can also use GC-IRE for IR input, which attaches to a serial port. Details are included for this option below.

Check IR Receiver Settings

IR Receiver. If using an IR Receiver on the HC such as the ELAN IRS5, verify that the settings for the HC EXT IR IN are Powered On. This will provide the necessary voltage to the IR Receiver to function. Powered On is the Default setting.

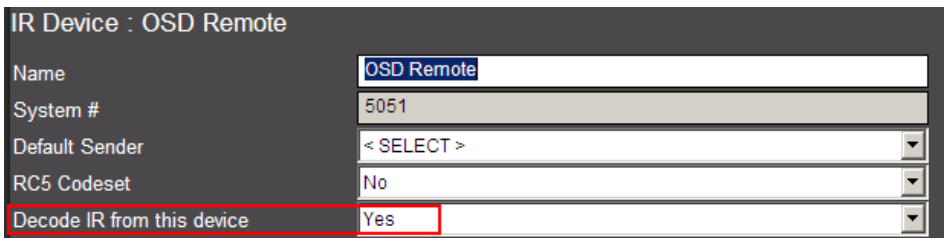
Direct cable connection: If using a direct cable connection to the EXT IR IN on the HC, ensure that the settings for the HC EXT IR IN are Powered Off prior to attaching the cable. Failure to set this correctly prior to attaching the cable may cause damage to the HC and the device on the other end of the connection.

GC-IRE. If using a GC-IRE, verify that you have added a Serial Port: Standard Connection Communication Device on the Input/Output tab with a com port selected, and have added the GC-IRE device as an IR Receiver.

Check IR Device Settings

You must have an IR Device with all incoming codes properly learned into Configurator to use incoming IR for Universal receiver or Event Mapping. Verify that a device has been created and all codes learned. It is best to learn any codes through the method they will usually be coming into the **g!** Controller to ensure they match and will trigger properly.

Verify the IR Device is set to “Decode IR from this device: Yes” within the IR Device Settings. If this is set to No, the HC will not check any incoming IR for a match among the IR codes contained within this device.



If using Universal Receiver, it is important that Universal Functions on all IR codes are set correctly for proper pass-through function.

If you had deleted the pre-populated OSD Remote IR Device, and are having trouble getting it to work again, it is important to know that the OSD IR Codes use special Universal Functions that include the OSD prefix (example: OSD:POWER instead of POWER). When importing these codes from the Common Resource Library, you should use the .**HIR** file, as this contains correct Universal Function information.

Check IR Input LED

LED on IR Receiver. Many IR Receivers such as the ELAN IRS5 have a LED that will flash when incoming IR is received. Try sending codes at the IR Receiver (if used) and see if the LED indicates it is receiving a code. If you cannot see any indication of incoming IR:

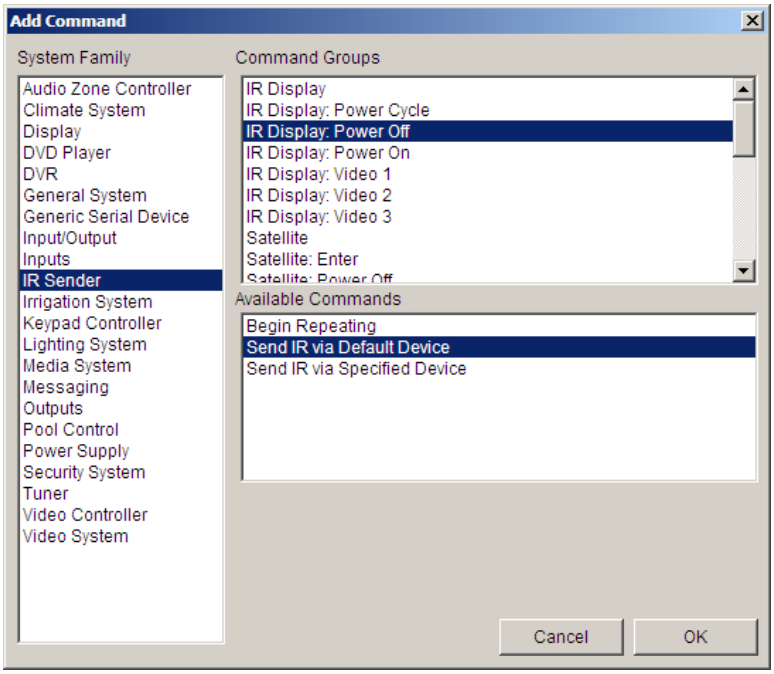
- Check the device sending IR is functional (verify remote controls its native device).
- Check the power settings in Configurator for HC EXT IR IN as above.
- Check the configuration for GC-IRE (if used) is correct as above.
- If you have extended the wires, or have some other splice or connection in the middle, try removing them.
- GC-IRE's are intended to be used with GC-CXG/CGX converter cables on direct connections, and GC-RG1 receivers. Verify you are using correct equipment. See Global Cache documentation and Integration Notes for details.
- HC EXT IR IN's have been tested only with ELAN IR Receivers. If you are using another brand or model, try an ELAN device.

LED on IRE or HC Controller. Check the IRE or rear of the HC, as both have a LED to indicate when IR is received. While sending codes into the **g!** controller, verify if the LED blinks.

- If the IR Receiver blinks, but the HC does not, try removing all VIANET connections and try again.
- If removing the VIANET cables has no effect, try Testing Codes as described in Section II above and verify IR Output is functional.
- If IR Output is not functional, or the IR IN/OUT LED's on the HC are lit solid, remove all VIANET and IR IN cables and see if this changes. If not, follow the steps in Section II to RESET VIANET and try again.
- If removing VIANET cables change your result, test all cables and add back devices one at a time to find the culprit or contact support for assistance.
- If removing IR Receiver changes your result, ensure you have correct settings and are using an ELAN IRS5 and re-test. ELAN cannot guarantee compatibility with all third party IR devices. If these are already true, contact support for assistance.

Check Event Map Trace Information

You can use Event Maps to control IR devices without adding an Interface or Generic Display. You can find commands to add to an IR Device in the commands menu under the **System Family IR Sender**. Codes are organized by the name of the IR Device.



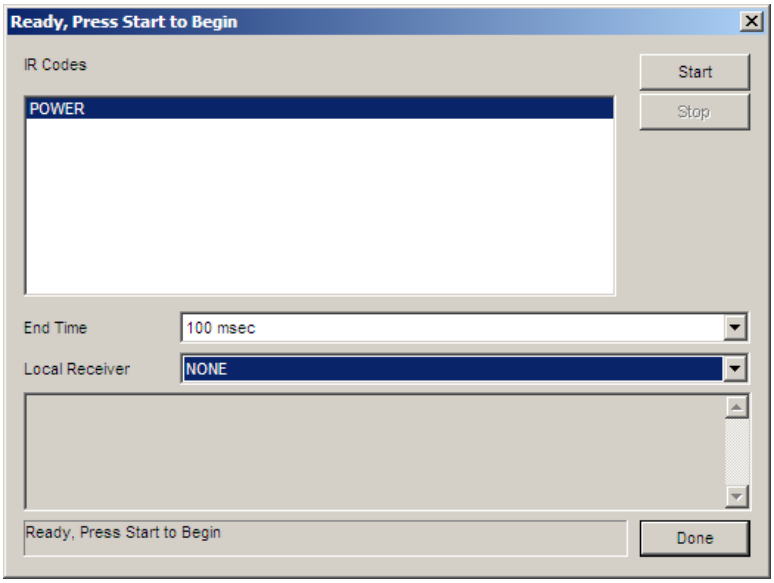
On the **Event Mapper** tab, right-click **Global Options** and open the Event Mapper trace. This will show all EVENTS that occur in the system, and will also show if any of the events trigger an EVENT MAP.

This tool can be useful when testing IR Input, because any incoming codes that are a match for a code within an IR Device will show up as EVENT DETECTED: IR CODE NAME RECEIVED. Send IR to your IR Input and watch for a matching code to display here as received. If a matching code does not display, re-verify all steps above or try re-learning the IR codes.

Learn IR through the Receiver:

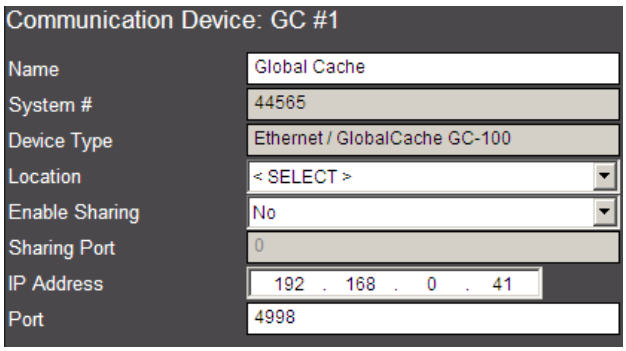
When using IR Input, it is best to have learned the IR through the input to ensure it matches the hex stored in the IR Device. To learn IR with an IR Receiver (not a learner), note that you must stop all other IR Input that could cause interference. Learn Codes as normal on your IR Device, but do not choose a Local Receiver in the Learn IR Codes window.

Note: If codes will not learn, contact ELAN Technical Support for assistance.



Global Cache IR Troubleshooting

1. Cycle power to the Global Cache.
2. Check Configurator Settings and Communication:
   - Verify the Global Cache has a **Communication Device** added on the Input/Output tab, and the Device Type selected is **Ethernet/Global Cache GC-100**.



Note: You should also confirm there is only one Communication Device of this type pointing to the IP Address of your Global Cache, and that the port is set to 4998 (4999 & 5000 are used for GC Com Ports).

   - Verify the **g!** controller is communicating with the Global Cache. Right-click the Global Cache Communication Device, and select **Show Communication Status**. See *Communication Status Troubleshooting Tips* on page 175. You may need to send IR to prompt bytes to change with the Global Cache.
   - Verify you have clicked **Discover Devices** to load the appropriate IR Outputs (senders) etc.
3. Verify the network status of the Global Cache:
   - Download the **iHelp** utility from the Global Cache web site: http://www.globalcache.com/files/software/iHelp.exe
   - Run iHelp. It should discover any Global Cache devices on your network. If you cannot locate the Global Cache on the network, contact Global Cache Technical Support for assistance.
   - Verify that the IP address shown in iHelp is the same as the IP address in the Global Cache Communication Device in Configurator.
4. Verify the Network Status of the Controller:
   - Navigate to the System tab in Configurator, then right-click **System** and select **Configure IP Info**.
   - Verify that the Global Cache and the Controller are on the same network, i.e. the first three sets of numbers in both IP addresses are the same (example: **192.168.0.**XXX).

Note: Click **Cancel** on the IP Config window in Configurator. If you click OK, the system will reboot regardless of whether changes were made or not.

   - If the Global Cache and Controller are *not* on the same network, use the iHelp utility to change the IP Address of the Global Cache to match the settings of the Controller. **Be sure the IP Address you choose is not already in use by another device on the Network**. Contact the install site's Network Administrator for help if needed.
   - Repeat the general troubleshooting steps above after this is done. If there are still problems, contact ELAN Technical Support for assistance.

HC Controller IR Troubleshooting

1. Reboot the HC Controller.
2. Verify that the HC Controller is up to date. Visit the ELAN Dealer website and check that the controller has the latest Core Module (In **Configurator: System -> Version**) and that the IR Engine is 1:0:1:1 or better.
3. Check the IR LED on the rear of the HC, near the Ethernet Jack, while you **Test Code Now** on an IR code from the Input/Output tab.

   What is the LED doing?

   - **Not Flashing**. Set the pre-loaded OSD Remote IR file to point to a HC IR Output, as these are known “good” codes, and **Test Code Now** again.

     Does the LED flash now?

     - **Yes.** The issue is likely bad IR codes. See *IR Code* Issues on page 182.
     - **No.** Go to Step 4 for RESET instructions.

   - **Lit Solid.** If the LED is lit solid whether you are sending codes or not, this is an indication that the IR may be locked up.
     - Remove all VIANET and IR cables from the HC.

       Did the LED go out?

       - **Yes.** You may have a bad cable causing an issue—add the cables back one at a time, to find the bad cable(s),and replace as necessary.
       - **No.** Perform a hardware reboot of the HC.

     - With all VIANET and IR cables removed, and the HC power cycled, set the pre-loaded OSD Remote IR file to point to a HC IR Output, as these are known “good” codes, and **Test Code Now** again (Note: no emitter is needed to see the HC IR LED flash).

       Does the LED flash now?

       - **Yes.** The issue is likely bad IR codes. See *IR Code* Issues on page 182.
       - **No.** If the LED still does not flash, or is still lit solid, see RESET in Step 4.

4. RESET VIANET/IR: With all VIANET and IR cables removed, go to the Input/Output tab, select the VIANET Communication Device, and click the "RESET" button at the bottom. This will perform some maintenance operation on the IR chipset within the HC. **Wait one minute** before attempting to re-connect IR/VIANET cables.

   Note: After RESET it is strongly recommended you re-try the test with the OSD REMOTE IR codes and a single emitter before continuing.

5. Repeat the general troubleshooting steps above after this is done. If there are still problems, contact ELAN Technical Support for assistance.

This page is intentionally blank.

Part 2:
Field-Level Reference

Introduction

The **g!** Software Configurator Reference is a field-level description of the elements in the Properties pane in the Configurator. This reference is hierarchical, organized by Configurator tab, then System Tree elements within each tab. Note that the contents of this reference are also available in the **g!** Online Help. Press **F1** at any time to view the description for the fields you are currently working with.

System

System Properties

Field	Description
System Name	Name that is used to log in remotely. The system name can only be changed by ELAN personnel.
Serial Number	The last 6 digits of the serial number displayed on the Controller. By default, the controller model plus these digits makes up the System Name. May also be used by technical support during troubleshooting.
System Description	A description of the System which is entered by the Installer.
Version Number	The version number of the software that is currently installed.
OS	The version of the OS running on the HC Controller, and the version of the IR Engine.
Internal Port	Port used for connections to the system from the local network. Cannot be changed.
External Port	Port used for remote access connections. By default, this is set to 443. Can be changed if needed.
ZIP Code	Enter the ZIP Code for the home in which the system is installed. If a ZIP code is configured and the system has an internet connection, you can use the Lookup Lat/Long/Time Zone from ZIP Code button to automatically populate the correct values.
Latitude / Longitude / Time Zone	Latitude and longitude for the home in which the system is installed. These values can be populated automatically using the [Lookup Lat/ Lon from Zip Code] button, or they can be entered manually. This information is used by the software for some of the scheduling functions.
Time Zone	Time Zone for the home in which the system is installed. Value is entered manually using the drop down list.
Enable Relay Agent	Used on remote connections, the Relay Agent is a backup method of connecting to the system when Port Forwarding isn't configured correctly or there are network issues. Typically set to Auto.
External IP	External IP allows you to control the external IP the system reports to the HomeLogic Address Server, and is used during remote connections. This is normally only needed on satellite internet connections where there may be different IP addresses for Transmitting and Receiving. If set to **Manual**, the Static Address field displays to input of the appropriate IP address. Typically set to **Automatic**.
Static Address	If External IP is set to **Manual**, enter a static IP address here.

***System Properties**, continued*

Field	Description
Weather Source	This field defines where the weather forecast is obtained. In the US, it should be left at its default value of USA (Automatic by Zip Code); outside the US, it should be set to NONE. The value “Canada (MSC)” is not implemented yet and should not be used.
Weather Params	The URL from which weather data is gathered. Generated automatically when an Airport is entered using the “Locate Current Conditions Airport” button.
[Locate Current Conditions Airport]	Click this button to select a local airport to use for weather data. This selection will override the ZIP Code setting, and in some cases may provide more accurate weather information.
[Lookup Lat/ Lon from Zip Code]	Click this button to automatically populate latitude and longitude fields based on the zip code provided.
[Apply]	Click this button to save settings.

System Time

Field	Description
Local System Time	Displays the time and date of the computer that is connected to the ELAN Controller. This is the computer that the Configurator is running on.
Target System Time	Displays the time and date setting on the ELAN Controller.
Set Target Time from this Machine	Click this button to reset the time on the ELAN Controller to match the time settings of your computer.

Language

Field	Description
Code Page	Typically, this field will automatically select the correct setting following the import of a language file. If it does not, then select the correct character font base for the touch screen. Verify that the character set matches the language being used.
Reset (English)	Click to reset the translated text to English. Note: Any Language changes that have not been exported are lost.
Import	Click to launch the file explorer program to locate a language XML file to import. Any Language changes that have not been exported will be lost.
Export	Click to launch the file explorer program to export any Language changes as an XML file. You must export the XML file to save any changes made to the language file. The exported file can be imported into any compatible **g!** system.

Language, *continued*

Language Editor	
Sort Alphabetically/ Sort by Context	Click to sort the columns alphabetically. The column sorts based on the English-language column. Click to sort the columns alphabetically by context based on the English-language column.
English	The default English text shown in the Viewer and Configurator.
Context	The context (system or sub-system) in which the associated text is used.
Translated	The translated text shown in the Viewer and Configurator. The Translated column can be customized. Click the field to select the text and enter any changes. Note that special characters in this column may be important and should not be edited. Note: Any changes that are not exported will be lost.
Special Characters in the Language Editor	
Variable characters	Some lines of text include special characters in the **g!** software. These characters, typically a percent symbol (%) followed by a single letter, are dynamic data (for example, the current temperature reading), and will be inserted automatically in that location. In all cases, these variable characters and their spacing must be preserved for proper function. **Example: %s**
\n	Certain text may have a new line shortcut or break inserted to move the text following this character to the next line. Remove or insert these characters (\n) in the editor as needed. Do not insert a space following the \n for proper function. **Example: Actual\nTemp** **Viewer Display:** **Actual** **Temp**

System Modes

System Modes are different states that the system can be set to such as “Home” when the homeowner is present and “Away” for when the house is empty. System Modes are primarily used to set up schedules for lighting and climate control, but can also be configured through the Event Mapper to provide additional functionality; such as allowing the homeowner one-touch control of the behavior of several sub-systems. Although most installations use the default number of two modes, up to ten can be configured through the System tab.

Field	Description
Number of Modes	Select between 1 and 10 System Modes for use in this configuration.
Mode #1, etc.	Enter a name for each System Mode. This name will appear throughout the Configurator, and in the Viewer.
[Apply]	Click this button to save settings.

Main Tabs

Main tabs are the icons that appear on the main menu page of the Viewer interface. You can change the order of the icons, and change the text that appears above each icon.

Field	Description
List of Tabs	The list of Tabs in the order they will appear on the Viewer.
Move Up	Move the selected tab up in the list, and change the order of its appearance in the Viewer.
Move Down	Move the selected tab down in the list, and change the order of its appearance in the Viewer.
[Apply]	Click this button to save settings.

Module Configuration

This section shows which Modules (or Applications) have been installed on the ELAN Controller.

Field	Description
Apps	Name of the app license.
Installed	Describes the type of license: 1. Permanent - installed by ELAN 2. Key - installed by Dealer 3. Trial Active - license is on a 30 day trial 4. Uninstalled – license has been uninstalled 5. <blank> - built-in function, no license required For the App “Viewer Licensed Seats”, the Installed field shows the number of seats available.

Active Client Connections

This section shows information for all active client connections (Viewers and Configurators).

Field	Description
IP Address	LAN IP of the device connected to the ELAN Controller.
User Name	Name of the contact whose login credentials the device is using. Note that local Viewers may connect without any password, and will show up as “Local”.
Host Name	Name of the interface device being used by the device.
Connection Type	Displays the type of connection, such as Configurator, CrystalPad (Viewer), or iPhone.
Bytes Sent To	Number of bytes transmitted from the ELAN Controller to this device.
Bytes Received From	Number of bytes received by the ELAN Controller from this device.
Connection Time	Duration (in hours:minutes:seconds) that this device has been connected to the ELAN Controller.
Free Memory	Amount of free memory on the device. This may only be accurate on ELAN devices.
Battery Status	Current Battery Charge level. This is only supported on some wireless touch screens.
Wireless Signal	Current strength of the wireless signal. This is only supported on some wireless touch screens.
Active Page	The page currently active in the Viewer (if available).
OS Info	The OS version the Viewer is running on.
[Force Software Update]	Forces a software update of the selected client.
[Apply]	Not Applicable

Contacts and Users

Field	Description
Name	The name of each user in the system. Note that the name entered here is for **reference only**. Login to the **g!** system is by System Name; the authentication is by password.
System #	Unique, read-only number assigned by the **g!** software for internal use.
Email	The email address for this user. Users must have email address listed here to be able to receive email notifications.

***Contacts and Users** (continued)*

Field	Description
Phone Number	The phone number for this user. Phone number must be provided if user will receive phone call notifications for specified events.
N. Dials	The number of times the system will attempt to call this user when sending a notification.
Ack Ends Call	Set to Yes if this user can acknowledge receipt of a call, and stop any additional calls to this user (or other users) for the event.
Viewer Allowed	Select Yes or No to control access to the Viewer interface.
Configurator Allowed	Select Yes or No to control access to the Configurator interface.
Login as Tablet	Select the interface to display when this user logs into their system remotely.
Set User Password	Click this button to set or change the user's password.
[Apply]	Click this button to save settings.

System Logs

Exception Log Properties

The Exception Log records system startup, shutdown, and other diagnostic notifications. This is typically used by Technical Support during troubleshooting.

Field	Description
Start Date/Time	Start date of displayed log entries.
End Date/ Time	End date of displayed log entries.
Get Records	Search for events during the specified time period (if they don't display automatically).
Get Previous	Click this button to change the date of the log entries shown to the prior cycle of entries. This will preserve the time range (ex 9/4-9/5 is a 24 hour period, clicking Get Previous will show entries for the previous 24 hour period)
Get Next	Click this button to change the date of the log entries shown to the following cycle of entries. This will preserve the time range (ex 9/4-9/5 is a 24 hour period, clicking Get Next will show entries for the next 24 hour period)
Date/Time	The date/time of the logged event.
Source	The device or subroutine posting the message.
Details	A description of the event.

Connections Log Properties

The Connection Log shows Viewer interfaces (both local and remote) as they log on and off.

Field	Description
Start Date/Time	Start date of displayed log entries.
End Date/ Time	End date of displayed log entries.
Get Records	Searches for events during the specified time period (if they don't display automatically).
Get Previous	Click this button to change the date of the log entries shown to the prior cycle of entries. This will preserve the time range (ex 9/4-9/5 is a 24 hour period, clicking Get Previous will show entries for the previous 24 hour period)
Get Next	Click this button to change the date of the log entries shown to the following cycle of entries. This will preserve the time range (ex 9/4-9/5 is a 24 hour period, clicking Get Next will show entries for the next 24 hour period)
Date/Time	The date/time of the logged event.
Action	The action performed by the remote user, normally either Connected or Disconnected.
Address	The IP address of the remote user, if applicable.
Context	Identifies whether the user logged into the Configurator or Viewer.
User Name	The user name associated with the IP address.

System Logs Properties

Logs system-made changes.

Field	Description
Start Date/Time	Start date of displayed log entries.
End Date/ Time	End date of displayed log entries.
Get Records	Searches for events during the specified time period (if they don't display automatically).
Get Previous	Click this button to change the date of the log entries shown to the prior cycle of entries. This will preserve the time range (ex: 9/4-9/5 is a 24 hour period, clicking Get Previous will show entries for the previous 24 hour period)
Get Next	Click this button to change the date of the log entries shown to the following cycle of entries. This will preserve the time range (ex: 9/4-9/5 is a 24 hour period, clicking Get Next will show entries for the next 24 hour period)
Date/Time	The date/time of the logged event.
Details	A description of the event.
User	The name of the user logged in when the event occurred.

Interface Tab

Interface

Communication Devices

Area to define communication between the system controller and non-IP communicating interfaces. The fields associated with each Communication Device depend on the Type of connection.

Add New Communication Device:

Field	Description
Device Name	Reference name for the communication device. The name should be descriptive so that this specific device can be identified in the Configurator and for future reference.
Type	The type of connection, such as serial port or Ethernet.
Device	This field will populate only if needed, depending on the selected type, to provide further definition of the communication device.
Communication Type	The protocol of the communication. See the device's *Integration Note* for the proper selection.

Communication Device (not all Fields are applicable for all Device Types):

Field	Description
Name	The name of the communication device. The name should be descriptive for future reference.
System #	Unique read-only number assigned by the **g!** controller for internal use.
Device Type	Read-only field that will populate depending on the selected type and communication type.
System Name	The System Name of the Remote System
Login Password	The Login Password for the Remote System
Location	Optional field used to track equipment location based on configuration on the Floor Plan tab. This field is for reference only.
Enable Sharing	Advanced feature, contact Technical Support for more information
Sharing Port	Advanced feature, contact Technical Support for more information
COM Port	The physical COM port to which the device is connected
IP Address	The IP Address of the device
Port	The Port to use associated with the above IP Address
Protocol	The protocol of the communication. See the *Integration Note* for the specific device for more information.
Baud Rate	The speed, measured in bits per second, at which the device communicates.
Flow Control	Also called handshake. The processes used to regulate the rate at which information is transferred from one device to another.
Parity	An error detection setting.

Communication Device, *continued*

Field	Description
Data Bits	The number of bits containing data in a packet.
Stop Bits	A bit that signals the end of a character in a data stream.
Configuration	Certain Device Types require additional configuration detail (ie, for the MOXA 5610/5410 Port, the port number being used for this Communication Device is displayed in this field).

Interface Devices (Touch Screen Options)

Area to configure Touch Screen device appearance and behavior. One is set up by default. Any new Viewer connections to the system controller will populate a new instance of Touch Screen Options by copying all of the settings configured on the "Default" Touch Screen Option. Additionally, Touch Screen Options can be added manually to allow custom configuration for remote system connections.

Touch Screen Properties

Field	Description
Name	The name of the interface. Use a descriptive name to make it easy to identify this screen during configuration and for future reference.
System #	Unique read-only number assigned by the **g!** controller for internal use.
Platform	Read-only field that displays the touch screen type. Examples are "HC Series OSD", or "ELAN TS7".
Format	Read-only field that displays the resolution of the Touch Screen. Examples are "800 x 600" or "800 x 480".
[ID This Touch Screen]	Button to allow identification of an individual touch screen in a system where many are installed. Click this button while a touch screen is connected to temporarily change only the referenced touch screen's display to show the name entered in the Name field above.

Power Scheme

Battery/AC Settings such as display off and screen saver timing.

AC Power – These settings only apply when the touch screen is running on AC Power.

Field	Description
Screen Saver Time	Duration of touch screen inactivity before the screen begins to display the screen saver pictures. Tapping the screen at anytime during screen saver will resume the normal user interface.
Display Off Time	Duration of touch screen inactivity before the screen display is turned off (goes to sleep). Tapping the screen at anytime while it is asleep will wake up the screen display and present the user interface.
Screen Saver Fade	Screen saver picture transition effect. Select **Yes** to fade between pictures; **No** for hard transition.
Screen Saver Random	Yes/No selection for screen saver randomization.
Screen Saver Buttons	Yes/No selection for screen saver navigation buttons. Select **Yes** to show the Back, Next, Pause buttons on the picture screen saver; **No** to display only the picture.
Screen Saver Delay	The amount of time each screen saver picture is displayed.

Battery Power – These settings only apply when the touch screen is running on battery power.

Field	Description
Suspend Time	Duration of touch screen inactivity before the screen enters suspend mode. Suspend mode shuts down the screen and wireless network connection. Restart requires the user to press the screen power button to wake the screen and reconnect to the controller. Note: It can take up to one minute for the screen to be usable.
Display Off Time	Duration of touch screen inactivity before the screen display is turned off (goes to sleep). Tapping the screen at anytime while it is asleep will wake up the screen display and present the user interface.

User Interface

Choose current Home Page, Display Settings, and whether schedules for lighting are available on this interface.

Field	Description
Home Page	Select the home page to display in the Viewer.
Display Settings (Day)	Select the color settings for the Viewer display.
Display Settings (Night)	Select the color settings for the Viewer display.
Hide HVAC Schedules	Yes/No selection to hide/display the climate scheduling page on this interface.

Advanced Settings

Toggle Browser tab, enroll in security announcements (if enabled in Security settings) and set volume. Also includes settings related to hardware graphics (typically should be left to defaults).

Field	Description
Announce Security Events	Yes/No selection to allow this touch screen will announce Security Events (if configured).
Show Photos Tab	Yes/No selection to show/hide the Photos tab on this interface.
Default Volume	Master volume level for sounds played by a touch screen.
Announce Volume	Volume level of announcements (i.e. Security Announcements) played by a touch screen.
Video Display	Applicable for On Screen Display (OSD) interfaces only. Select the video display that will host the OSD.
Video Display Source	Applicable for On Screen Display (OSD) interfaces only. Select the input on the video display that will host the OSD to switch to for the OSD.
Switch to Source before Off	Applicable for On Screen Display (OSD) interfaces only. Select the input on the video display that will host the OSD to switch to before turning off the OSD.

Tab Config: (one for each app)

Field	Description
Default Tab	(Optional). Select the default tab for each sub-system (app) on the touch screen. In the case of Media, this will also define the zone that the hard buttons on touch screen will control (only for supported screens).
Navigation Mode	Select to navigate by: **Horizontal** *(Default)*. Display items horizontally, side to side. When interface groups are placed in the “Available Tabs” column, the individual items within that group will display (without grouping). **Vertical.** Display items in a top to bottom list. When interface groups are placed in the “Available Tabs” column, the individual items within that group will display (without grouping). **Group.** Display items that have been configured in an Interface Group. When Group is selected, individual items will not display, even if they are placed in the “Available Tabs” column.
Navigate to Default Page First	Select to navigate directly to the touch screen’s Default Tab or to the subsystem overview page when a subsystem is selected.
Show Zone Arrows	Show or hide arrows at the top of the navigation bar on a subsystem control page. The arrows are used to navigate to next and previous subsystem pages.
Enable Page Swipe	Enable or disable the touch screen “Swipe” motion to navigate to the next or previous subsystem pages.

***Tab Config**, continued*

Field	Description
Available Tabs Column	This column displays a listing of subsystem pages that are hidden from the touch screen.
Visible Tabs Column	A listing of subsystem pages that are displayed on the touch screen.
Add Tab>> (button)	Use this button to move selected (highlighted) subsystem pages on the Available Tabs column to the Visible Tabs column. You can select single items, use Shift-Click to select a group, or use Control-Click to make multiple selections to move at one time.
<<Remove Tab (button)	Use this button to move selected (highlighted) subsystem pages from the Visible Tabs column to the Available Tabs column. You can select single items, use Shift-Click to select a group, or use Control-Click to make multiple selections to move at one time.
Move Up (button)	Use this button to change the order of the subsystem pages on the Visible Tabs column. The subsystem pages will appear on the touch screen in the order they are configured in this column. First select the page to re-order in the list then click the Move Up button to change the order.
Move Down (button)	Use this button to change the order of the subsystem pages on the Visible Tabs column. The subsystem pages will appear on the touch screen in the order they are configured in this column. First select the page to re-order in the list then click the Move Down button to change the order.

Interface Devices (OSD)

Area to configure OSD (On Screen Display) interface device's appearance and behavior. The layout for the OSD is the same as for the TouchScreen described above with one exception: When the "HC Series OSD" is selected, the "ID This TouchScreen" does not appear as it does for the TouchScreens.

Interface Devices (TS2)

Area to configure TS2 interface device's appearance and behavior

Field	Description
Name	The name of the interface. Use a descriptive name to make it easy to identify this interface during configuration and for future reference.
System #	Unique read-only number assigned by the **g!** controller for internal use.
Device Type	Read-only field that will populate with the interface type "ELAN TS2"
Communication Device	Associate the interface device with its communication device to enable communication between the system controller and the interface. The default and only available value is "VIANET".
ViaNET ID	Unique read-only number assigned by the **g!** controller to the interface to designate the interface address on the ViaNET.
Enable Weather Page	Display or hide the current weather information on the interface.
Enable Forecast Page	Display or hide the weather forecast information on the interface.
Enable Sys Mode Page	Display or hide the system mode selection page on the interface.

Interface Devices (TS2), *continued*

Field	Description
Media Zone	Select the media zone the interface will control.
Security Partition	Select the security partition the interface will control.
Lighting Keypad #1	Select the first lighting keypad the interface will display.
Lighting Keypad #2	Select the second lighting keypad the interface will display.
Lighting Keypad #3	Select the third lighting keypad the interface will display.
Thermostat	Select the thermostat the interface will display.
Backlight Timeout	Define the amount of time the interface will be inactive before the interface backlight turns off.

Interface Devices (HR2)

Area to configure HR2 interface device's appearance and behavior

Field	Description
Name	The name of the interface. Use a descriptive name to make it easy to identify this interface during configuration and for future reference. The default name is "HR2 Remote" followed by its IP address.
System #	Unique read-only number assigned by the **g!** controller for internal use.
Device Type	Read-only field that will populate with the interface type "ELAN HR2"
Communication Device	Associate the interface device with its communication device to enable communication between the system controller and the interface. In many cases this selection is automatic.
Power Button	Defines the function of the Power Button when the Zone is off. The value "Toggle" will turn the Zone back on; the value "Source Select" forces the user to select a Source within the Zone to turn the Zone on (to the selected Source).
Auto-Return to Media	Specify a time limit in which the HR2 will automatically return to the Media Tab after specified amount of inactivity
On-Cradle Zone	Specify the Zone to which the HR2 will change to when set in its cradle
Timeout	Specify the amount of time when HR2 will go to sleep after inactivity

Home Layout, Media Zones, Climate Zones, Security Partitions

Area to define the various layouts. All layouts are defined the same was, as shown below:

Field	Description
Available Tabs Column	This column displays a listing of the available items from the current subsystem.
Visible Tabs Column	A listing of subsystem pages that are viewable on the HR2.
Add Tab>> (button)	Use this button to move selected (highlighted) subsystem pages on the Available Tabs column to the Visible Tabs column. You can select single items, use Shift-Click to select a group, or use Control-Click to make multiple selections to move at one time.
<<Remove Tab (button)	Use this button to move selected (highlighted) subsystem pages from the Visible Tabs column to the Available Tabs column. You can select single items, use Shift-Click to select a group, or use Control-Click to make multiple selections to move at one time.
Move Up (button)	Use this button to change the order of the subsystem pages on the Visible Tabs column. The subsystem pages will appear on the touch screen in the order they are configured in this column. First select the page to re-order in the list then click the Move Up button to change the order.
Move Down (button)	Use this button to change the order of the subsystem pages on the Visible Tabs column. The subsystem pages will appear on the touch screen in the order they are configured in this column. First select the page to re-order in the list then click the Move Down button to change the order.

Zone Options

Area to define the Lighting, Climate, and Security defaults and the Zone Header associated with each Media Zone:

Field	Description
Media Zones	List of all Media Zones assigned to this HR2. Select Zone for configuration.
Default Keypad	Select the Lighting Keypad to be the default Keypad when the HR2 is associated with the above selected Media Zone
Default Thermostat	Select the Thermostat to be the default Thermostat when the HR2 is associated with the above selected Media Zone
Default Security Partition	Select the Security Partition to be the default Partition when the HR2 is associated with the above selected Media Zone
Zone Header	Select the Zone Header to use when the HR2 is associated with the above selected Media Zone

Six Default Home Pages

Entries plus User-Added Entries

Field	Description
Name	The name of the Home Page. For the System Defined Home Pages, this field is not editable. For User Defined Home Pages, this field is editable. We recommend that you use descriptive names for future reference and configuration.
System #	Unique read-only number assigned by the **g!** controller for internal use.
800x600 Touch Screen	The current 800x600 layout of this Home Page. For the System Defined Home Pages, this is not editable. For the User Defined Home Pages, this is editable.
800x480 Touch Screen	The current 800x480 layout of this Home Page. For the System Defined Home Pages, this is not editable. For the User Defined Home Pages, this is editable.

Display Settings

The settings for BLACK and BLACK HIVIS are provided by ELAN and cannot be changed or deleted.

Field	Description
Name	Editable field to define the name of the Display Settings. We recommend that you use descriptive names for future reference and configuration.
System #	Unique read-only number assigned by the **g!** controller for internal use.
Parameter. The upper portion of the screen provides a list of parameters and their respective values. Right-click on either the parameter name or the value to pop-up a list of options for that parameter.	
GUI Mode	Defines **g!** button behavior. Select **System Page** for a full-screen page for subsystem navigation (shields), or **Quick System Menu** for a small subsystem navigation bar at the top of the screen.
Popup Alpha Ctrl	(obsolete)
Prefer Lower Sidebar	Forces built in control bars on certain pages to appear on the bottom of the Viewer instead of the side (ex. Media Zone Controls—volume etc.). Matches iPad.
Font	Select the font to be used in the Viewer. Arial Narrow is the default. NOTE: Font selection may be limited when using non-English characters.
Font Weight	Further defines the selected font by adding “weight” properties (bold, light, etc.).
Button Press Sound	Select a sound (wav) file to play when a button is pressed on the touch screen.

Field	Description
Button Release Sound	Select a sound (wav) file to play when a button is released on the touch screen.
Connect Sound	Select a sound (wav) file to play when the Viewer connects to the system controller.
Disconnect Sound	Select a sound (wav) file to play when the Viewer disconnects from the system controller.
Texture	(obsolete)
Design Palette. The bottom portion of the screen contains the individual elements that make up the interface. Fonts, colors, shapes, etc. can all be customized. A preview of each element displays to the right. *****DISCLAIMER*** Customizing an interface can negatively impact the operation of the g! System. Any new interfaces created using the Design Palette are NOT SUPPORTED by ELAN. Issues encountered while using a custom interface are not considered software defects.**	

System Images

Browse for images.

System Sounds

Browse for sounds.

On Screen Display

Field	Description
Enable Local OSD	Select Yes if you will be using the OSD on the controller. Select No to disable the OSD.
Video Output	Select the appropriate format of the Display Device being used for the OSD

Security Tab

Security System

Communication Device

Area to define communication between the system controller and Security System. The fields associated with each Communication Device depend on the Type of connection.

Add New Communication Device:

Field	Description
Device Name	Reference name for the communication device. The name should be descriptive so that this specific device can be identified in the Configurator and for future reference.
Type	The type of connection, such as serial port or Ethernet.
Device	This field will populate only if needed, depending on the selected type, to provide further definition of the communication device.
Communication Type	The protocol of the communication. See the device's *Integration Note* for the proper selection.

Communication Device (not all Fields are applicable for all Device Types):

Field	Description
Name	The name of the communication device. The name should be descriptive for future reference.
System #	Unique read-only number assigned by the **g!** controller for internal use.
Device Type	Read-only field that will populate depending on the selected type and communication type.
System Name	The System Name of the Remote System
Login Password	The Login Password for the Remote System
Location	Optional field used to track equipment location based on configuration on the Floor Plan tab. This field is for reference only.
Enable Sharing	Advanced feature, contact Technical Support for more information
Sharing Port	Advanced feature, contact Technical Support for more information
COM Port	The physical COM port to which the device is connected
IP Address	The IP Address of the device
Port	The Port to use associated with the above IP Address
Protocol	The protocol of the communication. See the *Integration Note* for the specific device for more information.
Baud Rate	The speed, measured in bits per second, at which the device communicates.
Flow Control	Also called handshake. The processes used to regulate the rate at which information is transferred from one device to another.
Parity	An error detection setting.

***Communication Device**, continued*

Field	Description
Data Bits	The number of bits containing data in a packet.
Stop Bits	A bit that signals the end of a character in a data stream.
Configuration	Certain Device Types require additional configuration detail (ie, for the MOXA 5610/5410 Port, the port number being used for this Communication Device is displayed in this field).

Security Panel

Security Controller

The following describes the fields in the Security Controller properties pane:

Field	Description
Name	Editable Field used to name the Security Panel. Typically reflects the manufacturer of the panel.
System #	Unique, read-only number assigned by the **g!** software for internal use.
Device Type	Read-only field displaying the device type of the configured Security Panel. Typically this will display the make and model of panel being used.
Communication Device	Displays currently configured communication device for this panel. The communication device can be changed in this field.
Set Login PIN (button)	Used with some security panels to set the login PIN number for communication. See the integration note for your panel to determine if this step is needed.
Mode	A "state" that the security system can be in. Typically each mode will provide a different level of security.
Name	A name for the mode, such as "home" or "away". This is the name will appear on the mode's button in the Viewer.
Show Mode	Select Yes or No to display or hide a button for this mode in the Viewer.
Auto-Arm	Select whether this mode is "auto-armed"- that is, the panel is armed without entering a security code when this mode is selected.
Key Entry	The format for entering the security code on the Viewer keypad.
Apply button	Applies changes to the **g!** system.
Discover Devices	The Configurator queries the security panel to read the partitions and zones from the hardware.

Security Partition Properties

The following describes the fields in the Partition Properties pane for the Security subsystem:

Field	Description
Name	The logical name of the selected partition or security area. This is either read from the panel, or assigned by the installer.
System #	Read-only number assigned by the **g!** software for internal use. Each system has a unique number.
Partition #	The partition number on the security panel. The system reads this information from the panel.
Entry Delay Sound	Select a sound (.wav) file to play on touch screens to alert the homeowner to disarm the panel after entry into the building.
Entry Sound Repeat Count	The number of times the entry sound repeats.
Entry Sound Repeat Delay	The delay between the beginning of the entry delay sound, and the beginning of the next repeat.
Select Partitions for Zone	A list of partitions for the security panel. Highlighted partitions are associated with the current zone.

Security Zone Properties

The following describes the fields in the Zone Properties pane for the Security sub-system:

Field	Description
Name	The logical name of the selected security zone. This information is read from the panel, or assigned by the installer.
System #	Unique, read-only number assigned by the **g!** software for internal use.
Zone #	Zone number as set up in the security hardware.
Enable Bypass	Displays or hides the **Bypass** button for faulted zones. This configures the button accessibility on the Viewer; it does not enable/disable bypass functionality on the security panel and must match the zone setting on the panel.

Note: *Some panels do not allow bypass from the Viewer. Refer to the appropriate Integration Note for the panel you are working with.*

Security Panel Log

Field	Description
Start Date/Time	Start date of displayed log entries.
End Date/Time	End date of displayed log entries.
Get Records	Click this button to display Security records from the start date to the end date.
Get Previous	Retrieve the data from the previous day.
Get Next	Retrieve the data from the next day.
Date/Time	The date and time an event occurred.
Part/Zone	The partition/Zone in which the event took place.
Arm Status	The Arming status of the panel at the given date/time.
Bypassable	Yes or no if zone is bypassable or not
Conn. Error	Yes or no field tracking connection errors.
Bypassed	Yes or no field tracking the bypass state of a zone.
Faulted	Yes or no field tracking the faulted state of a zone.
Trouble	Yes or no field tracking the trouble state of the panel.

Climate Tab

Climate System

Global Options

The following describes the Global Options available for the Climate sub-system.

Field	Description
Units	Select Celsius or Fahrenheit as the scale for the temperature display.
Temporary Hold Mode	Controls how the system will handle deviations from schedule. • **Timed Hold** allows the deviation to be held for a specified amount of time, (see Temporary Hold Default Time) • **Hold Until Next Period** keeps the system on hold until the next scheduled period begins.
Temporary Hold Default Time	This value is used to set the timer for the Timed Hold Mode.
Outside Temperature Sensor	Select the sensor to pull temperature data from for the outside temperature displayed on each thermostat in the Viewer. Options include Internet, Thermostats and any Remote Sensors attached to your Climate system.
Outside Humidity Sensor	Select the sensor to pull humidity data from for the Outside Humidity Input. Options include Internet, supported Thermostats and any supported Remote Sensors attached to your Climate system. The Input for Outside Humidity may be used in History pages or displayed on a Custom tab.

Communication Device

Area to define communication between the system controller and Climate System. The fields associated with each Communication Device depend on the Type of connection.

Add New Communication Device:

Field	Description
Device Name	Reference name for the communication device. The name should be descriptive so that this specific device can be identified in the Configurator and for future reference.
Type	The type of connection, such as serial port or Ethernet.
Device	This field will populate only if needed, depending on the selected type, to provide further definition of the communication device.
Communication Type	The protocol of the communication. See the device's *Integration Note* for the proper selection.

Communication Device (not all Fields are applicable for all Device Types):

Field	Description
Name	The name of the communication device. The name should be descriptive for future reference.
System #	Unique read-only number assigned by the **g!** controller for internal use.
Device Type	Read-only field that will populate depending on the selected type and communication type.
System Name	The System Name of the Remote System
Login Password	The Login Password for the Remote System
Location	Optional field used to track equipment location based on configuration on the Floor Plan tab. This field is for reference only.
Enable Sharing	Advanced feature, contact Technical Support for more information
Sharing Port	Advanced feature, contact Technical Support for more information
COM Port	The physical COM port to which the device is connected
IP Address	The IP Address of the device
Port	The Port to use associated with the above IP Address
Protocol	The protocol of the communication. See the *Integration Note* for the specific device for more information.
Baud Rate	The speed, measured in bits per second, at which the device communicates.
Flow Control	Also called handshake. The processes used to regulate the rate at which information is transferred from one device to another.
Parity	An error detection setting.
Data Bits	The number of bits containing data in a packet.
Stop Bits	A bit that signals the end of a character in a data stream.
Configuration	Certain Device Types require additional configuration detail (ie, for the MOXA 5610/5410 Port, the port number being used for this Communication Device is displayed in this field).
Discover Devices (button)	The Configurator queries the Climate System to read the thermostats from the hardware.

Thermostats

The following describes the fields available in the Thermostat Properties pane:

Field	Description
Name	Editable field used to name a specific thermostat. Typically, the name reflects the physical area in which it is located. For example, a thermostat controlling the den would be named “Den”. This name is displayed both in the Viewer and in Configurator.
System #	Unique, read-only number assigned by the **g!** software for internal use.
Device Type	Read-only field that displays the device type of the configured thermostat. Typically this will display the make and model of thermostat being used.
Communication Device	Identifies the communication device that is currently configured for this thermostat. The communication device can be changed in this field.
Thermostat ID	The ID or address of the thermostat. This setting is typically auto-detected, but can be used to manually enter or change the ID of the thermostat.
Heating Unit	The heating unit for the selected thermostat. Use the drop-down list to change the selection.
Cooling Unit	The cooling unit for the selected thermostat. Use the drop-down list to change the selection.
Show Usage in History	Enables or Disables display of HVAC usage calculation in the History tab for the selected thermostat.
Show History for Additional Inputs	Allows configuration of additional values, such as remote sensors, to display in the Viewer's History for the selected thermostat. • Click the **Add Input** button in the Show History For Additional Inputs section of the properties window. You can choose to show the temperature readings from other thermostats, remote sensors, and other internet readings, and select color that will represent the new input on the history graph in the Viewer. • Click the **Add State** button to add individual Lighting states (on/off) to the history. (In the future, states of other devices may be added.)

Heating/Cooling Units

The following describes the fields available in the Heating/Cooling Device properties pane.

Field	Description
Name	Editable field used to name the Heating/Cooling Unit
System #	Unique, read-only number assigned by the **g!** software for internal use.
Device Type	Read-only field displaying the type of device the Heating/Cooling Unit is configured as. Typically this is Generic HVAC Unit.
Controls Heating	Specifies if the HVAC unit controls heating. If set to Yes, heat modes and set point controls appear in the Viewer, and usage is tracked in History.
Controls Cooling	Specifies if the HVAC unit controls cooling. If set to Yes, cool modes and set point controls appear in the Viewer, and usage is tracked in History.
Controls Fan	Enable or disable the control of fans from this HVAC unit. If set to Yes, fan controls appear in the Viewer.
Heat Cost per Hour	Allows entry of an hourly rate for the cost of operating the heating system. If this is supplied, the total cost for operating the system is tracked and displayed in the History screen. (cost per hour x system usage time = system operating cost)
Cool Cost per Hour	Allows entry of an hourly rate for the cost of operating the AC system. If this is supplied, the total cost for operating the system is tracked and displayed in the History screen. (cost per hour x system usage time = system operating cost)

Custom Tabs

Please see the section on Custom Tab Controls for information on the available settings

Interface Groups

Field	Description
Group Name	A logical name for the group of devices, i.e. Upstairs, Basement, East Wing, etc.
Available Tabs	List of devices that are not yet a part of this group
Visible Tabs	List of devices which have been added to this group

Lighting Tab

Lighting System

Communication Device

Area to define communication between the system controller and Lighting System. The fields associated with each Communication Device depend on the Type of connection.

Add New Communication Device:

Field	Description
Device Name	Reference name for the communication device. The name should be descriptive so that this specific device can be identified in the Configurator and for future reference.
Type	The type of connection, such as serial port or Ethernet.
Device	This field will populate only if needed, depending on the selected type, to provide further definition of the communication device.
Communication Type	The protocol of the communication. See the device's *Integration Note* for the proper selection.

Communication Device (not all Fields are applicable for all Device Types):

Field	Description
Name	The name of the communication device. The name should be descriptive for future reference.
System #	Unique read-only number assigned by the **g!** controller for internal use.
Device Type	Read-only field that will populate depending on the selected type and communication type.
System Name	The System Name of the Remote System
Login Password	The Login Password for the Remote System
Location	Optional field used to track equipment location based on configuration on the Floor Plan tab. This field is for reference only.
Enable Sharing	Advanced feature, contact Technical Support for more information
Sharing Port	Advanced feature, contact Technical Support for more information
COM Port	The physical COM port to which the device is connected
IP Address	The IP Address of the device
Port	The Port to use associated with the above IP Address
Protocol	The protocol of the communication. See the *Integration Note* for the specific device for more information.
Baud Rate	The speed, measured in bits per second, at which the device communicates.
Flow Control	Also called handshake. The processes used to regulate the rate at which information is transferred from one device to another.
Parity	An error detection setting.
Data Bits	The number of bits containing data in a packet.

***Communication Device**, continued*

Field	Description
Stop Bits	A bit that signals the end of a character in a data stream.
Configuration	Certain Device Types require additional configuration detail (ie, for the MOXA 5610/5410 Port, the port number being used for this Communication Device is displayed in this field).
Discover Devices (button)	The Configurator queries the Lighting System to read the lighting controls from the hardware.

Lighting Interface (not all Fields are applicable for all Interfaces):

Field	Description
Name	Enter a name for the external device. This can be any name, but should be descriptive so that you can identify this specific device in the Configurator
System #	Read only number assigned by the **g!** software for internal use. Each subsystem has a unique number.
Device Type	The type of connection, such as serial port or Ethernet..
Communication Device	Configure the appropriate Communication Device to link this device to the correct method/port for communication.
Network ID	Network ID of the Lighting System.
Settings	Settings options for the Lighting System.

Lighting Device (not all Fields are applicable for all Lighting Devices):

Field	Description
Name	The logical name of the selected lighting device. This name may be assigned by the installer. On some products, this may be read from the device during Discover Devices, or read from an imported lighting configuration file. See *Integration Notes* for details.
System #	Read only number assigned by the **g!** software for internal use. Each subsystem has a unique number.
Device Type	Displays the device type being used.
Hide Device From Scheduler	Allows certain lighting equipment to be hidden from the scheduling function.
Location	Optional field used for tracking the location of equipment with the Floor Plan tab. This field is currently used for reference only.
Activate, Deactivate (buttons)	Buttons to test the Lighting Device by activating or deactivating the device.
Other Fields	Other fields may appear depending on the type of Lighting Interface. Refer to the Integration Notes for that interface.

Keypad Interfaces

Field	Description
Name	Enter a name for the external device. This can be any name, but should be descriptive so that you can identify this specific device in the Configurator.
System #	Read-only number assigned by the **g!** software for internal use. Each subsystem has a unique number.
Model	The model number or name of the selected keypad interface.
Location	Optional field used for tracking the location of equipment with the Floor Plan tab. This field is currently used for reference only.
Preview Area	Displays a representation of how the keypad will appear in the Viewer. This view also allows access to rename buttons, and view the commands configured for each button. On Virtual Keypads, you may configure the commands and change the button type.

Keypad Button Properties

Field	Description
Text	The word(s) that will appear on the button.
Type	Selects the button action. Choices are: **Toggle**- Changes the load from one state to another (on/off) **Momentary**- Typically used for dimming, this will allow configuration of a lighting action based on press and release, such as begin dim/end dim. **Scene**- Activates a group of lighting devices to a pre-configured level. **Scene/Momentary**- Activates a group of lighting devices and allows momentary control for dimming of the lighting group. Note that on pre-configured keypads, this may not be editable.
Radius	Click and drag this slide control to the right to make the corners of the button more round; to the left to make them more square. Note that on pre-configured keypads, this may not be editable.
Button Press Commands	Action to be executed upon button press. Only applies to Momentary button type. Note that on pre-configured keypads, this may not be editable.
Button Release Commands	Action to be executed upon button release. Note that on pre-configured keypads, this may not be editable.

Customizable Scenes

Field	Description
Name	Enter a name for the customizable scene. Note this name is for your reference, and should be descriptive of the area or scene being actuated.
System #	Read-only number assigned by the **g!** software for internal use. Each subsystem has a unique number.

Keypad Templates

Field	Description
Name	The Name of the Keypad Template. Typically this includes the brand and model, or number of buttons.
System #	Read-only number assigned by the **g!** software for internal use. Each subsystem has a unique number.
Local/Master	Identify selected keypad as Local or Master type.
Interface Device(s)	The name of the lighting system for which this template is designed.
Preview Area	Displays a representation of how the keypad will appear in the Viewer. On existing templates, no changes may be made. If creating a new Keypad Template, you may add, size, and arrange buttons and name them. Note that if connected to an actual device, typically the name assigned should correspond to the function activated by the physical keypad.

Schedule

Field	Description
Number of Schedules	Select the number of schedules to use. Note the maximum amount of schedules available will always be the same as the number of system modes.
Select House Modes for Schedules	Use the buttons to choose which system modes will use which schedules. Note that it is possible to have more than one system mode use the same schedule.

Custom Tabs

Please see the section on Custom Tab Controls for information on available settings.

Interface Groups

Field	Description
Group Name	A logical name for the group of devices, i.e. Master Bedroom, Living Room, Kitchen, etc.
Available Tabs	List of devices that are not yet a part of this group
Visible Tabs	List of devices which have been added to this group

Media Tab

Media System

Audio Library Options

Field	Description
Ignore “The” in Global Artist Sort	Ignore or use definite articles (‘the’) in Artist sorting using the drop-downs.
Ignore “The” in Global Album Sort	Ignore or use definite articles (‘the’) in Album sorting using the drop-downs.
Ignore “The” in Global Track Sort	Ignore or use definite articles (‘the’) in Track sorting using the drop-downs.
Strict “Tracks by Artist Sorting	Controls the filtering of tracks to display on the Artist tab in the Viewer’s Music Library. When set to Yes, only tracks that are solely by the artist display. This mostly affects tracks on compilation albums and is rarely needed.
Show Sorting Tabs	To remove certain sort types from the Music Library in Viewer, click on the desired button to de-select it (all types are enabled by default). By deselecting Sorting Tab buttons, you will hide these Sorting options from the My Library tab in the Viewer.
Browse Network Cache (button)	Allows the user to browse/inspect the current Cover Art which has been cached on the HC unit.

Communication Devices

Area to define communication between the system controller and the various Media Devices. The fields associated with each Communication Device depend on the Type of connection.

Add New Communication Device:

Field	Description
Device Name	Reference name for the communication device. The name should be descriptive so that this specific device can be identified in the Configurator and for future reference.
Type	The type of connection, such as serial port or Ethernet.
Device	This field will populate only if needed, depending on the selected type, to provide further definition of the communication device.
Communication Type	The protocol of the communication. See the device’s *Integration Note* for the proper selection.

Communication Device (not all Fields are applicable for all Device Types):

Field	Description
Name	The name of the communication device. The name should be descriptive for future reference.
System #	Unique read-only number assigned by the **g!** controller for internal use.
Device Type	Read-only field that will populate depending on the selected type and communication type.
System Name	The System Name of the Remote System
Login Password	The Login Password for the Remote System
Location	Optional field used to track equipment location based on configuration on the Floor Plan tab. This field is for reference only.
Enable Sharing	Advanced feature, contact Technical Support for more information
Sharing Port	Advanced feature, contact Technical Support for more information
COM Port	The physical COM port to which the device is connected
IP Address	The IP Address of the device
Port	The Port to use associated with the above IP Address
Protocol	The protocol of the communication. See the *Integration Note* for the specific device for more information.
Baud Rate	The speed, measured in bits per second, at which the device communicates.
Flow Control	Also called handshake. The processes used to regulate the rate at which information is transferred from one device to another.
Parity	An error detection setting.
Data Bits	The number of bits containing data in a packet.
Stop Bits	A bit that signals the end of a character in a data stream.
Configuration	Certain Device Types require additional configuration detail (ie, for the MOXA 5610/5410 Port, the port number being used for this Communication Device is displayed in this field).

MP3 Player Properties (not all fields apply to all MP3 Players)

Field	Description
Name	This can be any name, but should be descriptive so this specific device can be identified in the Configurator.
System #	Unique, read-only number assigned by the **g!** software for internal use.
Device Type	Read-only field displaying the device type of the configured MP3 Player. Typically this will display the make and model number.
Communication Device	Select the communication device for the MP3 Player from the drop-down list.
Device ID	Used in some MP3 players to denote the chassis number or output number.
WAV Out Device	Only valid for the Internal Player, this field denotes the Sound Card in the controller.

Audio Service Properties (not all fields apply to all Audio Services)

Field	Description
Name	The name of the Audio Service, i.e. Rhapsody ™, Pandora ™
System #	Unique, read-only number assigned by the **g!** software for internal use.
Developer ID	Read only field assigned by **g!** software for use with this Audio Service.
Network Login	Username created during signup for the service
Network Password	Password created during signup for the service

Tuner Properties

Field	Description
Name	This can be any name, but should be descriptive so this specific device can be identified in the Configurator.
System #	Unique, read-only number assigned by the **g!** software for internal use.
Device Type	Read-only field displaying the device type of the configured Tuner. Typically this will display the make and model number.
Communication Device	Select the communication device for the Tuner from the drop-down list.
Tuner ID	Used in some tuners to denote the chassis number or output number.
Settings	Typically defines which set of Presets to use – the Global Presets maintained by the **g!** system, or the Tuner Presets maintained within the Tuner itself.

DVD Player Properties

Field	Description
Name	This can be any name, but should be descriptive so this specific device can be identified in the Configurator.
System #	Unique, read-only number assigned by the **g!** software for internal use.
Device Type	Read-only field displaying the device type of the configured DVD Player. Typically this will display the make and model number.
Location	Optional field used to track the location of equipment with the Floor Plan tab. This field is currently used for reference only.
Communication Device	Select the communication device for the DVD Player from the drop-down list.
Device ID	Used in specific situations, this field allows the controller to differentiate between multiple DVD players of the same type.

Video Display Properties

Field	Description
Name	Editable field used to name the display.
System #	Unique, read-only number assigned by the **g!** software for internal use.
Device Type	Read-Only field which reflects the type of display selected during addition
Communication Device	Displays currently configured communication device. The communication device can be changed in this field.
On Off Control Type	Drop-down field used to select the type of On/Off control available for the Display. Cycling- Indicates that the display does not have discrete codes for on and off, just a single "Power" command. The **g!** software will attempt to track the state of the display and send commands when appropriate. Discrete- Indicates that there are separate commands for "On" and "Off". When using this setting, the **g!** software will send the "On" command once when a video source is selected, and not send another command to the display until a different source is selected or the zone is turned off. Discrete Verify (Always Send)- Indicates that there are separate codes for "On" and "Off". When using this setting, the **g!** software will send the "On" or "Off" command each time a source button is pressed.
Source Control Type	Drop-down field used to select the type of Source control available for the Display. **Cycling**- Indicates that the display does not have discrete commands for each source, just a "Next Source" toggle. **Discrete**- Indicates that there are separate commands for each source. When using this setting, the **g!** software will send the source command once when a source is selected, and not send another command to the display until a different source is selected or the zone is turned off. **Discrete Verify (Always Send)-** Indicates that there are separate commands for each source. When using this setting, the **g!** software will send the source command each time a source button is pressed.
Delay After On/Off	Drop-down field used to select the delay between an On/Off command and the next command sent to the display. Use this setting if the display needs time after turning on before it will accept another command. Increments are in milliseconds.
Delay After Source	Drop-down field used to select the delay between a source command and the next command sent to the display. Use this setting if the display needs time after selecting a source before it will accept another command. Increments are in milliseconds.
Controller Commands	List of available commands for the display. The commands populated in the list can be based upon the type of display if it supports two-way control, or the display settings for a generic video display. The Add and Delete Input buttons function only with generic displays.

Keypad Controllers

Field	Description
Name	Editable device name which typically reflects the type of device, i.e. ViaMigo
System #	Unique, read-only number assigned by the **g!** software for internal use.
Device Type	Read-Only field that describes the type of keypad
Communication Device	Displays currently configured communication device. The communication device can be changed in this field.

Audio Zone Controller Properties

Note: Not all of the fields described below apply to all zone controllers. Properties specific to Elan controllers are described separately.

Field	Description
Name	Sets the name of the device. The name can be changed to reflect the devices location or for enumeration, for example “S8.6 Chassis 1” or “S8.6 Main Audio Rack”
System #	Unique, read-only number assigned by the **g!** software for internal use.
Device Type	Read-only field displaying the device type of the configured Zone Controller. Typically this will display the make and model of controller being used.
Location	Optional field used to track the location of equipment with the Floor Plan tab. This field is currently used for reference only.
Communication Device	Displays currently configured communication device for this Zone Controller. The communication device can be changed in this field.
LED Levels	Setting which controls the brightness of the front panel LEDs (ELAN S12 only)
Display Timeout	Setting which controls the length of time the front panel LEDs remain on after a change (ELAN S12 Only)
Video Setting	Setting which controls the Video Switching Options (ELAN S12 only)
On Off Control Type (Generic Single Zone Controller only)	Drop-down field used to select the type of On/Off control available for the Generic Single Zone Controller. **Cycling (Tracking Enabled)** - Indicates that the Generic Single Zone Controller does not have discrete codes for on and off, just a single “Power” command. The **g!** software will attempt to track the state of the controller and send commands when appropriate. **Cycling (Tracking Disabled)** – Same as “Cycling (Tracking Enabled)” except that **g!** software will not attempt to track the on/off state of the controller. **Discrete** - Indicates that there are separate commands for “On” and “Off”. When using this setting, the **g!** software will send the “On” command once when a source is selected, and not send another command to the controller until a different source is selected or the zone is turned off. **Discrete Verify (Always Send)** - Indicates that there are separate codes for “On” and “Off”. When using this setting, the **g!** software will send the “On” or “Off” command each time a source button is pressed.

***Audio Zone Controller Properties**, continued*

Field	Description
Source Control Type (Generic Single Zone Controller only)	Drop-down field used to select the type of Source control available for the Generic Single Zone Controller. **Cycling -** Indicates that the controller does not have discrete commands for each source, just a "Next Source" toggle. **Discrete -** Indicates that there are separate commands for each source. When using this setting, the **g!** software will send the source command once when a source is selected, and not send another command to the controller until a different source is selected or the zone is turned off. **Discrete Verify (Always Send) -** Indicates that there are separate commands for each source. When using this setting, the **g!** software will send the "On" or "Off" command each time a source button is pressed.
Delay After On/Off (Generic Single Zone Controller only)	Drop-down field used to select the delay between an On/Off command and the next command sent to the controller. Use this setting if the controller needs time after turning on before it will accept another command. Increments are in milliseconds.
Delay After Source (Generic Single Zone Controller only)	Drop-down field used to select the delay between a source command and the next command sent to the controller. Use this setting if the controller needs time after selecting a source before it will accept another command. Increments are in milliseconds.
Volume Control Type	Drop-down field used to select the type of volume control available for the Zone Controller. **Pass to Active Source**: - Sends volume and Mute commands to the active source rather than the Generic Single Zone Controller. **Mappable Ramp:** - Adds Volume and Mute commands to the Generic Single Zone Controller which can be manually assigned volume commands for any device. **Pass to Display:** - Sends Volume and Mute commands to Display 1 or Display 2 rather than the Generic Single Zone Controller. **None:** - Never sends volume commands.
Controller Commands	List of available commands for the Generic Single Zone Controller. The commands populated in the list will include Volume and Mute commands when "Mappable Ramp" is configured.

Source Properties

Field	Description
System #	Unique, read-only number assigned by the **g!** software for internal use.
Source Device	Drop-down list which allows the selection of a configured source for the chosen input.
Display Icon	Use the "Select Icon" button to choose an appropriate icon for this source. This icon will be displayed on the button next to the source name in the Viewer interface, and on the Zone tab when this source is active.
Source Volume	Allows the setting of a particular sources volume in order to balance the system. Not available for all source devices.
Display Name	Editable field used to change the name of the source as shown on the button in the Viewer interface.

Zone Properties

Field	Description
Name	Editable field used to name the zone.
System #	Unique, read-only number assigned by the **g!** software for internal use.
Universal Receiver	Zone IR Receiver assignment.
Settings Interface	Drop-down field used to select the Settings interface for the zone.
Display 1	Drop-down field used to select the first television display assigned to the zone.
Slave Zone 1	Drop-down field used to assign a slave zone to Display 1.
Display 2	Drop-down field used to select the second television display assigned to the zone.
Slave Zone 2	Drop-down field used to assign a slave zone to Display 2.
Turn On Source	Drop-down field used to select a source to be selected when the zone is turned on with a "Zone On" command.
Source Configuration Matrix	Matrix view of the sources in this zone. To change any of the settings in the matrix, right-click the setting you want to work with to display a popup menu of options. Select the appropriate option from the list. Use the matrix to configure the following: **Source Display Name**. Lists the name for the source as it will display in the Viewer. Right-click the source name to move it up and down in the list, which will change the order the sources are shown in the Viewer. **From Zone**. The name of the zone the source is directly connected to. **Show Source**. This Yes/No option controls whether (or not) this source will be displayed in the Viewer. **Display On/Off**. This On/Off option controls the behavior of video display(s) when this source is selected. **Display 1 Input**. Select the input that Display 1 should switch to for the selected source device. This column will only be available when a display is selected in the Display 1 field described above. **Display 2 Input**. Select the input that Display 2 should switch to for the selected source device. This column will only be available when a display is selected in the Display 2 field described above. **Slave 1 Source**. Map the appropriate source from the video switcher to show on Display 1 when this "Source Display Name" is selected. This will only be available when a selection is made in the Slave Zone 1 field above. **Slave 2 Source**. Map the appropriate source from the video switcher to show on Display 2 when this "Source Display Name" is selected. This will only be available when a selection is made in the Slave Zone 2 field above. **Volume Control**. Map each source to the appropriate audio zone controller/audio zone for volume control. This is only necessary when there is more than one audio source in a single zone.

S1616A Controller Properties

Field	Description
Name	Sets the name of the device
System #	Unique, read-only number assigned by the g! software for internal use.
Device Type	Read-only field displaying the device type of the configured Zone Controller. Typically this will display the make and model of controller being used.
Communication Device	Displays currently configured communication device for this Zone Controller. The communication device can be changed in this field.
Number of Units	Select the number of S1616A chassis in the system. Single chassis systems are represented by the numbers 1-16, Dual chassis systems are represented by Chassis Pairs 1-8. The Number of Units affects the Number of Zones available.
Number of Zones	Determines the Number of Zones available to be assigned to Outputs.
C2 Controller	Set to Yes if a C2 Communication Controller is being integrated, Set to No (default) if a C2 Communication Controller is not being integrated.
C2 Page Mode	Determines if all zones page together (Whole House Paging) or if Zones can be assigned to Page Groups (Group Paging) for selective paging.
Input Configuration	Source Sets the properties and Inputs used for the Source Level Sets the Input Gain to equalize volume for sources with different signal strength.
Output Configuration	Speaker Name Allows Outputs to be labeled to assist in wiring. Unit ID The ID of the S1616A chassis to which the Outputs are physically connected. Output The number of the physical speaker Output on the chassis. Level Adjusts the Output volume of additional speakers in a Zone relative to the Zone's Master speaker volume. Filter Used to activate a High Pass or Low Pass crossover for the Output. Crossover Sets the High Pass or Low Pass crossover frequency.
[Import Settings from S1616A]	Imports settings from an S1616A system into Configurator. Note: Does not import Speaker names, Source names or Zone names.
[Write Configuration to 1616A]	Transfers current Configurator data to the S1616As.
S1616A Source Properties **Note:** These properties are in addition to those described in *Source Properties* on page 234	
Type	Select Mono as the source type when using a single input. Select Stereo if using two inputs, e.g. a left and a right channel. Note: Inputs can only be assigned to stereo sources as specific pairs, Input 1&2, Input 3&4, etc.
Optical	Two specific pairs of inputs (1&2, 9&10) can optionally be configured to use a digital stereo Optical input rather than the RCA analog inputs.
Input	Select the input (or input pairing) used for the source.
Level	Allows the setting of a particular Source's volume in order to balance the system. Not available for all Source devices.

***S1616 Controller Properties**, continued*

S1616 Zone Settings **Note:** These properties are in addition to those described in *Zone Properties* on page 235	
Zone	The Zone number (or name) of the Zones in the system.
Subzone Of	Determines a “Master” Zone that the SubZone tracks in relation to Source selected, WHM participation and Zone Grouping. The SubZone retains individual settings for Volume, EQ, DND and ACE.
WHM	Determines if the Zone will participate in Whole House Music functions.
Group	Determines the Group (if any) to which the Zone belongs.
Max Vol	The Maximum volume allowed for a zone. Use this setting to prevent unpleasant volume levels or speaker damage in a zone.
On Max	The maximum volume level for a zone when it is turned on. If the zone is turned off with the volume above this point, it will return to this level when reactivated.
On Min	The minimum volume level for a zone when it is turned on. If the zone is turned off with the volume below this point, it will return to this level when reactivated.
On Bass	Determines the Bass level for the Zone when the Zone is initially turned on.
On Treble	Determines the Treble level for the Zone when the Zone is initially turned on.
On Loudness	Determines the Loudness EQ setting for the Zone when the Zone is initially turned on.
On DND	Determines the DND (Do Not Disturb) setting for the Zone when the Zone is initially turned on.

System 12 Controller Properties

Field	**Description**
Name	<User Defined>
System #	Unique, read-only number assigned by the g! software for internal use.
Device Type	Elan System 12 (X Zones)
Communication Device	Displays currently configured communication device for this Zone Controller. The communication device can be changed in this field.
LED Levels	On, Off, or Dim. Controls front panel LED brightness on the S12.
Display Timeout	Choose time from 1 sec to 4 hours to affect how long the Display on the front of the S12 will stay active (lit) following a change.
Video Setting	Default, Cleared, or Custom. (**Default Setting: Custom**) *Default*: Use the default factory settings in the S12. This setting will ignore any programming in g! or ViaTools! and follow factory settings (Default Tracking Mode). *Cleared:* Clear all Video Settings in the S12. Settings will be programmed in g!. *Custom:* The Video Settings were programmed already in ViaTools! and will not be re-programmed in g!. Keep current custom settings.

***System 12 Controller Properties**, continued*

System 12 Source Settings **Note:** These properties are in addition to those described in *Source Properties* on page 234	
Source Name	The names of the sources.
IR 1-12	IR routing matrix. This matrix allows configuration of IR routing through the S12 chassis. **Note:** These setting have no effect on IR outputs from Global Cache or the HC series controllers. Select the IR output jack for each source. An “X” indicates that IR received by the chassis zone input will be passed to that port when the selected source is active. In the screen above, for example, if IR is received to control source 2, Elan XMR-3, the IR will be routed to IR output 2.
Audio Input	The source volume level (gain). Use these adjustments (+ / –) on each source to maintain equivalent source volumes throughout the system.
Import Settings from Device	(Optional) If the chassis has already been configured, click this button to read in the existing settings from the device.
System 12 Zone Settings **Note:** These properties are in addition to those described in *Zone Properties* on page 235	
Zone Name	Enter Custom Name for Zone. This will be written down to the S12, or can be imported from the S12 if it was already programmed in ViaTools!
Max Volume	The Maximum volume allowed for a zone. Use this setting to prevent unpleasant volume levels or speaker damage in a zone.
Min Vol Turn On	The minimum volume level for a zone when it is turned on. If the zone is turned off with the volume below this point, it will return to this level when reactivated.
Max Vol Turn On	The maximum volume level for a zone when it is turned on. If the zone is turned off with the volume above this point, it will return to this level when reactivated.
Page Volume	The default volume for paging. Can be set from 0% (Off) to 100%. Default is 75%.
WHM	An “X” in this column designates that the zone participates in the Whole House Music functionality of the controller.
Group	Use the drop-downs to select a Group. Up to 4 groups per chassis may be created, and zones that are grouped will link source changes together. Note that Volume Control is always on a zone by zone basis and will not be affected by Grouping.
Import Settings from Device	(Optional) If the chassis has already been configured, click this button to read in the existing settings from the device.

System 8 (S86) Controller Properties

Field	Description
Name	Sets the name of the device. The name can be changed to reflect the devices location or for enumeration, for example “S8.6 Chassis 1” or “S8.6 Main Audio Rack”
System #	Unique, read-only number assigned by the g! software for internal use.
Device Type	Read-only field displaying the device type of the configured Zone Controller. Typically this will display the make and model of controller being used.
Communication Device	Displays currently configured communication device for this Zone Controller. The communication device can be changed in this field.
System 8 Source Properties **Note:** These properties are in addition to those described in *Source Properties* on page 234	
Source Name	The names of the sources.
IR 1-8	IR routing matrix. This matrix allows configuration of IR routing through the S8.6 chassis. ***Note:*** *These settings have no effect on IR outputs from Global Cache or the HC series controllers.* Select the IR output jack for each source. An “X” indicates that IR received by the chassis zone input will be passed to that port when the selected source is active.
Audio Input	The source volume level. Use these adjustments (+ / –) on each source to maintain equivalent source volumes throughout the system.
Import Settings from Device	(Optional) If the chassis has already been configured, click this button to read in the existing settings from the device.
System 8 Zone Properties **Note:** These properties are in addition to those described in *Zone Properties* on page 235	
Max Volume	The Maximum volume allowed for a zone. Use this setting to prevent unpleasant volume levels or speaker damage in a zone.
Min Vol Turn On	The minimum volume level for a zone when it is turned on. If the zone is turned off with the volume below this point, it will return to this level when reactivated.
Max Vol Turn On	The maximum volume level for a zone when it is turned on. If the zone is turned off with the volume above this point, it will return to this level when reactivated.
Page Volume	The default volume for paging. Can be set from 0% (Off) to 100%. Default is 75%.
WHM	An “X” in this column designates that the zone participates in the Whole House Music functionality of the zone controller.
Balance	Adjust the default Left channel/Right channel balance for the zone output.
DB	An “X” in this column designates that the zone participates in the Doorbell functionality of the zone controller.
DB Volume	If DB is enabled in the previous column, set the default volume for doorbell. Can be set from 0% (Off) to 100%. Default is 75%.
Trig	Set the Trigger Outputs to either “Zone Controlled” or “Command Controlled”.
WH Page Type	**Default Paging**. When Default Paging is selected, all zones on the M8 will switch to paging mode when a page is received. Default is On (X). **Group Paging**. If Group Paging is selected, zones can be grouped to respond to pages differently. Default is Off (-).
WH Page	Select zones to participate in paging functionality. By default, all zones are selected for paging.
Pg Group 1 –Pg Group 8	These columns display when Group Paging is selected as the WH Page Type. Eight paging groups are provided for paging customization. Each zone can be set to be a member of a group. By default, zones are only members of the WH (whole house) group.

M86A Controller Properties

Field	Description
Name	Sets the name of the device. The name can be changed to reflect the devices location or for enumeration, for example “S8.6 Chassis 1” or “S8.6 Main Audio Rack”
System #	Unique, read-only number assigned by the g! software for internal use.
Device Type	Read-only field displaying the device type of the configured Zone Controller. Typically this will display the make and model of controller being used.
Communication Device	Displays currently configured communication device for this Zone Controller. The communication device can be changed in this field.
M86A Source Properties **Note:** These properties are in addition to those described in *Source Properties* on page 234	
Source Name	The names of the sources.
IR 1-8	IR routing matrix. This matrix allows configuration of IR routing through the M86A chassis. Note: These setting have no effect on IR outputs from Global Cache or the HC series controllers. Select the IR output jack for each source. An “X” indicates that IR received by the chassis zone input will be passed to that port when the selected source is active.
Audio Input	The source volume level. Use these adjustments (+ / –) on each source to maintain equivalent source volumes throughout the system.
Import Settings from Device	(Optional) If the chassis has already been configured, click this button to read in the existing settings from the device.
System #	Unique, read-only number assigned by the g! software for internal use.
Source Device	Drop-down list which allows the selection of a configured source for the chosen input.
Display Icon	Use the “Select Icon” button to choose an appropriate icon for this source. This icon will be displayed on the button next to the source name in the Viewer interface, and on the Zone tab when this source is active.
Source Volume	Allows the setting of a particular sources volume in order to balance the system. Not available for all source devices.
Display Name	Editable field used to change the name of the source as shown on the button in the Viewer interface.
M86A Zone Properties **Note:** These properties are in addition to those described in *Zone Properties* on page 235	
Zone Name	The names of the zones.
Max Volume	The Maximum volume allowed for a zone. Use this setting to prevent unpleasant volume levels or speaker damage in a zone.
On Min	The minimum volume level for a zone when it is turned on. If the zone is turned off with the volume below this point, it will return to this level when reactivated.
On Max	The maximum volume level for a zone when it is turned on. If the zone is turned off with the volume above this point, it will return to this level when reactivated.
Page Volume	The default volume for paging. Can be set from 0% (Off) to 100%. Default is 75%.

***M86A Controller Properties**, continued*

Field	Properties
WHM	An “X” in this column designates that the zone participates in the Whole House Music functionality of the zone controller.
Balance	Adjust the default Left channel/Right channel balance for the zone output.
DB	An “X” in this column designates that the zone participates in the Doorbell functionality of the zone controller.
DB Volume	If DB is enabled in the previous column, set the default volume for doorbell. Can be set from 0% (Off) to 100%. Default is 75%.
Paging Preferences	
WH Page Type	**Default Paging**. When Default Paging is selected, all zones on the M86A will switch to paging mode when a page is received. Default is On (X). **Group Paging**. If Group Paging is selected, zones can be grouped to respond to pages differently. Default is Off (-).
WH Page	Select zones to participate in paging functionality. By default, all zones are selected for paging.
Pg Group 1 – Pg Group 8	These columns display when Group Paging is selected as the WH Page Type. Eight paging groups are provided for paging customization. Each zone can be set to be a member of a group. By default, zones are only members of the WH (whole house) group.
Import Settings from Device	Click this button to read in the current settings stored in the zone controller.

V883/ V85 Controller Properties

Field	Description
Name	Sets the name of the device.
System #	Unique, read-only number assigned by the g! software for internal use.
Device Type	Read-only field displaying the device type of the configured Zone Controller. Typically this will display the make and model of controller being used.
Communication Device	Displays currently configured communication device for this Zone Controller. The communication device can be changed in this field.
V883/V85 Source Settings	
System #	Unique, read-only number assigned by the g! software for internal use.
Source Device	Drop-down list which allows the selection of a configured source for the chosen input.
Display Icon	Use the “Select Icon” button to choose an appropriate icon for this source. This icon will be displayed on the button next to the source name in the Viewer interface, and on the Zone tab when this source is active.
Source Volume	Allows the setting of a particular sources volume in order to balance the system. Not available for all source devices.
Display Name	Editable field used to change the name of the source as shown on the button in the Viewer interface.
V883/V85 Zone Settings	
Name	Editable field used to name the zone.
System #	Unique, read-only number assigned by the **g!** software for internal use.
Universal Receiver	Zone IR Receiver assignment.
Settings Interface	Drop-down field used to select the Settings interface for the zone.

***V883/V85 Controller Properties**, continued*

Field	Description
Display 1	Drop-down field used to select the first television display assigned to the zone.
Slave Zone 1	Drop-down field used to assign a slave zone to Display 1.
Display 2	Drop-down field used to select the second television display assigned to the zone.
Slave Zone 2	Drop-down field used to assign a slave zone to Display 2.
Turn On Source	Drop-down field used to select a source to be selected when the zone is turned on with a "Zone On" command.
Source Configuration Matrix	Matrix view of the sources in this zone. To change any of the settings in the matrix, right-click the setting you want to work with to display a popup menu of options. Select the appropriate option from the list. Use the matrix to configure the following: **Source Display Name**. Lists the name for the source as it will display in the Viewer. Right-click the source name to move it up and down in the list, which will change the order the sources are shown in the Viewer. **From Zone**. The name of the zone the source is directly connected to. **Show Source**. This Yes/No option controls whether (or not) this source will be displayed in the Viewer. **Display On/Off**. This On/Off option controls the behavior of video display(s) when this source is selected. **Display 1 Input**. Select the input that Display 1 should switch to for the selected source device. This column will only be available when a display is selected in the Display 1 field described above. **Display 2 Input**. Select the input that Display 2 should switch to for the selected source device. This column will only be available when a display is selected in the Display 2 field described above. **Slave 1 Source**. Map the appropriate source from the video switcher to show on Display 1 when this "Source Display Name" is selected. This will only be available when a selection is made in the Slave Zone 1 field above. **Slave 2 Source**. Map the appropriate source from the video switcher to show on Display 2 when this "Source Display Name" is selected. This will only be available when a selection is made in the Slave Zone 2 field above. **Volume Control**. Map each source to the appropriate audio zone controller/audio zone for volume control. This is only necessary when there is more than one audio source in a single zone.

Keypads and Interfaces

Field	Description
Remote Control Buttons (visible when Interface node is selected)	Matrix/list of all buttons/commands used in the selected interface. Right-click Button Behavior to toggle between **Default** and **Override** mode. In Override, right clicking Output Code/Command allows selecting a different command from the Default Device command list.
Name	Editable field used to name the interface.
System #	Unique, read-only number assigned by the **g!** software for internal use.
Default Device	The Device to which the interface is connected
Screen Resolutions (seen when an interface is expanded)	**800x600 Layout** (Touchscreen) – Interface layout for 8.4" Inwall, Wireless Tablets, and PC Viewers. **800x480 Layout** (Touchscreen) – Interface layout for Profile 700 and TS7 **240x320 Layout** (iPhone/iPod Touch) – Interface layout for iPhones and iPods **TS2** - Interface layout for TS2 in-wall Keypads **HR2** – Interface layout for HR2 handheld remote controls

Zone Headers

Field	Description
Name	Editable field used to name the zone header
System #	Unique, read-only number assigned by the **g!** software for internal use
Header Size	Height of zone header display on HR2 remote control, in pixels

Interface Templates

Field	Description
Name	Editable field used to name the interface.
System #	Unique, read-only number assigned by the **g!** software for internal use.
Default Device	The Device to which the interface is connected
Screen Resolutions (seen when an interface is expanded)	**800x600 Layout** (Touchscreen) – Interface layout for 8.4" Inwall, Wireless Tablets, and PC Viewers. **800x480 Layout** (Touchscreen) – Interface layout for Profile 700 and TS7 **240x320 Layout** (iPhone/iPod Touch) – Interface layout for iPhones and iPods **TS2** - Interface layout for TS2 in-wall Keypads **HR2** – Interface layout for HR2 handheld remote controls

Interface Groups

Field	Description
Group Name	A logical name for the group of devices, i.e. Upstairs, Basement, etc.
Available Tabs	List of devices that are not yet a part of this group
Visible Tabs	List of devices which have been added to this group

Messaging Tab

Messaging

Global Options

Field	Description
Outgoing SMTP Server	The server through which outgoing e-mails will be sent. This information should be provided by the client's ISP.
Outgoing email account	Typically the e-mail address for the account. This information should be provided by the client's ISP.
Outgoing email password	The password for the configured account.
SMTP Port	The port at which the SMTP server listens for connections. This information should be provided by the client's ISP.

Communication Devices

Area to define communication between the system controller and the various Media Devices. The fields associated with each Communication Device depend on the Type of connection.

Add New Communication Device:

Field	Description
Device Name	Reference name for the communication device. The name should be descriptive so that this specific device can be identified in the Configurator and for future reference.
Type	The type of connection, such as serial port or Ethernet.
Device	This field will populate only if needed, depending on the selected type, to provide further definition of the communication device.
Communication Type	The protocol of the communication. See the device's *Integration Note* for the proper selection.

Communication Device (not all Fields are applicable for all Device Types):

Field	Description
Name	The name of the communication device. The name should be descriptive for future reference.
System #	Unique read-only number assigned by the **g!** controller for internal use.
Device Type	Read-only field that will populate depending on the selected type and communication type.
System Name	The System Name of the Remote System
Login Password	The Login Password for the Remote System
Location	Optional field used to track equipment location based on configuration on the Floor Plan tab. This field is for reference only.
Enable Sharing	Advanced feature, contact Technical Support for more information
Sharing Port	Advanced feature, contact Technical Support for more information

***Communication Device**, continued*

***Communication Device,** continued*

Field	Description
COM Port	The physical COM port to which the device is connected
IP Address	The IP Address of the device
Port	The Port to use associated with the above IP Address
Protocol	The protocol of the communication. See the *Integration Note* for the specific device for more information.
Baud Rate	The speed, measured in bits per second, at which the device communicates.
Flow Control	Also called handshake. The processes used to regulate the rate at which information is transferred from one device to another.
Parity	An error detection setting.
Data Bits	The number of bits containing data in a packet.
Stop Bits	A bit that signals the end of a character in a data stream.
Configuration	Certain Device Types require additional configuration detail (ie, for the MOXA 5610/5410 Port, the port number being used for this Communication Device is displayed in this field).

Telephone Controller Properties

Field	Description	Notes
Name	The name of the telephone controller device.	
System #	Unique, read-only number assigned by the **g!** software for internal use.	
Device Type	Read-only field displaying the type of device the controller is configured as.	
Number of Lines	Drop-down field for number of installed GMOD modems. Choose 1 or 2.	Can be configured before installing GMOD modems.
TTS Voice	Choose the gender of computer generated Text-To-Speech voice.	Really, the only option is “Female”.
*Announce Date/Time	Choose Yes or No. Controls announcing of Date/Time of voice messages by TTS Engine.	Used when checking messages through dial-in.
*Announce Name	Choose Yes or No. Controls announcing of Caller ID name by TTS Engine.	Used when checking messages through dial-in.
*Announce Number	Choose Yes or No. Controls announcing of Caller ID incoming number by TTS Engine.	Used when checking messages through dial-in.
Login PIN	Set a numerical pin which can be used to login to the HomeLogic system and access messages and Home Control features over the telephone	

Voice Mail Boxes

Field	Description
Name	Editable field used to name the mailbox. This name is shown in the Viewer software.
System #	Unique, read-only number assigned by the **g!** software for internal use.

Email Accounts

Field	Description
Name	Editable field used to name the email account. This name is shown in the Viewer software.
System #	Unique, read-only number assigned by the **g!** software for internal use.
POP3 Server	The mail server to which the **g!** software will connect to retrieve messages for this account. This information should be provided by the server administrator.
POP3 Port	The Port Number upon which the POP3 server listens for connections. This information should be provided by the server administrator.
POP3 SSL	Select Yes or No based upon whether this server uses SSL authentication. This information should be provided by the server administrator.
POP3 User Name	The user name used to log into this account
POP3 Password	The Password used to log into this account
Check Every	Frequency at which the **g!** software should check for new mail on the server. Available options are 1 Minute, 5 Minutes, 15 Minutes, 30 Minutes, and Hour.
Save Emails for	Number of days to save email messages. Can be set in one-day increments, up to 29 days.
Delete Messages from Server	Set to Yes or No to determine whether messages are deleted from the server after retrieval.

Outbound Email Messages

Field	Description
Name	Editable field used to identify a specific email message.
System #	Unique, read-only number assigned by the **g!** software for internal use.
Subject	What will be displayed in the Subject line of the email.
Message Body	The contents of the email message itself.

Text/Speech Messages

Field	Description
Name	Editable field used to identify a specific email message.
System #	Unique, read-only number assigned by the **g!** software for internal use.
Text	Anything typed in this field will be spoken in the text-to-speech message. Tokens may be used as well.
Token Reference	Tokens may be inserted into emails or text-to-speech messages to alert users to specific states in the system. The following tokens are available: <TIME> States the current system time <DATE> States the current date <LAST_CID> States the Caller ID information of the last call received. <LAST_REMOTE_NAME> States the username of the last person to log in remotely. <LAST_REMOTE_IP> States the IP address of the last person to log in remotely. <ROOMTEMP:x> States the temperature of the given thermostat, where "x" is the System # of the thermostat. <HEATSP:x> States the Heat Setpoint of the given thermostat, where "x" is the System # of the thermostat <COOLSP:x> States the Cooling Setpoint of the given thermostat, where "x" is the System # of the thermostat. <NVMAIL:x> States the number of Voicemail messages in a mailbox, where "x" is the System # of the mailbox. <NEMAIL:x> States the number of email messages in a mailbox, where "x" is the System # of the mailbox. <OUTSIDET> States the outside temperature. <OUTSIDEH> States the outside humidity.

Custom Tabs

Please see the section on Custom Tab Controls for information on the available settings.

Video Tab

Video System

Global Options

Field	Description
Record Path	The path to which DVR files are recorded
User Name	Not supported at this time.
Password	Not supported at this time.
Current Use	The amount of space currently being used by the DVR
Drive Total	The total amount of space available on the drive to which the DVR files are written
Drive Free	The free space available on the drive to which the DVR files are written
Storage Size (MB) 0 max	Enter the upper limit to be used for DVR storage
Auto-Delete Records if older than	Drop-down field to select the length of time recordings are kept, from 1 to 90 Days

Communication Devices

Area to define communication between the system controller and the various Media Devices. The fields associated with each Communication Device depend on the Type of connection.

Add New Communication Device:

Field	Description
Device Name	Reference name for the communication device. The name should be descriptive so that this specific device can be identified in the Configurator and for future reference.
Type	The type of connection, such as serial port or Ethernet.
Device	This field will populate only if needed, depending on the selected type, to provide further definition of the communication device.
Communication Type	The protocol of the communication. See the device's *Integration Note* for the proper selection.

Communication Device (not all Fields are applicable for all Device Types):

Field	Description
Name	The name of the communication device. The name should be descriptive for future reference.
System #	Unique read-only number assigned by the **g!** controller for internal use.
Device Type	Read-only field that will populate depending on the selected type and communication type.
System Name	The System Name of the Remote System
Login Password	The Login Password for the Remote System
Location	Optional field used to track equipment location based on configuration on the Floor Plan tab. This field is for reference only.
Enable Sharing	Advanced feature, contact Technical Support for more information
Sharing Port	Advanced feature, contact Technical Support for more information
COM Port	The physical COM port to which the device is connected
IP Address	The IP Address of the device
Port	The Port to use associated with the above IP Address
Protocol	The protocol of the communication. See the *Integration Note* for the specific device for more information.
Baud Rate	The speed, measured in bits per second, at which the device communicates.
Flow Control	Also called handshake. The processes used to regulate the rate at which information is transferred from one device to another.
Parity	An error detection setting.
Data Bits	The number of bits containing data in a packet.
Stop Bits	A bit that signals the end of a character in a data stream.
Configuration	Certain Device Types require additional configuration detail (ie, for the MOXA 5610/5410 Port, the port number being used for this Communication Device is displayed in this field).

Video Cameras/Sources

Field	Description
Name	Editable field used to define the camera name as it is displayed in the Viewer interface.
System #	Unique, internal number assigned by the **g!** software for internal use.
Device Type	Read-only field displaying the device type of the configured video camera or server.
Communication Device	Displayed only when Camera/Source is associated to a Communication Device. Drop-down field to select appropriate Communication Device.
Video Source	Displayed only
Location	Feature not yet implemented or displayed. Optional field used to track the location of equipment with the floor plan tab. This field is for reference only.
IP Address	Editable field to enter the IP address that the **g!** software will use to communicate with the video camera or server.
Port	Editable field to enter the port that the **g!** software will use to communicate with the video camera or server.

***Video Cameras/Sources**, continued*

Field	Description
Username	Editable field used to enter login credentials for the video camera or server.
Password	Editable field used to enter login credentials for the video camera or server.
Settings	Displayed for certain Cameras/Sources. Drop-down field to Disable Audio streaming or Enable Audio Streaming. Recommend Disable Audio, as this feature has not yet been implemented.
Enable DVR	Drop-down field. Yes – Save DVR files to path entered under Global Options. No – Do not create or save DVR files.
Controller	For some Cameras/Sources used with some Communication Devices/Controllers. Device to use to control Pan/Tilt features of some Cameras.
Low-Res Panning	Displayed only for supported Cameras/Devices. Option to enable switching the video camera to low resolution during pan/tilt operation. The result is a smoother video stream during camera movement, particularly with slower connections.
Has Pan/Tilt	Displayed only for supported Cameras/Devices. Drop-down field. Yes – Select if Camera/Device has this feature and you want to enable control in **g!** software. No – Select if Camera/Device does not have this feature.
Has Zoom	Displayed only for supported Cameras/Devices. Drop-down field. Yes – Select if Camera/Device has this feature and you want to enable control in **g!** software. No – Select if Camera/Device does not have this feature.
Has Presets	Displayed only for supported Cameras/Devices. Drop-down field. Yes – Select if Camera/Device has this feature and you want to enable control in **g!** software. No – Select if Camera/Device does not have this feature.
Has Audio	Displayed only for supported Cameras/Devices. Drop-down field. Yes – Select if Camera/Device has this feature and you want to enable control in **g!** software. No – Select if Camera/Device does not have this feature.
Has Motion Detect	Displayed only for supported Cameras/Devices. Drop-down field. Yes – Select if Camera/Device has this feature and you want to enable control in **g!** software. No – Select if Camera/Device does not have this feature.
Flip Image 180	Option to flip the video image, typically used when a camera is mounted upside down on a ceiling.
Hide Resolution Control	Control Option to hide/show the resolution control buttons on the video source's default Viewer interface.
Hide Full Screen Control	Control Option to hide/show the full screen button on the video source's default Viewer interface.
Default Resolution	Option to define the default resolution of the video source.
Goto Preset when Idle	Displayed only for Cameras/Devices with Presets enabled. Option to select a preset view that the video camera should reset to while not being viewed. (video sources that support view presets only)

***Video Cameras/Sources**, continued*

Field	Description
Record Resolution	Option to define the resolution that the video camera or server will record in. See the DVR integration note for more information.
Record Mode	Use only when selected Camera/Devices is supported for Motion Detection. Drop-down field to selection motion sensing thresholds. Auto (Low Sensitivity) – Built-in preset requiring large amounts of motion to trigger detection. Auto (Medium Sensitivity) – Built-in preset requiring medium motion to trigger detection. Auto (High Sensitivity) – Built-in preset requiring minimal motion to trigger detection. Fixed Threshold Value: Enables selection of a fixed percentage threshold value at which motion is detected. Enables "Record Threshold" field to select percentage setting.
Record Threshold	Option to define the minimum motion level required during a video recording to keep the incoming video frames. Video frames at or above this level will be saved and video frames with motion below this level will not be saved. (to reduce file size of saved video clips) See the DVR integration note for more information.

Video Camera Controllers

Options displayed under this node are experimental and no longer supported.

Field	Description
Name	N/A
System #	N/A
Device Type	N/A
Communication Device	N/A
Camera ID	N/A

Irrigation Tab

Irrigation System

Communication Devices

Area to define communication between the system controller and the various Media Devices. The fields associated with each Communication Device depend on the Type of connection.

Add New Communication Device:

Field	Description
Device Name	Reference name for the communication device. The name should be descriptive so that this specific device can be identified in the Configurator and for future reference.
Type	The type of connection, such as serial port or Ethernet.
Device	This field will populate only if needed, depending on the selected type, to provide further definition of the communication device.
Communication Type	The protocol of the communication. See the device's *Integration Note* for the proper selection.

Communication Device (not all Fields are applicable for all Device Types):

Field	Description
Name	The name of the communication device. The name should be descriptive for future reference.
System #	Unique read-only number assigned by the **g!** controller for internal use.
Device Type	Read-only field that will populate depending on the selected type and communication type.
System Name	The System Name of the Remote System
Login Password	The Login Password for the Remote System
Location	Optional field used to track equipment location based on configuration on the Floor Plan tab. This field is for reference only.
Enable Sharing	Advanced feature, contact Technical Support for more information
Sharing Port	Advanced feature, contact Technical Support for more information
COM Port	The physical COM port to which the device is connected
IP Address	The IP Address of the device
Port	The Port to use associated with the above IP Address
Protocol	The protocol of the communication. See the *Integration Note* for the specific device for more information.
Baud Rate	The speed, measured in bits per second, at which the device communicates.

Communication Device, *continued*

Field	Description
Flow Control	Also called handshake. The processes used to regulate the rate at which information is transferred from one device to another.
Parity	An error detection setting.
Data Bits	The number of bits containing data in a packet.
Stop Bits	A bit that signals the end of a character in a data stream.
Configuration	Certain Device Types require additional configuration detail (ie, for the MOXA 5610/5410 Port, the port number being used for this Communication Device is displayed in this field).

Irrigation Controller Properties

Field	Description
Name	Enter a name for the external device. This can be any name, but should be descriptive so that you can identify this specific device in the Configurator
System #	Read-only number assigned by the **g!** software for internal use. Each system has a unique number.
Device Type	Displays the ELAN driver or device type being used.
Communication Device	Configure the appropriate Communication Device to link this device to the correct method/port for communication.
Address	This field will populate if required depending on the model of Irrigation Panel used. If available, configure the correct ID or address for the panel.

Irrigation Zone Properties

Field	Description
Name	The logical name of the selected irrigation zone. This name is assigned by the installer.
System #	Read-only number assigned by the **g!** software for internal use. Each system has a unique number.
Controller #	Some Irrigation systems allow daisy chaining of controllers to increase zone quantities. In this case the controller number is the address of the individual controller that the zone is assigned to.
Irrigation Group	The irrigation group that the zone has been assigned to. Typically, different plant types are grouped separately to allow for different watering schedules.

Irrigation Groups

Field	Description
Name	The logical name of the selected irrigation group. This name is assigned by the installer.
System #	Read-only number assigned by the **g!** software for internal use. Each system has a unique number.

Global Irrigation Periods

Field	Description
Name	The logical name of a time period used in scheduling. This name is assigned by the installer.
System #	Read-only number assigned by the **g!** software for internal use. Each system has a unique number.

Pool Control Tab

Pool Control

Communication Device

Area to define communication between the system controller and the various Media Devices. The fields associated with each Communication Device depend on the Type of connection.

Add New Communication Device:

Field	Description
Device Name	Reference name for the communication device. The name should be descriptive so that this specific device can be identified in the Configurator and for future reference.
Type	The type of connection, such as serial port or Ethernet.
Device	This field will populate only if needed, depending on the selected type, to provide further definition of the communication device.
Communication Type	The protocol of the communication. See the device's *Integration Note* for the proper selection.

Communication Device (not all Fields are applicable for all Device Types):

Field	Description
Name	The name of the communication device. The name should be descriptive for future reference.
System #	Unique read-only number assigned by the **g!** controller for internal use.
Device Type	Read-only field that will populate depending on the selected type and communication type.
System Name	The System Name of the Remote System
Login Password	The Login Password for the Remote System
Location	Optional field used to track equipment location based on configuration on the Floor Plan tab. This field is for reference only.
Enable Sharing	Advanced feature, contact Technical Support for more information
Sharing Port	Advanced feature, contact Technical Support for more information
COM Port	The physical COM port to which the device is connected
IP Address	The IP Address of the device
Port	The Port to use associated with the above IP Address
Protocol	The protocol of the communication. See the *Integration Note* for the specific device for more information.
Baud Rate	The speed, measured in bits per second, at which the device communicates.
Flow Control	Also called handshake. The processes used to regulate the rate at which information is transferred from one device to another.
Parity	An error detection setting.
Data Bits	The number of bits containing data in a packet.
Stop Bits	A bit that signals the end of a character in a data stream.
Configuration	Certain Device Types require additional configuration detail (ie, for the MOXA 5610/5410 Port, the port number being used for this Communication Device is displayed in this field).

Pool Controllers Properties

Field	Description
Name	Editable field used to name a Pool Controller
System #	Unique, read-only number assigned by the **g!** software for internal use.
Device Type	Read-only field displaying the device type of the configured pool controller.
Communication Device	Drop-down field to select the Communication Device connected to the Pool Controller.
Settings	Jandy Aqualink only. Drop-down field which enables selection of Single Pump or 2 Pump system.

Input/Output

Communication Device

Area to define communication between the system controller and the various Media Devices. The fields associated with each Communication Device depend on the Type of connection.

Add New Communication Device:

Field	Description
Device Name	Reference name for the communication device. The name should be descriptive so that this specific device can be identified in the Configurator and for future reference.
Type	The type of connection, such as serial port or Ethernet.
Device	This field will populate only if needed, depending on the selected type, to provide further definition of the communication device.
Communication Type	The protocol of the communication. See the device's *Integration Note* for the proper selection.

Communication Device (not all Fields are applicable for all Device Types):

Field	Description
Name	The name of the communication device. The name should be descriptive for future reference.
System #	Unique read-only number assigned by the **g!** controller for internal use.
Device Type	Read-only field that will populate depending on the selected type and communication type.
System Name	The System Name of the Remote System
Login Password	The Login Password for the Remote System
Location	Optional field used to track equipment location based on configuration on the Floor Plan tab. This field is for reference only.
Enable Sharing	Advanced feature, contact Technical Support for more information
Sharing Port	Advanced feature, contact Technical Support for more information
COM Port	The physical COM port to which the device is connected
IP Address	The IP Address of the device
Port	The Port to use associated with the above IP Address
Protocol	The protocol of the communication. See the *Integration Note* for the specific device for more information.
Baud Rate	The speed, measured in bits per second, at which the device communicates.
Flow Control	Also called handshake. The processes used to regulate the rate at which information is transferred from one device to another.
Parity	An error detection setting.
Data Bits	The number of bits containing data in a packet.
Stop Bits	A bit that signals the end of a character in a data stream.
Configuration	Certain Device Types require additional configuration detail (ie, for the MOXA 5610/5410 Port, the port number being used for this Communication Device is displayed in this field).

Input Controllers (Sense Inputs)

Field	Description
Name	Editable field used to name an Input Controller. Typically the name will reference the type of device used.
System #	Unique, read-only number assigned by the **g!** software for internal use.
Device Type	Read-only field displaying the device type or ELAN driver used.
Input Name	Displayed when Input Controller is expanded. Editable name for the input sensor.
Input I/O Device ID	Displayed when Input Controller is expanded. Displays the input number.

Output Controllers (Relay Outputs)

Field	Description
Name	Editable field used to name an Output Controller. Typically the name will reference the type of device used.
System #	Unique, read-only number assigned by the **g!** software for internal use.
Device Type	Read-only field displaying the device type or ELAN driver used.
Communication Device	Displayed for specific supported devices only. Configure the appropriate Communication Device to link this device to the correct method/port for communication.
Module	Displayed for specific supported devices only. Enter the module number controlling this set of Relay Outputs.
Name	Editable name for the output relay.
Output I/O - or - Device ID	Displays the relay number.

Generic Serial Devices

Field	Description
Name	Sets the name of the device. The name can be changed to reflect the devices location or for enumeration, for example “Satellite 1” or “Master Bedroom Cable Box”
System #	Unique, read-only number assigned by the **g!** software for internal use.
Location	Not implemented for Generic Serial Devices.
Communication Device	Displays currently configured communication device for this Generic Serial Device. The communication device can be changed in this field.
Tuning Type	For use with TV Channel Favorites. Drop down field used to differentiate between devices with different channel assignments. Available options are Antenna, Cable (Type 1), Cable (Type 2), Satellite (Type 1) and Satellite (Type 2). Note that these type names are arbitrary assignments, and the names are provided for reference only. A Satellite box will still perform as expected if the Tuning Type is set to Antenna. Default is Cable (Type 1).
Minimum Digits (0 Padding)	For use with TV Channel Favorites. Drop down to select the minimum number of digits the device will accept as a channel number. If this is set to “3” and a single digit is entered for the TV Channel Favorite, the system will “Pad” the command by adding two “0” characters at the beginning of the IR stream. Default is “0”
Pre-Tune Command	For use with TV Channel Favorites. Use this drop down to select a command to send before Direct Tuning. Default is < NONE >
Post-Tune Command	For use with TV Channel Favorites. Use this drop down to select a command to send after Direct Tuning. Default is < NONE >
Delay Between Commands	For use with TV Channel Favorites. Set this value to the desired interval between Direct Tuning commands. Default is 250 msec.

Serial Code Properties

Field	Description
Name	Editable field used to name a Serial Code. Typically the name will reference the command being sent.
System #	Unique, read-only number assigned by the **g!** software for internal use.
Universal Function	Used for mapping the code to buttons in an interface.
ASCII	Editable field for ASCII code strings. ASCII code is typically human readable numbers and text. ASCII entry in this area will automatically be represented in the Hexadecimal field. Note the structure of some serial strings may require some of the string to be entered in as ASCII, some as Hex.
HEX	Editable field for Hexadecimal code strings. Hexadecimal represents the numbers 0-15, with A=10, B=11, and so on. Hexadecimal entry in this area will automatically be represented in the ASCII field. Note the structure of some serial strings may require some of the string to be entered in as ASCII, some as Hex.
Terminator	Select the terminator to append to the end of the command when this command is sent.

IR Sender (IR Output)

Field	Description
Name	Editable field used to name a IR Output. Typically the name will reference the number of the output.
System #	Unique, read-only number assigned by the **g!** software for internal use.
Device Type	Read-only field displaying the device type or ELAN driver used.
Communication Device	Displays currently configured communication device for this IR Output. The communication device can be changed in this field.
IR Output or Module:Device	Displays the current settings for the output number, or the module and output device number, depending on the type of IR Output being used. These fields may or may not be editable.

IR Receiver

Field	Description
Name	Editable field used to name an IR Receiver. Typically the name will reference the type of device and/or location of the IR Receiver.
System #	Unique, read-only number assigned by the **g!** software for internal use.
Device Type	Read-only field displaying the device type or ELAN driver used.
Communication Device	Displays currently configured communication device for this IR Receiver. The communication device may be able to be changed in this field.
Settings	If applicable, choose the desired settings for the device, such as enable power for the IR Receiver.

IR Devices

An IR Device includes all of the IR codes that are required for control of the device. The IR code set that is added in the Input/Output tab is used as a code database by the rest of the system.

IR controlled sources in the **g!** software require an IR Device and a customizable interface. IR controlled displays in the **g!** software require an IR Device and a customizable Generic Display.

IR Devices may also be used to control unsupported zone controllers or non-AV equipment, though this is typically not recommended.

Field	Description
Name	Sets the name of the device. The name can be changed to reflect the devices location or for enumeration, for example “Satellite 1” or “Master Bedroom Cable Box”
System #	Unique, read-only number assigned by the **g!** software for internal use.
Default Sender	Drop down field used to assign the physical IR output attached to the device.
RC5 Codeset	Field used to turn IR Toggle bits on or off. Default value is No.
Decode IR from this device	Set this to “Yes” if there is an IR Receiver in a zone and the system should watch for incoming codes from this device for triggering event maps or universal functions. Default is No.
Tuning Type	For use with TV Channel Favorites. Drop down field used to differentiate between devices with different channel assignments. Available options are Antenna, Cable (Type 1), Cable (Type 2), Satellite (Type 1) and Satellite (Type 2). Note that these type names are arbitrary assignments, and the names are provided for reference only. A Satellite box will still perform as expected if the Tuning Type is set to Antenna. Default is Cable (Type 1).
Minimum Digits (0 Padding)	For use with TV Channel Favorites. Drop down to select the minimum number of digits the device will accept as a channel number. If this is set to “3” and a single digit is entered for the TV Channel Favorite, the system will “Pad” the command by adding two “0” characters at the beginning of the IR stream. Default is “0”
Pre-Tune Command	For use with TV Channel Favorites. Use this drop down to select a command to send before Direct Tuning. Default is < NONE >
Post-Tune Command	For use with TV Channel Favorites. Use this drop down to select a command to send after Direct Tuning. Default is < NONE >
Delay Between Commands	For use with TV Channel Favorites. Set this value to the desired interval between Direct Tuning commands. Default is 250 msec.

IR Codes

Field	Description
Name	Sets the name of the IR Code.
System #	Unique, read-only number assigned by the **g!** software for internal use.
Carrier	Read-Only field which displays the frequency of the IR Code
Repeat	Drop down selecting the number of times the code is repeated for a single button press. In many cases, this should be changed to 1. All of the Repeat Counts for a device can be changed by right-clicking the IR device and selecting Set Repeat Count for All Codes…. Default value is 4.
Universal Function	Used for mapping the code to buttons in an interface.

Numeric Trigger

Field	Description
Name	Editable field used to name a Numeric Trigger. Typically the name will represent the data value being monitored.
System #	Unique, read-only number assigned by the **g!** software for internal use.
Numeric Value	Displays the currently selected source for the numeric value, and allows the source to be changed.
Trigger Type	Set the type of trigger to use, such as Trigger if Greater Than/Less Than, Equal, Between, or Not Between.
Trigger when equals	One or two editable fields, depending on the Trigger Type selection. Enter the actual numeric data you wish to use as a trigger as appropriate.

Graph Object

Field	Description
Name	Editable field used to name an IR Receiver. Typically the name will reference the type of device and/or location of the IR Receiver.
System #	Unique, read-only number assigned by the **g!** software for internal use.
Add Input/Add State (button)	Use these buttons to add Inputs and States to monitor and graph. Click the appropriate button to name, choose color, and to select an an Input; such a thermostat sensor, or State; such as a light switch
Edit Input (button)	Highlight the desired input or state, and then click this button to change the settings such as name or color.
Remove State (button)	Highlight the desired input or state, and then click this button to remove that input or state.

Backup Object

Field	Description
Name	Editable field used to name the backup.
System #	Unique, read-only number assigned by the **g!** software for internal use.
Source Path	Enter the system path (file or folder location) of the data you desire to copy.
Target Path	Enter the system path (file or folder location) to copy the data to.

Client HomeLogic Systems

Advanced feature. Contact technical support for details.

UPS

Power Supply

Communication Device

Area to define communication between the system controller and the various Media Devices. The fields associated with each Communication Device depend on the Type of connection.

Add New Communication Device:

Field	Description
Device Name	Reference name for the communication device. The name should be descriptive so that this specific device can be identified in the Configurator and for future reference.
Type	The type of connection, such as serial port or Ethernet.
Device	This field will populate only if needed, depending on the selected type, to provide further definition of the communication device.
Communication Type	The protocol of the communication. See the device's *Integration Note* for the proper selection.

Communication Device (not all Fields are applicable for all Device Types):

Field	Description
Name	The name of the communication device. The name should be descriptive for future reference.
System #	Unique read-only number assigned by the **g!** controller for internal use.
Device Type	Read-only field that will populate depending on the selected type and communication type.
System Name	The System Name of the Remote System
Login Password	The Login Password for the Remote System
Location	Optional field used to track equipment location based on configuration on the Floor Plan tab. This field is for reference only.
Enable Sharing	Advanced feature, contact Technical Support for more information
Sharing Port	Advanced feature, contact Technical Support for more information
COM Port	The physical COM port to which the device is connected
IP Address	The IP Address of the device
Port	The Port to use associated with the above IP Address
Protocol	The protocol of the communication. See the *Integration Note* for the specific device for more information.
Baud Rate	The speed, measured in bits per second, at which the device communicates.
Flow Control	Also called handshake. The processes used to regulate the rate at which information is transferred from one device to another.
Parity	An error detection setting.

***Communication Device**, continued*

Field	Description
Data Bits	The number of bits containing data in a packet.
Stop Bits	A bit that signals the end of a character in a data stream.
Configuration	Certain Device Types require additional configuration detail (ie, for the MOXA 5610/5410 Port, the port number being used for this Communication Device is displayed in this field).

UPS Power Supply Properties

Field	Description
Name	User-defined name for the device.
System #	Unique, read-only number assigned by the **g!** software for internal use.
Device Type	Displays the ELAN driver or device type being used.
Communication Device	Displays currently configured communication device for this UPS. The communication device can be changed in this field.

UPS Log

Field	Description
Start Date/Time	Start date of displayed log entries.
End Date/Time	End date of displayed log entries.
Get Records	Search for events during the specified time period (if they don't display automatically).
Get Previous	Click this button to change the date of the log entries shown to the prior cycle of entries. This will preserve the time range (ex 9/4-9/5 is a 24 hour period, clicking Get Previous will show entries for the previous 24 hour period)
Get Next	Click this button to change the date of the log entries shown to the following cycle of entries. This will preserve the time range (ex 9/4-9/5 is a 24 hour period, clicking Get Next will show entries for the next 24 hour period)
Date/Time	The date/time of the logged event.
Active	Indicates if the Battery backup was active at this time.
Check Bat	Indicates UPS reports a battery problem.
VAC In	If available, the amount of AC power incoming.
VAC Out	If available, the amount of AC power outgoing.
VDC Bat	If available, the amount of DC battery power.
DC Amps	If available, the amount of DC Amperage in the battery.
Temp	If available, the UPS temperature sensor value.

Event Mapper

Event Map System

Global Options

Field	Description
Event Maps Enabled	Set to “Yes” or “No” to enable or disable event maps. Useful for troubleshooting.

Event Maps

Field	Description
Name	Editable field used to name an event map. This name should be descriptive of the function of the event map. As the event map list is in alphabetical order, it is a good idea to group similar event maps by name, for example, begin any security-related event map names with “SECURITY:”
System #	Unique, read-only number assigned by the **g!** software for internal use.
Events	An action which triggers an Event Map. If multiple events are added, the occurrence of ANY event in the list will trigger the Event Map.
Sub-System	The specific component of the system which is generating the event, i.e. a button on a page or a security zone
Type	The action the sub-system component has taken, i.e. a button press or a security zone fault.
Family	The family to which the sub-system belongs, i.e. General System or Security System
Sys#	Unique, read-only number assigned by the **g!** software for internal use.
Conditions	A state that must be met for the Event Map to occur. If multiple conditions are in place, ALL conditions must be met for the commands to occur.
Sub-System	The specific component of the system which is being monitored for the condition, i.e. a System Mode or a security zone.
Type	The state the sub-system component is in, i.e. Home Mode or a security zone fault.
Family	The family to which the sub-system belongs, i.e. General System or Security System
Sys#	Unique, read-only number assigned by the **g!** software for internal use.
State	Can be true or false

***Event Maps**, continued*

Field	Description
Commands	Commands issued by the **g!** software if ALL listed conditions are met when ANY listed event occurs.
Sub-System	The specific component of the system which is being directed to change states, i.e. a Lighting Dimmer or an Email Message.
Type	The action the sub-system component is being directed to perform, i.e Go to 100% or Send an email message
Family	The family to which the sub-system belongs, i.e. Lighting or Messaging.
Sys#	Unique, read-only number assigned by the **g!** software for internal use.
Add (button)	Used to add Events, Conditions, or Commands to an event map
Remove (button)	Used to remove Events, Conditions, or Commands from an event map
Move UP (button)	Moves a command up in the list. Commands are processed sequentially.
Move Down (button)	Moves a command down in the list. Commands are processed sequentially.

Run-Once System Timers

Field	Description
Name	Editable field used to name a run-once system timer. A run-once timer must be started manually each time it is run.
System #	Unique, read-only number assigned by the **g!** software for internal use.
Base Time (Seconds)	Optional field used to calculate the pre-populated start times when beginning the timer from an event map.

Repeating System Timers

Field	Description
Name	Editable field used to name a repeating system timer. When a repeating system timer expires, it starts itself again, counting down from the Event Time setting.
System #	Unique, read-only number assigned by the **g!** software for internal use.
Event Time (Seconds)	The duration from which the repeating system timer counts back to zero.

Timed Events

Field	Description
Name	Editable field used to name a timed event.
System #	Unique, read-only number assigned by the **g!** software for internal use.
Time Type	Drop down field used to select the type of event. Available options are Relative Sunrise, Relative Sunset, or Clock.
Daily Start Time	Only active when Time Type is set to “Clock”. Used to set the start time for the event.
Daily Start Time	Only active when Time Type is set to “Relative Sunrise” or “Relative Sunset”. This field can be set in ten minute increments to have the event occur from three hours before to three hours after sunrise or sunset.
Days to Execute	Each day of the week is represented by a button. The event only occurs on selected days. All days are selected by default.

FTP Folder Triggers

Field	Description
Name	Editable field used to name an FTP Folder Trigger. FTP Folder Triggers are used to monitor a folder on the network for new files.
System #	Unique, read-only number assigned by the **g!** software for internal use.
Path	The path to the folder to be monitored.

Media Content

Audio Library Scan Options

Field	Description
Automatically Scan Shares	Configure the frequency of automatic music share scans.
Scan Folders Now (button)	Initiate a scan of all music shares at this time.

Audio Share Folders

Field	Description
Path – Music Files	The local or network path of the share.
Path – iTunes XML File	The network path to the iTunes Music Library .XML file.
System #	Read-only number assigned by the **g!** software for internal use. Each system has a unique number.
Item Count	Number of valid files detected during last scan.

Picture Library Scan Options

Field	Description
Automatically Scan Shares	Configure the frequency of automatic picture share scans.
Scan Folders Now (button)	Initiate a scan of all picture shares at this time.

Picture Share Folders

Field	Description
Path	The local or network path of the share.
System #	Read-only number assigned by the **g!** software for internal use. Each system has a unique number.
Item Count	Number of valid files detected during last scan.

Web Pictures

Field	Description
Name	User assigned name used for reference when creating and using this content.
System #	Read-only number assigned by the **g!** software for internal use. Each system has a unique number.
Refresh Time	Adjust the frequency the web picture is updated or refreshed.
Server Name	Read-only field displaying the source web server for the content. This is automatically derived by the **g!** software from the URL.
File Name	Read-only field displaying the file name for the content. This is automatically derived by the **g!** software from the URL.
URL	Enter a full URL (http link) to the desired web picture. Note this link should be to an image file, and end with an extension like ".jpg" or ".gif".

Web Site Groups

Field	Description
Name	User assigned name usually used to describe the type of web sites contained in the group. For example, a group of radar and satellite weather links might be contained in a group called "weather".
System #	Read-only number assigned by the **g!** software for internal use. Each system has a unique number.

Web Site

Field	Description
Name	User assigned name for the web site. Typically this will be descriptive of the site, or the content. For example, a weather radar image might be called "Regional Radar".
System #	Read-only number assigned by the **g!** software for internal use. Each system has a unique number.
URL	Enter a full URL (http link) to the desired web site.
Preview Picture	Drop-down field allows selection of a previously added Web Picture to use as the preview image in the Viewer when using a Web Site Picture Link control. A Web Site Picture Link control will typically be added to a custom Home Page or tab and will display an image in the Viewer. When the image is tapped, the web site will launch.

Internet Radio Favorite Genres

Radio Station

Field	Description
Name	The station name, which appears in the station list of the Viewer.
Server	The Internet address for the radio station server.
Command	The command used to locate the appropriate audio stream.

TV Channels

Field	Description
Name	User defined field, typically containing the name of the TV channel.
System #	Read-only number assigned by the **g!** software for internal use. Each system has a unique number.
Antenna Channel	Channel number for IR devices using Antenna as their default tuning type.
Cable Chanel (Type 1)	Channel number for IR devices using Cable (Type 1) as their default tuning type.
Cable Chanel (Type 2)	Channel number for IR devices using Cable (Type 2) as their default tuning type.
Satellite Channel (Type 1)	Channel number for IR devices using Satellite (Type 1) as their default tuning type.
Satellite Channel (Type 2)	Channel number for IR devices using Satellite (Type 2) as their default tuning type.
Image/ Select Icon (button)	Preview Image of currently selected icon. Click the Select Icon button to choose or upload new icons.

TV Channel Groups

Field	Description
Name	User defined name of a group of TV Channels displayed in Viewers.
System #	Read-only number assigned by the **g!** software for internal use. Each system has a unique number.
Available Channels Column	TV Channels not currently configured to show in this group. These channels may be added if desired.
Selected Channels Column	TV Channels that will be displayed when this group is selected in the Viewer.
Add Channel>> (button)	Used to add channels from the Available Channels column to the Selected Channels column. To use, first select a TV Channel from the Available Columns list.
<< Remove Channel (button)	Used to remove channels from the Selected Channels column to the Available Channels column. To use, first select a TV Channel from the Selected Columns list.
Move Up (button)	Used to re-order the list of Selected channels. To use, highlight the desired channel, then click Move Up to move the channel up the list.
Move Down (button)	Used to re-order the list of Selected channels. To use, highlight the desired channel, then click Move Down to move the channel down the list.