

MX HomePro™

Programming Guide



Advanced Menu Home Overview

You are programming: URC Home

- ⊕ Add a remote to the room ?
- ☰ Add Entertainment devices to the system ?
- 🔊 Setup volume control for devices ?
- ⏻ Setup the Power Off button ?
- 📺 Setup a simple activity for a device ?

More Programming Choices

- ⊕ Add an additional controller ?
- ⌚ Add advanced devices to the system ?
- 🏠 Program a different room ?



Table of Contents:

Welcome to the MX HomePro Editor.....	1
Account Registration.....	1
Entering the URC Programming Key.....	2
Adding the System to an Existing Account.....	3
Creating a User Account.....	3
Set System Information.....	5
Support Resources.....	6
Help Tab.....	6
Programming Menu.....	7
More Programming Options.....	8
Advanced Menu.....	9
Home Overview Display.....	10
The Download.....	11
Dealer Control Panel.....	11
Programming a System.....	12
Add a remote to the room.....	12
Adding Entertainment Devices.....	13
Volume Control.....	20
Power Off Button Programming.....	22
Setting Up Simple Activities.....	25
Adding an Additional Hub.....	28
Adding Advanced Devices.....	29
Programming Additional Rooms.....	33
Using the Home Overview Display.....	35
Home Overview Main Screen.....	35
Downloading to the System.....	41

Advanced Programming.....	42
Automating Activities.....	42
Automated Activity Editing Screen.....	46
Editing Previously Created Activities.....	55
Adding Additional Rooms.....	57
Editing the Entertainment Menu.....	59
Editing the Device's Layout.....	62
Device Layout Editing Screen.....	66
Learning Codes from an IR Remote.....	76

Welcome to the MX HomePro Editor

This editor is the cloud-based software used to program the MX HomePro system. Before reading any further, please ensure that the URC Programming Key has been obtained. For guidance on obtaining a URC Programming Key, refer to the MX HomePro Installation Manual.

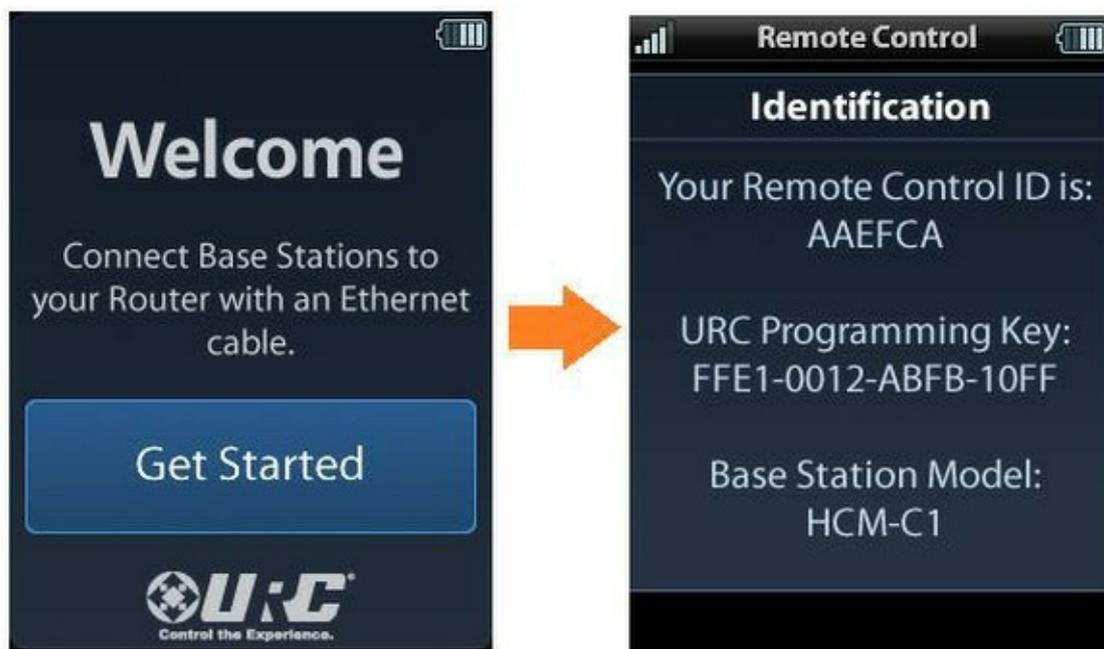
Use this editor to program all of the audio/video equipment, create automated activities (macros), automation events, and much more.

This guide is design to teach all the parts of the MX HomePro Editor as well as the programming steps to get a system running.

Account Registration

Before programming the system, it must be first registered. In order to register a system, the following items are **required**:

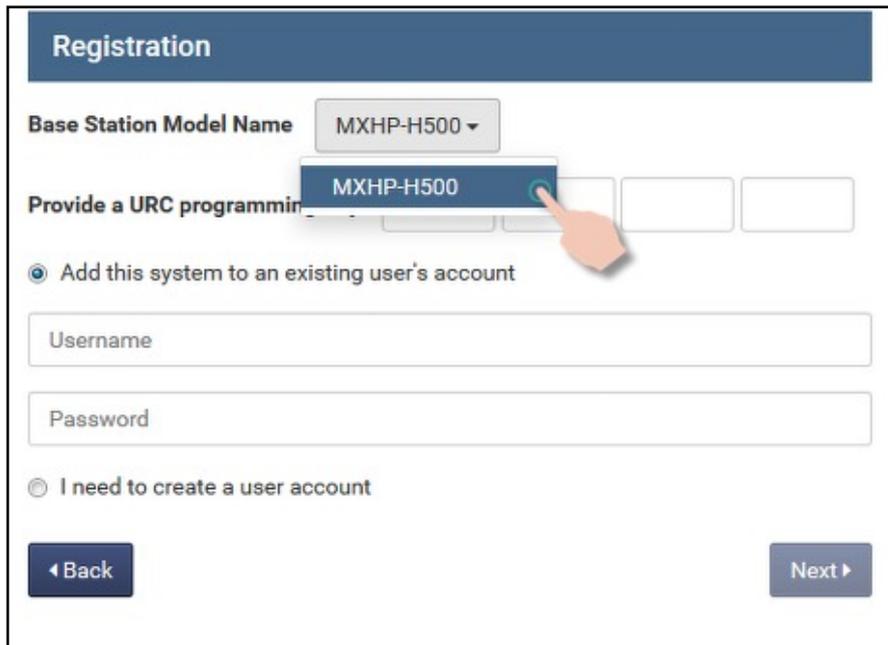
- MX HomePro Hub (MXHP-H500)
- MX HomePro Remote Control **OR** Entertainment mobile app (iOS or Android)
- Local Area Network (LAN) with Wi-Fi
- Internet Access
- URC Programming Key (refer to MX HomePro Installation Manual)



Entering the URC Programming Key

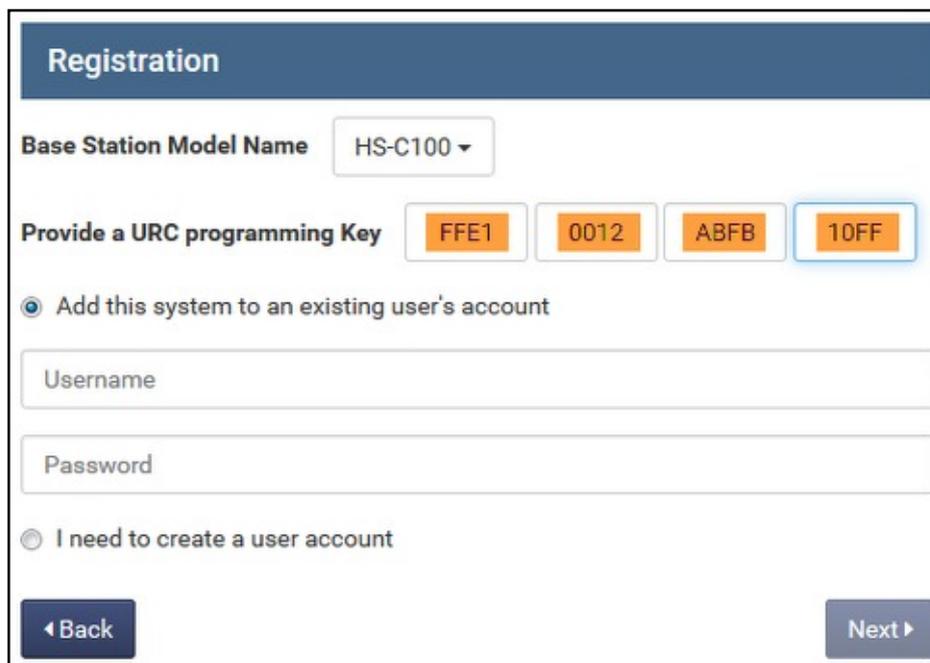
Follow these steps to begin the registration process:

1. Select the **MXHP-H500** from the **Base Station Model Name** drop down menu



The screenshot shows a registration form titled "Registration". The "Base Station Model Name" dropdown menu is open, displaying "MXHP-H500" as the selected option. A hand icon points to the selected option. Below the dropdown, there are three input fields for "Provide a URC programming key". The first field contains "MXHP-H500". There are two radio buttons: the first is selected and labeled "Add this system to an existing user's account", and the second is labeled "I need to create a user account". Below these are input fields for "Username" and "Password". At the bottom, there are "Back" and "Next" buttons.

2. Enter the **programming key** into the **Provide a URC programming key** field

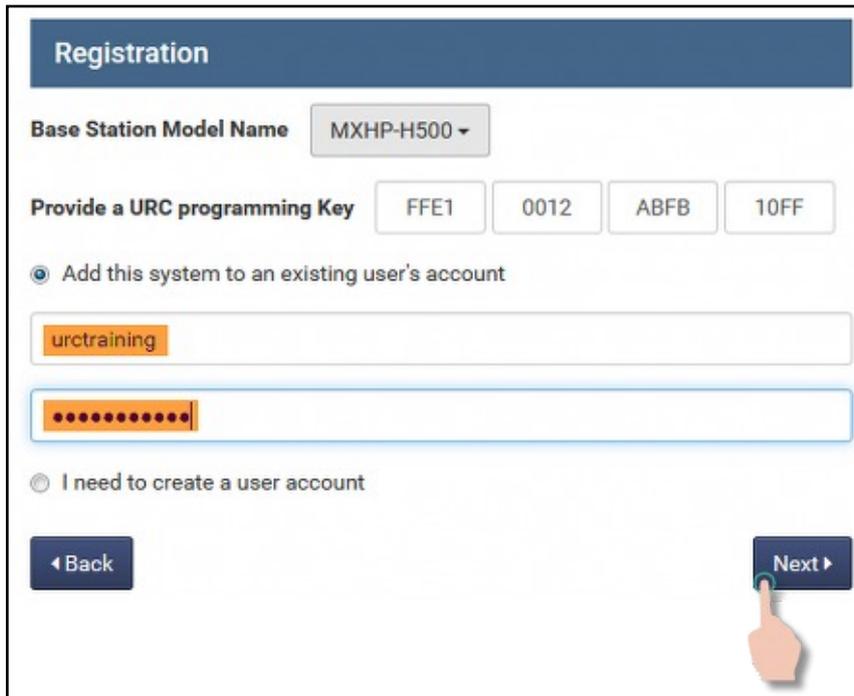


The screenshot shows the same registration form. The "Base Station Model Name" dropdown menu is now closed and shows "HS-C100". The "Provide a URC programming Key" field has four buttons: "FFE1", "0012", "ABFB", and "10FF". The "10FF" button is highlighted with a blue border. The radio buttons and input fields are the same as in the previous screenshot.

After selecting the hub and entering the programming key, the editor provides two (2) options. The system currently being registered can be added to an *existing* user account **OR** can be added to a completely *new* account.

Adding the System to an Existing User Account

Enter the user's account information in the field for **username** and **password**. If the system is being installed for someone else, then the log in credentials for their account must be obtained.



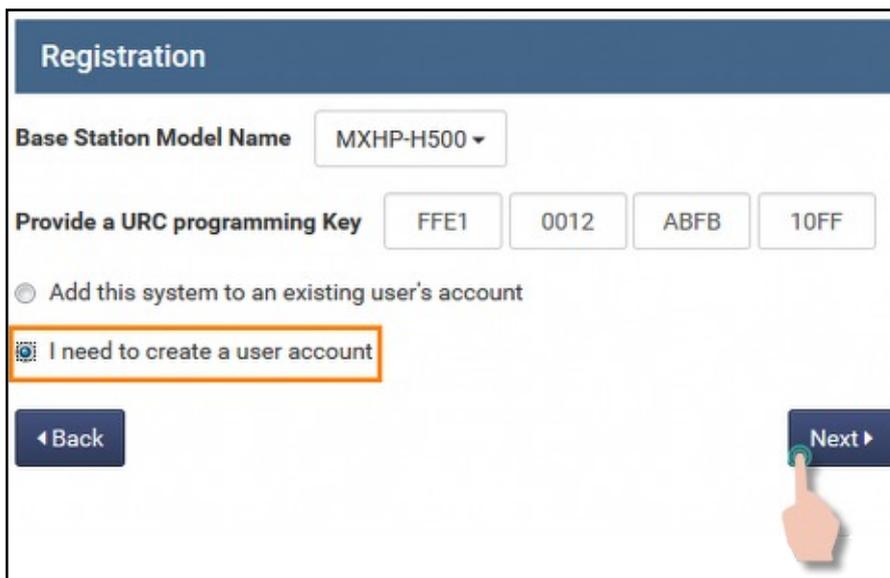
The image shows a registration form titled "Registration". It includes a dropdown menu for "Base Station Model Name" set to "MXHP-H500". Below it are four buttons for "Provide a URC programming Key": "FFE1", "0012", "ABFB", and "10FF". There are two radio button options: "Add this system to an existing user's account" (which is selected) and "I need to create a user account". Under the first option, there are two input fields: one containing the text "urctraining" and another with masked characters (dots). At the bottom, there are "Back" and "Next" buttons, with a hand icon pointing to the "Next" button.

Select Next and the account information is verified. The following screen allows the system information to be entered. Skip ahead to the **Set System Information** section or continue reading to learn how to create a new user account.

Creating a User Account

To create a new user account, follow these steps:

1. Select the **I need to create a user account** option and press **Next**



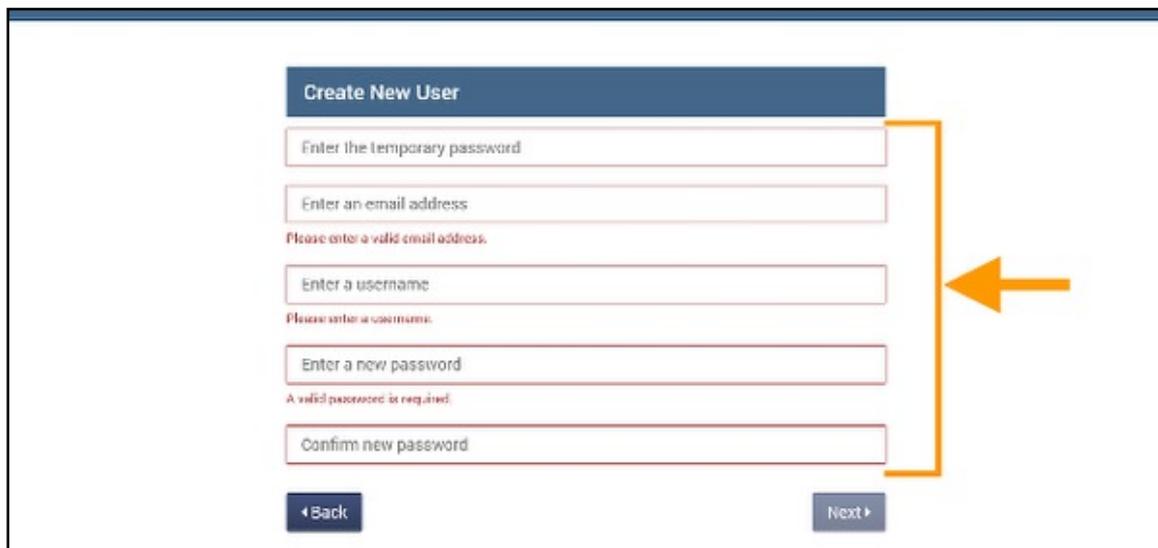
The image shows the same registration form as above, but with the radio button for "I need to create a user account" selected and highlighted with an orange box. The "urctraining" text and the masked password field are no longer visible. A hand icon is pointing to the "Next" button.

2. Enter the **email address** for the account and select **Next**



The MX HomePro server sends an email containing a temporary password, which is used to register continue the process of creating a new user account.

3. Use that **temporary password** in the MX HomePro Editor, also enter in the following:



- **Temporary Password**

Found in the email sent by the URC server.

- **User's Email Address**

Enter the email address of the person that uses the system after it has been installed.

- **Username**

Create a username that is used whenever the user needs to log into the system, it must be unique and consist of four (4) to eighteen (18) characters containing only alphanumeric characters, periods, and/or underscores.

- **New Password**

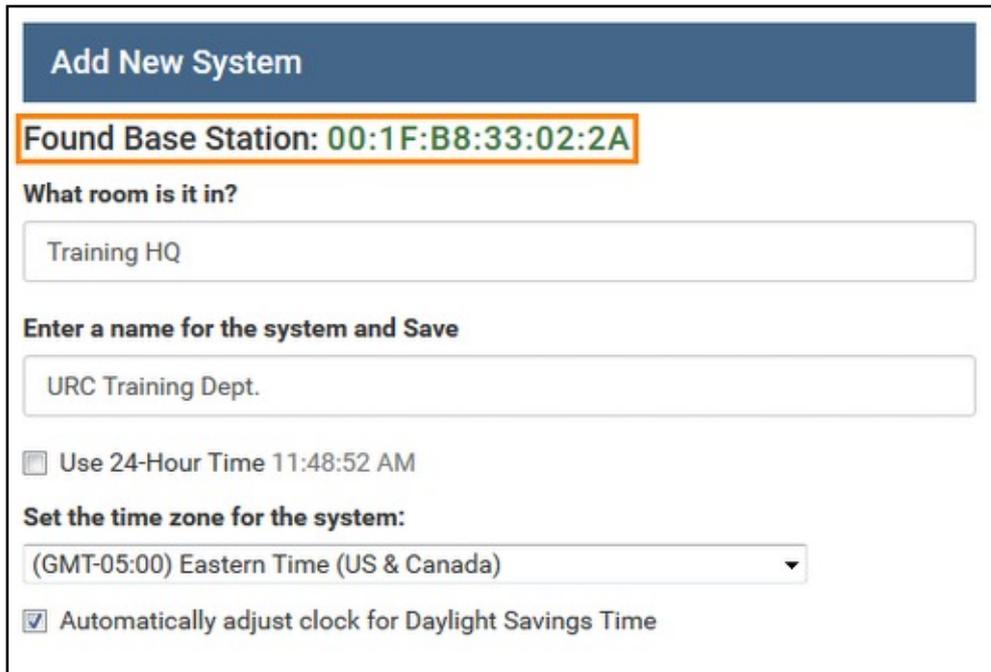
Create a password that is to be used along with the username to log into the system. It must be at least eight (8) characters long and include at least one (1) letter and number. Make sure to give the password to the user, they can change it later.

- **Confirm Password**

Enter the exact same password.

Set System Information

The editor automatically attempts to discover the hub (MXHP-H500) that was used to generate the URC Programming Key. Once it finds the unit on the network, a new page opens displaying the MAC address of the hub.



Add New System

Found Base Station: 00:1F:B8:33:02:2A

What room is it in?
Training HQ

Enter a name for the system and Save
URC Training Dept.

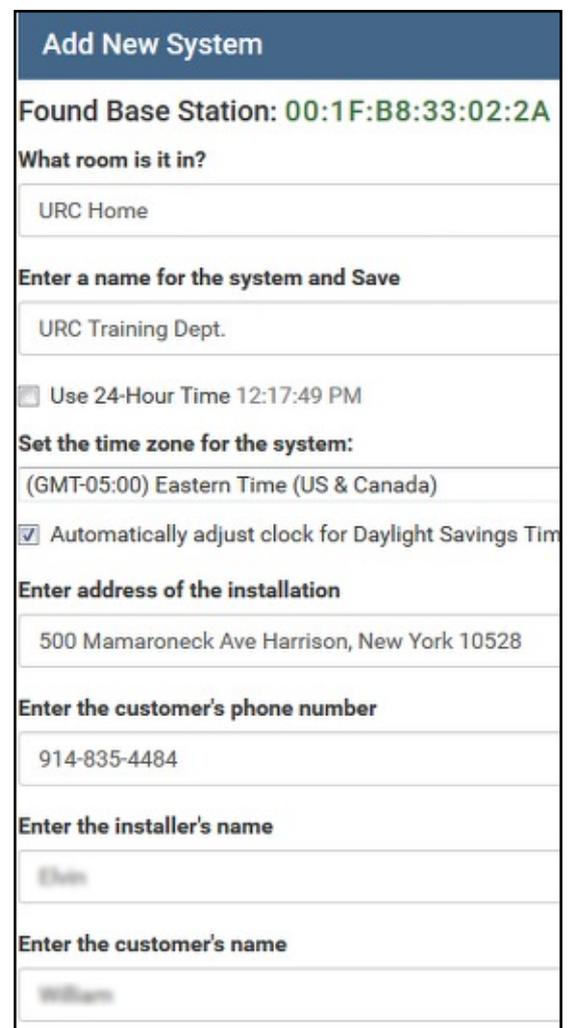
Use 24-Hour Time 11:48:52 AM

Set the time zone for the system:
(GMT-05:00) Eastern Time (US & Canada)

Automatically adjust clock for Daylight Savings Time

Verify that the MAC address displayed in the editor matches the one on the underside of the hub. Enter the rest of the information as follows:

- **What Room is it in?**
Enter the name of the room where the devices controlled by this hub are located. This name also appears at the top of the user interface assigned to control the room.
- **Enter a name for the system and Save**
Enter a name for the home system
- **Set Time Zone for the system**
Select the time zone from the drop down menu. **Check the box** to left to enable Automatically adjust clock for Daylight Saving Time.
- **Enter address of the installation**
Enter the address for the location of the installation site or customer's home.
- **Enter the customer's phone number**
Enter the phone number that is used to reach the customer.
- **Enter the installer's name**
Enter the name of the installer programming the MX-HomePro system
- **Enter the customer's name**
Enter the name of the customer who owns the system.



Add New System

Found Base Station: 00:1F:B8:33:02:2A

What room is it in?
URC Home

Enter a name for the system and Save
URC Training Dept.

Use 24-Hour Time 12:17:49 PM

Set the time zone for the system:
(GMT-05:00) Eastern Time (US & Canada)

Automatically adjust clock for Daylight Savings Time

Enter address of the installation
500 Mamaroneck Ave Harrison, New York 10528

Enter the customer's phone number
914-835-4484

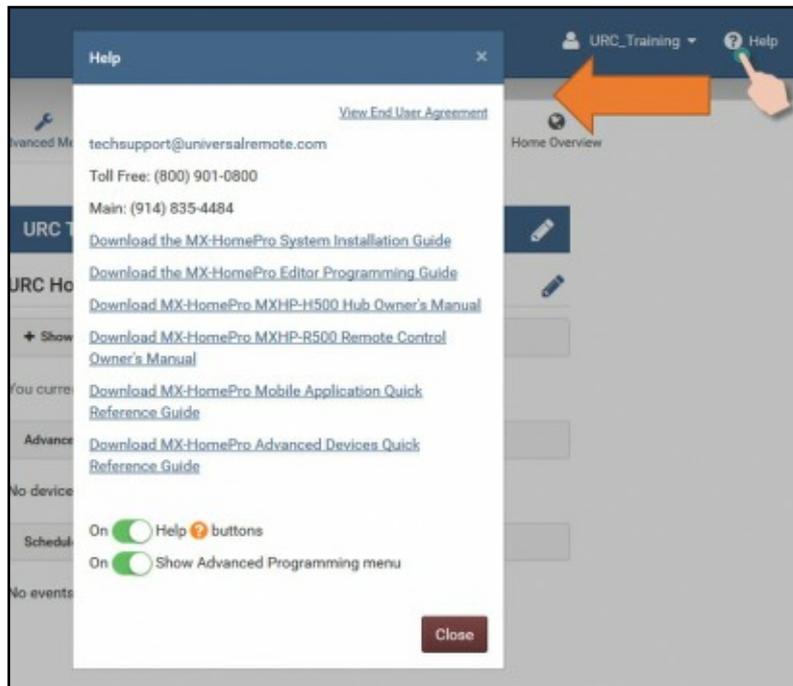
Enter the installer's name
Ellen

Enter the customer's name
William

Support Resources

Embedded within the MX HomePro Editor are all the training resources to aide in programming a system, all found within the Help button.

Help Tab



- **Contact Information**

For additional help beyond what is provided in this menu, contact URC Technical Support via email or phone.

- **System Installation Guide**

This downloadable guide walks through the procedures for installing the MX HomePro equipment and getting it setup for programming. For information on retrieving a URC Programming Key, look here for more details.

- **Editor Programming Guide**

The current document being read, provides detailed explanations of the various elements involved in programming an MX HomePro system.

- **Owner's Manual**

These cover the essential features and operations of the hub and the remote control.

- **Mobile Application Quick Reference Guide**

This guide describes the features of the MX HomePro Mobile Application, available on iOS and Android devices.

- **Help System Buttons**

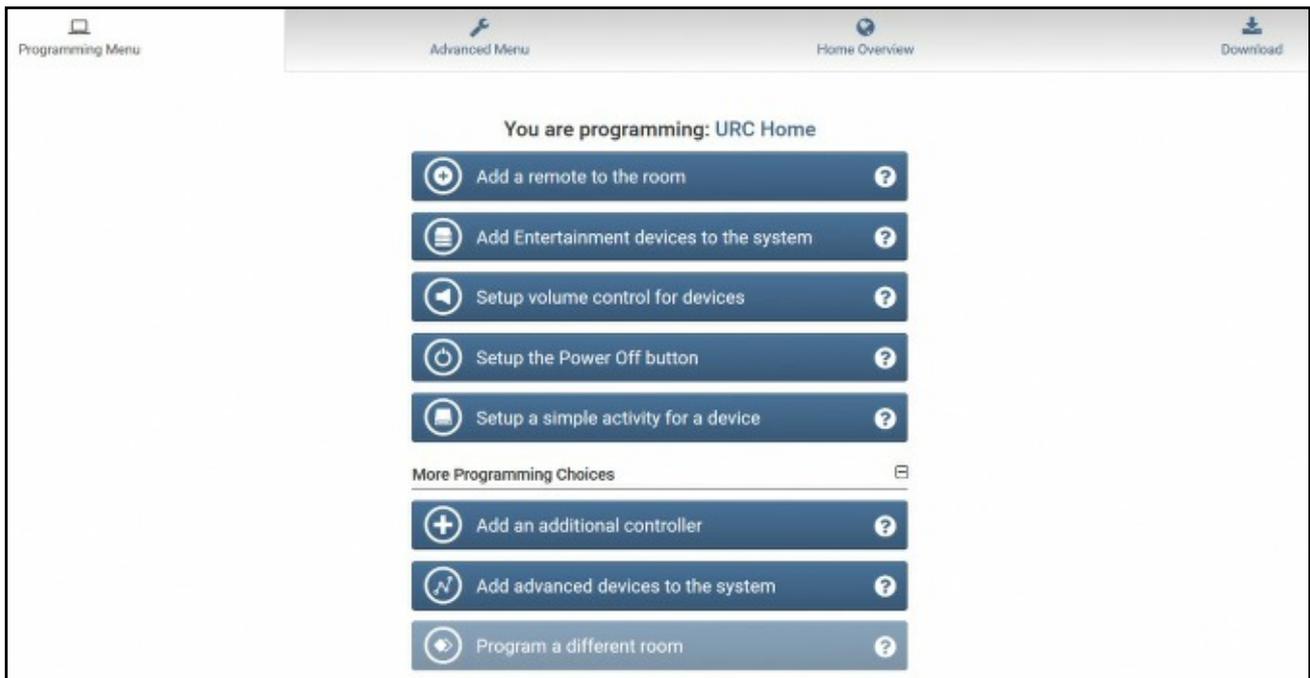
The Help button appears as a, "?", and can be enabled or disabled from this menu. This button is placed over various key areas throughout the software and can be selected to provide a brief explanation of the associated item.

- **Advanced Devices Quick Reference Guide**

Provides a quick reference to adding 3rd party advanced devices to the system.

Programming Menu

This menu has several available options which provide the primary programming functions for the system, defined below:



- **Add a remote to the room**

Identify and add a remote control (optional) to the room currently being programmed.

- **Add Entertainment device to the system**

Choose what is controlled by the *remote* OR *mobile app* by selecting from URC's ever expanding database of television, Blu-Ray players, audio/video receivers, and more.

- **Setup volume control for devices**

Volume control is simplified when buttons used to control a device, such as a cable box, can be set to operate another device instead such as a television.

- **Setup the Power Off button**

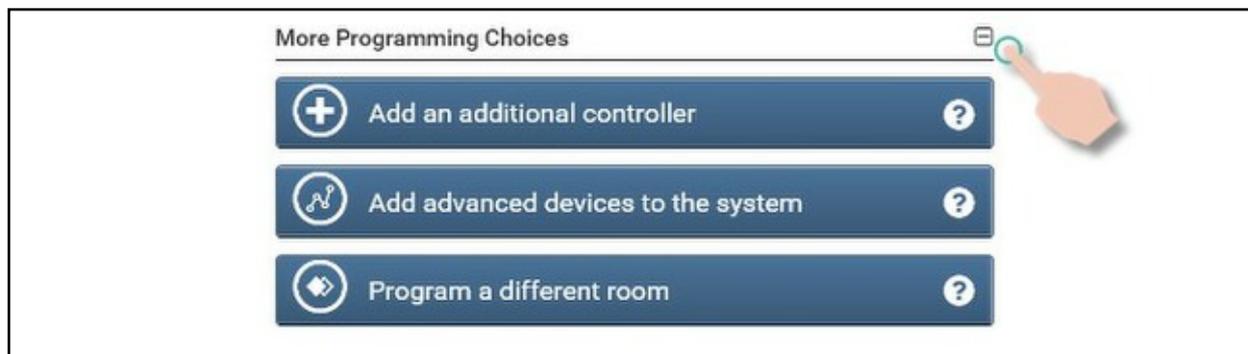
Choose which devices can be turned when the Off button is pressed.

- **Setup a simple activity for a device**

Program Simple Activities can be setup to make a system much easier to experience and enjoy such as setting watching a movie with the surround sound.

More Programming Options

Selecting the box at the right of **More Programming Choices**, expands the menu and reveals the following choices:



- **Add an additional controller**

Add another MXHP-500 hub to the current room for situations where more emitter ports are needed.

- **Add advanced devices to the system**

Add devices to the system that provides advanced control features such as lighting control that displays the dimmer level or streaming players that show information on the song currently playing.

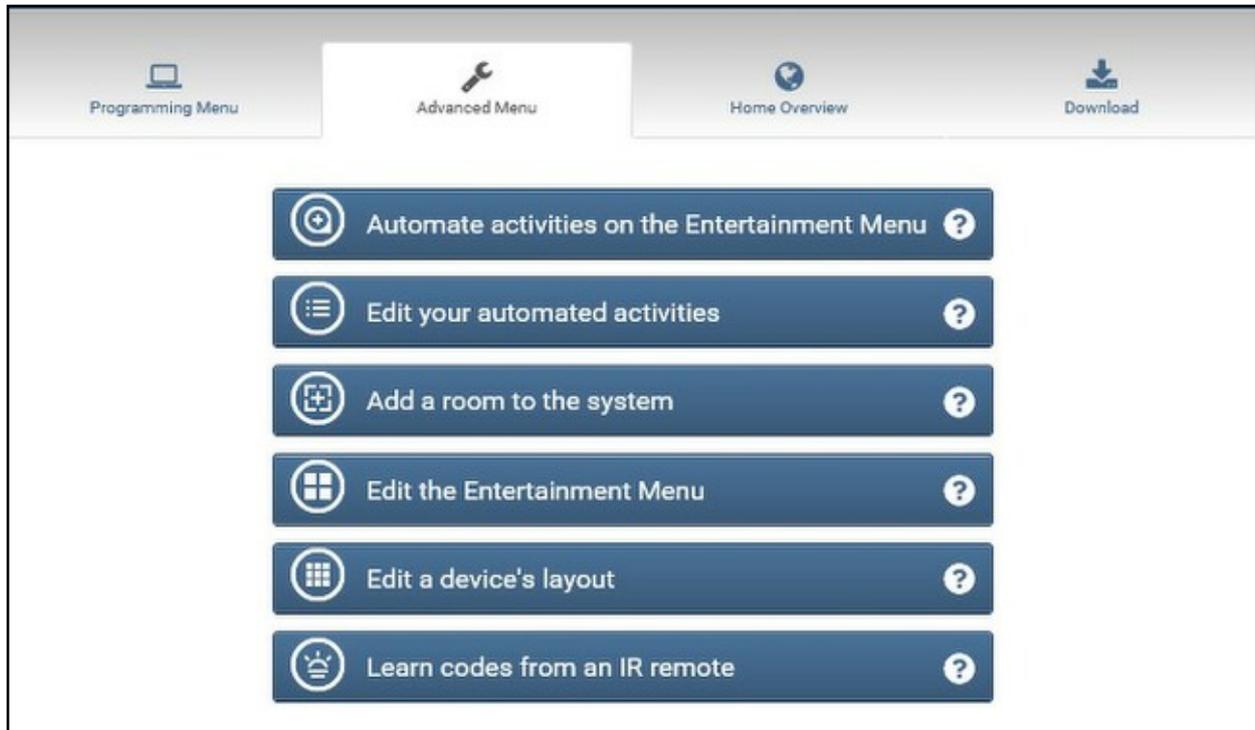
- **Program a different room**

MX HomePro supports up to five (5) rooms to a system, use this option to select another room for programming.

Advanced Menu

This menu houses additional options which can be utilized when programming more complex systems that require multiple controlled rooms or custom layouts.

The Advanced Menu is displayed the first time you view the editor, but can be hidden from the interface. To hide it, go to the Help menu and set the Show Advanced Programming Menu to Off.



- **Automate activities on the Entertainment Menu**

Program automated activities that send a series of control commands to the desired devices, providing a one button setup capability for even the most complicated systems.

- **Edit your automated activities**

Change any of the automated activities which have been programmed into the system.

- **Add a room to the system**

Add a room and a hub to the system to control additional rooms.

- **Edit the Entertainment Menu**

Change the appearance of the main page Entertainment menu so that buttons are in the order of preference, also edit the text to display as desired.

- **Edit device's layout**

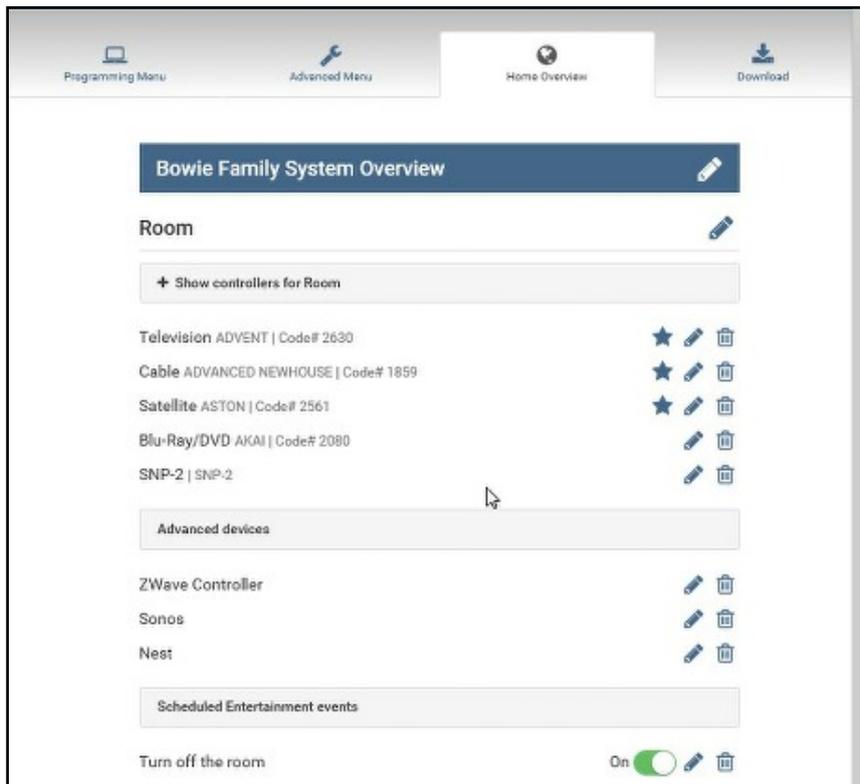
Change the way a controlled device looks on the user interface, this included the position and text labels of buttons on the screen.

- **Learn codes from an IR remote**

This allows the system to learn most infrared control codes one by one sending them from the original device remote control into the MXHP-H500's front panel.

Home Overview Display

The overall layout and content of the system can be quickly viewed by navigating to the Home Overview display. It provides a convenient location for accessing critical information about the system and allows for changes to the system name, room name, and more.



- **System Name**

The name given to the system when it was first registered is displayed at the top of the overview and can be changed.

- **Room Name**

Each room in the system is listed by name which may be edited.

- **Controllers**

View the hub(s) and remote control assigned to each room.

- **Devices**

Each device that is programmed for control in the system is listed by name, along with the brand, if known, favorite channel info, and permanent deletion of the device.

- **Advanced Devices**

Each advanced device that is programmed in the system is listed by name.

- **Advanced Device Options**

Options available for editing advanced devices vary by type and always include name and delete, but sometimes include information such as MAC address.

- **Scheduled Entertainment Events**

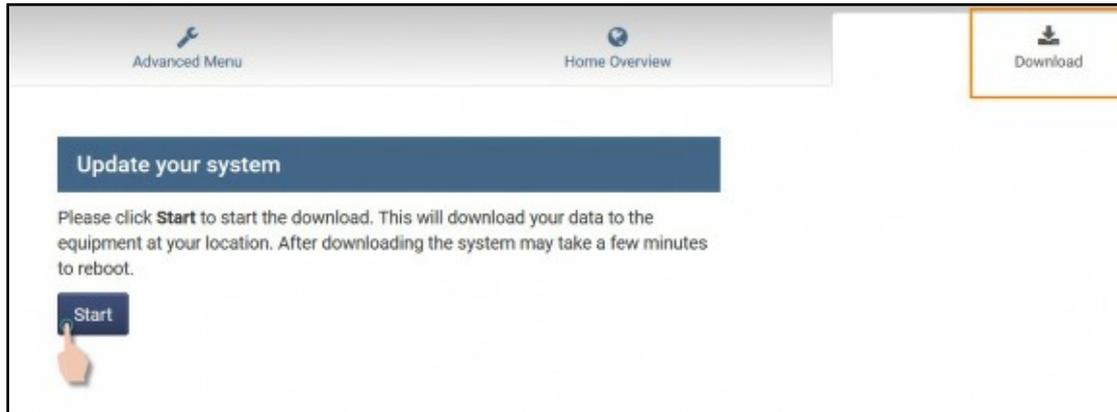
Each Scheduled Entertainment Event is listed under the room where it appears.

- **Scheduled Entertainment Event Options**

Each Scheduled Entertainment Event can be turned on, off, edited, or permanently deleted from the system

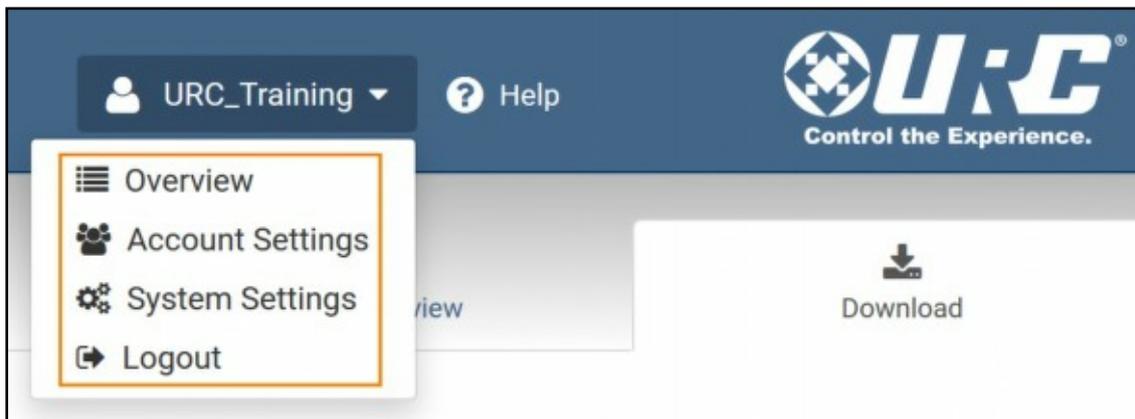
The Download

Selecting Download starts updating the system with all of the programming contained within the online editor. Selecting the Start button sends the programming data from the editor to the MXHP-H500 hub and the remote control.



Dealer Control Panel

This option is located at the top of the editor, it is accessed by selecting the username. This displays the User Control Panel menu, this menu contains the following options:



- **Overview**

Selecting Overview navigates back to the Home Overview Display.

- **Account Settings**

Username and associated email address are displayed, along with options to change the email address or password used to login to the editor.

- **System Settings**

Change the time zone and format settings for the system, replace a control hub, select a different system to program, or permanently delete one of you systems

- **Logout**

Select this once all programming has been completed.

Programming a System

Once the system has been registered, it is ready to begin programming. Start by selecting the Programming Menu.

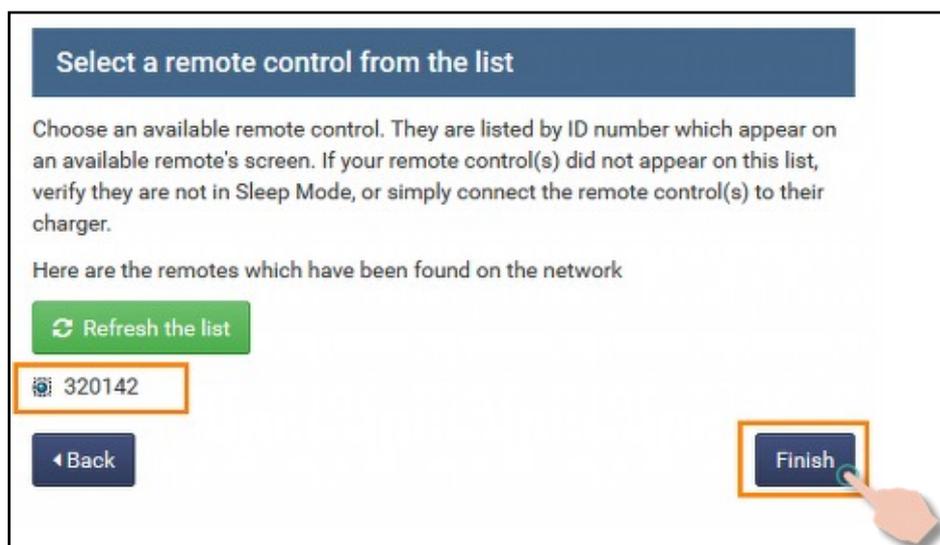
Add a remote to the room

The first step in programming is to add a remote to the room. This is an *optional* step, a system can be controlled fully from the mobile app. First make sure that the remote control being added is currently **powered on** and **connected to the same network as the hub** in the room.



Select an **available remote control** from the list of those discovered on the wireless network. If the device is not being displayed, make sure that it is connected to the same network as the hub, then select the Refresh button.

Each **remote** is listed by **ID**, use this to match up with the information displayed on the screen of the remote control in order to verify the correct unit.



Press the **Finish** button once the remote has been selected.

Adding Entertainment Devices

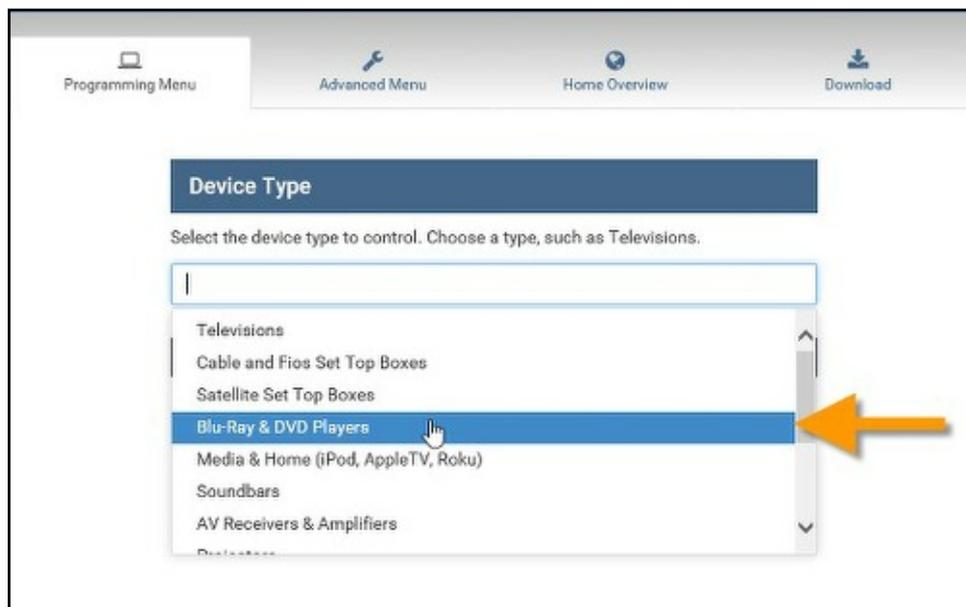
The next step in programming is to add the devices to control in the system.



These are referred to as Entertainment devices, just about any device that operates by an IR remote is compatible. Many devices controlled through the local network (LAN) are also possible to control.

Select **Add Entertainment devices to the system**:

1. Find the **Device Type** category that the device being programmed belongs in and select it, here are the device type categories that are available from within the editor:



- [Television](#): televisions, monitors, home theater projectors
- [Cable and FiOS Set Top Boxes](#): set top boxes for receiving television service
- [Satellite Set Top Boxes](#): set top boxes for receiving satellite television service
- [Blu-Ray & DVD Players](#): Blu-Ray and DVD players
- [Media & Home](#): network streaming media players and standalone players
- [Soundbars](#): surround soundbars, soundbars, and speaker bars
- [AV Receivers & Amplifiers](#): surround sound receivers, pre-amps, signal processors
- [Lights](#): home lighting control systems
- [Camera DVR](#): security and surveillance camera DVRs

- [DVR](#): standalone television DVRs
- [CD Players](#): CD players, CD burners, CD multi-disc changers
- [Matrix Switchers](#): video switchers, AV switchers, matrix switchers

2. After choosing a category, select **Next**

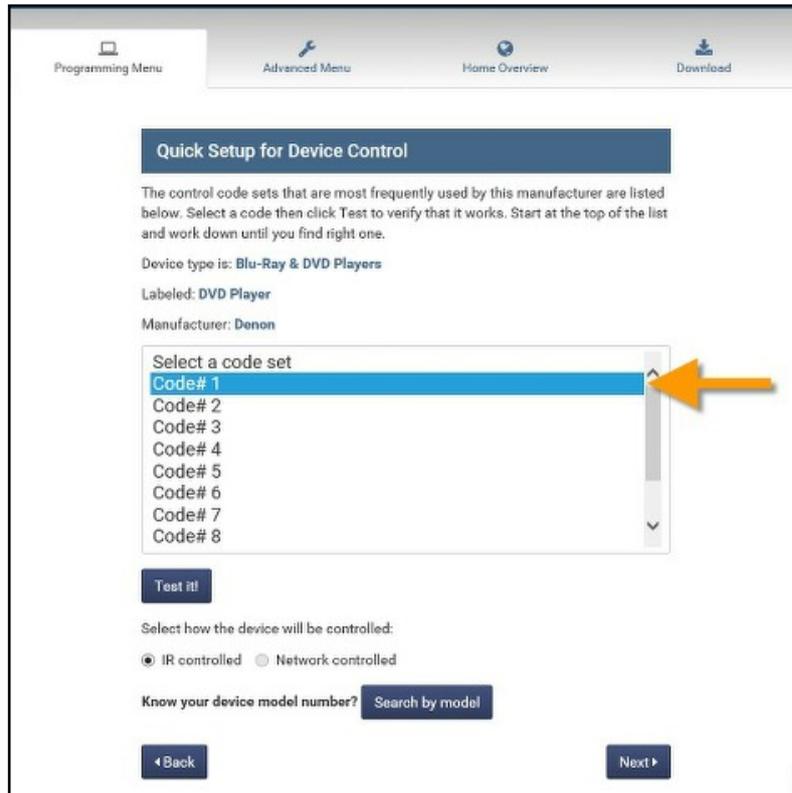
3. Enter a **name** for the device, this name appears on the user interface and is used for selecting the device

The default name of a device is the category type name, change as desired and select **Next** when complete

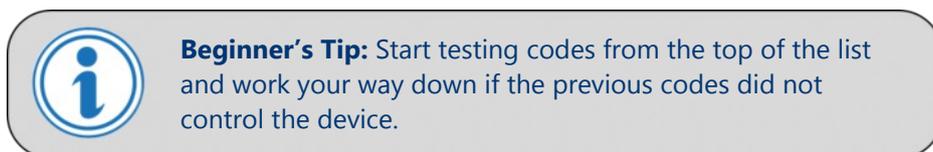
4. Select the device's **manufacturer** or **brand name**

When the field is selected, either scroll down the list and select the brand needed OR begin entering text to search the list. Select **Next** after the brand has been selected

5. The **Quick Setup for Device Control** window opens for the device being programmed, showing the following:

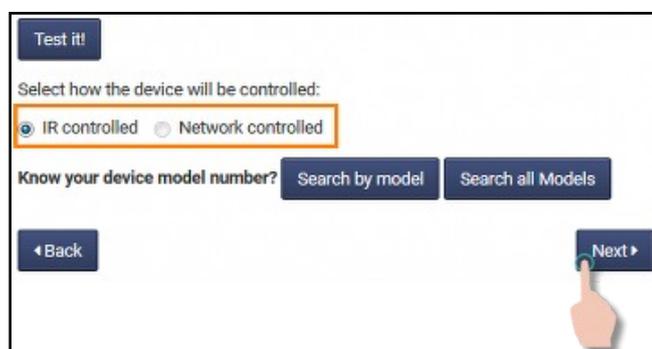


The device control code sets that are most frequently used by the manufacturer, selected in the previous step, are listed here. The codes are listed with the **most frequently used at the top**, the next most frequently used as "Code 2", and so on. Select a code, then select Test to verify that it works. Additionally the Search by model button can be used to find a device, see section Using the Search by Model Button.



Beginner's Tip: Start testing codes from the top of the list and work your way down if the previous codes did not control the device.

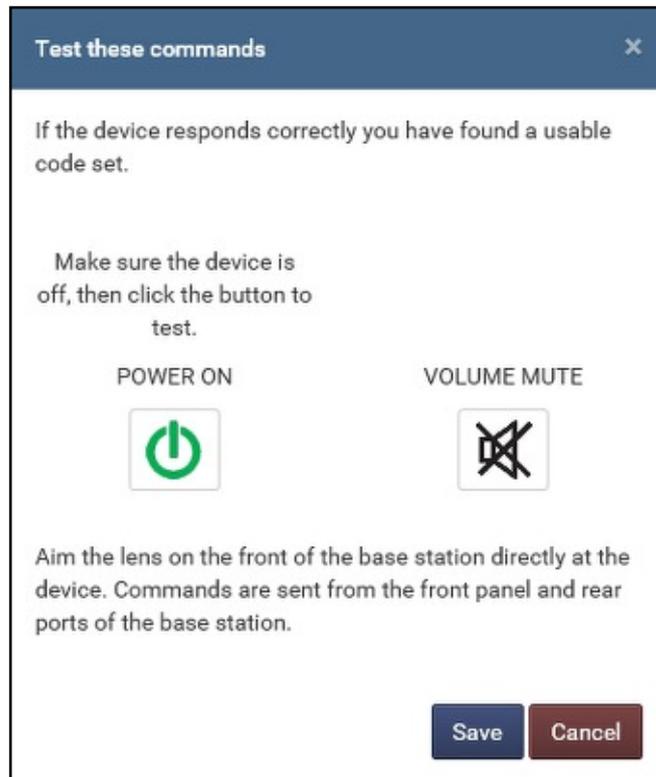
6. Below the Test button are two options IR controlled or Network controlled, select the method being used to control the device



Both options are *not always available*, some devices do not have the option for network control, while others do not have an option for IR. The unavailable option is not selectable in the editor.

7. **Test** the code sets selected

Select the Test button and a window displays which allows the editor to send commands over the network, to the hub, then to the devices being controlled.

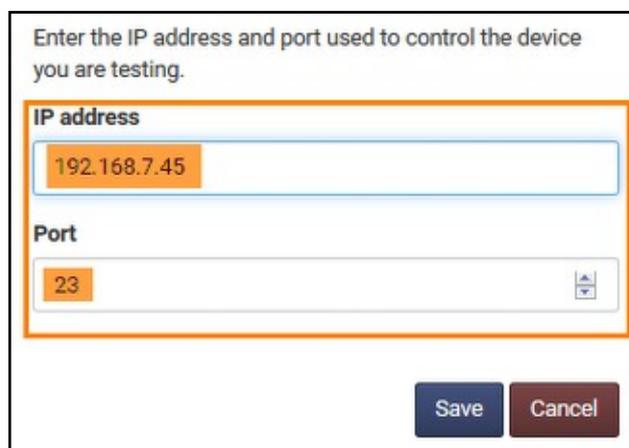


To test IR commands have the front lens of the hub directed toward the device that was programmed or have a wired IR emitter plugged into the rear of the hub and connected to the target device's IR sensor.

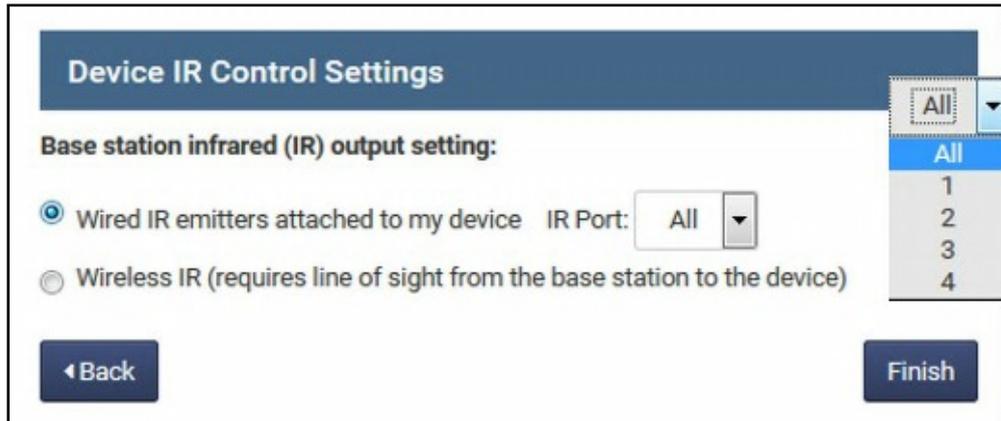
Power testing: must be performed with the entertainment device turned off, select the Power On test button in the window and if the code set is correct the device turns on.

Volume Mute testing: must be performed with the entertainment device on and with sound at an audible volume level. Select the Volume Mute test button in the window and if the code is correct the device's volume is muted.

When test network controlled codes, the editor request the IP address and port number of the device. The port number does not need to be changed, the software derives this information from the database.



8. Select the **Save** button
9. Choose the **base station (hub) output setting**, two choice are presented:

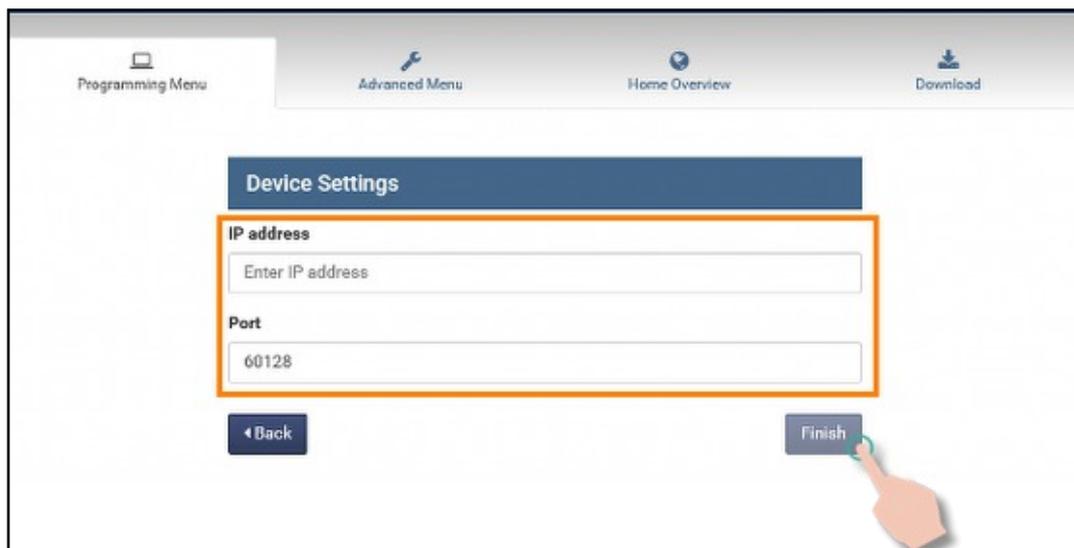


Wired IR: when using wired IR select the drop down menu and choose which emitter port is sending data to the device.

Wireless IR: when using wireless IR, make sure the device is in line of sight range for the front IR panel of the MXHP-H500 hub.

OR

For network controlled devices, enter the IP device settings:



IP address: enter the network IP address of the device being controlled. For the device to be reliably controlled it must have a Static IP address or that some other precaution is taken such as setting up a reserved IP address for the device in the DHCP server.

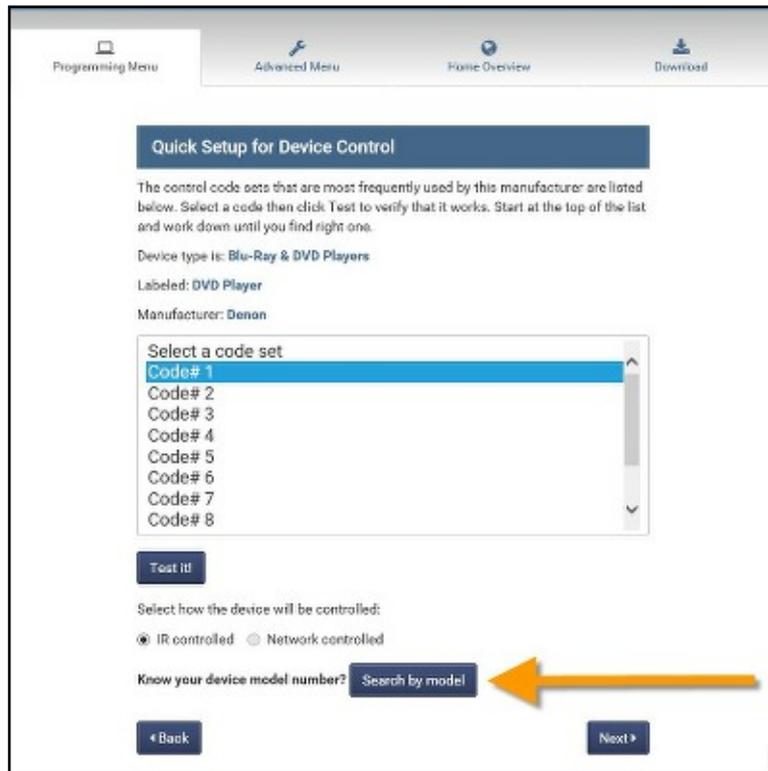
Port: enter the network port number used to control the device. This usually is designated by the manufacture and is normally not needed to be changed.

10. Select **Finish** to complete the process of adding this Entertainment device.

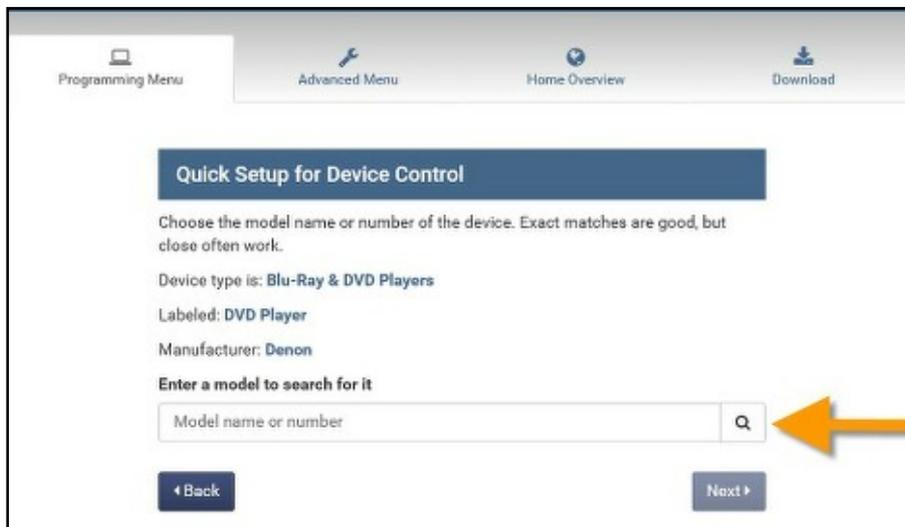
Using the Search by Model Button

As mentioned in the previous section, when programming an entertainment device to the system the editor allows a search based on the device's model number.

1. Select the **Search by Model** button



2. Enter the **exact model** name or enter just a few letters/numbers from the model name.



3. Select the **search button** and the software looks through the database to find a match. For example, search for "1910 and find the model DVD-1910 and BD-1910, but search for DVD-1910 and only find that exact model.



Beginner Tip: the model number doesn't always have to match exactly in order to control a device. Often you can control most or even all of the functions of a device if you find a close match to the model number.

4. Select **Next** and follow the steps mentioned in the previous section to complete the process of adding this entertainment device to the system.

Favorite Channels

When programming a TV, DVR, cable, satellite box there is an option that enabled the favorite channel listing to appear on the user interface that operate this device. After following all the steps mentioned in the Adding an Entertainment Device section.

Follow these to enabled Favorites:

1. In the Cable Favorite Channels window, select **Use Favorite Channel**



This window **only** appears when programming a TV, DVR, cable, or satellite box.

2. Select the **Finish** button to complete this process

Instructions on the operation and setup of the Favorite Channels are presented on the user interface during its first use.

Volume Control

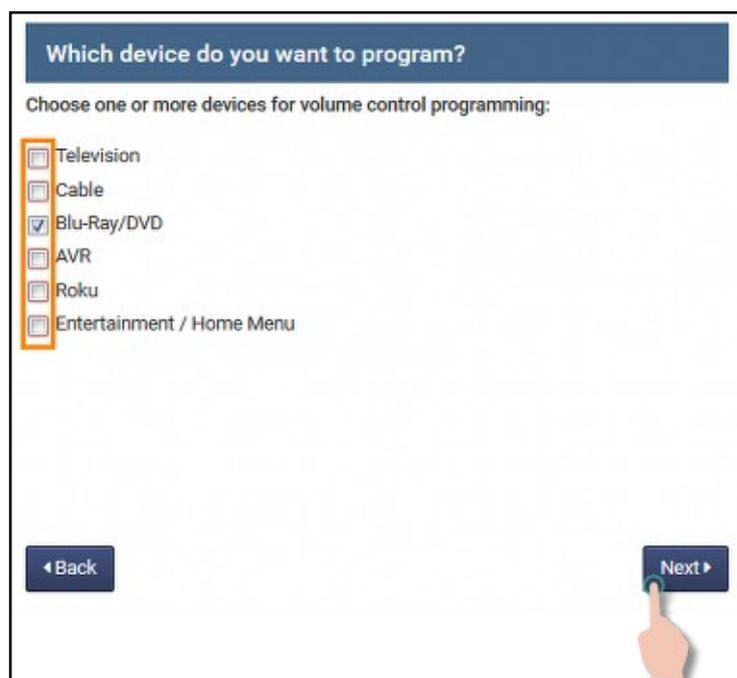
Volume button on the user interface normally control the volume of the selected device. While that is an expected way to operate a system, sometimes it can be a very inconvenient one. To better this situation use the Volume Control for device feature, also known as Volume Punch-Through. This allows the user to see all the functions for the device they are using on the interface, but control the volume commands of another device when they press volume up, down, or mute.

Volume Punch-Throughs are extremely helpful when the user is engaging in an activity such as watching a Blu-Ray movie on TV with sound that is coming from a separate device like a surround sound amplifier.

1. Select **Setup volume control for devices**

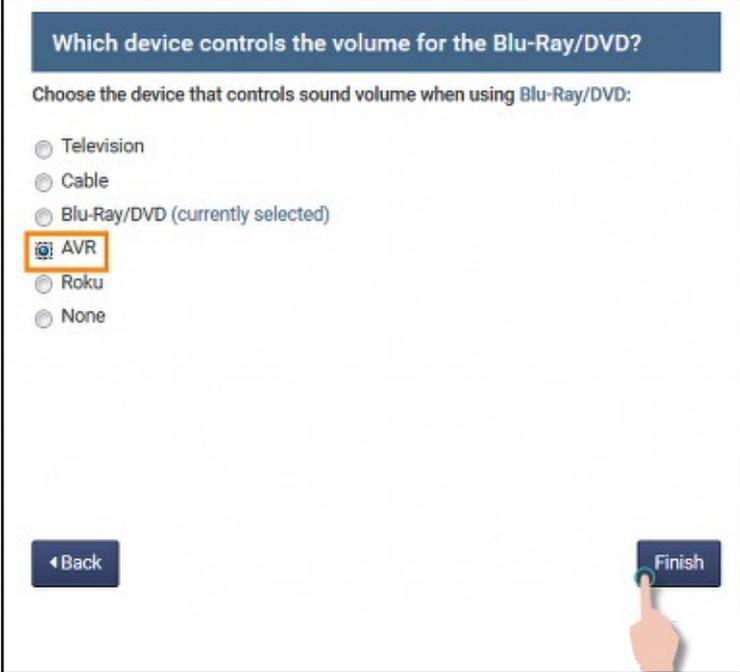


2. **Choose one or more devices from the list** and select **Next**, this selection is to tell the editor which device performs all the basic control **except** for sound.



This example chooses the Blu-Ray/DVD device.

3. **Choose** which **device** to use **for volume control**, this tells the editor which device in the system is being used to control the volume when the previous device is selected.



Which device controls the volume for the Blu-Ray/DVD?

Choose the device that controls sound volume when using Blu-Ray/DVD:

- Television
- Cable
- Blu-Ray/DVD (currently selected)
- AVR
- Roku
- None

◀ Back Finish

In this example, the AVR is chosen to perform all of the volume controls for the Blu-Ray/DVD device that was selected in the previous step.

4. Select **Finish** and the Volume-Punch through has been set

Power Off Button Programming

The Off button on the user interface is designed to turn off the devices in the room. It is extremely important to any well programmed system. Not every device in the system needs to be turned off, some devices like DVRs are required to be on at all time. Setting up a Power Off button grants the flexibility to turn off certain devices while leaving others as they are.

The operation and programming of the Off button is very similar to programming a Simple Activity. When the user presses the Off button, a Help Screen appears on the screen and allows the user to quickly turn off the devices one press at a time (see below).

Power Off Menu

The image to the right is an example of how the Power Off button menu looks. This menu is completely dependent on what choices were made in the editor during its creation.

For more details on how to build this menu, read the **Power Off Button Programming** section.

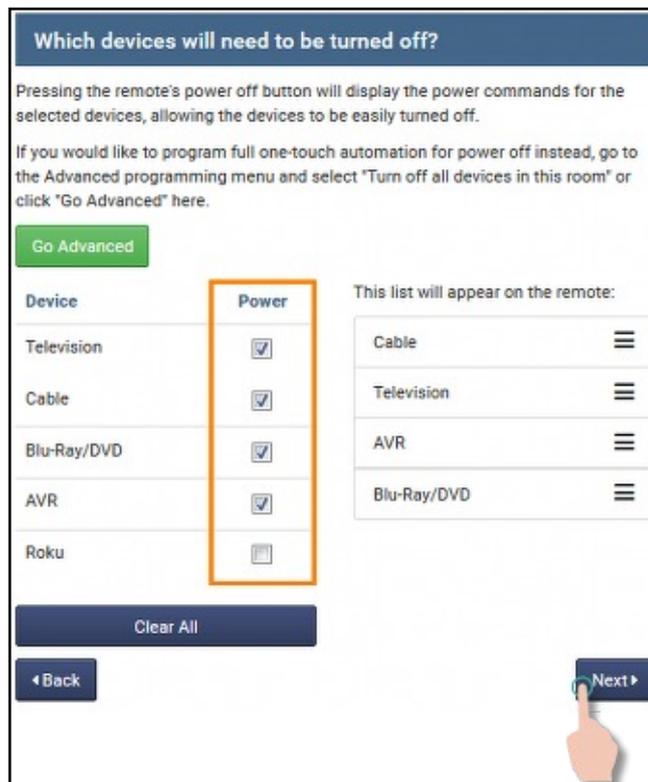


Follow these steps to setup the Power Off button:

1. Select the **Setup the Power Off button** option

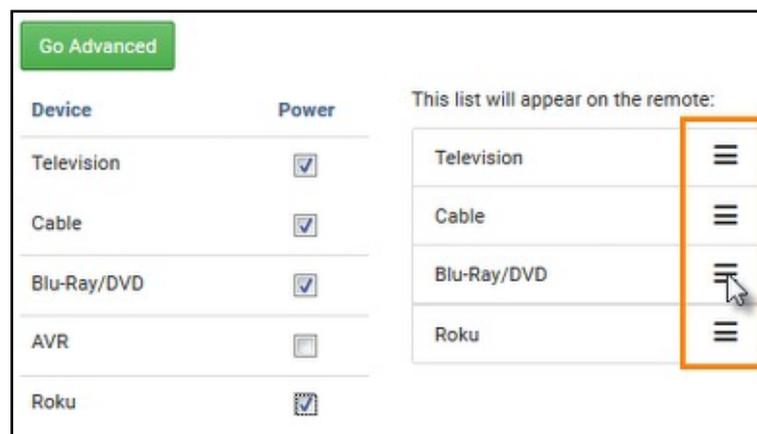


2. **Choose** which **devices** to appear on the Power Off list



Check the box at the right of the device **under Power**. This example is using the Television, Cable, Blu-Ray/DVD, and AVR. The Roku device is not affected by the Power Off button. Select the Go Advanced button to create an automated activity, this is discussed later.

3. Each check box selected appears at the list on the right. Review this list, the way the items appear here are how they are going to appear on the user interface. **Rearrange this list**, if necessary, by dragging an item up or down **using the grabber** icon



Press **Next** once the items are arranged properly.

Selecting the **Go Advanced** button, navigates the editor to creating an automated activity on the Power Off button.

4. **Identify** and **select the Power Off commands for the device**, one after the other



Often the Power Off command is automatically selected; however, in situations where it is not select the drop down arrow and select a command from the list. This command can be a command that only turns the device Off, called *discrete power* or a command that turns the device on or off, called *toggle power*. A text search can also be initiated in this field to find command matching what is entered.

5. Select the **Test** button, this uses the hub to send the information to the device and confirm the command is correct.
6. Follow those steps for each device selected from the Power list until reaching the **Finish** button, select that to complete this process

Setting Up Simple Activities

Simple Activities are designed to make it easier for the user to use their system to engage in an activity like watching cable TV with surround sound. When a simple activity has been made, after pressing the associated button, the user sees a *help list* that allows them to quickly turn on all the required devices and send any needed input changes one press at a time. This list is referred to as the **Help Screen** (see image below).

Help Screen

Also known as a Help Screen, this menu allows the user to select down the list and power on devices as well as switch input on devices that require it.

For more details on how to build this menu, read the following section **Setting Up Simple Activities**.

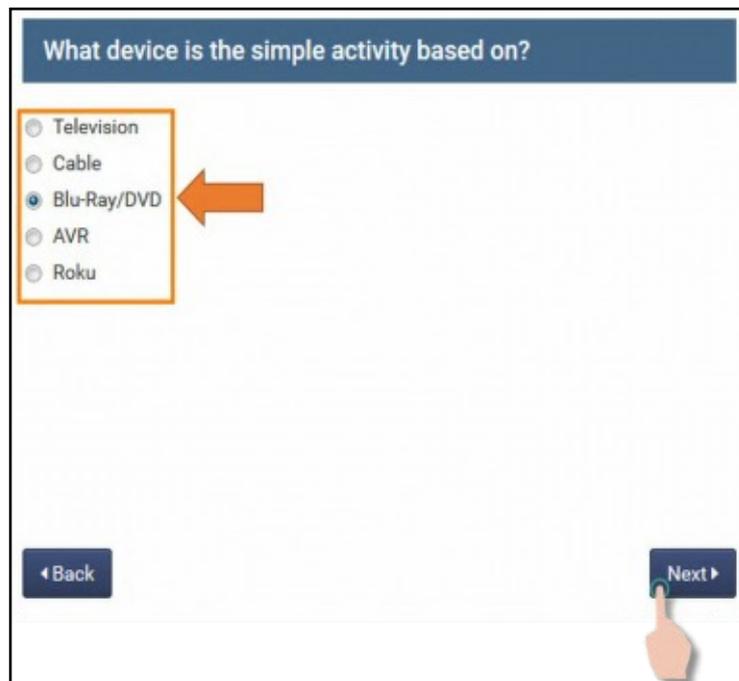


Follow these steps to create a Simple Activity:

1. Select the **Setup a simple activity for a device** button

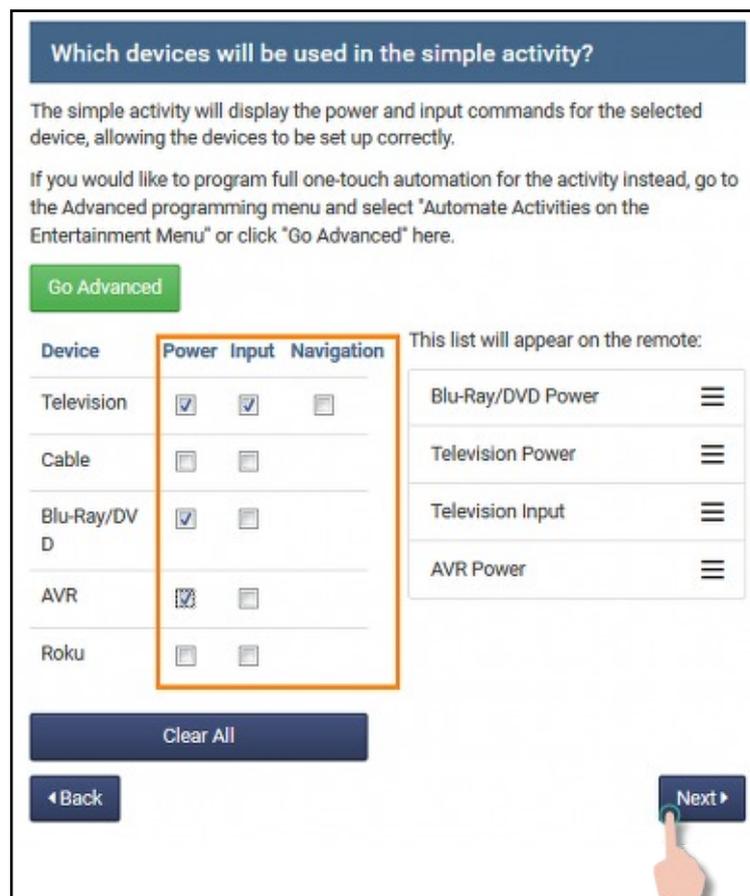


2. **Choose** the **device** that the activity is based on and select next



This is also the button that the user presses on the user interface.

3. **Choose** which **devices** need **power** on command and which devices need to switch **inputs** in order for the activity to work

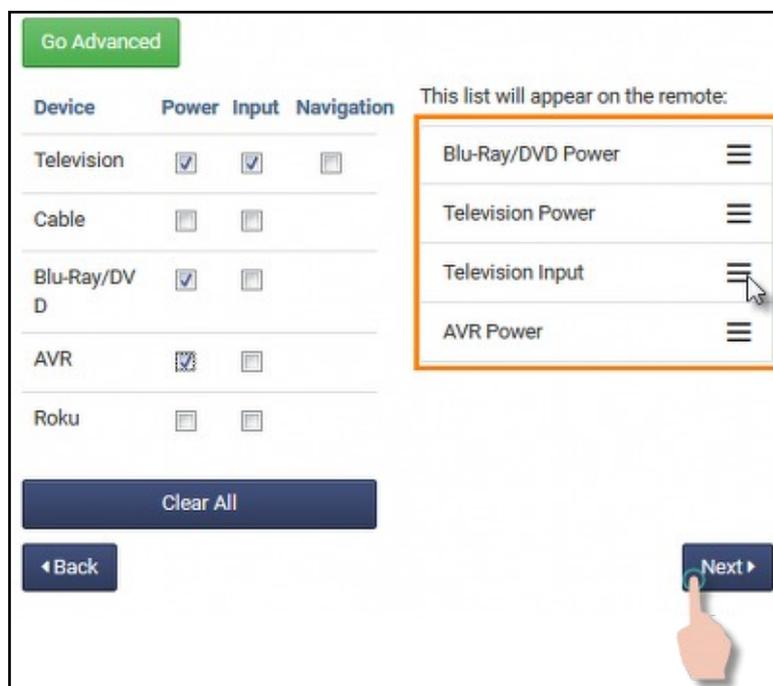


For each device that must be *powered on*, select the box under the *Power* column. For each device that requires its *input switch*, select the box under the *Input* column.

Select the *Go Advanced* button to create an Automated Activity, for more information on these refer to the **Build an automated activity on an Entertainment page device** section.

Televisions have an additional check box available for *Navigation*, which can also be selected if the input box is selected first. In some cases using the input button alone is not enough to change the setting on the TV. The navigation option needs to be selected if the television's menu requires the user to perform either of the following actions:

- **Navigate** a list of **input choices** using the interface's up, down, left, or right arrow buttons because pressing the input button repeatedly does not change the selection on the television.
 - Pressing the interface's **select** button is required to change the input because simply leaving the desired input highlighted does not change the input.
4. Each selection chosen is added to the list at the right, **review the order** of these and **rearrange** if necessary by using the grabber and moving an item up or down



The **Go Advanced** button, navigates the editor to creating an automated activity on the Entertainment Menu button.

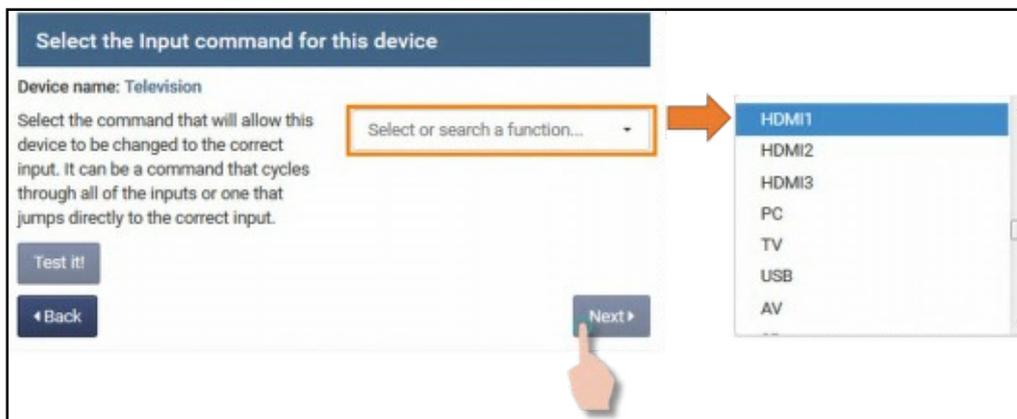
5. Press the **Next** button

6. **Identify** the **Power On** command for the device(s), one after the other



Often the Power On command is preselected, if that is not the case select the drop down menu and select the correct Power On command.

7. Once the correct command has been selected, press the **Test** button to verify and press **Next** when ready
8. **Identify** the **Input** command for the device(s), one after the other



Select the drop down menu and scroll through the available commands. Select the command that causes the input change. Enter text into this box and the editor searches through the list of available commands to match what was entered. Choose a command that cycles through inputs, called *toggle* or *wraparound input* command, or one that jumps directly to the correct input called a *discrete input* command.

Discrete input commands are more efficient for the end user, but must be set to the correct input being used on the device in order for them to work properly.

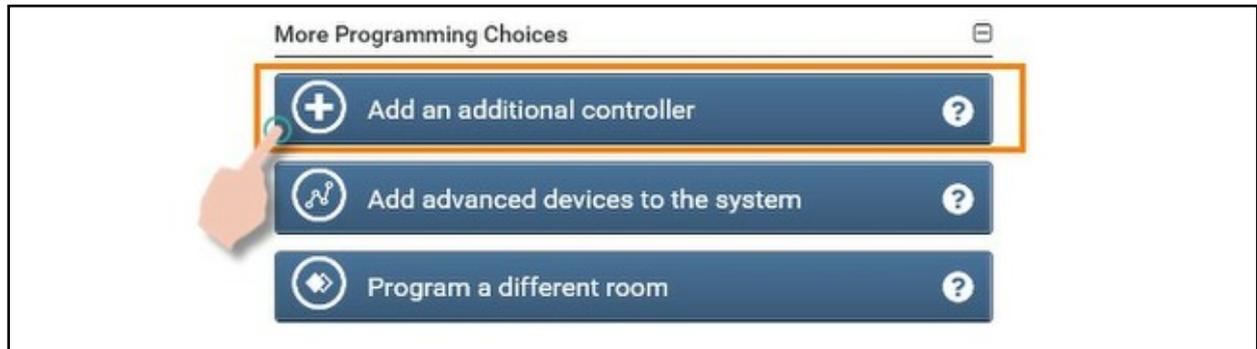
9. Once the correct command has been selected, press the **Test** button to verify and press **Finish** to complete this process.

Adding an Additional Hub

Adding an additional MXHP-H500 is convenient when operating a room that needs more than four (4) IR emitters or for devices that are out of reach of a single IR blaster.

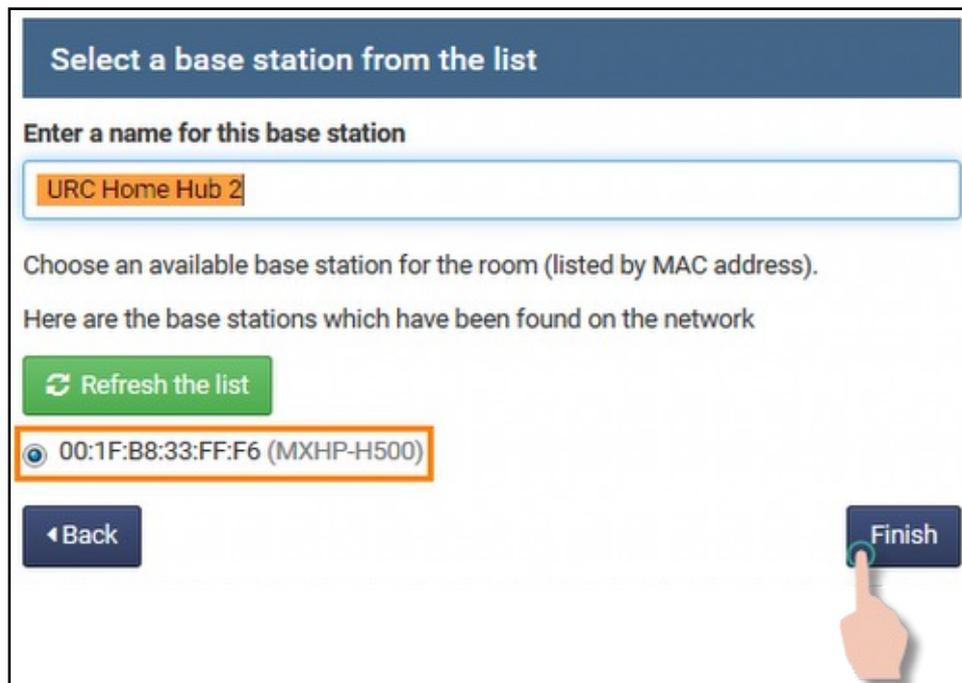
Follow these steps to do so:

1. Select the **Add an additional controller** from the programming menu, if this option is not available simply press the "+" icon to the right of **More Programming Choices** to reveal it



The editor automatically searches the network for an MXHP-H500 hub that has not been assigned to the software.

2. **Enter a name** for the hub so that it is easier to recognize when programming through the editor, this name can be changed later



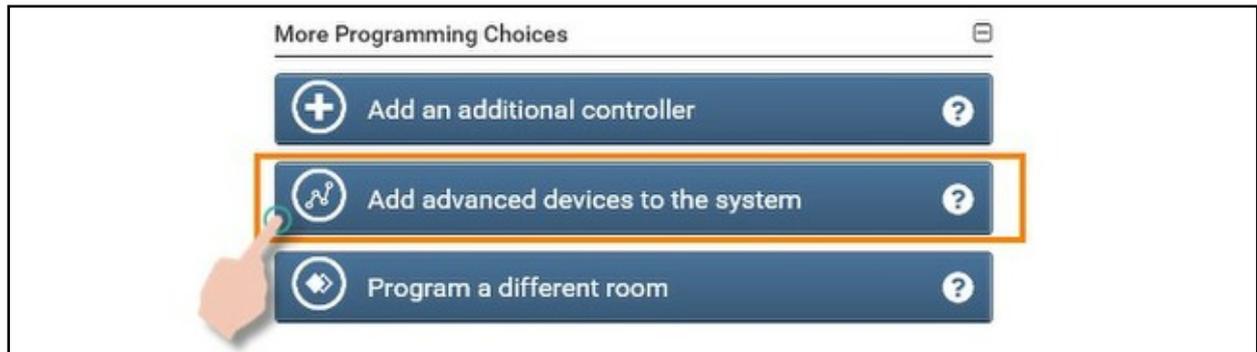
3. **Select an available hub** from the list of those discovered on the network, if a the device in question does **not appear** make sure it is **connected** to the **same network** as any other previously discovered hubs then select the **Refresh the list button**
4. Once the hub has been selected from the list and named, press the **Finish** button to add the hub to the system.

Adding Advanced Devices

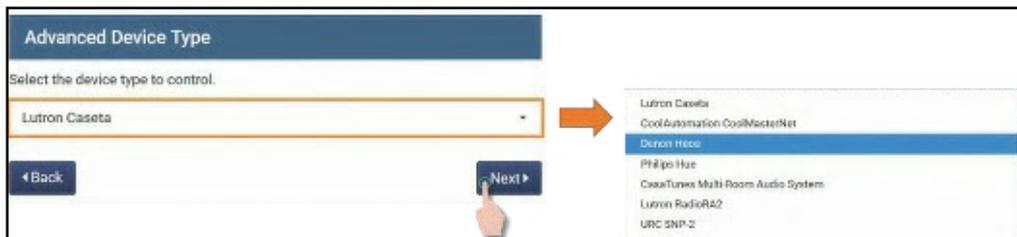
Outside the standard Entertainment devices, there are yet more devices that can be controlled. These devices are added to the system in different ways than normal Entertainment devices, and the exact method varies depending on the type of device. For more detailed information on programming advanced devices please review the **MX HomePro Advanced Devices Quick Reference Guide**.

Follow these steps:

1. Select the **Add advanced devices to the system** from the programming menu, if this option is not available simply press the “+” icon to the right of **More Programming Choices** to reveal it



2. Find the **Advanced Device Type** to add to the system, select the down arrow to scroll through all the available options

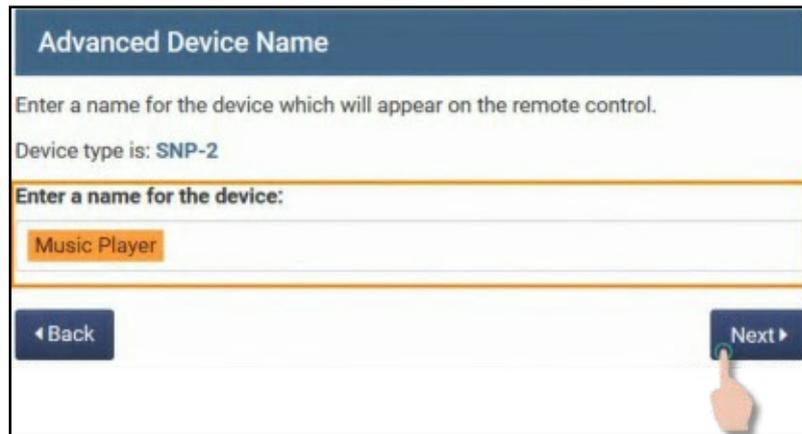


Devices available include music systems by Denon and Sonos®, as well as home automation devices such as Nest® Learning Thermostat™ and the TRF-ZW series of Z-Wave® controllers also from URC.

The TRF-ZW controller is not just one controlled device. It is a way to control various other advanced devices such as lighting, door locks, motion detectors, flood sensors, and more.

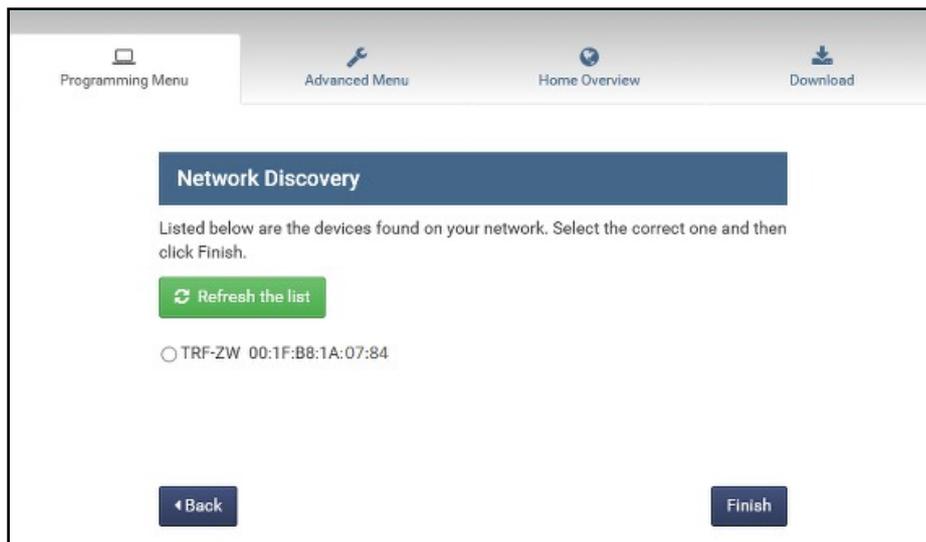
Text can be entered into this field to do a specific search for a particular advanced device. Begin entering text and the editor searches through the available devices to find a match.

3. Once the device has been found, select **Next**
4. **Enter** a **name** for the device and select **Next**, this name appears on the user interface and is used for selecting the device



The default name for any advanced device being added to the system is the device type label. This name can be changed at any time from the Home Overview menu.

5. This step depends on the type of device that is being added, a device may require the use of one or more of these steps in order for it to be added to the system:
 - a. Some devices such as the TRF-ZW are automatically discovered on the network, similarly to adding an additional hub.



Select an available device from the list of those discovered on the network. If the device is not displayed, make sure that it is connected to the same network as the MXHP-H500 hub and press the **Refresh this list** button.

Each device is listed by **MAC address**, use this to match up with the information found on the actual device in order to verify the correct unit.

- b. To add some devices such as *Sonos*, the **MAC address** of the unit must be **manually entered** into the editor.

Advanced Device Identification

Enter the MAC address for the device you are adding.

00 : 0E : 58 : 10 : 9C : 04

◀ Back Next ▶

The MAC address is not automatically discovered, this information is usually found on the device itself.

- c. Other devices like the *Nest Learning Thermostat* do **not** require **any additional setup** here. The installation is complete after entering the name for the device; however, **once** the system is downloaded the user needs to enter information such as their **account log in credentials** into the user interface after selecting the device on the Home Menu.
- d. The IP address and network port used for communication are required by some devices. Enter the exact IP address in the field labeled for it.

Advanced Device Identification

Enter the IP address and port for the device you are adding.

IP address

192.168.7.45

Port

1255

◀ Back Next ▶

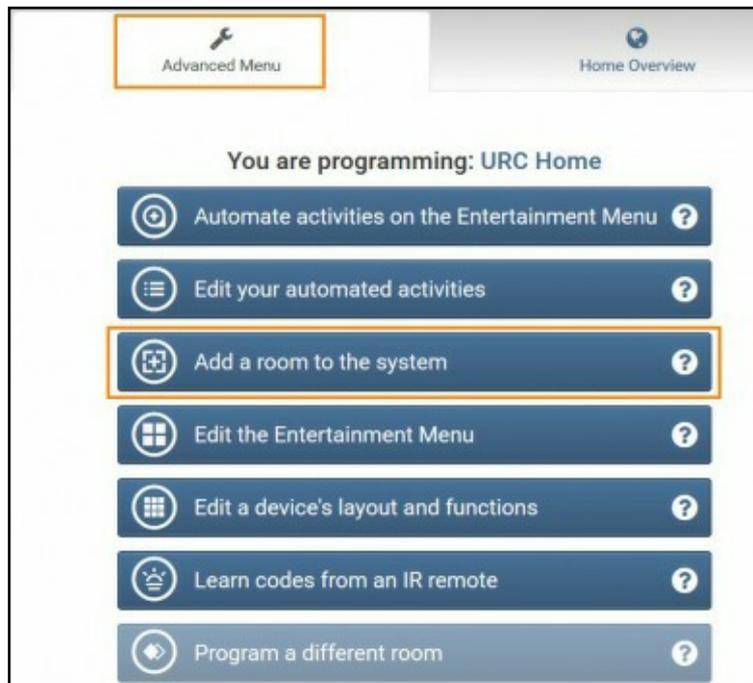
- e. Some devices require a username and password to be entered in the editor. **Enter** the exact **username** and **password** used by the **device**.
- f. Some device require *one or more* parameter values to be entered in the editor. These can vary greatly depending on the device. Each parameter has a description value that needs to be entered. Some **parameters** are **required** and if so there is an indicator next to it. The editor does not allow any progress from this screen until all required parameters have been filled out.

Programming Additional Rooms

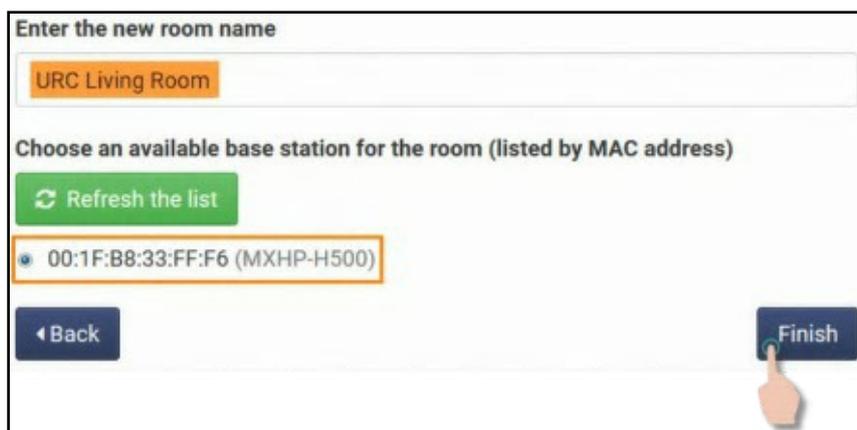
Oftentimes controlling one room is just not enough, additional rooms, hubs, and remote controls can be added to expand control to other rooms. In these multi-room systems, selecting a different room for programming is simple.

Follow these steps:

1. Locate and select the Advanced Menu and choose the **Add a room to the system** option

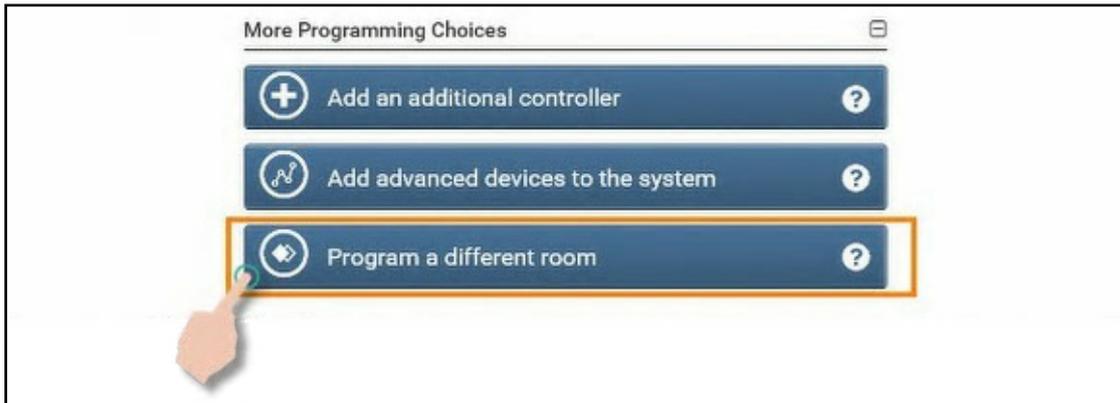


2. The editor **automatically searches** the network for an unassigned **hub** and displays it in this menu, enter a name for the room being added to the system

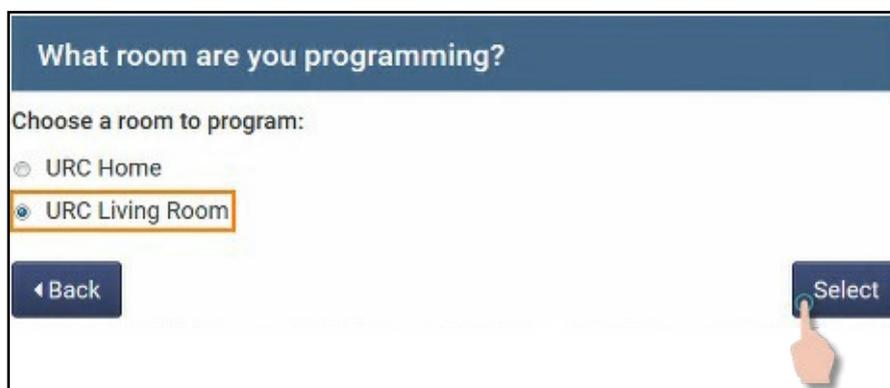


3. **Select** an **available hub** from the list of those discovered on the network, if a the device in question does **not appear** make sure it is **connected** to the **same network** as any other previously discovered hubs then select the **Refresh the list button**

4. Select the **Finish** to add the room to the system
5. Return to the **Programming Menu** and select **Program a different room**

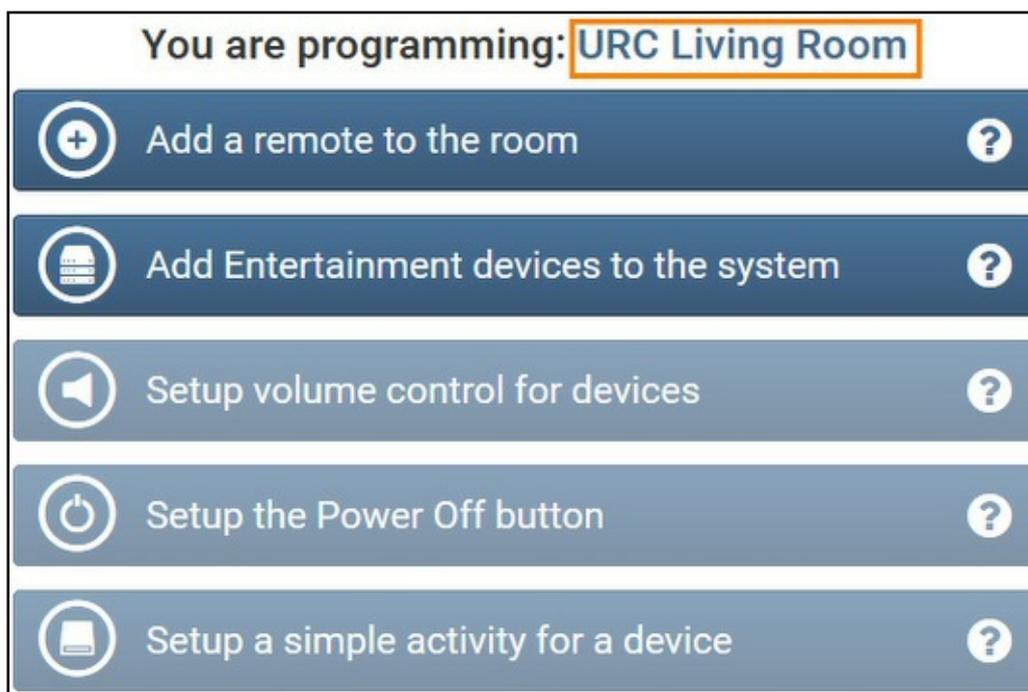


6. **Select** the **room** to program



7. Once the room has been chosen press the **Select** button

This returns the editor to the Programming Menu, at the top of this menu the software reads which room is being currently programmed.

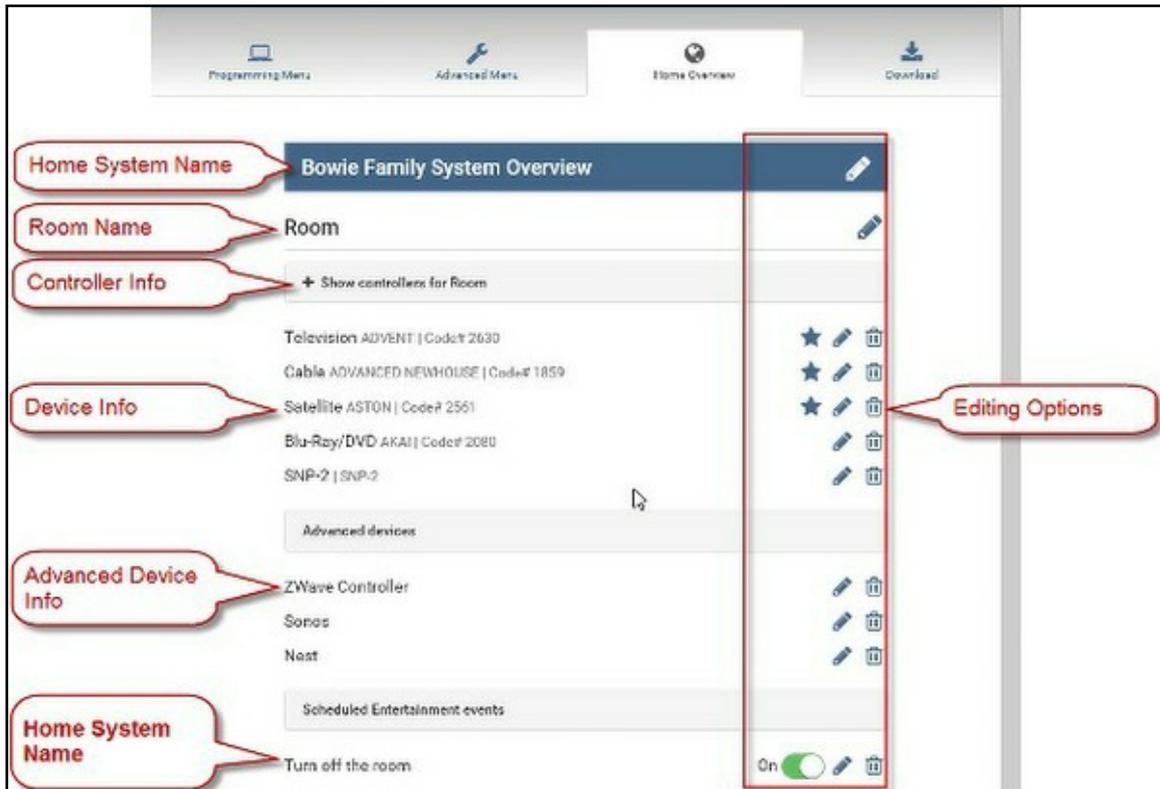


Using the Home Overview Display

The overall layout and content of the system is quickly accessible by navigating to the Home Overview display. This page allows for some key adjustments to the MX HomePro system.

Home Overview Main Screen

The main screen of the Home Overview provides information about the entire system. These elements are as follows:



Home System Name

This is the name given to the system when it was first registered. The name is **edited** by selecting the **pencil icon** at the right of the name.

Room Name

Each room in the system is listed by name. The name is **edited** by selecting the **pencil icon** at the right of the name.

Controller Information

Selecting **+ Show Controllers for Room** either displays or hides the model and ID information for each MXHP-H500 (hub) and remote control programmed to the room.

Each hub in the room is **listed** by **name** and **MAC address**, **edit** the name by selecting the **pencil icon** to the right of it.



A **key icon** is next to the **primary hub**. This hub is associated with the URC Programming Key, it cannot be deleted from the system.

Selecting the **info icon** displays vital information about the hub. Use it to view the hub's IP address, hardware, and software version numbers.

A trash can icon deletes a hub and is displayed next to the pencil icon, this icon is not displayed next to the primary hub.



Remote Control Information

Each remote control in the room is listed by **model name** and **ID**.



Select the **info icon** to display vital information from the remote control. This displays its IP address, hardware, and software version numbers.

Select the **trash can icon** to **delete** a remote, this is displayed to the right.

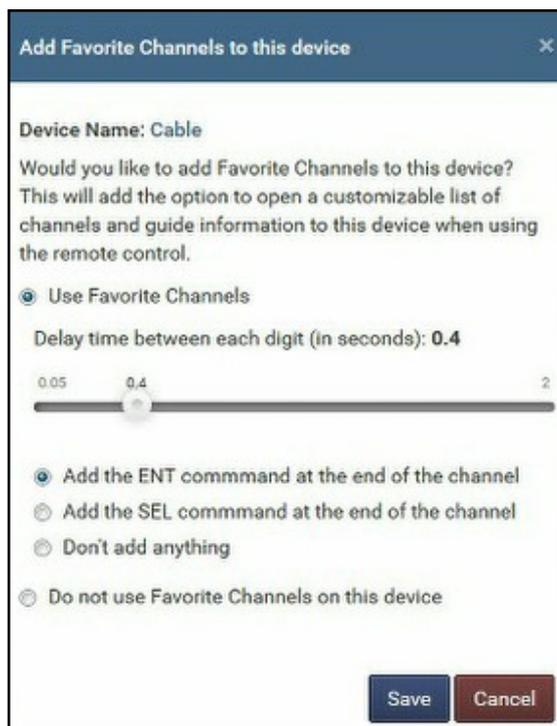
Device Information

Each device that is programmed for control in the room is listed by name, along with the brand and code set or model name if added by exact model.



- **Trash Can Icon:** use this to delete a device from the system, this process is irreversible and the device be required to be added as a new to the system.
- **Speaker Icon:** displays next to any device which has volume punch-through programming assigned to it. Hovering over the icon displays the device source of the volume commands.

- **Star Icon:** is displayed next to any device that can have Favorite Channels programmed to it, a filled star indicates that the device has Favorites enabled. An outlined star indicates that Favorites is currently disabled. Selecting the star opens the Favorite Channel editing window, displaying the following:



The screenshot shows a dialog box titled "Add Favorite Channels to this device". The device name is "Cable". The text asks, "Would you like to add Favorite Channels to this device? This will add the option to open a customizable list of channels and guide information to this device when using the remote control." There are four radio button options: "Use Favorite Channels" (selected), "Add the ENT command at the end of the channel", "Add the SEL command at the end of the channel", and "Don't add anything". Below these is a slider for "Delay time between each digit (in seconds)" with a value of 0.4, ranging from 0.05 to 2. At the bottom are "Save" and "Cancel" buttons.

Inside this window, **choose whether or not to use** Favorite channels. This window allows for the adjustment of the **delay time** between each channel command. Adjust this if the device does not register all of the commands when the interface selects a favorite channel number.

An option to **Add the ENT** command or the **SEL** command to the **end of a channel number** sequence is available. Locate this option just below the delay time slider. Sending the ENT or SEL button after the channel digits often makes the channel change occur more quickly on the device. Sending the ENT command is selected by default.

- **Pencil Icon:** use this icon to edit the device properties

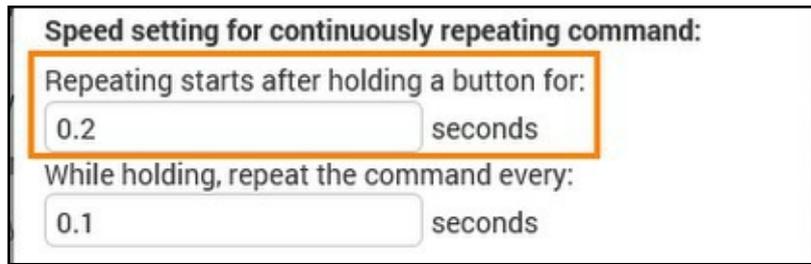
The **name** of the device can be **changed** by editing the displayed text.

Command Repeat settings effect how the hub sends out the control commands to the device. There are two settings which can be adjusted here, though this is normally not required or advised unless the device is not working properly.

Macro repeat, the first value, controls how the command is sent when a one touch macro is triggered. IR commands are pulsed in order to operate a device and three (3) is the normal setting for this. This does **not** mean the command acts on the device three (3) times, but rather that the command is sustained for three (3) pulses.

Button pressing repeats, the second value, controls how the command is sent when a physical button is pressed on the user interface by the user. A setting of one (1) is normally optimal, but may need to be increased if the device is not responding reliably when the button is pressed.

Speed setting is also available **only** for **network controlled device** commands.

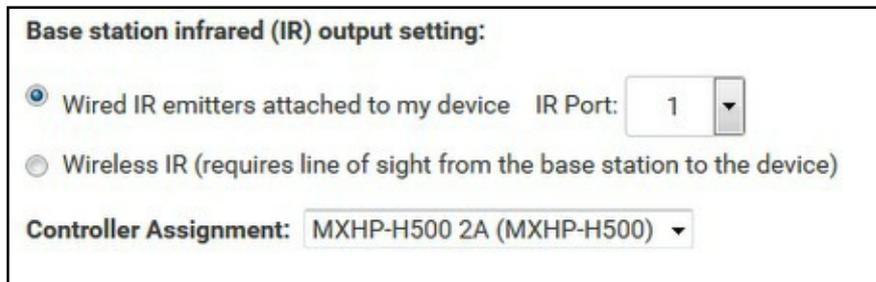


The screenshot shows a configuration window titled "Speed setting for continuously repeating command:". It contains two input fields. The first field is labeled "Repeating starts after holding a button for:" and has a value of "0.2" followed by "seconds". The second field is labeled "While holding, repeat the command every:" and has a value of "0.1" followed by "seconds". The first field and its label are highlighted with an orange border.

The **first value** controls how long the user must hold the button down before the command begins to **continuously repeat**. This is useful for a command like volume up. Smaller value make the repeat action begin faster.

The **second value** controls how **quickly the command repeats** once the button is held down long enough for it to start, useful for controlling how quickly a command like volume, ramps the device to maximum or minimum volume. Small values make the command action happen more rapidly.

Command Routing can be edited for IR and network controlled devices.



The screenshot shows a configuration window titled "Base station infrared (IR) output setting:". It has two radio button options: "Wired IR emitters attached to my device" (which is selected) and "Wireless IR (requires line of sight from the base station to the device)". Next to the selected option is an "IR Port:" label and a dropdown menu showing the value "1". Below these options is a "Controller Assignment:" label and a dropdown menu showing the value "MXHP-H500 2A (MXHP-H500)".

IR device properties allow editing of the IR control method that the hub uses to control the device, the IR port assignment and the selection for the available controller which operates the device. Network devices allow for the editing of its IP address and network port number.

[Advanced Device Info](#): each advanced device that is programmed in the room is listed by name. This is the name given to the device when it was added to the system or edited, not the device type name.

Each device has two (2) editing options available

- **Trash Can Icon**: this deletes the device from the system and is displayed at the right, this process is irreversible and would require reprogramming.

- **Pencil Icon:** allows for the editing of the advanced device properties if selected. The exact content of this window depends on the type of advanced device that was added; however, name, device type, and version numbers are always present.

The **name** of the device can be **changed** by editing the displayed text.

Advanced Device Type describes what kind of device is present, this label cannot be changed in the editor.

Version indicates the software version of the module being used to control the actual device. Every advanced device added to the system has a module loaded on the hub which allows control over the device.

In addition to these items there may be others, depending on the advanced device type. The available fields, such as IP address or port numbers are the same as those used when the device was added to the system and may be changed as required.

Scheduled Entertainment Event Information:

All of the Scheduled Entertainment Events which have been added to a the room appear here. Each is listed by name, there is also an indicator describing whether the even is set to on or off after the next download to the system.

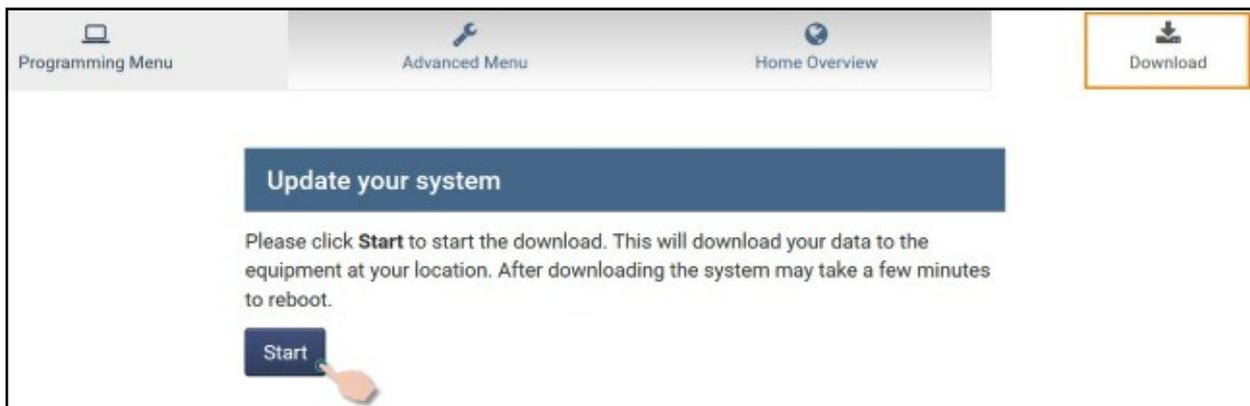
Scheduled Entertainment Event Editing Options

Each of the scheduled entertainment events have three editing options available:

- **Trash Can Icon:** use this to **delete** a scheduled entertainment event from the system, this process is irreversible.
- **Pencil Icon:** selecting this icon enables the editing of the actual **activity steps** in the scheduled entertainment event as well as its **schedule**.
- **On/Off Toggle Switch:** selecting this switch enables or disables the scheduled entertainment event. The switch displays the current setting for the event. Set the switch to **On** to **enable** the event to take place according to the schedule programmed for it or set it to **Off** to **disable** it and prevent it from occurring.

Downloading to the System

Select the Download tab when ready to send the program to the home system.



Simply open the **Download** tab and select the **Start** button when ready. For best results have all the hubs powered and connected to the network as well as any of the optional remote controls.. A window with an indicator appears when the download has begun. This indicator disappears once the download has completed.

Advanced Programming

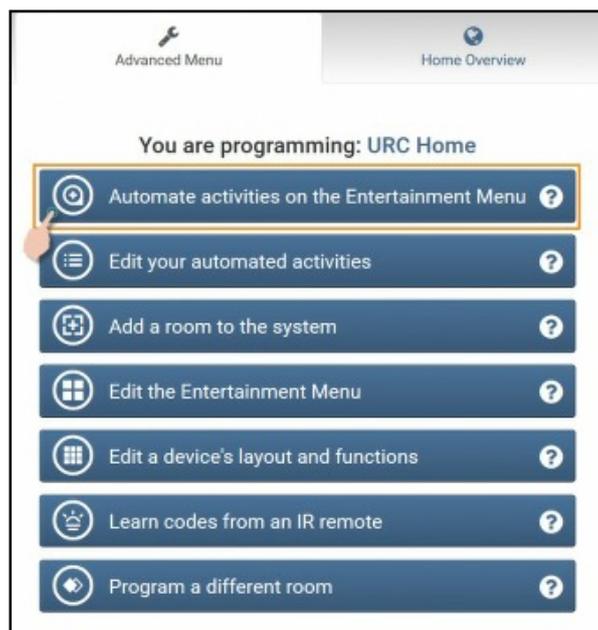
The Advanced Menu contains the tools needed when programming goes beyond a single room solution. Use this menu to make one button **automated activities** (macros) to perform multiple system commands, add additional rooms for control, edit the look of the user interface, and more.

Automating Activities

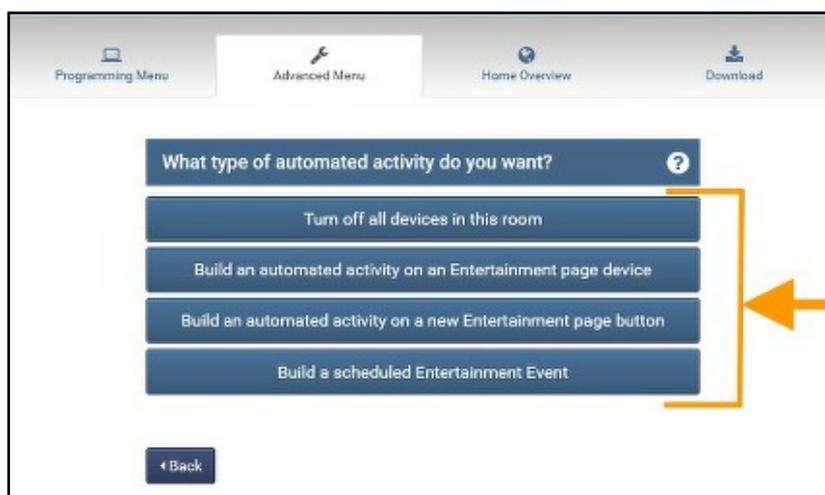
Also referred to as **macros**, they are essentially a recording of several commands which are played back at any time with the press of a button. Program these automated activities (macros) to any button on the Entertainment Menu.

Follow these steps to create one:

1. Select the **Advanced Menu** and **Automate activities on the Entertainment Menu**



2. **Choose** what **type** of **automated activity** to program, there are four (4) options to choose from. Each is different in its intended function, but are all programmed similarly. The types are listed below and the programming for each type is explained afterwards:



- **Turn off all devices in this room:**

This is intended to turn off all programmed devices in the room with only one (1) button press. This can only be programmed to the Off button.

- **Build an automated activity on an Entertainment Menu device:**

This is intended to send multiple commands to one (1) or more devices with only one button press so that the device or devices are ready to use. This automated activity can be programmed to any device button on the Entertainment Menu. When the macro completes, the interface screen displays the device commands for the primary device.

- **Build an automated activity on a new Entertainment page button:**

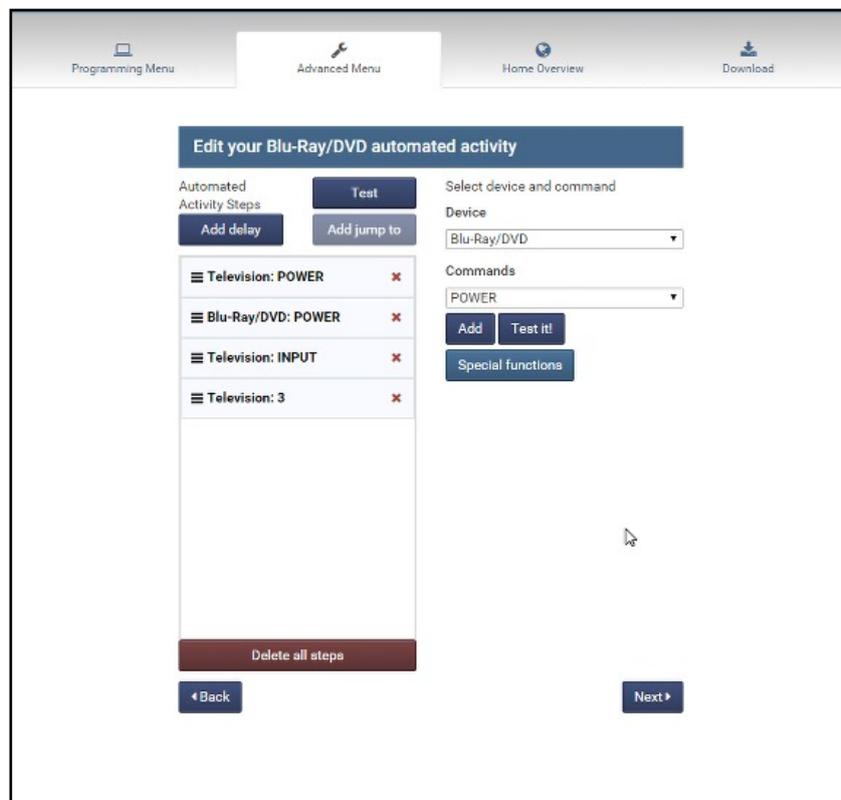
This type is nearly identical to the previous one. There are two (2) main differences. First, this type is programmed onto a new Entertainment Menu button which is created for it when started. Second, it can be programmed to display any device in the room when the macro completes or it can remain on the Entertainment Menu.

- **Build a scheduled Entertainment Event:**

This type is designed to allow completely automatic operation with no need for the activity to be initiated by the user, it occurs automatically based on a set schedule. Programming is otherwise very similar to the other type of automated activities.

Decide what type of automated activity is needed and select it to proceed.

3. **Construct the automated activity** by using the **Automated Activity Editing screen** to select which commands from the various devices in the room to record and add to the command list. Add any commands that suit the needs of the devices in the room.



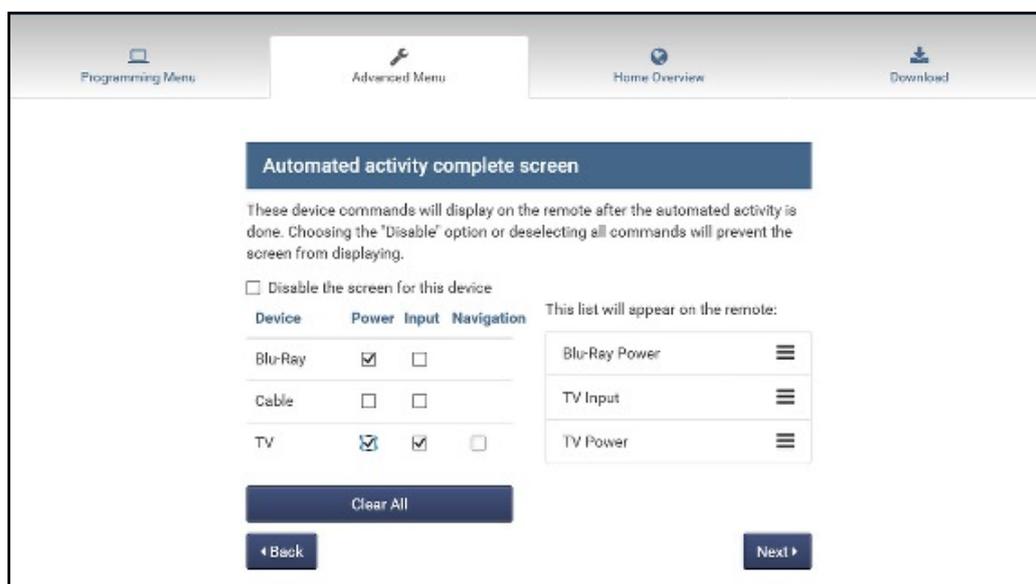
Beginner's Tip: Notice that the **Add jump to** button is grayed out and not selectable. When creating an automated activity on a device button, this option is never selectable. This option **only** works when creating an automated activity on a new button on the Entertainment Menu.

Optional *delay steps* can be added to the macro, this pauses the activity for any period of time between **0.1 and 99.9 seconds** each. These are vital in order to make automation reliable if the device being targeted needs time to perform one function before doing another. This is very common after turning a device such as a television on. For example a TV may need up to seven (7) seconds after turning on before it can be told to change inputs or anything else. Sending a command before that time causes it to be ignored.

When programming an automated activity on a new button, add a step that tells the interface which device to display at the end of the macro. To do this select the **Add jump to** button and select the destination device from the list.

Special functions such as an **If/Else** or **Variable** step can also be added to the macro by selecting the Special Functions button and then choosing the type to add.

4. After completing the macro steps, the editor grants the option to display a **Done/Help screen** at the end of its process. Think of this as a safety net which can be used to correct issues that result if devices miss one or more power and/or input commands.



If this screen is not needed, simply disable it by checking the Disable the screen for this device option or by leaving this list blank.

5. When programming a Scheduled Entertainment Event, there is not done screen available. Instead, select when the event is to occur. There are two (2) options for each event. Choose to have it happen only when **manually selected by the user** or you program it to occur automatically at a **specific time, certain days, and/or days**.

Select the option **When manually selected by the user** if the Entertainment even is only to occur when the **user** selects it from the Entertainment Menu.

Select the option **At a specific time and day** to have the Entertainment Event happen automatically based on a **set schedule**. **Set the time** value to the **time of day** that the event is to occur on by choosing the **hour** and **minute** and whether it should occur in the **AM** or **PM**. Then select each day of the week that it should occur on by selecting the box for that day. If the event is to occur every day, simply select the box **Every day**..

6. After completing the automated activity, a new screen appears with the following:

- **Continue in room**

This option returns to the **list of automated activity types** to choose from so that they can quickly begin programming another in the same room.

- **Back to room selection**

This option **returns** you to the **list of rooms** so that a different room can be selected for programming

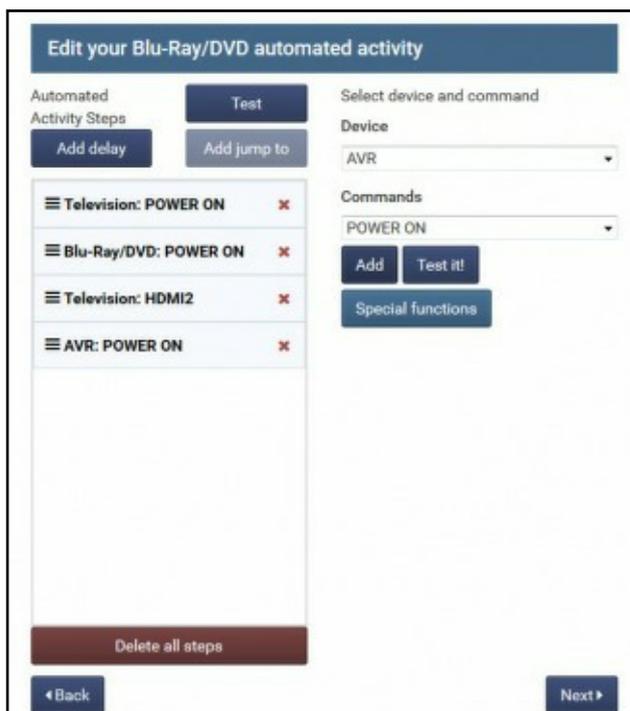
- **Finish automated activity programming**

This completes the finish automated activity process and returns the editor to the Advanced Programming Menu.

Choose the option that is needed.

Automated Activity Editing Screen

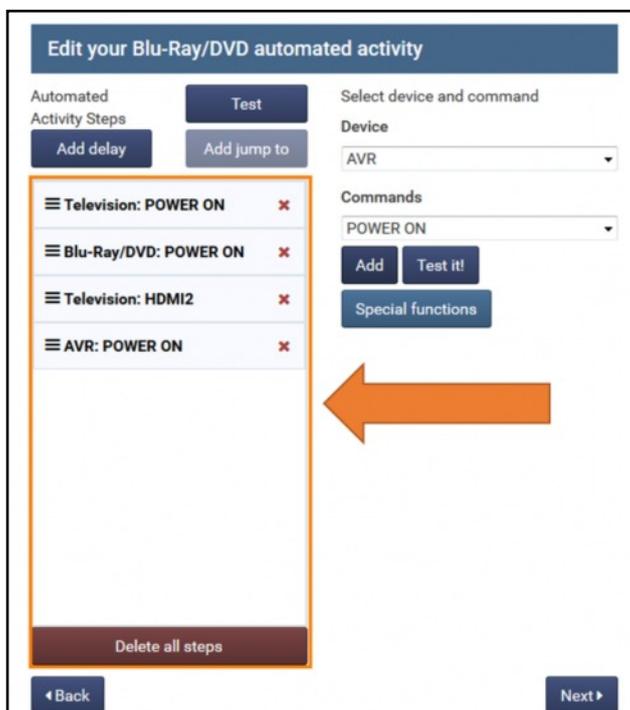
When programming or editing an *Automated Activity* in the system, use the **Automated Activity Editing Screen** to do so.



Although some features are not enabled for all automated activity types, the general layout is the same. Each feature is described below:

The Command List

Displays **all** of the **device commands** and **delays** which have been added to the automated activity so far.



They are displayed in the step by step order in which they are sent to the devices with the first step appearing at the top and the last at the bottom.

● **Device Command Steps**

Each device command step is listed by device name and command function name. For example **Blu-Ray/DVD: POWER** is the command to turn on the Blu-Ray device (see right).

● **Delay Steps**

Each delay step is listed and indicated the delay time in seconds. For example **Delay 10 seconds** is the delay in the macro (see right).

● **Delete**

Selecting the **red X** (see image at right) in the row with a step removes that step from the command list

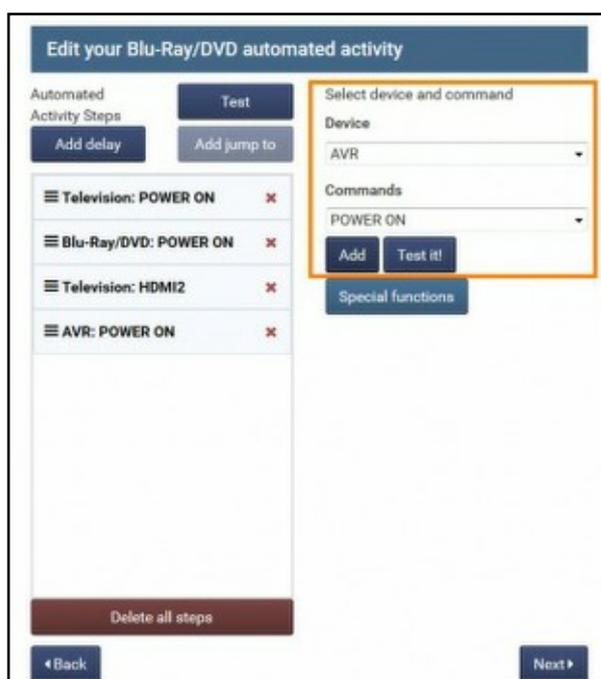
● **Reorder**

The listed steps can be reordered by **selecting the grab area** (see image at right) to the left of any listed item and dragging it above or below another, then releasing it.



Device Command Selection

Use this area to select any **device command function** from any device in the room and add it to the command list:



● **Device**

Select the desired device from the drop down list.

● **Add**

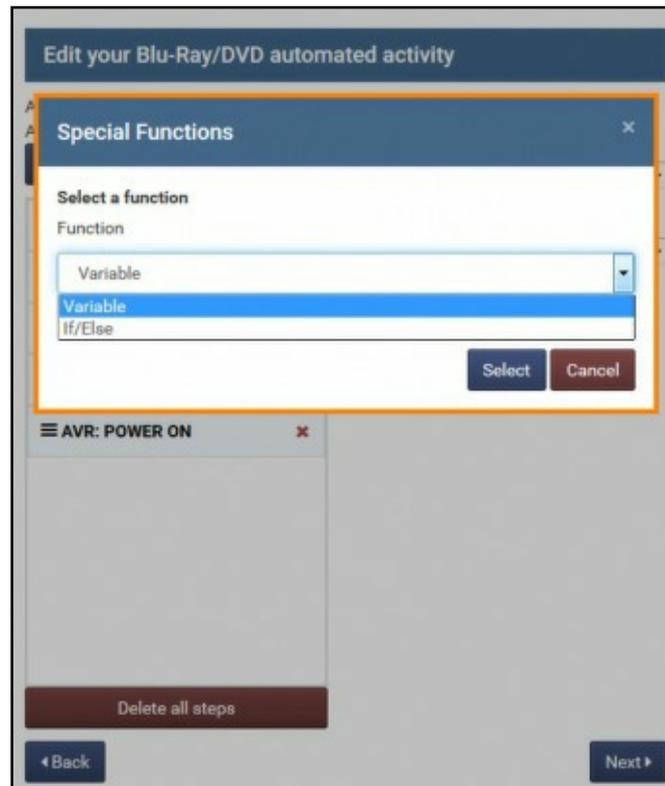
Select to add the command function to the command list. The drop down menu displays all the available commands in the code set added to the system.

● **Test It!**

See if the command performs the function expected by selecting this button. This causes the hub to send the selected command to the device.

Special Functions

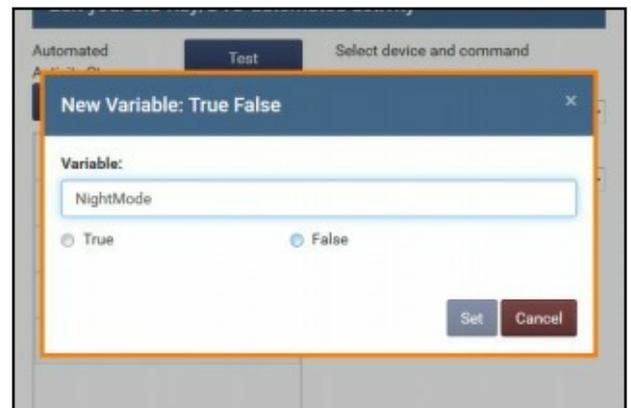
Add a special function to the automated activity by selecting this button. This displays a window that has the following options:



Special Function: Variables

Variables may be used in countless advanced programming methods. There are two types of variables that can be selected for use in automated activities. Before either is used, it must first be created by selecting the **Add new** button in the following screen.

New True/False variables have two possible states; true or false.



New String variables are set to a given text string. This can be any group of characters desired

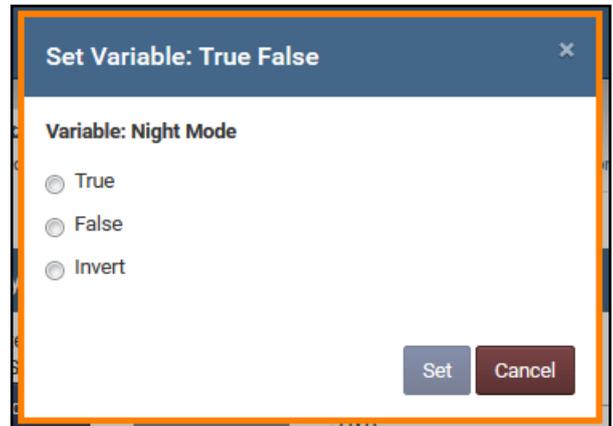


When you create either type of new variable, it must be given a name and a *default state* for the variable must be selected. *True/False* variables must be set to either true or false and *string* variables must have at least one character entered in the *value field*.

After a variable has been create, place it in an automated activity to change the value assigned to it. Similar to creating a variable, first select the special function then select the variable. Then select the variable from the list of any that have been created.

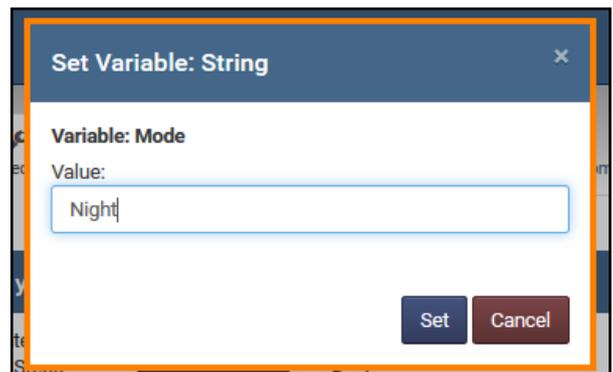
A **True/False variable** must be set to True, False, or Invert.

Setting the variable's value to True or False does just that. Setting the variable to Invert changes the variable's value to the opposite of whatever the current value is; a value of true is changes to false and vice versa

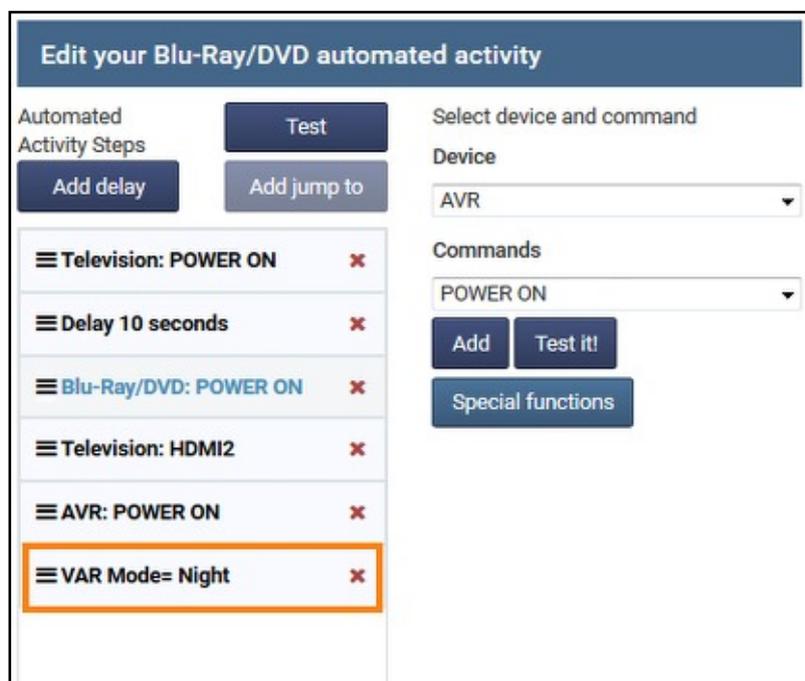


A **String Variable** may be set to any text string desired.

Once ready, press the **Set** button to add the variable to the automated activity command list.



The variable is displayed in the command list with VAR to indicate that it is a variable, followed by the variable name and the value that is set when the automated activity is used. The variable function can be re-positioned in the command list just like any other function.

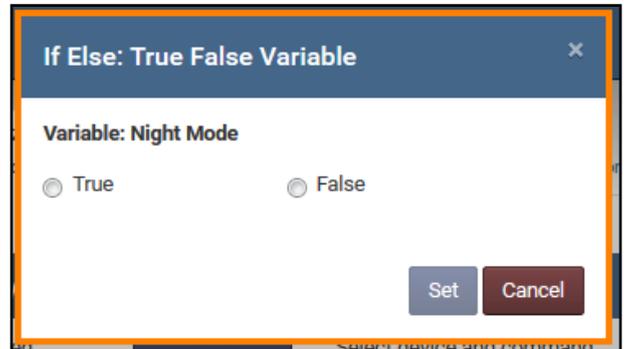


Special Function: If/Else

This allows the automated activity macro to be branched on the state of a variable. In other words, **If** a certain condition exists to do one thing, **Else** do another. The condition is tracked by a variable that was created.

When selecting the If/Else special function, select one of the variables that have been previously made. This is the variable that the If/Else function uses as a condition to check.

When using a **True/False** variable, select which condition to check for; true or false.

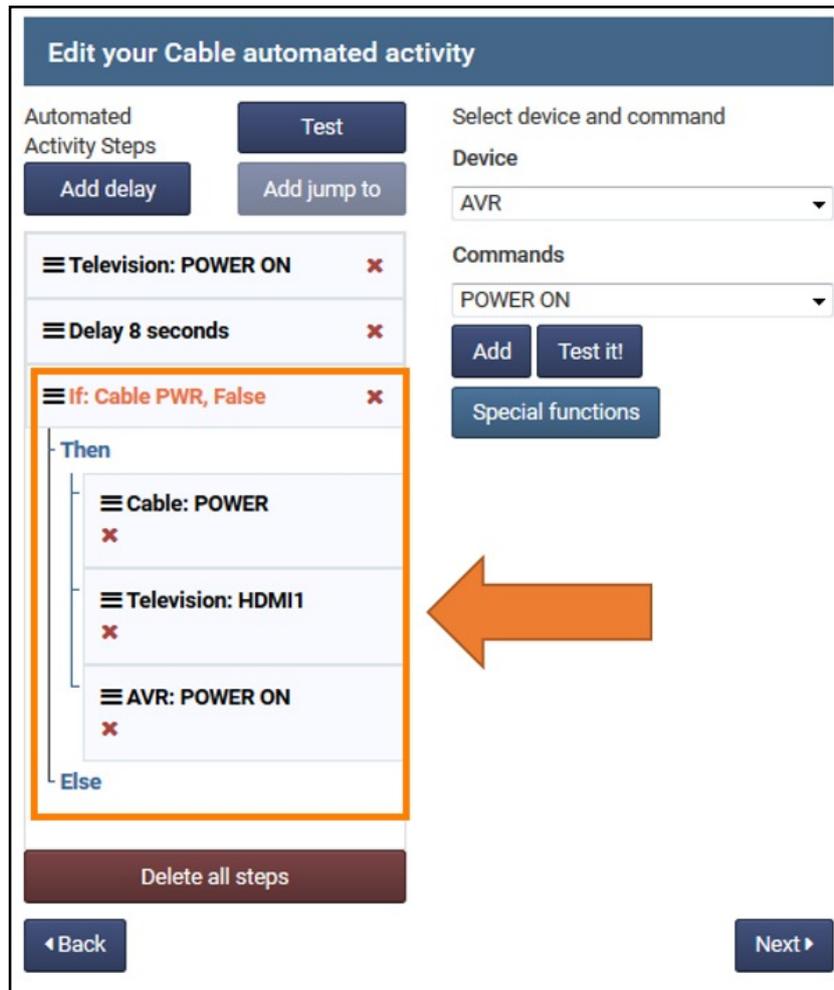


When using a **String** variable in the If/Else, check the variable against the value entered.

Enter the string in the value field and then select the way that it is compared to. Choose to check if the string variable includes the text entered in the value field or check if the variable exactly equals the text.



Once a selection is made, the If/Else is placed into the command list, the branches look as such:



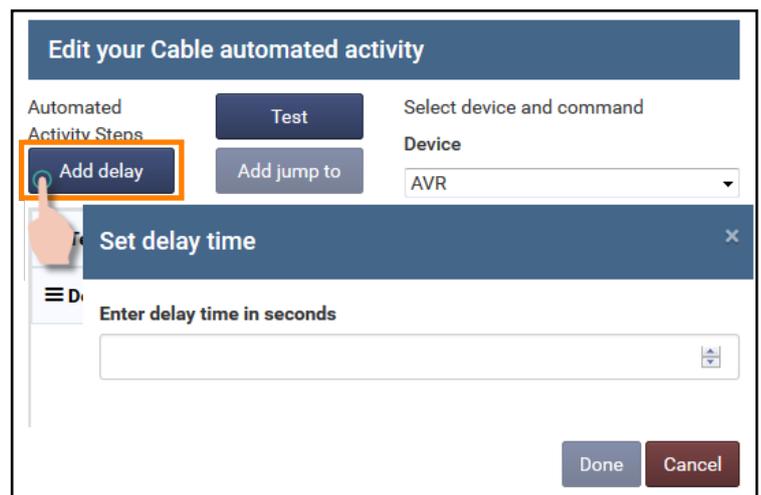
Add additional commands to each branch, the If/Else only runs the commands that are correct based on the variable condition that was selected.

Delay

Add a delay to the automated activity by selecting the button **Add delay**. Enter the amount of time in seconds for the automation to pause.

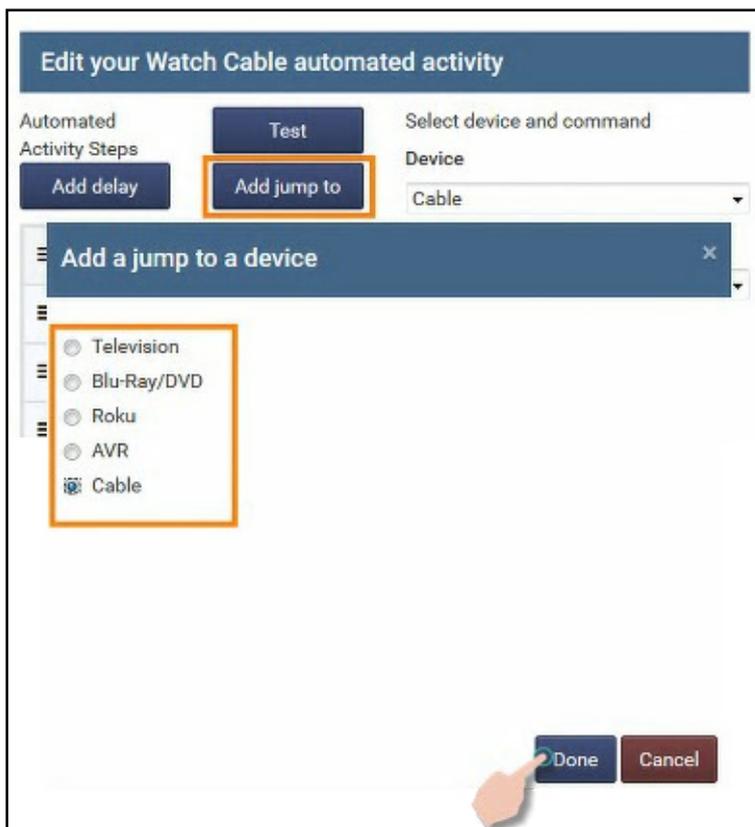


Beginner's Tip: pause macros using delay steps, this can pause the automation from **0.1-99.9** seconds.



Add a Jump To

Select this button to add a step that tells the user interface to change the screen for controlling a particular device.



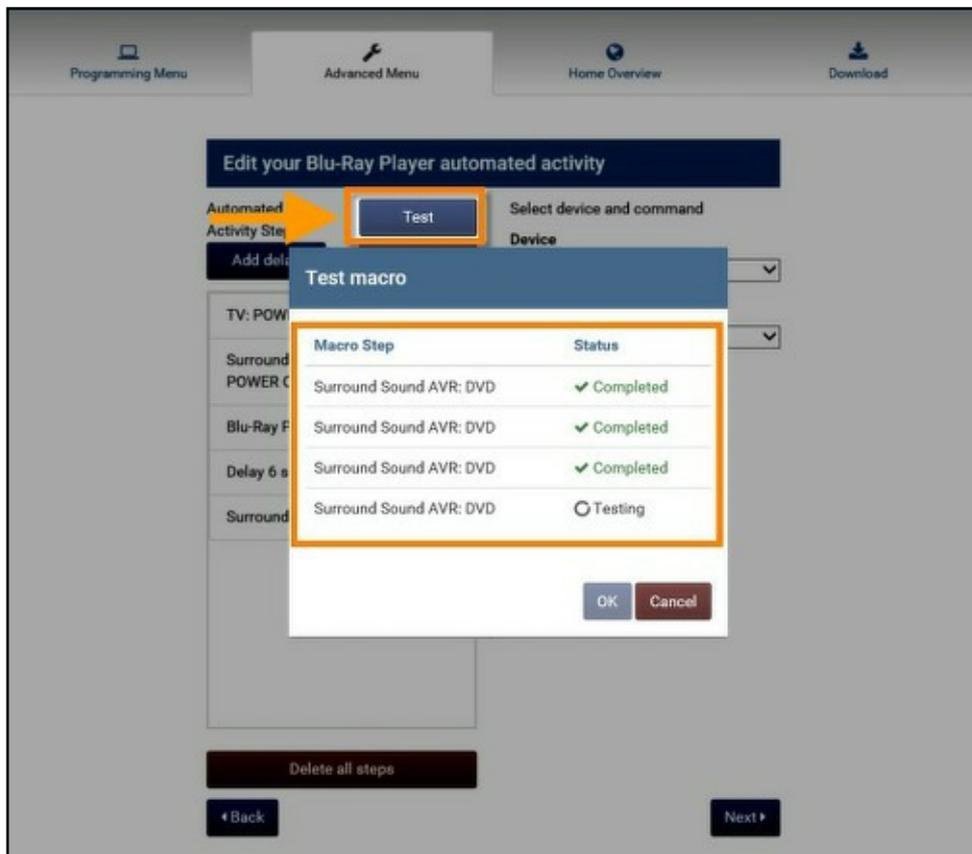
After selecting the Add jump to button, select the target device from the list of available device. Then select the Done button complete the process.



Beginner's Tip: this option is only available when the **Build an automated activity on a new Entertainment page button** option has been selected.

Test

Select this button to test the steps in the automated activity by having the commands sent to the devices by the hub.

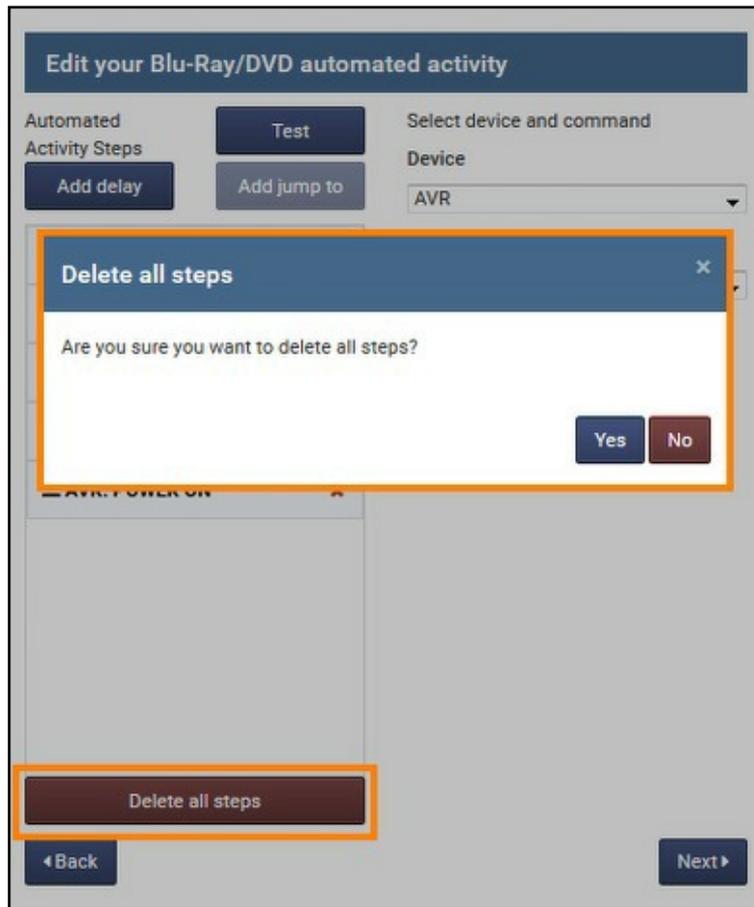


After selecting **Test**, a window appears and list out each macro step. While the test is in progress, each step indicates its status when its turn arrives.

Keep in mind that this test is running through the Internet, so the timing of these steps may not be the same as when the macro is triggered by the interface. For the most accurate test make sure to do so from the actual interface after downloading to the system.

Delete All Steps

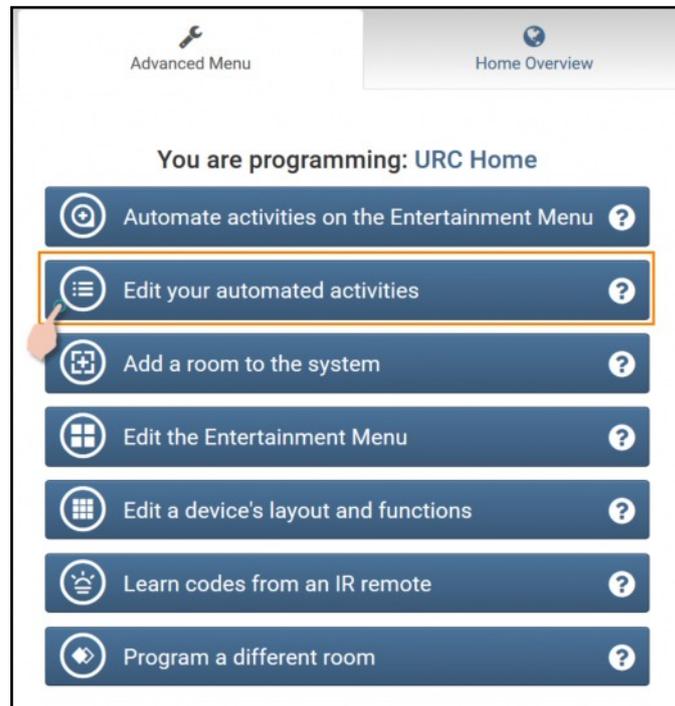
Select this button to delete all of the steps in the automated activity.



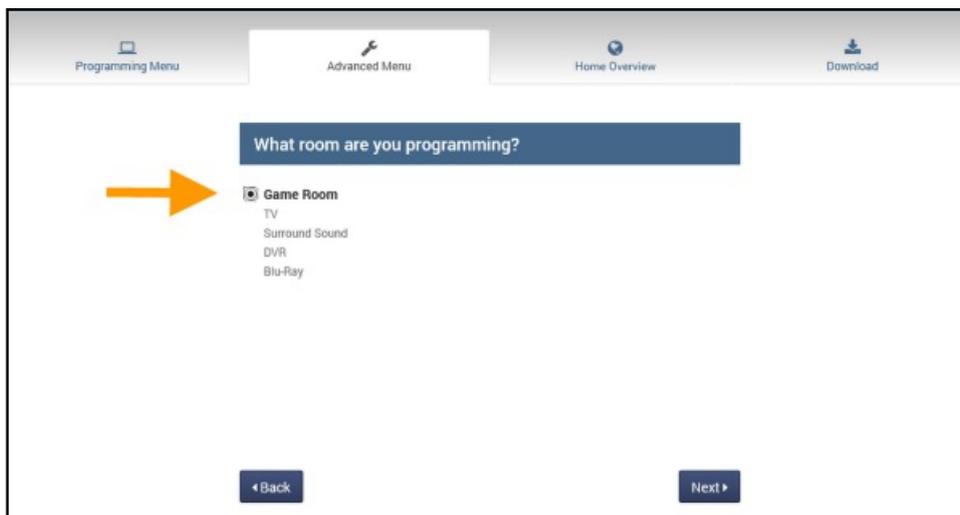
A confirmation notification appears on the screen, selecting **Yes** permanently erases all the steps from the automated activity. Selecting **No** returns the screen to the previous screen.

Editing Previously Created Activities

Editing an automated activity which was previously created is very similar to the method used to create it. To begin select the **Edit your automated activities** button:

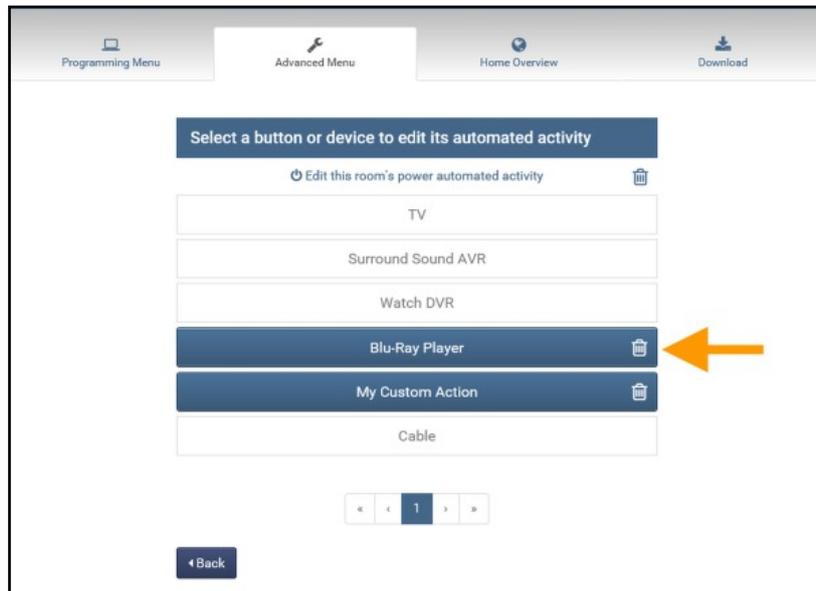


1. **Select** the **room** where the automated activity appears



All of the rooms in the system appear on this list. Select the room needed and press the **Next** button

2. **Choose** the **automated activity** to edit



Select from the buttons on the *Entertainment Menu* or the room's *Power* automated activity. If there are many buttons on the menu they are represented in groups which can be browse through using the page buttons at the bottom of the list.

If the button has not been programmed with an automated activity it is **not** selectable and appears as a gray text on a white background.

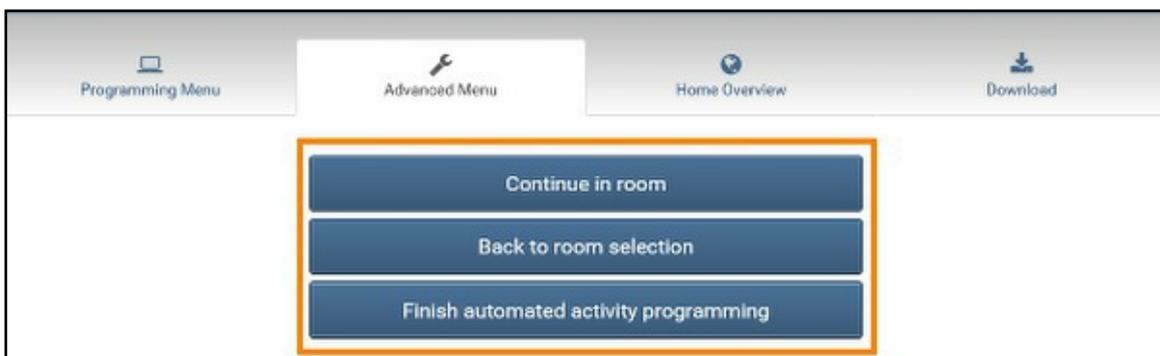
Choose the **permanently delete** an automated activity by selecting the **trash can icon** next to the name.

3. **Edit** the **automated activity** as needed. See all of the automation elements that were previously programmed. Add to them, reorder, or delete them.

The done Automated Activity Done Screen can also be enabled or disabled after making changes to the macro.

See the *Automated Activity Editing section* for additional details.

4. After the editing of the automated activity is complete, there are **three (3) navigation options** to choose from:



- **Continue in room**

This option returns to the **list of automated activity types** to choose from so that they can quickly begin programming another in the same room.

- **Back to room selection**

This option **returns** you to the **list of rooms** so that a different room can be selected for programming

- **Finish automated activity programming**

This completes the finish automated activity process and returns the editor to the Advanced Programming Menu.

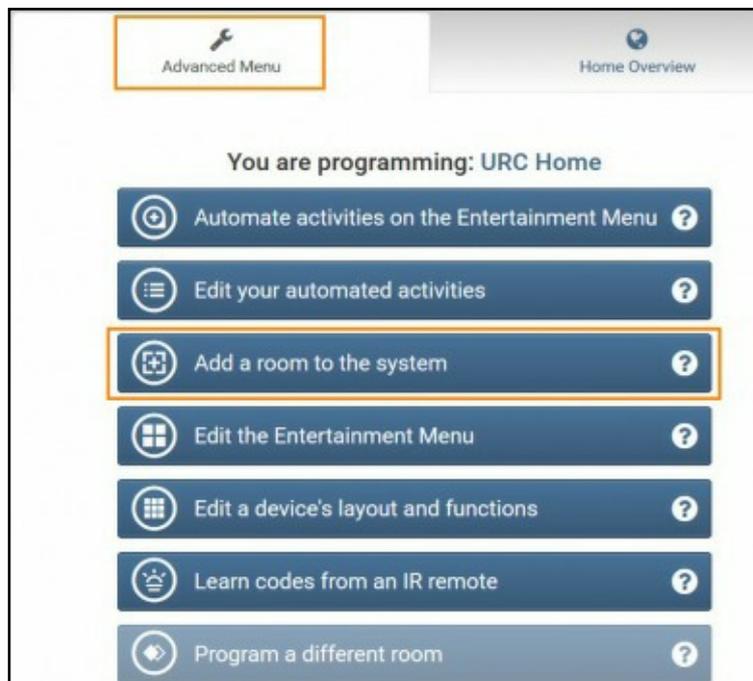
Choose the option that is needed, selecting **Finish automated activity programming** concludes the editing process.

Adding Additional Rooms

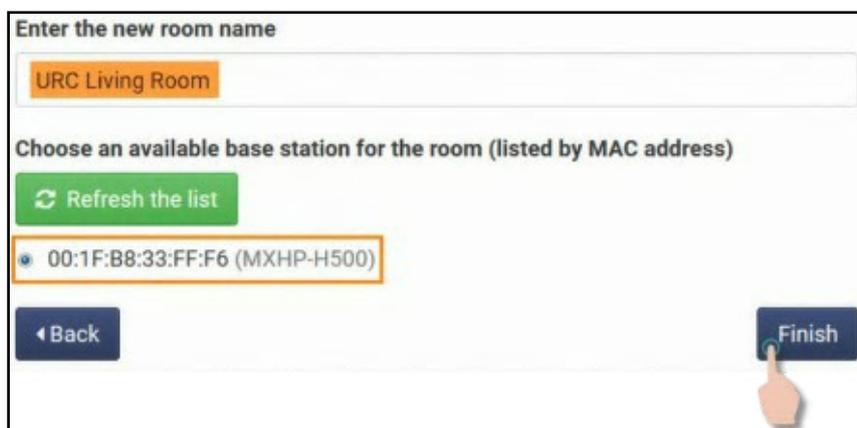
When controlling a system to be able to operate devices in more than one room, the software must add an additional room and hub.

Follow these steps:

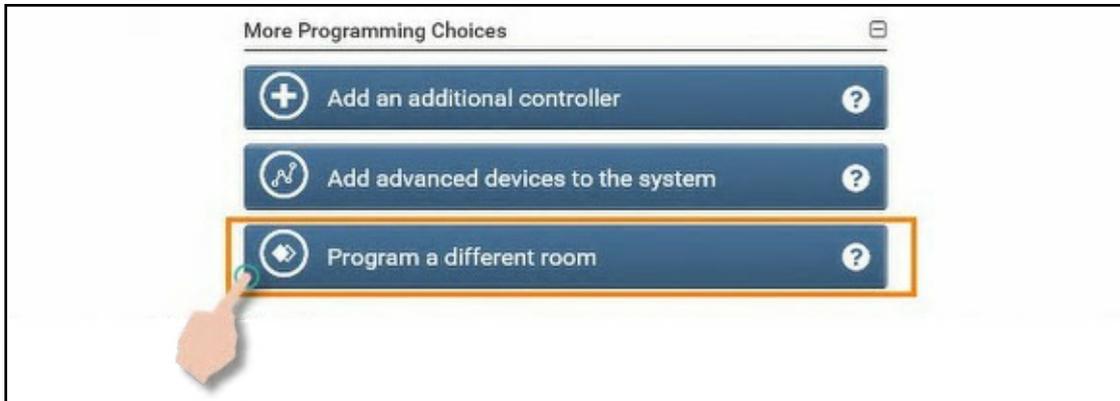
1. Locate and select the Advanced Menu and choose the **Add a room to the system**



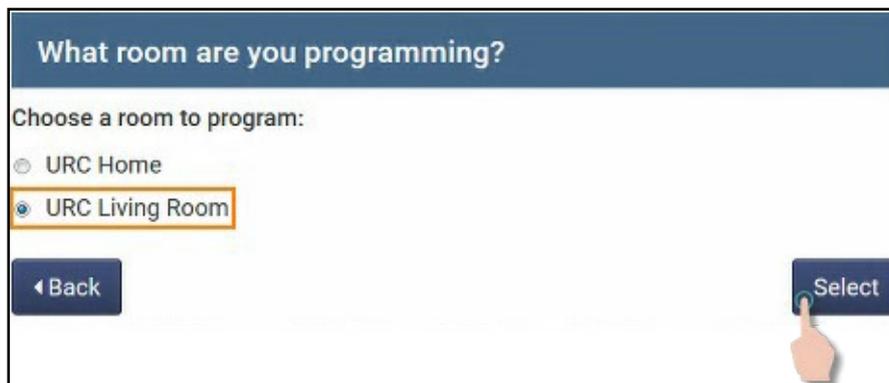
2. The editor **automatically searches** the network for an unassigned **hub** and displays it in this menu, enter a name for the room being added to the system



3. **Select** an **available hub** from the list of those discovered on the network, if a the device in question does **not appear** make sure it is **connected** to the **same network** as any other previously discovered hubs then select the **Refresh the list button**
4. Select the **Finish** to add the room to the system
5. Return to the **Programming Menu** and select **Program a different room**



6. **Select** the **room** to program

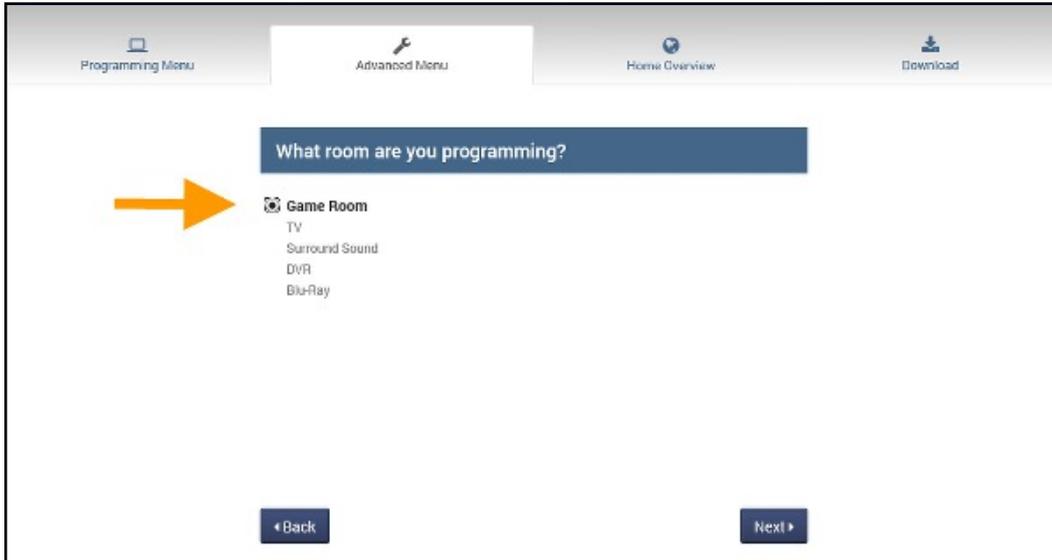


7. Once the room has been chosen press the **Select** button

Editing the Entertainment Menu

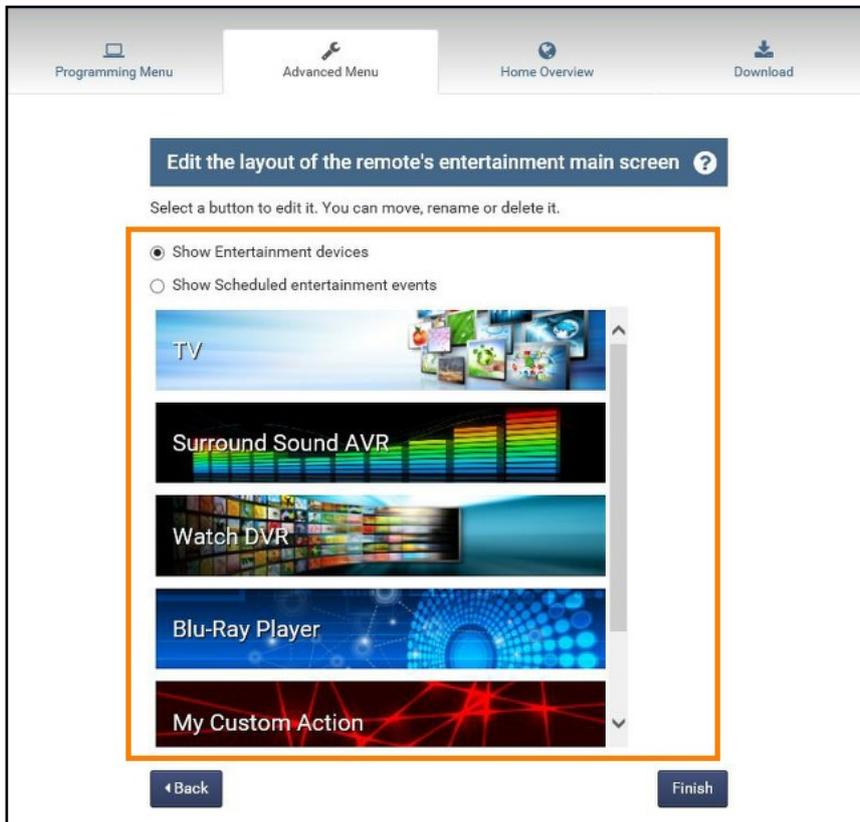
Alter the look of the Entertainment Menu for every room in the system. The button images and text can be changed to give the desired look. To begin select the **Edit the Entertainment Menu** button on the Advanced Menu:

1. Choose the room where the Entertainment Menu is to be edited



All of the rooms in the system appear on this list. Select the room needed and press the **Next** button

2. This list represents the buttons on the **Entertainment Menu** of the room selected. If the list has many buttons, scroll through it to view all of them.



Entertainment devices are listed *separately* from scheduled Entertainment Events. Choose the list by selecting the appropriate option at the top. Then select the button to edit by pressing it.

3. After selecting a button there are two (2) editing options presented. Select the **pencil** to edit the button or select the **trash can** to delete the button and the device it represents.



4. Selecting the **pencil** opens a window that allows the following three (3) actions:

A screenshot of a dialog box titled 'Edit the device button'. The dialog has a dark blue header. Below the header, there is a text input field containing the word 'Television'. Underneath the input field are two checkboxes: 'Hide Text' and 'Hide Device', both of which are currently unchecked. Below the checkboxes is a section labeled 'Current icon:' which shows a preview of the television button from the previous screenshot. To the right of this preview is a dark blue button labeled 'Change'. At the bottom right of the dialog are two buttons: 'Done' and 'Cancel'.

- **Edit the button name**

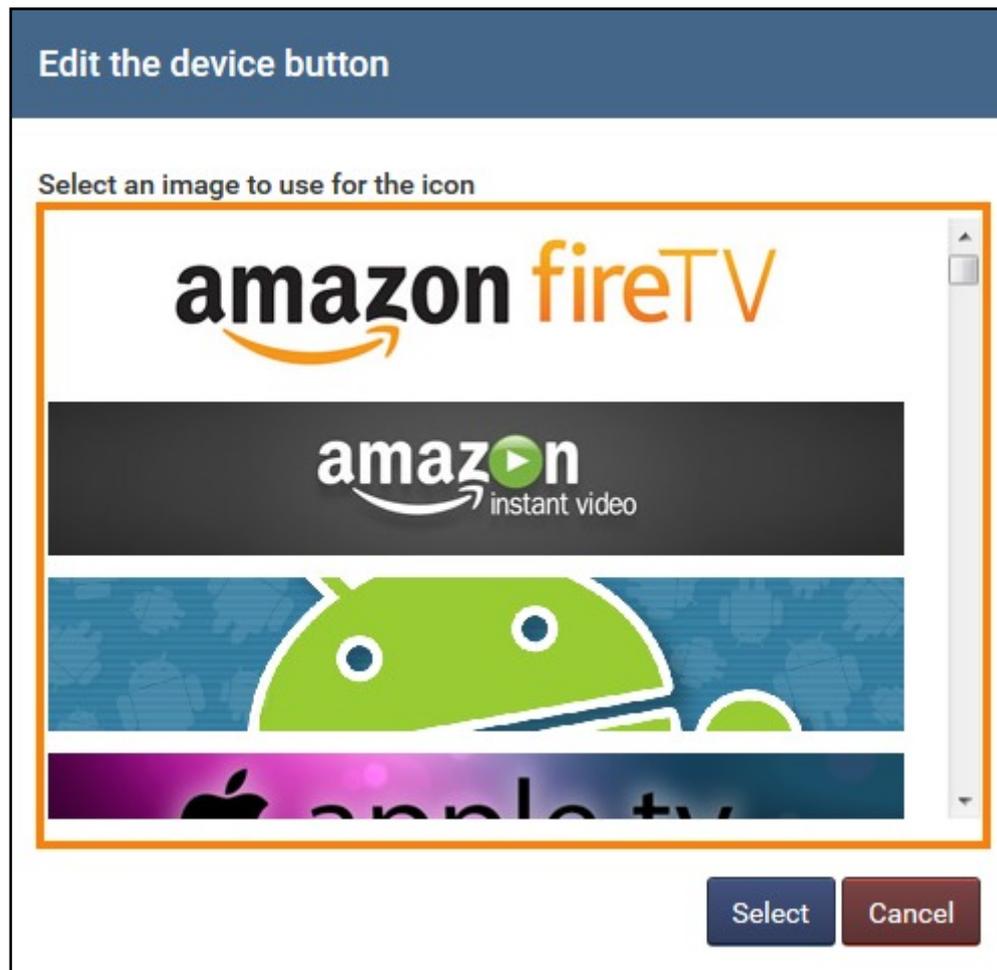
Select the text field and enter the label, this edits what appears on the user interface.

- **Hide Text/Hide Device**

Select the option to Hide text so that only the button image displays. This is useful when using a logo that already has text on it. Selecting Hide Device removes the button from the Entertainment Menu without deleting it from the system.

- **Change the icon**

Select the Change button and an additional window opens that displays the available button images.

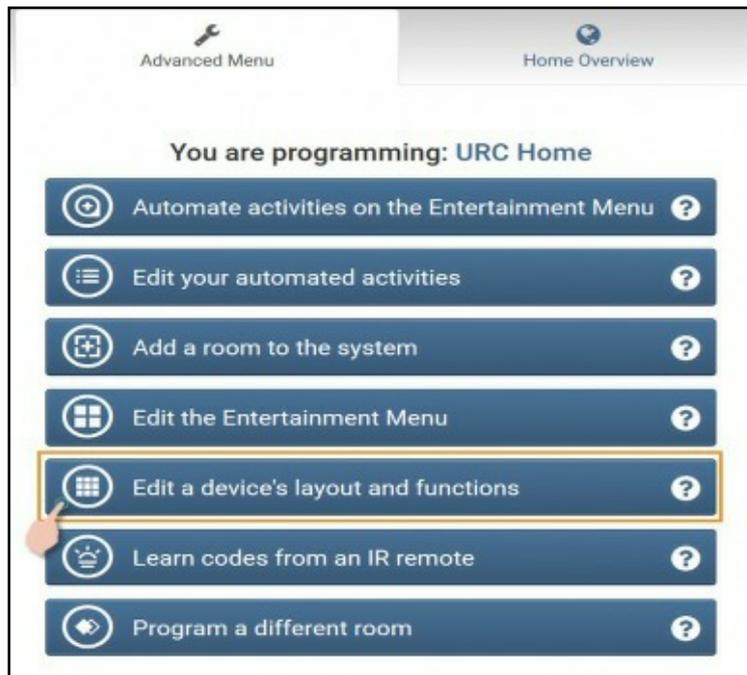


Select an image and confirm it using the Select button. This sets that new image as the button icon on the user interface.

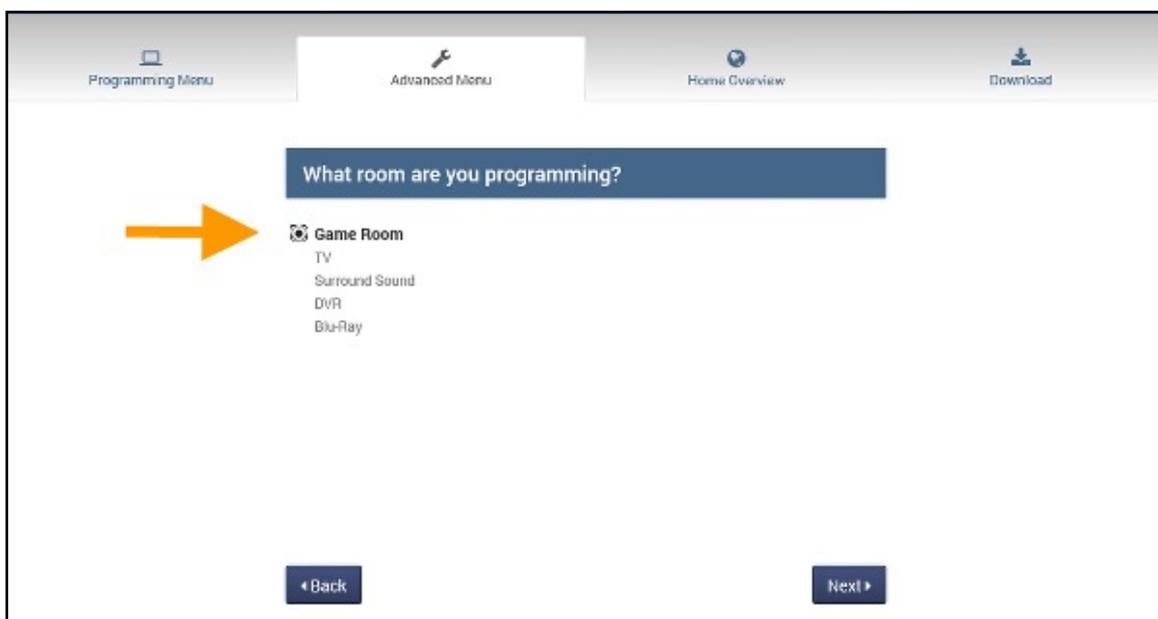
5. **Reorder** the button in the Entertainment Menu by dragging a menu item up or down on the list. Release the button once it is in the proper position
6. When all editing is complete, select the **Finish** button to return to the Advanced Menu

Editing a Device's Layout

After adding a device to the system it is ready to use after downloading. However, if there is still room for improvement this option can alter the layout of any device that has been programmed on the Entertainment Menu. The button positions and text can be changed or deleted entirely. Go even deeper by altering the way the individual device commands behave when the buttons are pushed. To begin select the **Edit a Device's Layout** button on the Advanced Menu:

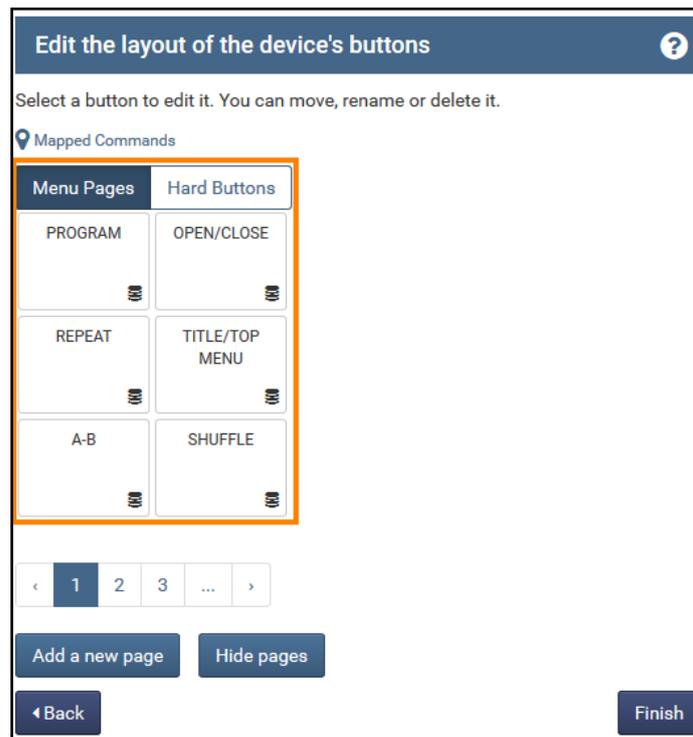


1. **Choose** the **room** where device to edit is programmed



All of the rooms in the system appear on this list. Select the room needed and press the **Next** button

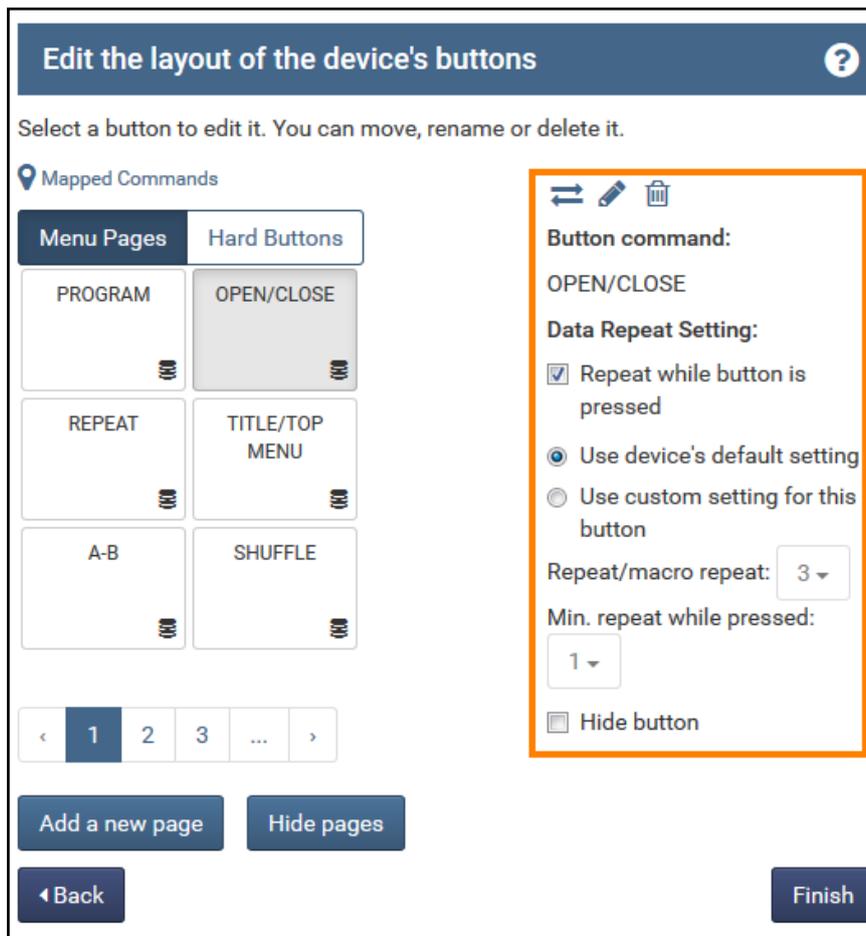
2. The **Device Editing** screen displays:



When the screen first opens it displays the first page of menu buttons that appear on the user interface. Hard buttons can also be viewed by selecting the **Hard Buttons** tab at the right of **Menu Pages**. Move through the available groups of these buttons by using the numbered page indicators below the button layout.

Easily move a button to another position on the current menu by selecting the button and **dragging** it onto another. The other buttons reposition to make room the button that was just moved.

3. Select a button to view the **editing options** and the data repeat settings for it:

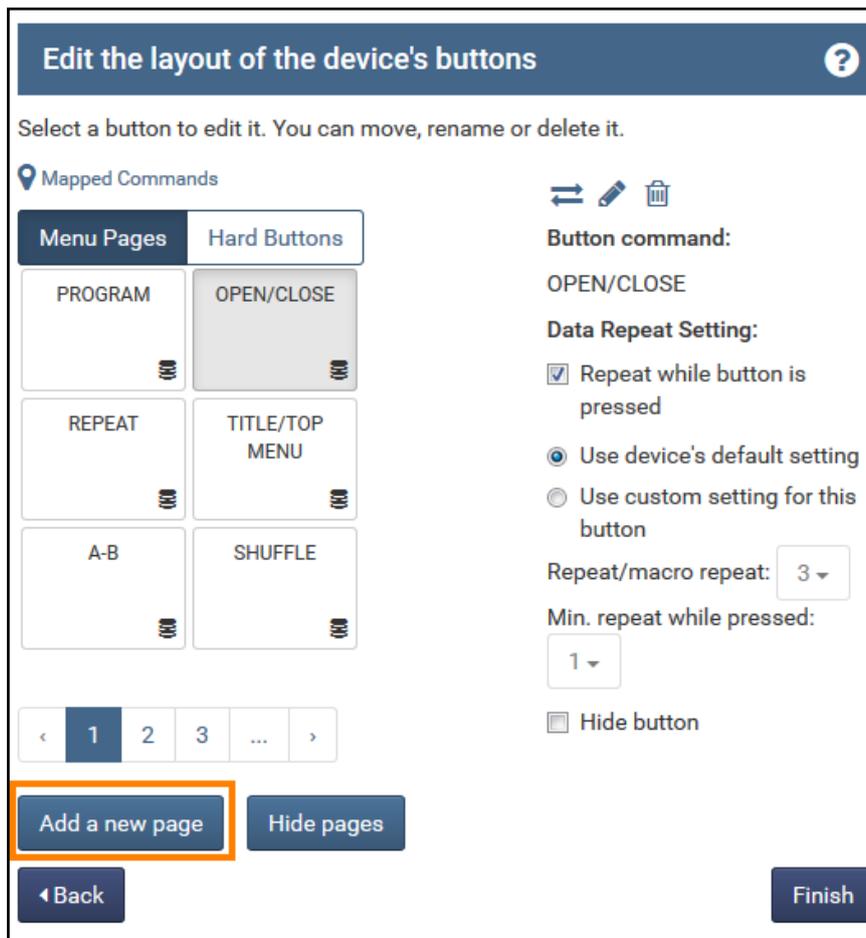


Select the **pencil icon** to **edit** the button label or the assigned function. Select the **trash can** icon to **delete** the button. The **arrow key** is used to **swap** positions with a different button on the menu.

The **data repeat settings** can also be adjusted for individual button functions here. While this can be helpful for fixing problems like a volume command that moves too quickly, an incorrect setting can have a very detrimental effect on system usability. If adjustments are needed, make small ones and test them after downloading to the system.

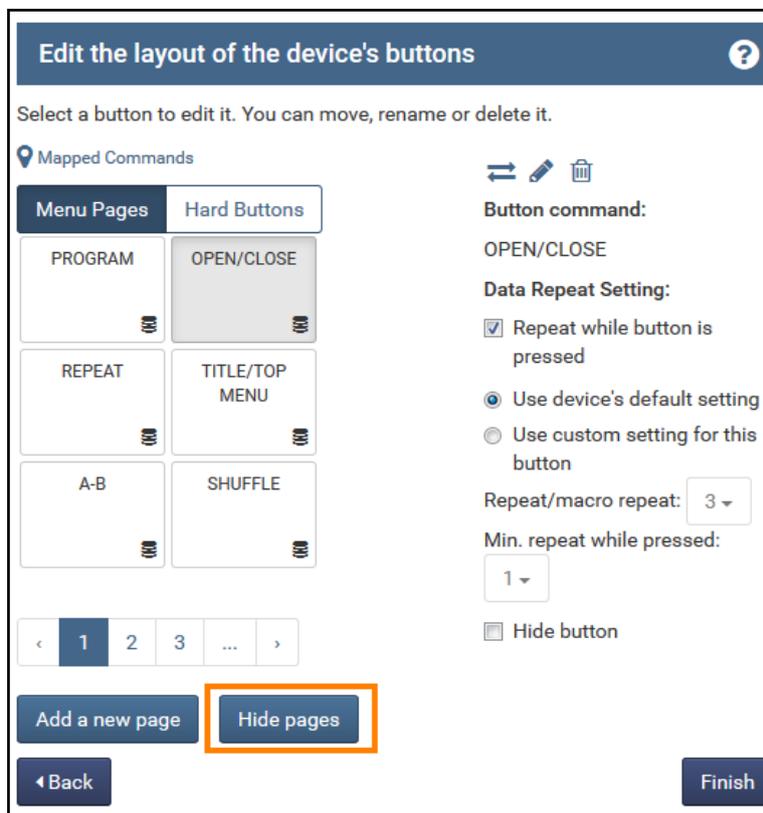
These options are explained in more detail in the **Device Layout Editing Screen** section.

4. Add additional menu pages by selecting the **Add a new page** button



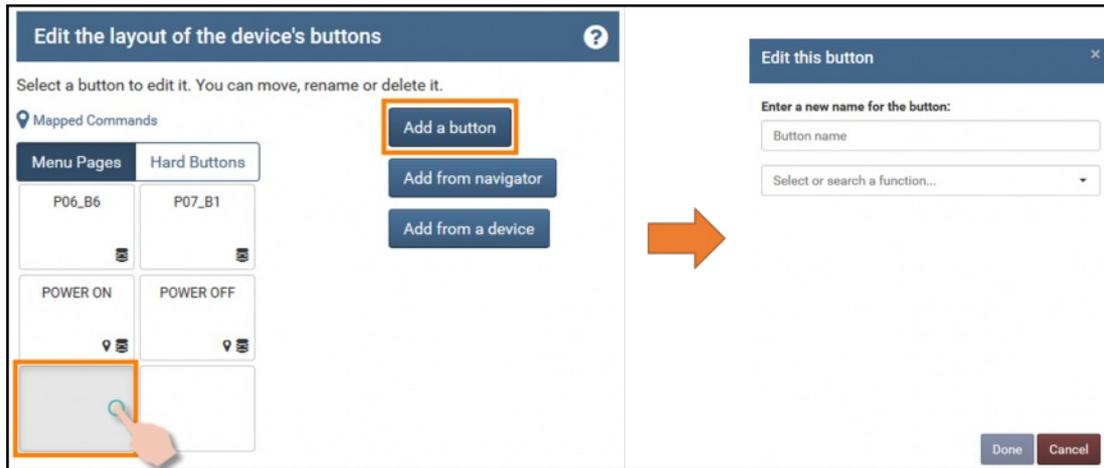
If any page is left blank, the editor automatically **deletes** it.

5. Select the **Hide pages** button to hide any pages that the user does not need access to



One or more pages of device button can be hidden or, if already hidden, made visible.

6. **Select** an **empty button** space then press the Add a button option to add an extra button to that menu page



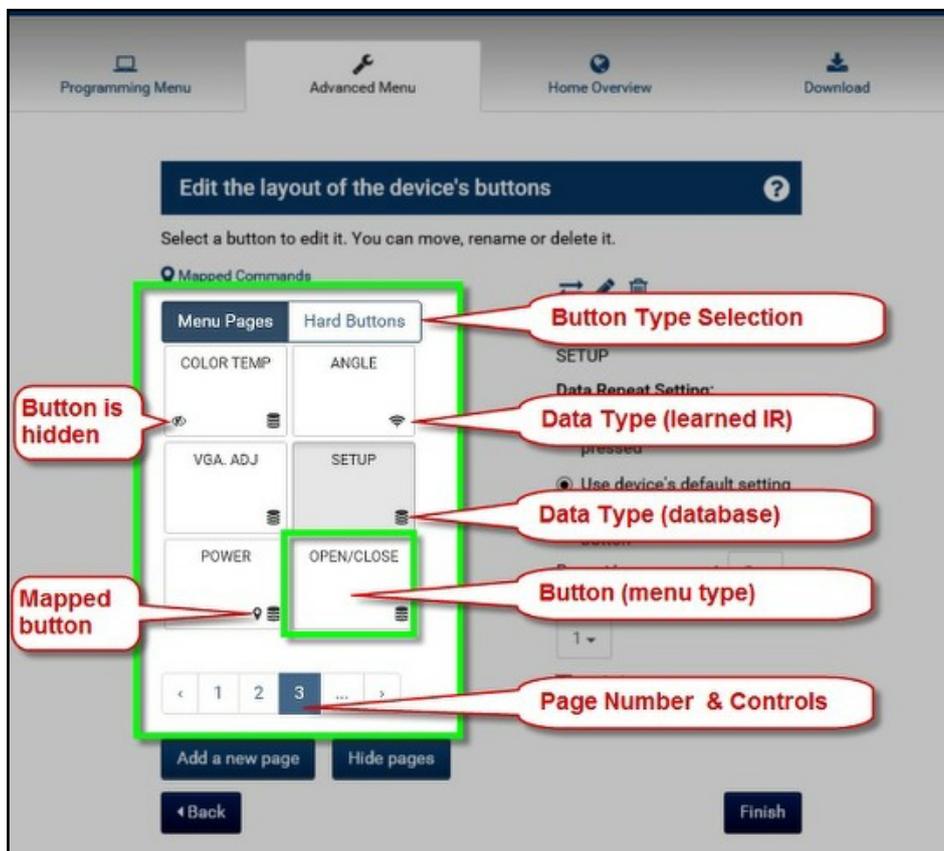
In the edit window, enter a name for the new button and then assign a command function to it by choosing one from the list. Select **Done** when complete.

Device Layout Editing Screen

When choosing to change the way that a device looks when it is used on the user interface, use the **Device Layout Editing Screen** to do so.

Button Simulator

This simulator displays the **menu pages** in the editing screen. This gives the most efficient starting point because most device layout operations are simply *re-labeling* and *rearranging* button on the menu pages. The main points are described below:



- **Button Type Selection**

Select on the **Button Type** to display in the simulator. Button type choice are *menu pages*, which are the buttons displayed on the interface screen, and *hard buttons*, which

represent the physical and permanent button on the remote control, such as volume buttons. The current type selection is highlighted in blue.

- **Buttons**

Buttons are simulated here and display their **text label** and relative position that they are in when downloaded to the user interface(s). Menu page buttons display their text label and data type. They also display an **indicator** if they have been selected as a **mapped** button. **Hard** buttons display these, along with the fixed label from the physical button which cannot be deleted.

- **Rearranging Buttons**

Easily move a button to another position on the current menu page by selecting the button and dragging it onto another. Then release it and they other buttons reposition to make room for the button just moved. Hard buttons **cannot** be moved in this manner. To **move** a button to **another page** use the **swap** feature described later.

- **Data Type**

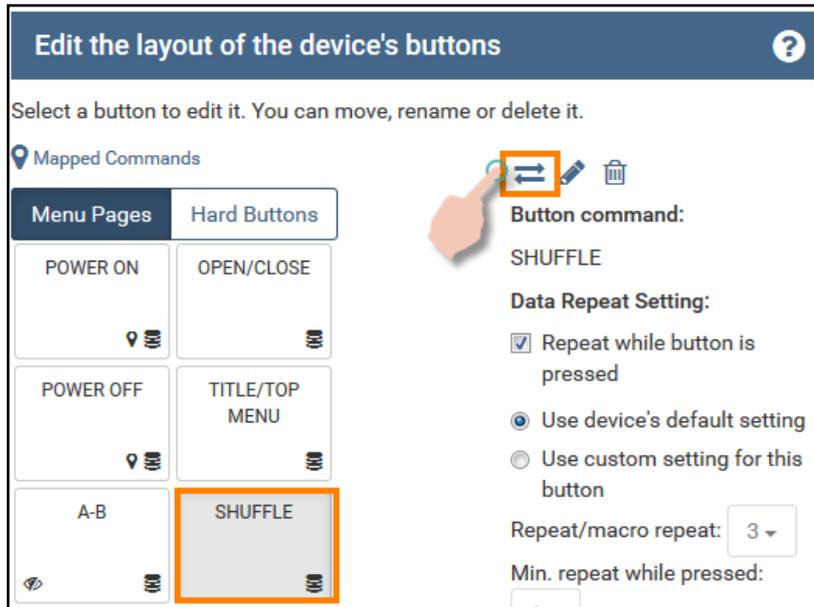
Each button also displays the type of **device function** command data stored on them. The database type is a command that comes from the **preprogrammed device** command database represented by  . The **learned IR type** is a command that was learned to the device from another remote control and is represented by the icon  .

- **Page Number & Control**

Use the page number control to move through and view the different pages of buttons for the device. Select on the numeral to jump directly to that page or select on the left or right arrow to move one page at a time in the indicated direction.

Button Swapping

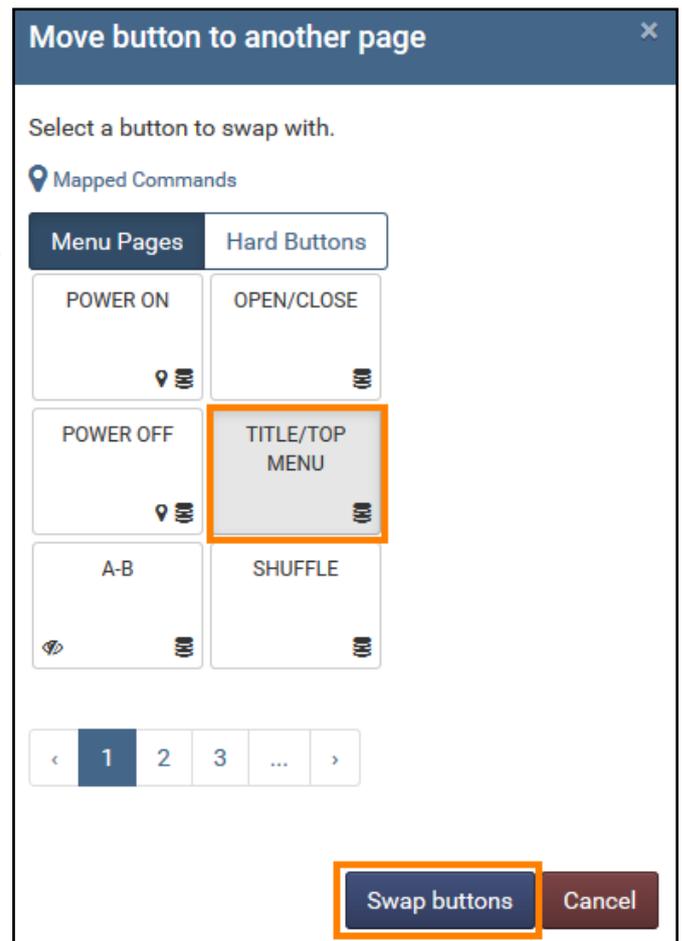
Use the **swap** function to move a button to another page from the one it is on or to move hard button command.



A window opens allowing for the **selection** of **any** other **button** in the device as the target for the swap. When selecting the target, press on the swap button execute the move.

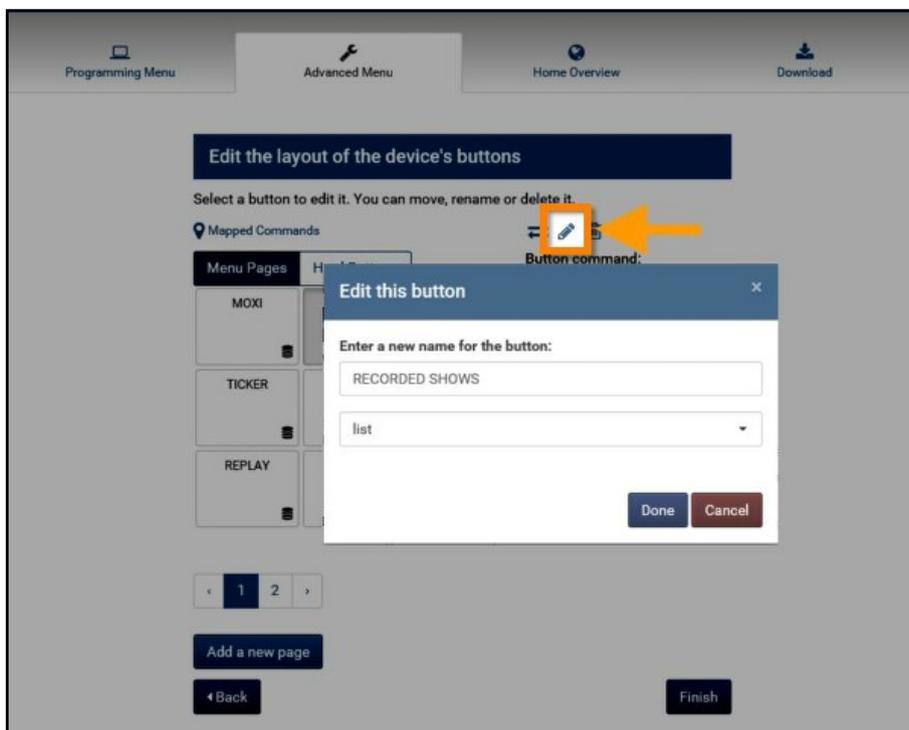
Selecting any button, even a **hard button**. If swapping with a hard button, the hard button text label swaps, not the fixed label.

Selecting a **blank space** is also possible. In this case the original button moves to the blank space and there is no button where the original was located.



Button Function Editing

To change the text label on a selected button or change the command assigned to it, select the **pencil icon** to edit it.



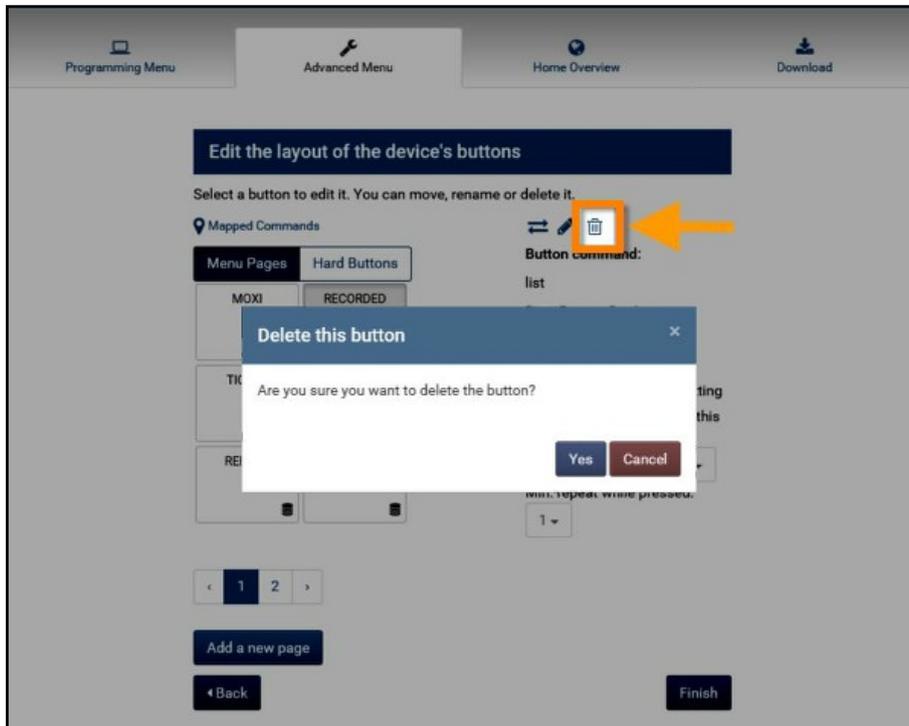
From the window that opens, **add** button **text label** by selecting the field text and entering what needs to be displayed or edit the text that is already present.

From this window, **assign** a different **device function** command to the button. To do so select the the drop down menu and choose the function for the button to use. This does not affect the text label of the button.

When all edits are complete, select the **Done** button to close the window.

Deleting a Button

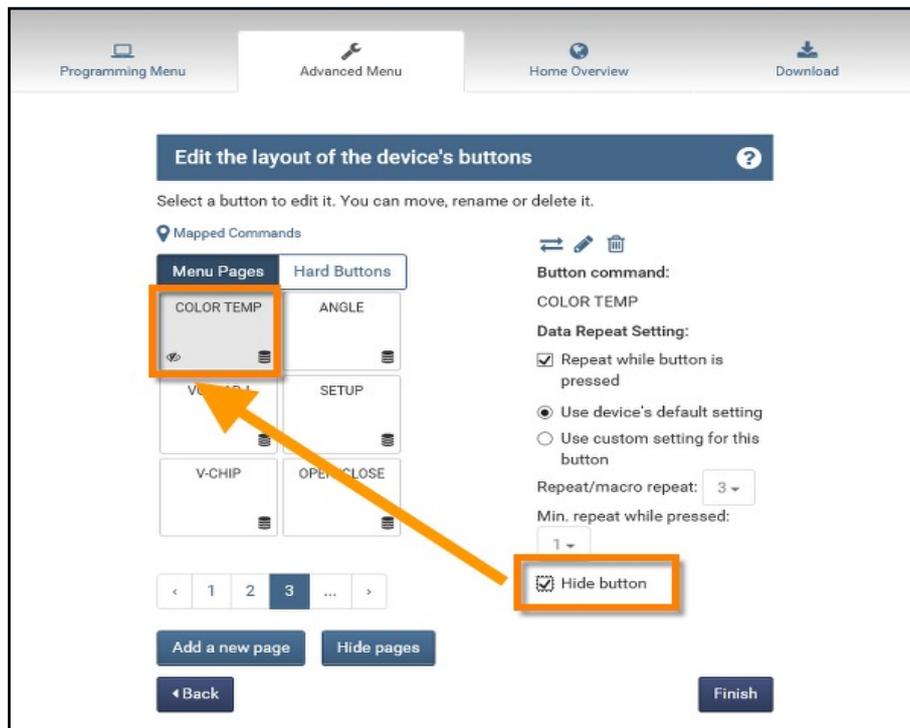
To remove a button, simply select the **trash con** icon to **delete** it.



A window open for confirmation, select **yes** to permanently **delete** the button. Deleting the button does remove it from the user interface, but the device command function is not deleted. It is still available in the device function list.

Hiding a Button

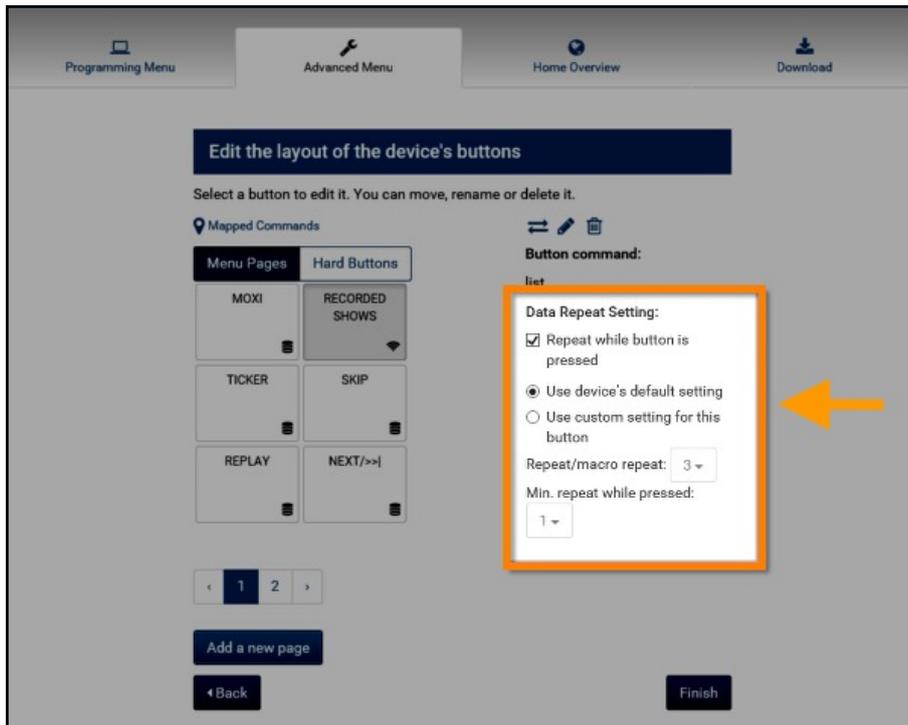
In some instances, deleting a button is not always what is best. For those cases, prevent that button from displaying on the user interface by using the **hide button** option.



When the **Hide button** option is selected an indicator  appears on the button to acknowledge that it is hidden. This button does not appear on the user interface. This process can be **undone** by **deselecting** the **Hide button** option.

Data Repeat Settings

When selecting a button the data repeat options are visible. Most of the times these can and should be left at their default state. However, in certain situations they need to be changed to a custom setting for an individual button to improve performance.



- **Repeat while button is pressed**

This option determines if the device command function **repeats** for as long as the button is **continuously pressed** down. Select the box to set the command to repeat while pressed. This setting is commonly used for commands such as **volume** where the user presses the button to raise or lower the level until it reaches the desired point.

- **Use device's default setting**

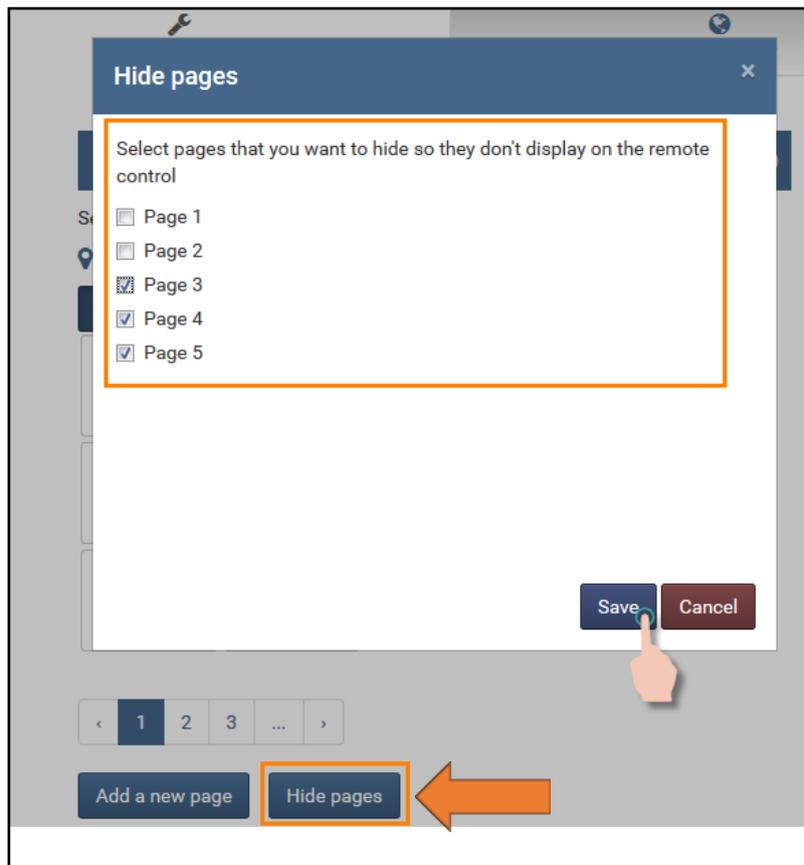
This option sets the button to use the **same** command repeat settings that are applies to the **device properties**. These are adjustable for the entire device under the **Home Overview** page.

- **Use custom setting for this device**

Selecting this option allows the button to have the **repeat settings** set **individually**, applying only to it and no other buttons. The effect of the **repeat/macro repeat** and **min repeat while pressed** values here are the same as **macro repeat** and **button pressing repeats** values respectively, which are found under the device properties in the Home Overview. See the **device properties** in the **Home Overview** section for additional details.

Hiding Pages

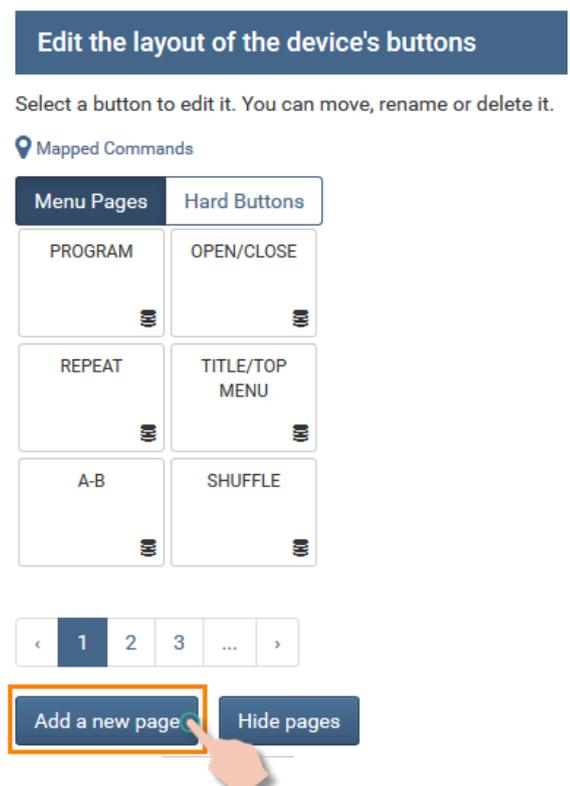
There may be times when an entire **menu page** of buttons needs to be hidden. Select the **Hide pages** button and select the pages to hide:



From the Hide pages menu, **select** the menu pages to hide on the user interface. Whenever a page is hidden, a ***Hidden Page*** text is labeled below it.

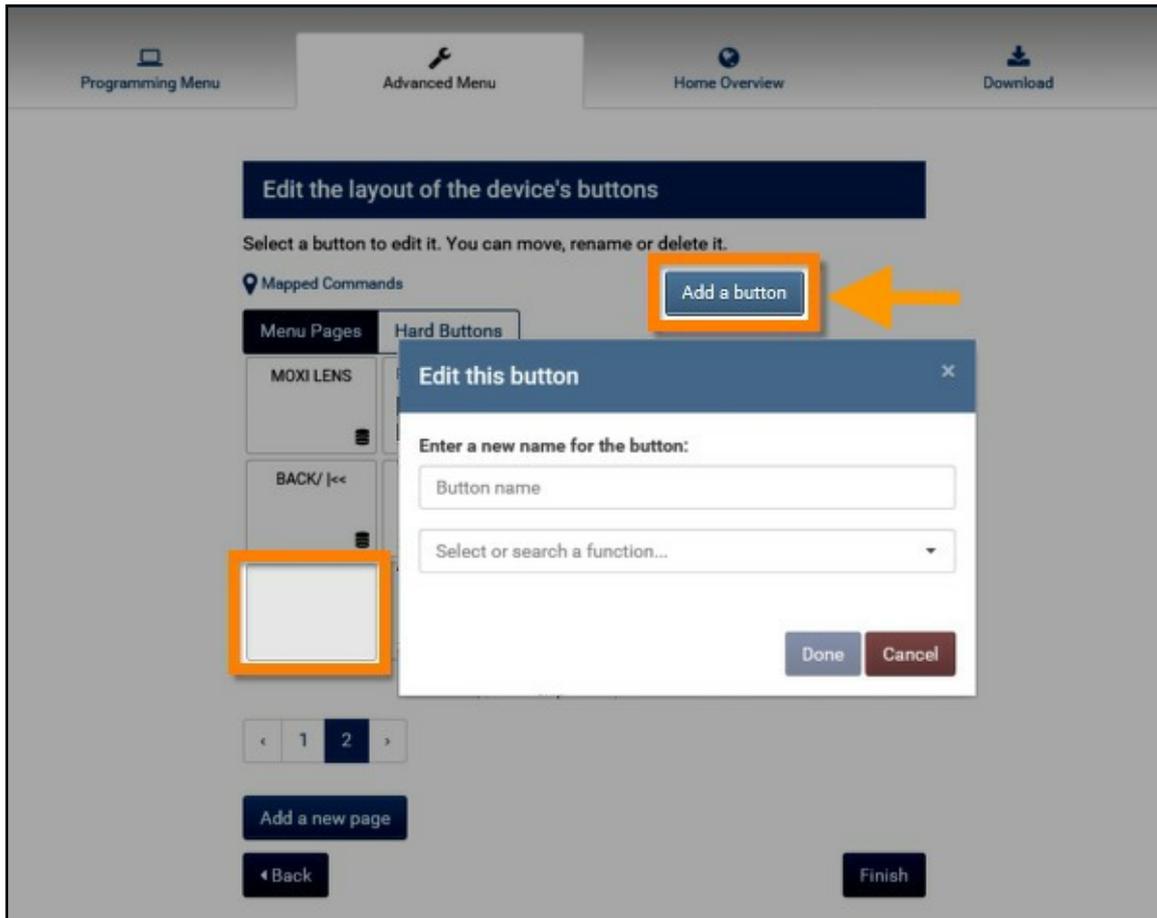
Adding a New Page

Select **Add a new page** and an additional blank menu page is added after the last page. If any page is left completely blank, the editor automatically removes it.



Adding a Button

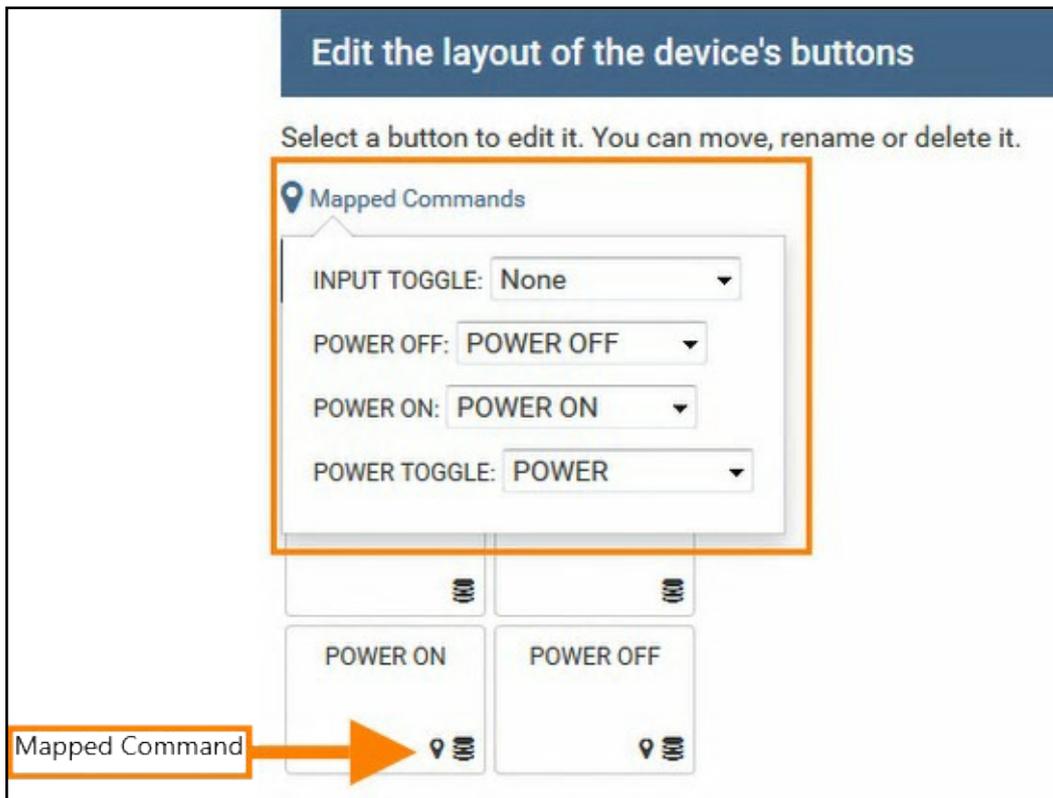
Choose an **empty** button **space** then select the **Add a button** option:



Choose **blank menu buttons** or **hard buttons**. In the edit window **enter** a **name** for the new button and then **assign** a **command** function to it by selecting one from the list. Select the **Done** button when completed.

Mapped Commands

The **Done Screen** feature organizes **power** and **input** commands to make it easier for a user to enjoy the system and stop worrying about finding commands on the user interface. To speed up assembling of the Done Screen, choose to designate mapped commands for power and input on devices. These commands then are highlighted the first time when building a **Done Screen** for a particular **Simply Activity** or **Automated Activity**.



Select the **Mapped Commands** button to open the settings panel. In the settings panel there are four (4) command types that are mapped; these are described below:

- **Input Toggle**

This command is the one that toggles or **cycles** through all of the **available inputs** on a device. This command is labeled in many different ways; however, the most **frequent** is *Input* or *Source*.

- **Power Off**

This command is the one that **always** turns the device **off**. It is also known as a discrete off command. It is often labeled *Power Off*, *Off*, *Standby*, or *P-Off* in the database of functions.

- **Power On**

This command is the one that **always** turns the device **on**. It is also known as a discrete on command. It is often labeled as *Power On*, *On*, or *P-On* in the database of functions.

- **Power Toggle**

This command is the one that **toggles** the **power** state of the device **on or off**. This command is usually labeled as *Power*.

Mapping button commands is optional, many devices in the database are mapped already. However, if using Simple Activities or Automated Activities, make sure the commands are mapped, this can save time.

Learning Codes from an IR Remote

The hub has the ability to **learn** most **IR commands** from **other remote controls** and then store them so that they can be used by your system to operate the original device. Learning IR commands, though a powerful feature, is a last resort.

Remember the following when learning IR commands:

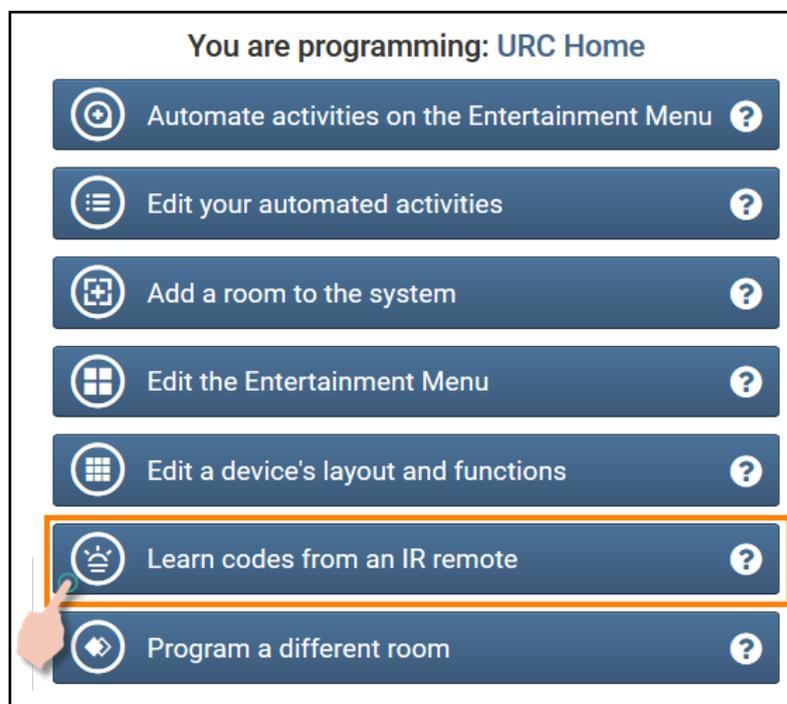
- **Fresh Batteries on the Original Remote**

Weak batteries often cause the system to **fail** when trying to learn. Even if the original remote operates the component, the batteries can be too weak to produce a strong enough carrier for any learning remote to detect. If a code fails, replace the batteries.

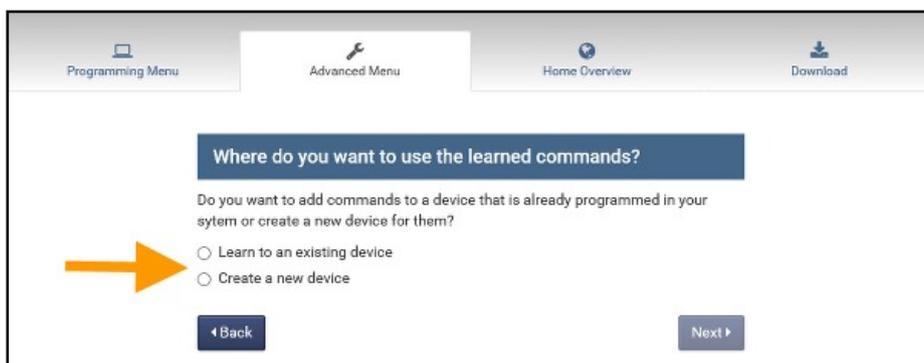
- **Vary the Distance between the Remote and the Learning Sensor**

It is recommended that the **starting distance** be a **half of an inch** between the remote and the learning sensor. If this doesn't work, try varying the distance by doubling it each attempt. Keep trying until at three (3) feet away from the learning sensor.

To begin the process select the **Learn codes from an IR device** from the Advance Menu:



1. First decide **where** in the system **to save** the learned commands to and select **Next**



Learn commands to either an *existing device* in the system or create an entirely *new device*. If there are database codes that work the device but are missing some functions, the save time by learning codes to that existing device. Otherwise create a new device.

2. If **creating a new device** for learning, it require entering in some basic information so that the system correctly handles the device.

The screenshot shows a web form titled "New Device Info". The form is divided into several sections, each with a label and a corresponding input field or control. The sections are: "Add a device to room" (dropdown menu with "URC Home" selected), "Select a device type to control" (dropdown menu with "Televisions" selected), "Enter a name for the device" (text input field), "Enter the manufacturer name" (text input field), "Enter the exact model number" (text input field), "Base station infrared (IR) output setting" (radio button options: "Wired IR emitters attached to my device" is selected, "Wireless IR (requires line of sight from the base station to the device)" is unselected), and "Select which Controller will control this device" (dropdown menu). At the bottom of the form, there are two buttons: "Back" and "Next".

- **Add a device to room**

Choose the room in the system where the device is used.

- **Select a device type to control**

Assign the device type by choosing one of the options from the list.

- **Enter a name for the device**

Enter a name for the device, this label appears on the user interface and is used for selecting the device. This can be changed later if required.

- **Enter the manufacture name**

Enter the brand name of the manufacturer of the device.

- **Enter the exact model number**

Enter the model number just as it appears on the device, this is very helpful if troubleshooting the device.

- **Base station infrared (IR) output setting**

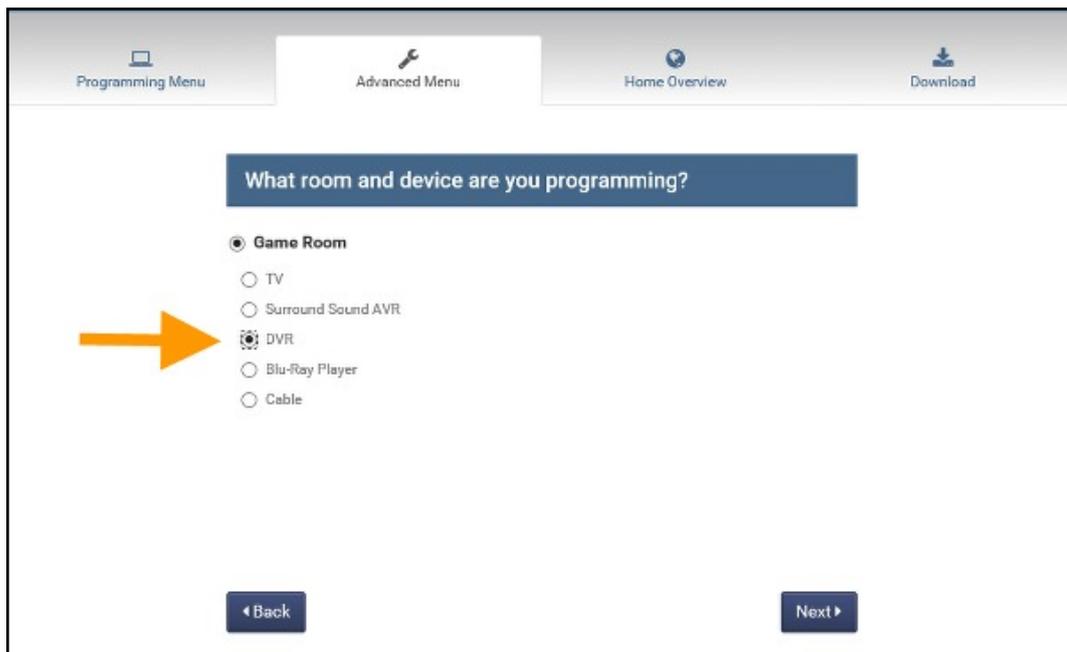
Choose if the device uses wired or wireless IR. This can be changed later.

- **Select which control will control this device**

Select a hub from the list

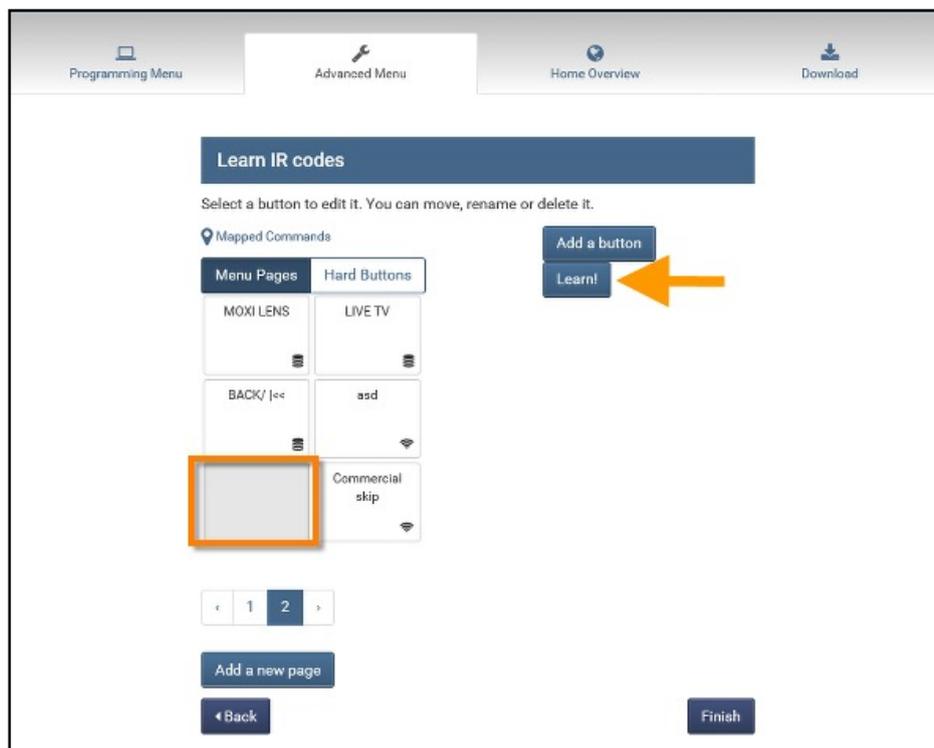
Once all the information for the new device has been entered, select **Next**.

3. If learning IR commands to an **existing device**, designate which:



Select the **room** where the device is programmed, then select the device to learn to. Select **Next** when ready.

4. Now **select** exactly what **button** to store the learned command to

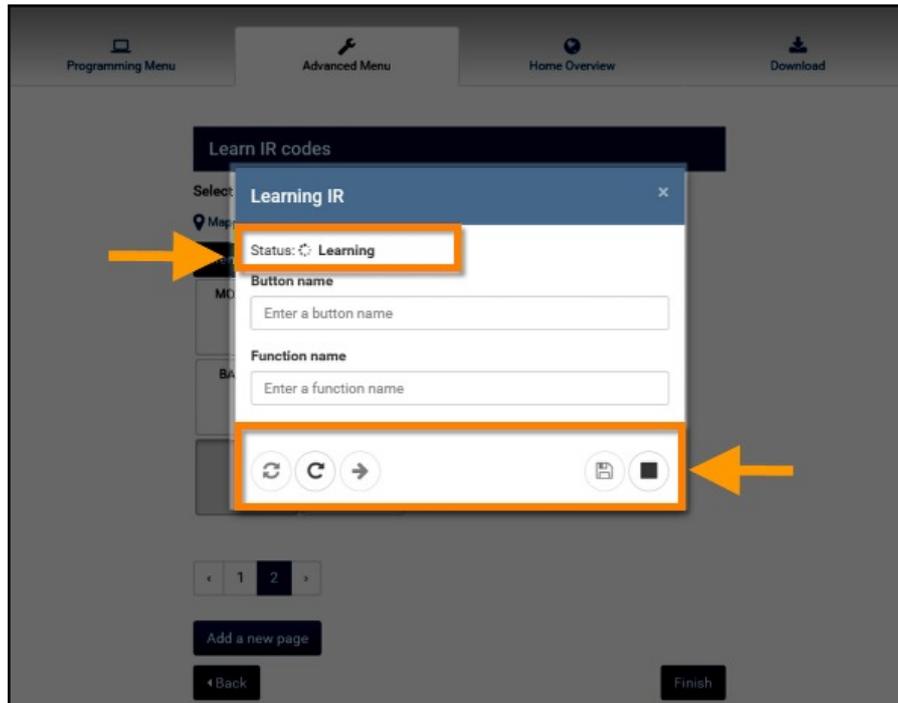


Use the button simulator for this. Pick a **blank button** or a button that already has command data on it. If there are no blank buttons, add a new page to the menu and select a button from the newly added page.

When learning an IR command to a button where there is already one present, the **new command erases** and **replaces** the old one.

Select the **Learn!** button when ready.

5. The **Learning IR window** opens and the hub is **readied** to accept IR commands into the front panel lens



• Status

The status of the learning system is displayed at the top of the window. This informs on whether the system is prepared to learn a command or if there is some problem. It displays one of the following messages:

- ❑ [Attempting to start learning mode](#): the editor is attempting to connect to the hub in order to start the learning mode.
- ❑ [Learning](#): the hub is ready to receive an IR command from the remote control.
- ❑ [Successfully learned](#): the hub accepted the learned IR code.
- ❑ [Communication Error/Fail to start the learning mode](#): the hub did not enter learning mode, timed out after inactivity, or an error occurred during the learning process. Usually this can be resolved by selecting the Retry button or closing the window and choosing the Learn button again.

• Button Name

A button name text label is required to save the command. If learning a command to a button that already has a command on it, there is already text there which can be changed if desired.

• Function Name

A function name is required to save the command. This label is not shown to the user on the remote control screen but is used in the editor. If learning to button that already has a command on it, there is already a function name which can be changed or used.

- **Learning Controls**

Across the bottom of the window are the control buttons for operating the learning functions. From left to right, these are described below:

 **Retry:** This restarts the learning process, it can be used when attempting to relearn the current butt or if there was an error and the learning process did not start

 **Skip:** this skips the current button attempting to be learned on and selects the next one in line.

 **Next:** after learning a command and naming it, this button saves the data and moves to the next button in line and prepares the system for learning to it.

 **Save and Close:** after learning a command and naming it, select this button to save the data and close the learning window.

 **Stop:** selecting this button stops the learning process and closes the window.

6. When the status displays learning the system is ready to learn the IR command from the remote control. Hold the remote that is being learned from a few inches in front of the hub's front lens. Then press and hold the button to learn from. Keep the button pressed until the display in the learning window updates. If the status changes to successful, enter the button name and function. Then select the **Next** button or **Save and Close**.
7. Continue to learn as many IR commands, when complete select the **Finish** button.