



COMPLETE CONTROL



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About Complete Control

Complete Control (CCP) is a reliable, single-room entertainment control solution that uses high-quality, easy-to-use handheld remotes. These URC Complete Control MX handheld remotes provide **IR** control of TV, AV components, cable, satellite and more. In addition, Complete Control remotes offer custom macro programming for single-touch automation.

These MX handheld remotes are ideal for home theater installations and AV control in family rooms, kitchens, bedrooms and home offices. When used with a compatible URC RF base station, Complete Control remotes can be professionally programmed to control components through walls or cabinets, even outdoors. No need to point the remote or be present in the same room.

All **CCP** remotes and base stations are programmed using our Complete Control software. Always make sure that you are using the most up to date software so that you have access to the latest IR commands and updates.



Whats Needed

Complete Control requires a **Windows** PC. If you are using MacOS you will need to have Bootcamp or Parallels installed with a compatible version of Microsoft Windows. Configuration requirements are:

1. Windows 10 or newer
2. Available USB port
3. Internet Connection
4. 3GB of available space



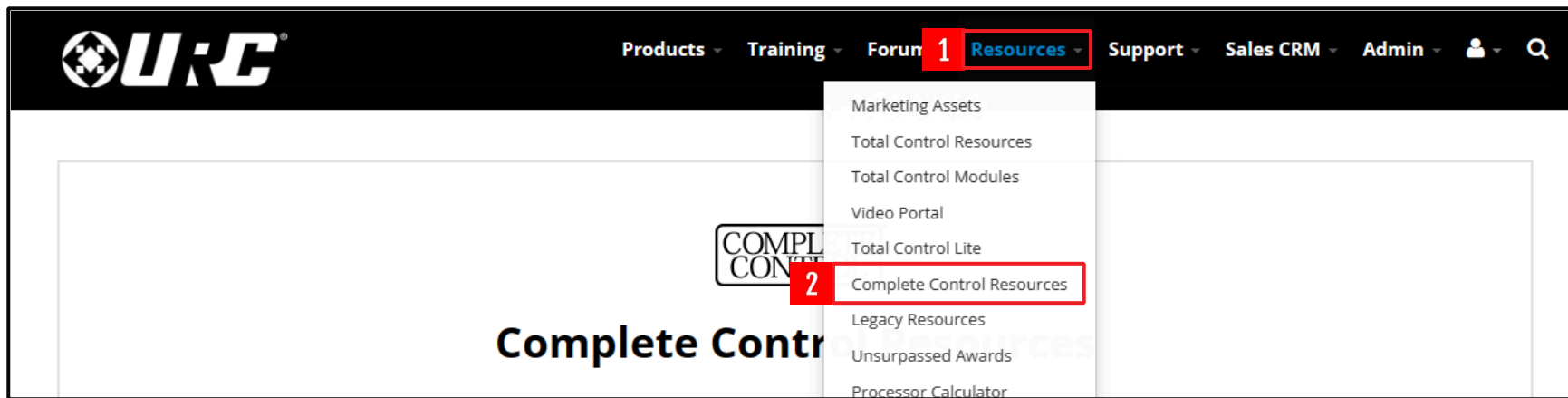
Installing CCP

Complete Control is installed using a self extracting installer file. This can be found on our website at:

www.urcportal.com

You will need to use your URC portal login access to view our website. Once you have logged in:

1. Click on the **Resources** tab.
2. Click **Complete Control Resource**.
3. Scroll down and click on **Download CCP Software**.



4
5



*“Clicking **Download CCP Software** will download the file to your computer. Open the file after the download is complete and follow each step to make sure that the software is installed correctly.”*

Types of URC Complete Control Remotes

URC has **three** types of remotes that can be programmed with the Complete Control software. Each of these remote have various functions and capabilities that can be setup when configuring. This manual will show you how to program all of these remotes and their available features. These remotes are:



Text Remotes

MX-790, MX-900

Basic Functions
Graphic Limited



Graphic Remotes

MX-890, MX-990

Advanced Functions
Custom Icons
Custom Backgrounds



Free Form Remotes

MX-1400, MX-4000

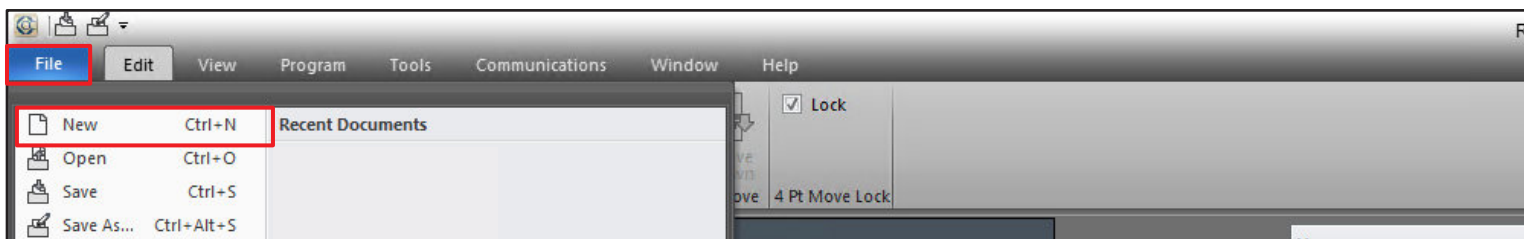
Advanced Functions
Custom Screen Layout
& Design

Click or Tap a remote to view the section of the programming manual specific to its type.

Introduction to Graphic Remote Programming

Graphics remotes are a line of URC remotes that can control devices and can have custom graphics such as backgrounds and icons. This manual will cover basics in programming these types of remotes.

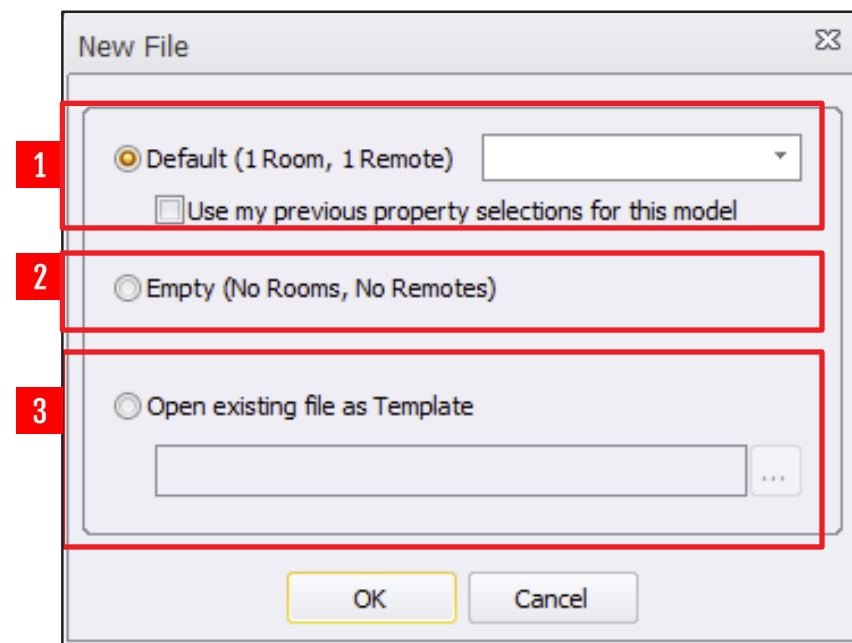




Starting a File

Starting a file is the first step in creating a program in Complete Control. There are three ways to initially start programming a system after clicking on the **File** tab then clicking **New**.

1. **Default:** Automatically creates a room (*can be renamed*) with the selected choice.
2. **Empty:** This brings you to the system configuration menu where you can choose your room, base station, and remote.
3. **Opening existing file as a Template:** Opens an existing file and loads all the existing configurations.



“Both default and opening existing file options bypass the system configuration window.”

System Configuration Window

This **System Configuration** window will allow you to add the following items below to your file. After selecting any item in one of the categories, click the **<<Add** or **Remove>>** button to move an item within the configuration panel of the project:

1. **Rooms:** A list of pre-programmed room names. Also, any room name can be renamed.
2. **Base Stations:** A base station for a project may be needed if you do not have line of sight to the device from a remote. Click [here](#) to learn about setting up a base station.
3. **Remotes:** A list of compatible Complete Control remotes that can be configured for the project.



“A file can have multiple rooms with different remotes.”

Model Properties Window

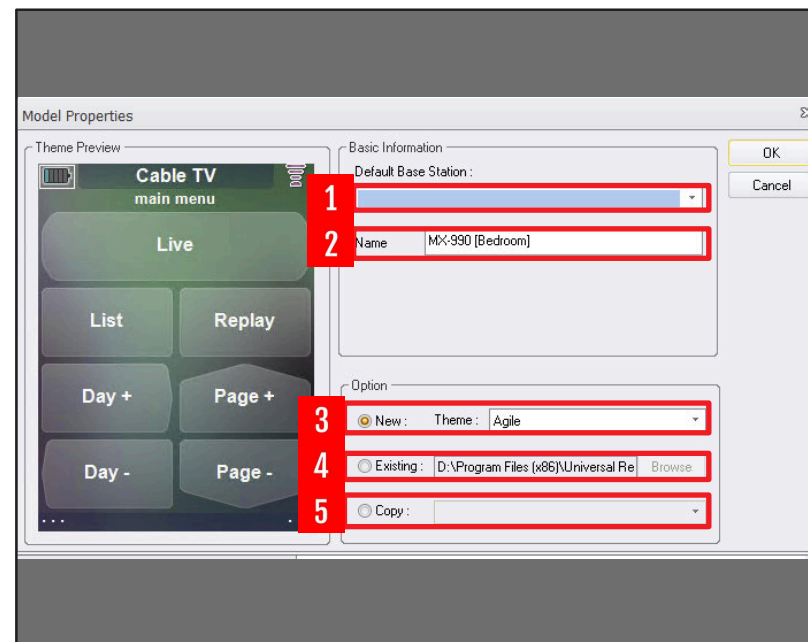
The **Model Properties** window of a remote will show when it is added to the configuration panel. This window will show a variation of either a 6 or 8-button layout depending on the graphical remote selection in the **Theme Preview** panel. Also, each remote can be configured with a few options.

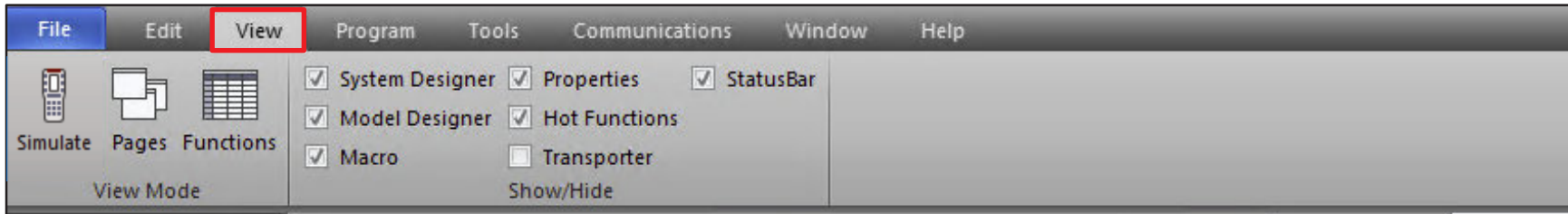
In the **Basic Information** panel:

1. **Default Base Station:** If a base station has been selected, it can be linked here. You can also link to multiple base stations if there is more than one. To learn more on using one or multiple base stations click [here](#).
2. **Name:** Renames a remote in a file.

In the **Option** panel:

3. **New:** Sets up a new remote interface design.
4. **Existing:** Copy an interface from another file.
5. **Copy:** Copy an existing interface within the file.

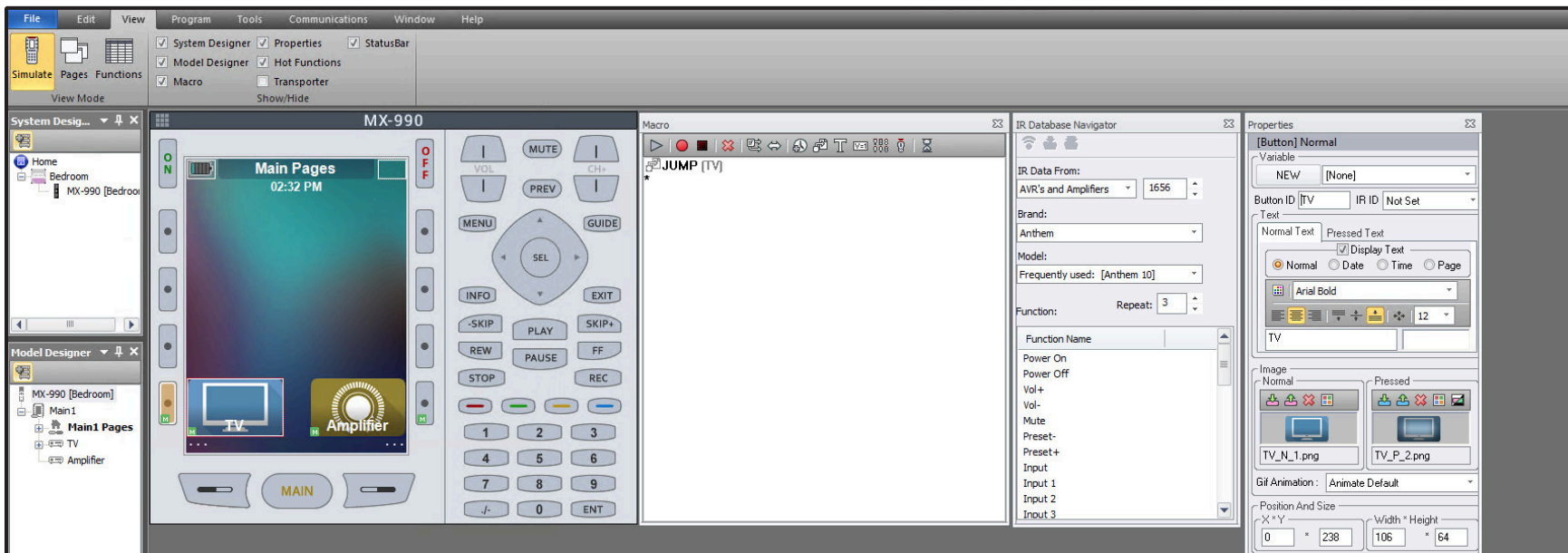


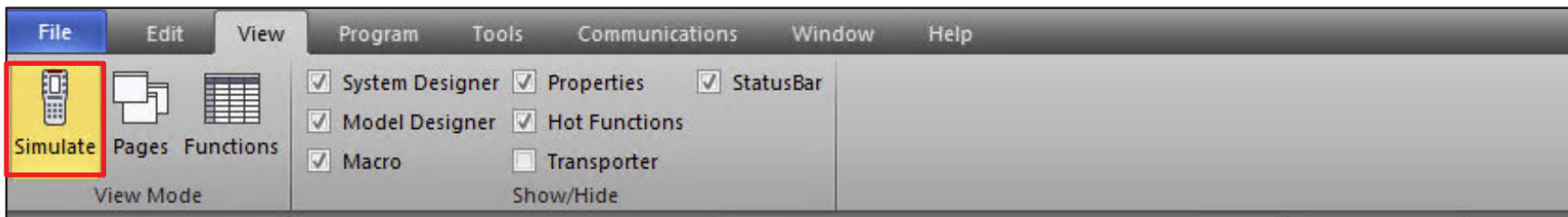


View Tab

The **View** tab consists of a selection of **View Modes** and **Windows** that can assist with programming and customizing a URC Complete Control remote. Depending on what is being setup, it may be best to have multiple windows open at one time with the ability to view them together.

The ability to view multiple windows may be limited by your resolution or DPI setting in the operating system of the computer. To learn more about adjusting these display settings, Click [here](#).



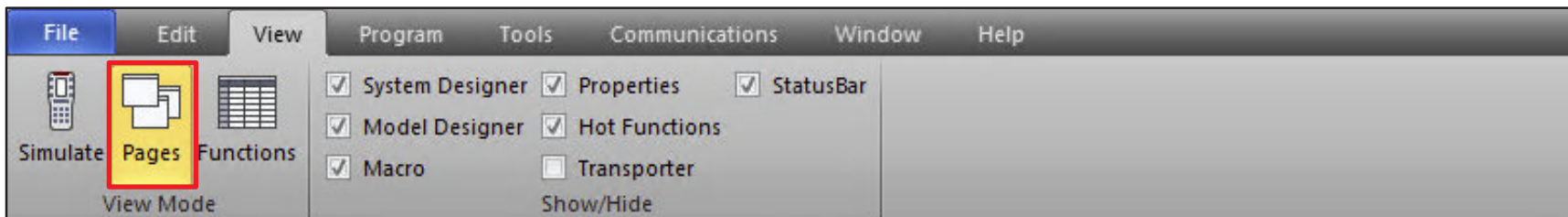


View Mode Menu Options

The **Simulate** view offers a fully simulated view of the remote. It can be used to preview the navigation of a remote to test its functionality before downloading to it or it can be used for adding commands to a macro. Depending on what windows are shown and hidden, you can see the selected configuration parameters of each button when pressed.

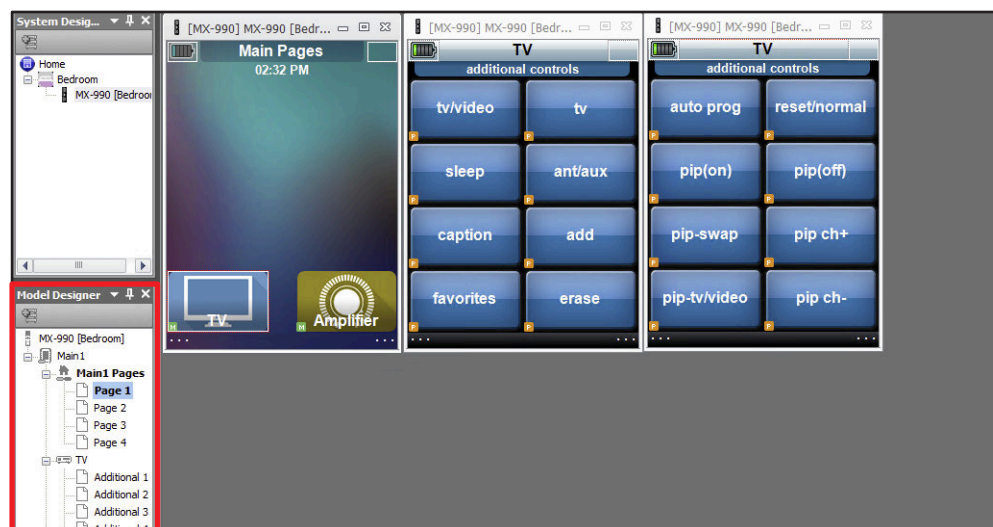


**Your remote may look different*

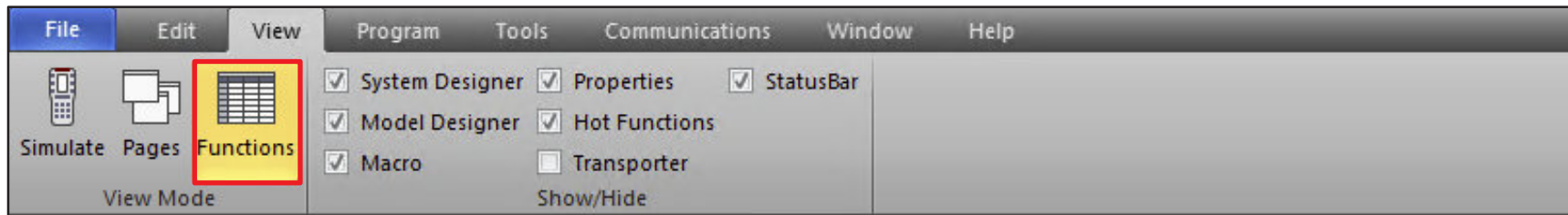


View Mode Menu Options (cont'd)

The **Pages** view will preview selected pages of a remote. You can view one or multiple pages at a time. To open a page double click on each page that needs to be previewed in the **Model Designer** window.

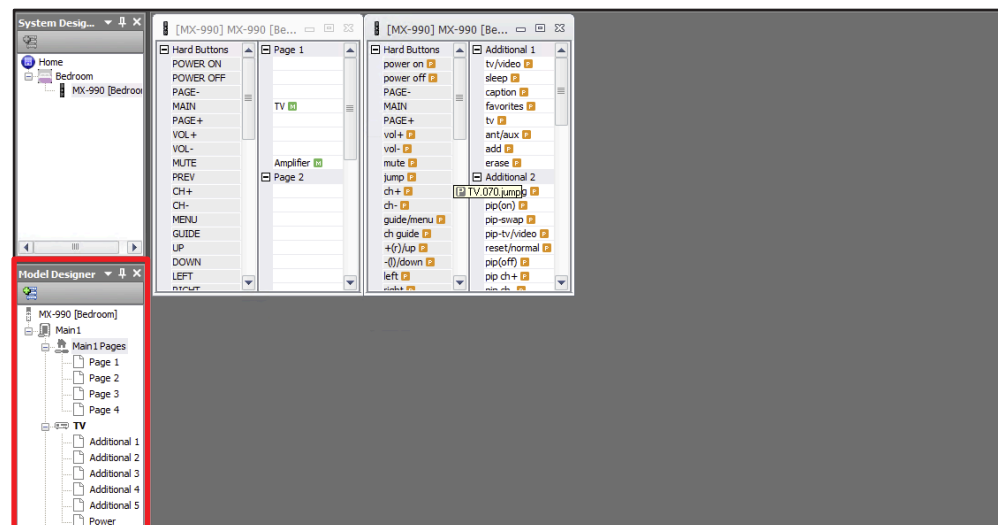


**Your remote may look different*

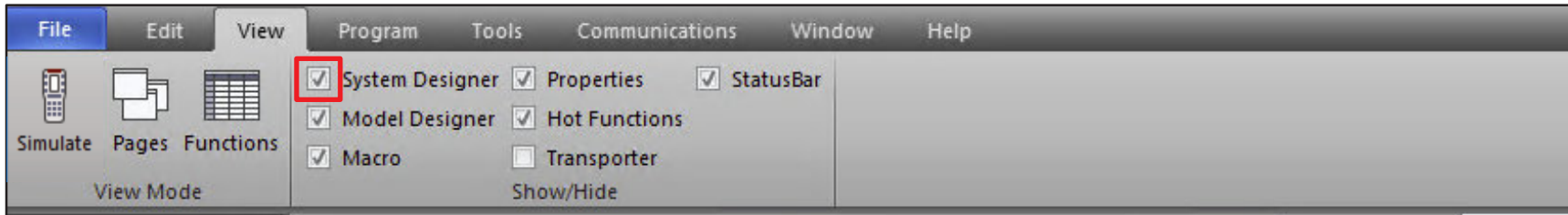


View Mode Menu Options (cont'd)

The **Functions** view will show a list of both hard buttons and screen commands. You can open additional windows by clicking on a page of a device in the **Model Designer** window.



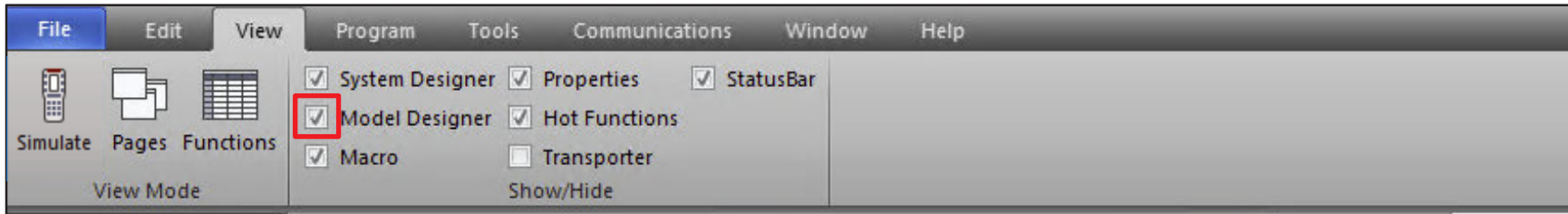
**Your remote may look different*



Show/Hide Windows

The **System Designer** window list rooms and equipment that have been added to a program.

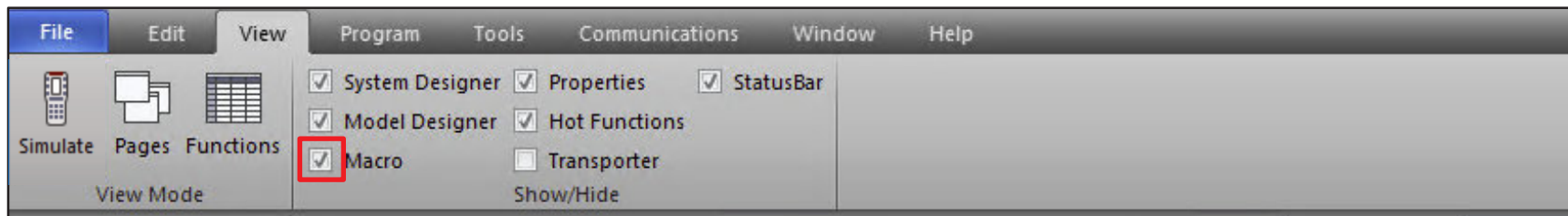




Show/Hide Windows (cont'd)

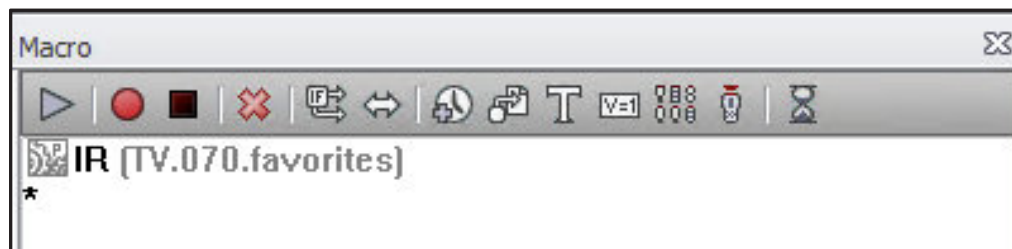
The **Model Designer** window list all pages of devices and activities that have been added to a program.

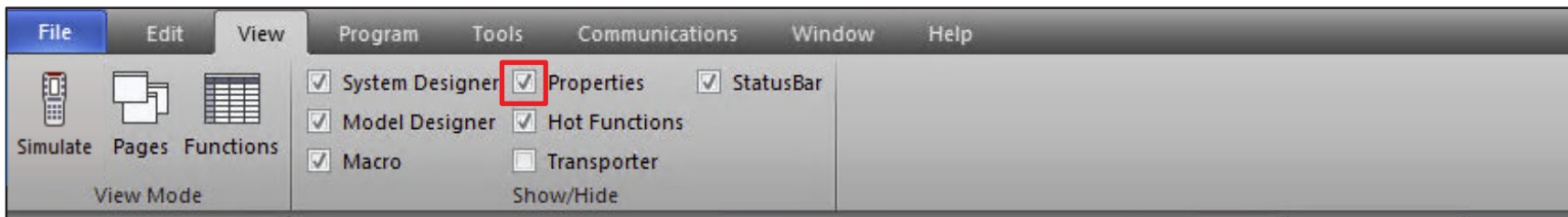




Show/Hide Windows (cont'd)

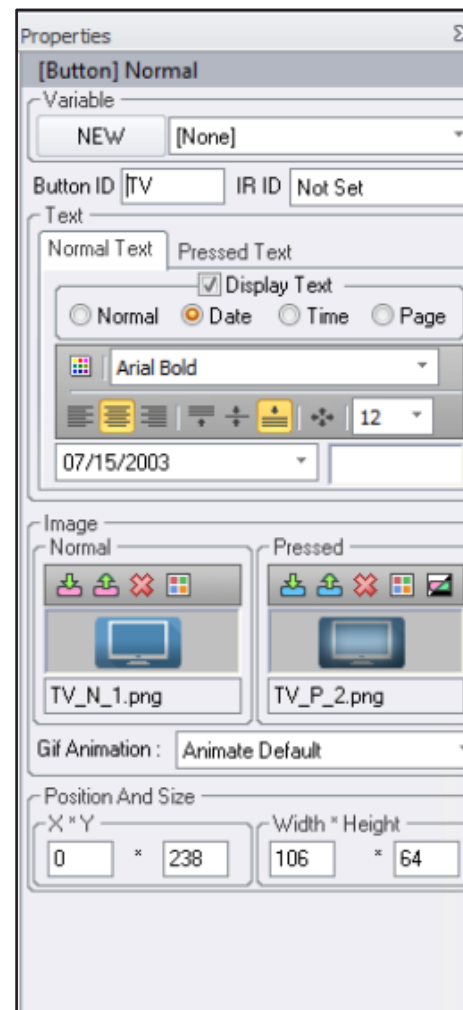
The **Macro** window will show what command or commands are loaded into a hard button on a remote or a button corresponding to an item on the screen. There are a number of options available in this window to help setup various commands. To learn more about setting up Macros, click [here](#).

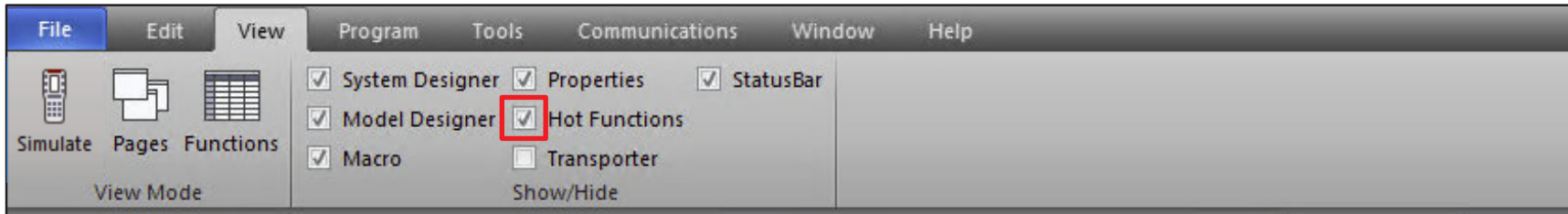




Show/Hide Windows (cont'd)

The **Properties** window is where adjustments for **Graphic** and **Text** of buttons and backgrounds located on the screen can be changed. To learn more about adjusting items in the properties window, click [here](#).

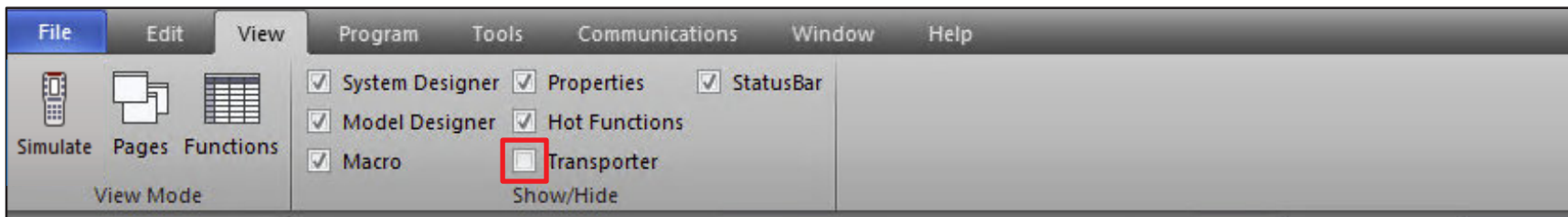




Show/Hide Windows (cont'd)

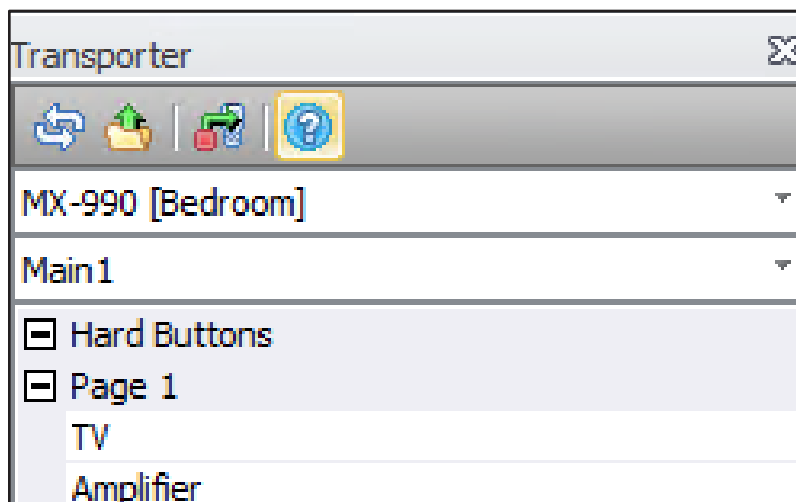
The **Hot Functions** window is only used for the MSC-400 base station.

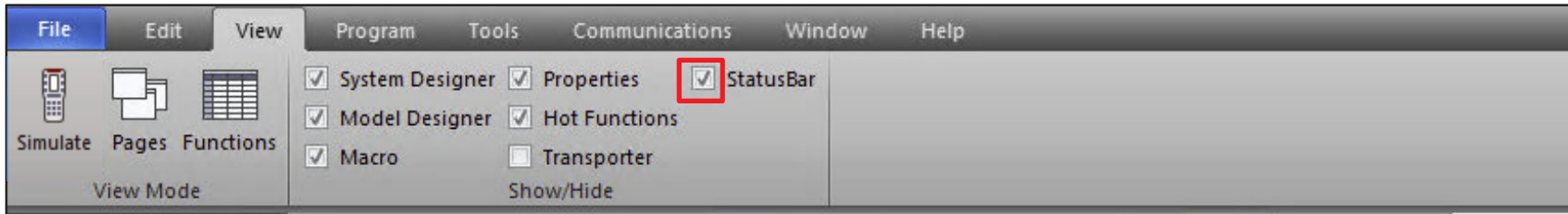
“ The MSC-400 is a discontinued unit and no longer supported.”



Show/Hide Windows (cont'd)

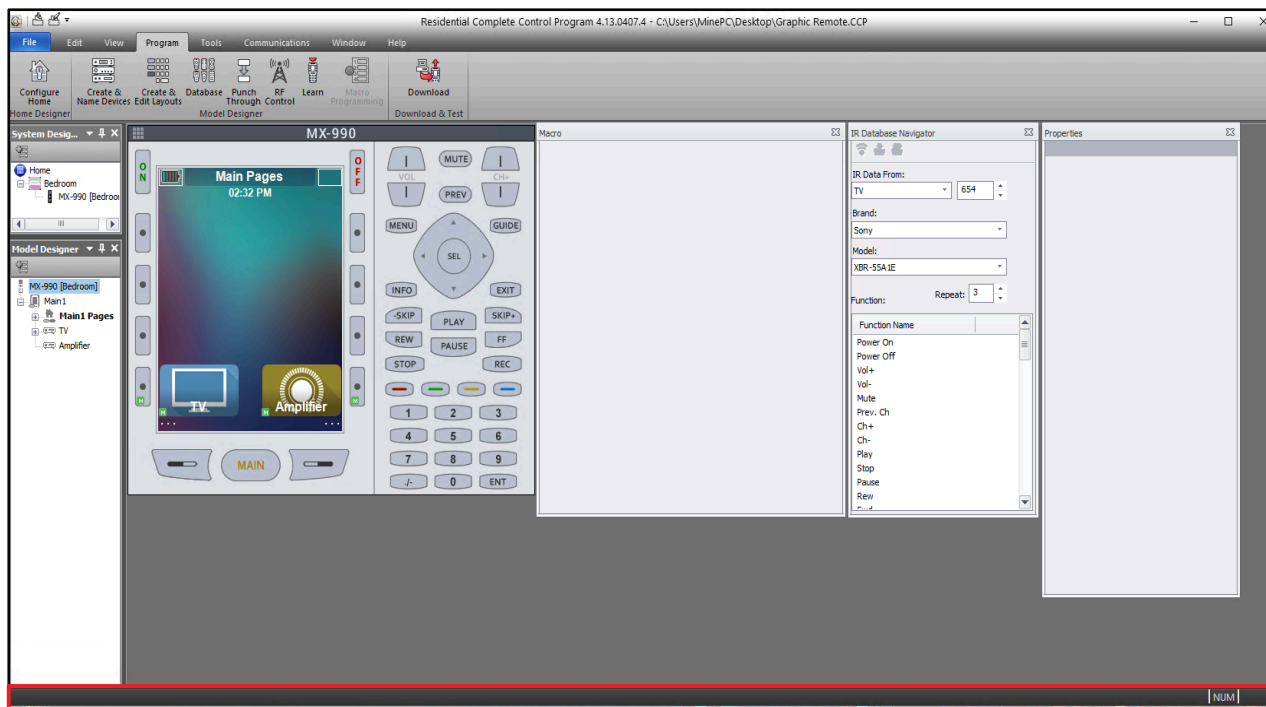
The **Transporter** window provides the ability to import devices into the current model from any other URC Complete Control remote. Only programmed and learned codes are transported and not variables, delays, etc. To learn more about transporting click [here](#).





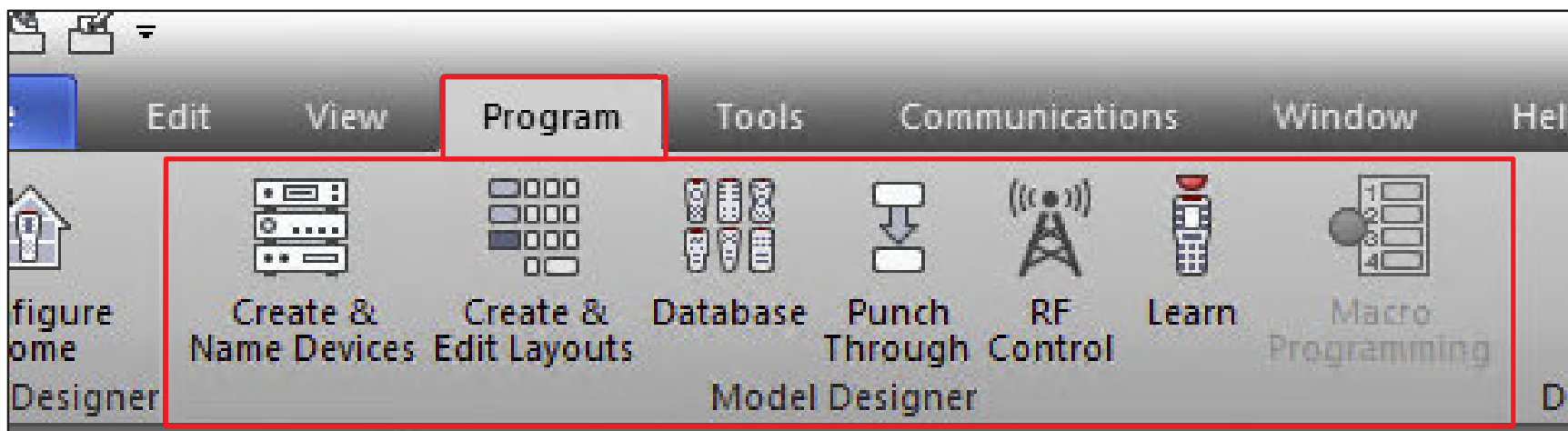
Show/Hide Windows (cont'd)

The **StatusBar** option shows a bar at the bottom with real-time info on what is being done at various moments of programming a URC Complete Control remote.



Program Tab

The **Program** tab will access the **Model Designer** tabs of the Complete Control software. This gives access to various menus to program a file in a URC Complete Control remote. When programming a new remote it is best to start left to right.



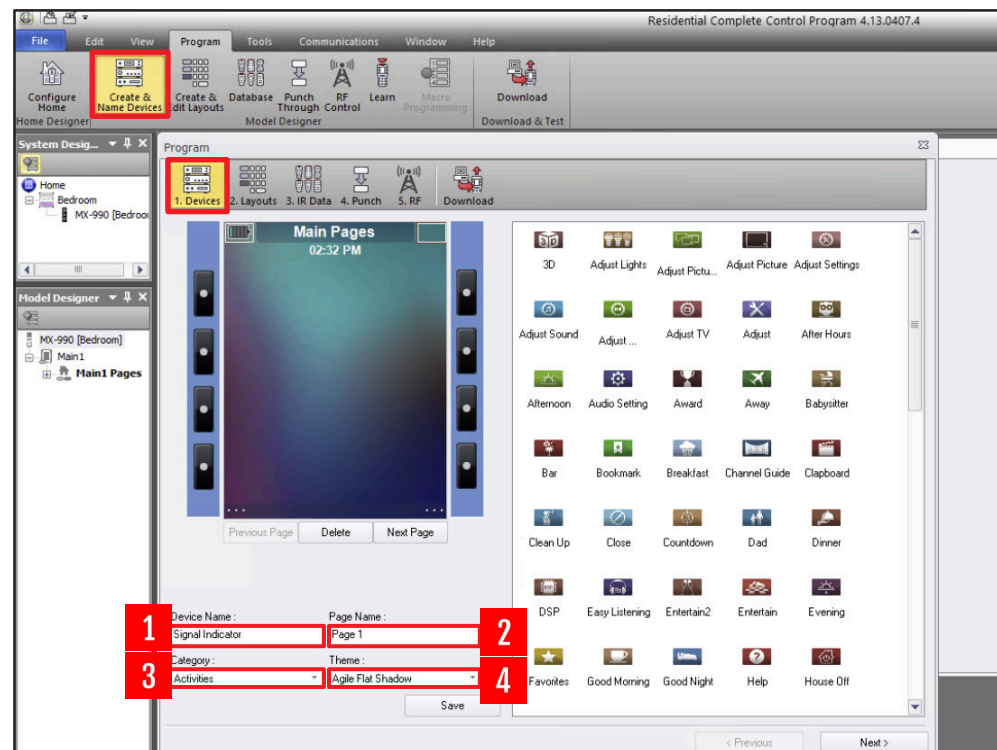
Model Designer Menu

The **Create & Name Devices:Devices** window is where you can add various buttons and pages to the **Main** or **Watch** section of the remote. Simply click and hold the icon you want to use and place in a selected area of the preview panel.

The **Previous Page** and **Next Page** buttons cycle through various pages of the remote. The **Delete** button will remove added icons from the **Main** or **Watch** menu. Further customizations available are:

1. Change an **Icon** name.
2. Change the **Page Number** name.
3. Choose what **Category** of icons to select.
4. Change the **Theme** of icons available.

The choice of what icon to use is up to the programmer. It is best to choose icons that identify what is being done. For example, you may choose a **Device** icon to control an item directly such as an AVR. You may also choose a **Activity** icon that may turn on and control multiple devices such as the cable box, TV, and AVR with the Watch TV icon.



“Custom icons can also be used. To learn more about adding your own buttons, click [here](#).”

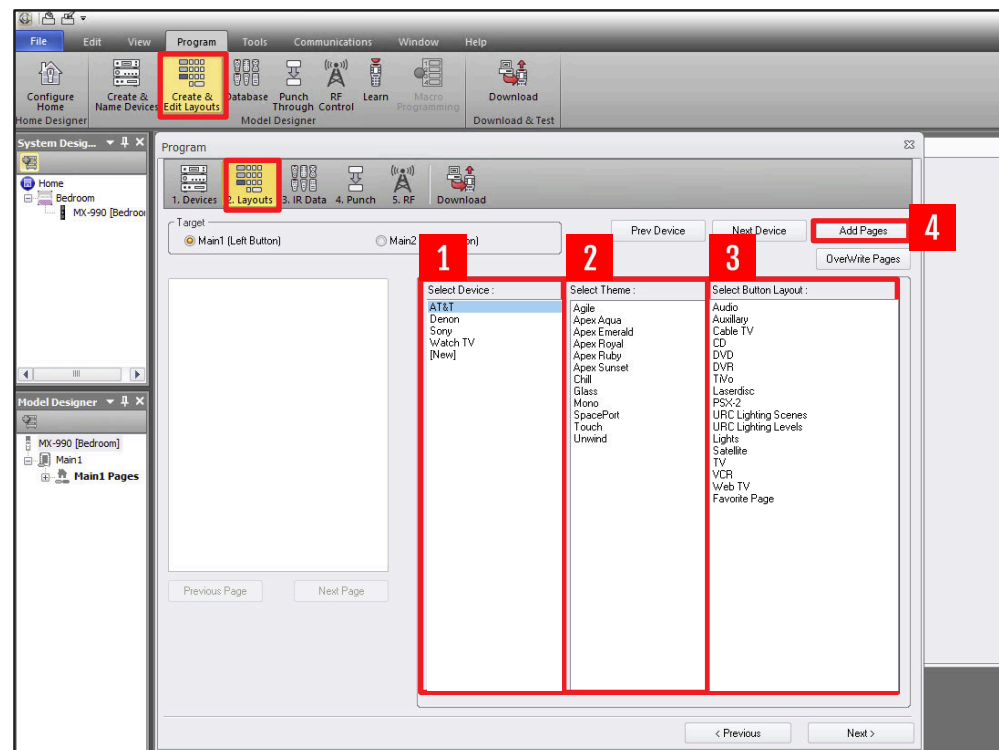
Model Designer Menu (cont'd)

For the **Create and Edit Layouts:Layouts** section, you can add page layouts for all device or activity icons that are set in the **Devices** window. To add a layout:

1. Choose the **Device** to add the layout to.
2. Choose a **Theme**.
3. Select the **Layout** you want for the device
4. Click the **Add Pages** button

“ You will need to add page layouts for each device or activity icon in the remote.”

If a device layout needs to be change after already being configured, follow the steps above but on step 4 use the **OverWrite Pages** button instead of **Add Pages** button.

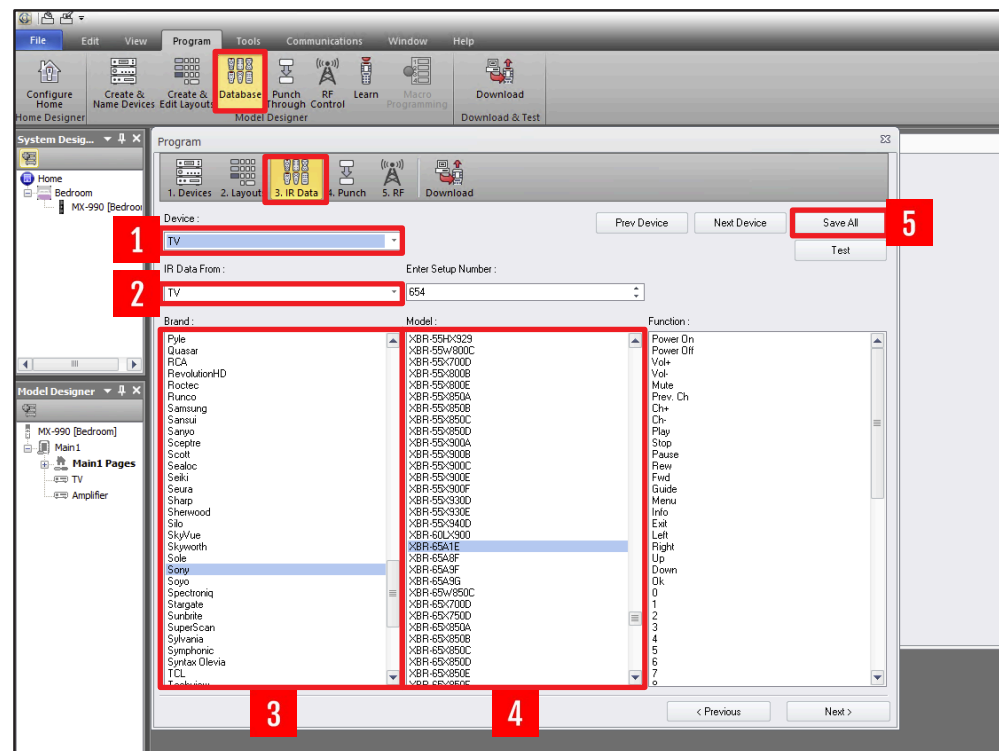


Model Designer Menu (cont'd)

The **Database:IR Data** section is where the IR data for each activity or device is added to its layout. To add IR Data to a device layout:

1. Select a **Device**.
2. Select a **Category**.
3. Choose a **Brand**.
4. Choose a **Model**.
5. Click the **Save All** button.

If you do not see your model, you can manually add third party commands to a program. To learn more about adding third party commands, click [here](#).



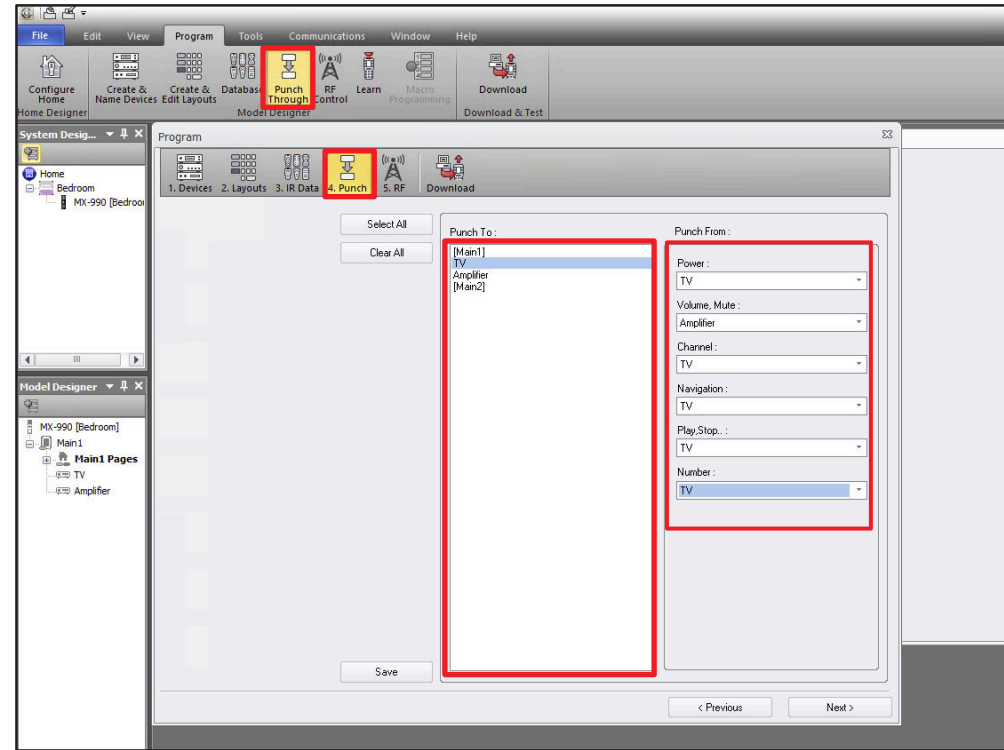
“You will need to add IR Data for each device or activity layout in the remote.”

Model Designer Menu (cont'd)

PunchThrough allows you to set the same functions on all devices very quickly. You can punchthrough any of the groups of buttons on a URC Graphic Remote. For example, the **Volume Up, Down and Mute** have been set as a group to punchthrough to a surround sound receiver. The following categories can be changed:

1. **Power**
2. **Volume, Mute**
3. **Channel**
4. **Navigation**
5. **Play, Stop**
6. **Number**

Example



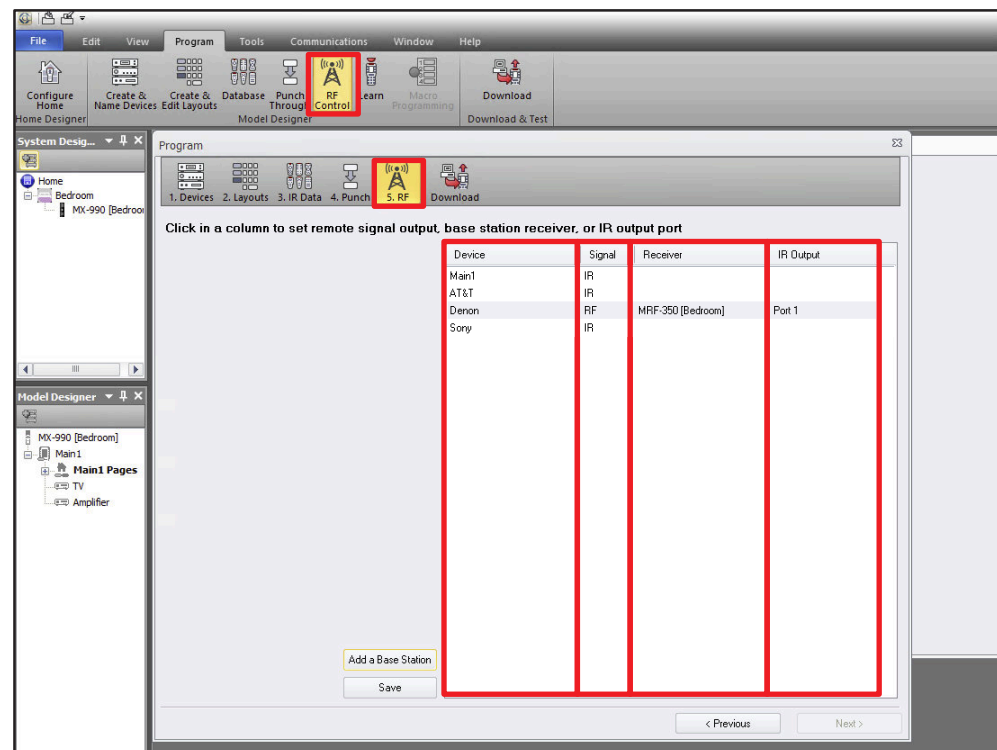
“After programming, flags on the view windows remind the programmer that the buttons have been set to punchthrough.”

Model Designer Menu (cont'd)

The **RF Control:RF** section selects the signal type of a command that is to be sent to each device. To change how a command is sent to a device, click an item in the **Signal** column and adjust.

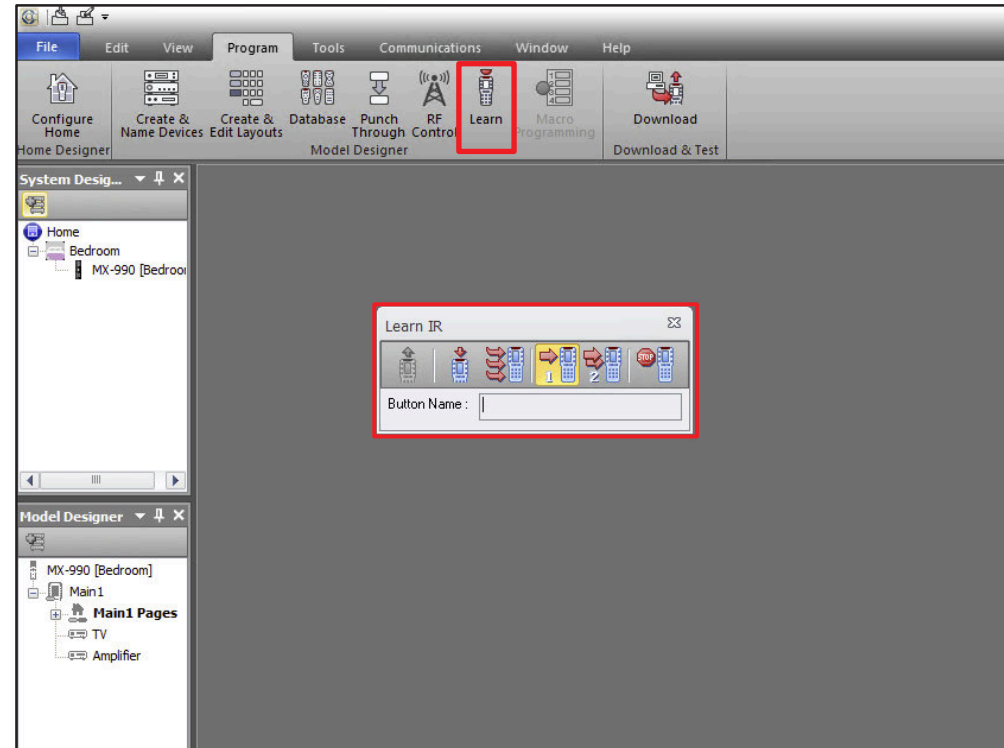
The **Receiver** column will choose what receiver to use if you are using one or more base stations. The **IR Output** column will allow you to choose which IR port to send the signal out of if a base station is being used.

“ If there is no base station configured in the file, the Receiver and IR Output columns will be empty.”



Model Designer Menu (cont'd)

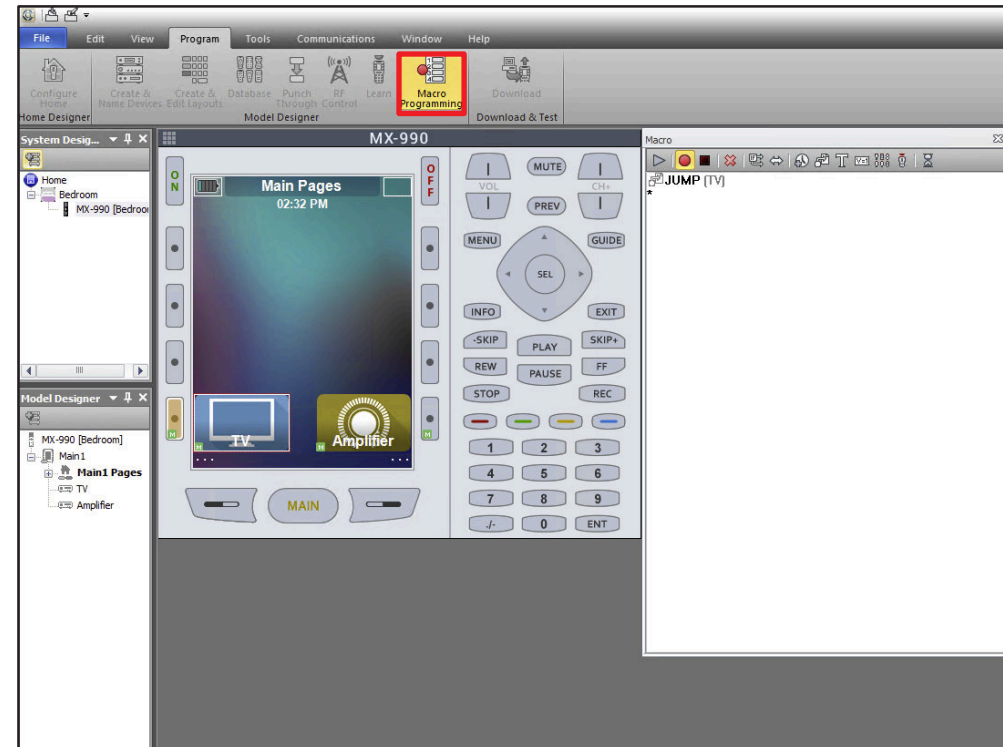
The **Learn** tab will allow you to program third party IR commands into Complete Control through the remote itself or a PIR-1. This is useful if you cannot find the IR codes of a device. To learn how to add commands by remote, click [here](#).



Model Designer Menu (cont'd)

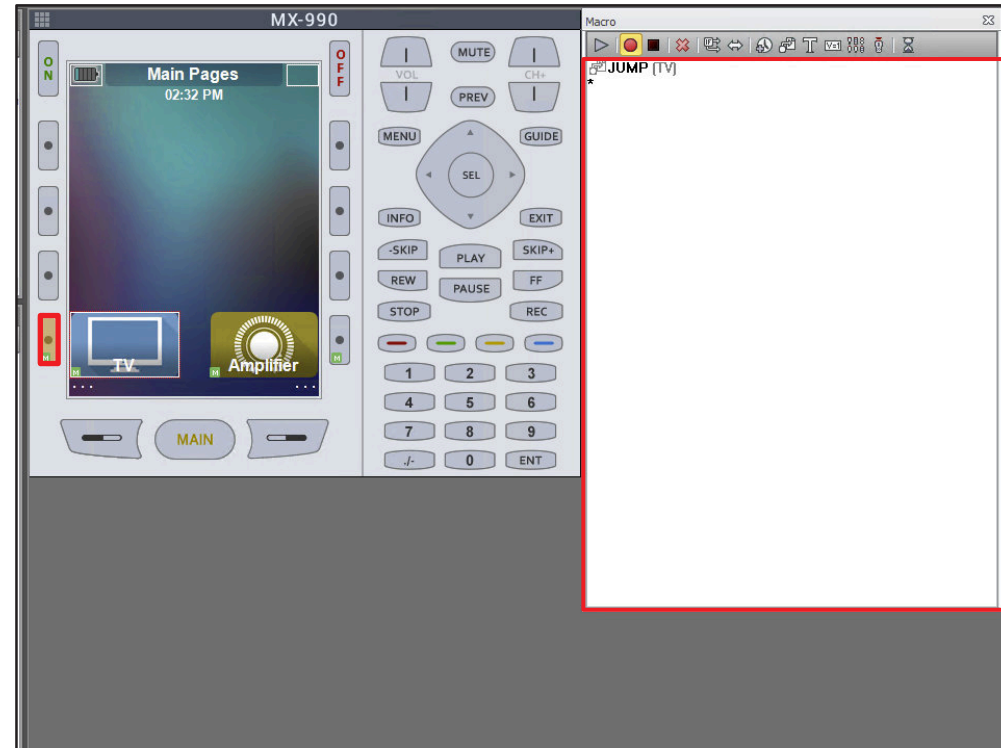
The **Macro Programming** tab allows you to add a command or sequence of commands to a button. This is useful if you want to turn on or off multiple devices at once.

A **Macro** can also change the state of one or multiple devices such as inputs with just a single button press. Almost any button can be selected and configured to include one or multiple commands.



Macro Programming Window

The **Macro** window will show what command or commands are loaded into a selected button. This could be a hard button or a button corresponding to an item on the screen.





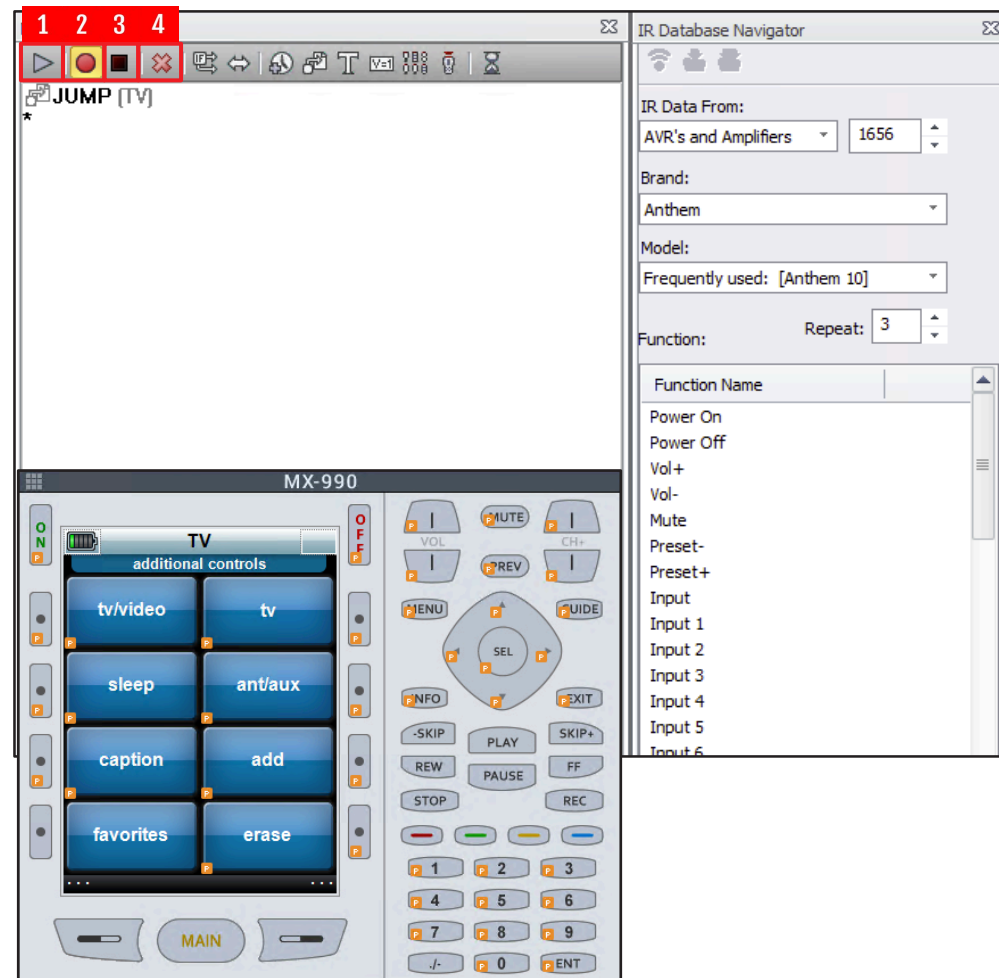
Macro Programming Toolbar

The **Macro Programming Toolbar** gives multiple options for configuring a macro. Various commands and functions will vary in availability by which remote has been selected to be program.

Macro Programming Toolbar (cont'd)

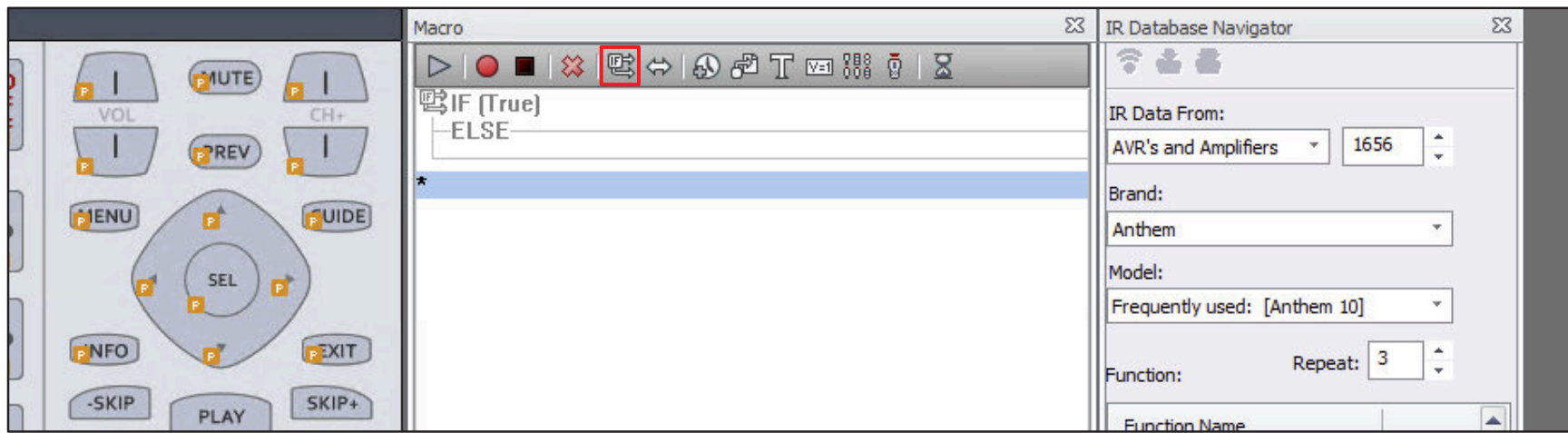
The **Play, Record, Stop and Delete** functions allow the editing of commands in a macro.

1. **Play**: Will test run the commands loaded into a macro to confirm the sequence is performing as intended through the remote.
2. **Record**: Allows one or multiple commands to be added from the IR Database Navigator window or Simulate window in the sequence of selections.
3. **Stop**: Stops the sequence of adding multiple buttons from the IR Database Navigator or simulate window.
4. **X**: Deletes a command or commands that have been loaded into a button selection



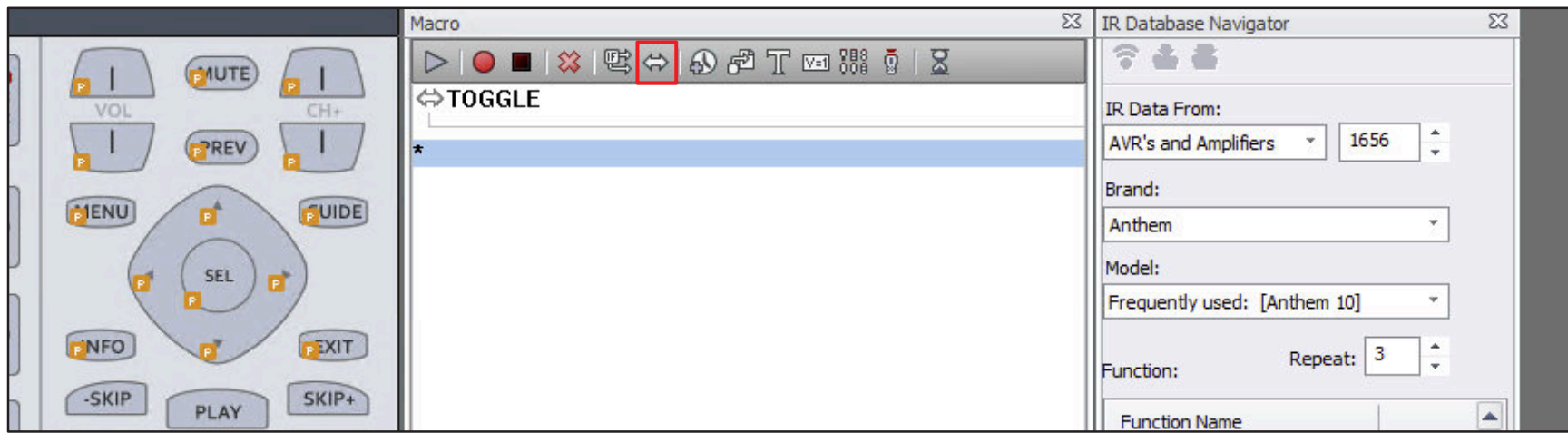
Macro Programming Toolbar (cont'd)

The **If** function enables you to create conditional logic in a macro. (If [condition] is True, then do [action]... Else do [action]). To learn more about conditional logic commands click [here](#).



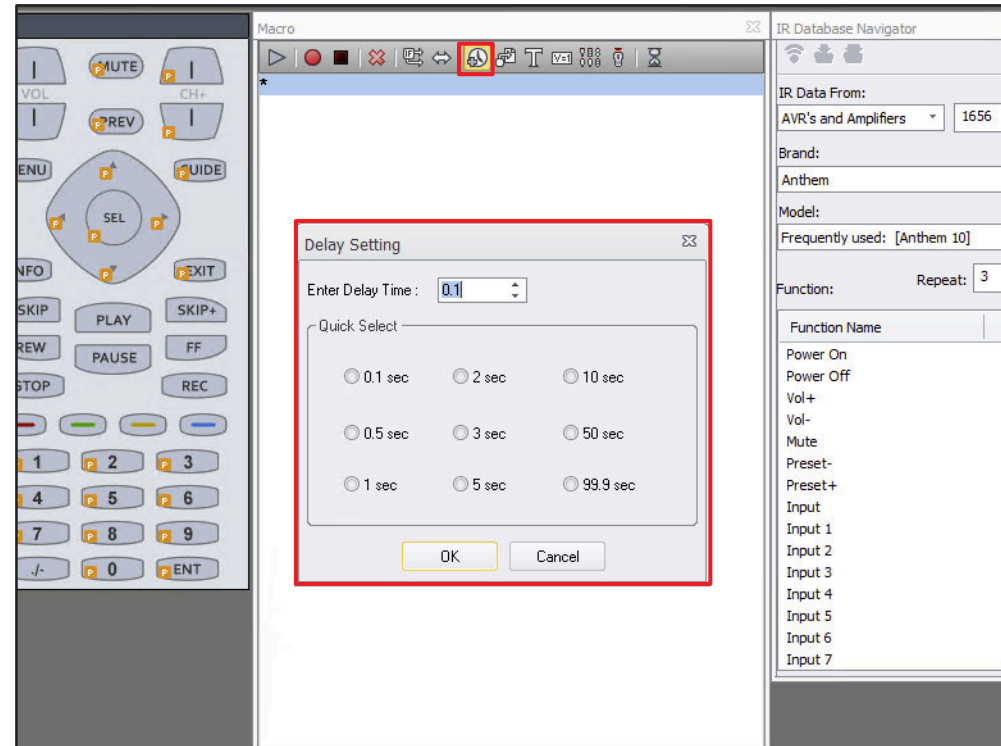
Macro Programming Toolbar (cont'd)

The **Toggle** function enables you to create a list of commands that the selected button will toggle through. To learn more about Toggle commands click [here](#).



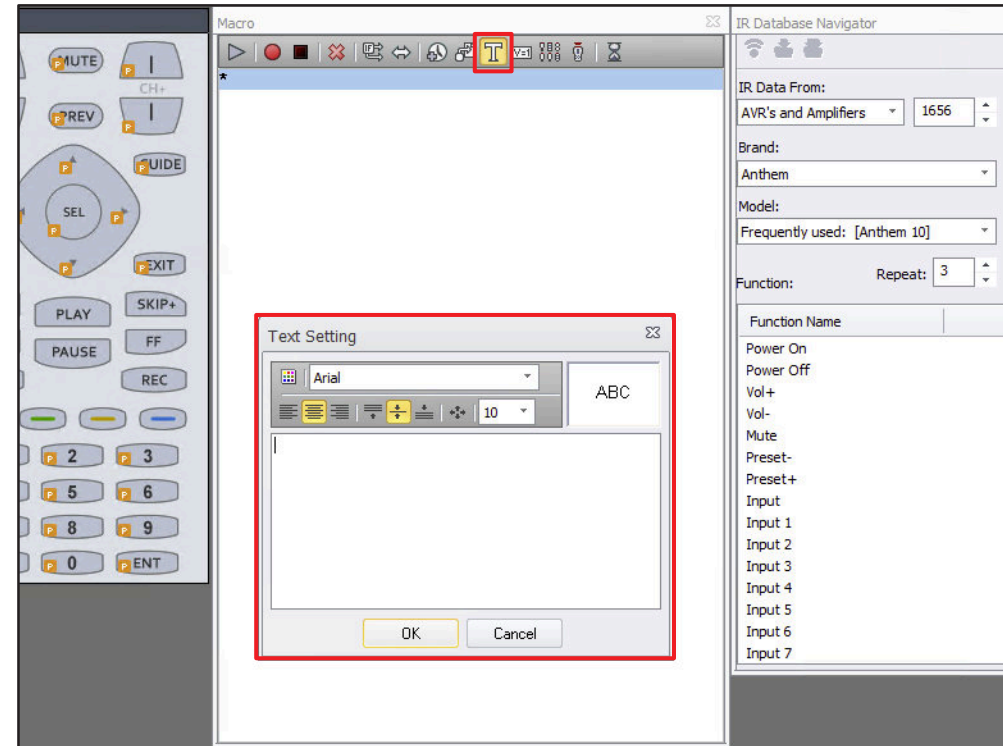
Macro Programming Toolbar (cont'd)

The **Delay** function adds a preset time or custom time between .1 and 99.9 seconds between commands in a macro. To learn more about adding delays, click [here](#).



Macro Programming Toolbar (cont'd)

The **Text** function allows a text entry to show over the icon when a button is pressed. Click [here](#) to learn about adding text entries into a macro.

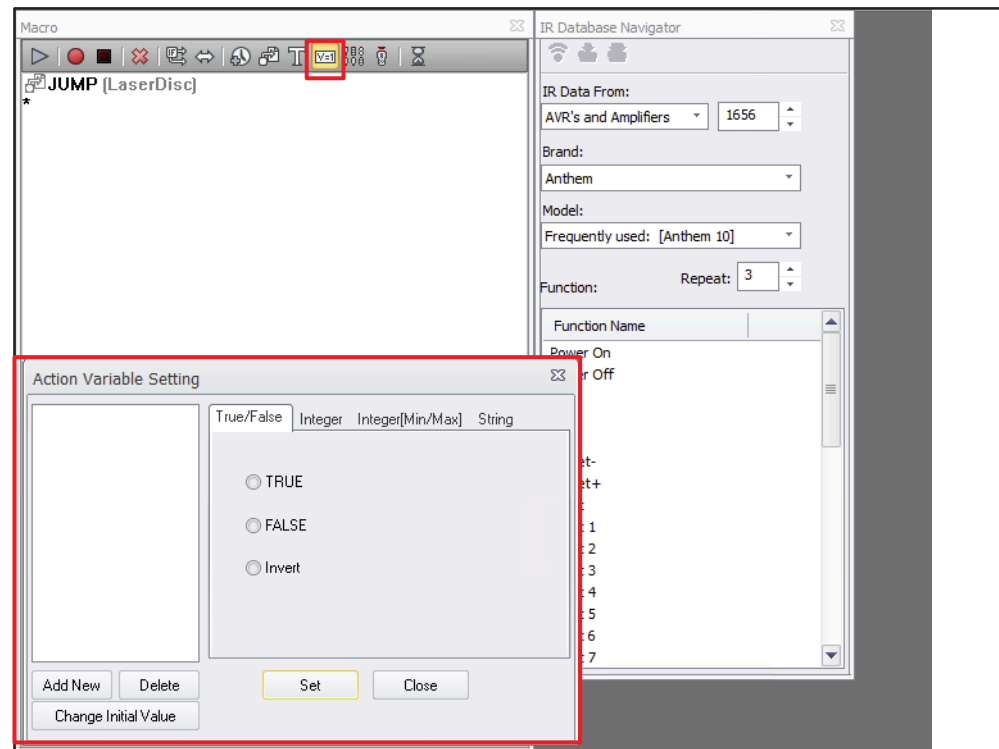


Macro Programming Toolbar (cont'd)

The **Variable** function allows the creation of a variable. This variable can be assigned different states depending on the remote that is being programmed. Your options may include either:

1. **True**, **False**, or **Invert** of true or false value.
2. **Integer** (specific number value).
3. **Integer** with a min and max value set.
4. **String** that's either:
 - a. **Ascii**
 - b. **Hex**
 - c. **Decimal**

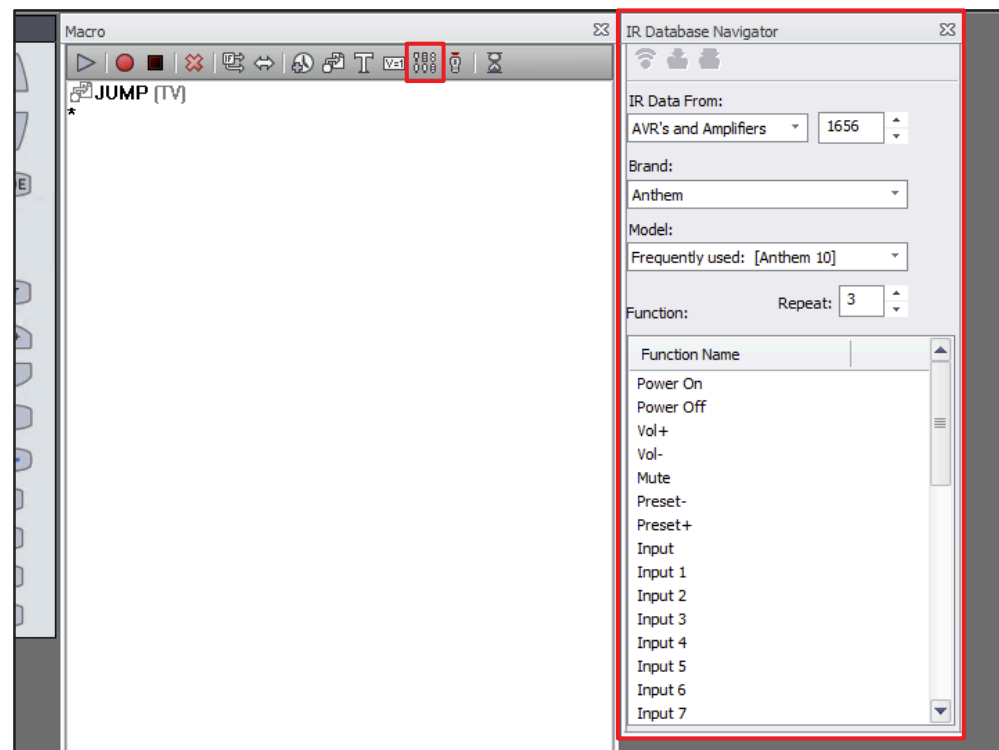
“ Click [here](#) to learn more about adding variables.”



Macro Programming Toolbar (cont'd)

The **PreProgrammed IR** icon opens the **IR Database Navigator** window. This is where commands of various third party devices are located to add to a macro.

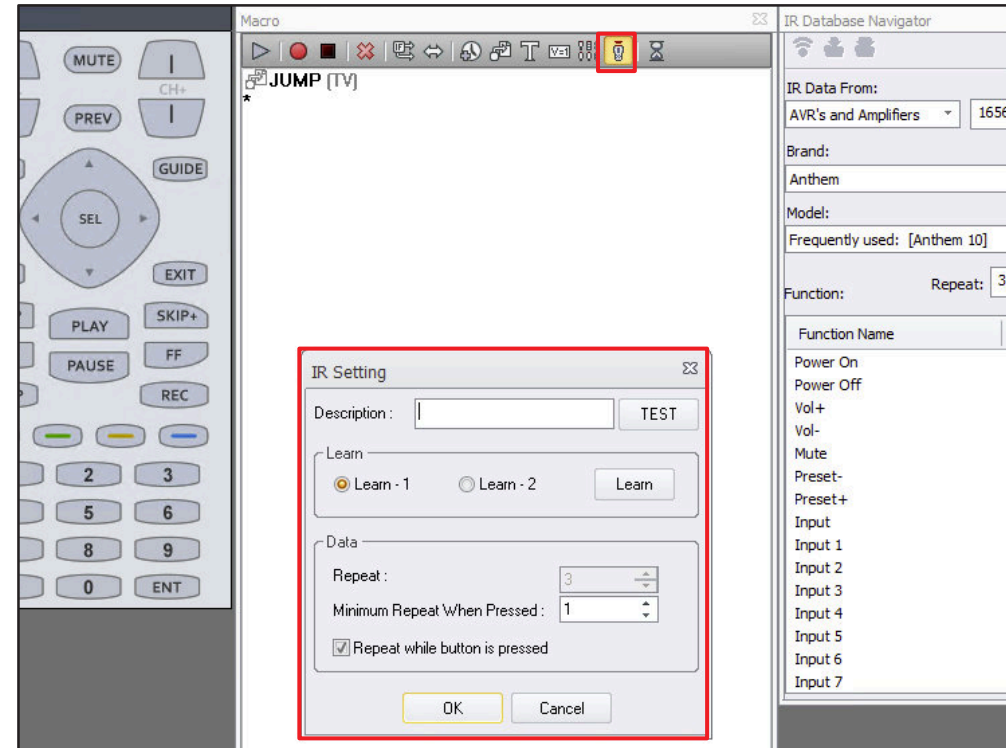
“Click [here](#) to learn more about the IR Database Navigator.”



Macro Programming Toolbar (cont'd)

The **Learn** icon opens the IR Settings window. This window allows learning of third-party IR commands directly into a button that has been selected.

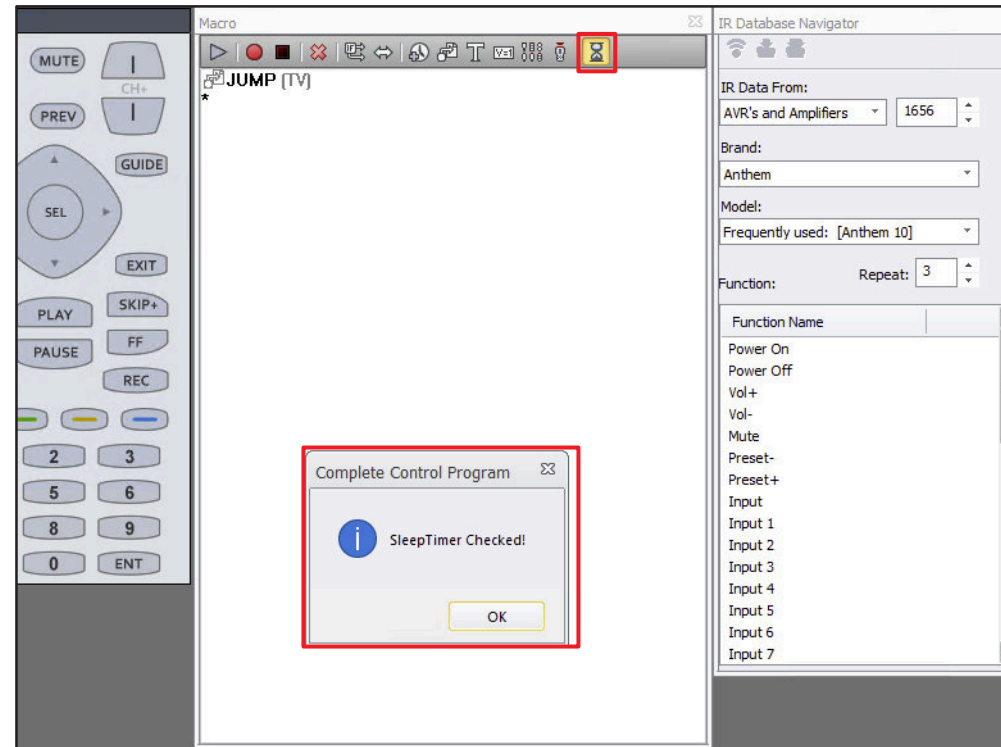
“Click [here](#) to learn more about learning commands from a third party remote.”



Macro Programming Toolbar (cont'd)

The **Sleep** icon adds a sleep timer to a selected macro.

“To learn more about configuring sleep timers, click [here](#).”



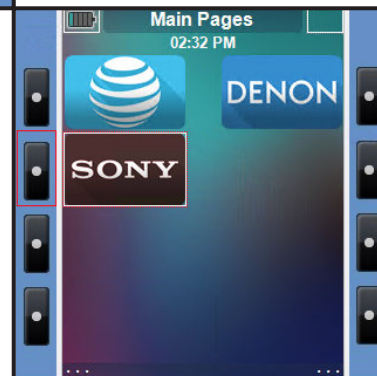
Process To Create A Macro

The process for creating a macro starts with an understanding on what the macro needs to do. For ease of use, a macro may be needed to set a system up to view and control a cable box with connected equipment. For example, it may need to turn on a TV, a receiver and cable box, then change inputs and it will also need to jump to the control layout for the cable box, all with a single button press. To configure a macro for this setup, make sure you have the following items done:

1. An **Icon** on the **Watch/Main** page that represents the activity that is to be setup.
2. That all devices needed for the macro are setup correctly with the proper icon, layout and assigned IR data.

“ You may place device icons on a separate page so they are separate from the activity icons.”

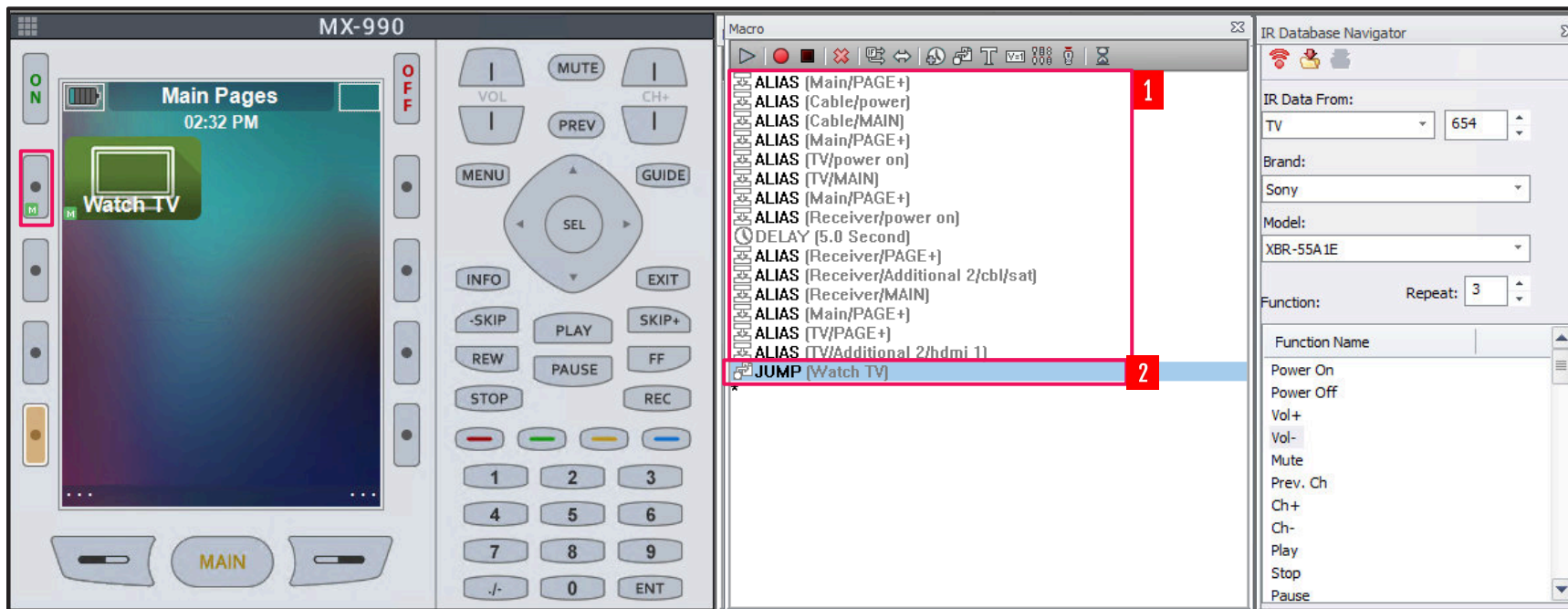
3. Know what inputs on all devices are needed to setup up proper use of an activity.



Process To Create A Macro (cont'd)

Have the **Macro** and the **Simulate** windows open. For this example click on the button that corresponds to the **Watch TV** icon. The Macro window will show what commands are preloaded into that specific icon. Commands that should be added to this macro are:

1. The **ON** and **INPUT** commands for the Cable Box, Receiver, and TV. Make sure to add the input commands after the devices are powered on. Different devices require a select amount of time before a command can be registered so a **Delay** may be needed. Commands should be added by using the the **Simulate** window.
2. The **Jump** function to jump to the Cable Box Layout.



Process To Create A Macro (cont'd)

To add commands from the **Simulate** window you will need to make sure that all the devices for the macro are setup in the program correctly already. You can then navigate the remote in the Simulate window and select each command to add into the macro. To do this

1. Click the **Record** button.
2. Navigate the **Simulate** window to the command you want. The example shows navigating to the **power on** button for the receiver. Continue to select the command or commands to be added in succession .

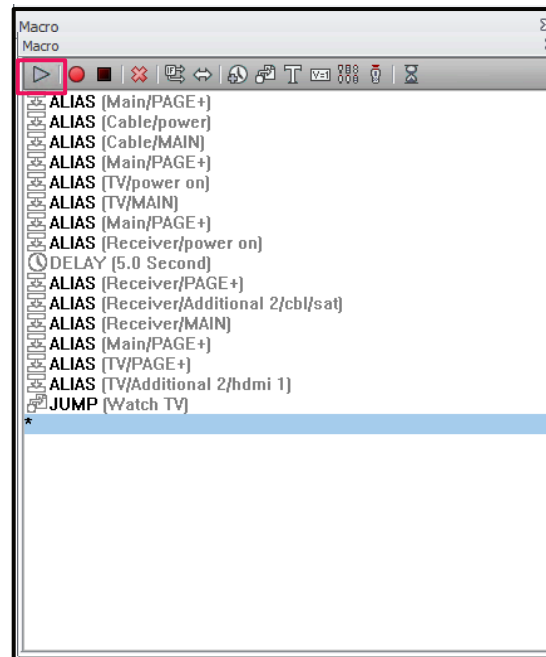
Once you have added all the commands that are needed for the macro to function properly, click the **Stop** button in the macro toolbar.



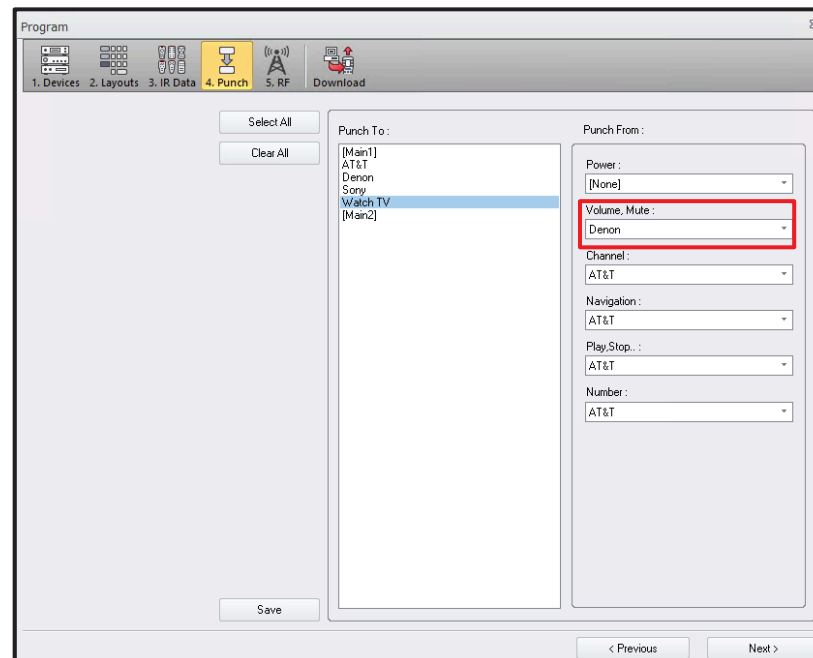
Process To Create A Macro (cont'd)

Once all the commands to a macro have been added, use the **Play** button to confirm its functionality. This will allow you to test the macro without having to download to the remote and make changes if necessary.

You may also need to edit your punchthroughs in the **Punch Through:Punch** window. Since the activity is using a receiver for audio you will want to set the **Volume,Mute** selection to the receiver. This way when the activity is selected, it controls the correct audio device.

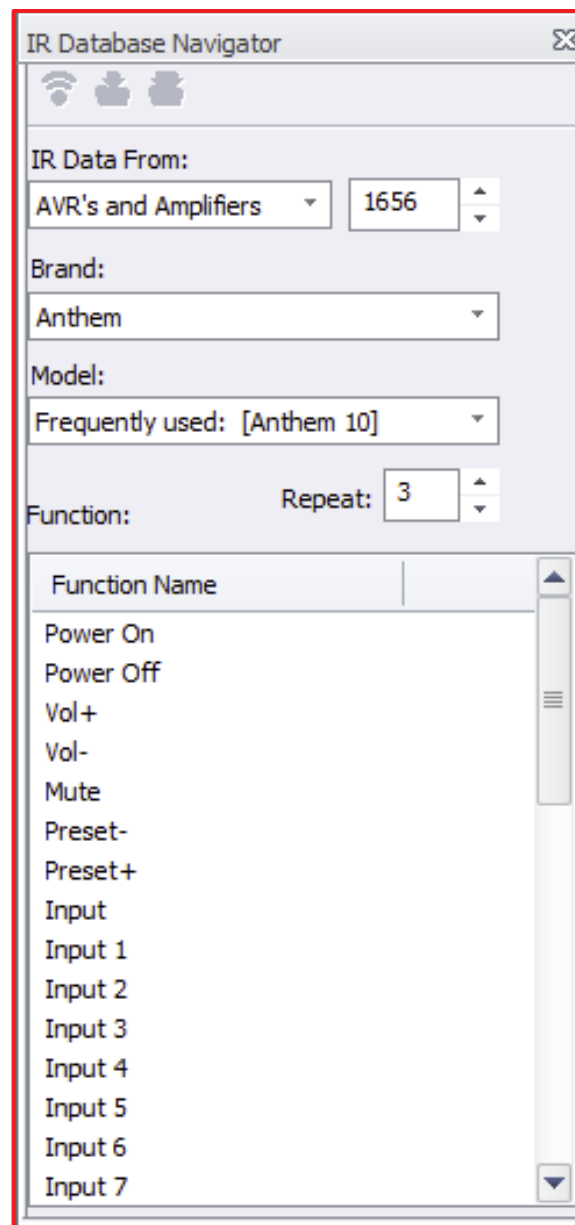


“ Make sure to always place the final Jump to device at the end of a macro in a Complete Control program. This is needed for situations where you may want to Jump to a PLEASE WAIT page in the beginning while the macro is running. Select remotes have the option to setup a PLEASE WAIT page in the Jump menu on the Macro Toolbar. For all other remotes, you will need to manually create the page.”



IR Database Navigator

The **IR Database Navigator** window is where you will find available commands to various third party devices to add to your macro or button.

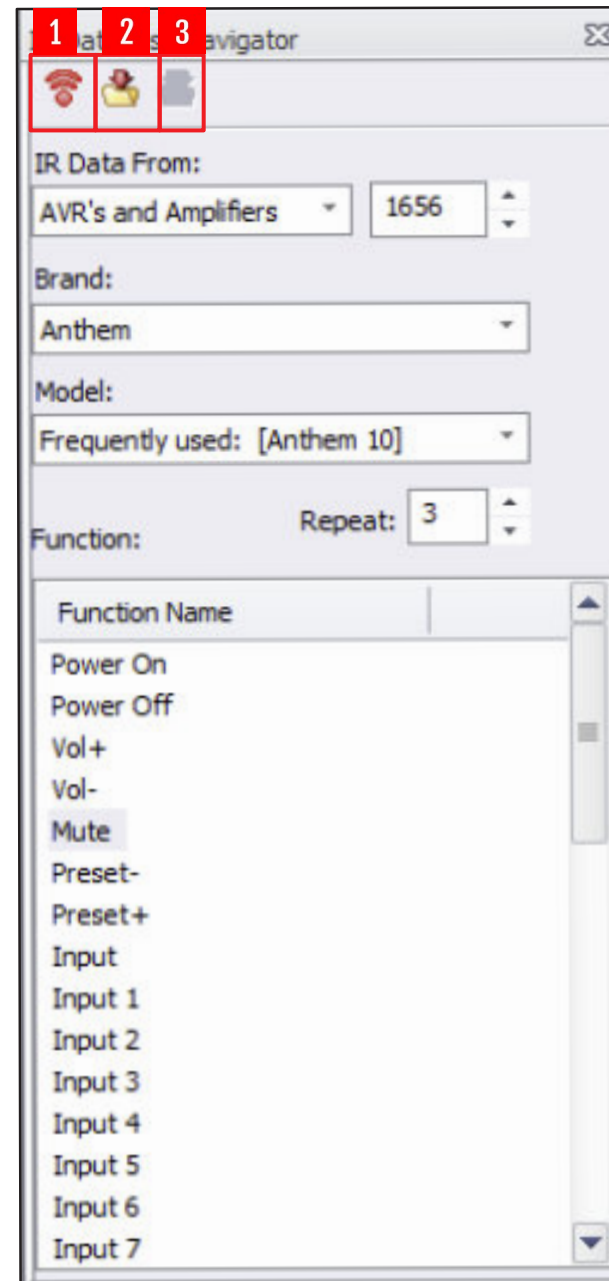


IR Database Navigator (cont'd)

The **IR Database Navigator Toolbar** has various options for a selected command. This includes:

1. **Test Icon:** With a Complete Control remote connected, you can test the IR command in real time. Select the command in the Function Name column and click the test icon. This will send the selected command through the remote.
2. **Save Icon:** After selecting a command in the Function Name column, click the Save icon to add it to the macro window. You can also click and hold on the command and slide it into the macro window to also add it.
3. **Save All:** It will save all the codes from the set selected in the navigator to the function list you are currently editing in the driver editor.

“Using Save All will overwrite anything there.”



IR Database Navigator (cont'd)

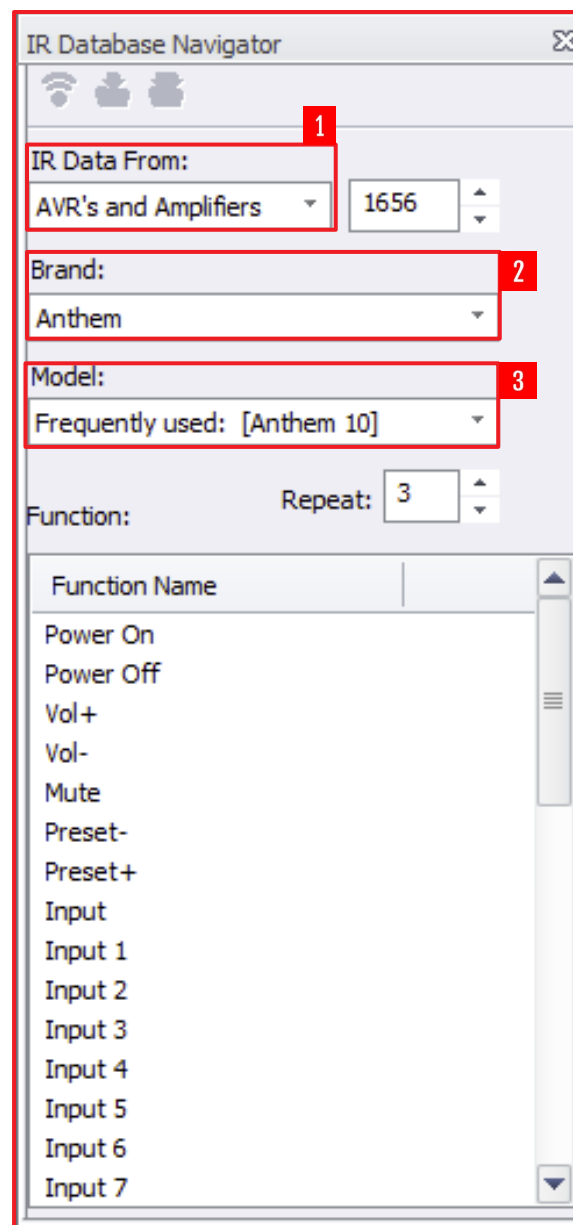
Navigating the menu selections to find a third party command is done by a selection of choices sorted by hierarchy. The commands for available devices can be found by selecting in order:

1. **IR Data From:** Selects the **Category** of device.

“ If you know the Device ID number for the device, you can access its commands by entering it in the ID number field. This field will auto populate when a model has been selected.”

2. **Brand:** Selects the **Brand** of device.
3. **Model:** Selects the **Model** of the brand of device

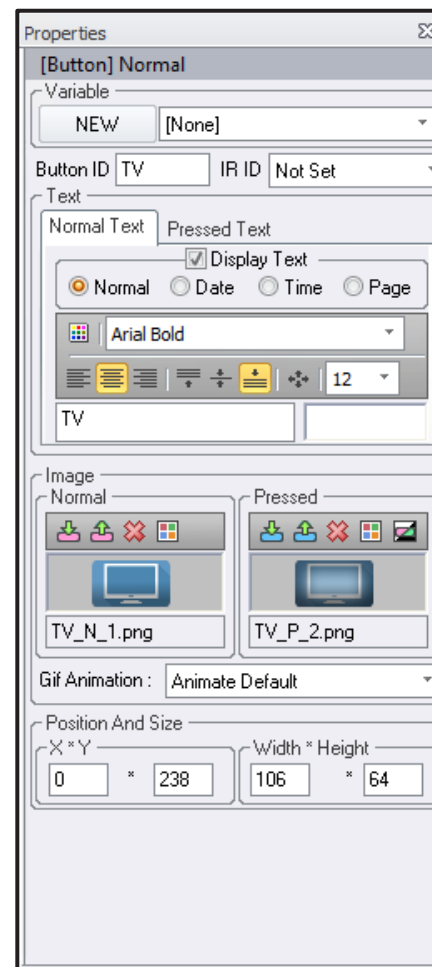
Once you have highlighted the command you want to use, you can either click the save icon at the top of the **IR Database Navigator** window to add it to the selected button or click and hold the command and slide it over to the **Macro** window.



Properties Menu

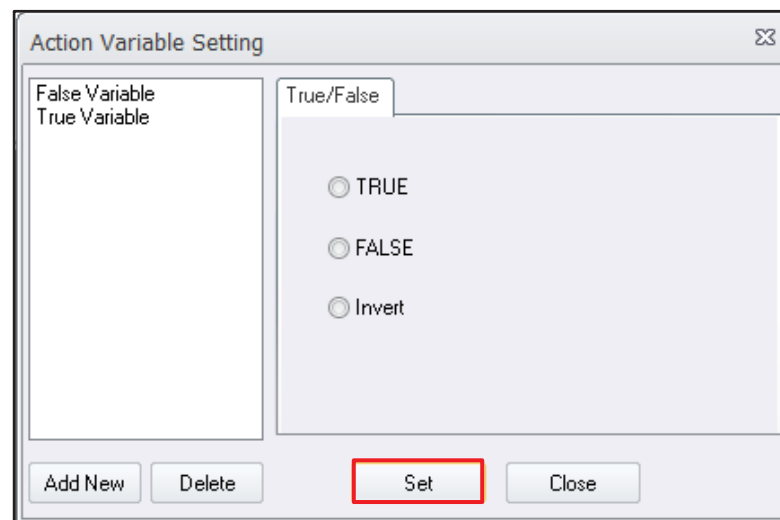
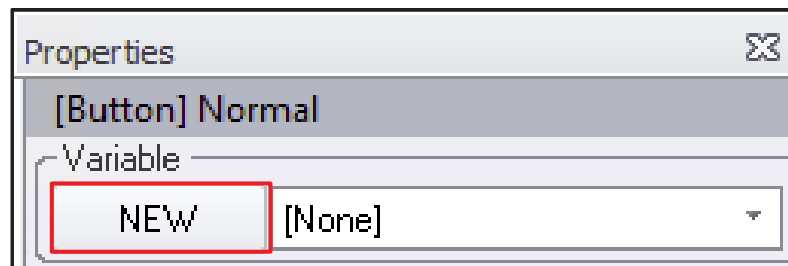
The **Properties** menu is where you can adjust the appearance and text of buttons located on the layout screen. To adjust a button select one that corresponds to a icon on the screen in the **Simulate Remote Panel**. Options will vary by remote and by what button is pressed.

“The hard or physical buttons on a remote cannot be changed.”



Properties Menu (cont'd)

The **Variable** panel allows **True** or **False** variables to be added to a icon. Clicking the **NEW** button will open the **Action Variable Setting** window. Only **True** or **False** variables can be assigned to a button. Click on any created **True** or **False** variable and click **Set** to add.



“ False variables will show a normal image while True variables will show a Pressed image.”

“ Button ID and IR ID are assigned from the layout selection chosen for a device and IR Data chosen for it.”



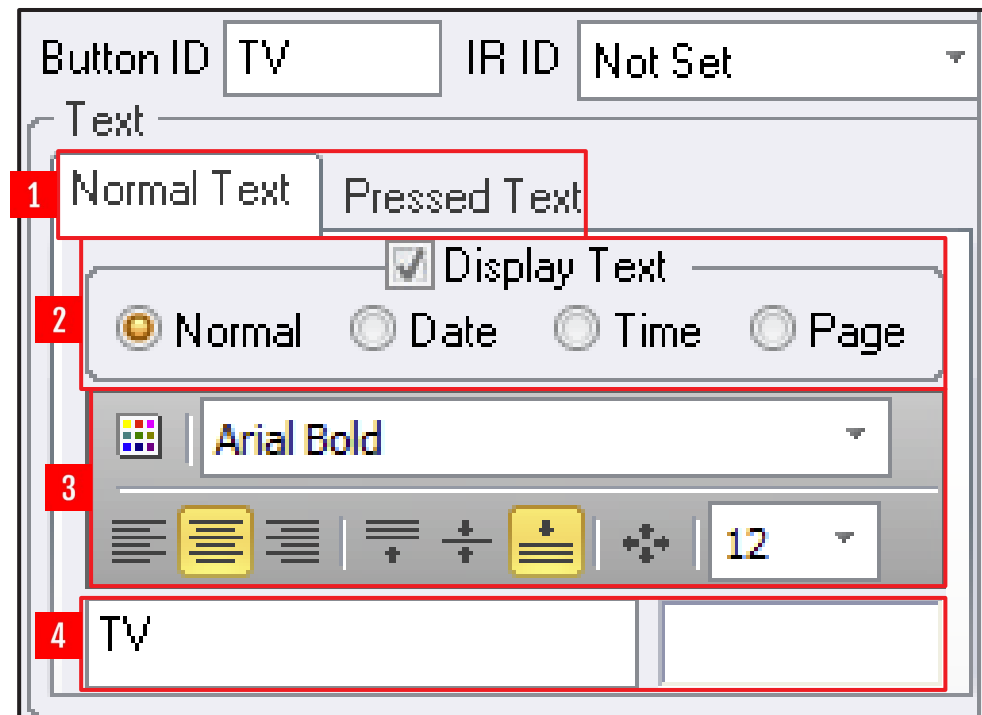
Properties Menu (cont'd)

The **Text** Panel in the **Properties** menu allows a number of configurable options to be modified for the label of a icon. These options will vary by remote.

1. **Normal Text - Pressed Text:** Settings can be adjusted based on whether the icon is stagnant or being pressed by its corresponding button.
2. **Display Text:** **Show** or **Hide** one of the text labels of a icon for the following selections:
 - a. **Normal:** What it is actually labeled.
 - b. **Date:** Format of date can be adjusted.
 - c. **Time:** 12 or 24-hour format selection.
 - d. **Page:** Show the page the icon is on.

“All 4 options will be adjustable in the lower text box of the Text panel after selection.”

3. **Font Adjustments:** The **Font** type, **Indentation**, **Placement** and **Size** can be changed .
4. **Label Name or Format Change:** Depending on what **Display Text** option is selected, you can specifically modify the label an icon here.



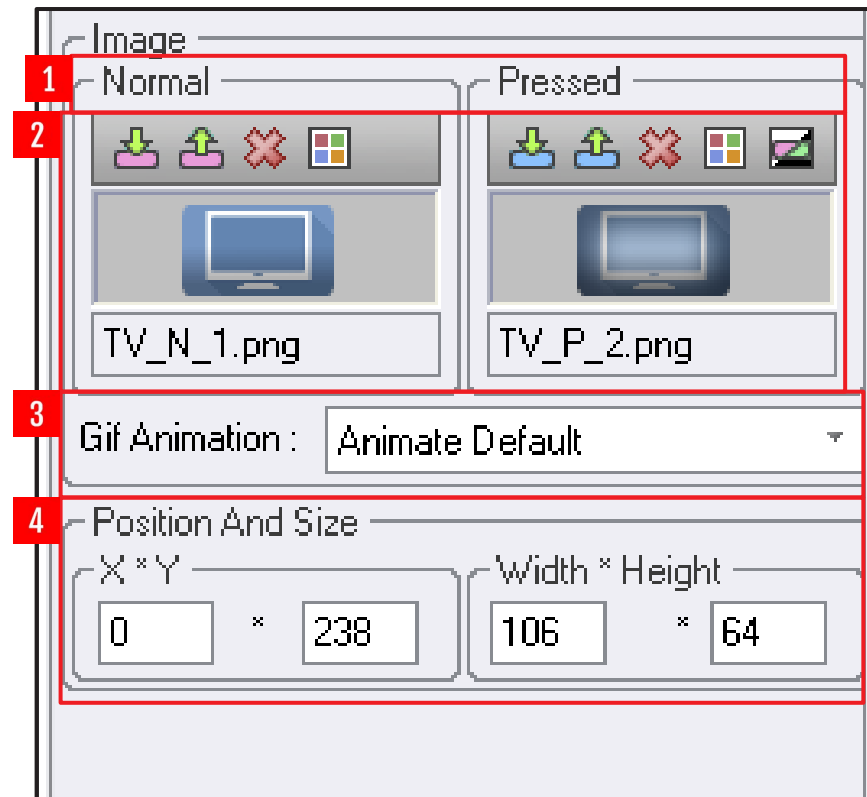
Properties Menu (cont'd)

The **Image** panel in the **Properties** menu allows a number of graphic options to be modified for an icon or a background. These options will vary by remote. To change the background (if applicable), click on the background instead of a corresponding button in the Simulate View window.

1. **Normal - Pressed**: Icon can be adjusted based on whether the it is stagnant or being pressed.
2. **Icon Change**: **Import**, **Export**, **Delete**, or **change** the color of a icon.
3. **Gif Animation**: If a animated Gif is used as a icon or background, you can choose wether the animation happens **Once** or is **Continuous**.

“ Gif Animation not available on all remotes.”

3. **Position and Size**: Each icon location can be adjusted on a graphical remote. It is best to have it next to the corresponding button that selects it. Depending on remote, you may be able to adjust its **Position** and/or **Size**. Use the **Simulate** view window to adjust as needed.



Adding your own Images or Icons

With graphic remotes, all images are stored in the Complete Control installation folder. Your graphics will be subdivided by remote. Custom images can be dropped within an already accessible folder or created in a folder within the specified directory tree so that the Complete Control software can find them. Your folder location will vary by computer.

To add a custom folder, make sure to add it under the specific directory of the individual remote that is being programmed. When using the import option in the properties menu the folders that can be accessed from the Images directory are:

1. **Activities**
2. **Buttons & Backgrounds**
3. **Blanks**
4. **Brands**
5. **Devices**
6. **Favorite Channel Icons**
7. **Rooms**

If the Complete Control software installation is on C: drive, the file path to add your own graphics is found at:

C:\Program Files (x86)\Universal Remote Control, Inc\Complete Control Program\XXXXX\Images

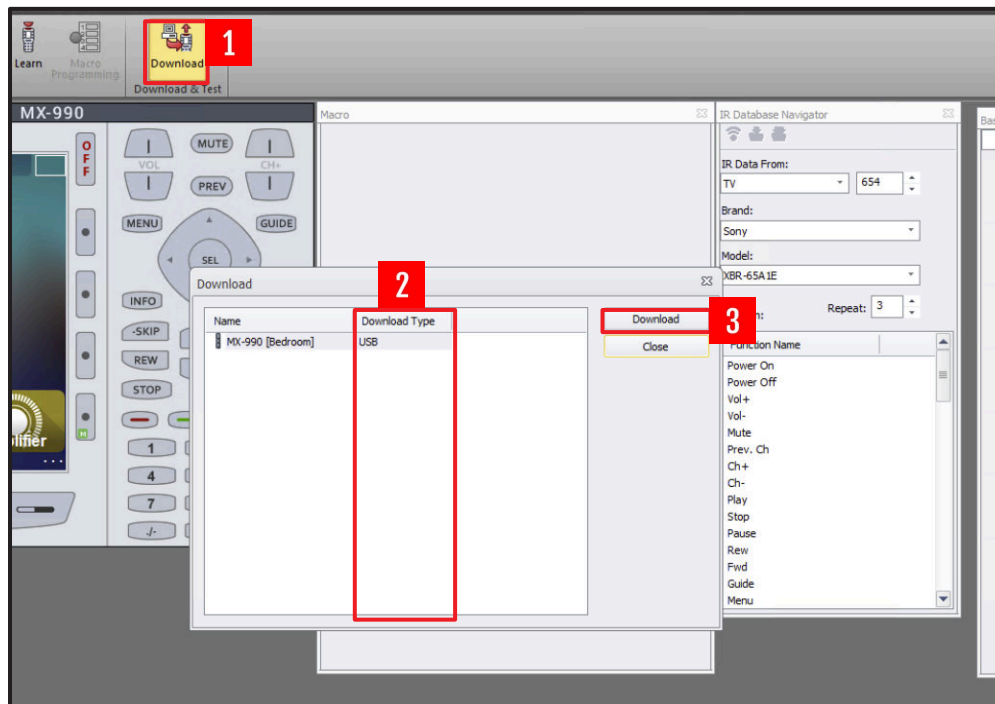
**XXXXX being the model number of the remote you are working with.*

Downloading to a remote

Upon program completion, you should download the file to the remote and test its functionality. Navigation should have already been tested within the **Simulate** view window. Also, the **Play** button in the **Macro** window can test whether the sequence of commands work correctly before downloading. This will save time from having to download multiple times to test a remote for functionality. To download to a remote:

1. Click the **Download** tab in the **Main** toolbar.
2. Use the **Download Type** column to confirm the type of connection used for a URC remote to be programmed. All graphic remotes use a **USB** connection to the computer for programming.
3. Click **Download**.

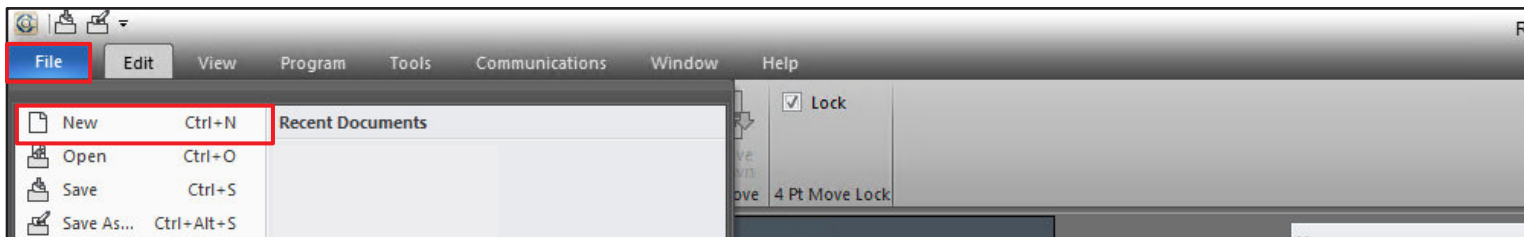
Wait for the process to finish. Once completed, the remote will reboot. After reboot, you should completely test the functionality of the remote to make sure it is working as intended.



Introduction to Text Remote Programming

Text remotes are a line of URC remotes that can control devices and have limited or no graphical customization. This manual will cover basics in programming these types of remotes.

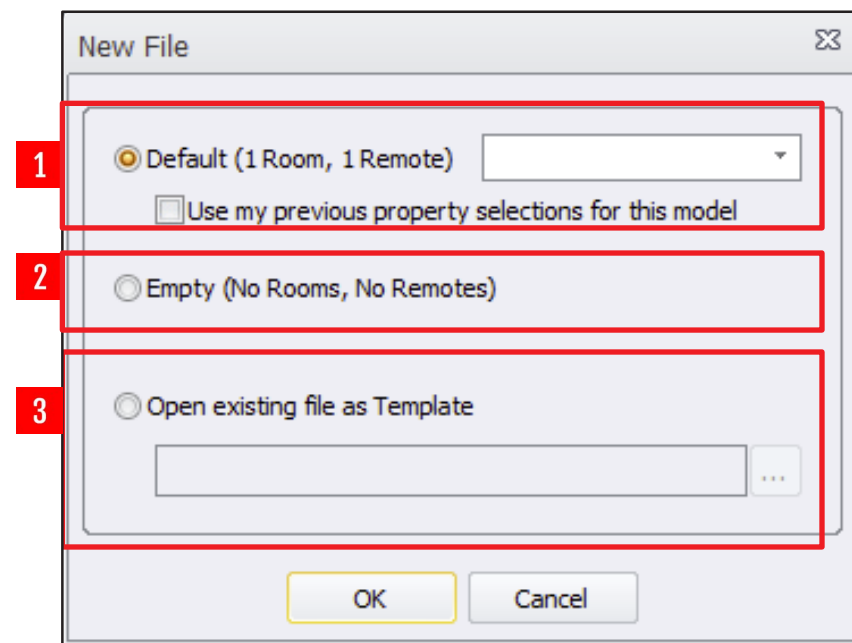




Starting a File

Starting a file is the first step in creating a program in Complete Control. There are three ways to initially start programming a system after clicking on the **File** tab then clicking **New**.

1. **Default:** Automatically creates a room (*can be renamed*) with the selected choice.
2. **Empty:** This brings you to the system configuration menu where you can choose your room, base station, and remote.
3. **Opening existing file as a Template:** Opens an existing file and loads all the existing configurations.

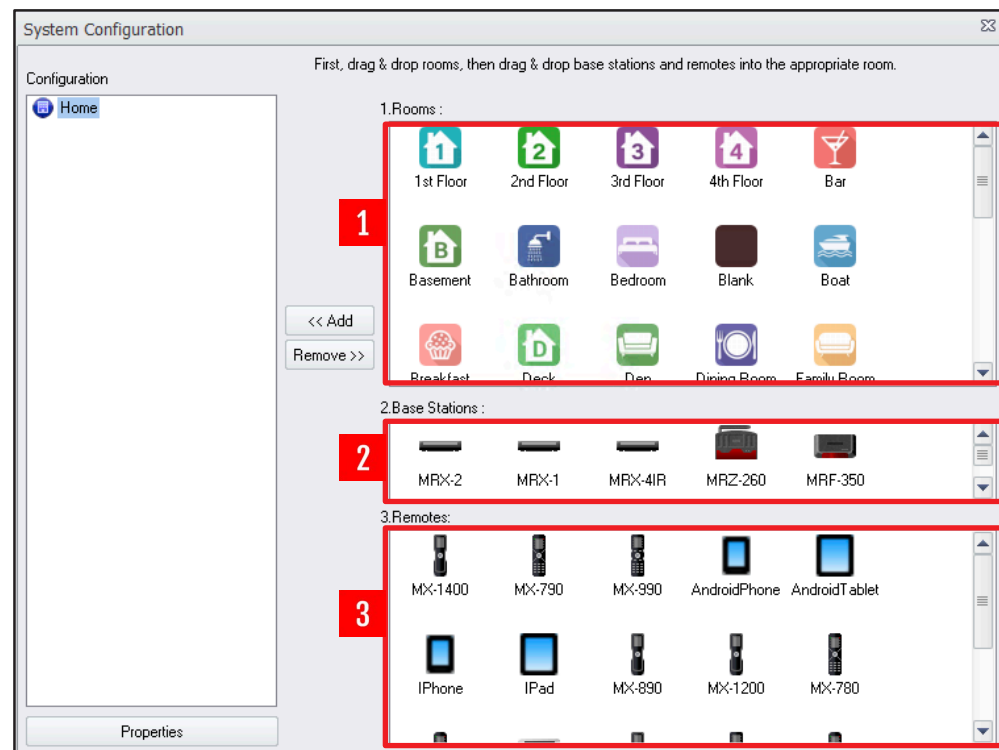


“Both default and opening existing file options bypass the system configuration window.”

System Configuration Window

This **System Configuration** window will allow you to add the following items below to your file. After selecting any item in one of the categories, click the **<<Add** or **Remove>>** button to move an item within the configuration panel of the project:

1. **Rooms:** A list of pre-programmed room names. Also, any room name can be renamed.
2. **Base Stations:** A base station for a project may be needed if you do not have line of sight to the device from a remote. Click [here](#) to learn more about setting up a base station.
3. **Remotes:** A list of compatible Complete Control remotes that can be configured for the project.



"A file can have multiple rooms with different remotes."

Model Properties Window

The **Model Property** window of a remote will show when it is added to the configuration panel. Each remote can be configured with a few options.

In the **Basic Information** panel:

1. **Default Base Station:** If a base station has been selected, it can be linked here. You can also link to multiple base stations if there is more than one. To learn more on using one or multiple base stations click [here](#).

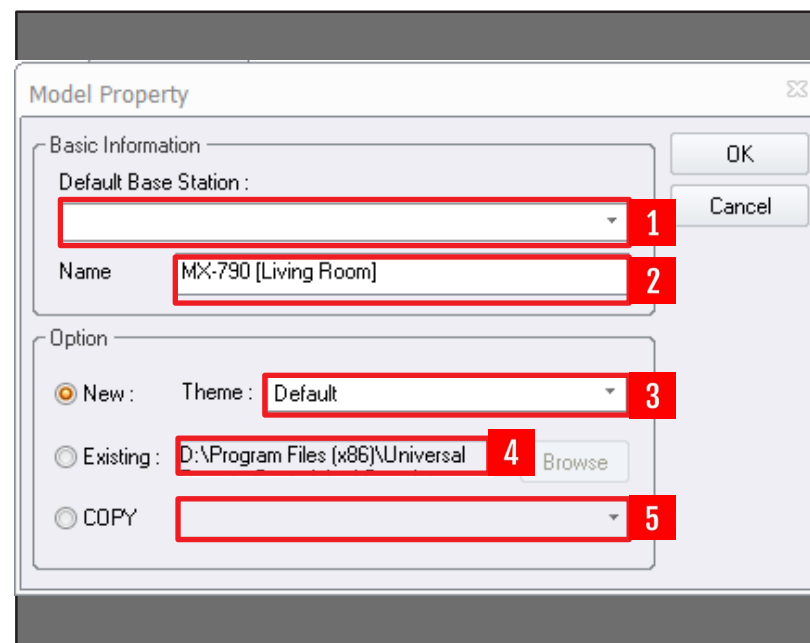
2. **Name:** Renames a remote in a file.

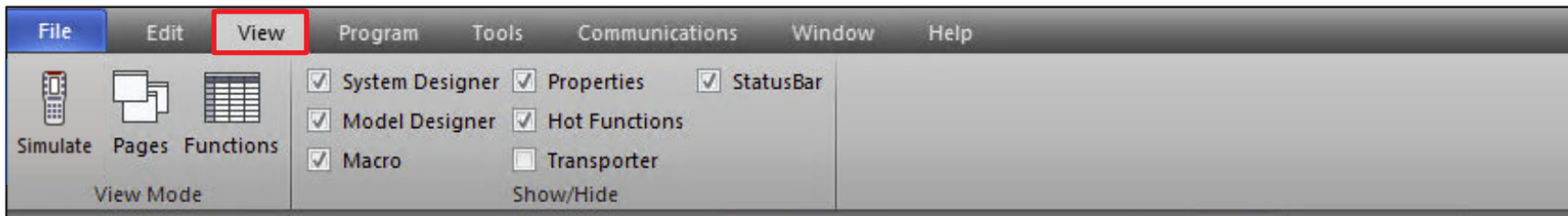
In the **Option** panel:

3. **New:** Sets up a new remote interface design. Text remotes only have a **Default** selection choice.

4. **Existing:** Copy an interface from another file.

5. **Copy:** Copy an existing interface within the file.

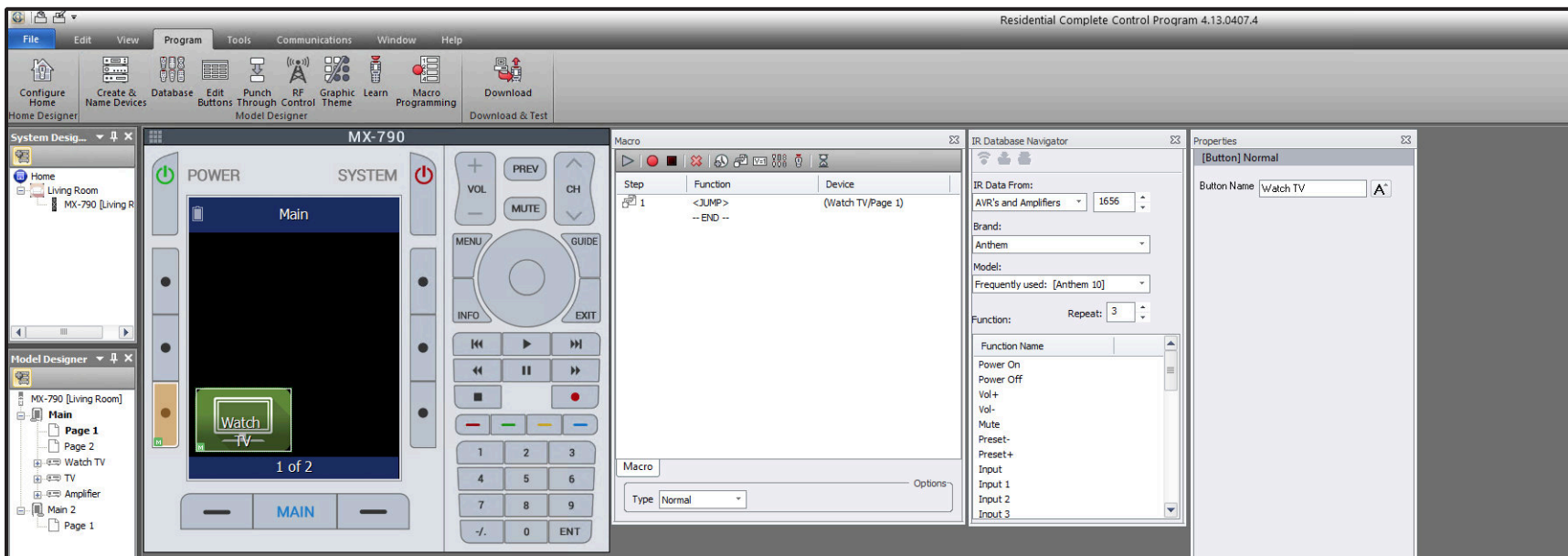


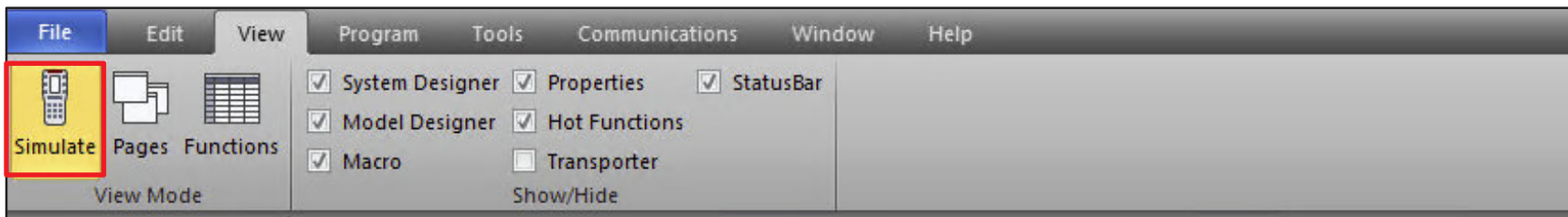


View Tab

The **View** tab consists of a selection of **View Modes** and **Windows** that can assist with programming and customizing a URC Complete Control remote. Depending on what is being setup, it may be best to have multiple windows open at one time with the ability to view them together.

The ability to view multiple windows may be limited by your resolution or DPI setting in the operating system of the computer. To learn more about adjusting these display settings, Click [here](#).



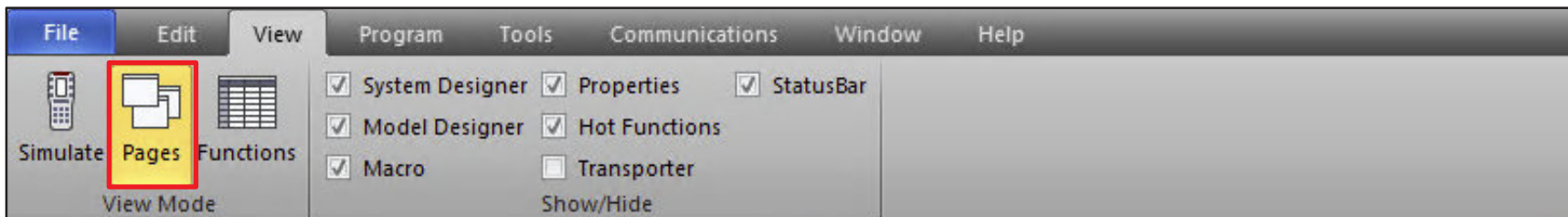


View Mode Menu Options

The **Simulate** view offers a fully simulated view of the remote. It can be used to preview the navigation of a remote to test its functionality before downloading to it or it can be used for adding commands to a macro. Depending on what windows are shown and hidden, you can see the selected configuration parameters of each button when pressed.

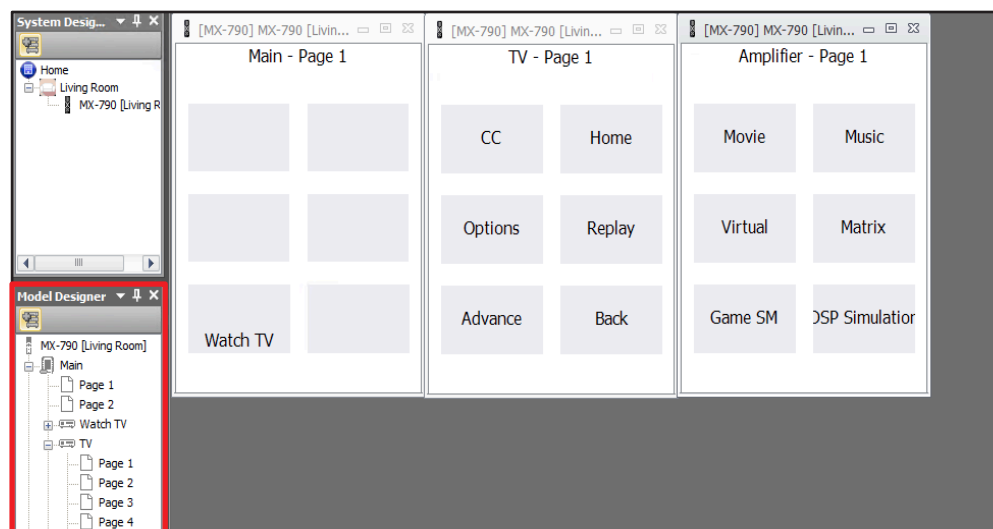


**Your remote may look different*

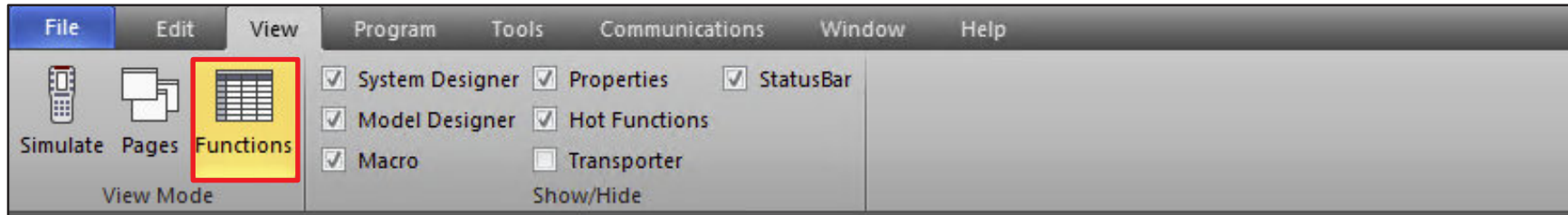


View Mode Menu Options (cont'd)

The **Pages** view will preview selected pages of a remote. You can view one or multiple pages at a time. To open a page double click on each page that needs to be previewed in the **Model Designer** window.

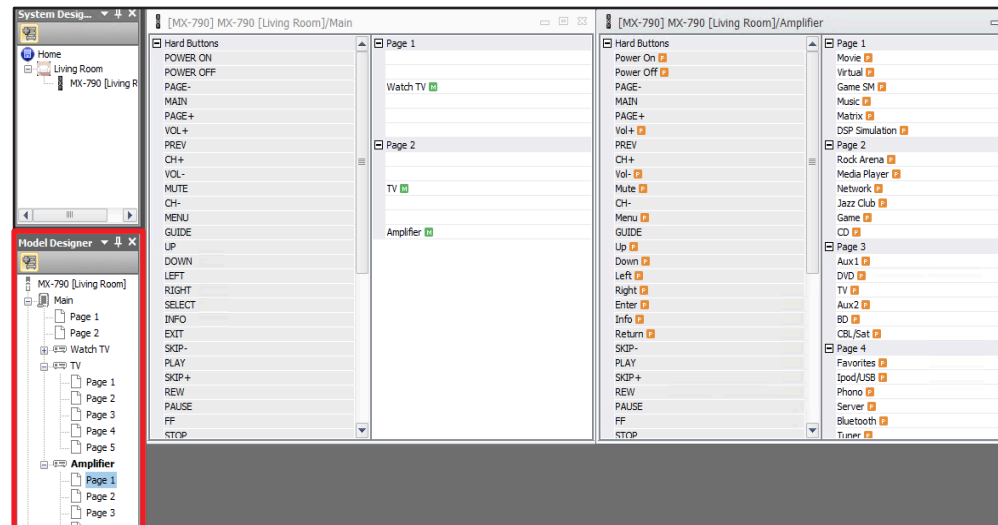


**Your remote may look different*

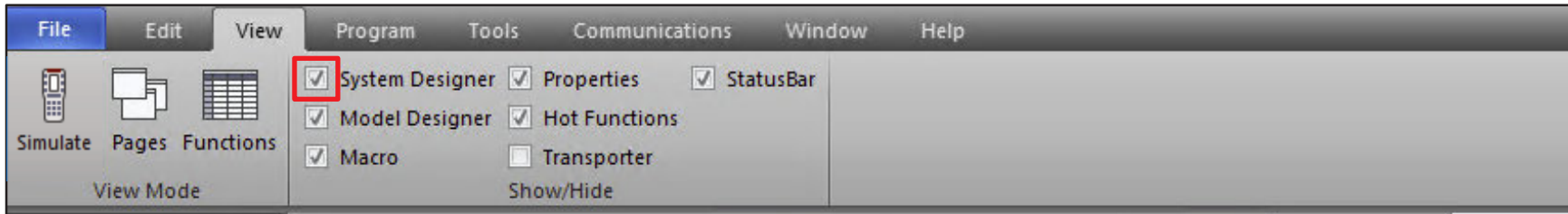


View Mode Menu Options (cont'd)

The **Functions** view will show a list of both hard buttons and screen commands. You can open additional windows by clicking on a page of a device in the **Model Designer** window.



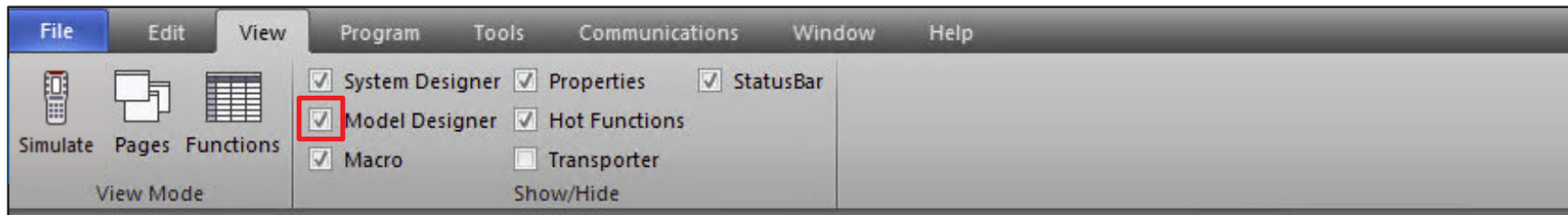
**Your remote may look different*



Show/Hide Windows

The **System Designer** window list rooms and equipment that have been added to a program.

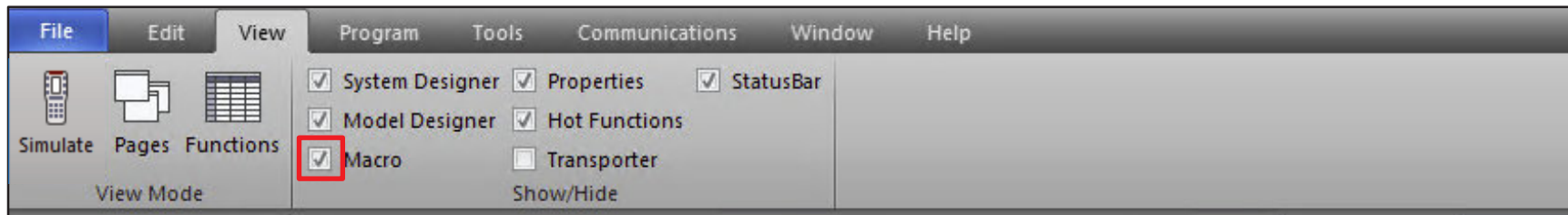




Show/Hide Windows (cont'd)

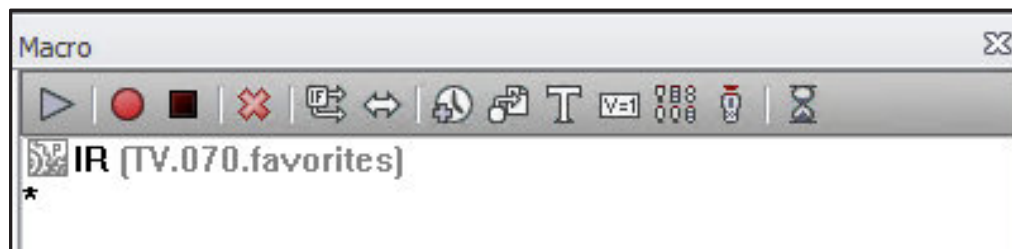
The **Model Designer** window list all pages of devices and activities that have been added to a program.

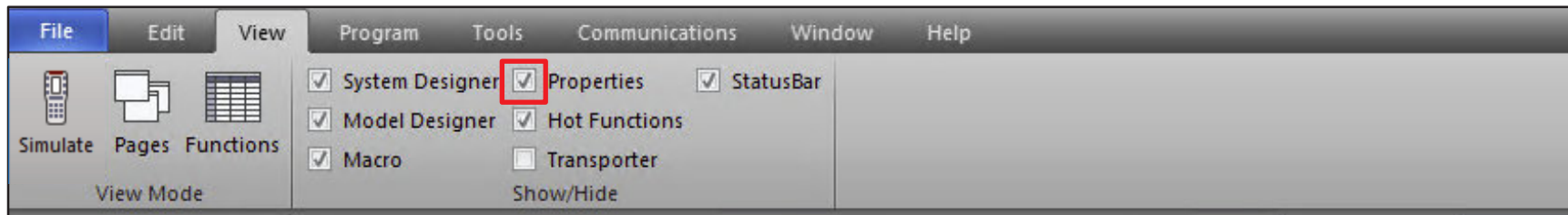




Show/Hide Windows (cont'd)

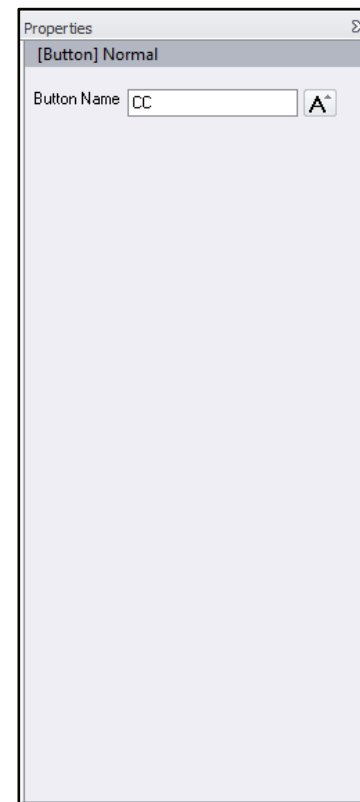
The **Macro** window will show what command or commands are loaded into a hard button on a remote or a button corresponding to an item on the screen. There are a number of options available in this window to help setup various commands. To learn more about setting up Macros, click [here](#).

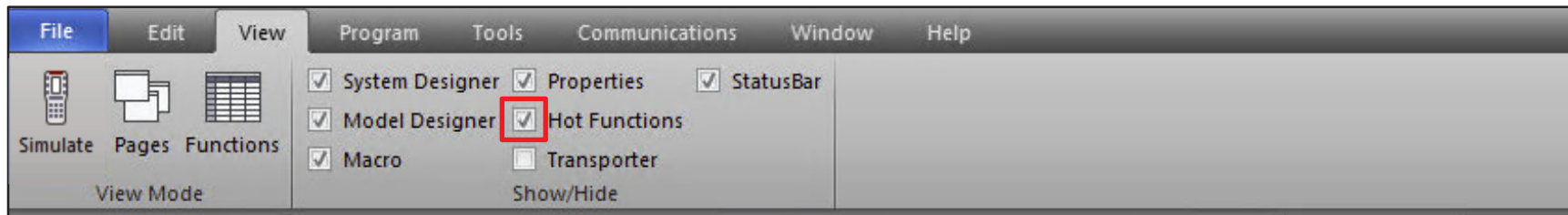




Show/Hide Windows (cont'd)

The **Properties** window is where the label of a selected button on the screen can be changed. To learn more about adjusting items in the properties window, click [here](#).

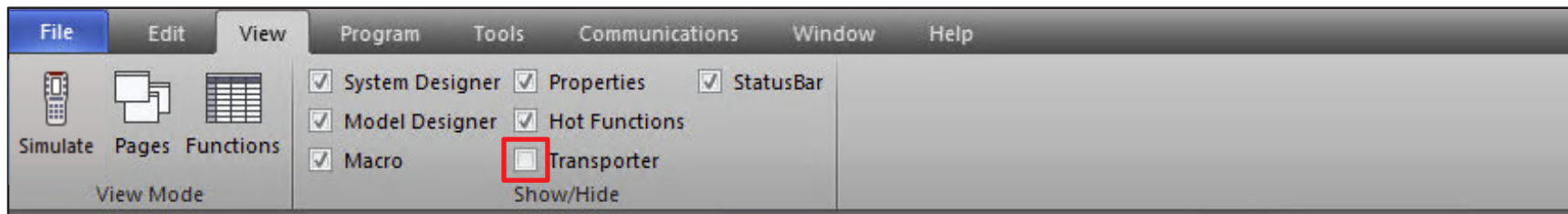




Show/Hide Windows (cont'd)

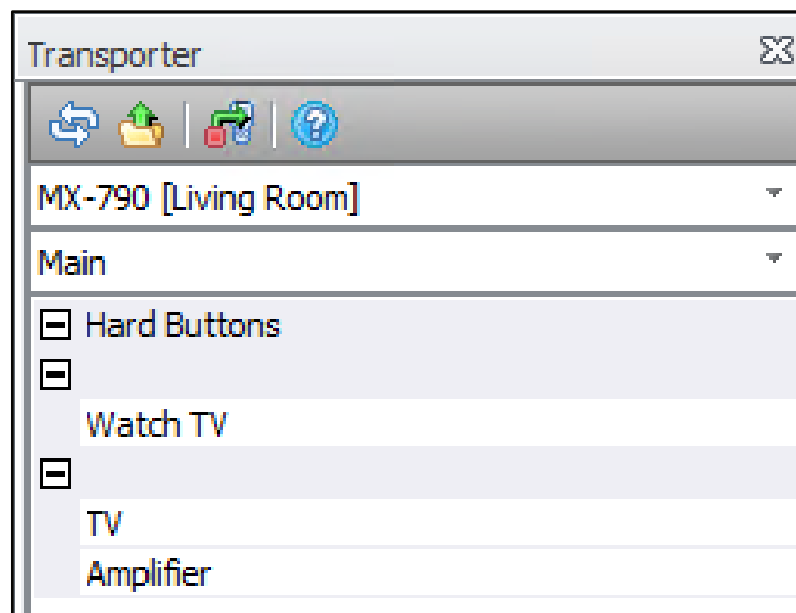
The **Hot Functions** window is only used for the MSC-400 base station.

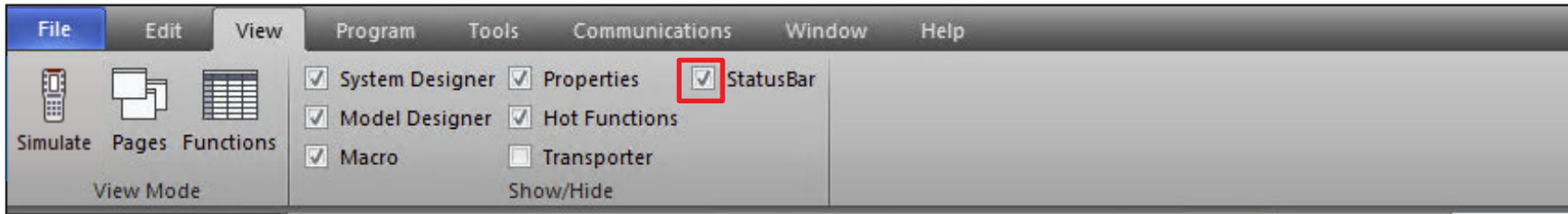
“ The MSC-400 is a discontinued unit and no longer supported.”



Show/Hide Windows (cont'd)

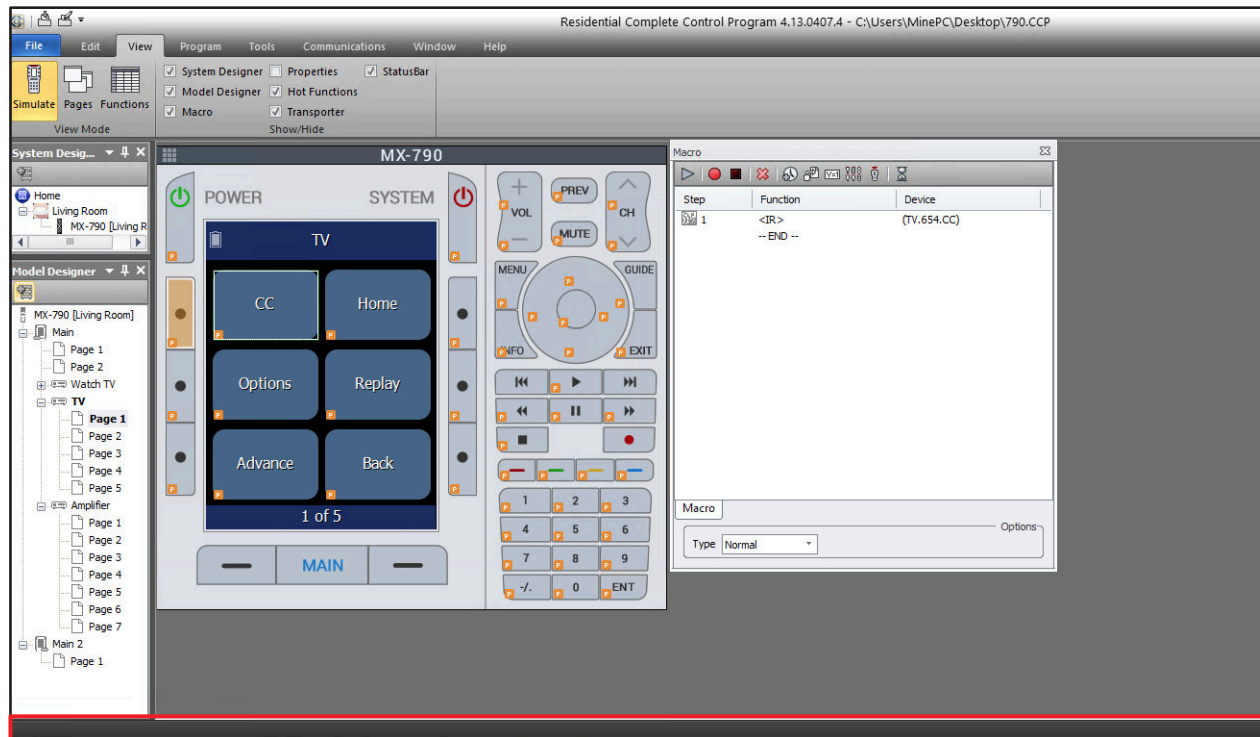
The **Transporter** window provides the ability to import devices into the current model from any other URC Complete Control remote. Only programmed and learned codes are transported and not variables, delays, etc. To learn more about transporting click [here](#).





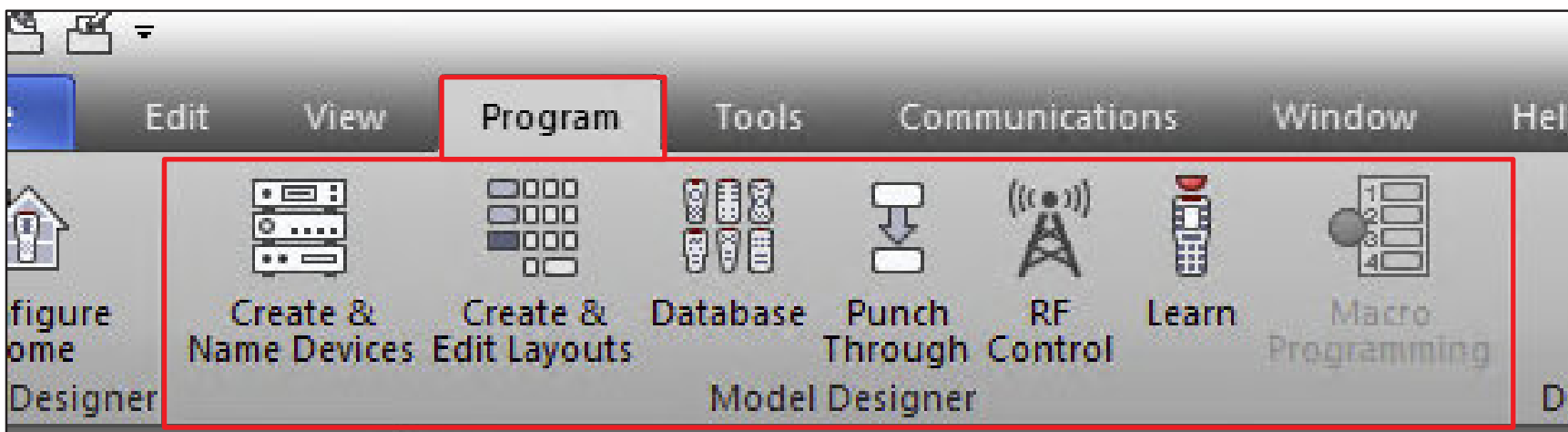
Show/Hide Windows (cont'd)

The **StatusBar** option shows a bar at the bottom with real-time info on what is being done at various moments of programming a URC Complete Control remote.



Program Tab

The **Program** tab will access the **Model Designer** tabs of the Complete Control software. This gives access to various menus to program a file in a URC Complete Control remote. When programming a new remote it is best to start left to right.



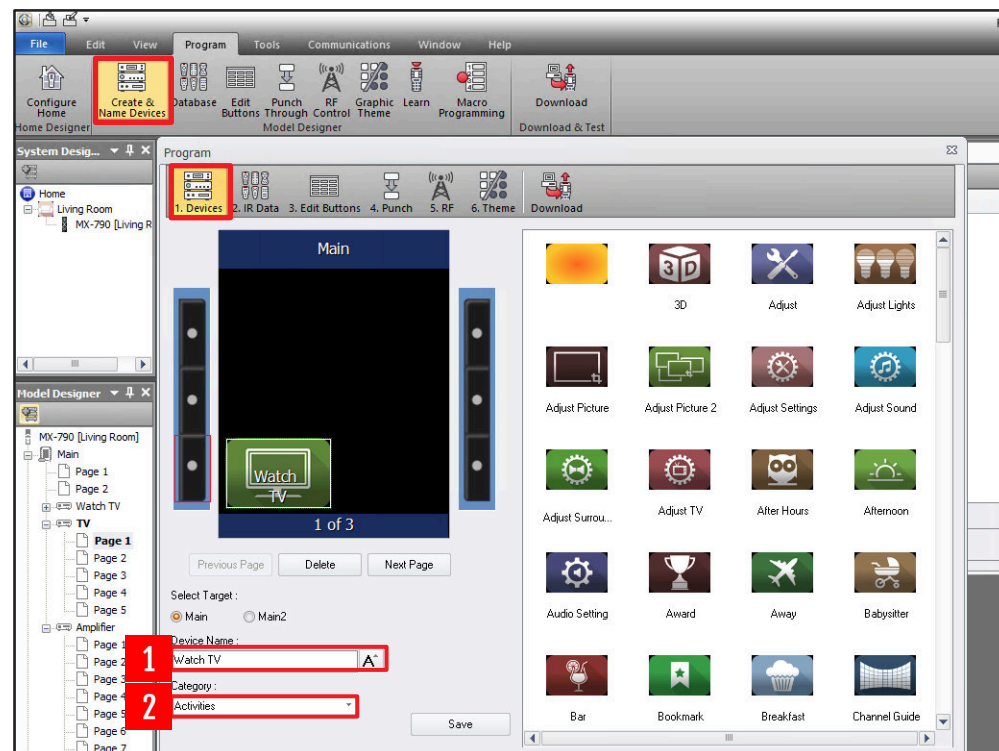
Model Designer Menu

The **Create & Name Devices:Devices** window is where you can add various buttons and pages to the **Main** or **Main2** section of the remote. Simply click and hold the icon you want to use and place in a selected area of the preview panel.

The **Previous Page** and **Next Page** buttons cycle through various pages of the remote. The **Delete** button will remove added icons from the **Main** or **Main2** menu. Depending on the remote you may have a **Main** and **Listen** page instead. Further configurable options are:

1. Change an **Icon** name.
2. Choose what **Category** of icons to select.

The choice of what icon to use is up to the programmer. It is best to choose icons that identify what is being done. For example, you may choose a **Device** icon to control an item directly such as an AVR. You may also choose a **Activity** icon that may turn on and control multiple devices such as the Cable Box, TV, and AVR with the Watch TV icon.



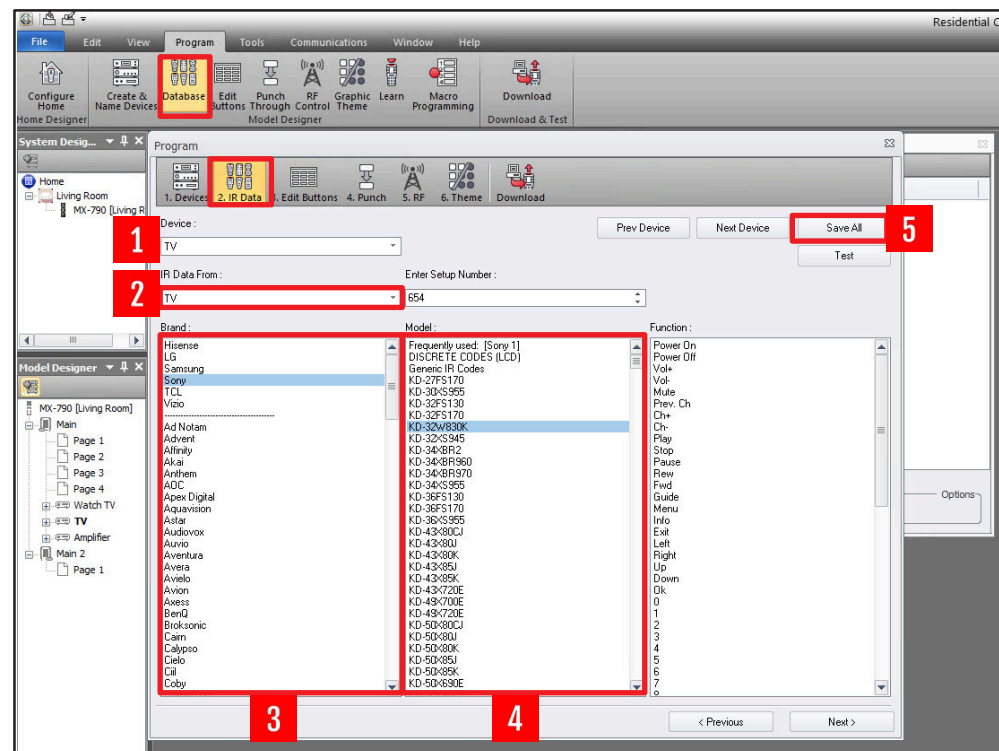
“Customizable icons can also be used on certain Text remotes. To learn more about adding your own buttons to select Text remotes, click [here](#).”

Model Designer Menu (cont'd)

The **Database:IR Data** section is where the IR data for each activity or device is added to its layout. To add IR Data to a device layout:

1. Select a **Device**.
2. Select a **Category**.
3. Choose a **Brand**.
4. Choose a **Model**.
5. Click the **Save All** button.

If you do not see your model, you can manually add third party commands to a program. To learn more about adding third party commands, click [here](#).



“You will need to add IR Data for each device or activity layout in the remote.”

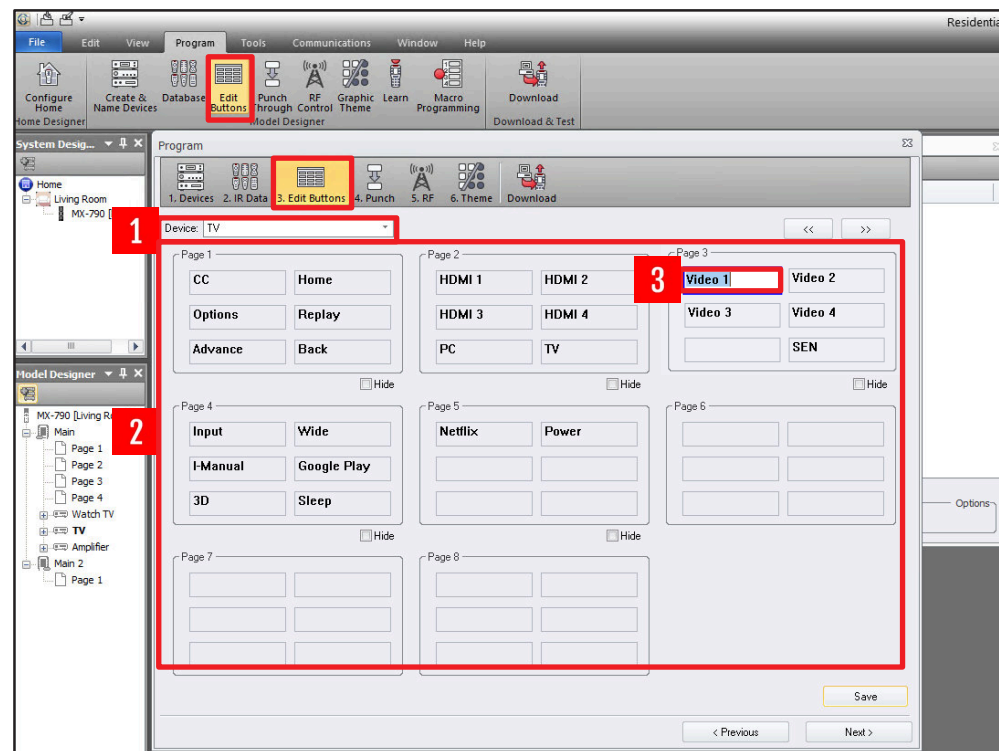
Model Designer Menu (cont'd)

For the **Edit Buttons** section, you can rename and arrange buttons for devices. To change a button label:

1. Choose a **Device** to edit.
2. Double-Click any button on any page to rename it.
3. Rename the button, then press Enter

To change the location of a button, click and hold the button you wish to move and slide it into its new place. If an existing button is there, the buttons will swap locations.

“ Under each page is a Hide page box. If this box is checked , the remote will not show any buttons on the selected page.”

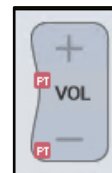
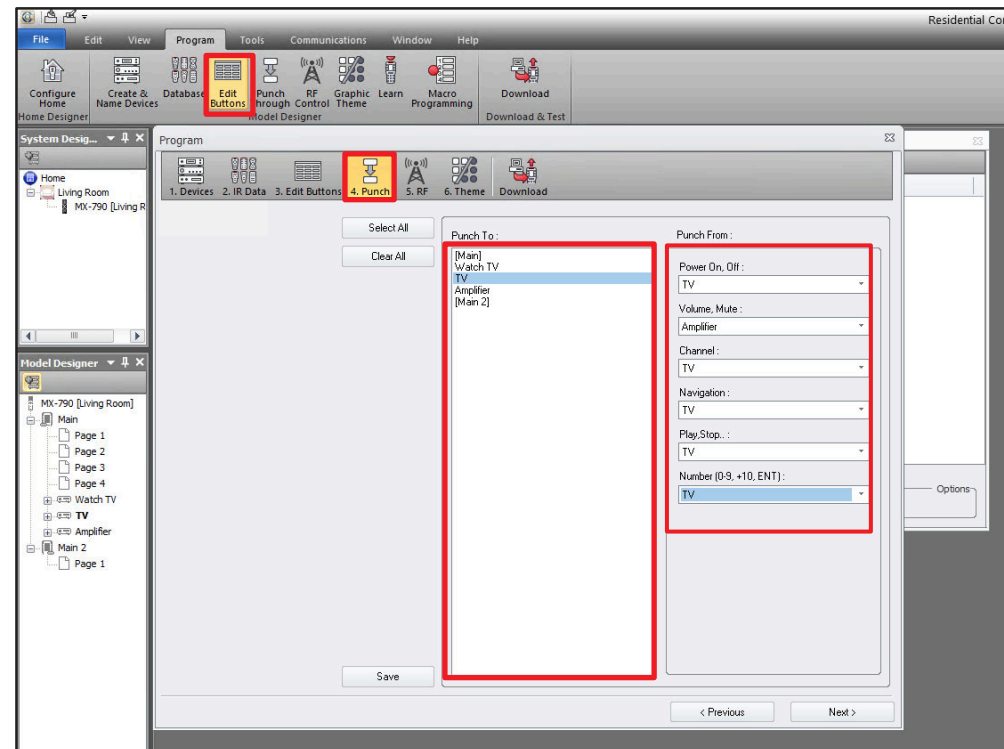


Model Designer Menu (cont'd)

PunchThrough allows you to set the same functions on all devices very quickly. You can punchthrough any of the groups of buttons on a URC Graphic Remote. For example, the **Volume Up, Down and Mute** have been set as a group to punchthrough to a surround sound receiver. The following categories can be changed:

1. **Power**
2. **Volume, Mute**
3. **Channel**
4. **Navigation**
5. **Play, Stop**
6. **Number**

Example



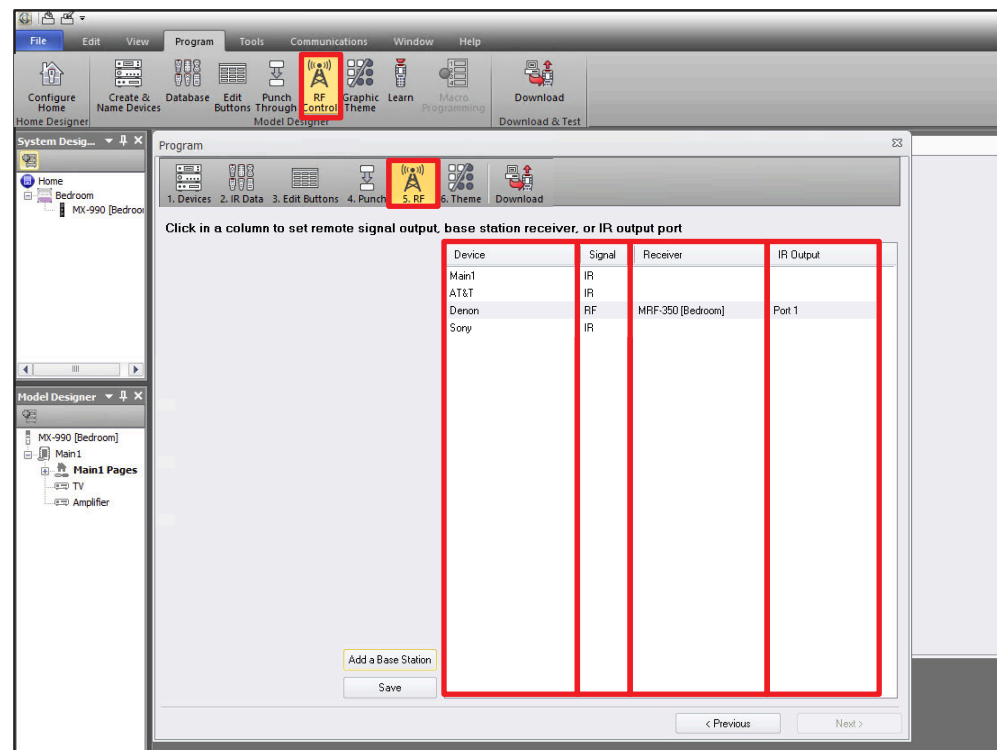
“After programming, flags on the view windows remind the programmer that the buttons have been set to punchthrough.”

Model Designer Menu (cont'd)

The **RF Control:RF** section selects the signal type of a command that is to be sent to each device. To change how a command is sent to a device, click an item in the **Signal** column and adjust.

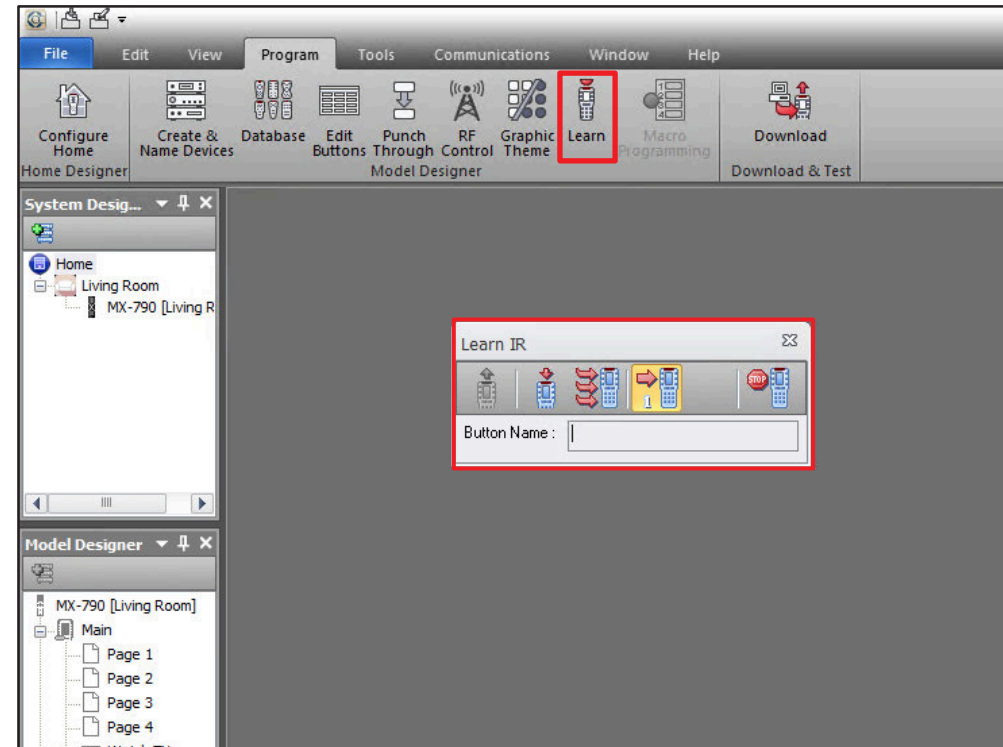
The **Receiver** column will choose what receiver to use if you are using one or more base stations. The **IR Output** column will allow you to choose which IR port to send the signal out of if a base station is being used.

“ If there is no base station configured in the file, the Receiver and IR Output columns will be empty.”



Model Designer Menu (cont'd)

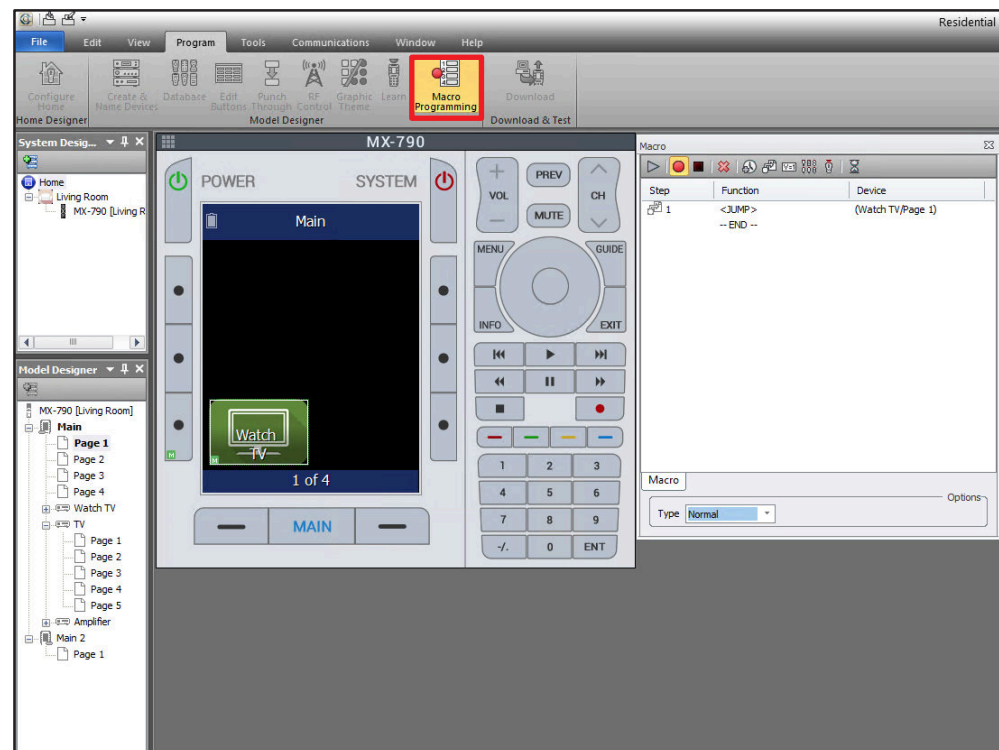
The **Learn** tab will allow you to program third party IR commands into Complete Control through the remote itself or a PIR-1. This is useful if you cannot find the IR codes of a device. To learn how to add commands by remote, click [here](#).



Model Designer Menu (cont'd)

The **Macro Programming** tab allows you to add a command or sequence of commands to a button. This is useful if you want to turn on or off multiple devices at once.

A **Macro** can also change the state of one or multiple devices such as inputs with just a single button press. Almost any button can be selected and configured to include one or multiple commands.

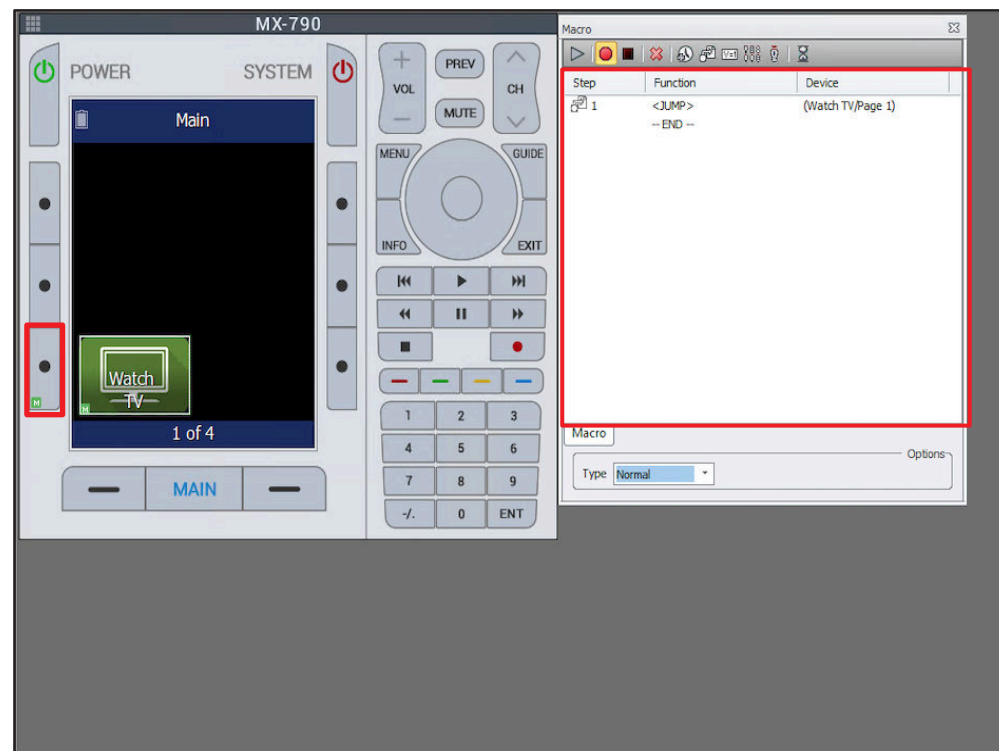
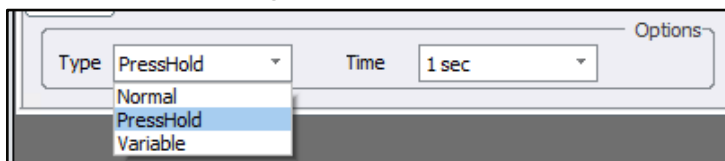


Macro Programming Window

The **Macro** window will show what command or commands are loaded into a selected button. This could be a hard button or a button corresponding to an item on the screen of the remote.

Text remotes can have each button function in three types of ways that is selectable at the bottom of the **Macro** window:

1. **Normal**: Push a button and execute command or commands in the **Macro** window.
2. **PressHold**: Press and hold a button to execute command or commands in the **Macro** window.
3. **Variable**: Press a button to execute a macro based on a variable being **True** or **False**.



“ To learn more about using the types of commands click [here](#).“



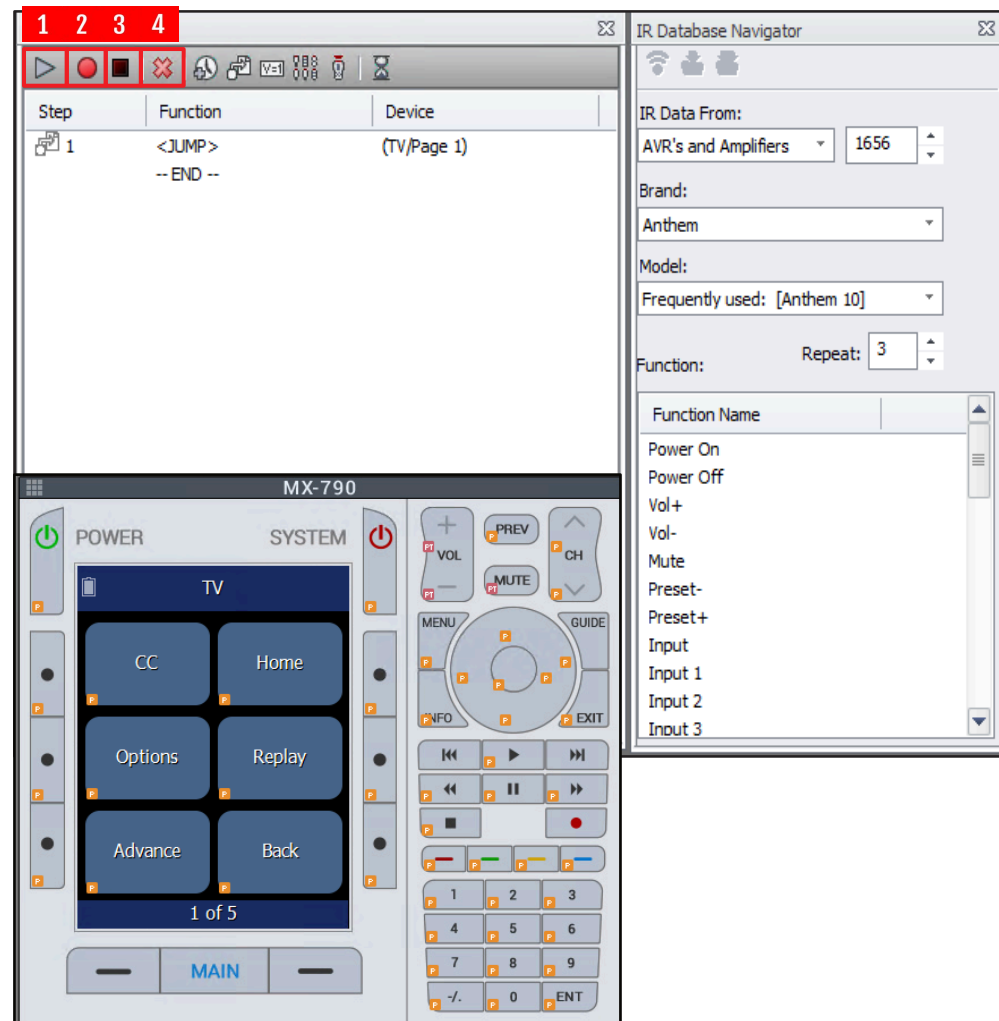
Macro Programming Toolbar

The **Macro Programming Toolbar** gives multiple options for configuring a macro. Various commands and functions will vary in availability by which remote has been selected to be program.

Macro Programming Toolbar (cont'd)

The **Play, Record, Stop and Delete** functions allow the editing of commands in a macro.

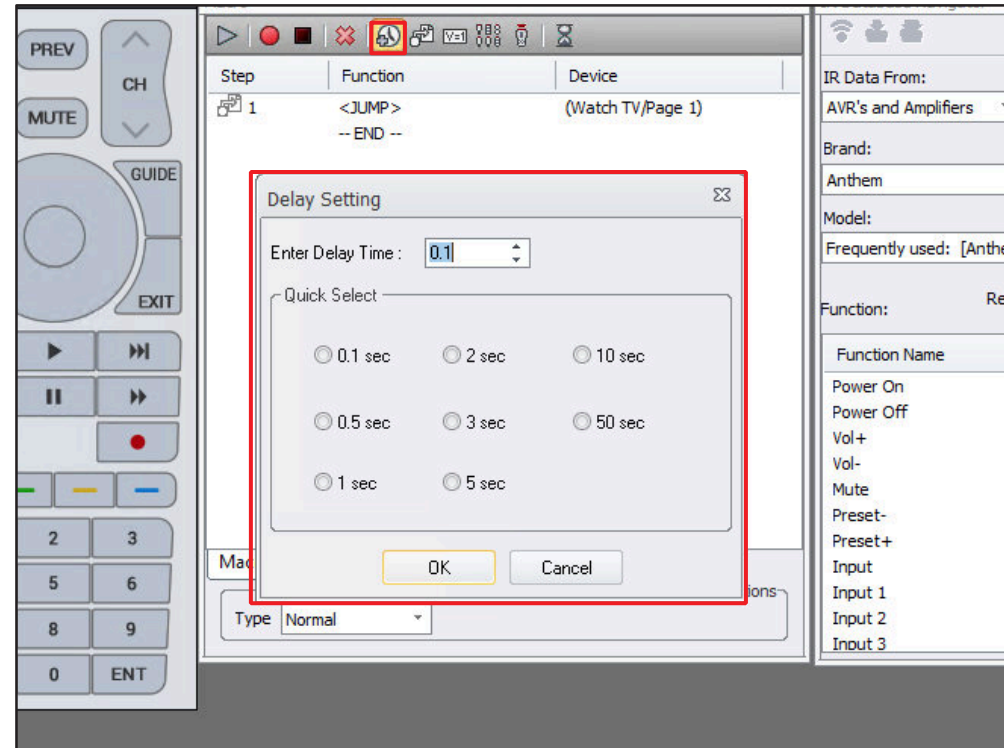
1. **Play**: Will test run the commands loaded into a macro to confirm the sequence is performing as intended.
2. **Record**: Allows one or multiple commands to be added from the IR Database Navigator window or Simulate window in the sequence of selections.
3. **Stop**: Stops the sequence of adding multiple buttons from the IR Database Navigator or simulate window.
4. **X**: Deletes a command or commands that have been loaded into a button selection



Macro Programming Toolbar (cont'd)

The **Delay** function adds a preset time or custom limit between .1 and 99.9 seconds between commands in a macro.

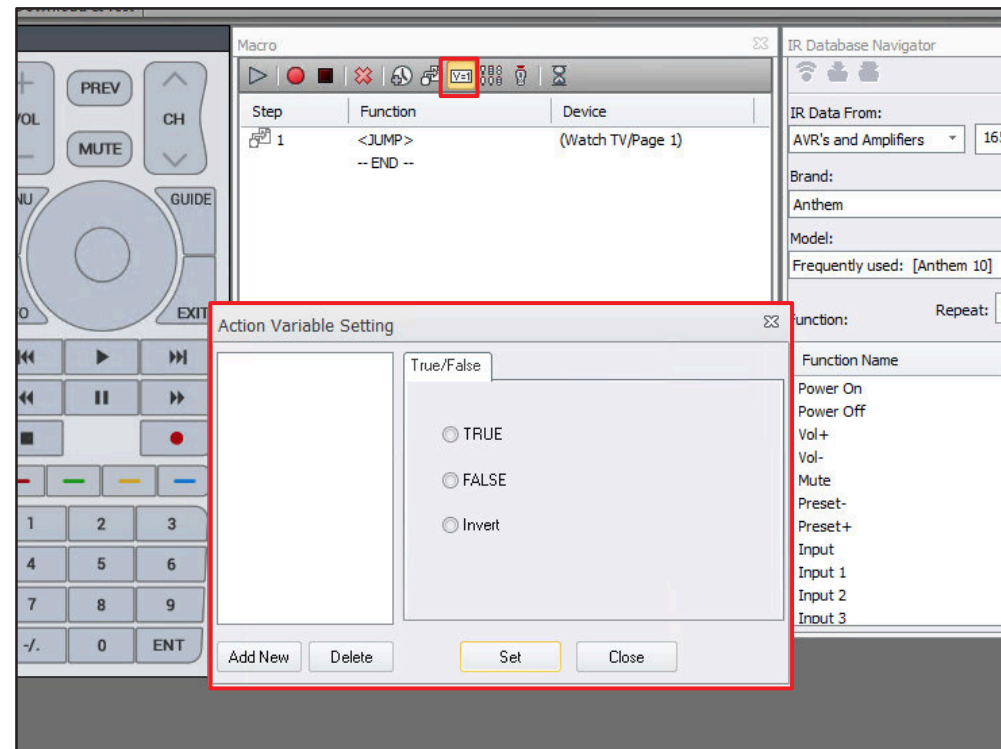
“ Click [here](#) to learn more about adding delay.”



Macro Programming Toolbar (cont'd)

The **Variable** function allows the creation of a variable. This variable can be assigned different states depending on the remote that is being programmed. Text remotes have the ability to create **True**, **False**, or **Invert** of true or false variables.

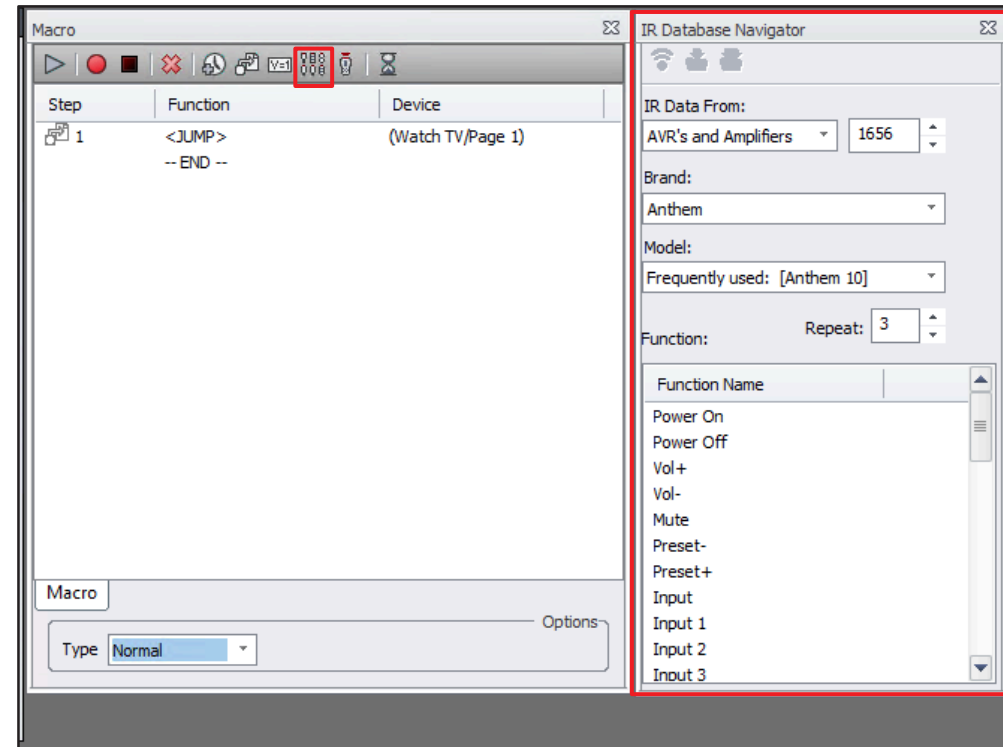
“ Click [here](#) to learn more about adding variables.”



Macro Programming Toolbar (cont'd)

The **PreProgrammed IR** icon opens the **IR Database Navigator** window. This is where commands of various third party devices are located to add to a macro.

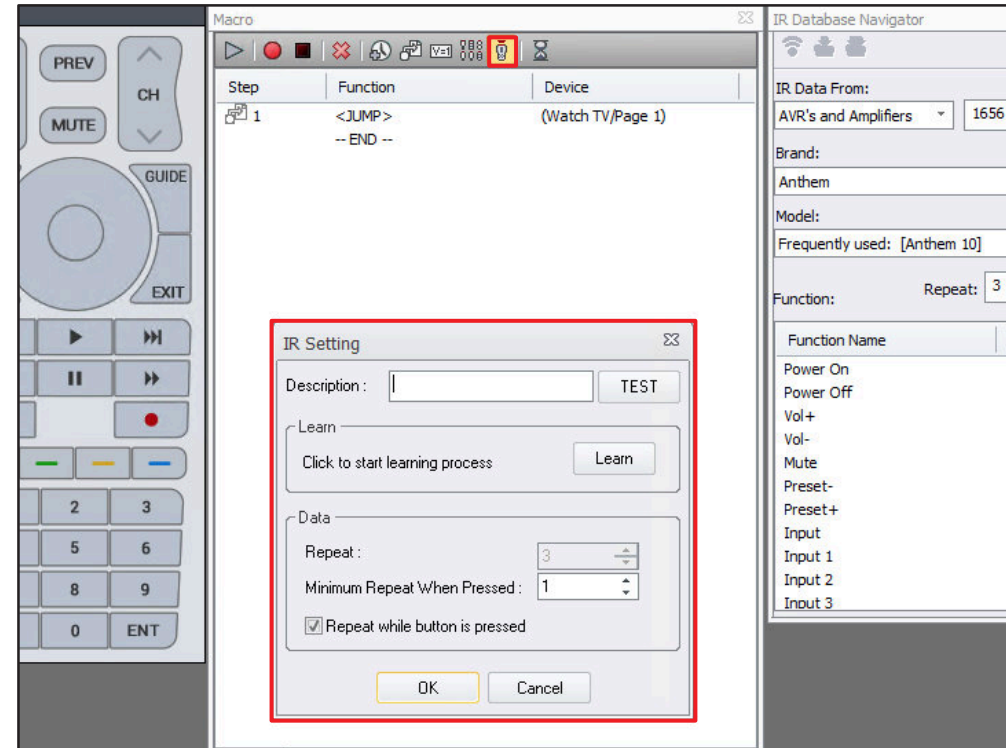
“Click [here](#) to learn more about the IR Database Navigator.”



Macro Programming Toolbar (cont'd)

The **Learn** icon opens the IR Settings window. This window allows learning of third-party IR commands directly into a button that has been selected.

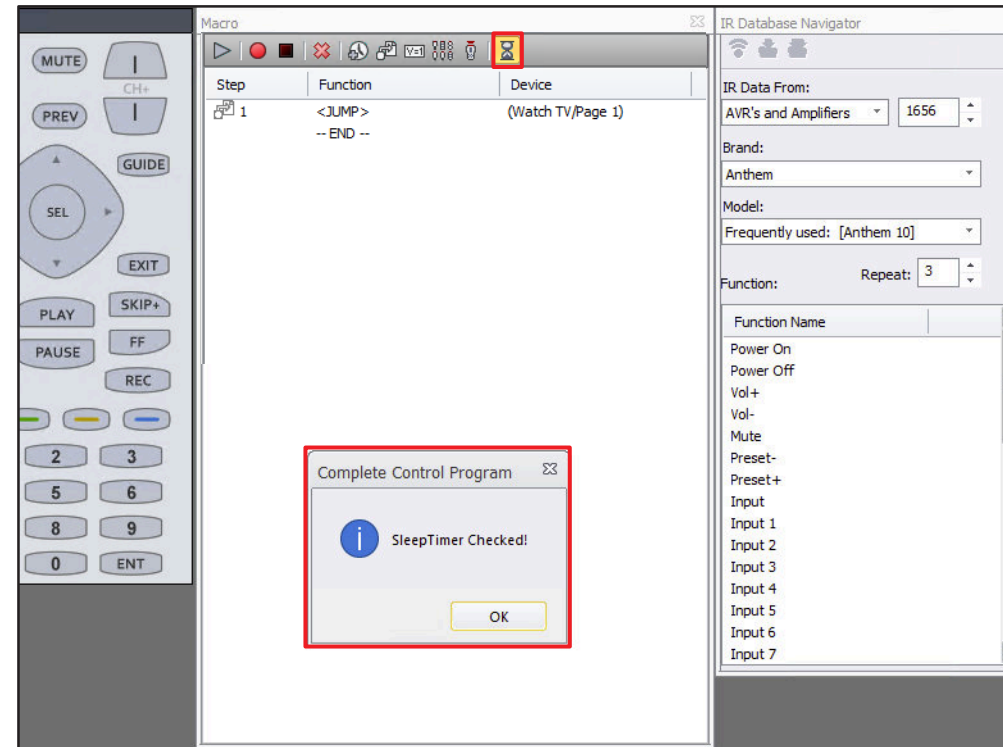
“Click [here](#) to learn more about learning commands from a third party remote.”



Macro Programming Toolbar (cont'd)

The **Sleep** icon adds a sleep timer to a selected macro.

“To learn more about configuring sleep timers, click [here](#).”



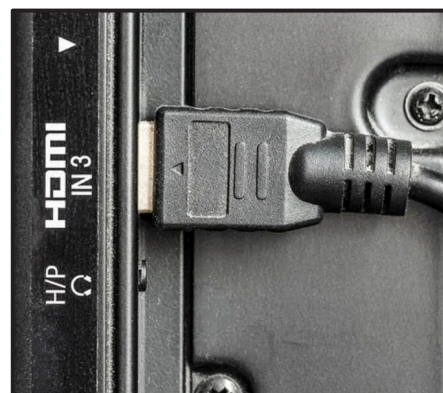
Process To Create A Macro

The process for creating a macro starts with an understanding on what the macro needs to do. For ease of use, a macro may be needed to set a system up to view and control a cable box with connected equipment. For example, it may need to turn on a TV, a receiver and cable box, then change inputs and it will also need to jump to the control layout for the cable box, all with a single button press. To configure a macro for this setup, make sure you have the following items done:

1. An **Icon** on the **Main/Main2** or **Listen** page that represents the activity that is to be setup.
2. That all devices needed for the macro are setup correctly with the proper icon, layout and assigned IR data.

“ You may place device icons on a separate page so they are separate from the activity icons.”

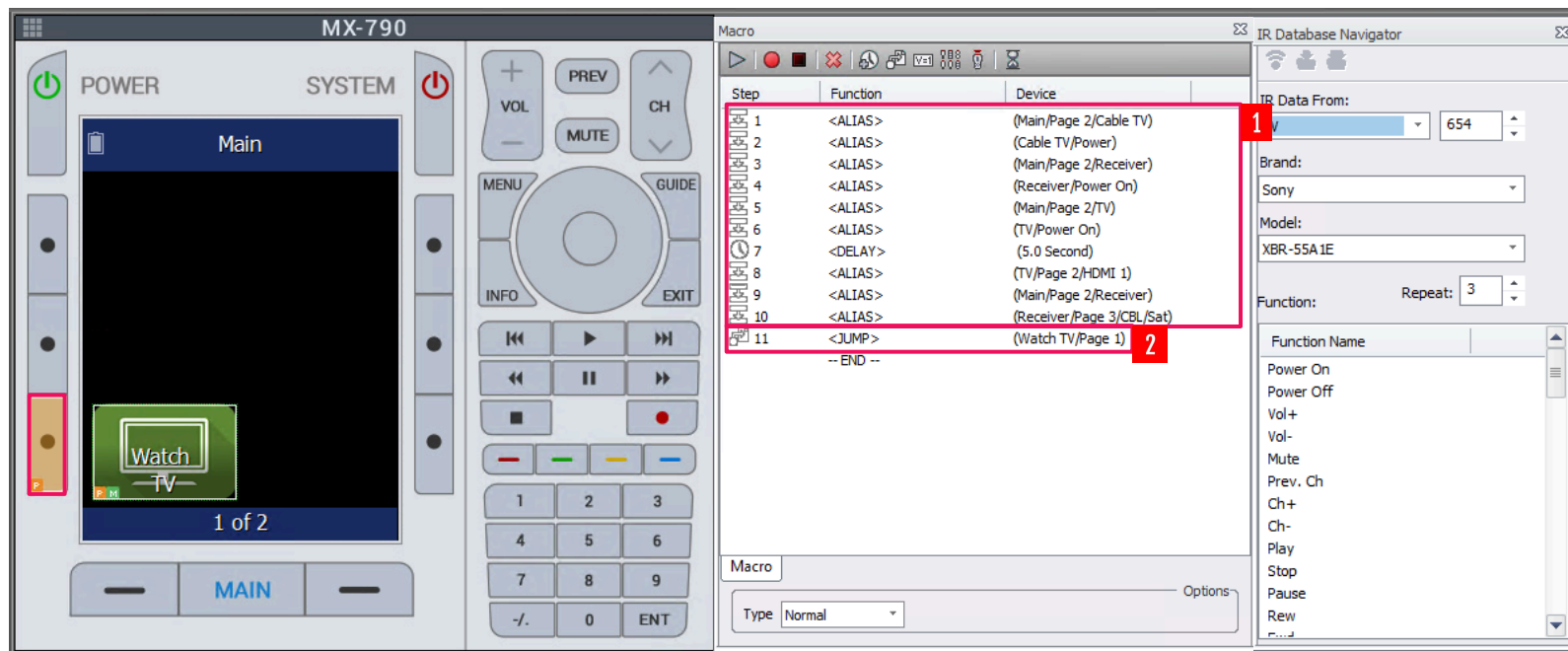
3. Know what inputs on all devices are needed to setup up proper use of an activity.



Process To Create A Macro (cont'd)

Have the **Macro** and the **Simulate** windows open. For this example click on the button that corresponds to the **Watch TV** icon. The Macro window will show what commands are preloaded into that specific icon. Commands that should be added to this macro are:

1. The **ON** and **INPUT** commands for the Cable Box, Receiver, and TV. Make sure to add the input commands after the devices are powered on. Different devices require a select amount of time before a command can be registered so a **Delay** may be needed. Commands should be added from the the **Simulate** window
2. The **Jump** function to jump to the Cable Box Layout.

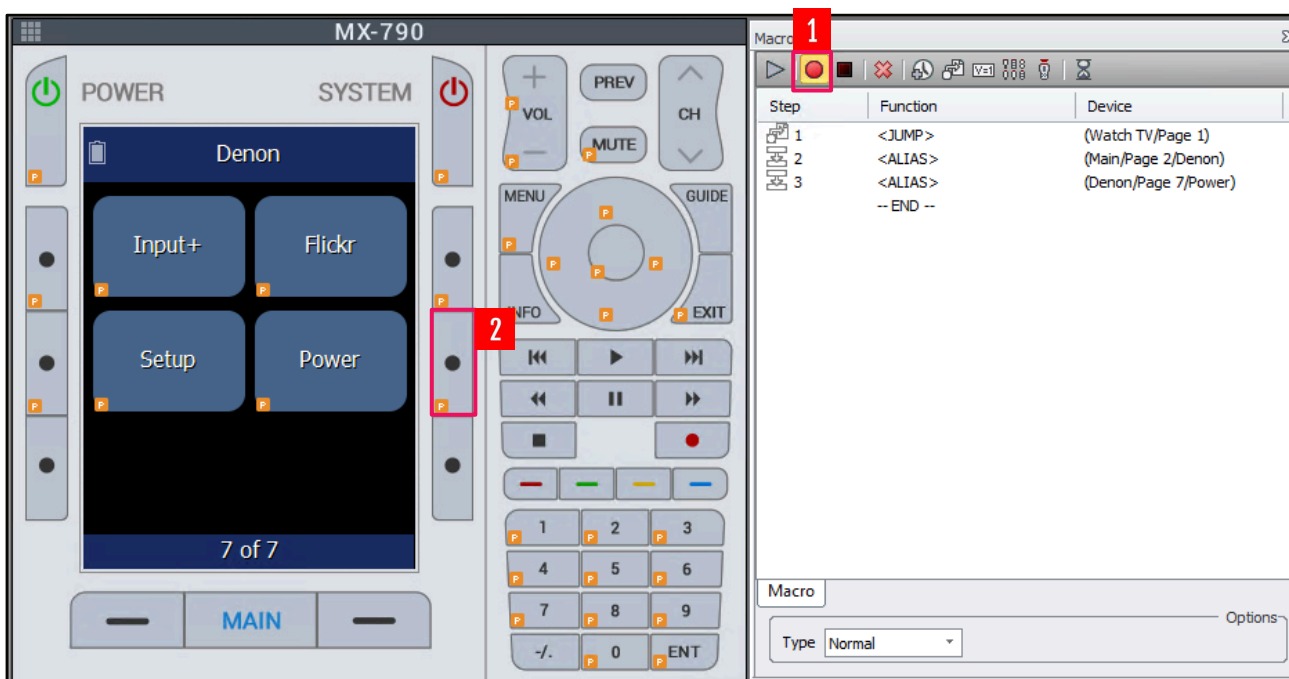


Process To Create A Macro (cont'd)

To add IR commands from the **Simulate** window you will need to make sure that all the devices for the macro are setup in the program correctly already. You can then navigate the remote in the Simulate window and select each command to add into the macro. To do this

1. Click the **Record** button.
2. Navigate the **Simulate** window to the command you want. The example shows navigating to the **power** button for the receiver. Continue to select the command or commands to be added in succession .

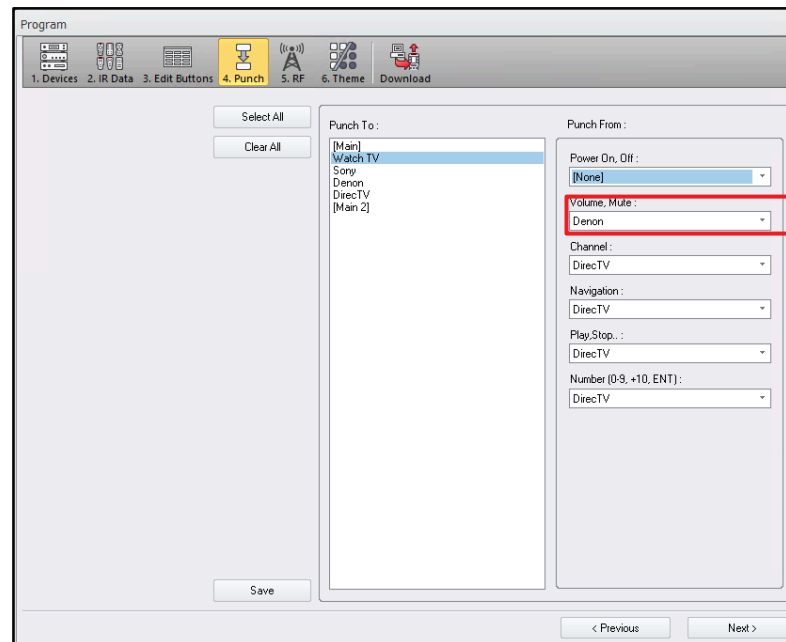
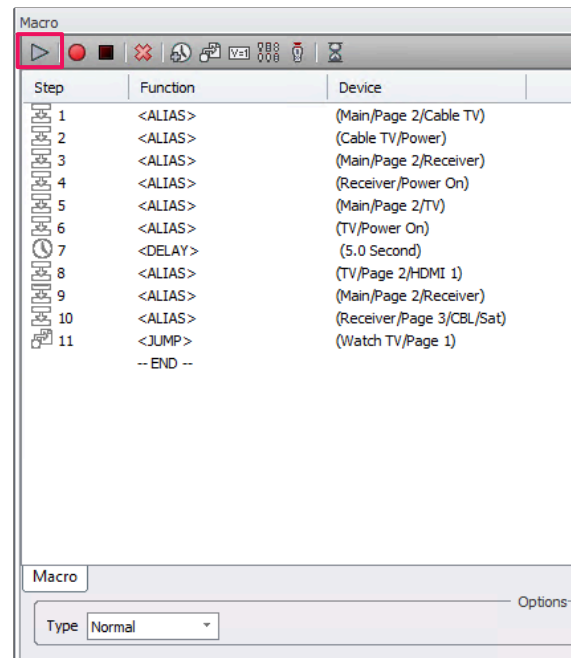
Once you have added all the commands that are needed for the macro to function properly, click the **Stop** button in the macro toolbar.



Process To Create A Macro (cont'd)

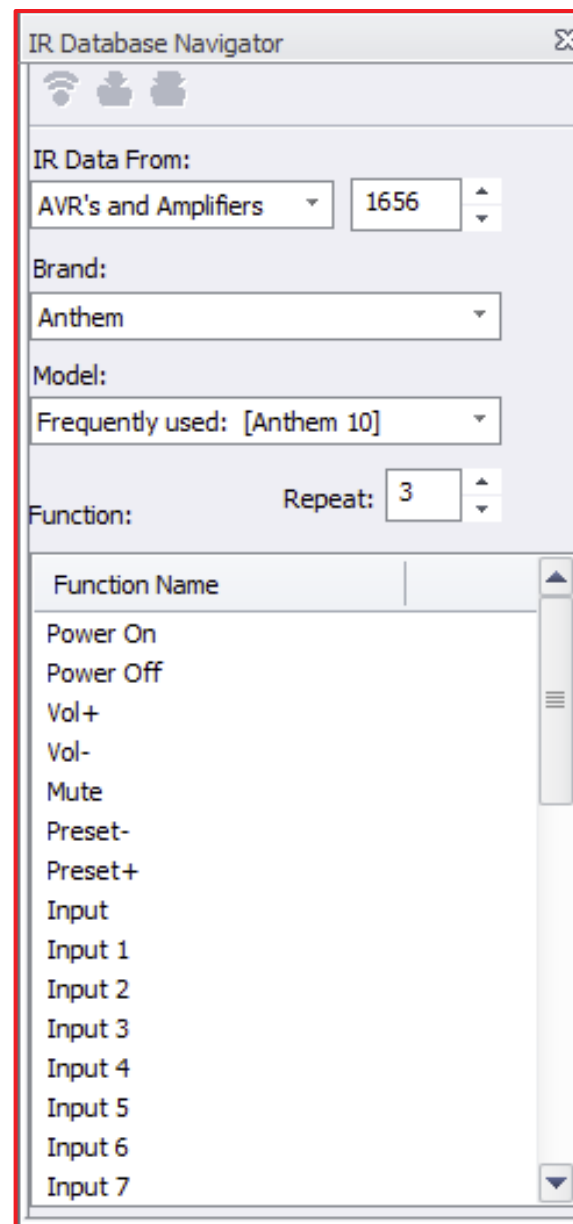
Once all the commands to a macro have been added, use the **Play** button to confirm its functionality. This will allow you to test the macro without having to download to the remote and make changes if necessary.

You may also need to edit your punchthroughs in the **Punch Through:Punch** window. Since the activity is using a receiver for audio you will want to set the **Volume,Mute** selection to the receiver. This way when the activity is selected, it controls the correct audio device.



IR Database Navigator

The **IR Database Navigator** window is where you will find available commands to various third party devices to add to your macro or button.

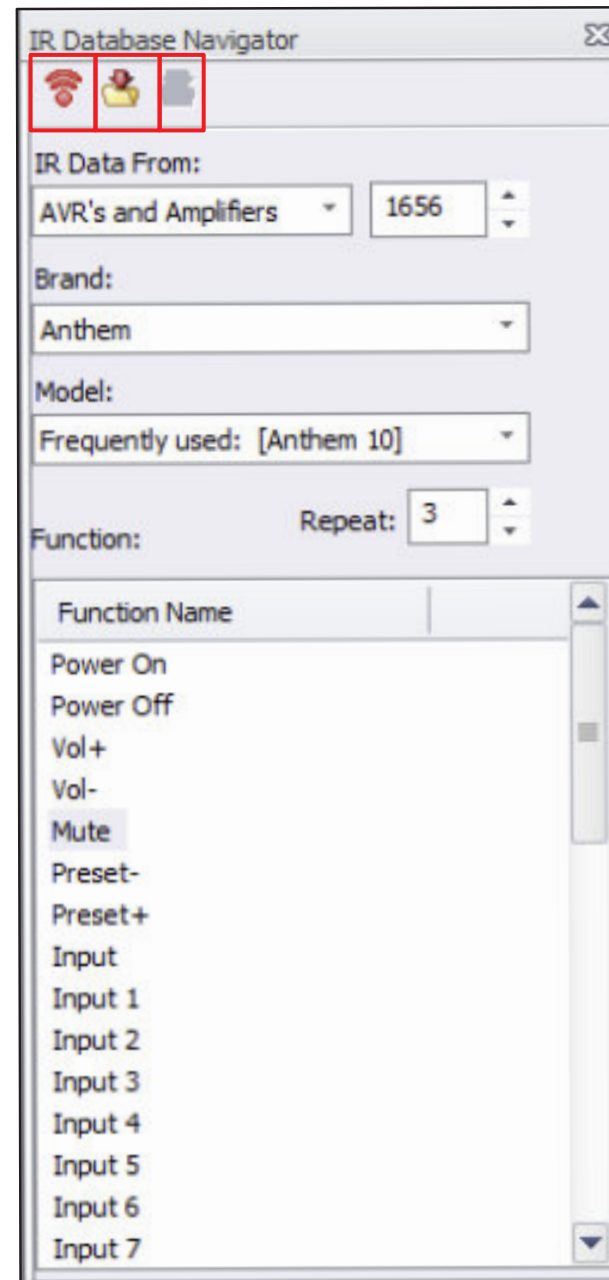


IR Database Navigator (cont'd)

The **IR Database Navigator Toolbar** has various options for a selected command. This includes:

1. **Test Icon:** With the URC PIR-1 connected, you can test the IR command in real time by selecting the command in the Function Name column and clicking the test icon.
2. **Save Icon:** After selecting a command in the Function Name column, click the Save icon to add it to the macro window. You can also click and hold on the command and slide it into the macro window to also add it.
3. **Save All:** It will save all the codes from the set selected in the navigator to the function list you are currently editing in the driver editor.

“Using Save All will overwrite anything there.”



IR Database Navigator (cont'd)

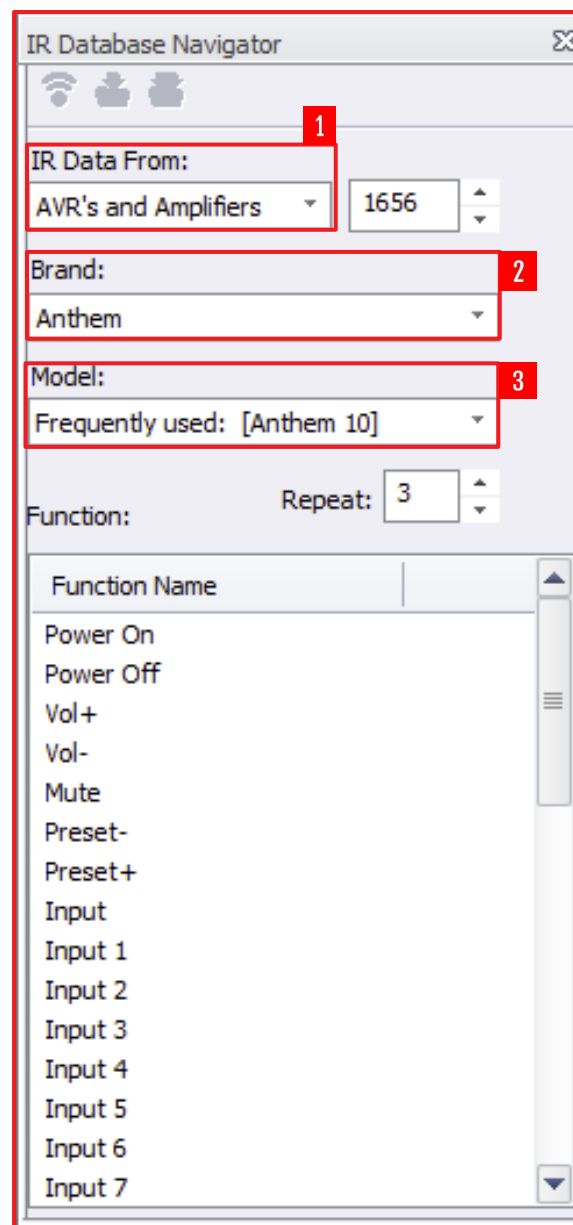
Navigating the menu selections to find a third party command is done by a selection of choices sorted by hierarchy. The commands for available devices can be found by selecting in order:

1. **IR Data From:** Selects the **Category** of device.

“ If you know the Device ID number for the device, you can access its commands by entering it in the ID number field. This field will auto populate when a model has been selected.”

2. **Brand:** Selects the **Brand** of device.
3. **Model:** Selects the **Model** of the brand of device

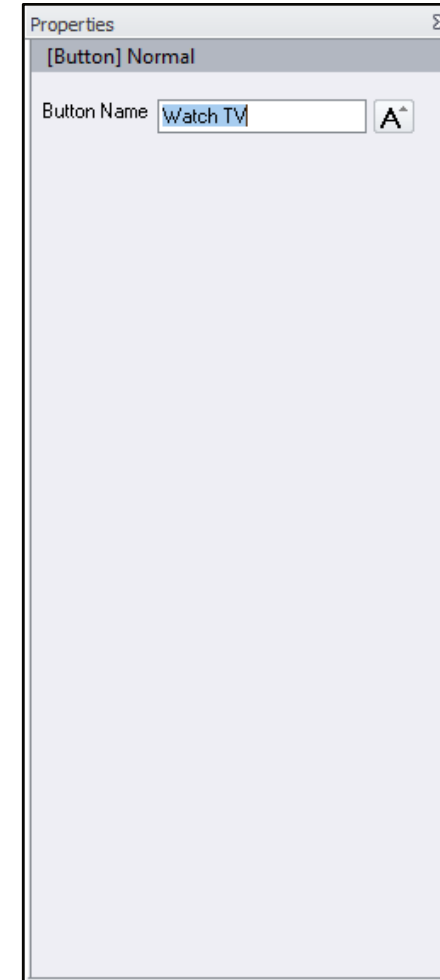
Once you have highlighted the command you want to use, you can either click the save icon at the top of the **IR Database Navigator** window to add it to the selected button or click and hold the command and slide it over to the **Macro** window.



Properties Menu

The **Properties** menu is where you can adjust the text of buttons located on the layout screen. To adjust a button, select one that corresponds to a icon on the screen in the **Simulate** view. Text remotes can only adjust the **Button Name** and **Enlarge** the text to a preset size.

“The hard or physical buttons on a remote cannot be changed.”



Adding your own Icons

With **select** Text remotes you can add your own icons. All icons are stored in the Complete Control installation folder. Your icons will be subdivided by remote. Custom icons will need to be placed within an already accessible folder so that the Complete Control software can find them. Your folder location will vary by computer.

When adding icons, make sure to place them into one of the following folders

1. **Activities**
2. **Brands**
3. **Commercial Devices**
4. **Commercial Rooms**
5. **Devices**
6. **Games**
7. **Lighting**
8. **Services**
9. **Various**
10. **Rooms**

If the Complete Control software installation is on C: drive, the file path to add your own icons is found at:

C:\Program Files (x86)\Universal Remote Control, Inc\Complete Control Program\XXXXX\Images\Alpha\Icons

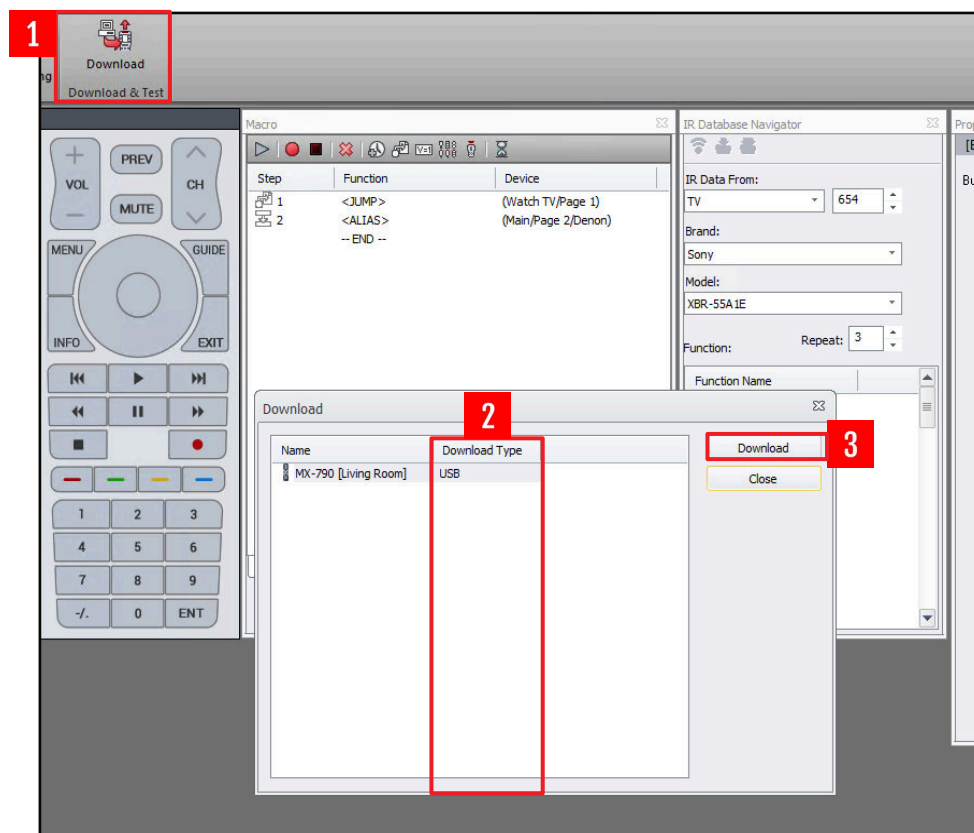
**XXXXX being the model number of the remote you are working with.*

Downloading to a remote

Upon program completion, you should download the file to the remote and test its functionality. Navigation should have already been tested within the **Simulate** view window. Also, the **Play** button in the **Macro** window can test whether the sequence of commands work correctly before downloading. This will save time from having to download multiple times to test a remote for functionality. To download to a remote:

1. Click the **Download** tab in the **Main** toolbar.
2. Use the **Download Type** column to confirm the type of connection used for a URC remote to be programmed. All graphic remotes use a **USB** connection to the computer for programming.
3. Click **Download**.

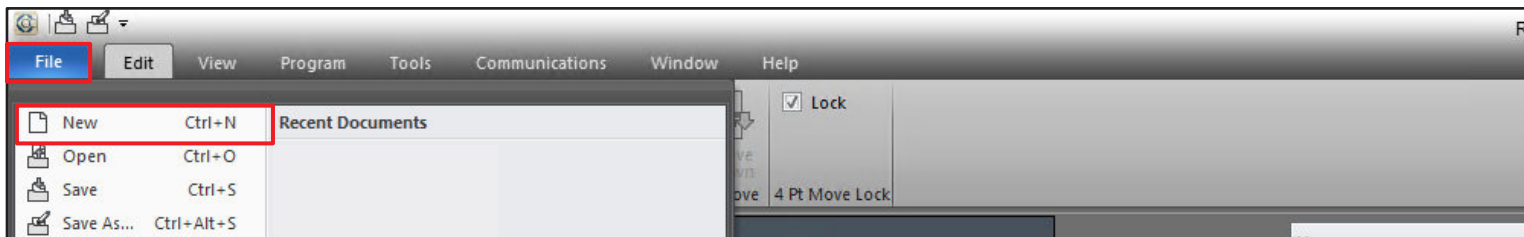
Wait for the process to finish. Once completed, the remote will reboot. After reboot, you should completely test the functionality of the remote to make sure it is working as intended.



Introduction to Free Form Programming

Free Form remotes are a line of URC remotes that can control devices, have custom graphics such as backgrounds and icons, and a layout that is fully customizable. This manual will cover basics in programming these types of remotes.

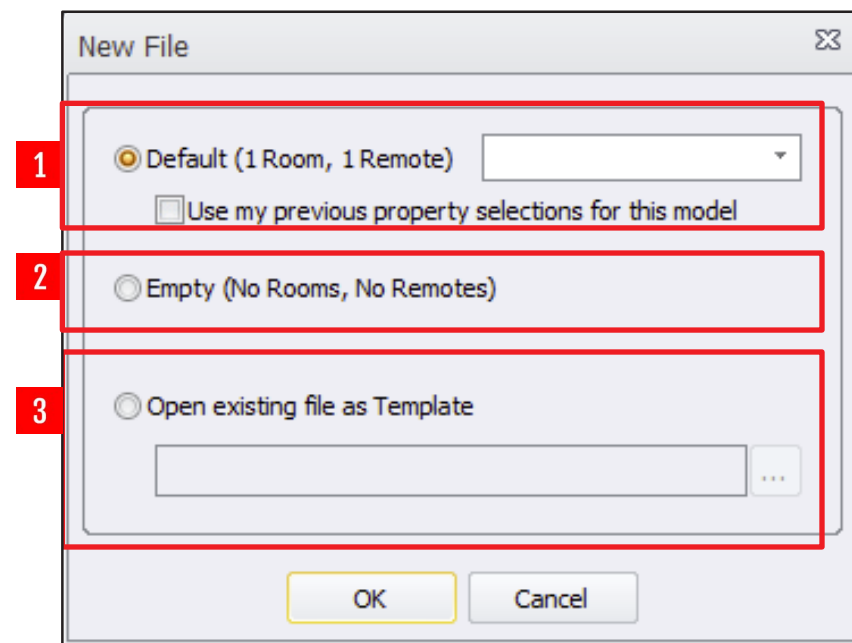




Starting a File

Starting a file is the first step in creating a program in Complete Control. There are three ways to initially start programming a system after clicking on the **File** tab then clicking **New**.

1. **Default:** Automatically creates a room (*can be renamed*) with the selected choice.
2. **Empty:** This brings you to the system configuration menu where you can choose your room, base station, and remote.
3. **Opening existing file as a Template:** Opens an existing file and loads all the existing configurations.

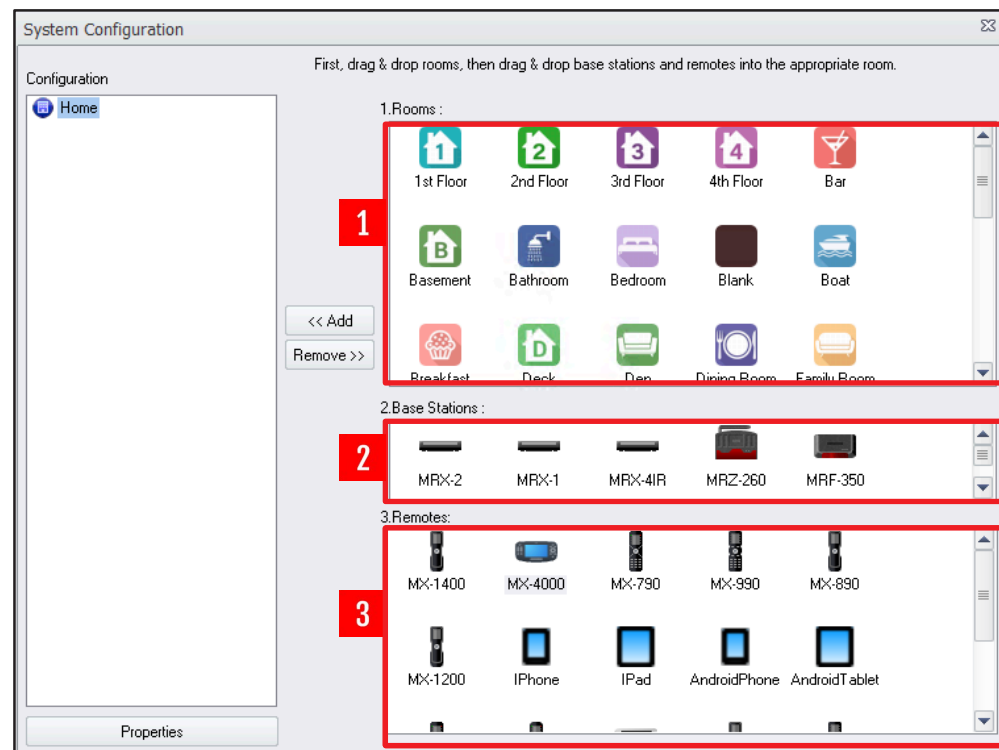


“Both default and opening existing file options bypass the system configuration window.”

System Configuration Window

This **System Configuration** window will allow you to add the following items below to your file. After selecting any item in one of the categories, click the **<<Add** or **Remove>>** button to move an item within the configuration panel of the project:

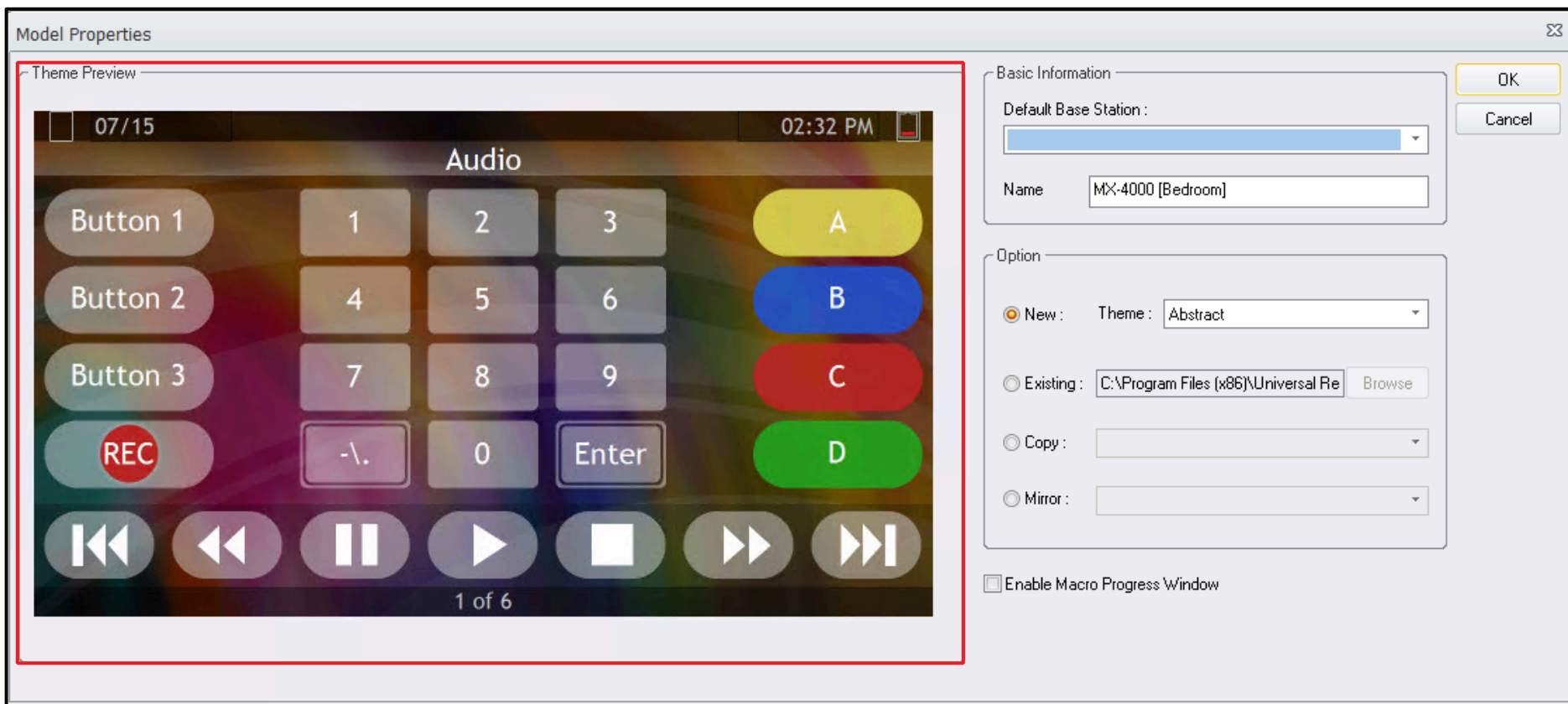
1. **Rooms:** A list of pre-programmed room names. Also, any room name can be renamed.
2. **Base Stations:** A base station for a project may be needed if you do not have line of sight to the device from a remote. Click [here](#) to learn about setting up a base station.
3. **Remotes:** A list of compatible Complete Control remotes that can be configured for the project.



"A file can have multiple rooms with different remotes."

Model Properties Window

The **Model Properties** window of a remote will show when it is added to the configuration panel. This window will show a example of a **Free Form** layout depending on the remote selection in the **Theme Preview** panel. Also, each remote can be configured with a few options.



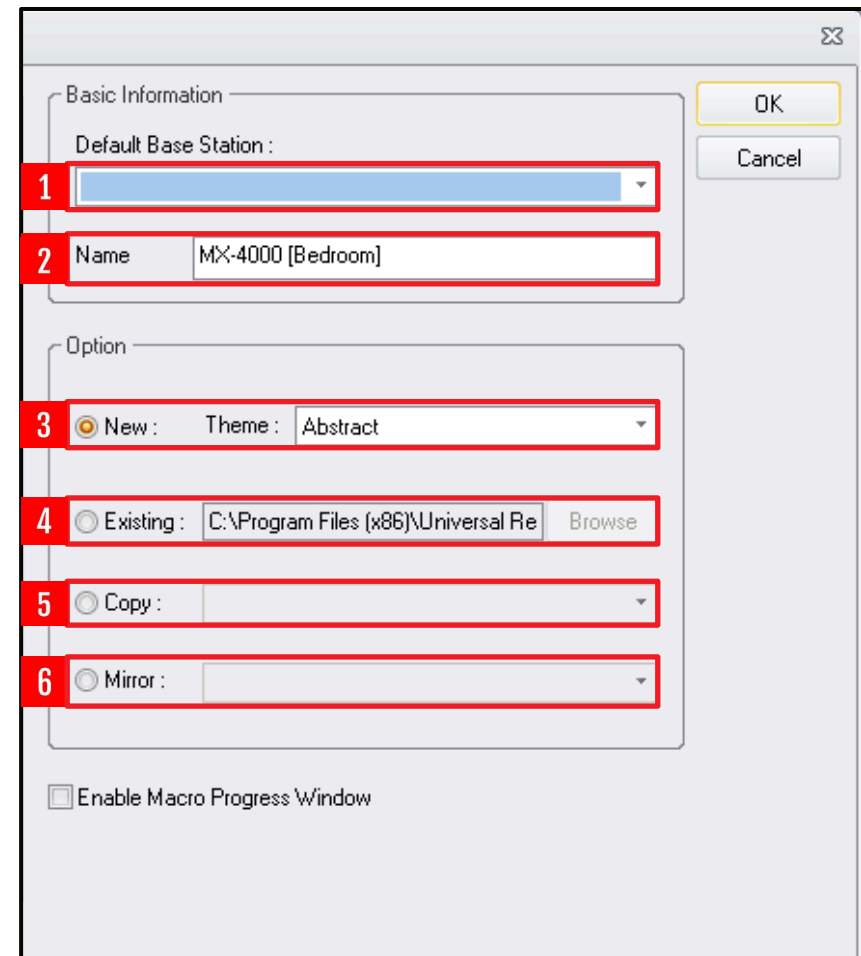
Model Properties Window (cont'd)

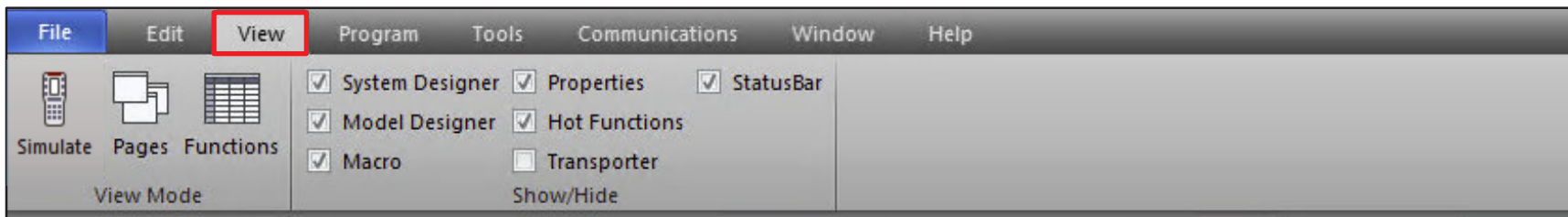
In the **Basic Information** panel:

1. **Default Base Station:** If a base station has been selected, it can be linked here. You can also link to multiple base stations if there is more than one. To learn more on using one or multiple base stations click [here](#).
2. **Name:** Renames a remote in a file.

In the **Option** panel:

3. **New:** Sets up a new remote interface design.
4. **Existing:** Copy an interface from another file.
5. **Copy:** Copy an existing interface within the file.
6. **Mirror:** Mirror an existing interface within the file.

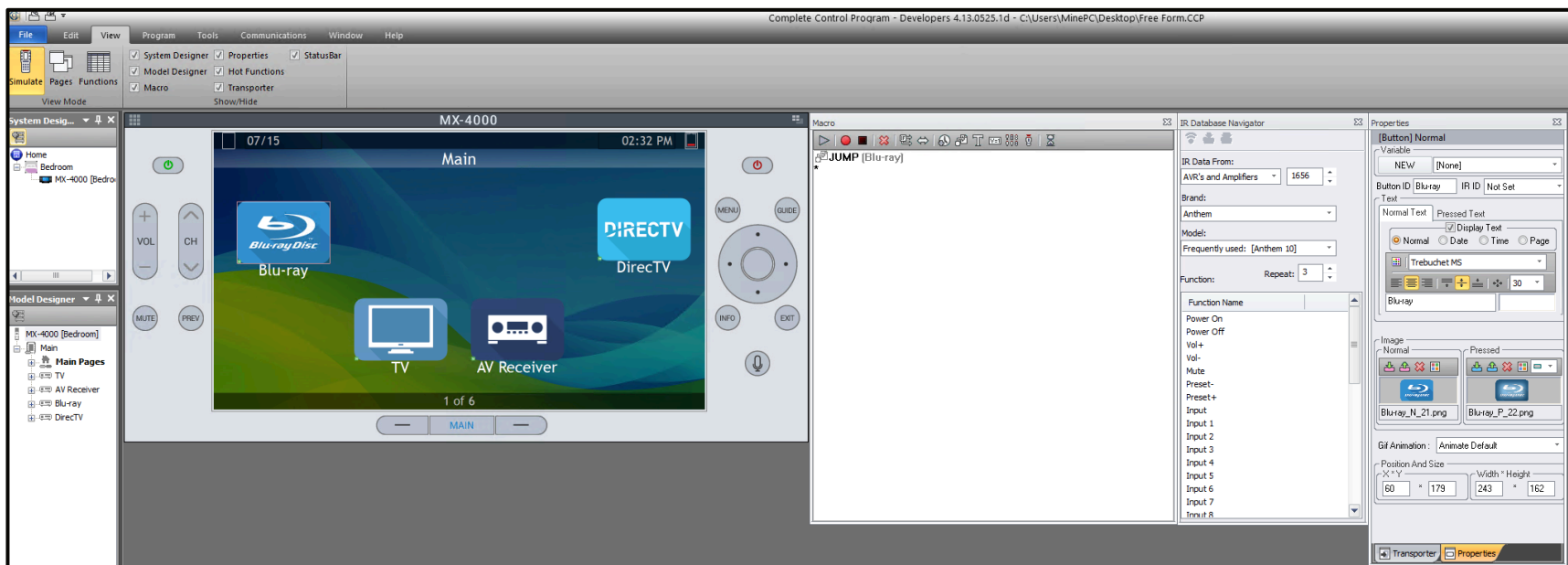


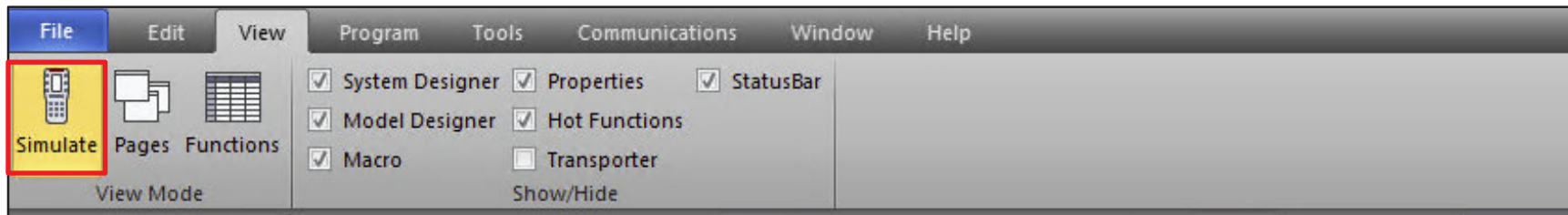


View Tab

The **View** tab consists of a selection of **View Modes** and **Windows** that can assist with programming and customizing a URC Complete Control remote. Depending on what is being setup, it may be best to have multiple windows open at one time with the ability to view them together.

The ability to view multiple windows may be limited by your resolution or DPI setting in the operating system of the computer. To learn more about adjusting these display settings, Click [here](#).



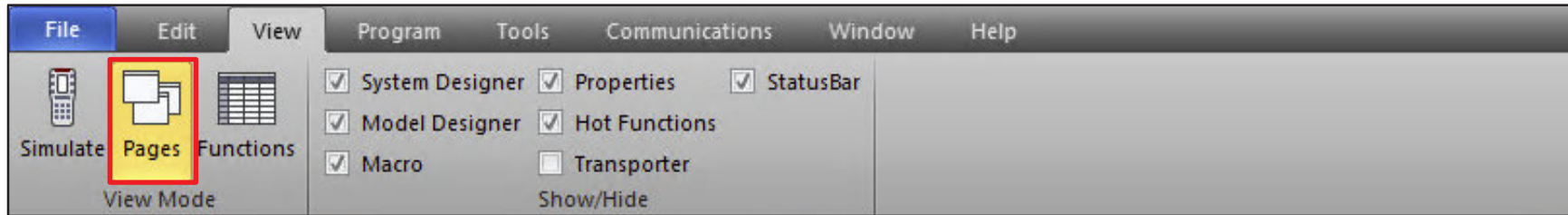


View Mode Menu Options

The **Simulate** view offers a fully simulated view of the remote. It can be used to preview the navigation of a remote to test its functionality before downloading to it or it can be used for adding commands to a macro. Depending on what windows are shown and hidden, you can see the selected configuration parameters of each button when pressed.

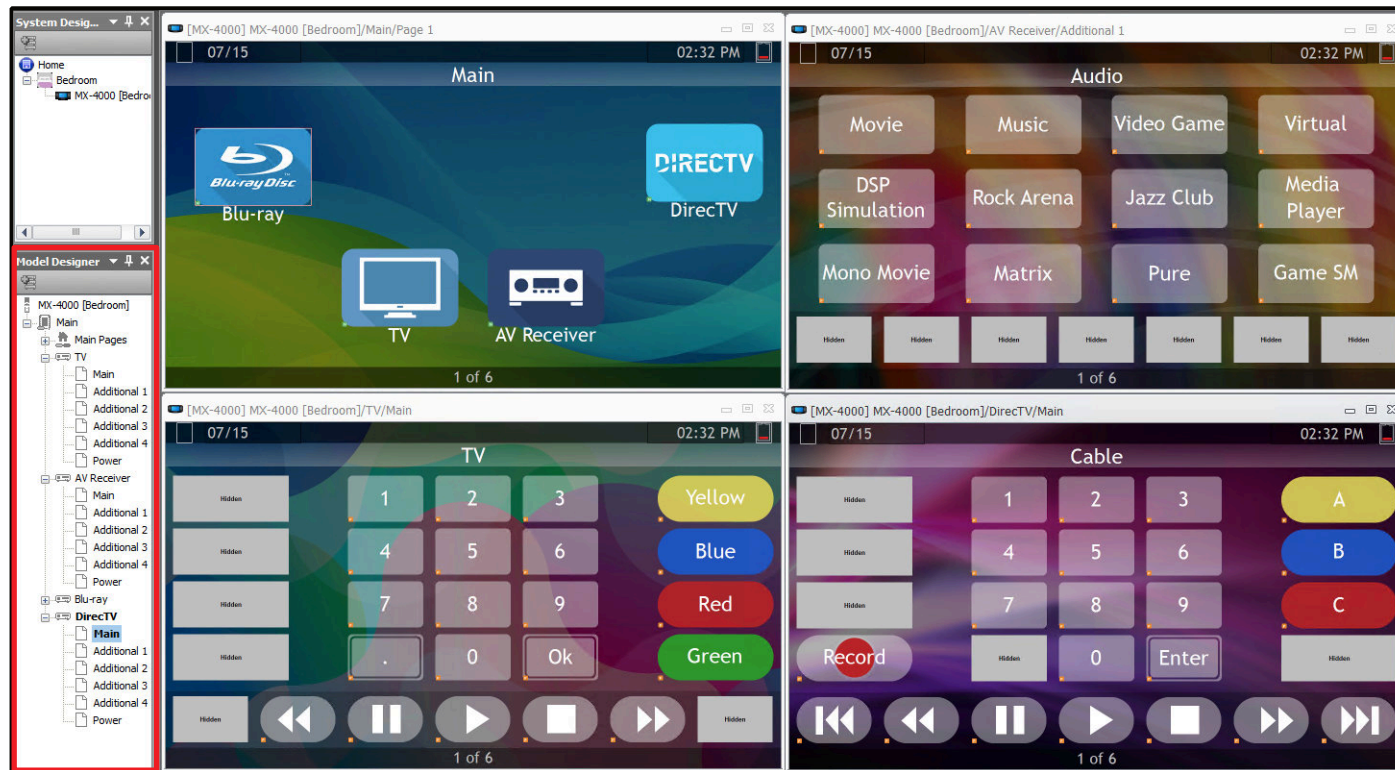


**Your remote may look different*

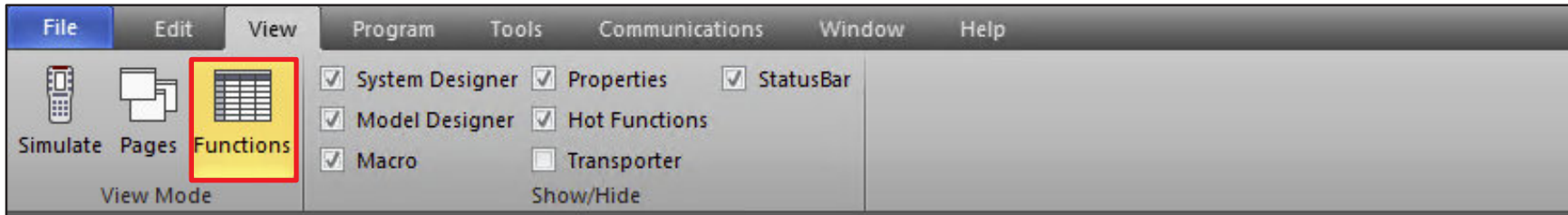


View Mode Menu Options (cont'd)

The **Pages** view will preview selected pages of a remote. You can view one or multiple pages at a time. To open a page double click on each page that needs to be previewed in the **Model Designer** window.

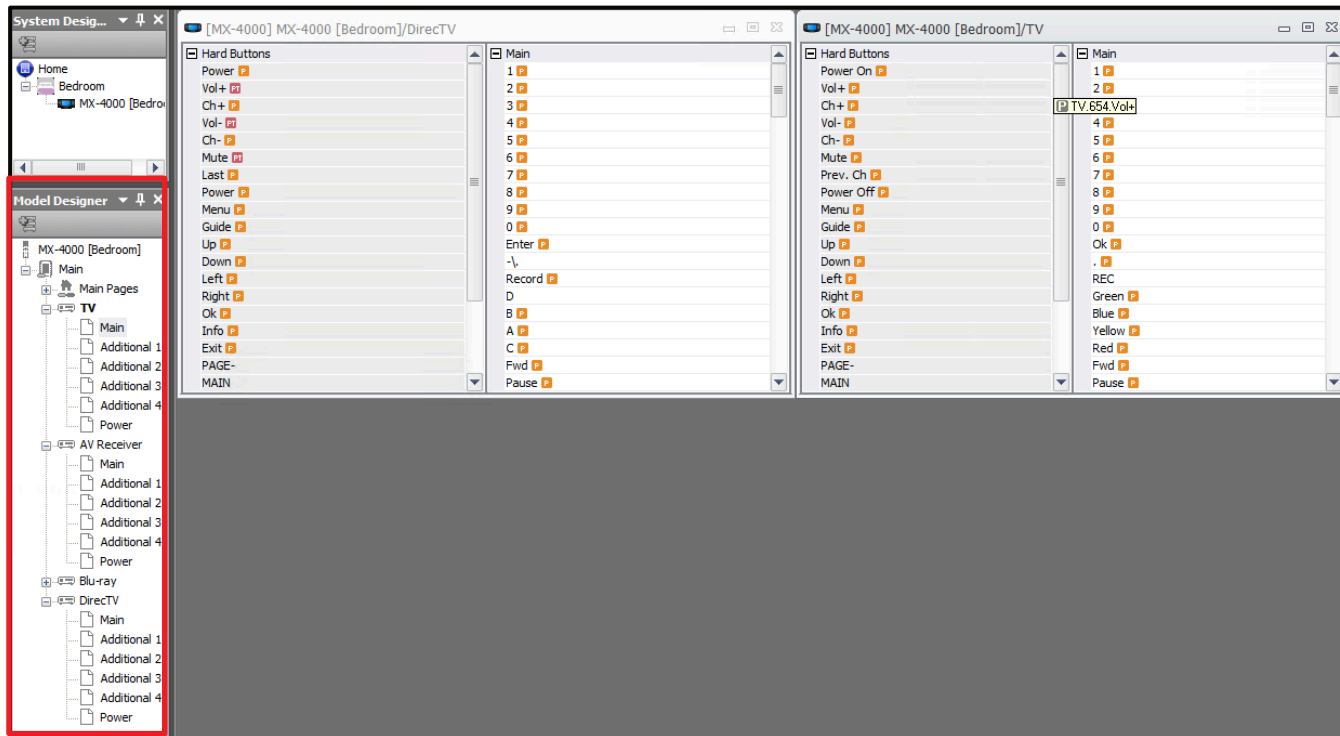


**Your remote may look different*

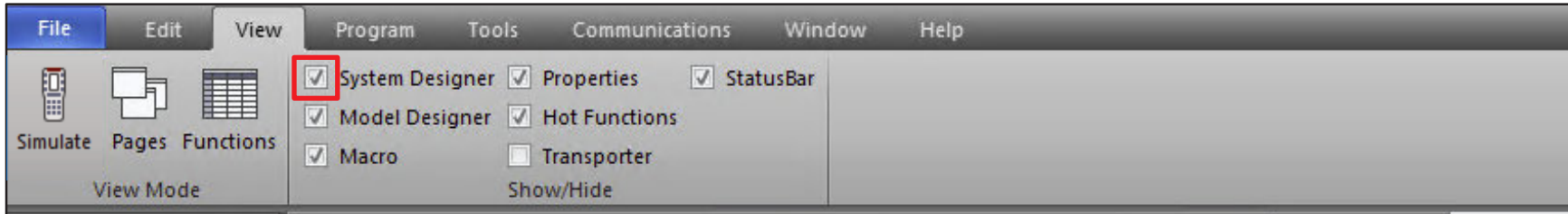


View Mode Menu Options (cont'd)

The **Functions** view will show a list of both hard buttons and screen commands. You can open additional windows by clicking on a page of a device in the **Model Designer** window.

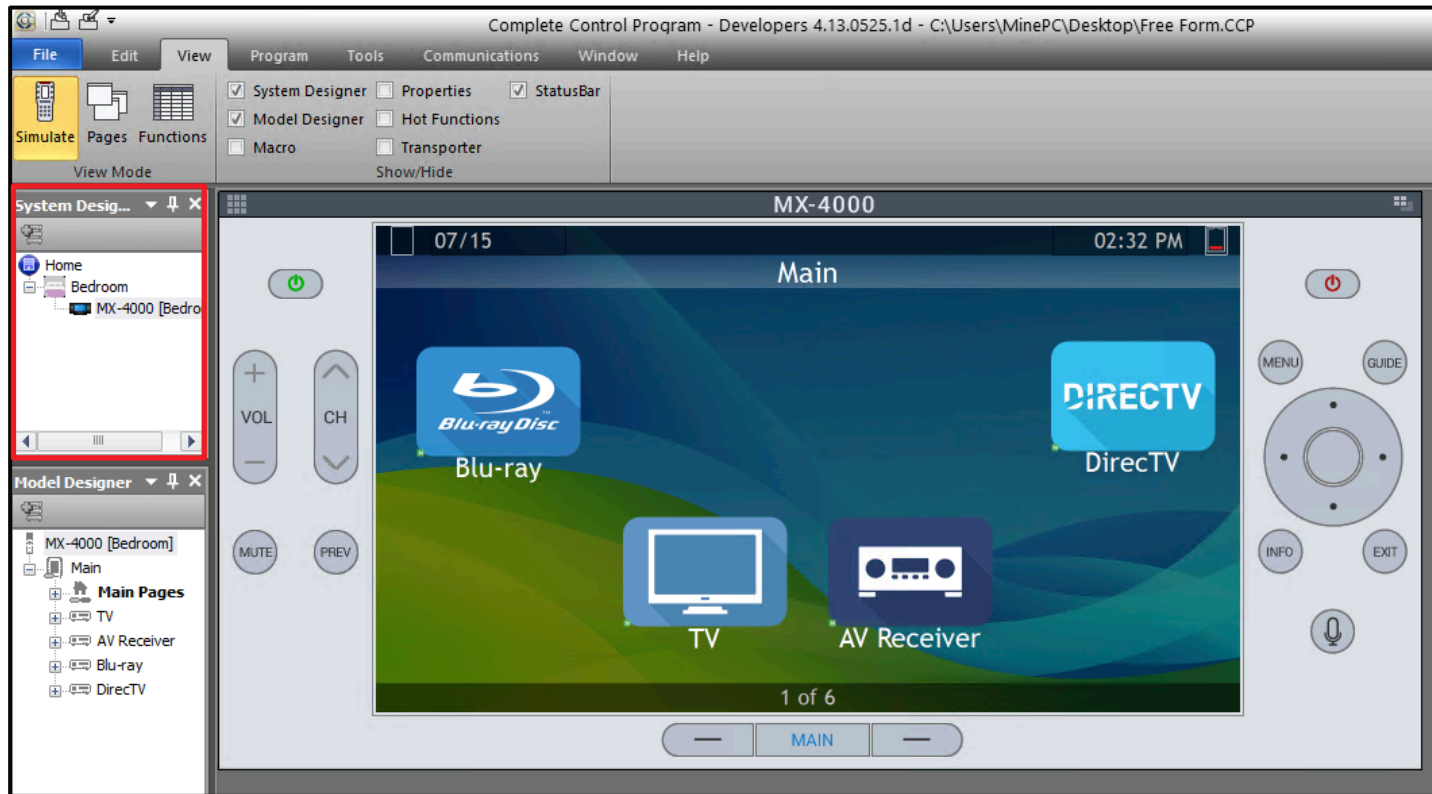


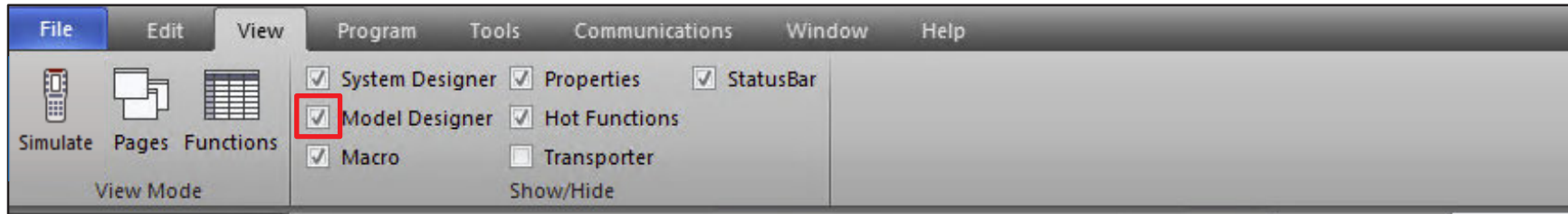
**Your remote may look different*



Show/Hide Windows

The **System Designer** window list rooms and equipment that have been added to a program.

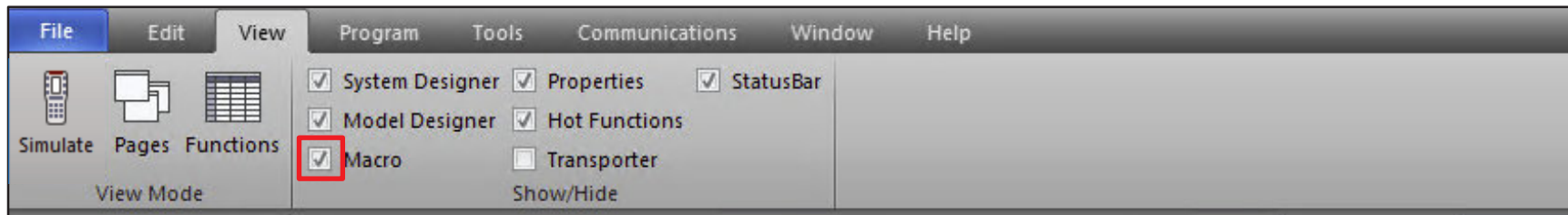




Show/Hide Windows (cont'd)

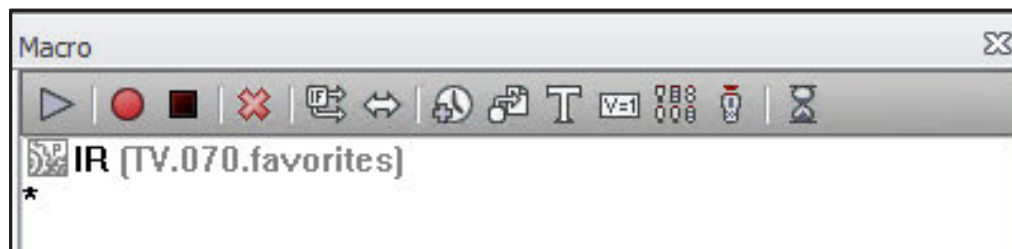
The **Model Designer** window list all pages of devices and activities that have been added to a program.

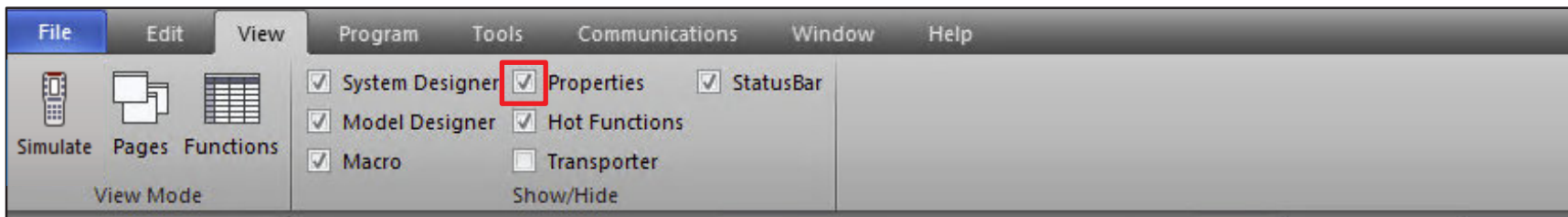




Show/Hide Windows (cont'd)

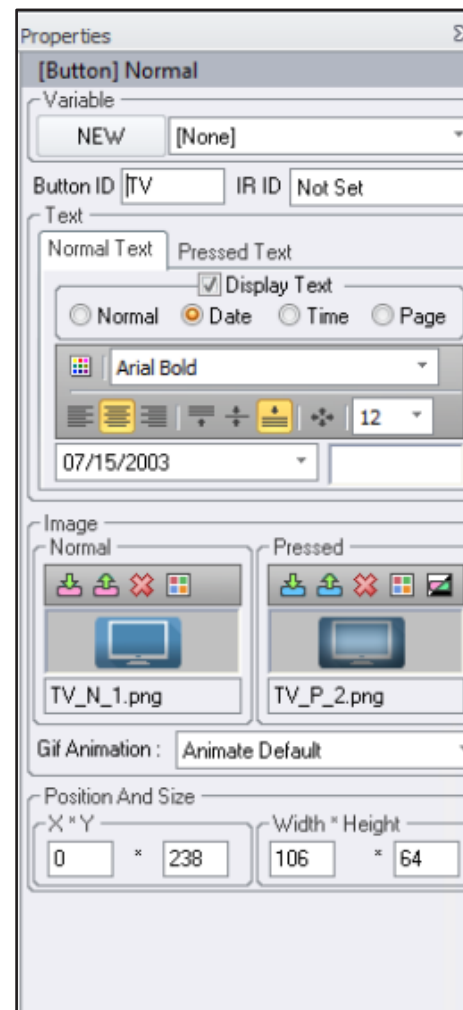
The **Macro** window will show what command or commands are loaded into a hard button on a remote or a button corresponding to an item on the screen. There are a number of options available in this window to help setup various commands. To learn more about setting up Macros, click [here](#).

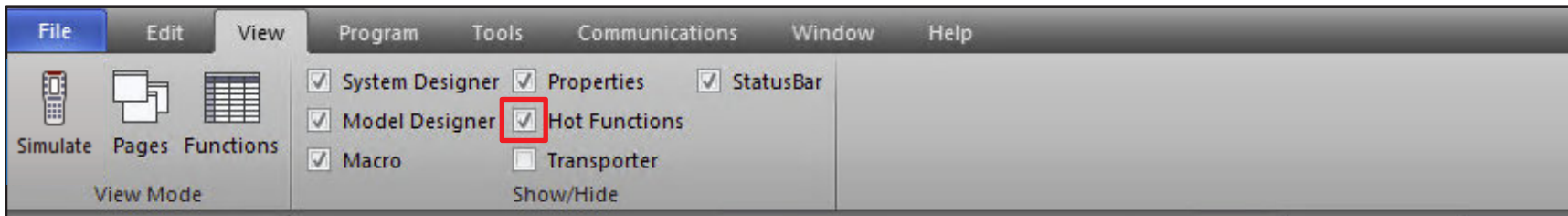




Show/Hide Windows (cont'd)

The **Properties** window is where adjustments for **Graphic** and **Text** of buttons and backgrounds located on the screen can be changed. To learn more about adjusting items in the properties window, click [here](#).

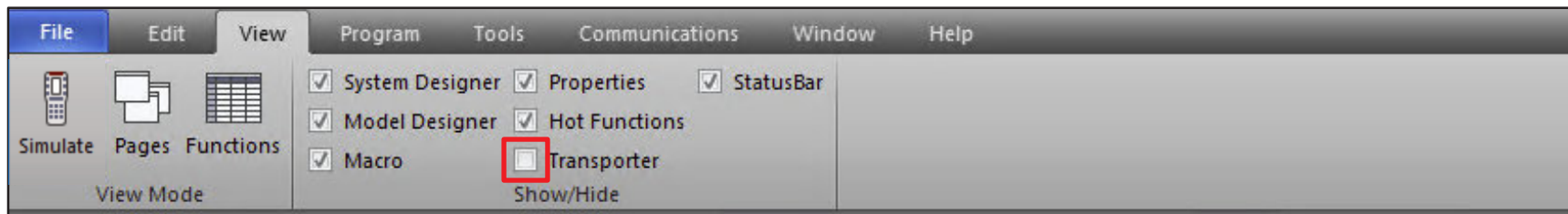




Show/Hide Windows (cont'd)

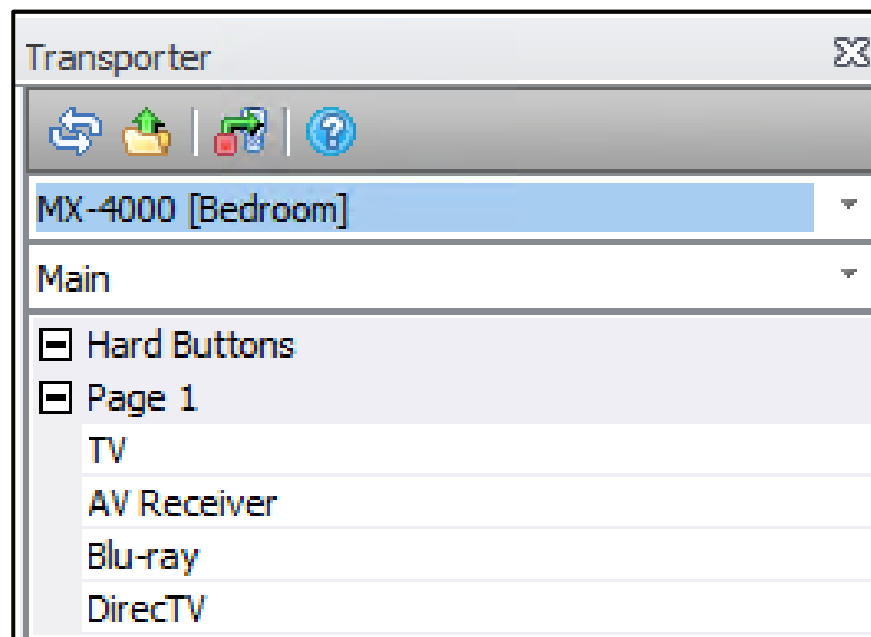
The **Hot Functions** window is only used for the MSC-400 base station.

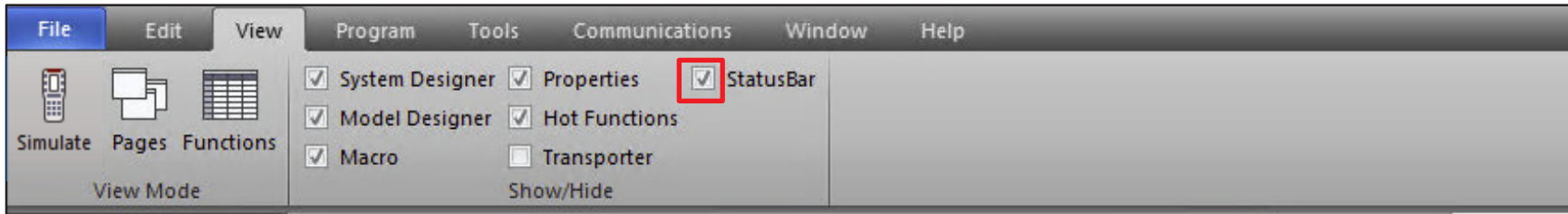
“ The MSC-400 is a discontinued unit and no longer supported.”



Show/Hide Windows (cont'd)

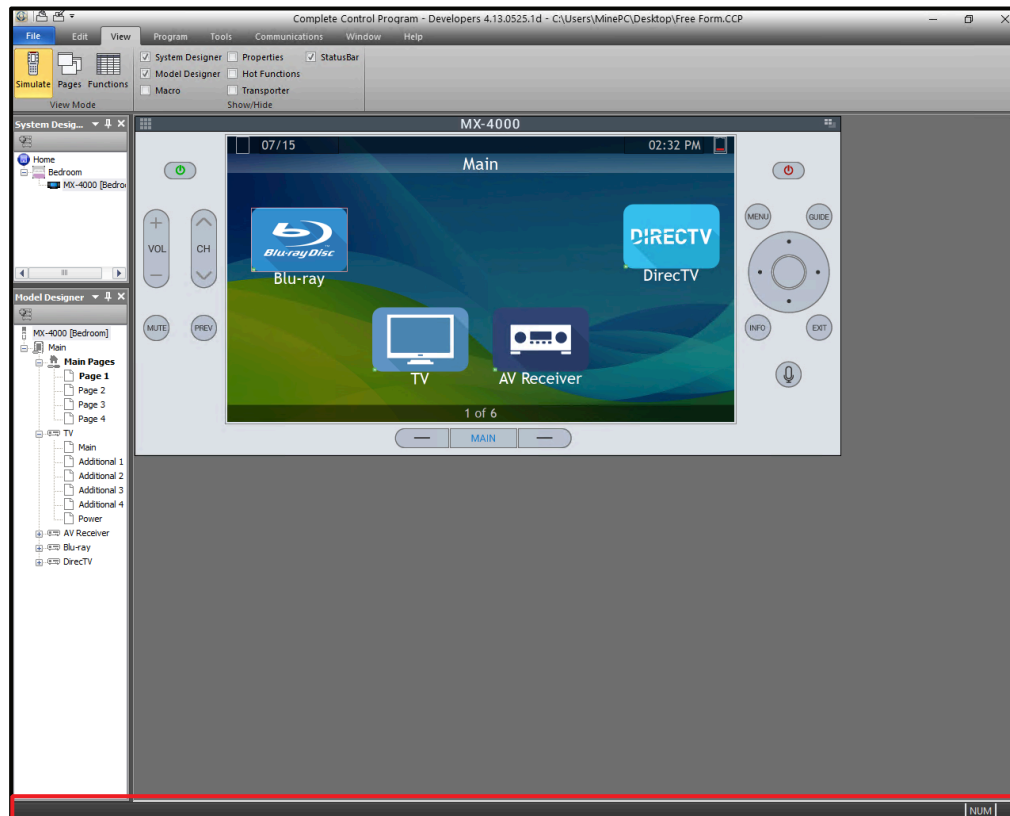
The **Transporter** window provides the ability to import devices into the current model from any other URC Complete Control remote. Only programmed and learned codes are transported and not variables, delays, etc. To learn more about transporting click [here](#).





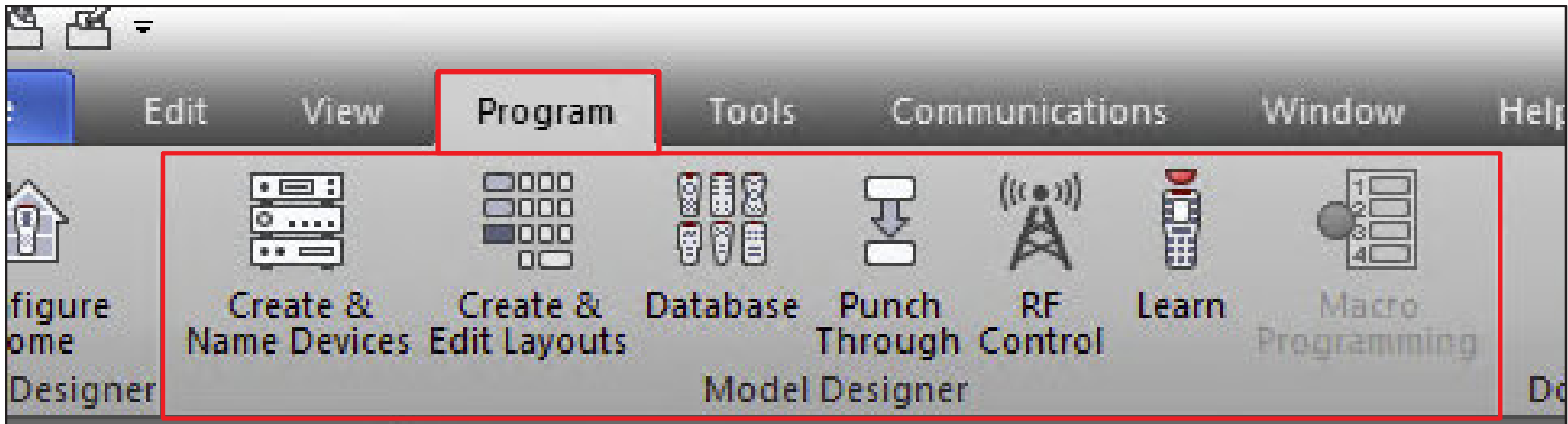
Show/Hide Windows (cont'd)

The **StatusBar** option shows a bar at the bottom with real-time info on what is being done at various moments of programming a URC Complete Control remote.



Program Tab

The **Program** tab will access the **Model Designer** tabs of the Complete Control software. This gives access to various menus to program a file in a URC Complete Control remote. When programming a new remote it is best to start left to right.



Model Designer Menu

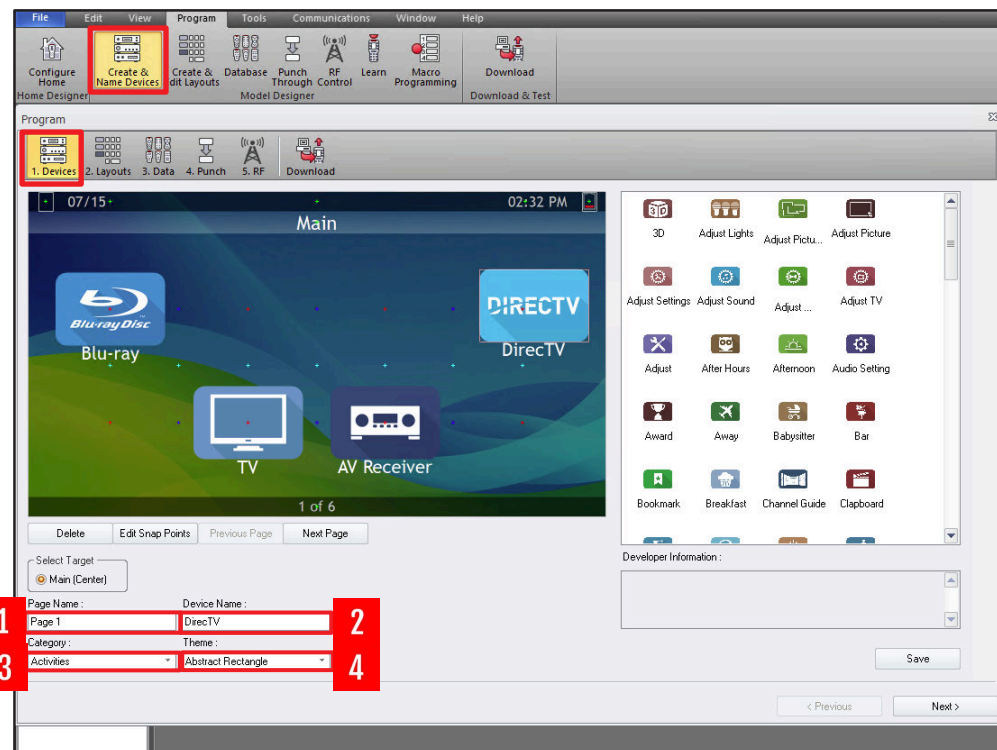
The **Create & Name Devices:Devices** window is where you can add various buttons and pages to the **Main** menu of the remote. Simply click and hold the icon you want to use and place in any area or snap point in the the preview panel.

The **Previous Page** and **Next Page** buttons cycle through various pages of the remote. The **Delete** button will remove added icons from the **Main** menu. Further customizations available are:

1. Change an **Icon** name.
2. Change the **Page Number** name.
3. Choose what **Category** of icons to select.
4. Change the **Theme** of icons available.

It is best to choose icons that identify what is being done. For example, you may choose a **Device** icon to control an item directly such as an AVR. You may also choose a **Activity** icon that may turn on and control multiple devices such as the cable box, TV, and AVR with the Watch TV icon.

*“Free Form remotes can edit the snap points of a icon by clicking the **Edit Snap Points** button. To learn more about editing snap points, click [here](#).”*



“Custom icons can also be used. To learn more about adding your own buttons, click [here](#).”

Model Designer Menu (cont'd)

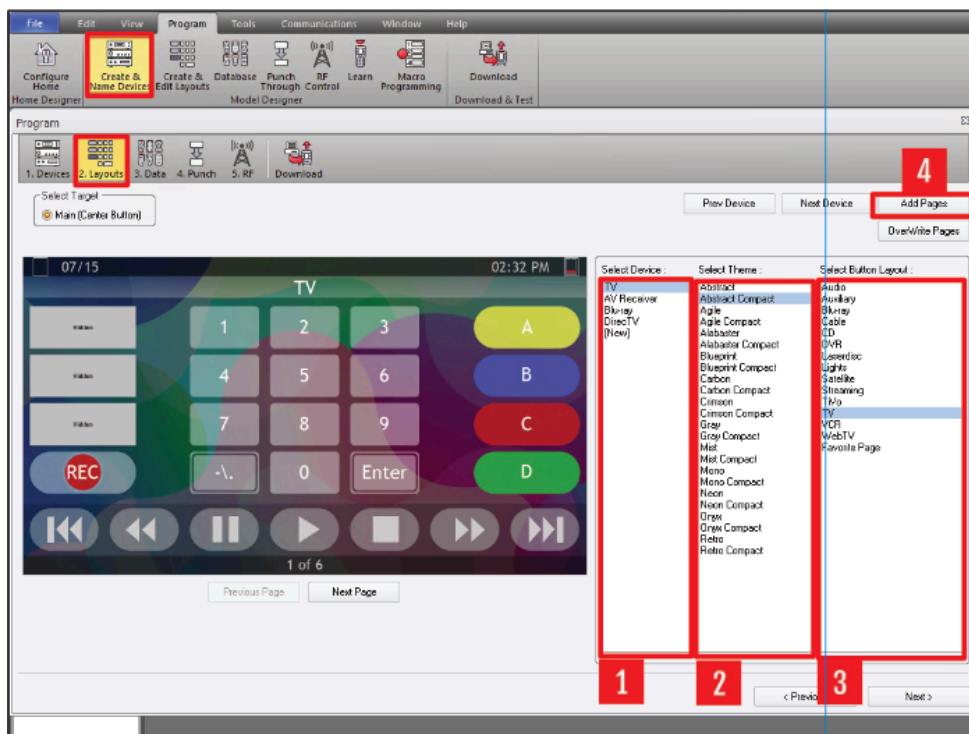
For the **Create and Edit Layouts:Layouts** section, you can add page layouts for all device or activity icons that are set in the **Devices** window. To add a layout:

1. Choose the **Device** to add the layout to.
2. Choose a **Theme**.
3. Select the **Layout** you want for the device.
4. Click the **Add Pages** button.

“Add page layouts for each device in the remote.”

If a device layout needs to be change after already being configured, follow the steps above but on step 4 use the **OverWrite Pages** button instead of **Add Pages** button.

*“Any button on screen in a **Free Form** remote can by moved anywhere on the display. After selecting the button layout, use the **Simulate Window** view window to change the button location. Click and hold a button to move it.”*

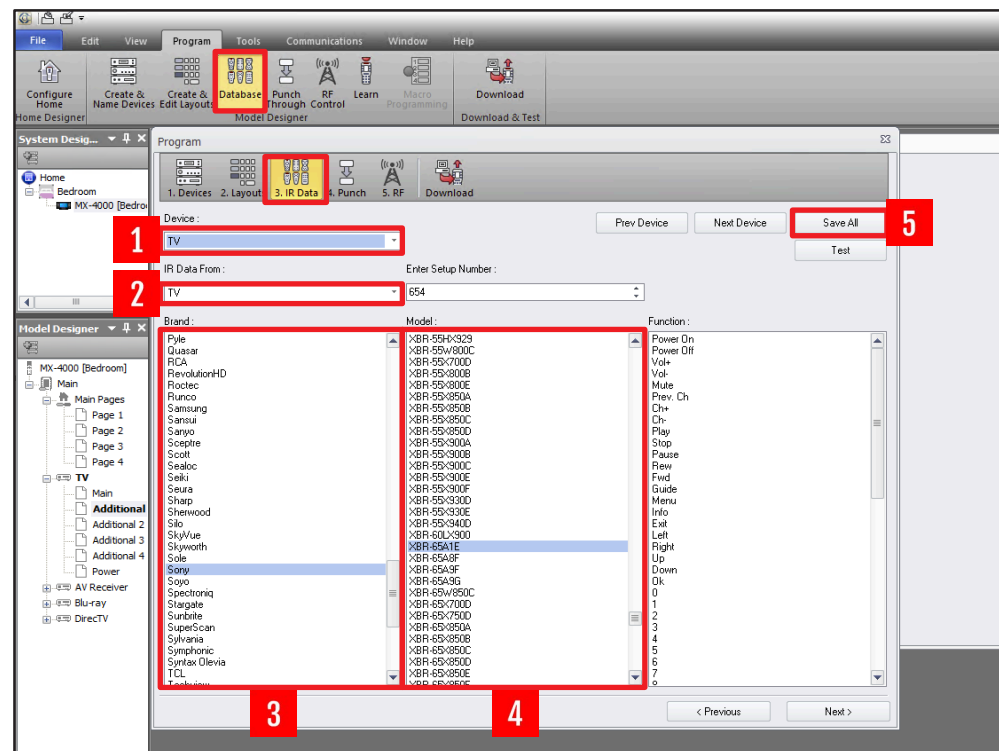


Model Designer Menu (cont'd)

The **Database:IR Data** section is where the IR data for each activity or device is added to its layout. To add IR Data to a device layout:

1. Select a **Device**.
2. Select a **Category**.
3. Choose a **Brand**.
4. Choose a **Model**.
5. Click the **Save All** button.

If you do not see your model, you can manually add third party commands to a program. To learn more about adding third party commands, click [here](#).

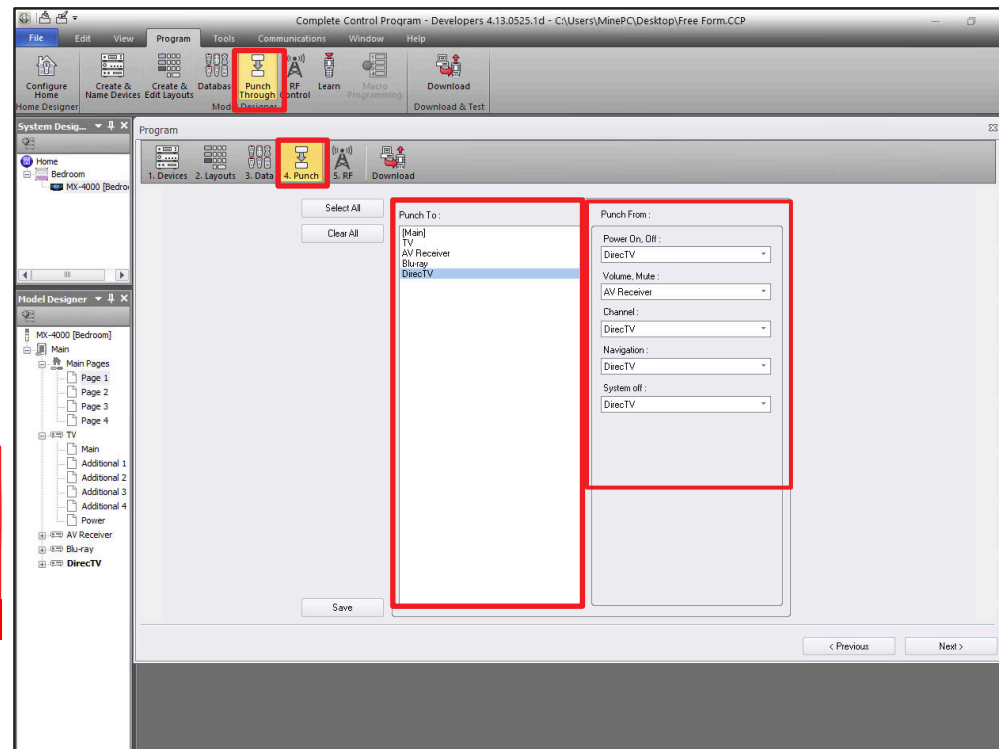


“You will need to add IR Data for each device or activity layout in the remote.”

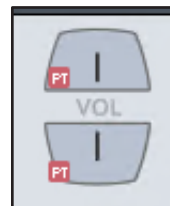
Model Designer Menu (cont'd)

PunchThrough allows you to set the same functions on all devices very quickly. You can punchthrough any of the groups of buttons on a URC **Free Form** Remote. For example, the **Volume Up**, **Down** and **Mute** have been set as a group to punchthrough to a surround sound receiver. The following categories can be changed:

1. **Power**
2. **Volume, Mute**
3. **Channel**
4. **Navigation**
5. **Play, Stop**
6. **Number**



Depending on which Free Form Remote is being setup, the hard button punchthrough areas may not be completely available on the physical remote but in the display itself when a device is selected.



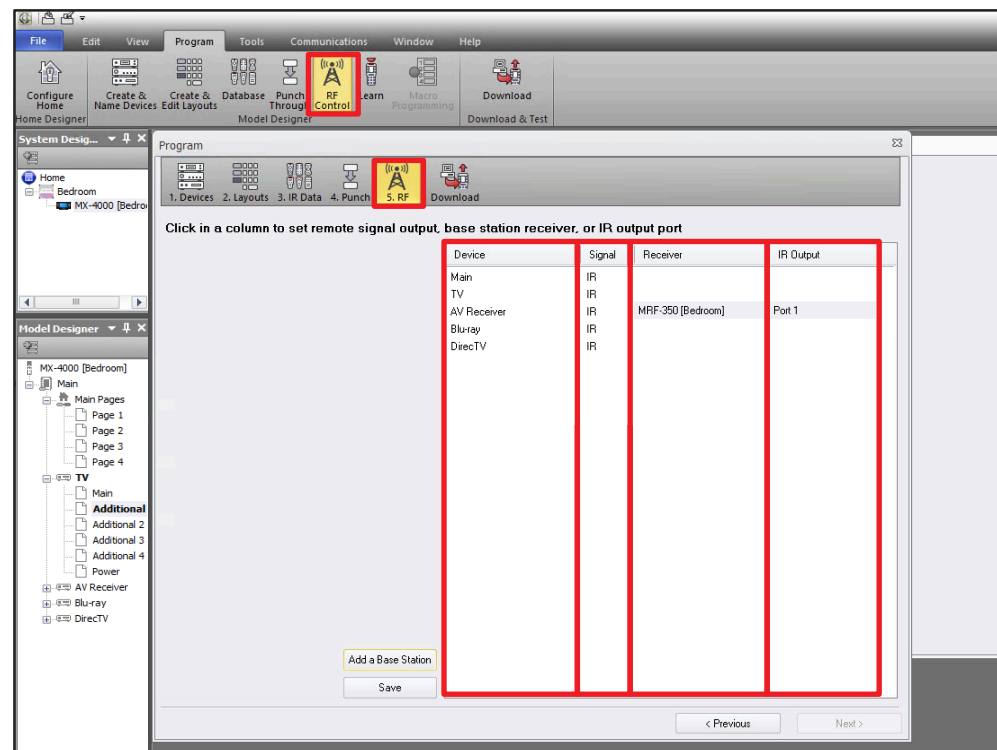
“After programming, flags on the view windows remind the programmer that the buttons have been set to punchthrough.”

Model Designer Menu (cont'd)

The **RF Control:RF** section selects the signal type of a command that is to be sent to each device. To change how a command is sent to a device, click an item in the **Signal** column and adjust.

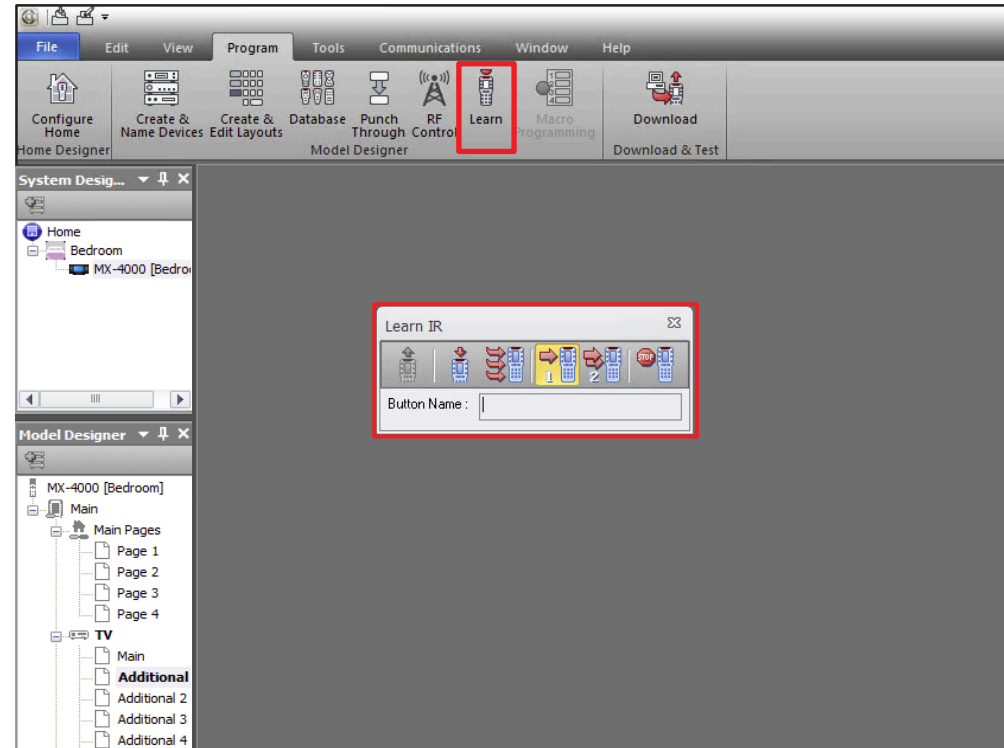
The **Receiver** column will choose what receiver to use if you are using one or more base stations. The **IR Output** column will allow you to choose which IR port to send the signal out of if a base station is being used.

“ If there is no base station configured in the file, the Receiver and IR Output columns will be empty.”



Model Designer Menu (cont'd)

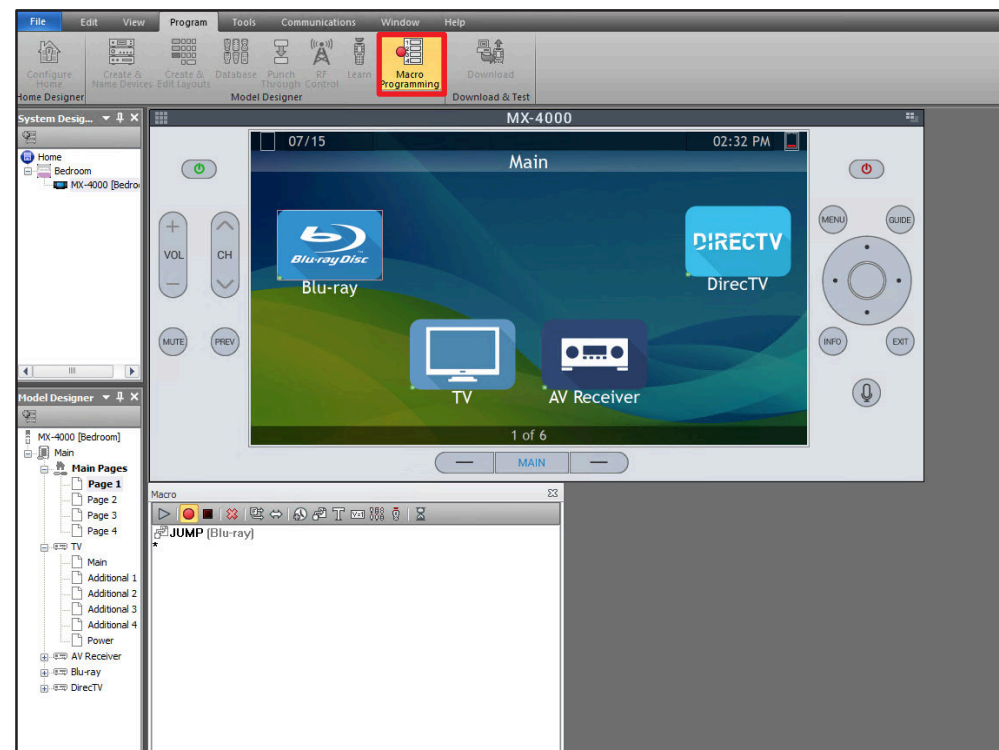
The **Learn** tab will allow you to program third party IR commands into Complete Control through the remote itself or a PIR-1. This is useful if you cannot find the IR codes of a device. To learn how to add commands by remote, click [here](#).



Model Designer Menu (cont'd)

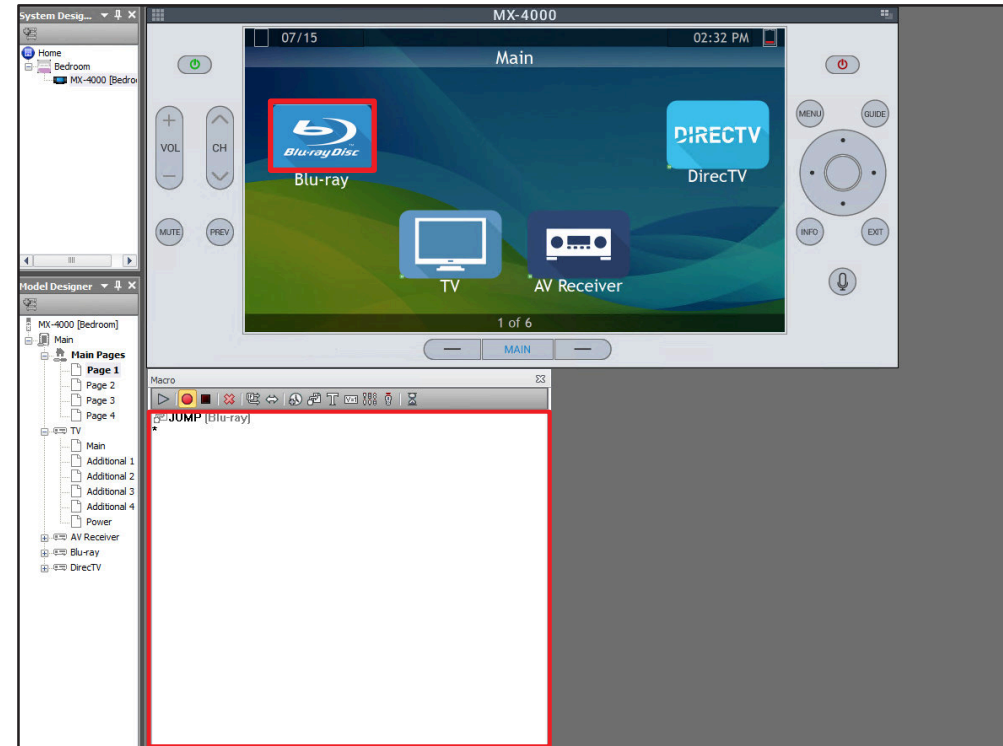
The **Macro Programming** tab allows you to add a command or sequence of commands to a button. This is useful if you want to turn on or off multiple devices at once.

A **Macro** can also change the state of one or multiple devices such as inputs with just a single button press. Almost any button can be selected and configured to include one or multiple commands.



Macro Programming Window

The **Macro** window will show what command or commands are loaded into a selected button. This could be a hard button or a button corresponding to an item on the screen.





Macro Programming Toolbar

The **Macro Programming Toolbar** gives multiple options for configuring a macro. Various commands and functions will vary in availability by which remote has been selected to be program.

Macro Programming Toolbar (cont'd)

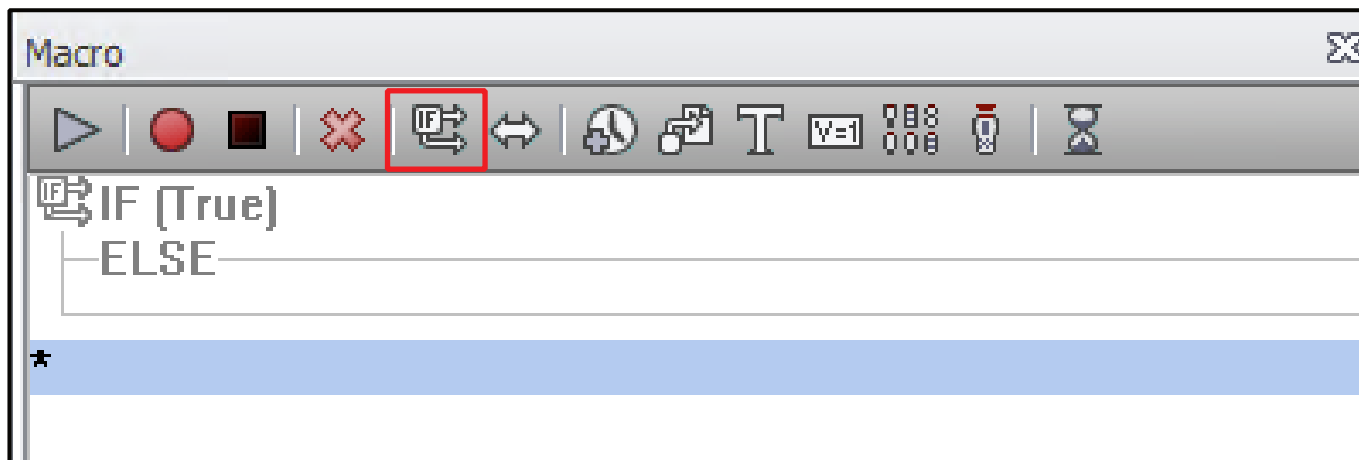
The **Play, Record, Stop and Delete** functions allow the editing of commands in a macro.

1. **Play**: Will test run the commands loaded into a macro to confirm the sequence is performing as intended through the remote.
2. **Record**: Allows one or multiple commands to be added from the IR Database Navigator window or Simulate window in the sequence of selections.
3. **Stop**: Stops the sequence of adding multiple buttons from the IR Database Navigator or simulate window.
4. **X**: Deletes a command or commands that have been loaded into a button selection.



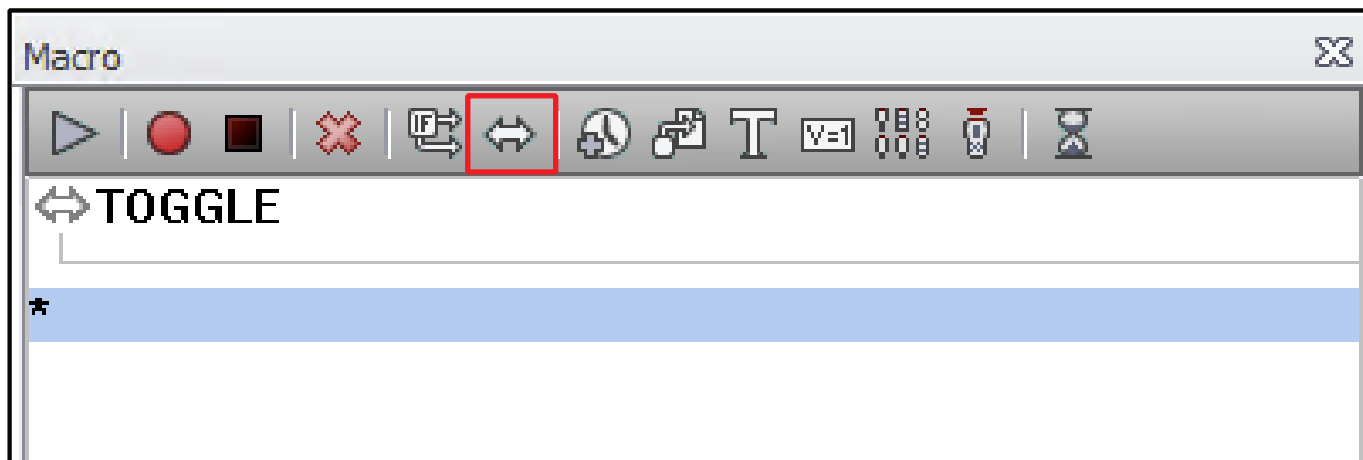
Macro Programming Toolbar (cont'd)

The **If** function enables you to create conditional logic in a macro. (If [condition] is True, then do [action]... Else do [action]). To learn more about conditional logic commands click [here](#).



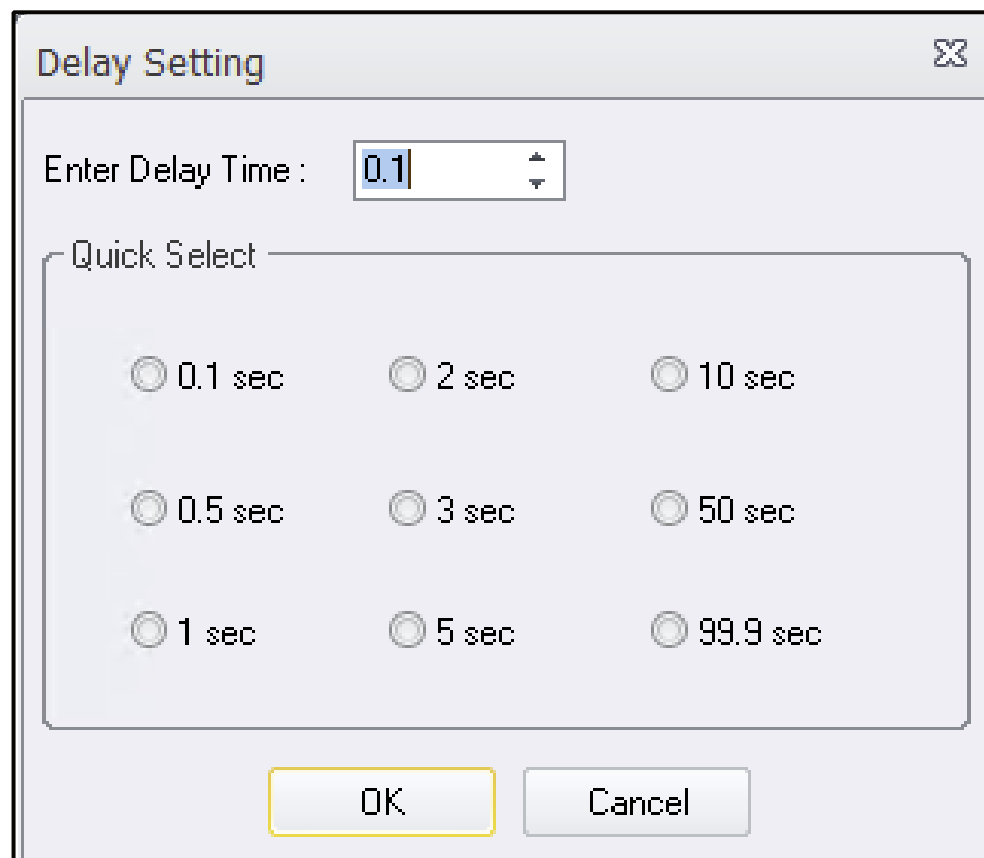
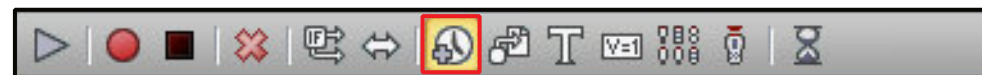
Macro Programming Toolbar (cont'd)

The **Toggle** function enables you to create a list of commands that the selected button will toggle through. To learn more about Toggle commands click [here](#).



Macro Programming Toolbar (cont'd)

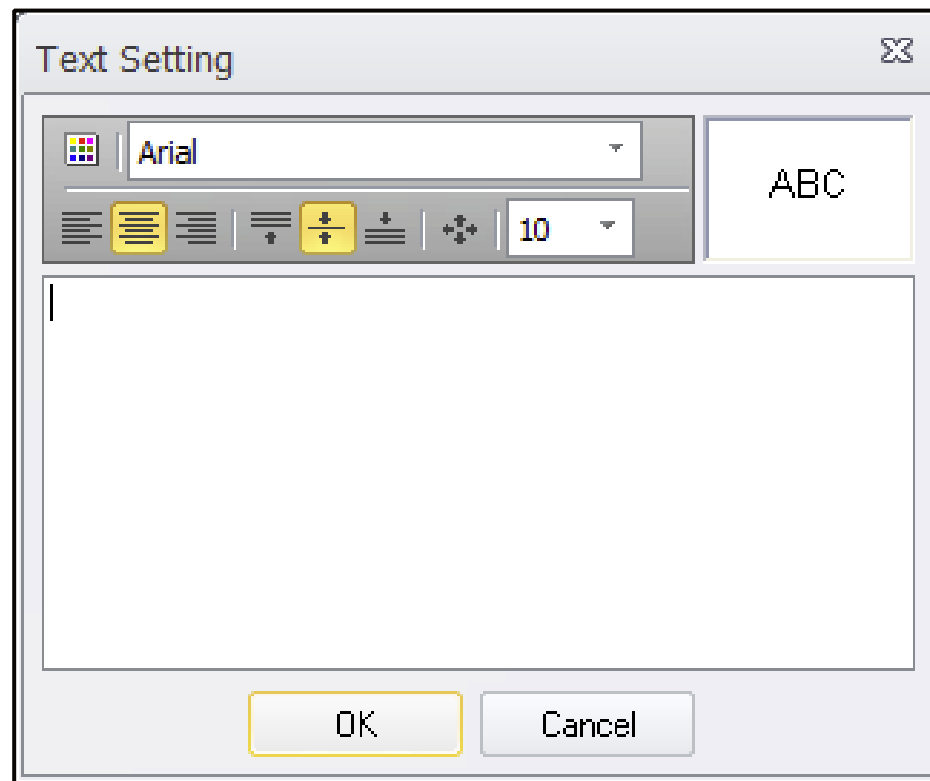
The **Delay** function adds a preset time or custom time between .1 and 99.9 seconds between commands in a macro. To learn more about adding delays, click [here](#).





Macro Programming Toolbar (cont'd)

The **Text** function allows a text entry to show over the icon when a button is pressed. Click [here](#) to learn about adding text entries into a macro.



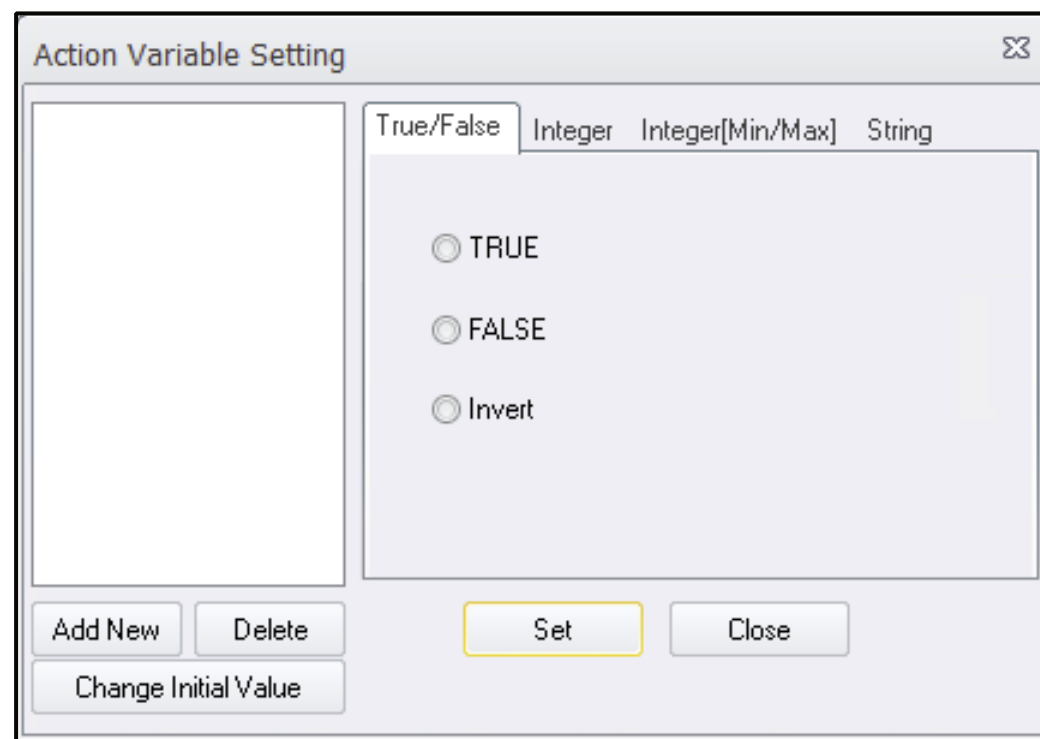


Macro Programming Toolbar (cont'd)

The **Variable** function allows the creation of a variable. This variable can be assigned different states depending on the remote that is being programmed. Your options may include either:

1. **True**, **False**, or **Invert** of true or false value.
2. **Integer** (*specific number value*).
3. **Integer** with a min and max value set.
4. **String** that's either:
 - a. **Ascii**
 - b. **Hex**
 - c. **Decimal**

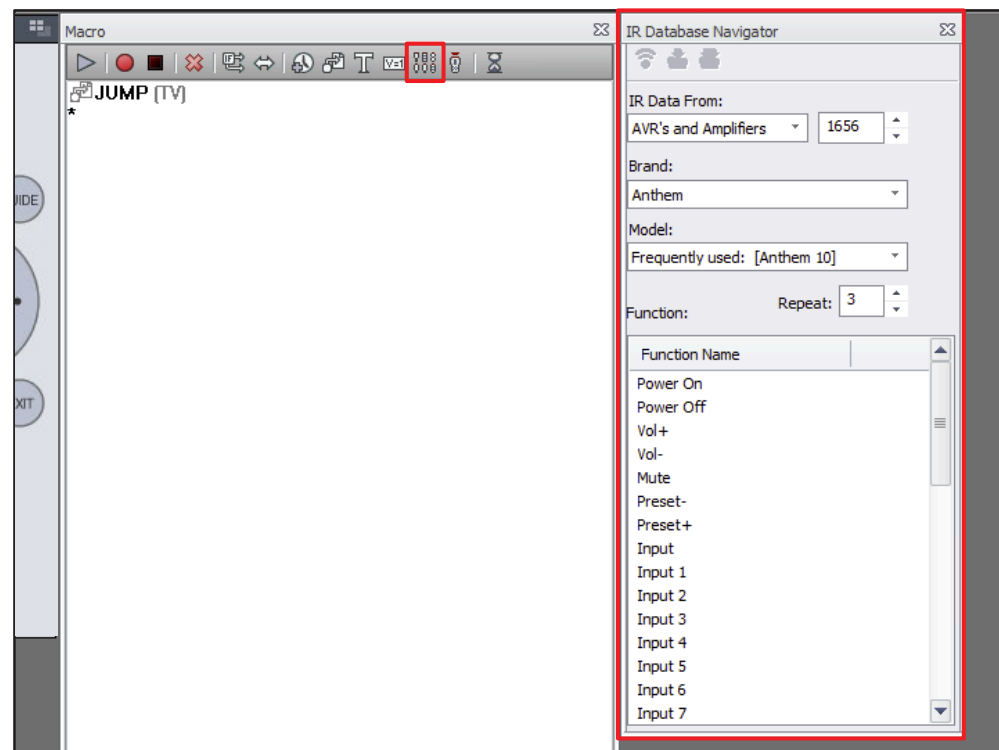
“ Click [here](#) to learn more about adding variables.”



Macro Programming Toolbar (cont'd)

The **PreProgrammed IR** icon opens the **IR Database Navigator** window. This is where commands of various third party devices are located to add to a macro.

“Click [here](#) to learn more about the IR Database Navigator.”

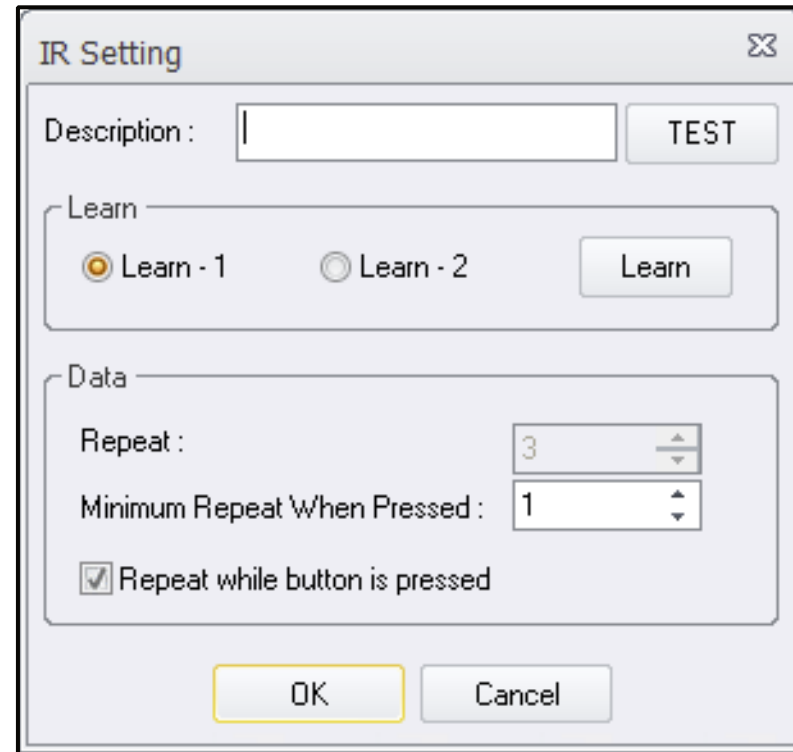




Macro Programming Toolbar (cont'd)

The **Learn** icon opens the IR Settings window. This window allows learning of third-party IR commands directly into a button that has been selected.

“Click [here](#) to learn more about learning commands from a third party remote.”

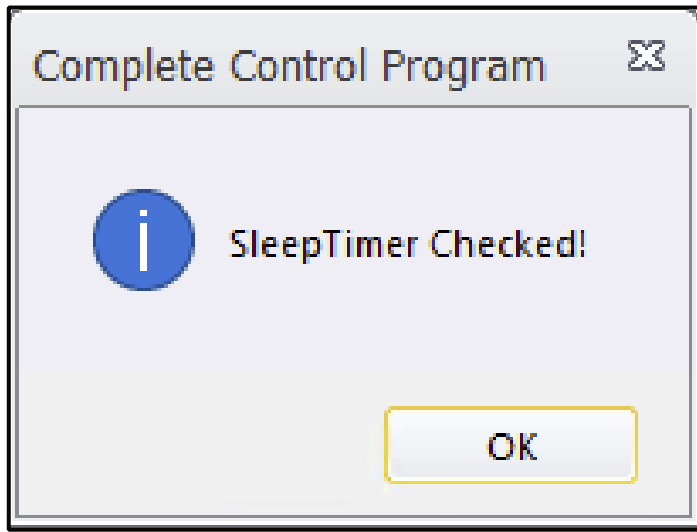




Macro Programming Toolbar (cont'd)

The **Sleep** icon adds a sleep timer to a selected macro.

“To learn more about configuring sleep timers, click [here](#).”



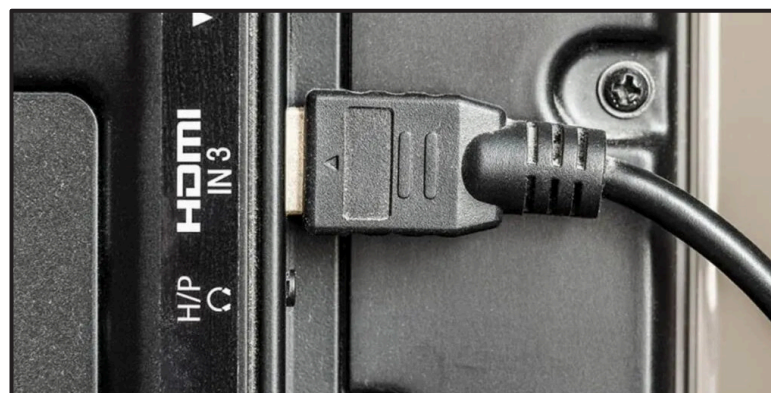
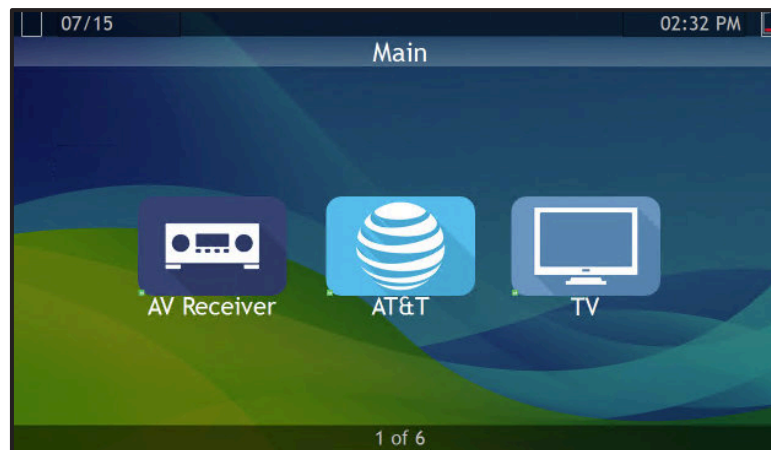
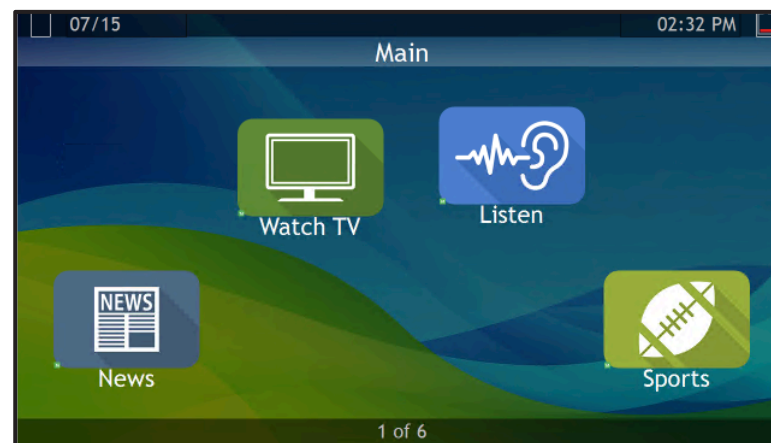
Process To Create A Macro

The process for creating a macro starts with an understanding on what the macro needs to do. For ease of use, a macro may be needed to set a system up to view and control a cable box with connected equipment. For example, it may need to turn on a TV, a receiver and cable box, then change inputs and it will also need to jump to the control layout for the cable box, all with a single button press. To configure a macro for this setup, make sure you have the following items done:

1. An **Icon** on the **Main** page that represents the activity that is to be setup.
2. That all devices needed for the macro are setup correctly with the proper icon, layout and assigned IR data.

“ You may place device icons on a separate page so they are separate from the activity icons.”

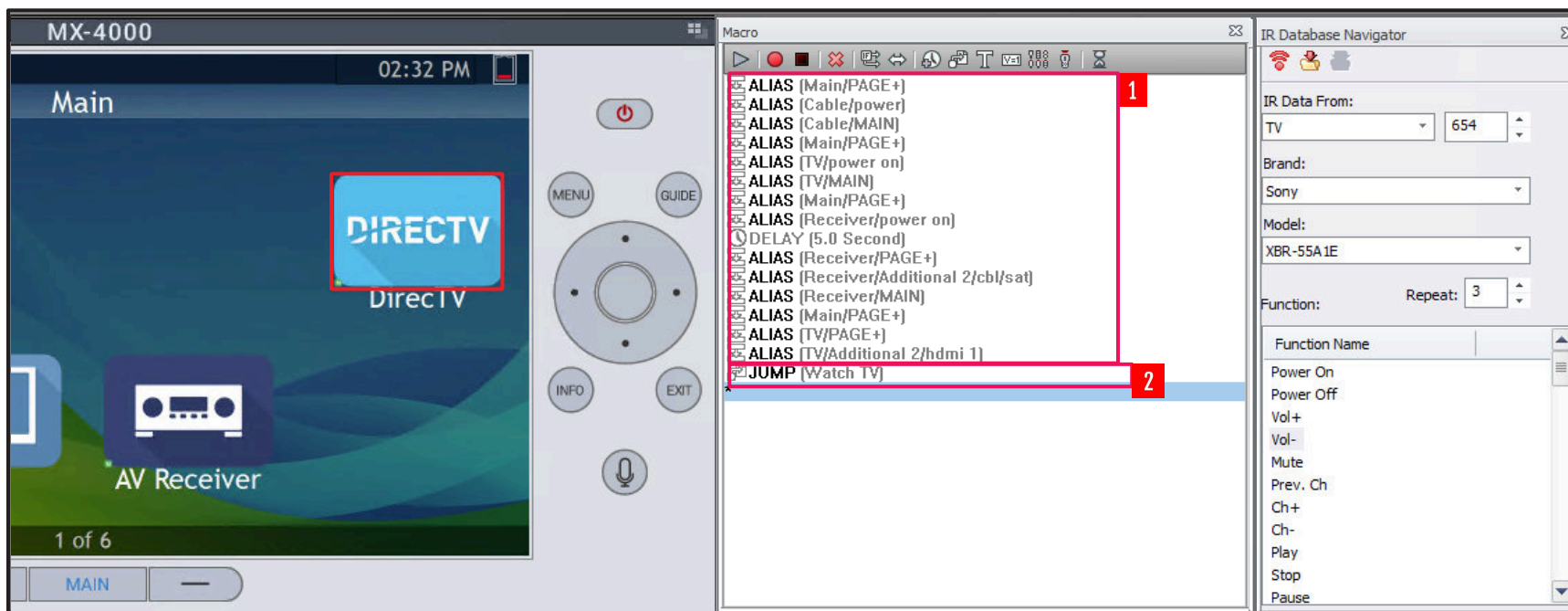
3. Know what inputs on all devices are needed to setup up proper use of an activity.



Process To Create A Macro (cont'd)

Have the **Macro** and the **Simulate** windows open. For this example click on the button that corresponds to the **Watch TV** icon. The Macro window will show what commands are preloaded into that specific icon. Commands that should be added to this macro are:

1. The **ON** and **INPUT** commands for the Cable Box, Receiver, and TV. Make sure to add the input commands after the devices are powered on. Different devices require a select amount of time before a command can be registered so a **Delay** may be needed. Commands should be added from the **Simulate** window.
2. The **Jump** function to jump to the Cable Box Layout.



Process To Create A Macro (cont'd)

To add IR commands from the **Simulate** window you will need to make sure that all the devices for the macro are setup in the program correctly already. You can then navigate the remote in the Simulate window and select each command to add into the macro. To do this

1. Click the **Record** button.
2. Navigate the **Simulate** window to the command you want. The example shows navigating to the **power on** button for the receiver. Continue to select the command or commands to be added in succession.

Once you have added all the commands that are needed for the macro to function properly, click the **Stop** button in the macro toolbar.

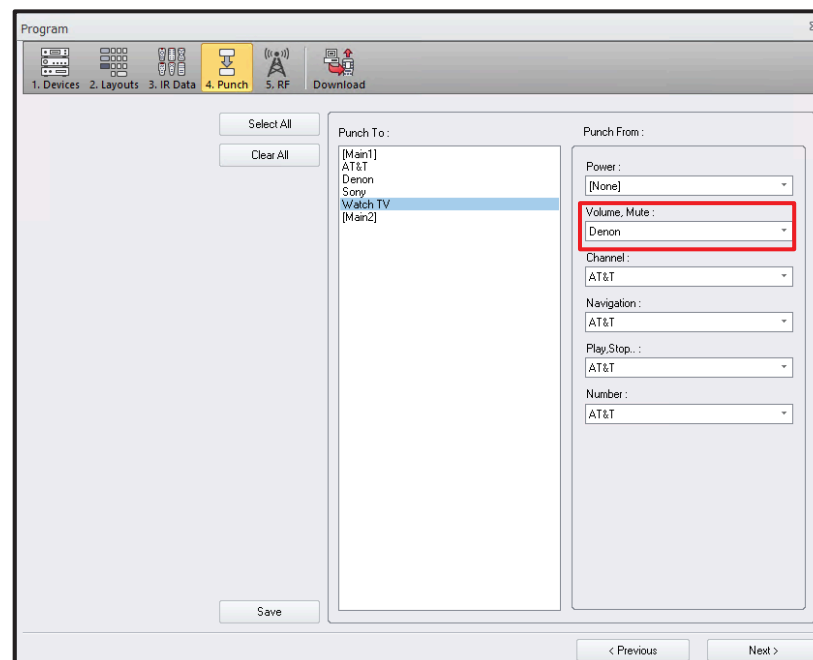
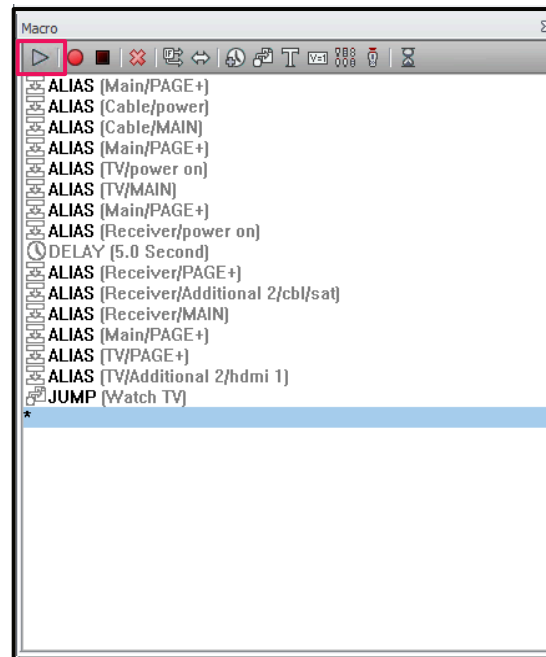


Process To Create A Macro (cont'd)

Once all the commands to a macro have been added, use the **Play** button to confirm its functionality. This will allow you to test the macro without having to download to the remote and make changes if necessary.

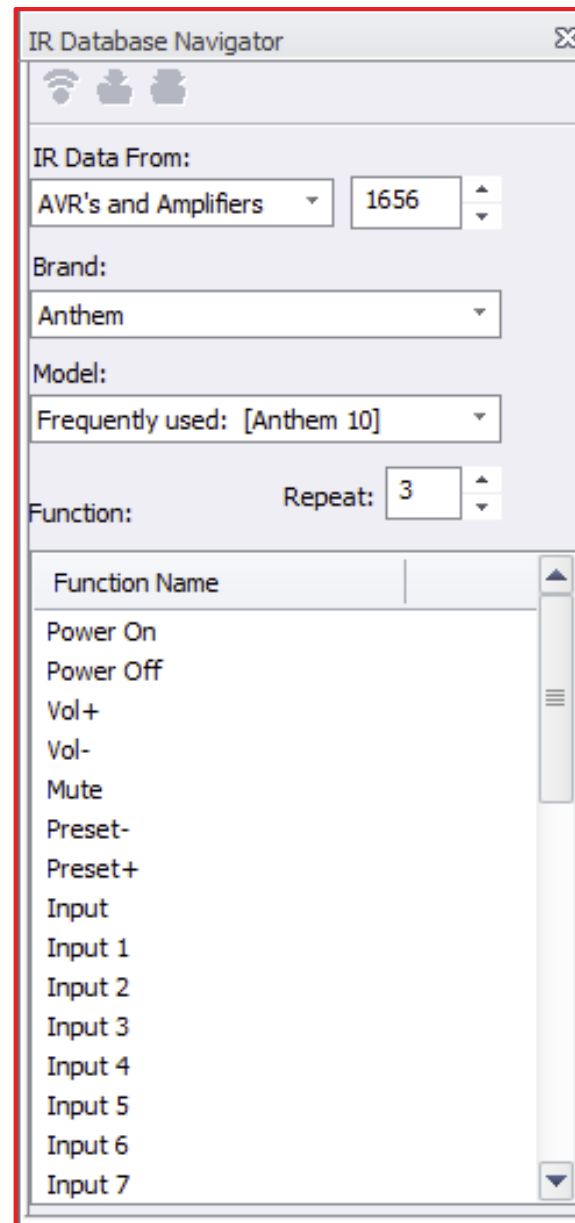
You may also need to edit your punchthroughs in the **Punch Through:Punch** window. Since the activity is using a receiver for audio you will want to set the **Volume,Mute** selection to the receiver. This way when the activity is selected, it controls the correct audio device.

“ Make sure to always place the final Jump to device at the end of a macro in a Complete Control program.”



IR Database Navigator

The **IR Database Navigator** window is where you will find available commands to various third party devices to add to your macro or button.

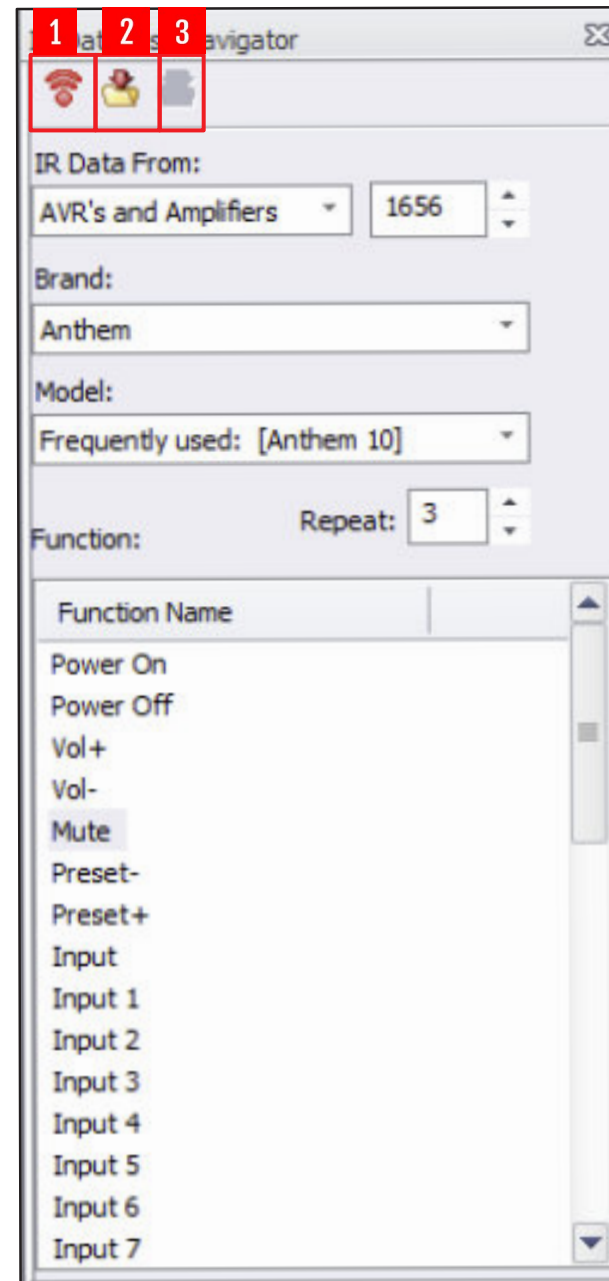


IR Database Navigator (cont'd)

The **IR Database Navigator Toolbar** has various options for a selected command. This includes:

1. **Test Icon:** With a Complete Control remote connected, you can test the IR command in real time. Select the command in the Function Name column and click the test icon. This will send the selected command through the remote.
2. **Save Icon:** After selecting a command in the Function Name column, click the Save icon to add it to the macro window. You can also click and hold on the command and slide it into the macro window to also add it.
3. **Save All:** It will save all the codes from the set selected in the navigator to the function list you are currently editing in the driver editor.

“Using Save All will overwrite all commands.”



IR Database Navigator (cont'd)

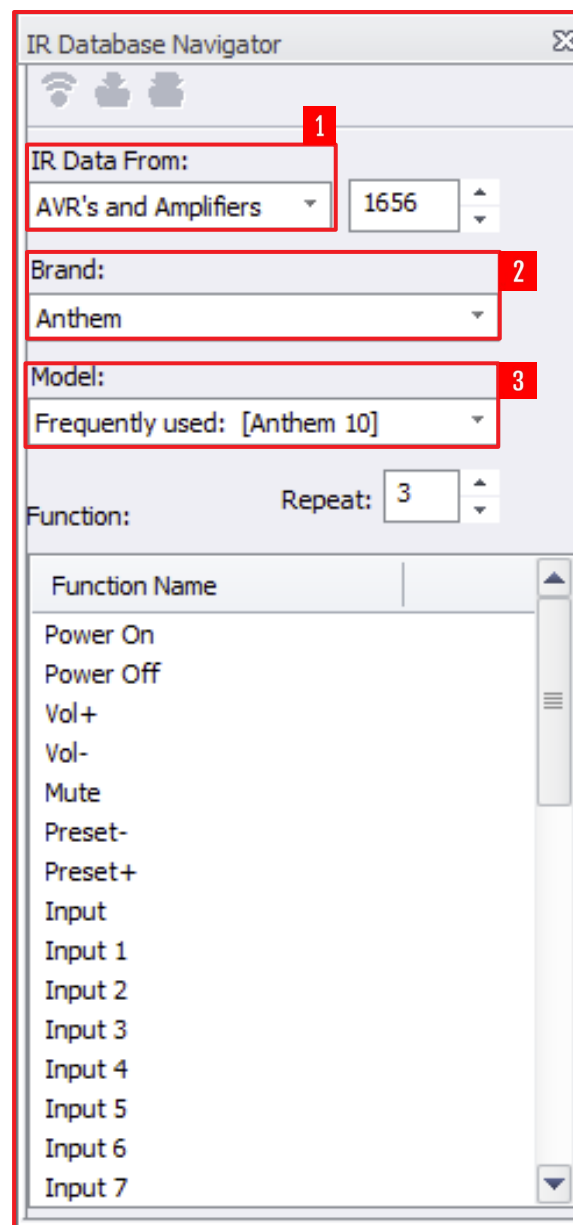
Navigating the menu selections to find a third party command is done by a selection of choices sorted by hierarchy. The commands for available devices can be found by selecting in order:

1. **IR Data From:** Selects the **Category** of device.

“ If you know the Device ID number for the device, you can access its commands by entering it in the ID number field. This field will auto populate when a model has been selected.”

2. **Brand:** Selects the **Brand** of device.
3. **Model:** Selects the **Model** of the brand of device

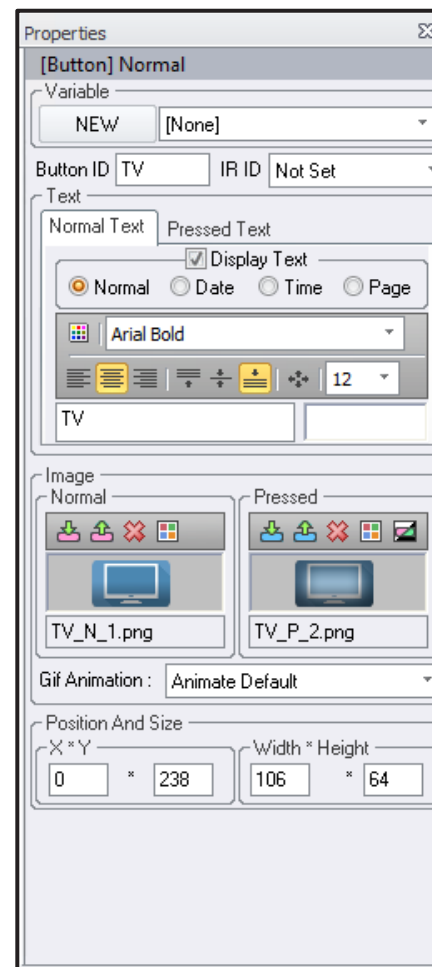
Once you have highlighted the command you want to use, you can either click the save icon at the top of the **IR Database Navigator** window to add it to the selected button or click and hold the command and slide it over to the **Macro** window.



Properties Menu

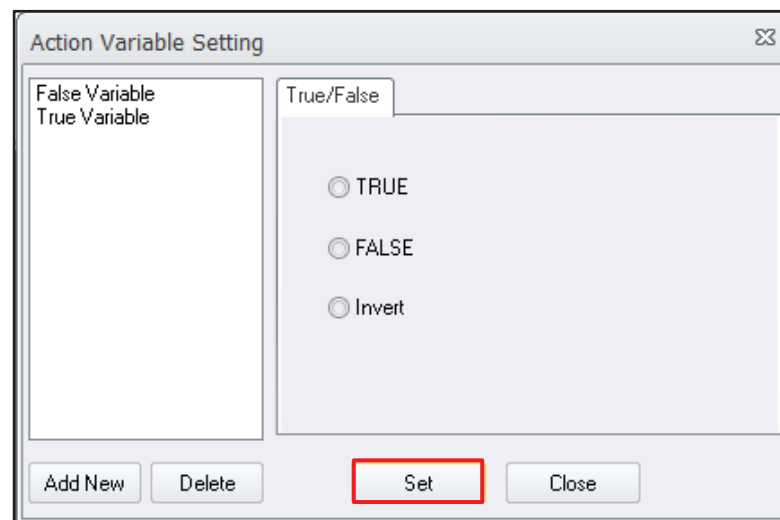
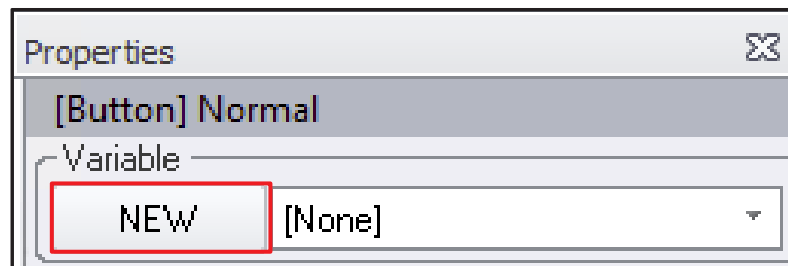
The **Properties** menu is where you can adjust the appearance and text of icons and backgrounds located on the layout screen of each device. To adjust a button or background, click on either item on the screen in the **Simulate Remote Panel**. Options will vary by remote and by what button is pressed.

“The hard or physical buttons on a remote cannot be changed.”



Properties Menu (cont'd)

The **Variable** panel allows **True** or **False** variables to be added to a icon. Clicking the **NEW** button will open the **Action Variable Setting** window. Only **True** or **False** variables can be assigned to a button. Click on any created **True** or **False** variable and click **Set** to add.



“ False variables will show a normal image while True variables will show a Pressed image.”

“ Button ID and IR ID are assigned from the layout selection chosen for a device and IR Data chosen for it.”



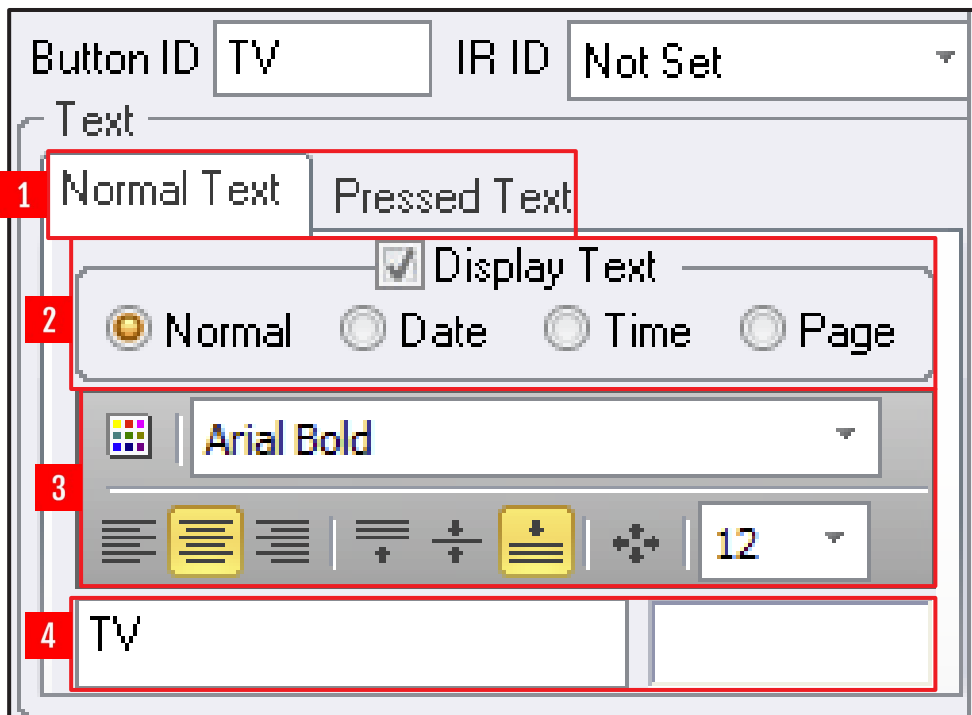
Properties Menu (cont'd)

The **Text** Panel in the **Properties** menu allows a number of configurable options to be modified for the label of a icon. These options will vary by remote.

1. **Normal Text - Pressed Text:** Settings can be adjusted based on whether the icon is stagnant or being pressed by its corresponding button.
2. **Display Text:** **Show** or **Hide** one of the text labels of a icon for the following selections:
 - a. **Normal:** What it is actually labeled.
 - b. **Date:** Format of date can be adjusted.
 - c. **Time:** 12 or 24-hour format selection.
 - d. **Page:** Show the page the icon is on.

“All 4 options will be adjustable in the lower text box of the Text panel after selection.”

3. **Font Adjustments:** The **Font** type, **Indentation**, **Placement** and **Size** can be changed .
4. **Label Name or Format Change:** Depending on what **Display Text** option is selected, you can specifically modify the label an icon here.



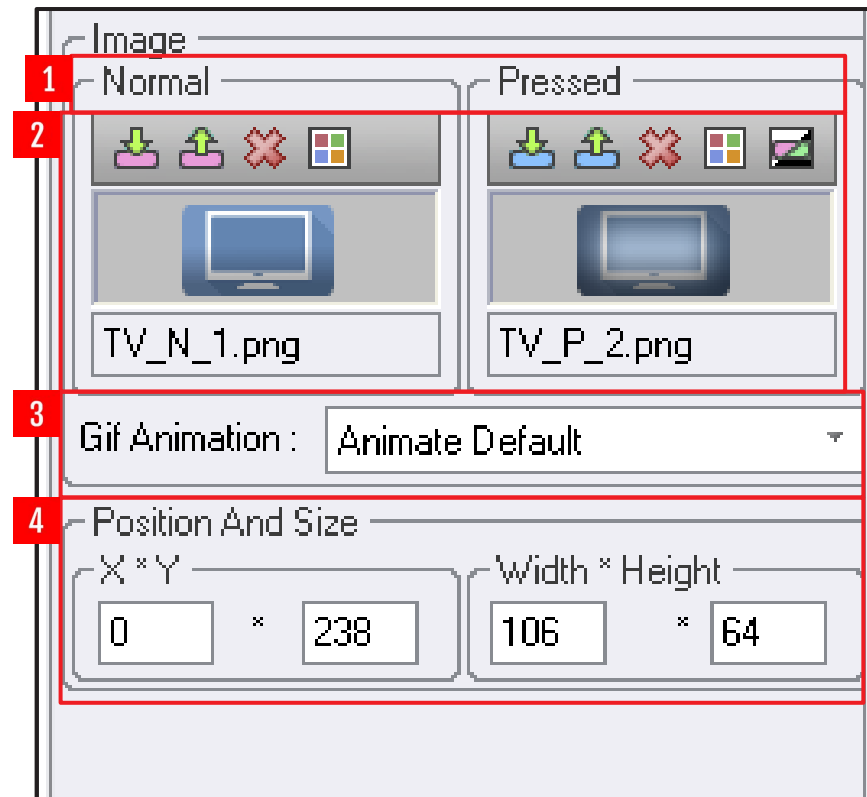
Properties Menu (cont'd)

The **Image** panel in the **Properties** menu allows a number of graphic options to be modified for an icon or a background. These options will vary by remote. To change the background (if applicable), click on the background instead of a corresponding button in the Simulate View window.

1. **Normal - Pressed**: Icon can be adjusted based on whether the it is stagnant or being pressed.
2. **Icon Change**: **Import**, **Export**, **Delete**, or **change** the color of a icon.
3. **Gif Animation**: If a animated Gif is used as a icon or background, you can choose wether the animation happens **Once** or is **Continuous**.

“ Gif Animation not available on all remotes.”

3. **Position and Size**: Each icon location can be adjusted on a **Free Form** remote. It is best to have it next to the corresponding button that selects it. Depending on remote, you may be able to adjust its **Position** and/or **Size**. Use the **Simulate** view window to adjust as needed.



Adding your own Images or Icons

With **Free Form** remotes, all images are stored in the Complete Control installation folder. Your graphics will be subdivided by remote. Custom images can be dropped within an already accessible folder or created in a folder within the specified directory tree so that the Complete Control software can find them. Your folder location will vary by computer.

To add a custom folder, make sure to add it under the specific directory of the individual remote that is being programmed. When using the import option in the properties menu the folders that can be accessed from the Images directory are:

1. **Activities**
2. **Buttons & Backgrounds**
3. **Blanks**
4. **Brands**
5. **Devices**
6. **Favorite Channel Icons**
7. **Rooms**

If the Complete Control software installation is on C: drive, the file path to add your own graphics is found at:

C:\Program Files (x86)\Universal Remote Control, Inc\Complete Control Program\XXXXX\Images

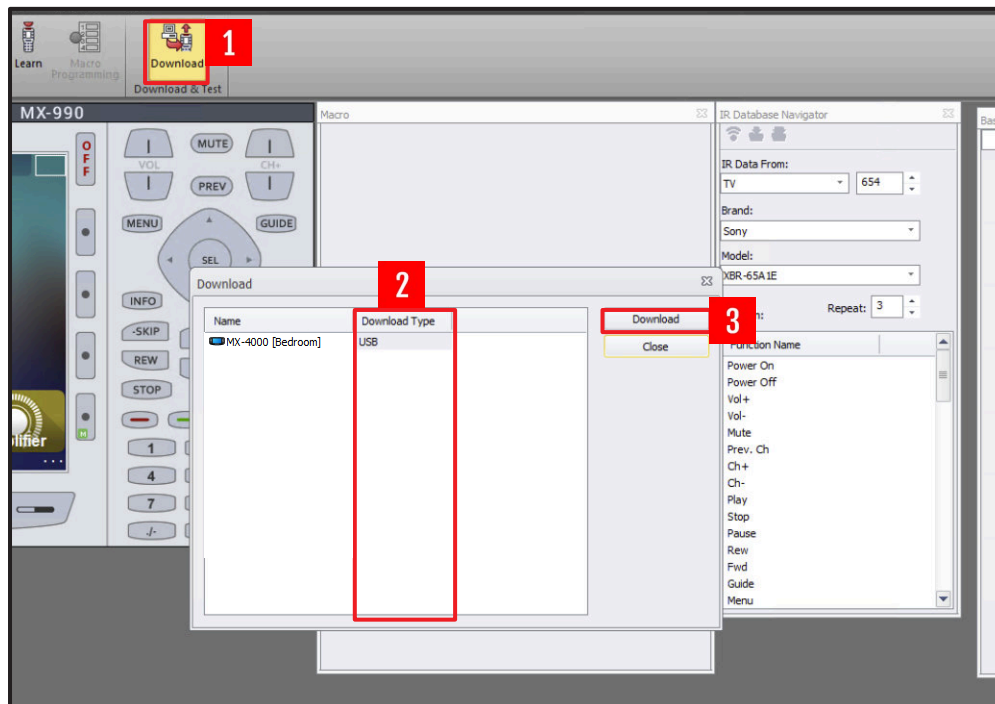
**XXXXX being the model number of the remote you are working with.*

Downloading to a remote

Upon program completion, you should download the file to the remote and test its functionality. Navigation should have already been tested within the **Simulate** view window. Also, the **Play** button in the **Macro** window can test whether the sequence of commands work correctly before downloading. This will save time from having to download multiple times to test a remote for functionality. To download to a remote:

1. Click the **Download** tab in the **Main** toolbar.
2. Use the **Download Type** column to confirm the type of connection used for a URC remote to be programmed. All **Free Form** remotes use a **USB** connection to the computer for programming.
3. Click **Download**.

Wait for the process to finish. Once completed, the remote will reboot. After reboot, you should completely test the functionality of the remote to make sure it is working as intended.



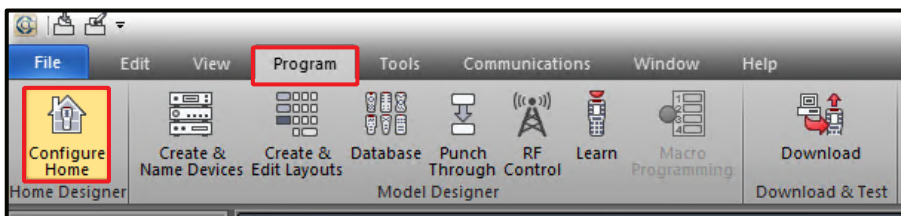
Base Stations

A **Base Station** gives the ability to control components without the need for line of sight from a remote. This is useful for equipment that may be hidden behind items that interfere with IR window on the remote or it can give the client the flexibility of not having to worry about pointing the remote at one or more devices when using. This section will show how to setup a base station in the Complete Control software.



Adding a Base Station to a file

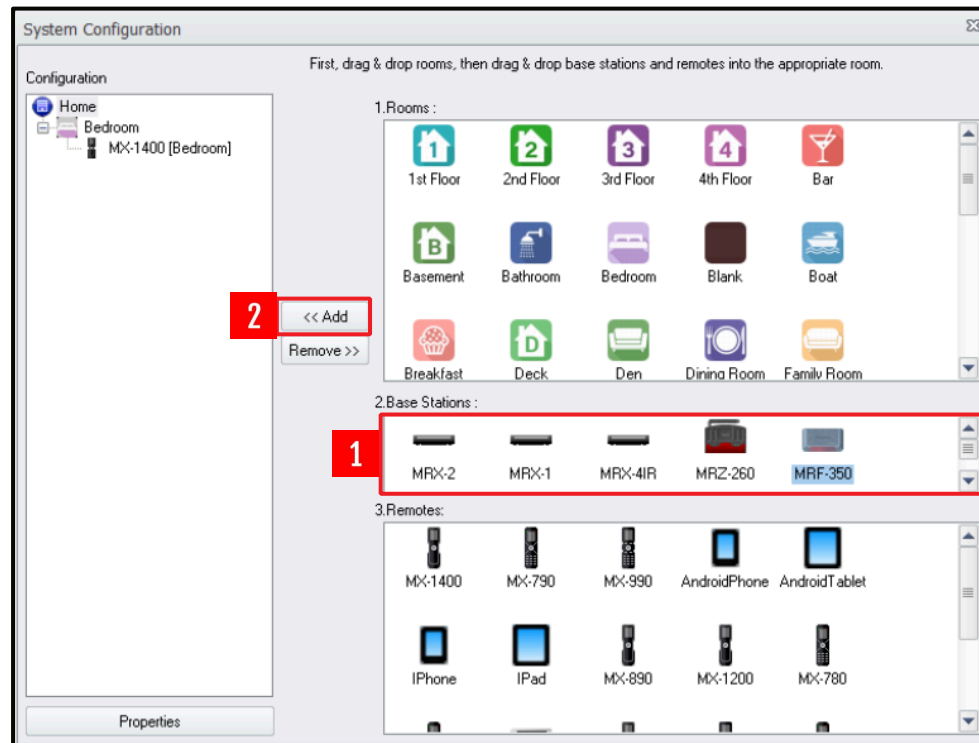
A Base Station must first be added to a file before you can configure it. To do this, open the **System Configuration** window by clicking the **Program** tab and then clicking the **Configure Home** icon.



Once you have access to the **System Configuration** window you can add a Base Station. To do this:

1. Select a Base Station that is compatible with the remote being programmed.
2. Click the **<<Add** icon to place it in the Configuration window. This will automatically generate the Model Property window for whichever Base Station was selected.

*“ The **System Configuration** window will also load if you choose **New** in the **File** tab and select **Empty** when creating a new file.”*



“ You can add more than one Base Station to a project.”

Base Station Model Property Window

The **Model Property** windows is divided into two sections. **Basic Information** and a **Port Information**.

Under Basic Information you can edit two things:

1. **RF ID**: Selects the channel ID of the Base Station you are trying to communicate to. They will need to match. If you are using multiple Base Station, use a unique RF ID for each base station so you do not have any cross talk issues.
2. **Name**: You can change the name of any Base Station to make it more identifiable in the file.

The **Port Information** panel allows you to label each device that will connect to each port on a Base Station. Depending on what Base Station you are using, you may have more or less ports than what is shown. Once done, click **OK**.

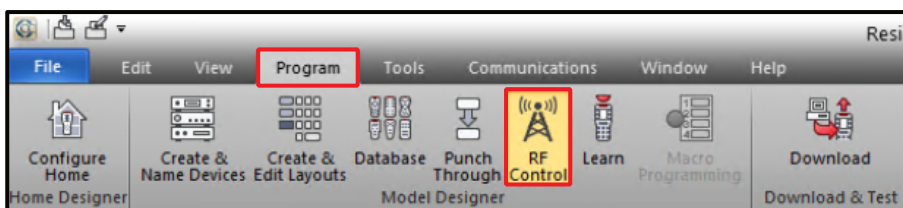
The screenshot shows the 'Model Property' dialog box with the following configuration:

Basic Information	
RF ID	01
Name	MRF-350 [Bedroom]

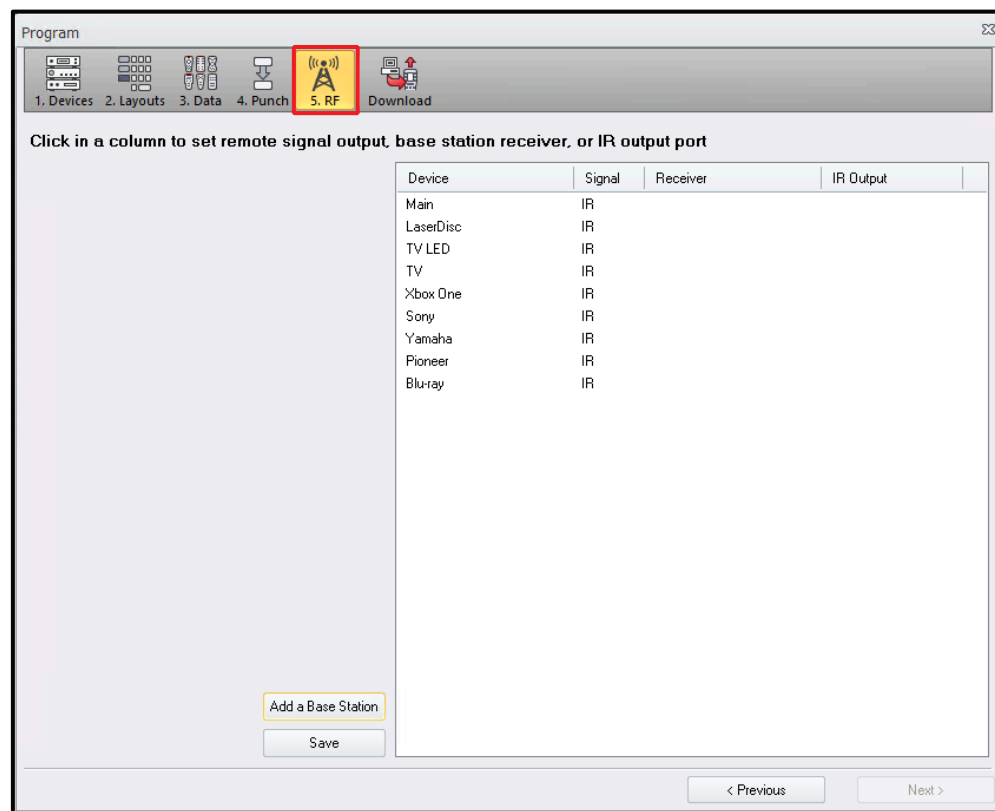
Port Information	
Port 1	AVR
Port 2	CABLE BOX
Port 3	
Port 4	
Port 5	
Port 6	

Base Station Configuration

To configure a Base Station click the **Program** tab and then click the **RF Control** icon.



This will bring up the **Program** window so you can assign devices to ports on the Base Station. Complete Control automatically assigns every device to IR on the remote. You will need to change each device that you want the Base Station to control.

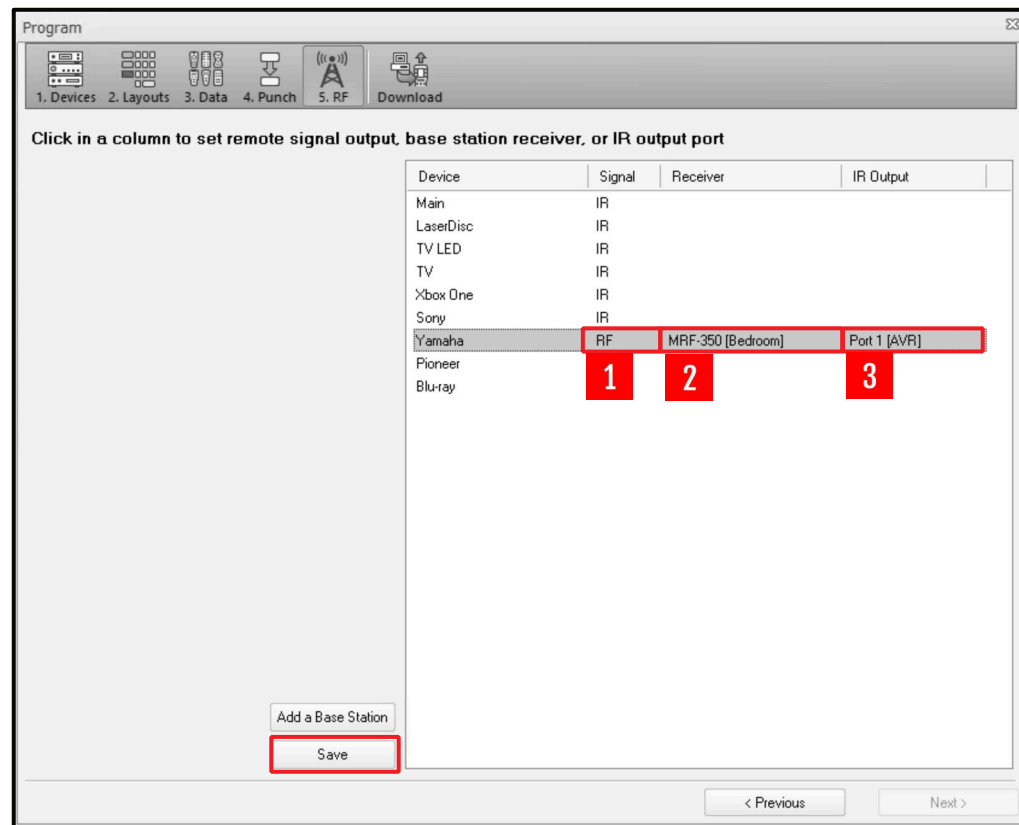


Base Station Configuration cont'd

To change a device so it gets the signal from a Base Station and not the remote:

1. In the **Signal** column, change the device that needs to be controlled by the Base Station to **RF**.
2. Under the **Receiver** column, choose the Base Station that is attached to the device.
3. In the **IR Output** column, select the port that the device is connected to.

Once done, click the **Save** icon. You can then download to the remote to start using the base station.



DPI Settings

It is possible when using a 4K or high-resolution display or laptop, you may need to adjust the High DPI scaling for best performance when using and viewing the Complete Control Program.

This manual will detail the steps required to adjust a laptop or PC for this situation.



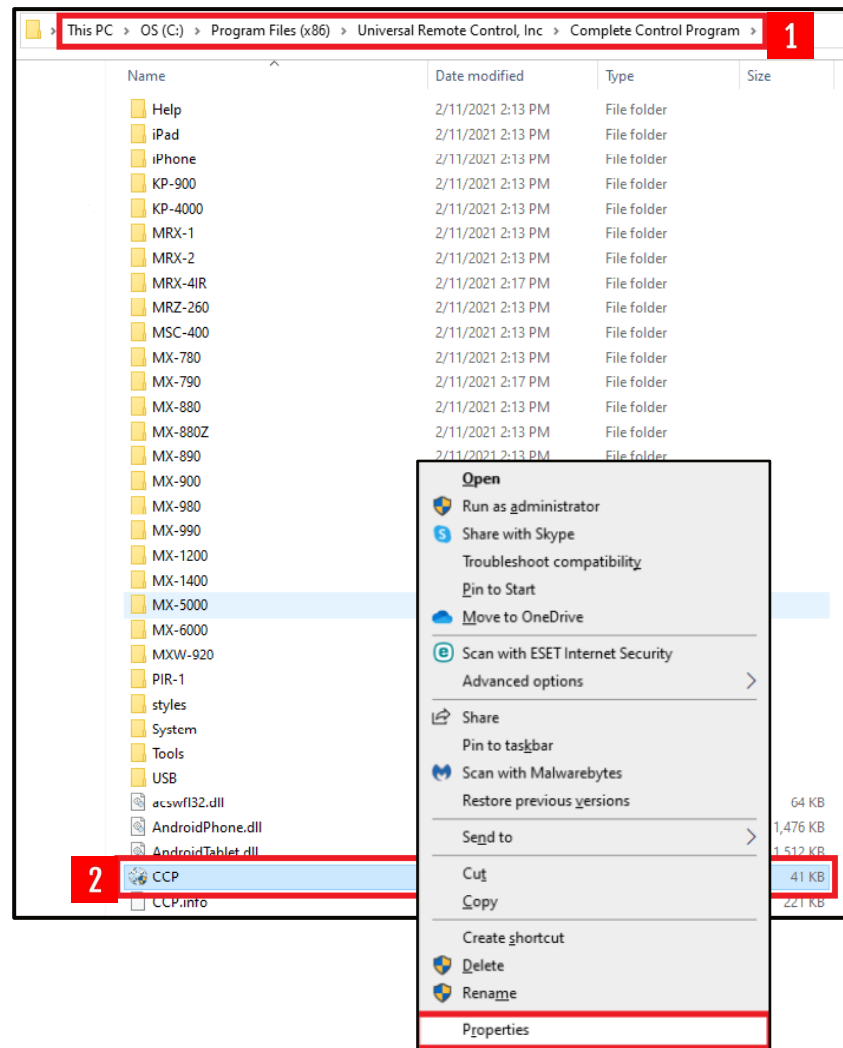
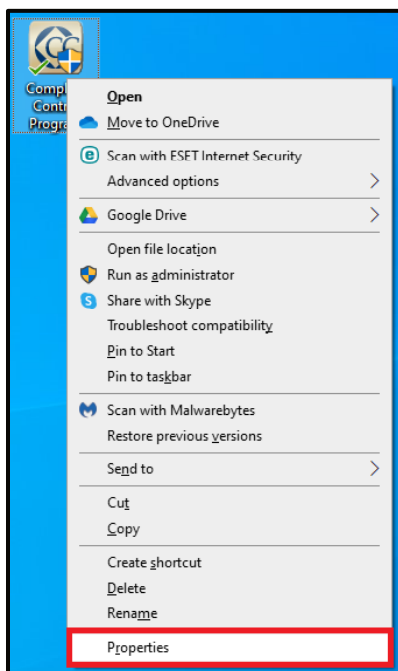
Adjusting DPI Settings

1. Navigate to the directory path as shown.
2. Right-click on the CCP application icon and then select Properties

“This file path may vary based on the URC program installation.”

Alternately, you can also right-click on the desktop shortcut for the CCP program. This shortcut is **usually** on your PC desktop after a standard installation.

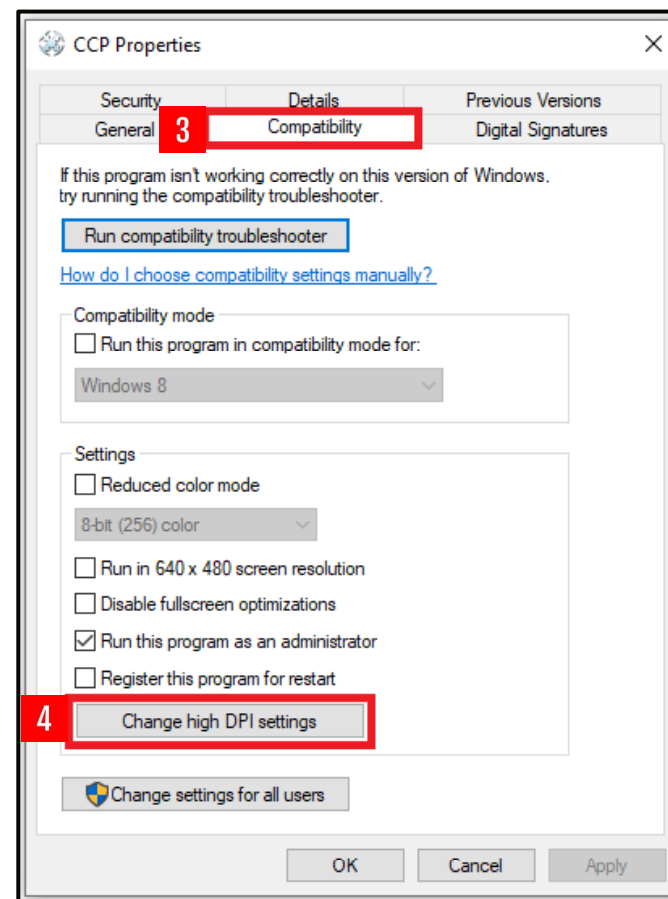
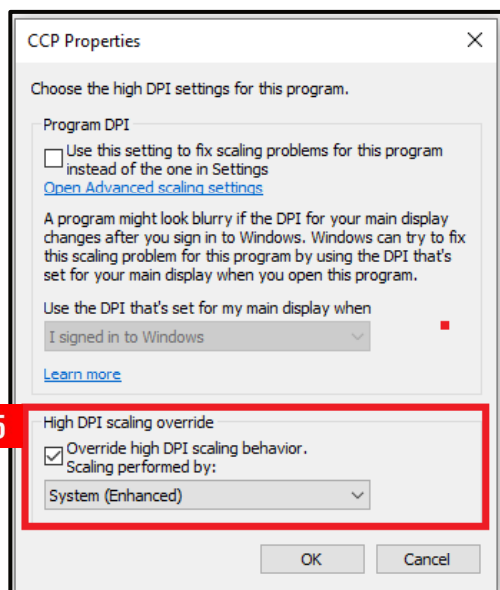
C:\Program Files (x86)\Universal Remote Control, Inc\Complete Control Program



Adjusting DPI Settings cont'd

3. Click the **Compatibility** tab.
4. Click **Change high DPI settings** button.
5. Check the box for: **Override high DPI scaling behavior**. Then, the drop down for: **Scaling Performed By**: choose **Application**, **System** or **System (Enhanced)**.

“ In most cases, System (Enhanced) yields the best results but this may require some experimentation depending on your specific laptop or PC system configuration. “



Transporter

The **Transporter** function provides the ability to import devices or commands into a URC Complete Control remote from any other URC Complete Control remote.

When using the **Transporter** function, the **Import Device** functionality requires a device from the same remote. Also, **Main**, **Watch**, or **Listen** macros can now be transported. Only preprogrammed and learned codes are transported and **NOT** variables, alias, delays, etc.

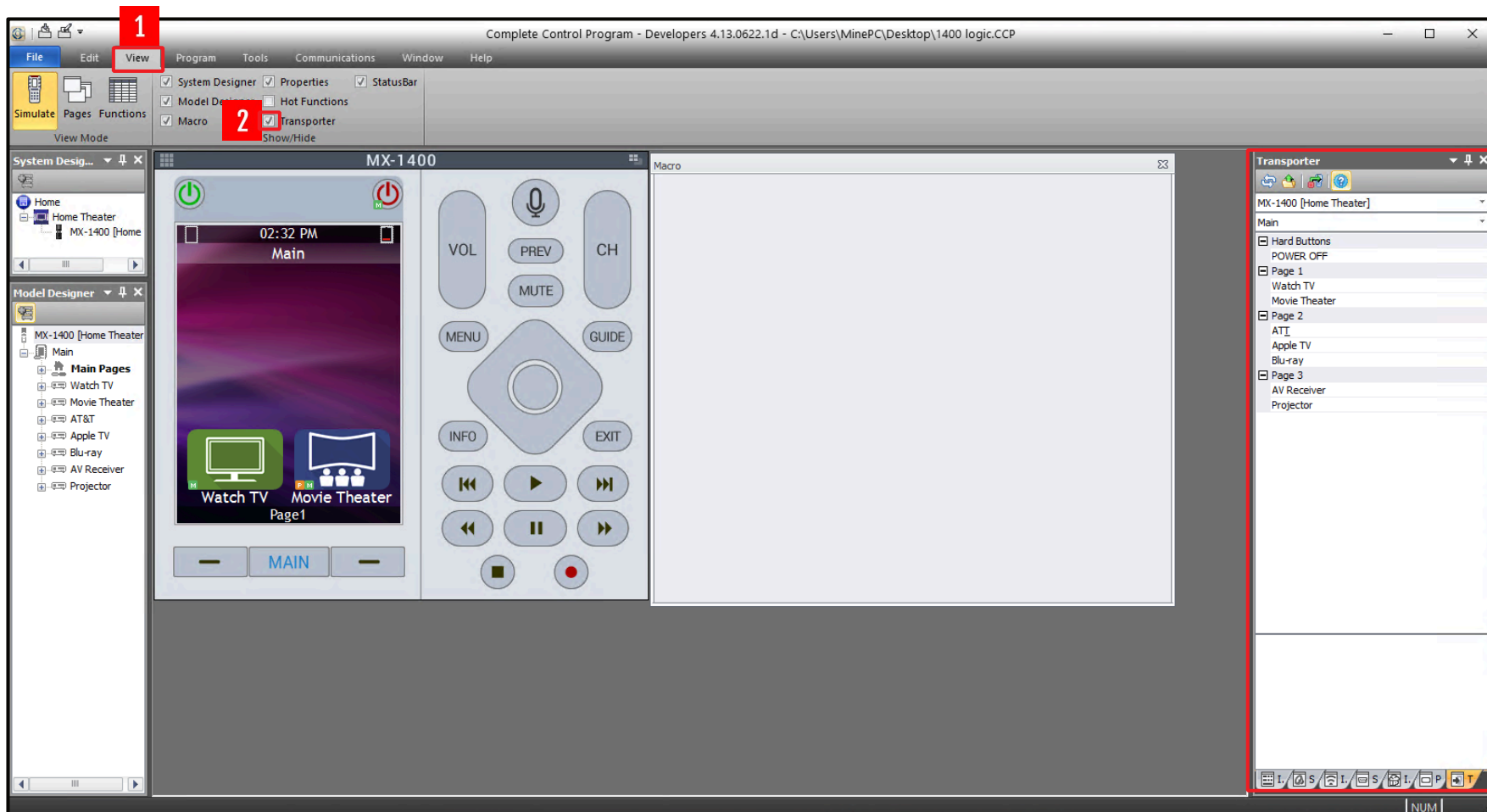


Accessing the Transporter window

To access the Transport window

1. Click the **View** tab.
2. Check the Transporter check box.

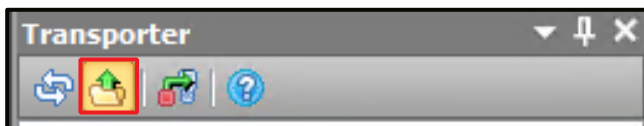
You will now see the Transport window.



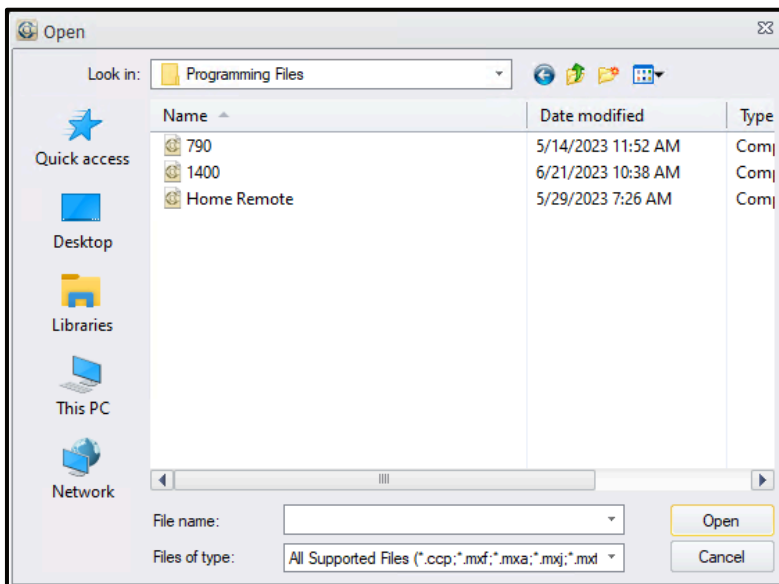
Transport A Device

To Transport a device from a previous file to a current file you will need to:

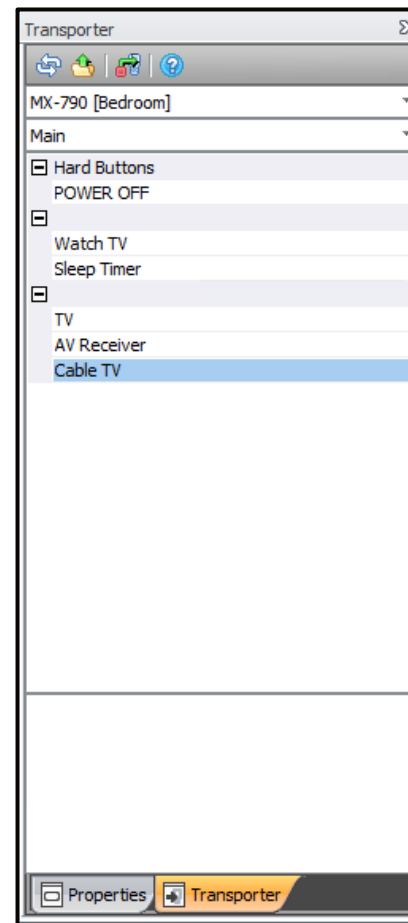
1. Click the **Open** File icon.



2. This will open the **File Explorer**, find and select a file with the device you want to transport.



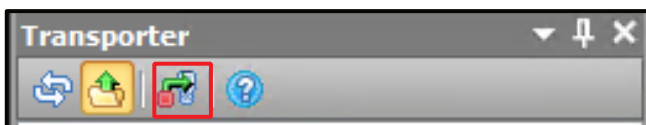
3. Select the device in the Transporter window to transfer over to the new file. For this example, we can select the Cable TV from a MX-790 file.



Transport A Device cont'd

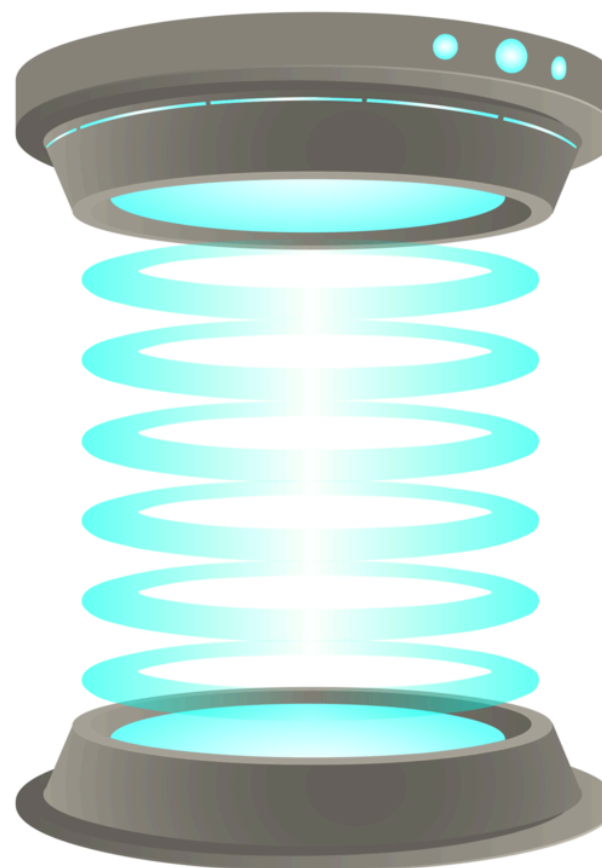
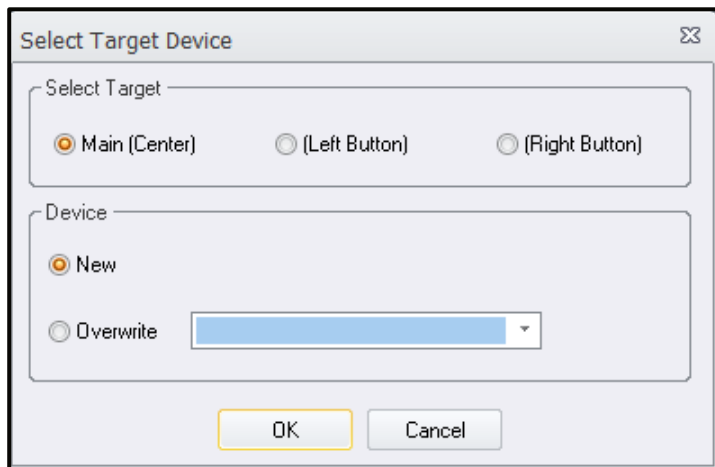
To finish transporting a device:

4. Select the **Transport** Button.



5. Once you select the Transport button the **Select Target Device** window will appear. Depending on which remote you are transporting to, you can select its target area to move it to.

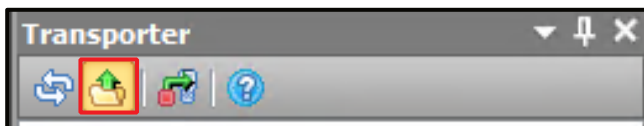
Under the **Device** panel, you can have a **New** device created or have it **Overwrite** a device that is already programmed.



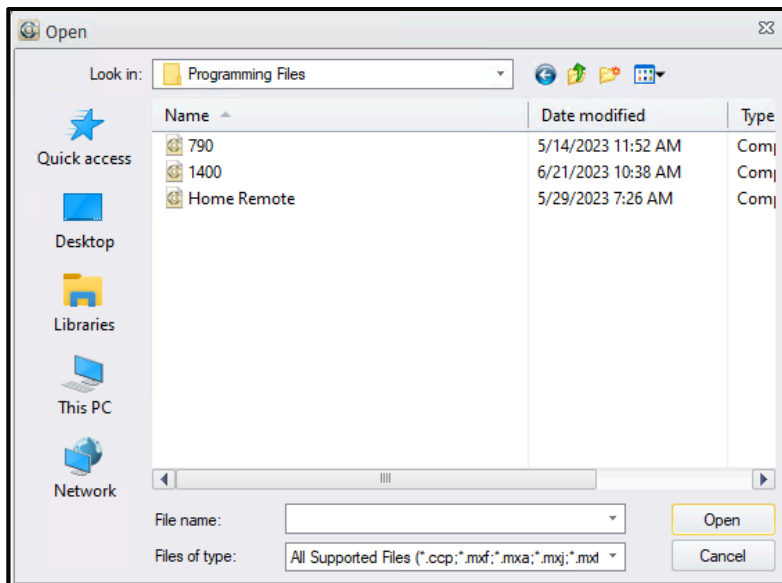
Transport A Command

To Transport a command from a previous file to a current file you will need to:

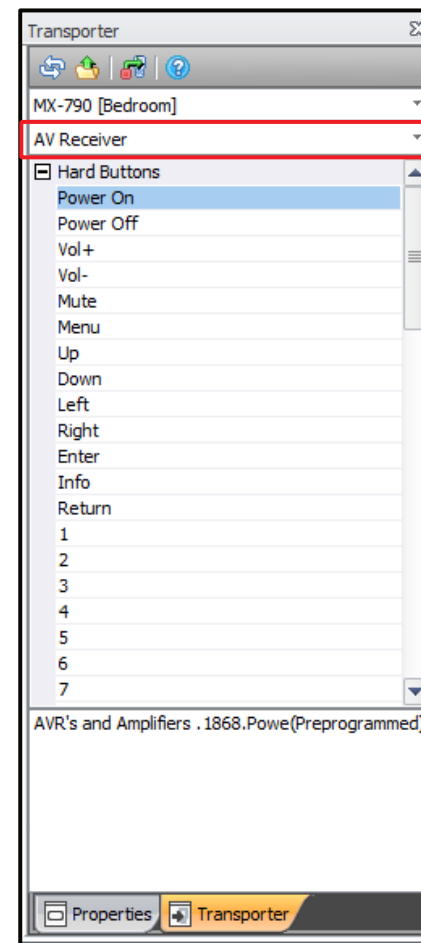
1. Click the **Open** File icon.



2. This will open the **File Explorer**, find and select a file that has the device with the command you want to transport.



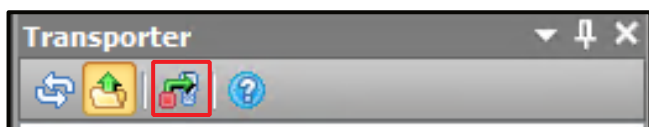
3. **Select** the dropdown and choose what device you want to get the command from. This example shows the **Power On** command from the **AV Receiver**.



Transport A Command cont'd

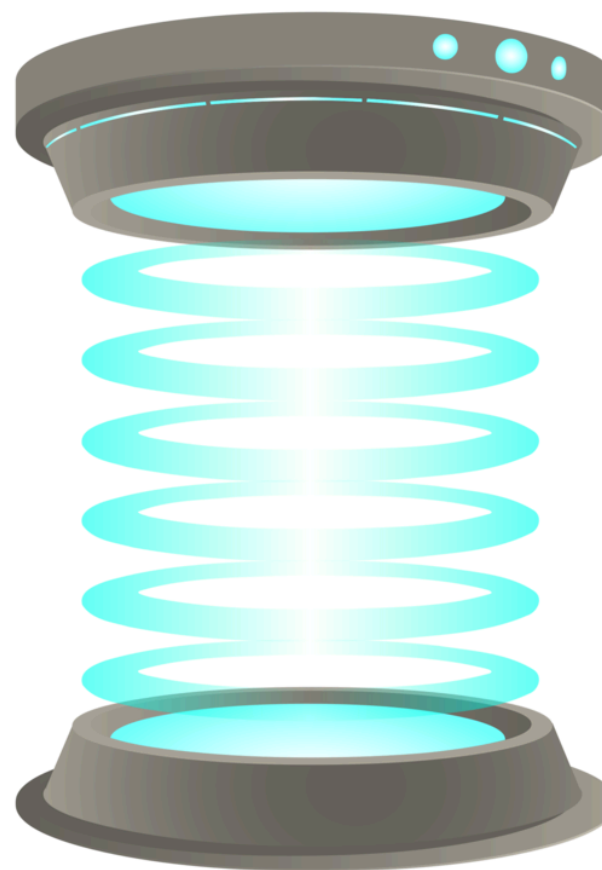
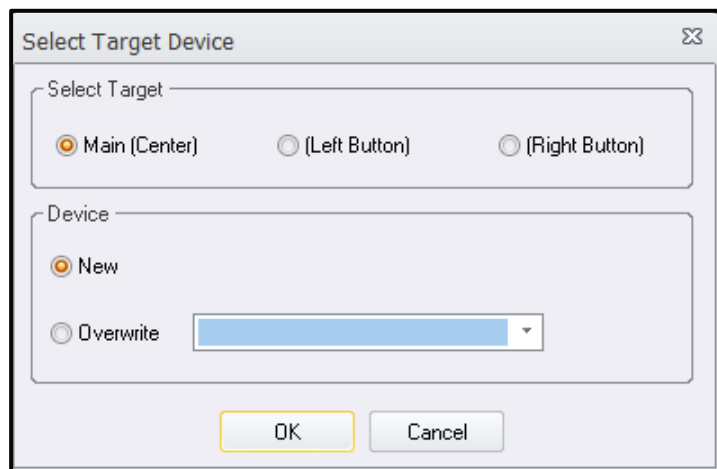
To finish transporting a command:

4. Select the **Transport** Button.



5. Once you select the Transport button the **Select Target Device** window will appear. Depending on which remote you are transporting to, you can select the target area to move it to.

Under the **Device** panel, you can have the command go to a **New** device or have it **Overwrite** a command in a device that is already programmed.



Introduction to Learning 3rd Party Remotes

URC remotes can learn commands from 3rd party remotes. This is useful if a device is not in the Complete Control Program. This manual will show various steps to setup and learn IR commands into a program.



Prerequisites

Before learning IR commands into a file, make sure to have the following items:

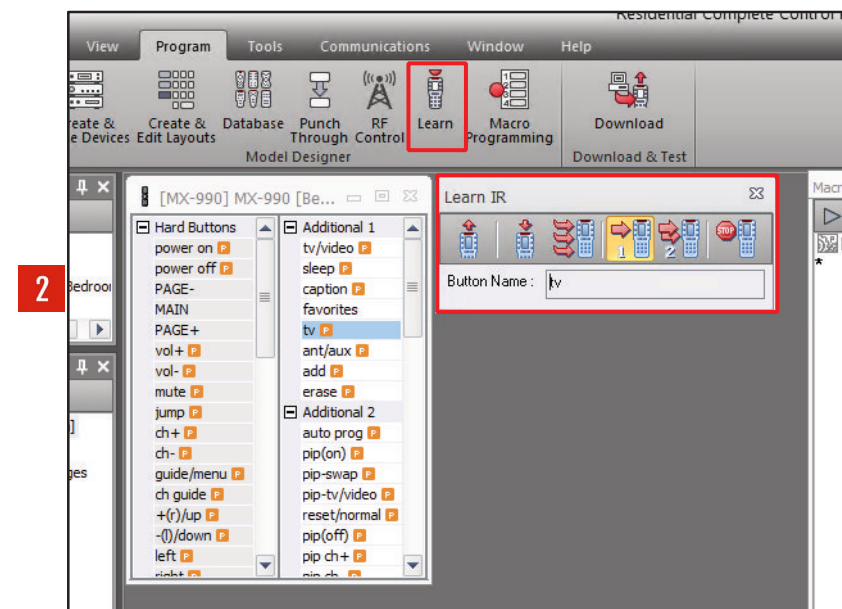
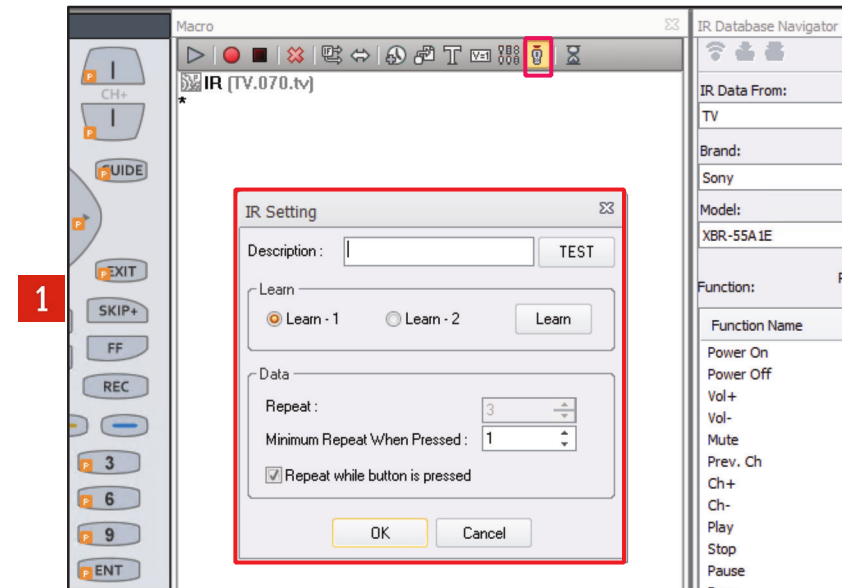
1. A **URC Complete Control Remote** to learn commands too.
2. A **3rd party IR remote** to learn commands from.
3. Both remotes are **powered** and **functional**.
4. The Complete Control remote is connected to the computer's **USB** port.
5. A clear **line of site** between the IR window of the 3rd party remote and the IR window of the Complete Control remote.



Learning a command

There are two ways to learn IR commands into a Complete Control file:

1. **Macro Window:** Best for single button learning.
2. **Learn Tab:** Best for learning an entire remote.

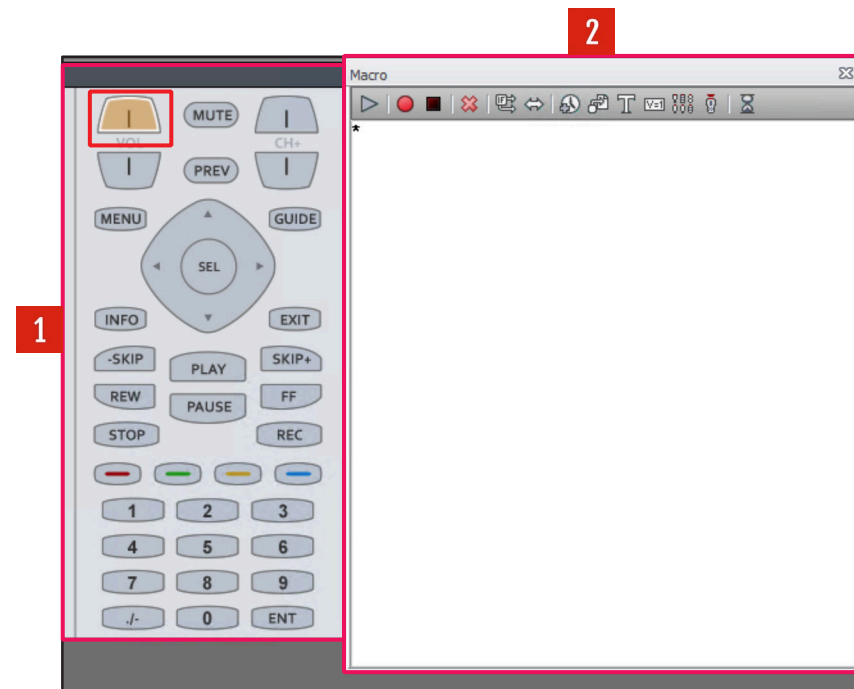


Macro Window: IR Learning

To learn IR commands through the **Macro** window, have the following windows open.

1. **Simulate** view window.
2. **Macro** window.

Click the hard button or corresponding button to a icon on the screen to select which button you want to learn the command into. When a button has been selected the Macro window will show an asterisk and any commands that are already assigned for the button. The example on the right shows the **Volume Up** button being selected.

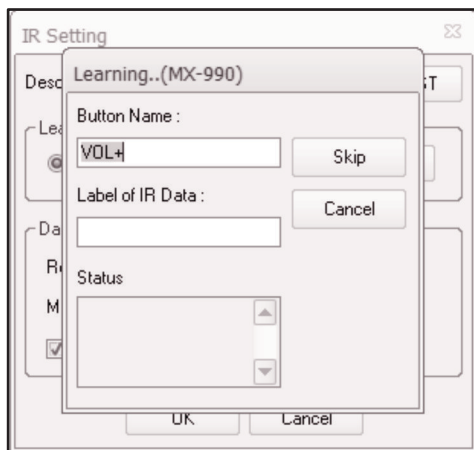
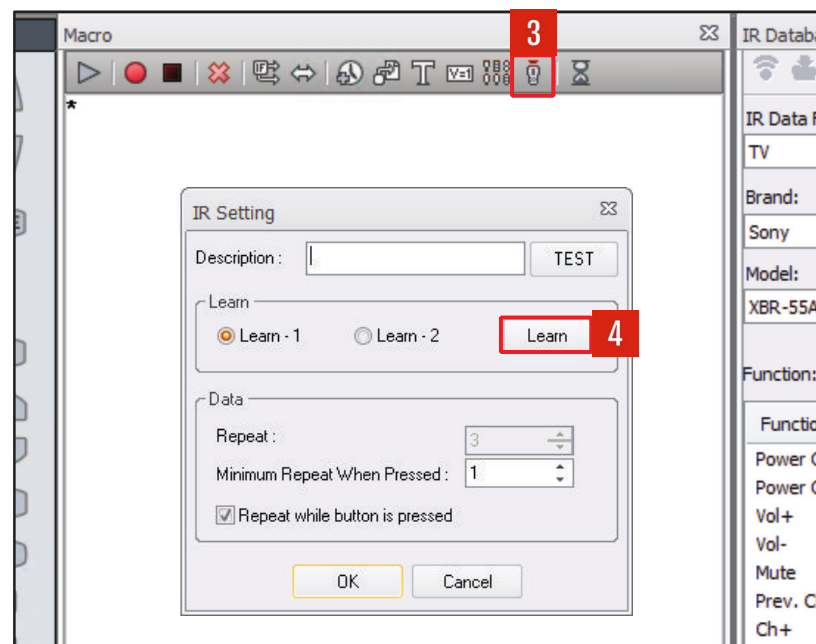


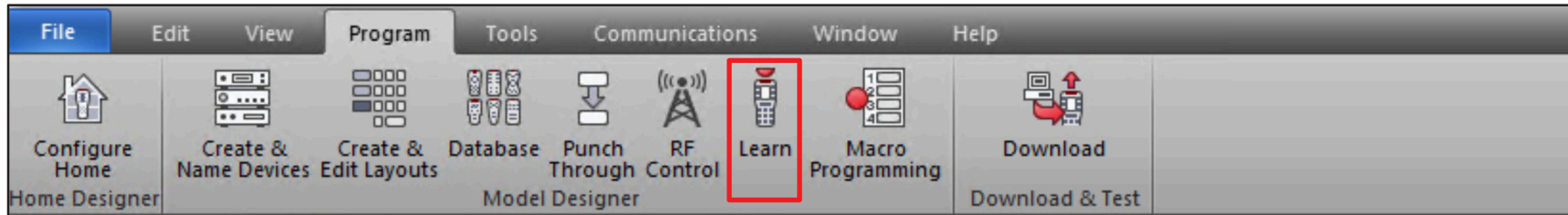
Macro Window: IR Learning (cont'd)

Now, with the button selected:

3. Click the **Learn** Icon in the **Macro Toolbar**.
4. Click the **Learn** button in the **IR Setting** window.

The **Learning** window will show the remote is ready to receive a command. Have the IR window of the 3rd party remote aiming at the IR window of the URC remote and press the button on the 3rd party remote you want to learn. The **Status** box will let you know when the command has been accepted and you will see the command in the **Macro** window.

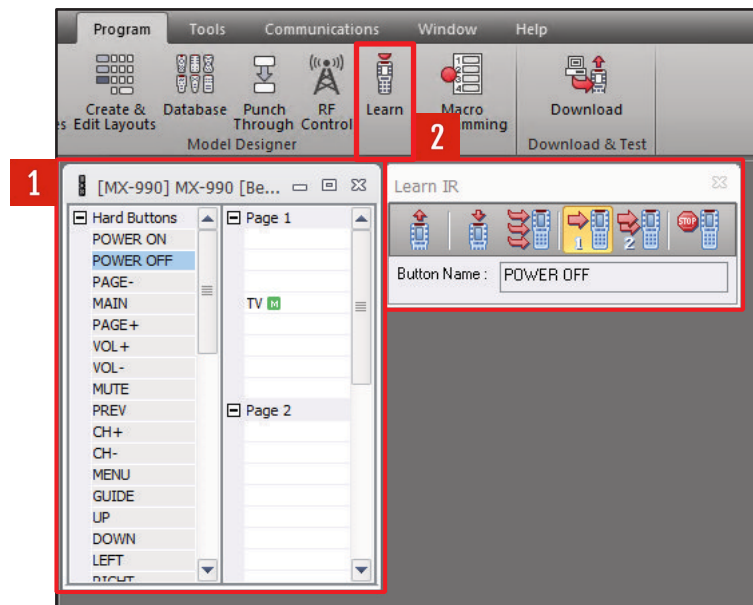




Learn Tab: IR Learning

To learn IR commands through the **Learn** tab, have the following windows open:

1. **Function** View Mode from the **View** tab.
2. **Learn IR** window. Opens after clicking the **Learn** tab from the **Model Designer** window.



Learn Tab: IR Learning (cont'd)

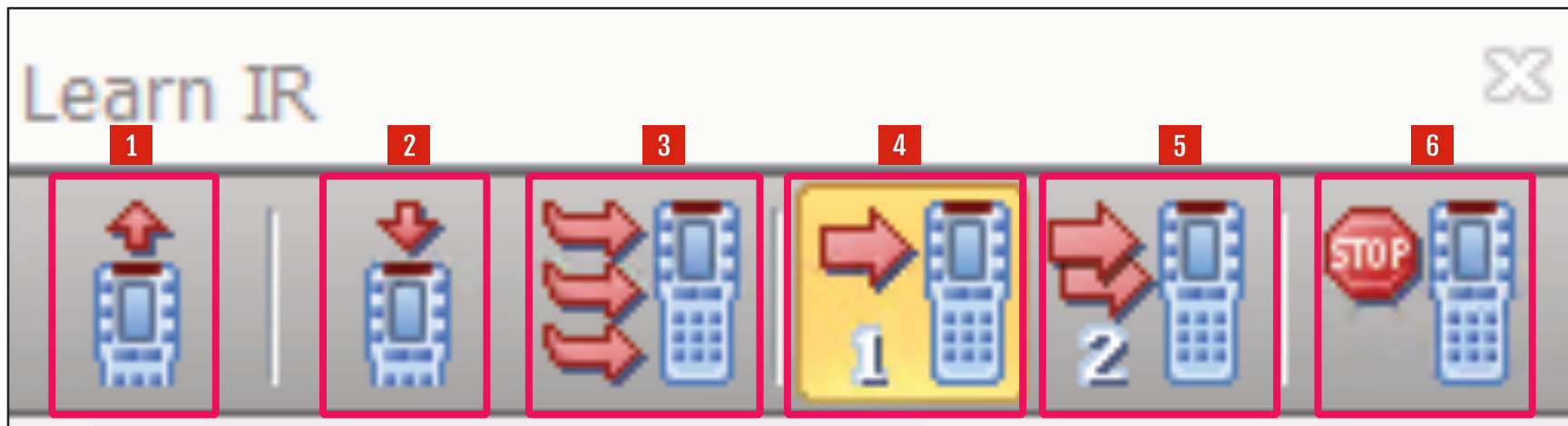
The **Learn IR** window has six icons to help learn IR commands from a 3rd party remote from the **Function** view window. These commands are:

1. **Test**: Test a command that is already loaded into the button.
2. **Learn**: Starts the learning of commands and will go through every button in the function list as it is learned.
3. **Next Button**: Allows you to skip and learn the next available command in the Function list.
4. **Learn 1**: Select to learn a **Single Tap** IR command. The most common type.
5. **Learn 2**: Select to learn a **Double Tap** IR command. You will be prompted to learn every code twice.

“ Useful for devices that use commands like the Philips RC5 togglebit protocol where one button can send two commands.”

6. **Stop**: Stops automatic cycling of learning commands in the Function list.

Once you click on the **Learn** icon, have the 3rd party remote IR window face the IR window of URC Complete Control remote and cycle through each command as needed. When finish, click **Stop**.



Using Logic Functions

Complete Control has the ability to create logic functions through the use of **Variables** and **Conditional Logic**. This can give a Complete Control remote the ability to do automated routines or perform task under certain conditions. While there are a infinite capabilities with using logic functions, this manual will show how to implement logic commands that are available. Depending on the Complete Control remote you have, it may or may not have all the logic and variable functions available.



What Are Variables

Variables allow you to track when a particular button has been pressed by getting assigned a value. Then, when another button is pressed, you can do something different based on the previous button press.

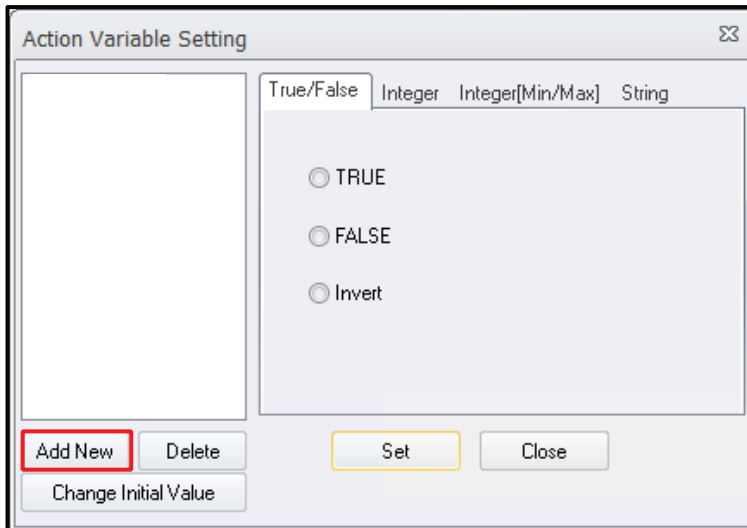


Creating a Variable

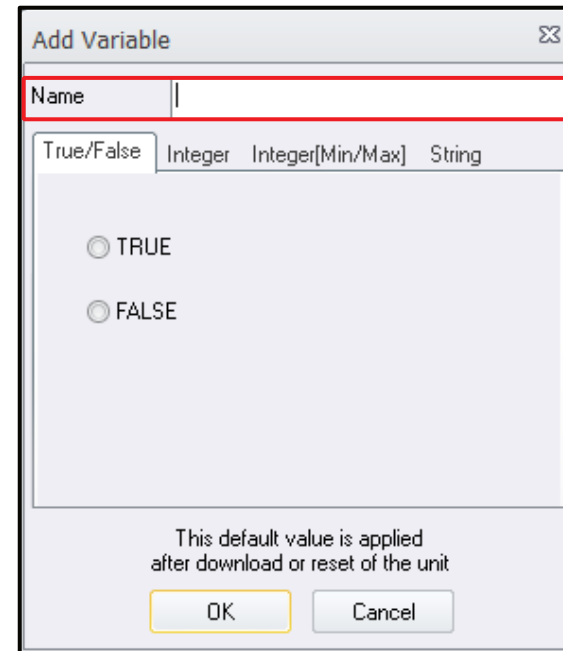
To create a **Variable**, click the **Variable** icon in the macro window.



This will open the **Action Variable Setting** window. Here you can **Add**, **Delete** or **Change the Initial Value** of a Variable. To add a variable click **Add New**.



**Your program may look different*



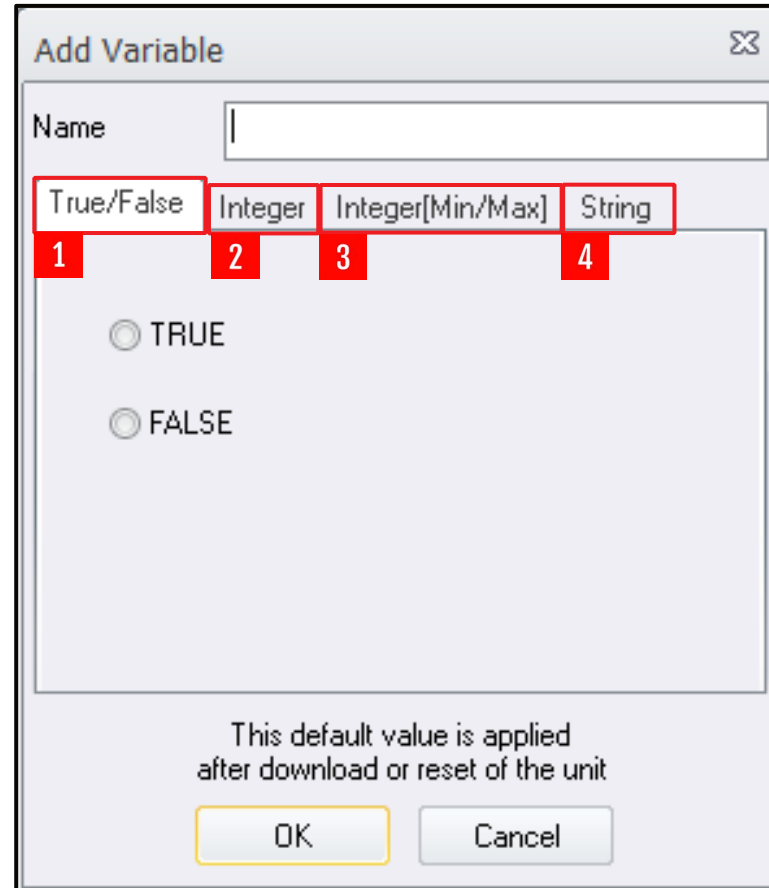
You can name this variable anything you want in the **Name** field. Multiple values that can be assigned to a **Variable**.

Creating a Variable cont'd

Values that can be assigned to are **Variable** are:

1. **True**, or **False**.
2. **Integer** (*specific number value*).
3. **Integer** with a min and max value set.
4. **String** that's either:
 - a. **Ascii**
 - b. **Hex**
 - c. **Decimal**

The programmer will need to decide what these variables mean based on their assigned value. Also, they will need to trigger actions based on **Conditional Logic** when used in a macro.

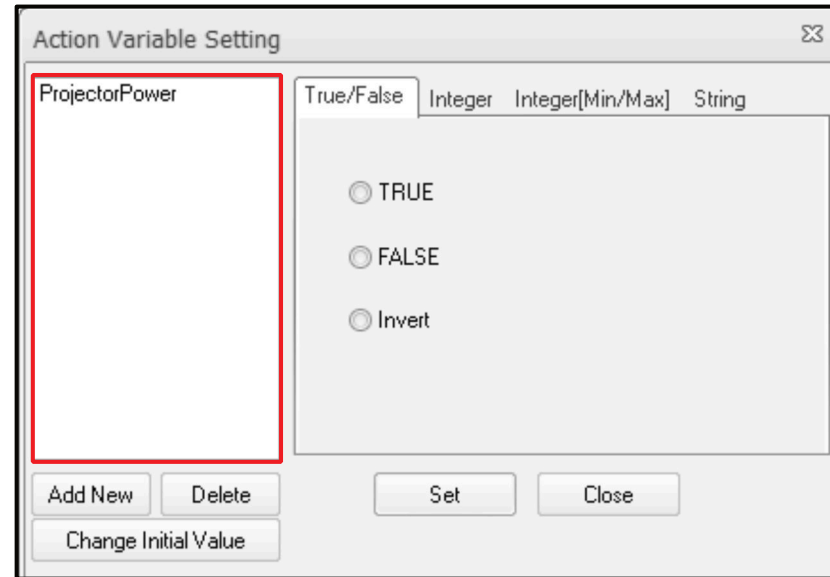


The screenshot shows the 'Add Variable' dialog box. It features a 'Name' input field at the top. Below this, there are four radio button options: 'True/False', 'Integer', 'Integer[Min/Max]', and 'String'. Each option is highlighted with a red box and a red number below it: 1, 2, 3, and 4 respectively. Under the 'True/False' option, there are two radio buttons labeled 'TRUE' and 'FALSE'. At the bottom, there is a note: 'This default value is applied after download or reset of the unit'. Below the note are 'OK' and 'Cancel' buttons.

“ Not all Complete Control remotes have all the above variables. “

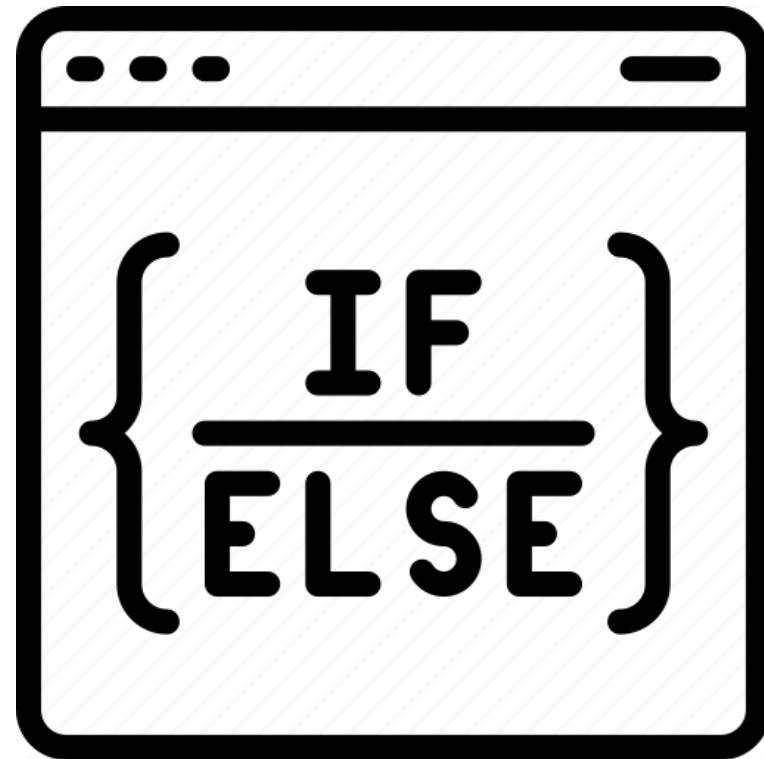
Creating a Variable cont'd

Once a Variable has been created you will see it in the **Action Variable Setting** window. You can create as many variables as you need and assign them to any macro to either set its value or run commands based on **Conditional Logic**.



What is Conditional Logic

Conditional Logic will change how a macro is executed based on the state of a **Variable** that is created and assigned to it.

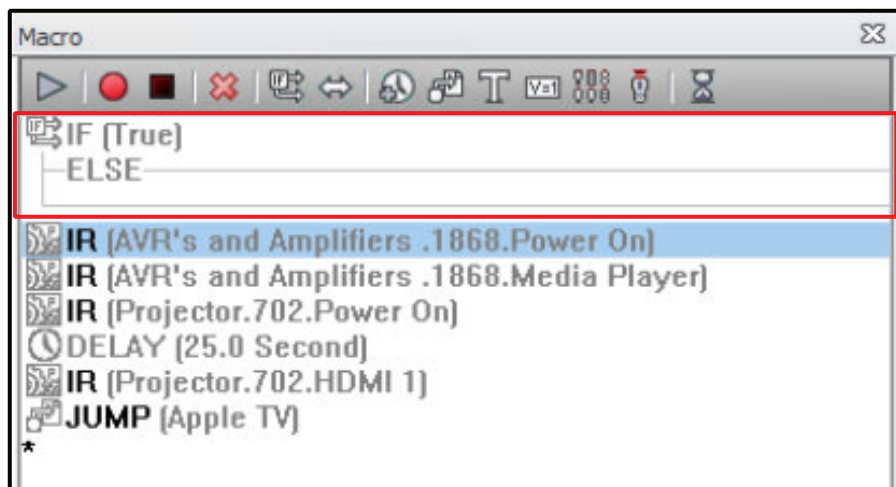


Creating Conditional Logic

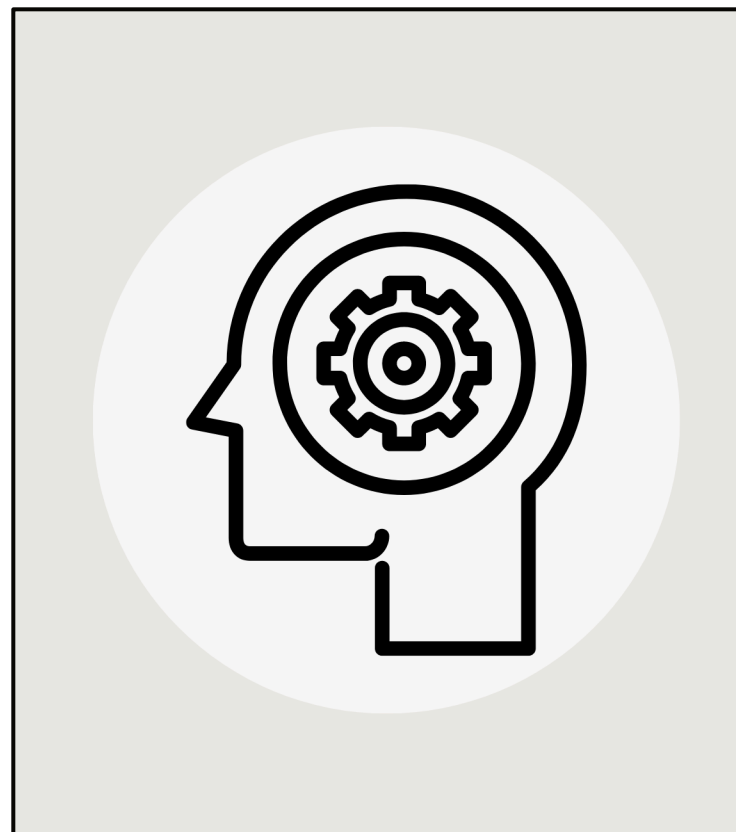
Conditional Logic involves the use of **IF,ELSE** function in the **Macro** window. To add it, click the **IF** icon.



This will add a **IF (True), ELSE** statement above any line selected.

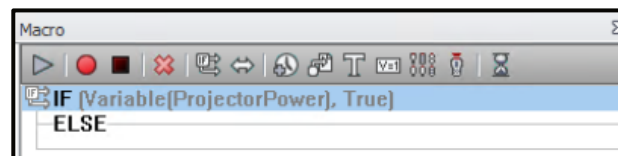
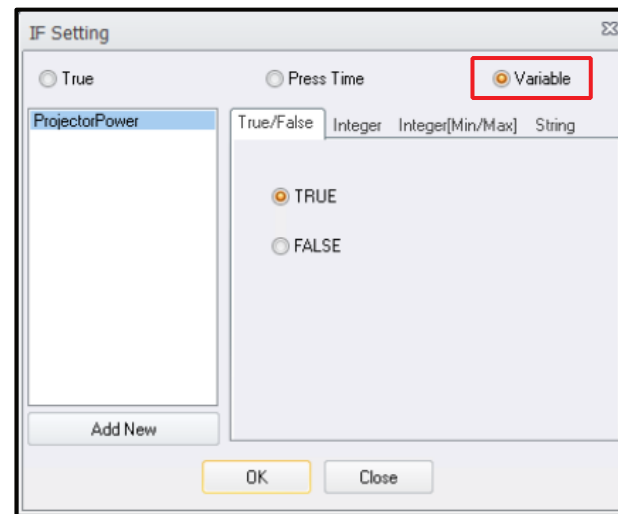
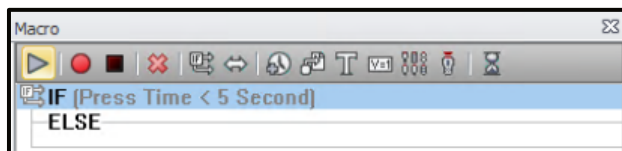
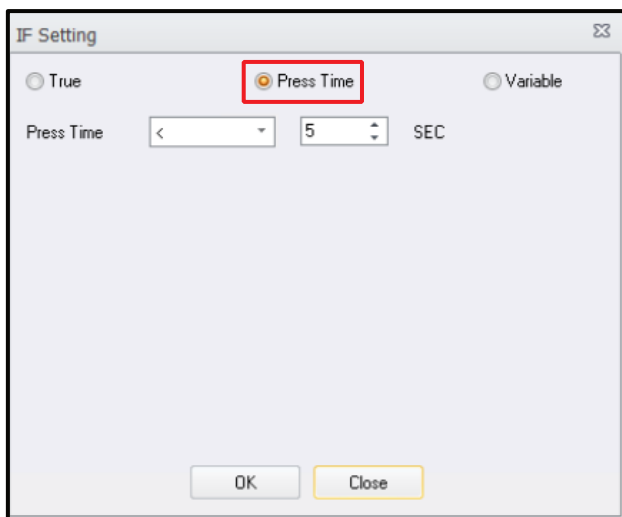


Before we add commands to the **IF,ELSE** function, there are custom functions that can be implemented in the **IF Setting** window. To access, double-click the **IF (TRUE), ELSE** line in the macro after it's been added.



Creating Conditional Logic cont'd

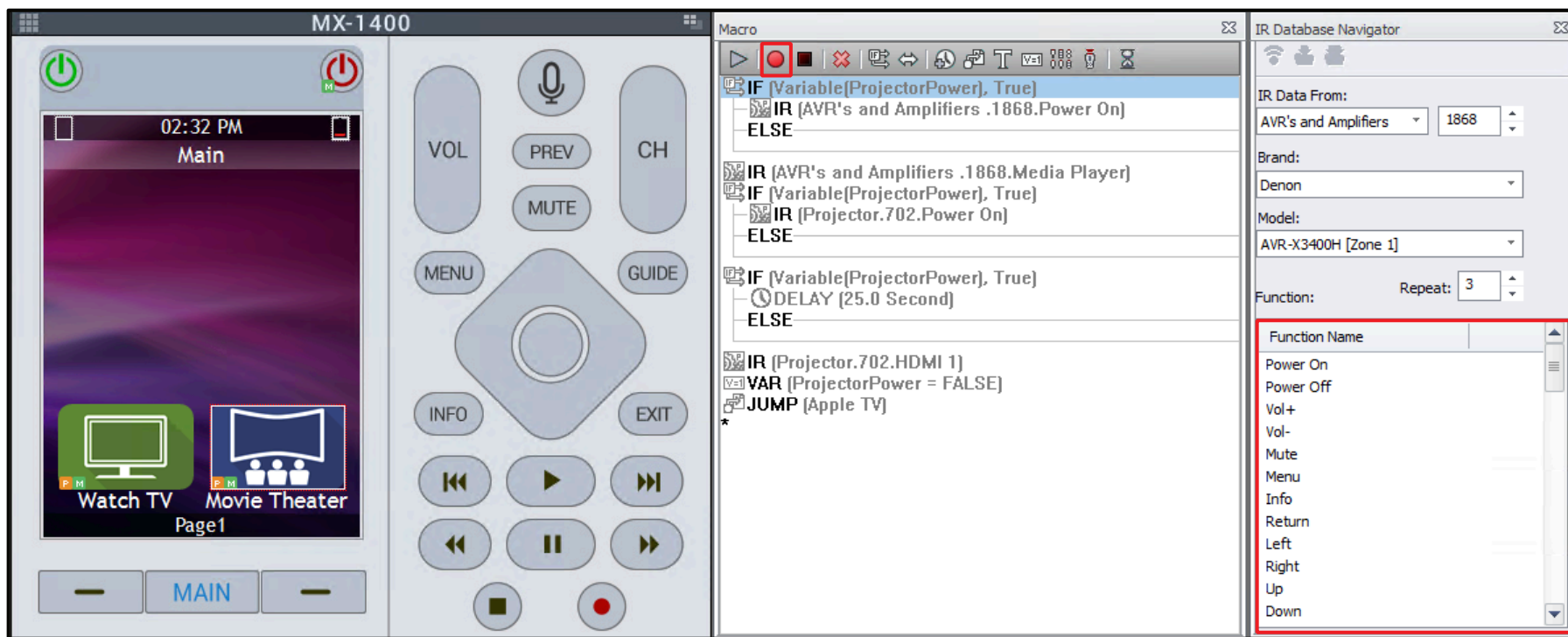
Press Time allows you to set an **IF** statement to run if a button is pressed for an allotted amount of time that is **Greater** than or **Equal**, **Less** than the amount selected. Using this, a macro can be based on how long the button is pressed and if pressed longer or shorter than specified, will run the **ELSE** commands.



Variable allows you to assign any created variable to the selected **IF** statement in the macro. This example shows the **ProjectorPower** variable being assigned to the selected **Conditional Logic** of an **IF,ELSE** statement.

Adding Commands to Conditional Logic

Adding commands to the **IF,ELSE** function is the same as adding commands to the macro. You can **Click and Hold** each command from the **IR Database Navigator** window, or you can use the **Record** button and select commands in the **Simulate** view mode. Make sure to place commands in the **IF** and **ELSE** sections correctly so that the logic functions as intended.



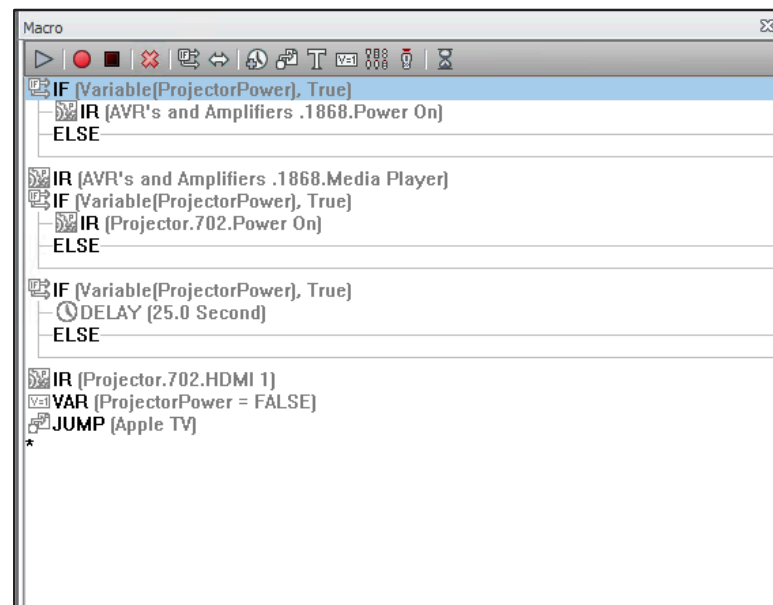
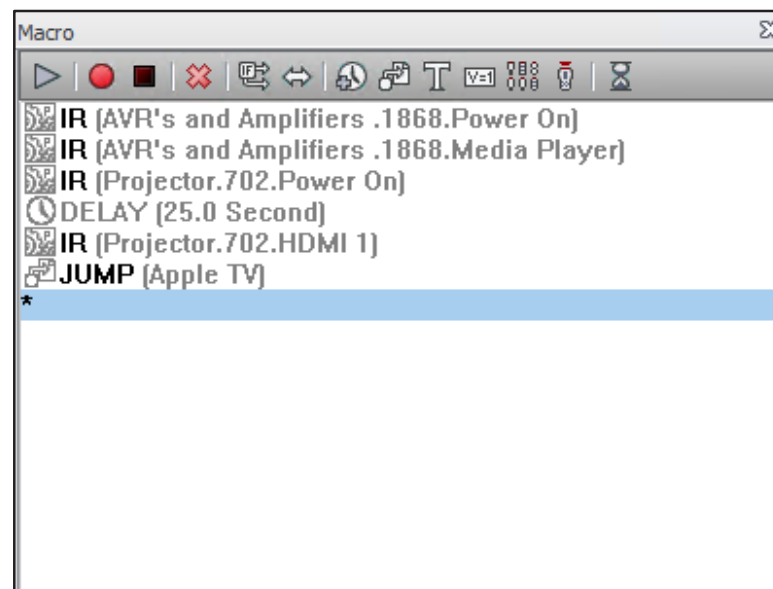
Variables & Logic Together

Use of **Variables** and **Logic** can enable multiple improvements to a macro. Here's an example that removes the delay and extra commands in a macro to turn on an Apple TV connected to a projector.

The macro to turn on the projector requires 25 seconds before the input is changed. Without variables and logic, every time this activity is selected, there would be a 25 second delay. However, with a **ProjectorPower** variable, if the projector is already on, it removes the **DELAY** and **On** commands.

Don't worry if this seems confusing, let's break down what is happening in this macro and how it's created.

**No Variables or Conditional Logic*



**With Variables and Conditional Logic*

Variables & Logic Together cont'd

In the first line, both a **IF** statement (*logic*) and a **Variable** is used. This variable is called **ProjectorPower** and looks at the state of the projector. If ProjectorPower equals True, meaning if the projector is turned off, then do the following command which is send the **Power On** command to the receiver. If the **ProjectorPower** variable was **False**, than the conditional logic statement will do **ELSE** which is nothing because no command is placed in the else area of this logic statement.

Now, there are additional commands in this macro that check the state of the projector before executing. This includes **Power On** for the Projector and the **Delay** function before the input is selected. If the ProjectorPower variable is True, these commands will be sent. At the end of this macro, the variable is set to **False**. Now, if this macro runs again, it will bypass all the commands under the **IF** statements because the **Variable** is now set to **False**. When using this type of logic, the **Power Off** button for the system should set the **ProjectorPower** variable back to **True** in its macro.

```

Macro
IF [Variable(ProjectorPower), True]
  IR (AVR's and Amplifiers .1868.Power On)
ELSE
  IR (AVR's and Amplifiers .1868.Media Player)
  IF [Variable(ProjectorPower), True]
    IR (Projector.702.Power On)
  ELSE
    IF [Variable(ProjectorPower), True]
      DELAY (25.0 Second)
    ELSE
      IR (Projector.702.HDMI 1)
  VAR [ProjectorPower = FALSE]
  JUMP [Apple TV]
  *
    
```

*“ In this example **True** means **off**. However, this could be programmed so **False** means **off**. Make sure to follow the logic you have in place“*

Toggle

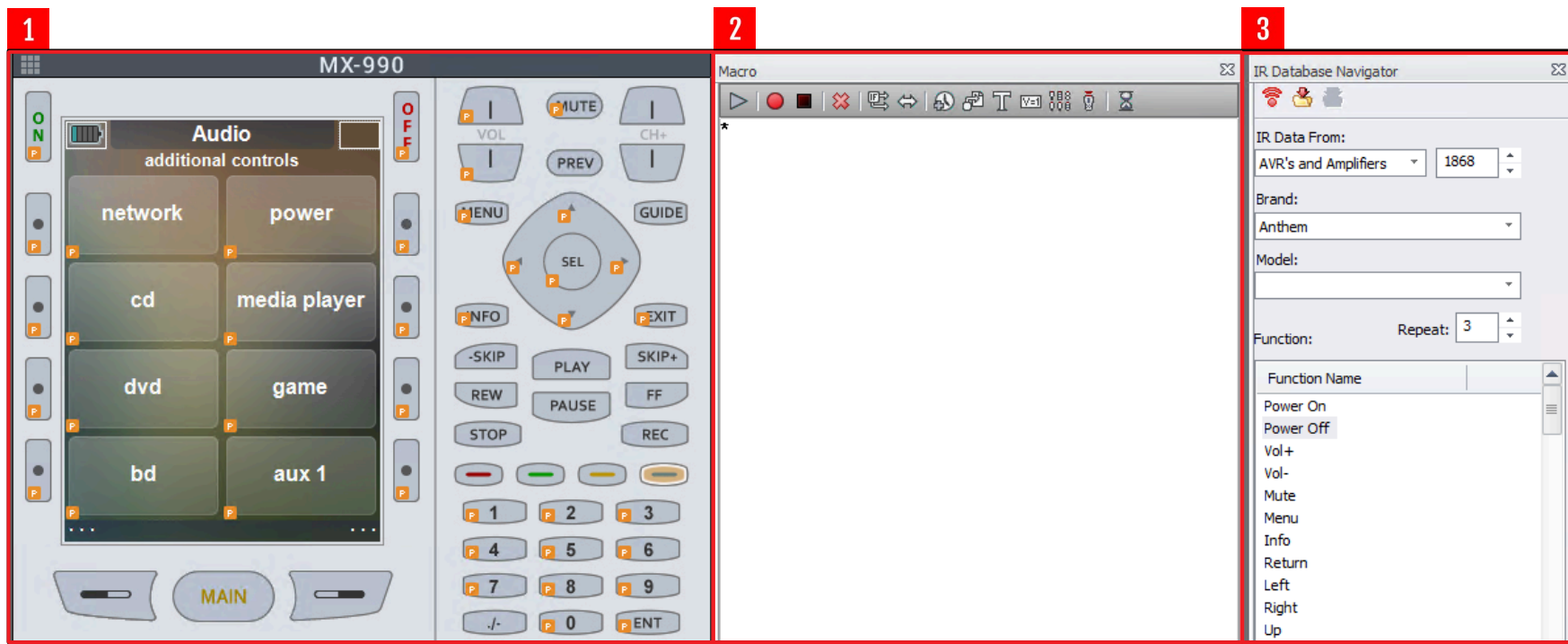
Using the **Toggle** function will allow you to cycle through multiple commands with a single button. This is useful, for example, if you want a single button on a remote to select multiple sound fields from a receiver. In this section, we will show you how to setup a toggle function for a remote.



Setting Up

First, you will want to open the following windows:

1. **Simulate View** window.
2. **Macro** window.
3. **IR Database Navigator** window.



**Your remote may look different*

Creating A Toggle Function

A **Toggle** command can be added to any **Button** or **Icon**. In this example, we will show how add a toggle button to cycle through sound modes on the receiver. To do this:

1. Double Click the **AV Receiver** in the Simulate window.
2. Select the **Blue** Button in the same window.
3. Click the **Toggle** button in the Macro window.

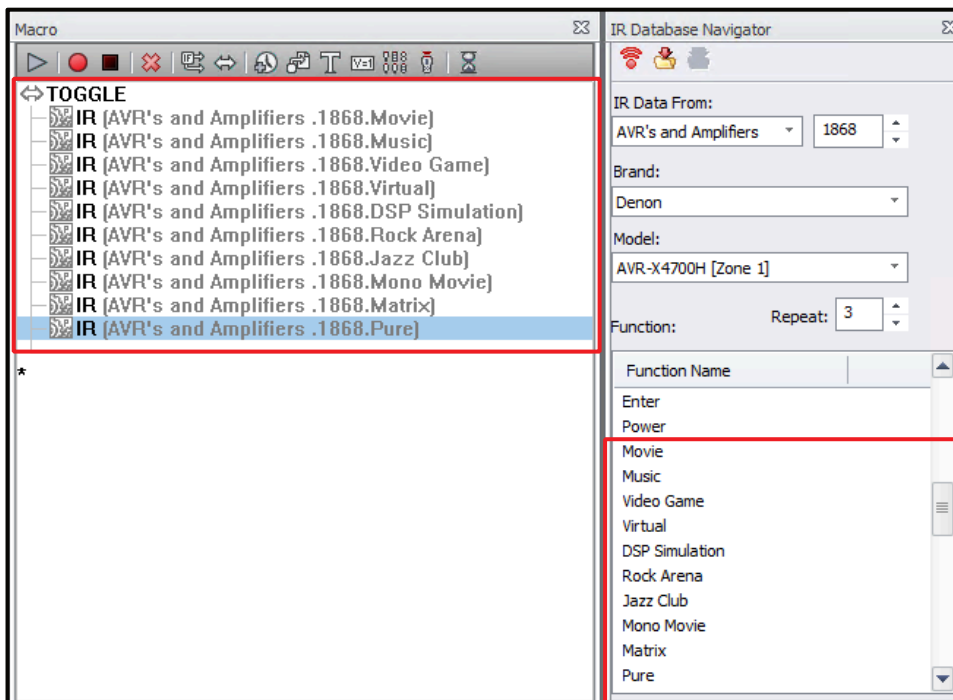


**Your remote may look different*

Creating A Toggle Function cont'd

In the **IR Database Navigator Window**, find your receiver. Then, under the **Function Name** panel, you can now select multiple sound fields that you want the new Toggle button to cycle through. You may wish to add all of them or just a few.

These commands can be added by clicking and holding each sound field that you want to add and sliding them under the **TOGGLE** function in the **Macro** window. You can also use the **Record** function to add commands, just make sure to click in the Toggle area first before selecting a sound field.



“ The button will cycle in the order in which the commands are entered. If the remote is ever restarted, it will start the cycle from the beginning. “

Once the commands for the toggle button have been added, you can download to the remote and use the button to cycle through all the commands.

Delay

Using a **Delay** will allow a macro to execute with a break or pause between commands. This is useful for items like a projector that may need a delay before accepting a input command due to the amount of time it takes to turn on. A delay may also be needed due to commands being sent to quickly back to back and not registering with a device. This section will show how to add a delay.

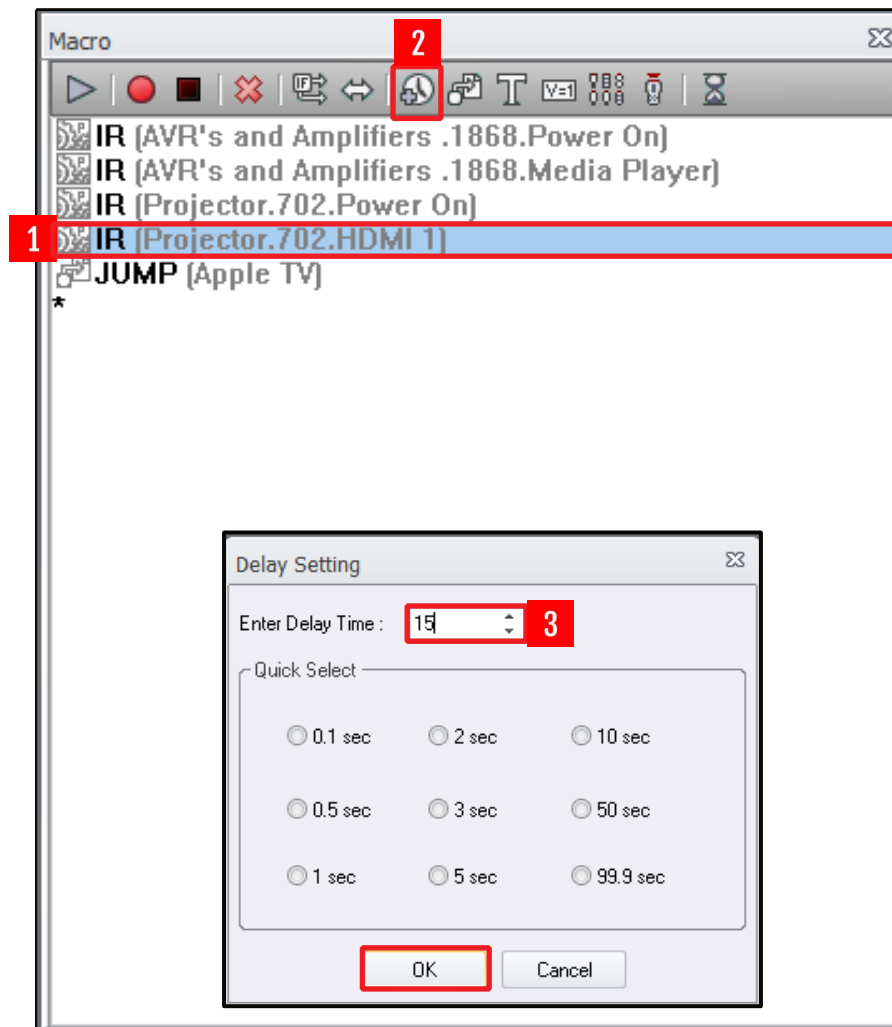


Adding a delay to a macro

Here is an example of a macro that needs a Delay. The projector takes 15 seconds to accept a command after it turns on. To add this Delay:

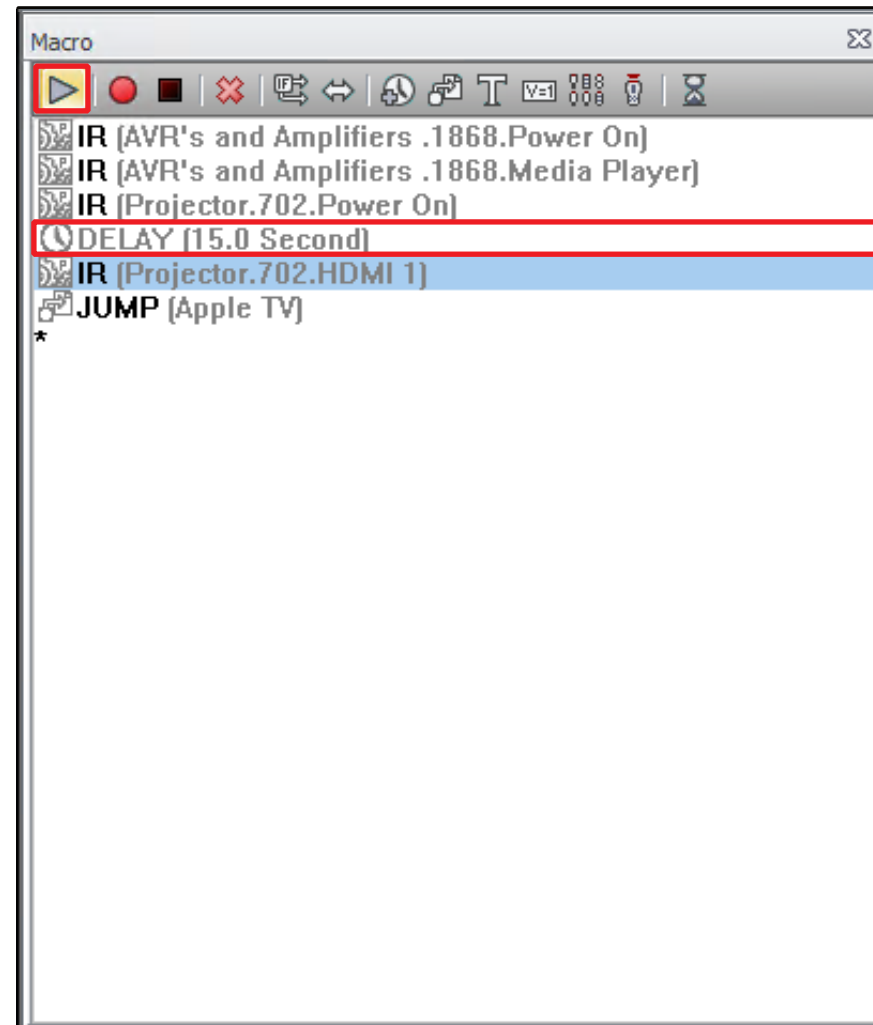
1. Select the command that the Delay should come **before**, in this case it is the input command.
2. Select the **Delay** function. This will pop-up the **Delay Setting** window.
3. You will notice there is no 15 second delay choice in the quick select panel. You can manually enter any delay time between .1 to 99.9 seconds. To manually add a 15 second delay, enter **15** in the **Enter Delay Time** field.

You can now click the **OK** button and this will add a delay after the projector powers on so that it will accept the input command.



Adding a delay to a macro cont'd

Once the **Delay** is added to the macro, it should be tested to confirm that it is working properly. Use the **Play** button to test the macro. This way you can adjust the delay if needed before you download to the remote. If you need to make changes, double-click the **Delay** line in the macro. Once the macro is working properly, download the file to the remote.



Text

Using the **Text** function in a macro will allow text to be displayed when a button is pressed. This can be useful with logic statements if you want to check the status of something when an icon is pressed or just to simply display text over the icon. The section will show you how to apply the Text function in a macro.

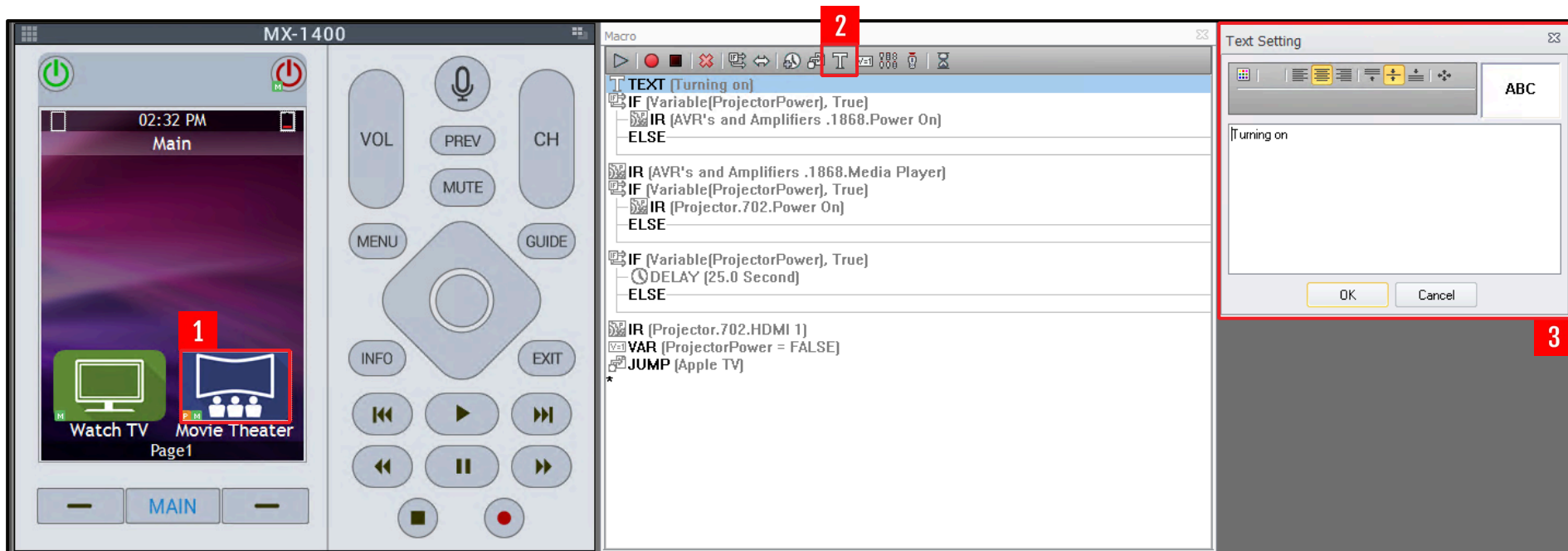


Creating a Text Function

The **Text** function can be added to any **icon** on screen. To do this:

1. Select a **button** on the **screen** that you want the Text to show when **pressed**.
2. Select the **Text** function in the **Macro** window.
3. This will cause the **Text Setting** window to display.

In the **Text Setting** window, you can enter and modify text. Once you have entered the text, click **OK**. Make sure the **Text** function is at the beginning of the macro so it will show when the button is pressed. This function **only** works when the button is **pressed**. You can also incorporate Text to display under certain logic conditions. To learn more about logic commands, click [here](#).

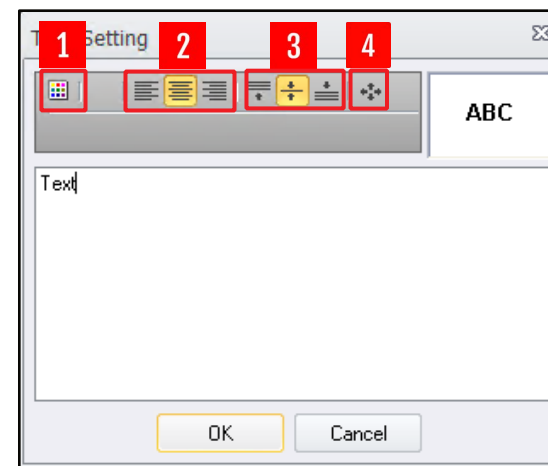


**Your remote may look different*

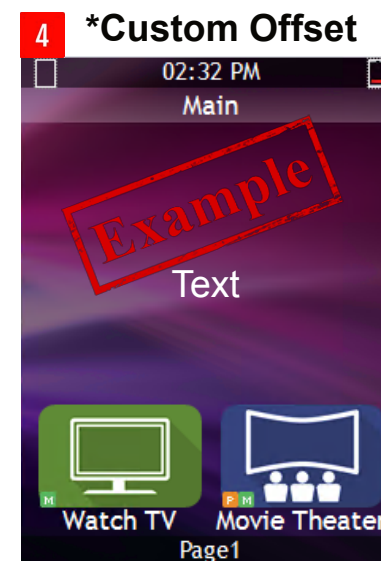
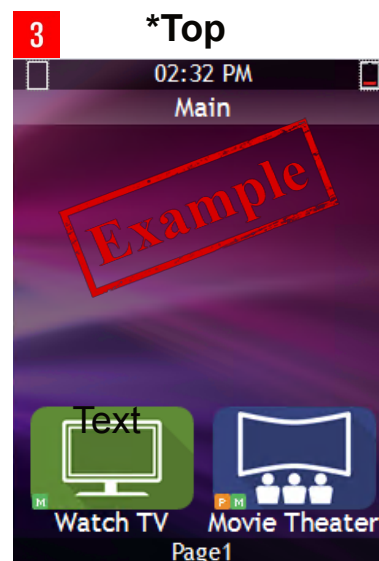
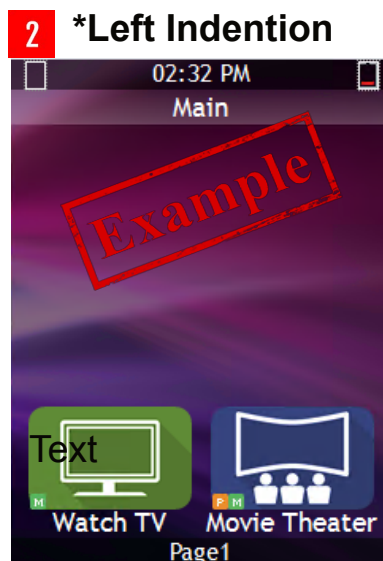
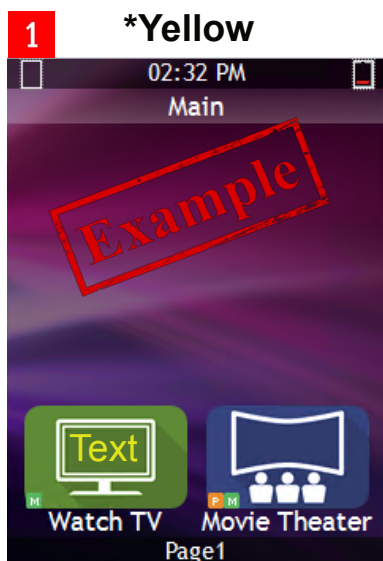
Modifying the Text

Various aspects of the text can be changed. This includes:

1. **Color**
2. **Indentation** (*Left, Center, Right*)
3. **Height** (*Top, Middle, Bottom*)
4. **Custom Offset** (*Show anywhere on screen*)



*“Offset values in **Custom Offset** are not in the same location as **Snap Points** of **Free Form** remotes. Offset X:0 and Offset Y:0 will be the center of the icon.”*



**Your remote may look different*

Sleep Timer

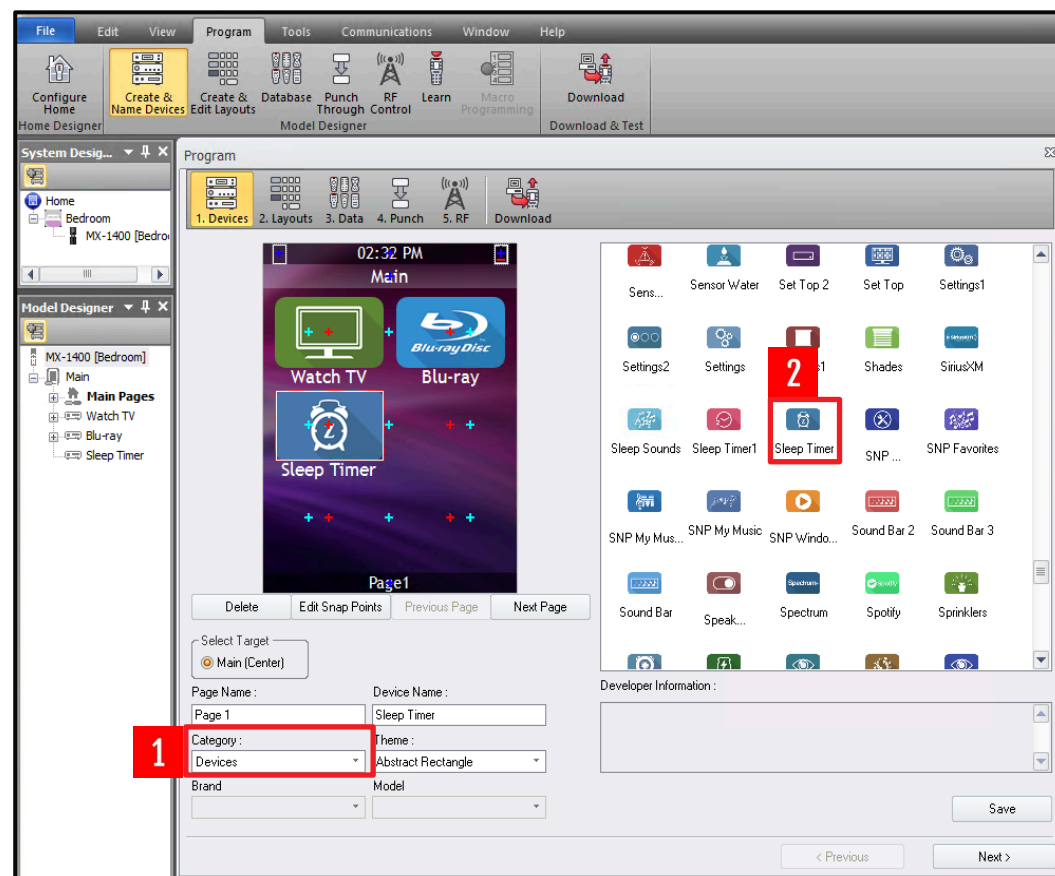
The Sleep Timer feature allows the user to determine when a macro executes. This can be set by the user to run a macro in as little as 5 minutes to a maximum of 90 minutes. This section will show how to add a Sleep Timer.



Setting up the Sleep Timer

The **Sleep Timer** icon will need to be added to a page on the remote. To add the icon:

1. In the **Create & Name Devices/Devices** tab change **Category** to **Devices**.
2. Add the **Sleep Timer** icon to a viewable page by clicking and holding it, then move the icon over to the preview page.

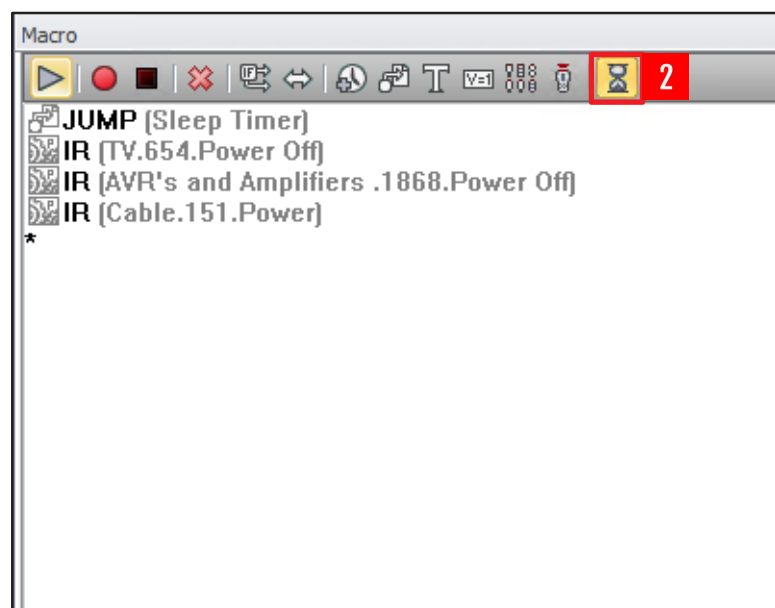


“ Your remote may look different.”

Configuring the Sleep Timer

A **Sleep Timer** can be assigned any command that is setup in a remote. You can use the **Process To Create A Macro** section of the programming manual to help configure this for each remote. Once the commands are added to the macro window of the Sleep Timer you will need to activate the Sleep Timer function. To add it, have the **View Mode** and **Macro** window open, then:

1. Select the **Sleep Timer** button from one of the view modes. This will show all the commands you have added to the Sleep Timer.
2. Select the **Sleep Timer** icon in the **Macro** **Toolbar** window. This will add the function.



*“ Notice in this macro, the cable box does **NOT** have discrete power on and off commands. It may be necessary to setup a **Variable** and **IF** statement to track and control the power state of a device . This way the system will know if it needs to execute the power command for that particular device. To learn how to setup a **Variable** and **IF** statement click [here](#).”*

Using the Sleep Timer

Once the updated file with the sleep timer has been downloaded to the remote, all the client will need to do is press the button. Once the Sleep Timer has been selected the client will see the sleep timer option pop up automatically. To set the Sleep Timer:

1. Select a sleep time between 5-90 minutes by using the - and + sign on the screen.
2. Select the **OK** button to confirm selection.

This will run the macro at the selected time limit. Make sure to setup or position the remote so that it can control all the devices that it will need to communicate to if using line of sight.



Editing Snap Points

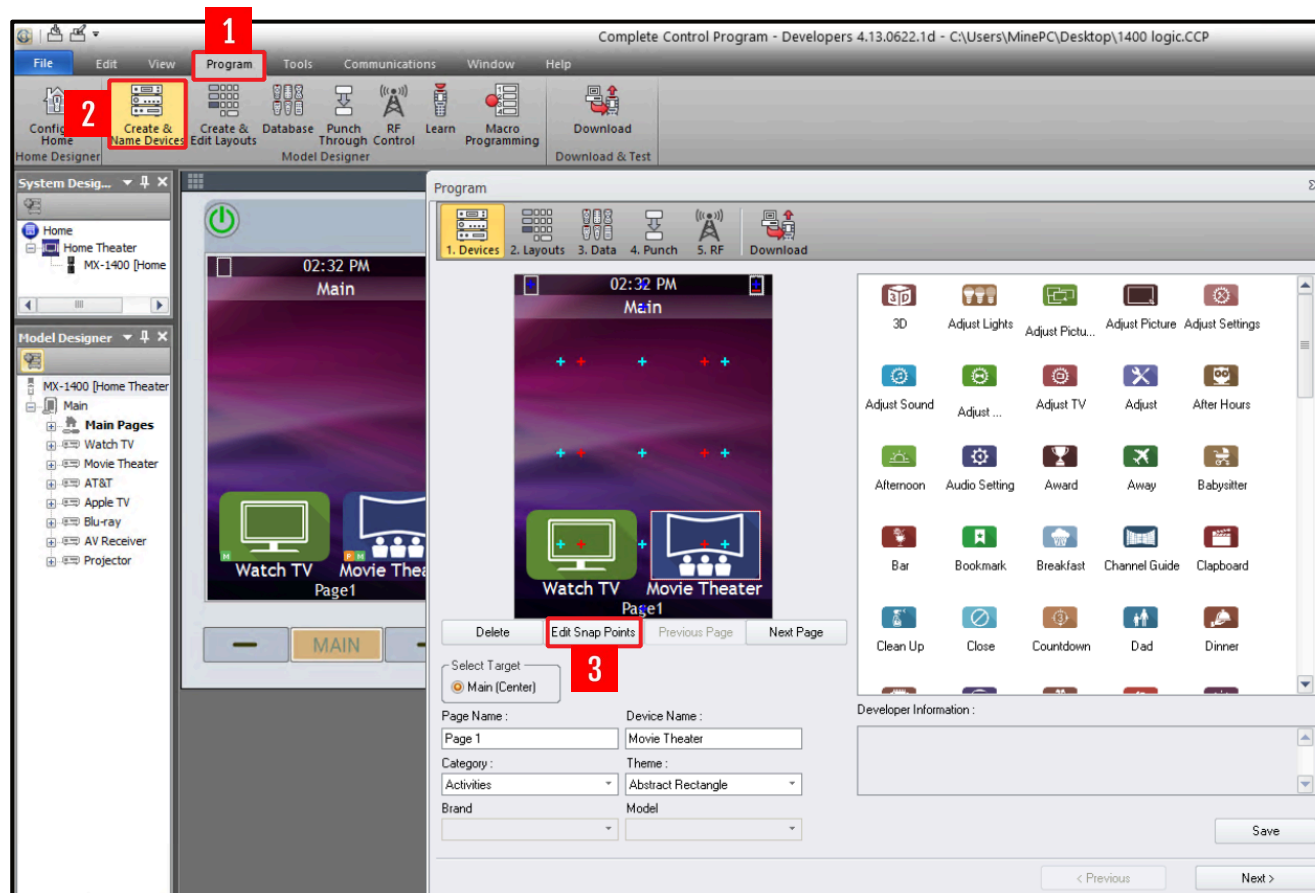
Free Form remotes offer the ability to customize its interface by allowing the display to have an icon placed anywhere on the screen. Editing these **Snap Points** will allow a programmer to specifically place icons in predetermined areas. This is completely optional but it will allow you to place icons anywhere on the remote display.



Accessing the Edit Snap Points window

To access the Edit Snap Points window:

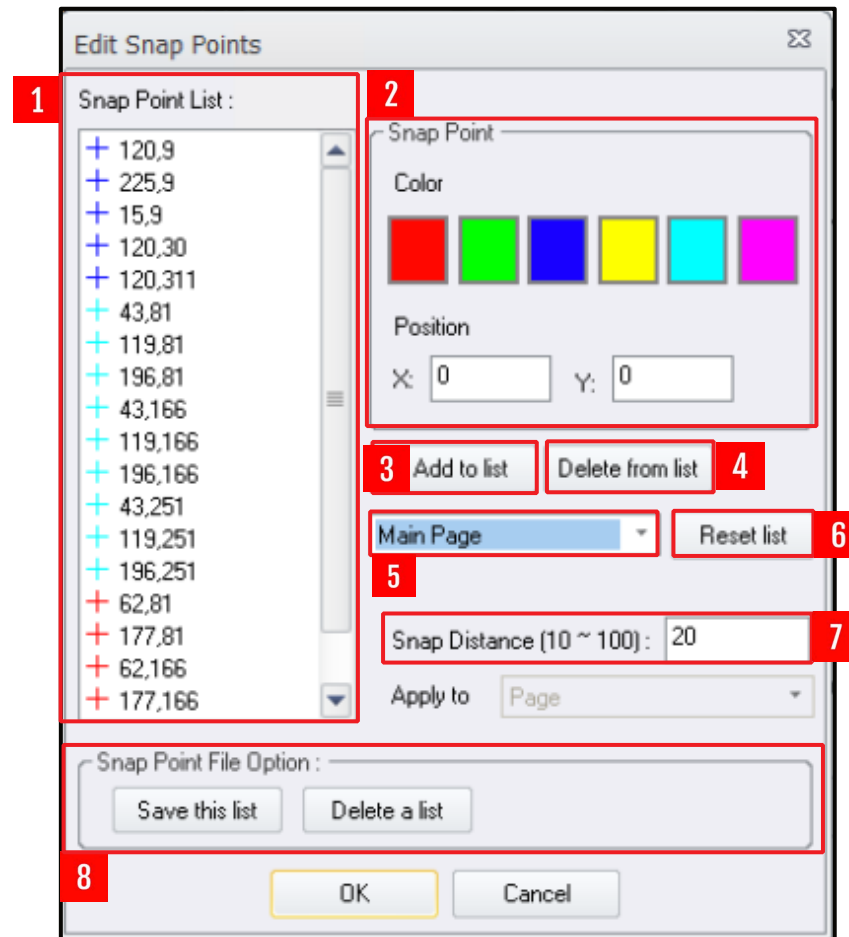
1. Click the **Program** tab.
2. Click the **Create & Name Devices** icon.
3. Click the **Edit Snap Points** button.



Edit Snap Points Window

The **Edit Snap Points** window features information and customizing options. These include:

1. **Snap Point List:** Where current Snap Points are located on the Free Form display.
2. **Snap Point:** Sets the color and position of the Snap Point being added to the Snap Point List.
3. **Add to list:** Based on the information in the **Snap Point** panel, will add a Snap Point to the display.
4. **Delete from list:** Will remove a Snap Point from the **Snap Point List**.
5. **Page Select:** Selects page to edit Snap Points.
6. **Reset list:** Resets the entire Snap Point list on a selected page.
7. **Snap Distance:** Selects how far the distance to Snap Point the icon has to be to automatically snap to the set point.
8. **Snap Point File Option:** Snap Points List can be saved to use on other files by clicking the **Save this list** button or remove a list using the **Delete a list** button. Once finished, click **OK**.



Finalization of Snap Points

Once you finished editing all the snap points, you can look at the preview window in the Create & Name Devices menu and see the Snap Points. Use this to create custom icon locations on all Free Form Remotes.

