

URC DRIVER V1.0

FOR MIRAGE AMPLIFIER

COMPATIBLE WITH ALL MIRAGE AMPLIFIERS



M-801E



M-401E



M-120E



MIRAGE

THE SOURCE OF PURE SOUND

Quick Start

To quickly setup a system, follow these steps:

1. Add the driver for use in the URC Total Control environment.
2. Enter the IP address of the MAS.
3. Ensure that the drivers are bound properly according to the [Configuration](#) section below.

Overview

The Autonomic URC v1.0 amplifier driver allows for convenient programming of all models of the Mirage amplifiers in the URC Total Control System environment.

The Autonomic Mirage Amplifier system offers up to 32 zones of audio in a Total Control environment using one or more mirage amplifiers.

Features

Version 1.0 of the mirage amplifier driver integrates fully in the URC Total Control system. It offers functionality for each output zone including event triggers and queries of key properties. In addition, select amplifiers can play content directly from Autonomic MMS servers over the TCP-IP network.

Getting Started

Please verify that you are running the latest version of URC Accelerator software and the Mirage Amplifier firmware is up to date before proceeding.

You can check and update your firmware version on the MAS by going to the Firmware tab on the server's web configuration

(<http://server-ip/config/Software.aspx>) or from the Autonomic

Dealer Zone company account associated with the MMS

(<http://dealerzone.autonomic-controls.com>). The latest URC Accelerator

software is available from the URC Dealer Portal for authorized

URC dealers. If you're not an authorized dealer, please contact URC:

http://www.universalremote.com/contact_us.php

Download the Drivers

All Mirage Amplifier control drivers are available on the product page on the SnapAV website or on the Autonomic Downloads page, found at http://www.autonomic-controls.com/support_downloads.php.

To download the URC v1.0 Amplifier Driver Suite, simply click on the link labeled **URC Amplifier Suite v1.0** to start the download of the zip file.

INSIDE THE DOWNLOAD:

- Autonomic Amp v1.0.tcm

Details of Driver Communication

The central controller (MRX-8, MRX-10 and others) handles all communication with the MAS and is responsible for relaying client commands. Each URC client (such as TKP-7600, TRC-1080 and others) is capable of independently controlling all the audio outputs on the MAS.

The MAS driver contains all the outputs available on the server, which are capable of being mapped in the URC environment to different rooms or inputs of another device.

Configuration

REQUIREMENTS

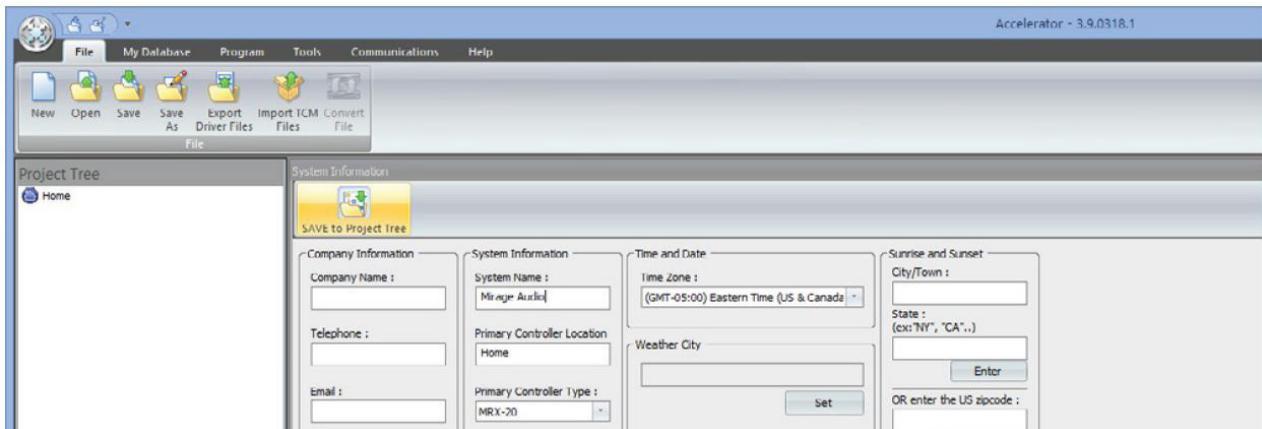
This action informs the MAS server of the available outputs based on the drivers present in the URC Total Control System program.

- TCM file: contains one-way and two-way driver including client interfaces
- URC Accelerator software
- Total Control System Hardware
- Mirage Amplifier (M-801e, M-401e and M-120e)

CONFIGURING THE TOTAL CONTROL SYSTEM IN THE URC ACCELERATOR

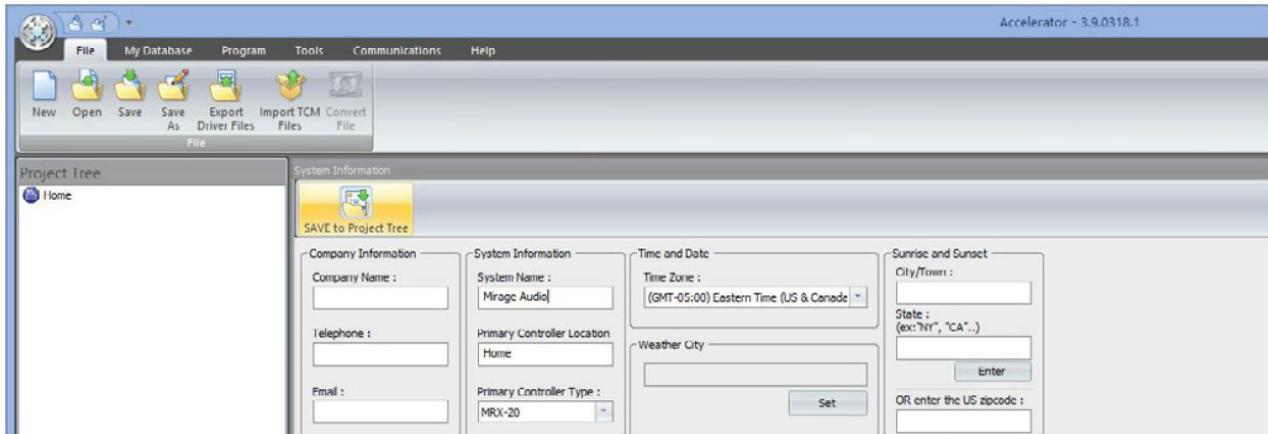
Note: The following steps illustrate a basic configuration of URC Total Control System for Autonomic MAS. For more details or advanced setups, please refer to URC Documentation.

1. Open the URC Accelerator software. Go to **File tab > Import TCM Files**. This will open a browse dialog box. Navigate to the location where the .tcm file is saved and click on **Open** to import the file.



Important: Please restart the URC Accelerator software by closing and re-launching it.

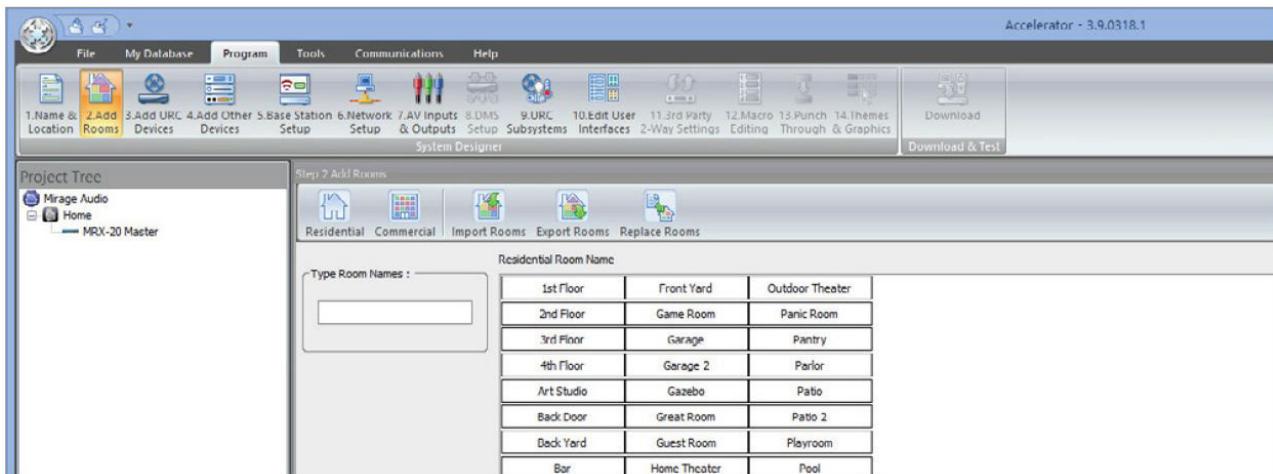
- On relaunching the URC Accelerator software, set up a new project by going to **File tab > New**. This will automatically switch to Program tab with 1. Name & Location selected. Fill out Company Information and System Information sections with desired data. Choose the Primary Controller Type depending on your hardware.



If unsure, please contact URC support at:
http://www.universalremote.com/contact_us.php

Click on **Save to Project Tree**. A dialog box saying Sunrise/Sunset information is invalid will show. Click on **OK**.

- The **Add Rooms** tab will open under **Program**. Add additional rooms depending on your setup.

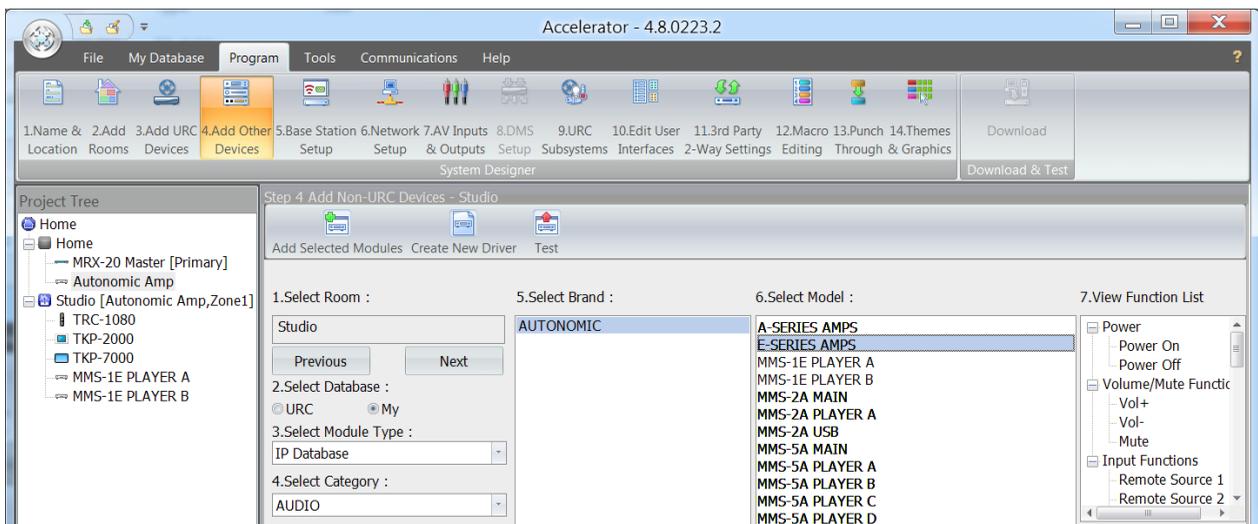


4. Go to **Add URC Devices**. This is for adding the existing URC Total Control devices. Select the room in the **Current Room** menu on the left. Double-click on a device, or click on **Add to Room** button on top left to add a device. For some devices, a dialog box opens up showing advanced settings for the device. Unless advanced setup is needed, leave default options selected and click on **Apply**.



5. Go to **Add Other Devices**.
 - a. In the left pane under **Select Room**, select the desired room to add the device to.
 - b. In **Select Database**, choose **My**.
 - c. In **Select Module Type**, choose **IP Database**.
 - d. In **Select Category**, choose **Audio**.
 - e. In **Select Brand** pane, choose **Autonomic**.
 - f. In **Select Model** pane, choose A-Series Amps or E-Series Amps to add one at a time.

Note: One instance of the driver can run an amplifier system up to 32 zones.

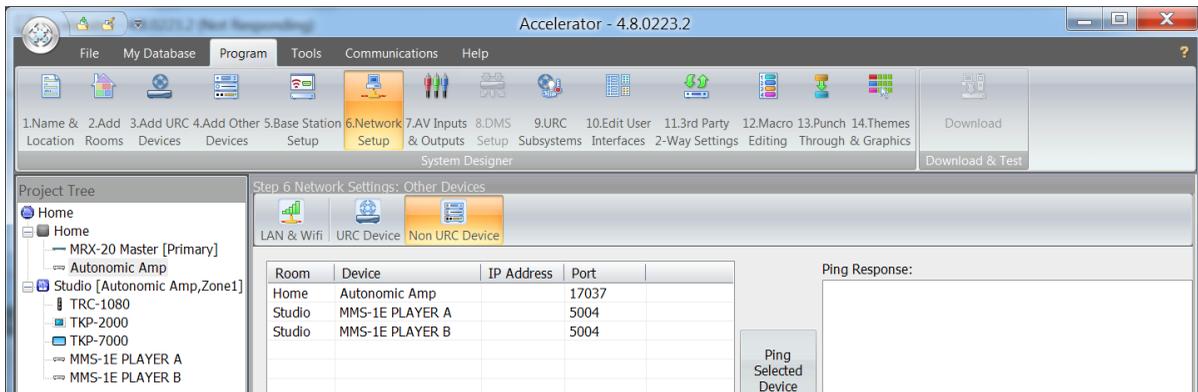


Note: To edit the names of your added devices, right-click on the device > **Rename**. These are the names which show up in the menus and clients.

Tip: If a display is connected, the MRX-20 gets stuck on loading screen when a new project is pushed. To resolve this, a monitor needs to be added to the project. This can be added to any room. In **Add Other Devices**, pick **Database: URC > IR Database > TV Category >** and select a monitor from any brand (for instance, **Samsung** if you have a Samsung monitor) > pick any model, and add to project. Rename the device to **Monitor** for easy recognition. See step 7 for configuring this monitor input.

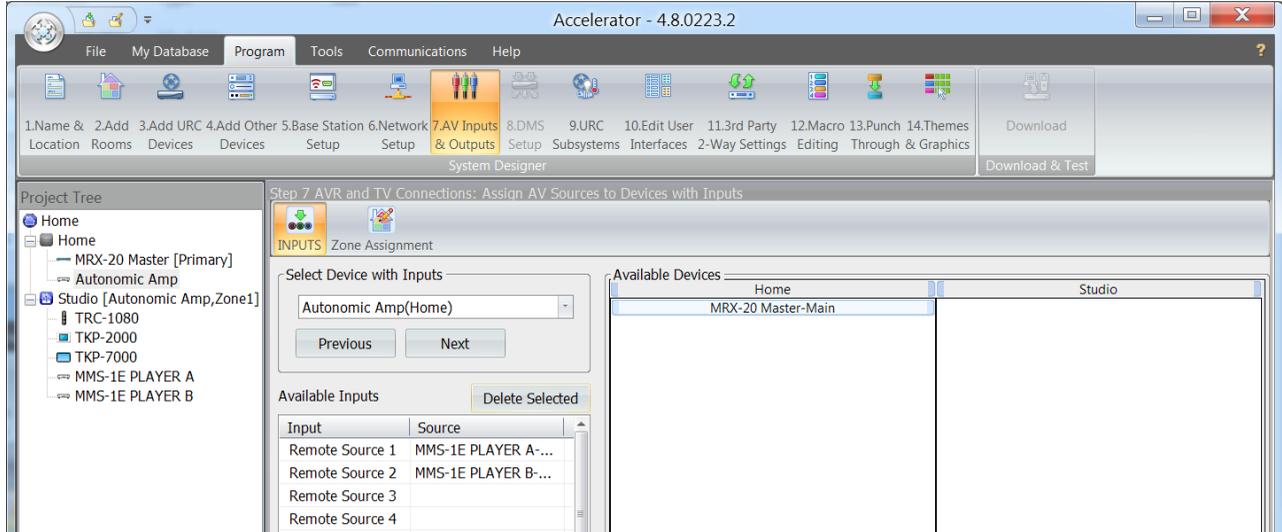


6. Go to **Network Setup**. This section configures both URC and non-URC devices (in this case, Mirage Amplifier) with the current network address. As a prerequisite, ensure all the devices are on the network with desired static or DHCP configuration.
 - g. Click on tab **URC Device**. This will show all the currently added URC devices in the project in the left pane. In this pane, click on the device you want to configure the IP address for. Then click on the **Refresh** button. This might take a small amount of time, after which it will show you the discovered URC devices on the current network of currently selected type in the right pane. Pick the device in the right pane with the correct IP address. Then click on **Assign** button. If the devices are not discovered, please ensure the actual device is on the network and is switched on. Alternatively, you can also manually enter the MAC address and IP addresses of your devices in the left pane.
 - h. Click on tab **Non URC Device**. This will show all the currently added non-URC devices in the project in the left pane. If you previously added Mirage Amplifier to a room, its instance(s) should show up in the left pane. Enter the IP Address for the amplifier in the **IP Address** field. Port field should already be filled with value **17037**.



→ Converge with a higher standard.

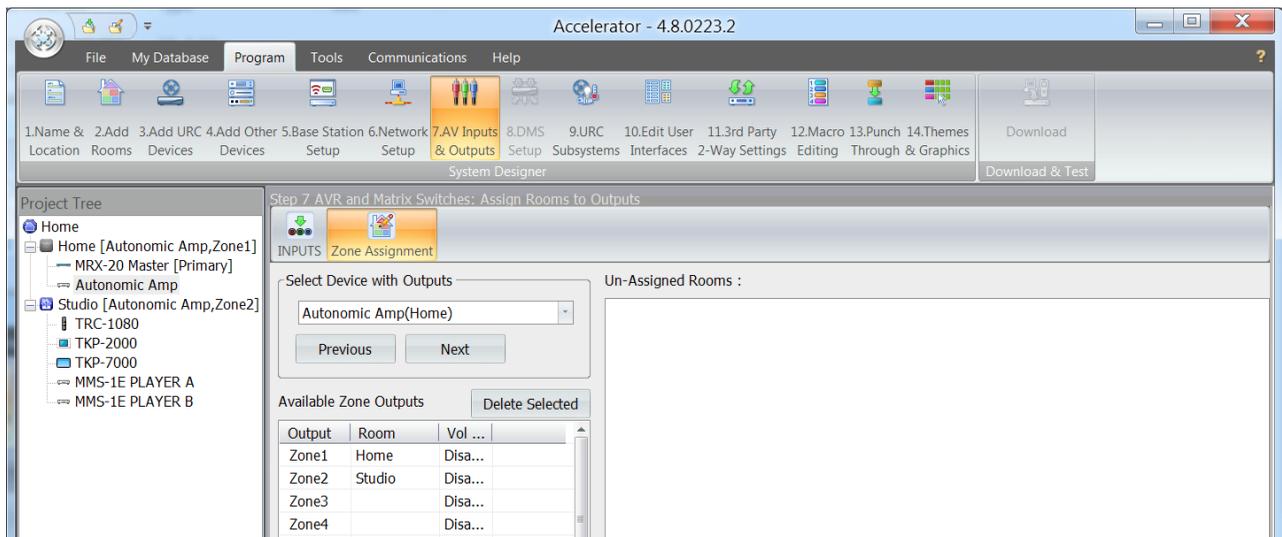
7. Go to AV Inputs & Outputs tab. Click on the Inputs tab.



Here, available outputs of the MAS can be assigned to inputs of another device (only if those devices have already been added to the project). The available devices can be selected from **Select Device with Inputs** drop-down. Drag the outputs from right pane to the left pane next to desired input of currently selected device. **Outputs** assigned by accident can be deleted by using the **Delete Selected** button. Next, click on **Zone Assignment**. Here, the outputs can be assigned to different rooms.

Note: For e-series amps remote source assignment can be managed using the procedure on page 9.

In **Select Device with Outputs** in the left pane, choose **Mirage Amplifier**. Next, from the right pane, drag the desired unassigned room to the appropriate MAS output on the left pane.



Note: The following procedures are only valid for setups that include e-series products.

- a. Initiate playback for all sources that will be used in URC in one of the zones from the WebUI of the MMS.
- b. Go to the configuration page for each MMS. Look for the ID or serial number depending on the server model on the **Firmware** tab under **license**. This is usually a 32 character hexadecimal string separated by dashes.

The screenshot shows a web browser window titled "Firmware" with the URL "192.168.13.122/Config/Software.html?v=6.0.6334.28796". The browser's address bar shows the URL. The page has a navigation menu with tabs: Machine, System, Content, Schedule, Control Systems, and Firmware (selected). The main content area is titled "Firmware" and contains three sections:

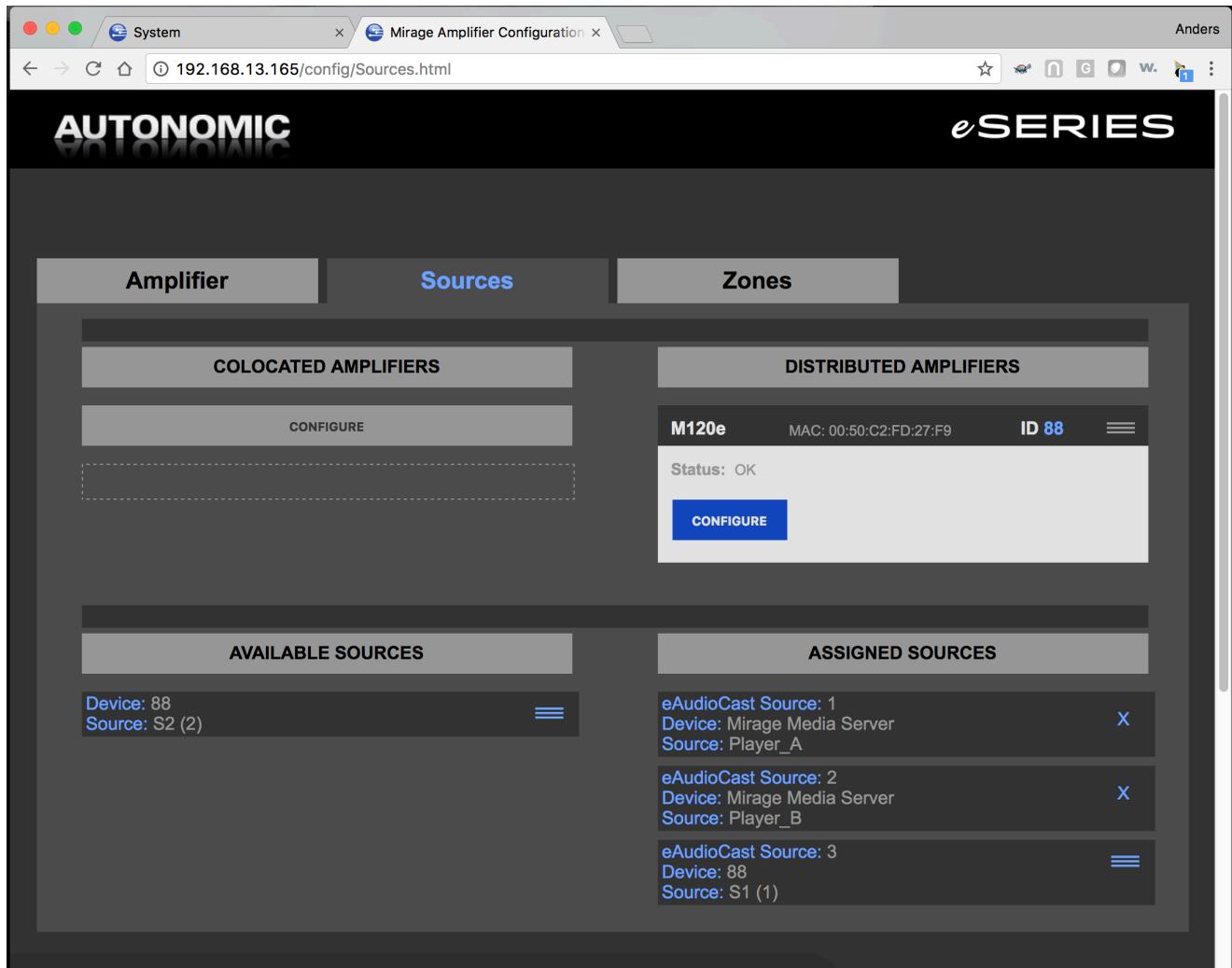
- Current firmware:** 6.0.6337.30356
- Other Software:** Start Mirage in this browser window. Install the Mirage stand alone application.
- License and Hardware:**

Model	MMS-1e
Serial Number	411-30-1612120307
ID	64c8807c-2bee-4d42-967d-42920fb17ab6
Ethernet MAC Address	70B3D5973600
License	Licensed for general PolyTune streaming use by MMS-1e CM

At the bottom of the page, there is a footer with the text: "v6.0.6337.30356 © 2006-2017 Autonomic Controls, Inc."

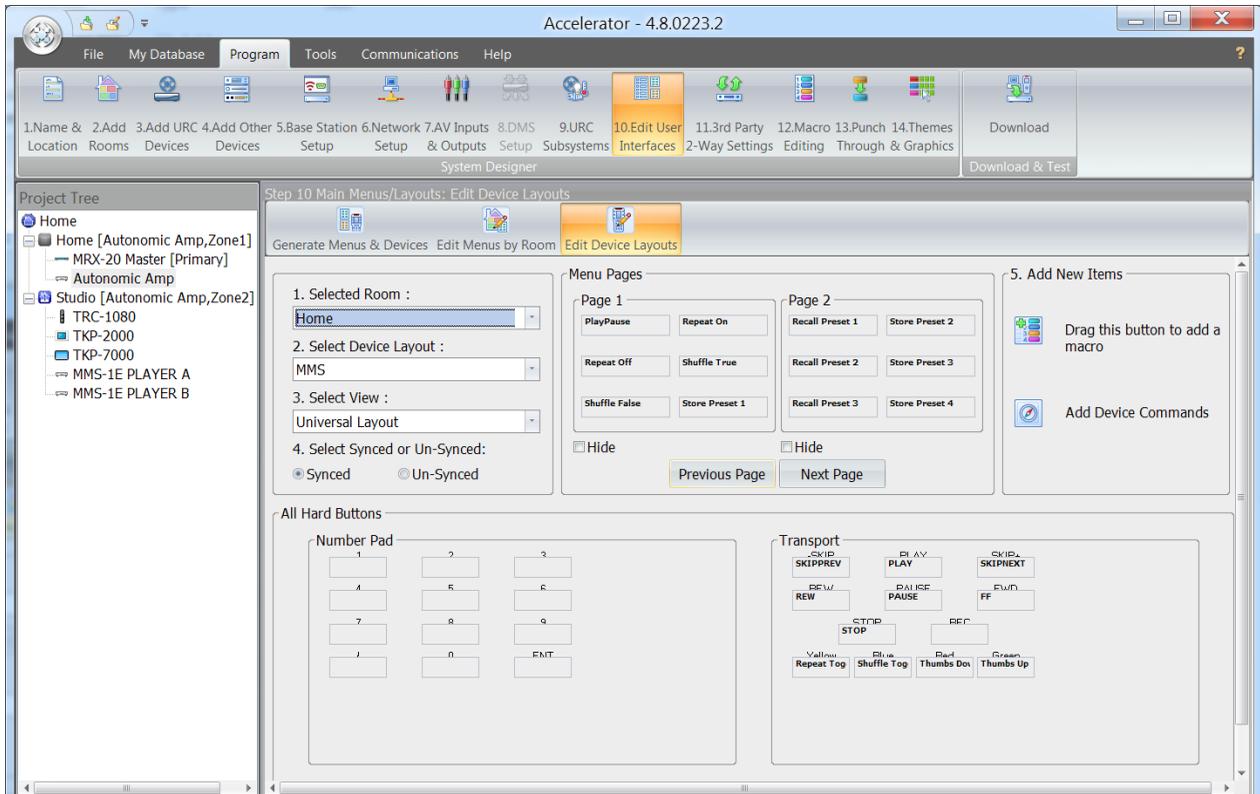
Note: This value will be used to identify the MMS on the amplifiers.

- c. Go to the configuration WebUI for any amplifier in the stack.
Configured remote sources are on the sources tab on the bottom right under **Assigned Sources**.



- d. Players on MMS are automatically added to the list when played. See step a on page 10. Players are identified by **Device: Mirage Media Server**. The Player's default name is shown under **Source**. In cases where several are in the stack, hovering over the panel shows the **license ID** to identify the MMS. Record the source number.
- e. Physical input sources on the amplifiers that have not been assigned are available on the left in **Available Sources**. Drag the source from **Available Sources** to **Assigned Sources** to use them with Total Control. Record the source number.

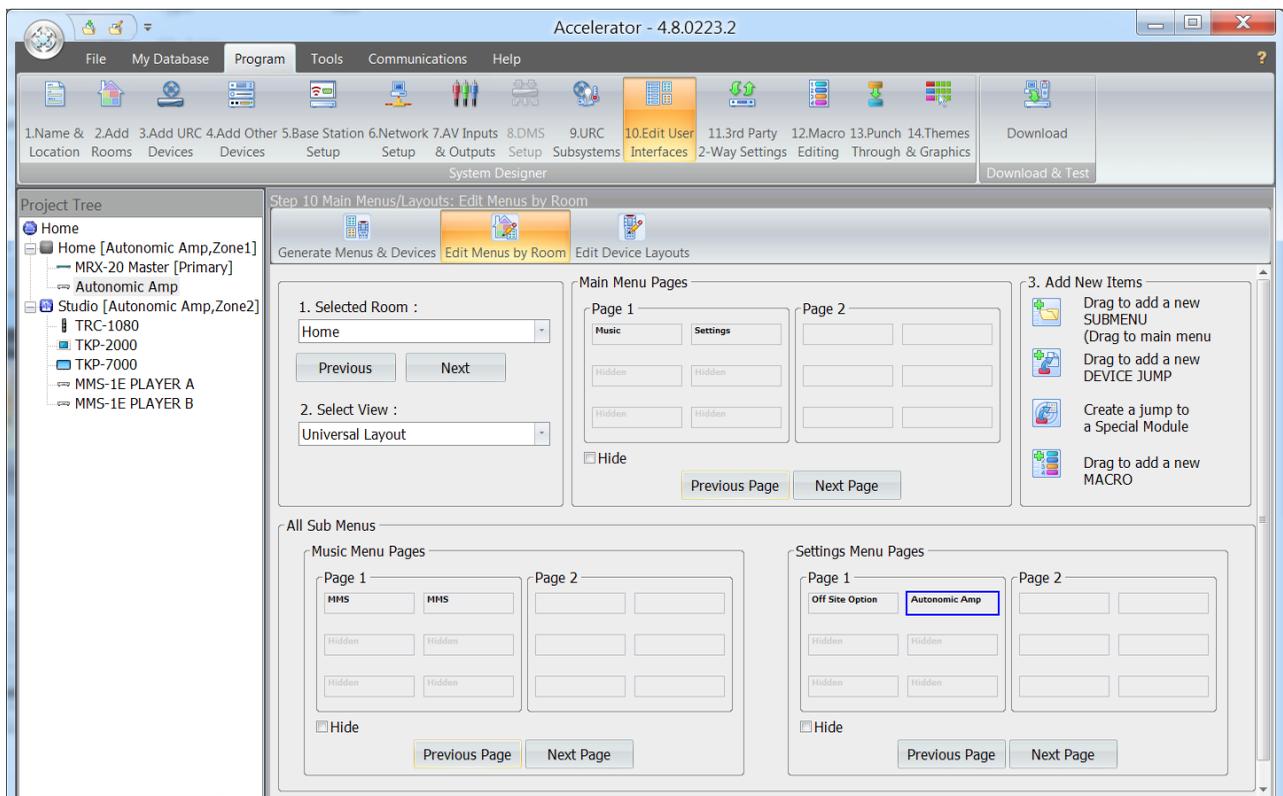
8. Go to **Edit User Interfaces** tab. **Generate Menus & Devices** is selected. Advanced options can be edited through the Advanced button. With default options selected, click on **Accelerate** button. You can choose to leave the existing menus unchanged or erase all menus. If unsure, leave the default option selected and click **OK**. Click on OK button on the **Complete Notification** dialog box.



The **Edit Menus by Room** tab is displayed next.

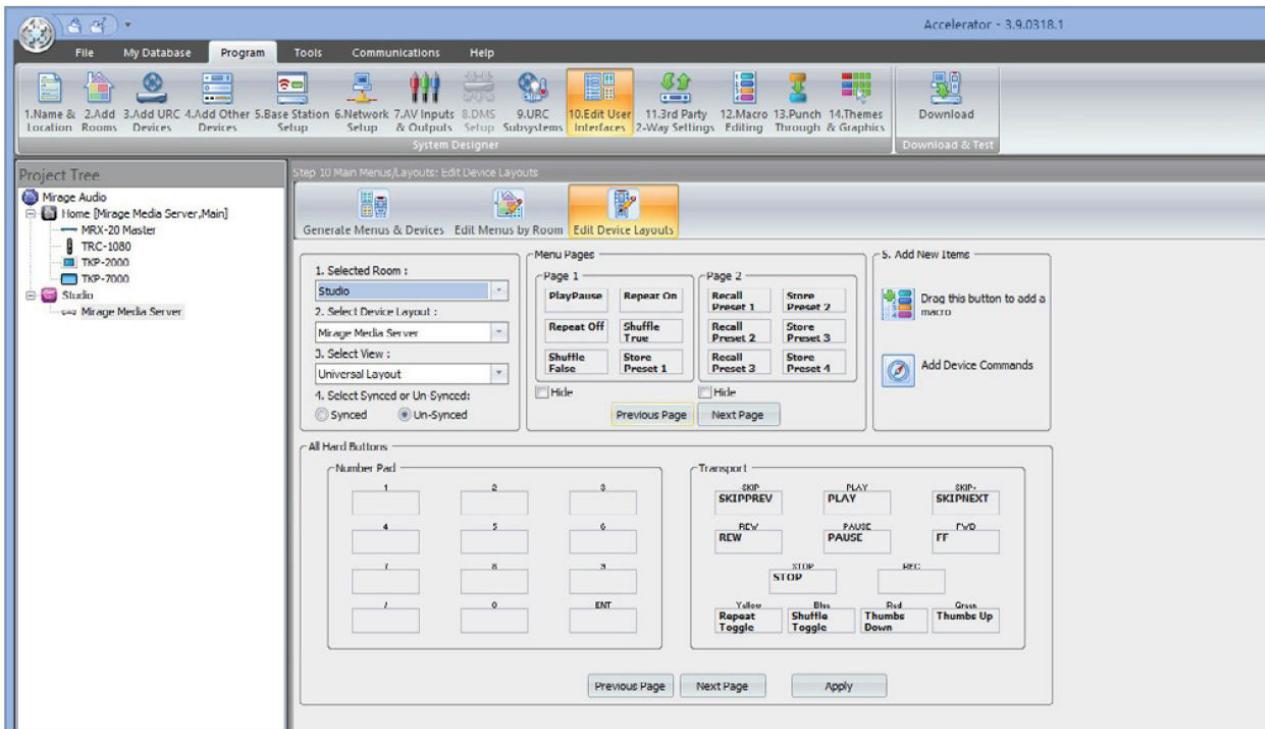
Optional: The menus for all rooms for either all devices or individual devices can be edited here. Rooms can be selected in the **Selected Room** section and device views can be selected in **Select View** section. On **editing a menu**, click on **Apply** to save the changes.

Note: The MAS module is placed in the **Settings** menu by default. (Below image shows sample menu with MAS module named to **Autonomic Amplifier** in the **Settings** menu).



Optional: Configure the mapping of available MAS commands to hard buttons.

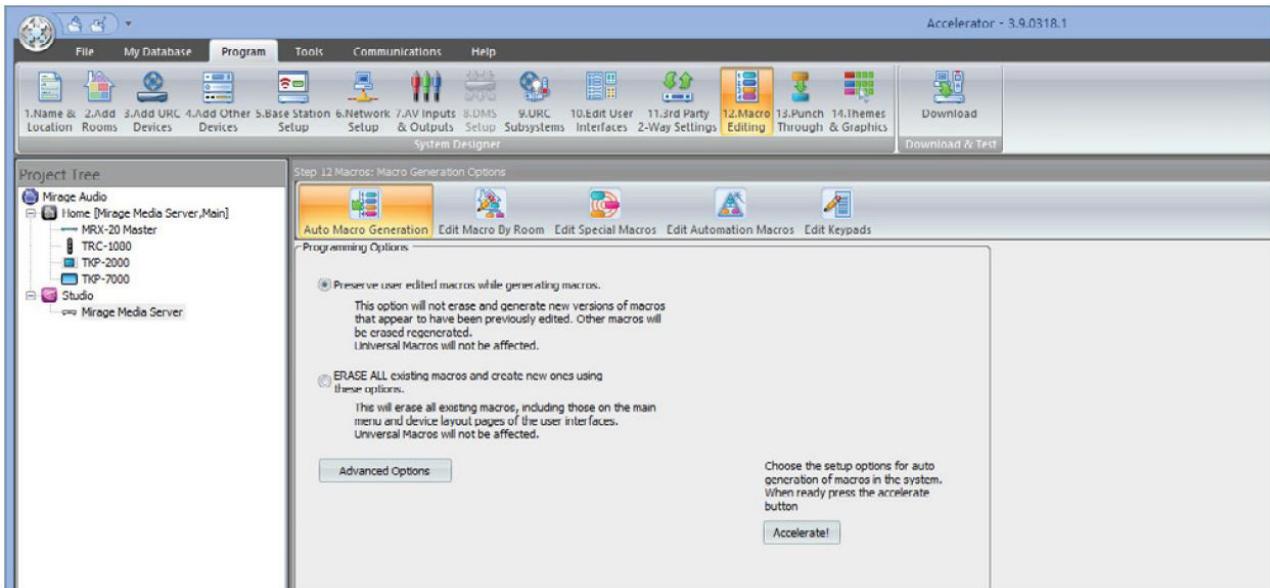
Go to **Edit Device Layouts**. This screen allows configuration of commands triggered on hard button presses. On **Select Device Layout** drop-down menu on the left, select **Autonomic Amplifier**. In **Select View**, **Universal Layout** is selected by default, which means the configuration for all clients is being edited. To edit hard button configuration for only a specific client, you can select the specific device from the drop-down menu here.



All Hard Buttons section shows all hard buttons and their currently assigned commands. Use **Previous** and **Next** page buttons to flip through all available hard buttons. **Menu Pages** section shows commands currently unassigned to any button. To change commands assigned to a hard button, simply drag a command to the new button. You can modify existing commands by dragging from one button to another, or assign new commands by dragging unassigned commands from **Menu Pages** section to an empty button.

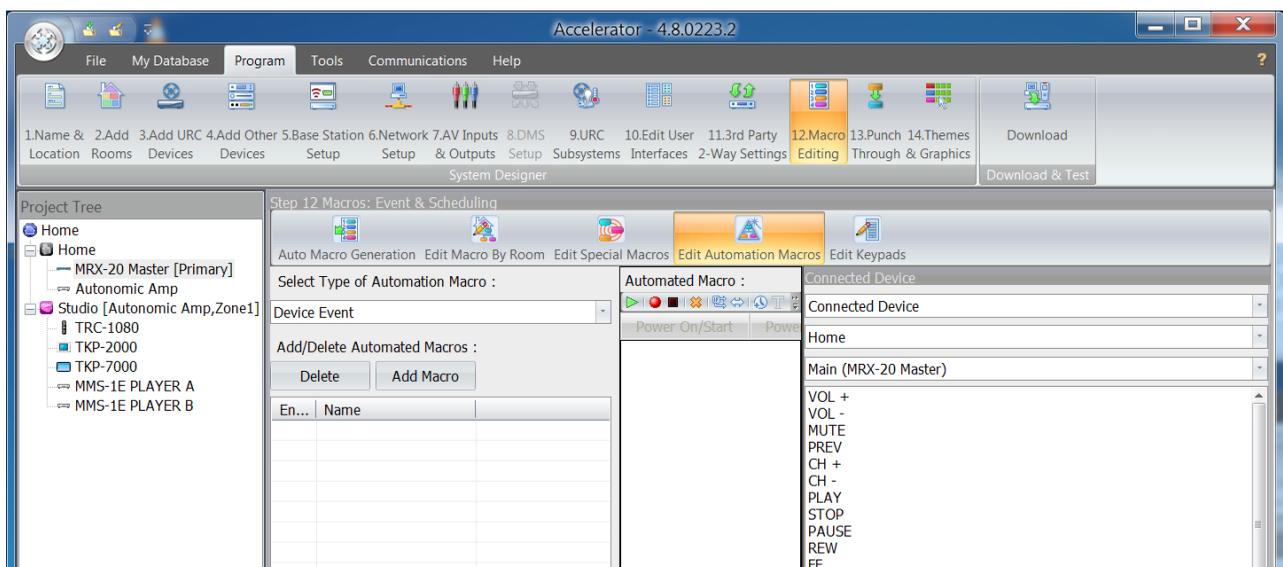
Click on **Apply** to save changes.

- Go to the **Macro Editing** tab. Leave the default options selected and click on **Accelerate**. Click on **OK** on the **Complete Notification** dialog box.
Optional: For advanced macro editing, refer to URC documentation.



The driver provides event triggers for power, source, volume and mute status changes programmable per zone. Triggers will execute a URC macro when the programmed condition occurs

In tab 12. **Macro Editing** under **Edit Automation Macros** select **Device Event** from **Select Type of Automation Macro** and click **Add Macro**.



In the Device Event Dialog enter the following

- A descriptive name for the event in **Name**
- Select the device(**Autonomic Amp**)
- Select the **Event** rule to base the trigger on
- Type in and select the properties for the event that would cause the event to trigger.
- Click **OK** to program the macro.

In the example below the trigger is set for when zone 1 of the amplifier stack is powered on.

Explanation of available Events:

Zone Power State Change event:

Parameters: name (example values), type of entry, notes

- Zone (1-32) input field,
- New State (on, off, either) drop down menu, "Either" triggers both when the zone is powered on and off

Zone Volume Change event:

Parameters: name (example values), type of entry, notes

- Zone (1-32), input field
- Operator (any, less than, equals, greater than), drop down,
- Level (0-100), input field, level to compare with the current volume level of the amp

Zone Mute Change event:

Parameters: name (example values), type of entry, notes

- Zone (1-32) input field,
- New State (on, off, either) drop down menu, **Either** triggers both when the zone is muted and unmuted

Zone Input Change:

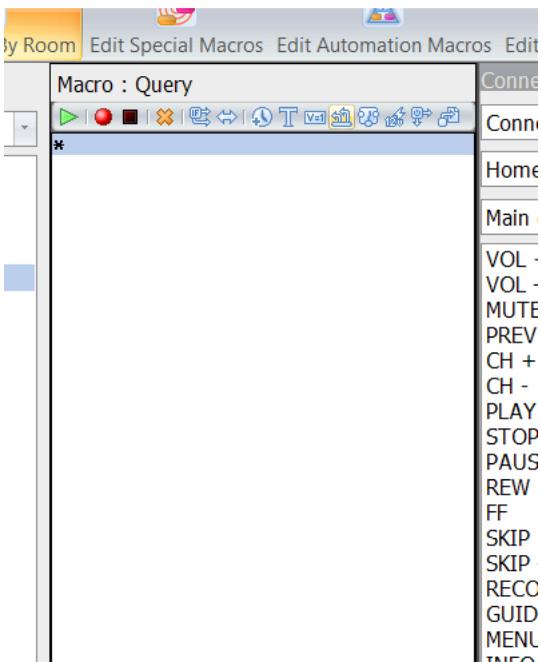
Parameters: name (example values), type of entry, notes

- Zone (1-32), input field
- New State (S1-S12, R1-32), drop down, **Sx** is a physical source. **Rx** is a remote source (e-stream). Not all amp configurations will have all sources available.

Queries

The **Driver** provides queries for the power, source, volume and mute status. Each programmed query is saved in a URC variable that can be used to perform conditional programming in URC macros. A query can be programmed to execute in any URC macro.

In any URC macro window, select the **2-way command button** highlighted in the following image.



In the **2-way Module Command Dialog** enter the following:

- A descriptive name for the query in **Name**
- Select the device (**Autonomic Amp**)
- Select the **Command** to query
- Enter the **zone** to query (1-32)
- The **Description** field will describe the valid return values.
 - power: 0=OFF, 1=ON
 - volume: 0-100, -1 = failure
 - mute: 0=OFF, 1=ON
 - input: 1-8, 0=error
- Check the box **Save the result**
- Select an existing variable to save the result to in the **Variable** drop down, or create a new variable of the correct type as specified after **Save the result** : right above the drop down.
- Click **OK** to program the macro.

2-Way Module Command

Name :
query zone 1 power

Available Devices :
Autonomic Amp [Home]

Available Command :
Zone Power Status

Parameters

Zone#
1

Description
return values: 0=OFF, 1=ON

Prev Next

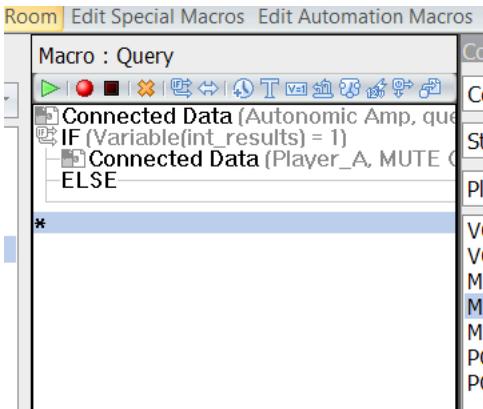
Result

Save the result : int

Variable : int_results [int] Create Variable

OK Cancel

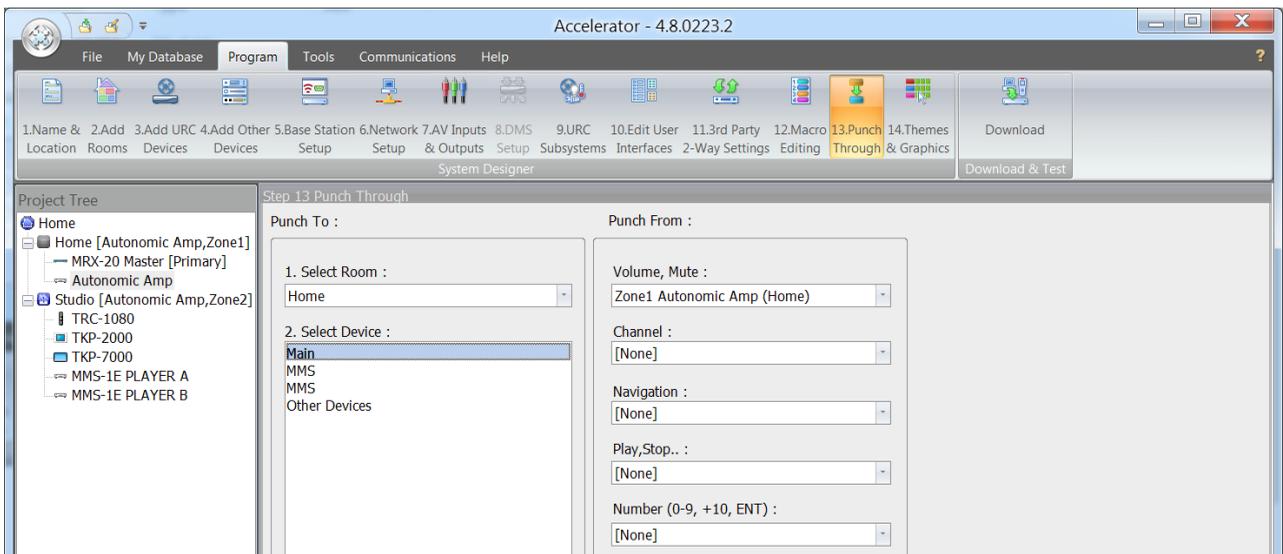
The variable is now programmed and can be used for conditional programming. The variables in Total Control are global and can be used throughout the system. In the example macro below the variable is evaluated in the same macro but this is not necessary.



TIP: Tracking changes of a property

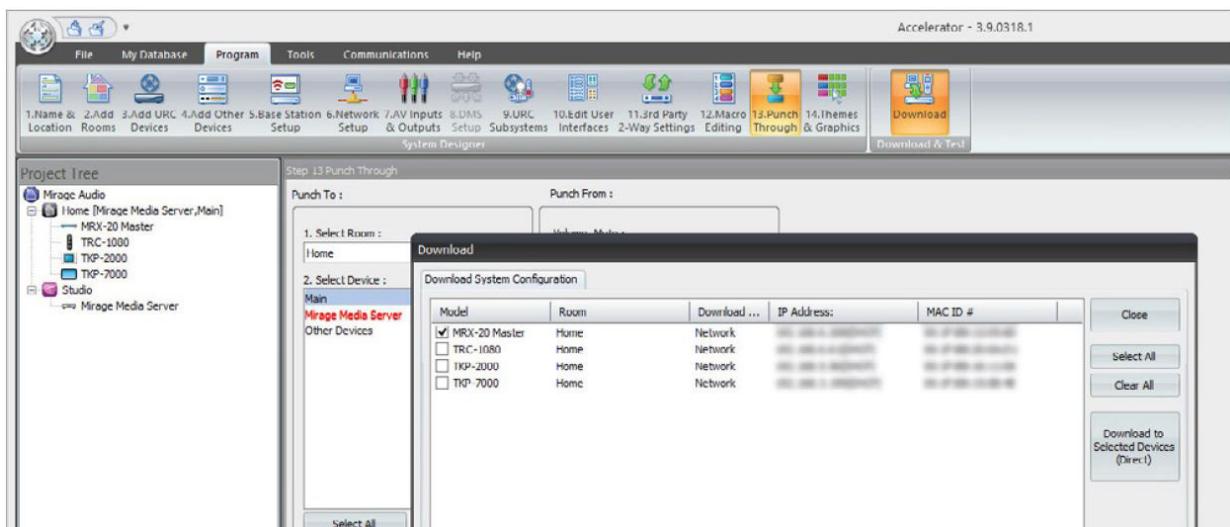
Using both the **event trigger** and **2-way command query**, variables can be set up to always track a specific property, for example in the examples above to track the power status of zone 1.

- Create a device event to trigger for either power state change for zone 1.
 - Query zone 1 power status in the macro for the device event and save to a variable.
10. The MAS zone output has been set in step 7, so the **Punch Through** setting by default is the volume setting for all devices in the room.



Note: By default, the Amplifier zone is punch-through for volume, and mute for the whole room setting.

11. Go to **Download** tab. If the accelerator project has not been saved yet, a prompt will be shown to save it now. Click on **OK** on the next prompt. A download screen will be shown with a list of all URC devices added to the project. This will push the current project to the primary controller and clients. Select the devices you want to download to and click on **Download to Selected Devices (Direct)**.



Tip: Occasionally, download fails to select clients like remotes and touchpanels. For instance, the panel drops WiFi if screen is not on or if the remote is not charged. Touch the screen to switch it on, or place the remote on charger and try to download again.

12. Go to **Download** tab. If the accelerator project has not been saved yet, a prompt will be shown to save it now. Click on **OK** on the next prompt. A download screen will be shown with a list of all URC devices added to the project. This will push the current project to the primary controller and clients. Select the devices you want to download to and click on **Download to Select Devices (Direct)**.

Technical Support

If you require further assistance with configuring the URC Driver Suite v1.0 for the Mirage Amplifier, please contact Technical Support at (866) 838-5052, or email techsupport@snapav.com. You can also visit the Autonomic Knowledge base (<http://www.autonomic-controls.com/kb>) for troubleshooting information and access to submitting a support ticket.