



MartinLogan MDA RTI Driver

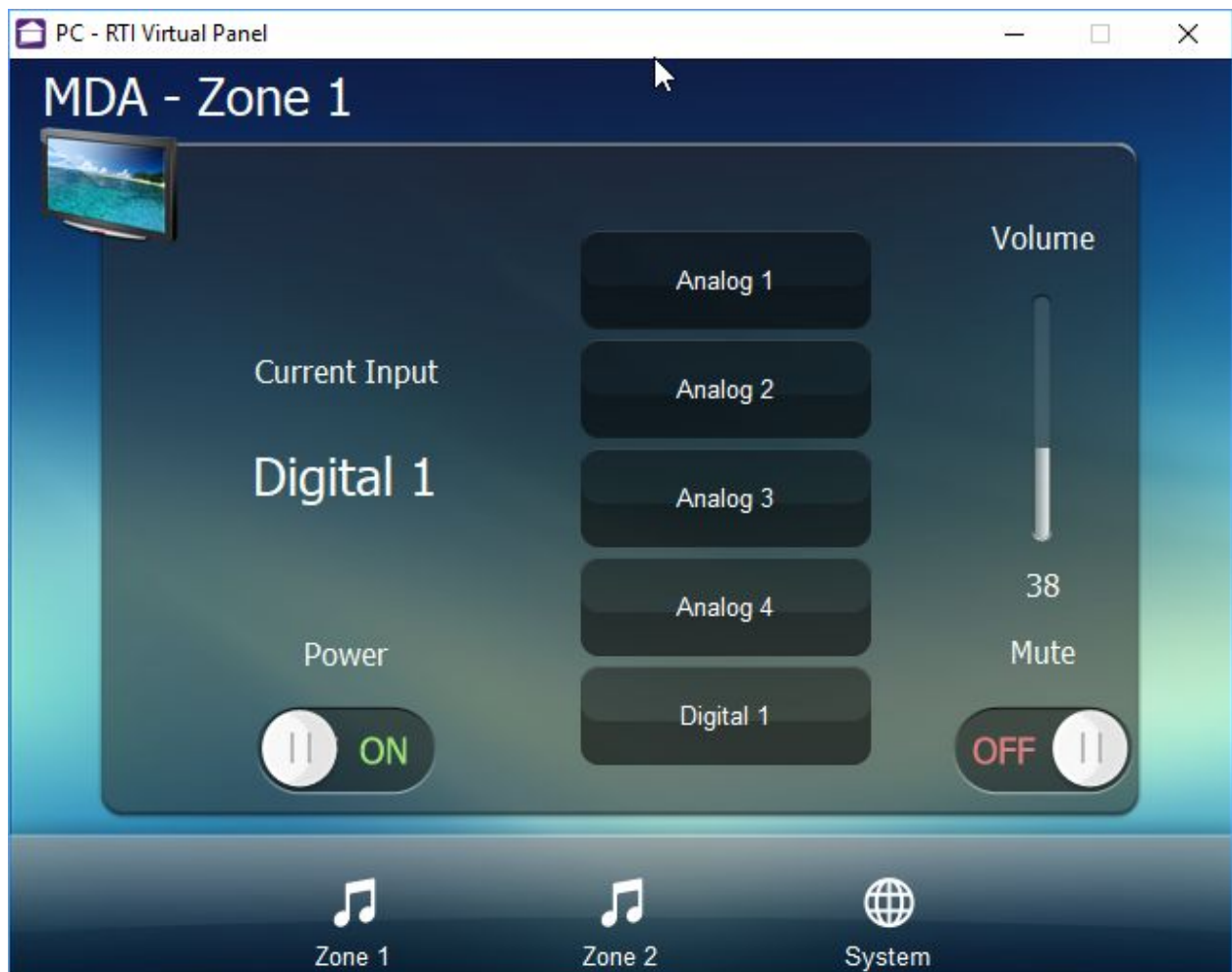
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Overview

The MartinLogan MDA RTI driver allows for IP and RS-232 control over the MartinLogan MDA range distribution amplifiers. This driver provides control and feedback for all of the commonly used functions of the MartinLogan MDA range.

The driver will provide immediate feedback for changes to most status items as well as polling for everything else at a user definable rate.



Installation

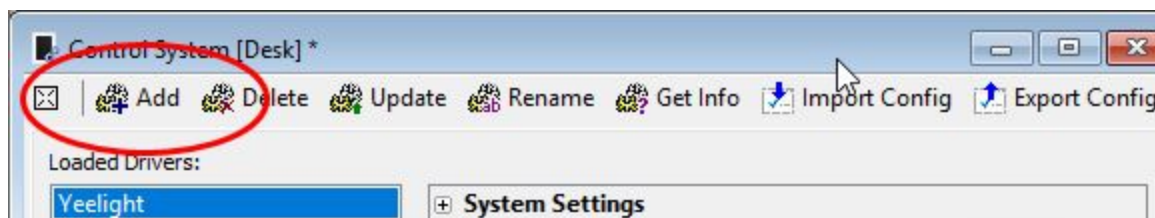
The zip file that included this documentation has the rtidriver file you will need to add. The first step is to download and extract the driver from the zip file. It doesn't matter where you store the file but we advise keeping them together.

The default location is Documents\Integration Designer\Control Drivers

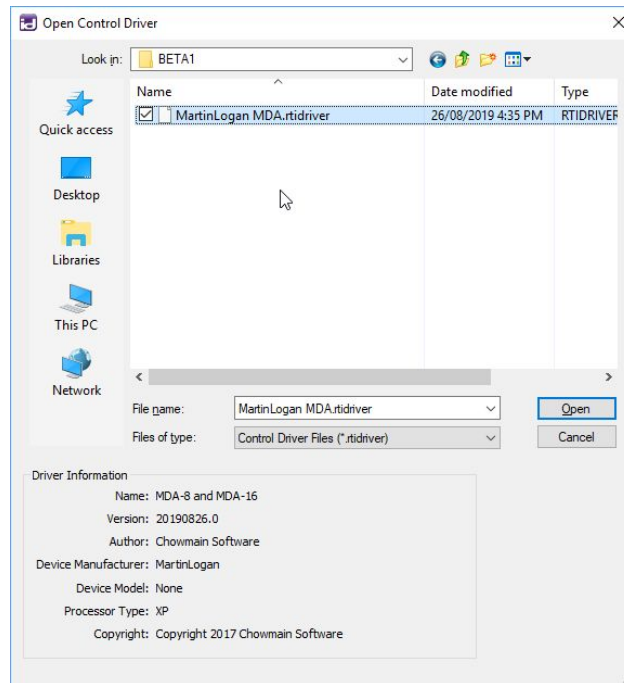
Select your processor from the System Workplace sidebar and select the Drivers tab at the bottom of the window (If you are using a KX3 in control mode then you might need to select 'Switch UI / Control Processor Mode' from the Device menu).

Add the driver

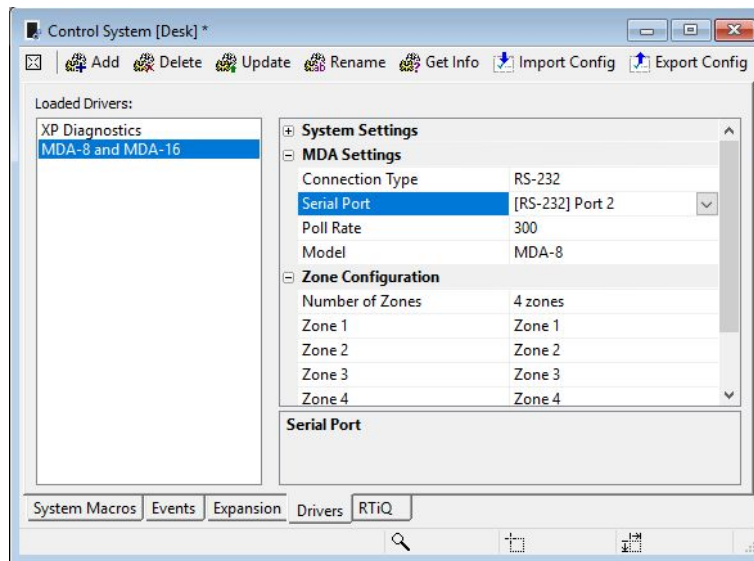
Click the Add button at the top of the driver window. The driver is now ready to configure or use.



Find the rtidriver file that you extracted from the zip file above. Click on Open when you have found the correct file.

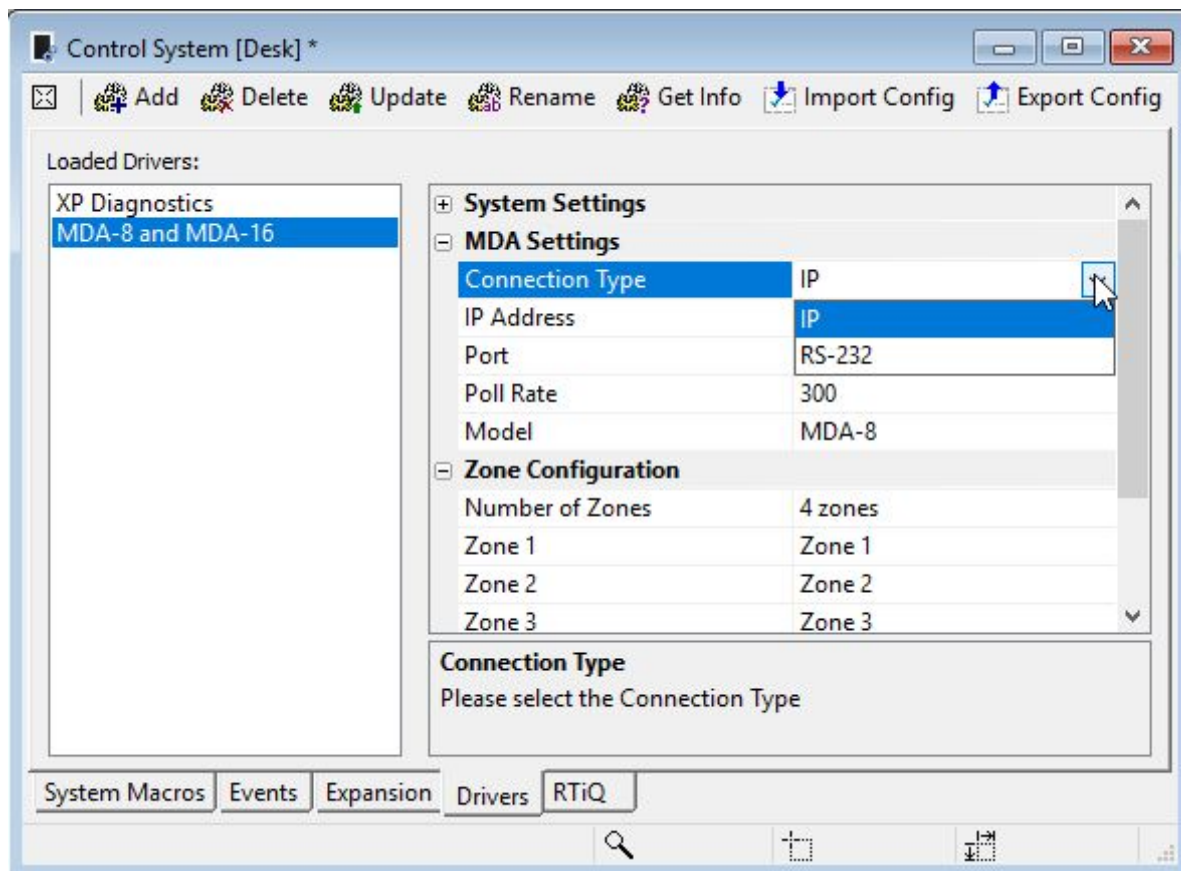


The driver is now ready to use.



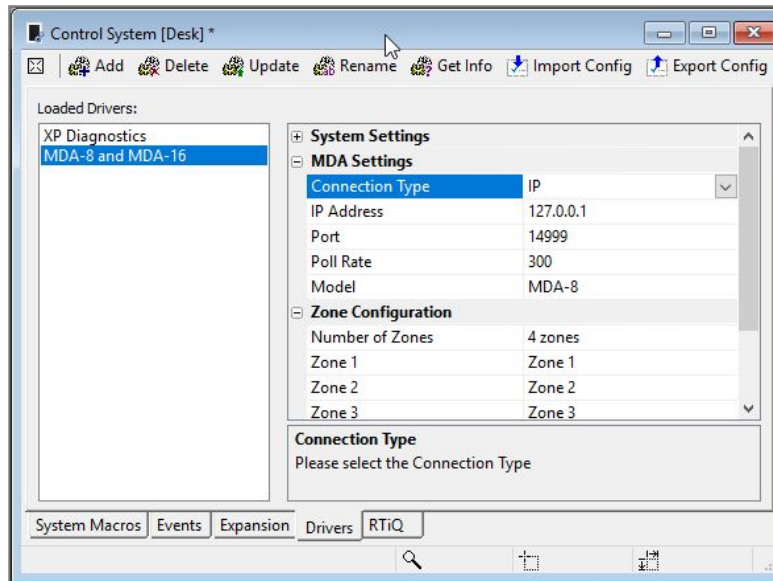
Driver Configuration

This driver can be configured to communicate over IP or RS-232. You can select the appropriate connection using the Connection Type drop down in the MDA settings section of the driver config.



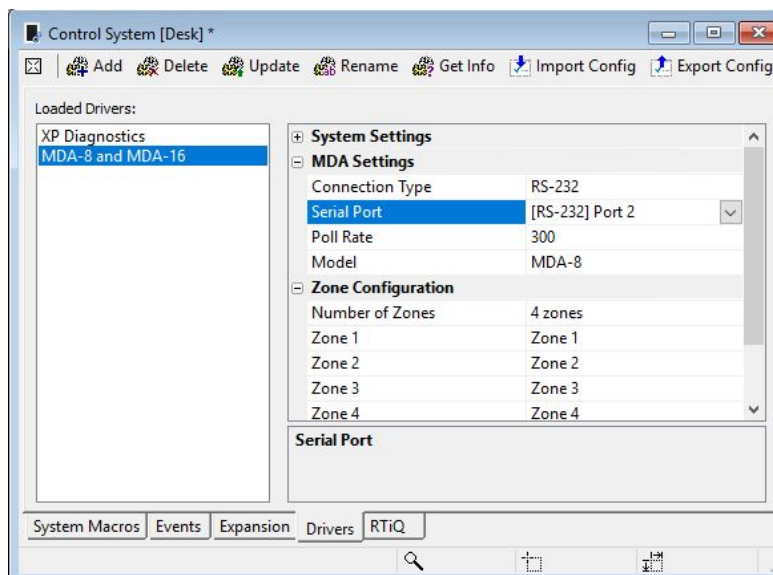
IP Connection

When IP is selected as the Connection Type, a section will appear to enter an IP address and Port number. The default port is 14999.



RS-232 Connection

If RS-232 is chosen as the Connection Type, a field will appear to let you select a serial port that the unit is connected to. Use the drop down to select the appropriate serial port.



Poll Rate

The driver will update its state automatically when something changes, but for some features we need to regularly poll to get the current state. This setting lets you set the time between these polls in seconds. The default setting is 300 (5 minutes).

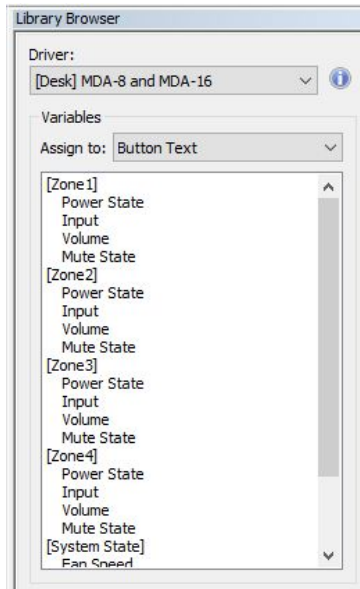
Model

This drop down is used to select between the MDA-8 and the MDA-16. Setting this will affect which inputs and outputs are shown. It also determines what state needs to be scanned for at startup so it's important to select the correct model.

Zone Configuration

The Zone Configuration section allows you to select the number of zones that you are actually using - this helps reduce the various commands and variables to only show the ones you are actually using. You can also name the zones you are using in this section.

System Variables



The system variables are divided up into zone specific variables (listed under the zone name) and system variables.

Each Zone has four variables, described in more detail below.

The System has a series of variables that give an overview of the state of the entire unit.

There is also a connection state variable that will appear if you are using an IP connection.

Zone Variables

Power State

The Power state variable will feedback the current power state. Note that will change with the feedback from the unit, so when you turn a zone on there will be a delay while the system powers the zone up. Once the zone is ready, this variable will change to show the correct state.

Input

The input variable will display the currently selected input.

Volume

The volume variable will feedback the current volume as a number between 0 and 100. This can be connected directly to a slider for feedback.

Mute

The Mute variable will provide boolean feedback of the current mute state.

System Variables

Fan Speed

This variable will feedback the current fan speed in RPM.

Serial Number

This variable will feedback the serial number of the connected unit.

Firmware Version

The Firmware Version variable will feedback the current firmware version as a string.

Firmware Date

The Firmware Date variable will feedback the current firmware build date as a string.

Connection State

The Connection State variable will activate when the driver is communicating with the unit via IP. It will return to false when the current commands have been sent and the connection stops.

Driver Commands

Power ON

The Power ON command takes one parameter - the zone. This will discreetly send a power on command to the selected zone.

Power OFF

The Power OFF command takes one parameter - the zone. This will discreetly send a power off command to the selected zone.

Power Toggle

The Power toggle command takes one parameter - the zone. This command will check the current power state and change it to the opposite state (if the unit is on it will send an off commands, and vice-versa).

Input

The Input command takes two parameters, the zone and the input you wish to change to. The input list is affected by the mode selection in the driver config, so if you don't see the input you need to make sure to check you have set the model appropriately.

Volume

The Volume command takes two parameters, the zone and the volume level. This command can be attached to a slider or used directly in a macro.

Volume Up

The Volume Up command takes one parameter - the zone. This will discreetly send a volume up command to the selected zone, raising the volume by 1%.

Volume Down

The Volume Down command takes one parameter - the zone. This will discreetly send a volume down command to the selected zone, lowering the volume by 1%.

MuteON

The Mute ON command takes one parameter - the zone. This will discreetly send a mute on command to the selected zone.

Mute OFF

The Mute OFF command takes one parameter - the zone. This will discreetly send a mute off command to the selected zone.

Mute Toggle

The Mute toggle command takes one parameter - the zone. This command will check the current mute state and change it to the opposite state (if the unit is on it will send an off commands, and vice-versa).

Get State

The Get State command forces an internal refresh of the driver. It is included for diagnostic purposes and isn't required for normal operation.