



# **Anthem MDX Crestron Module**

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## Module

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### Module

### Overview

The Anthem MDX Crestron module allows for IP and RS-232 control over the Anthem MDX range distribution amplifiers. This module provides control and feedback for all of the commonly used functions of the Anthem MDX range.

The module provides control using native Crestron symbols for volume (standard analog 0% - 100%) as well as providing both analog (0% - 100%) and string based volume feedback.

The module 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 simpl+ module that needs to be copied in to your project folder. The files were built and tested on a Crestron 3-series processor.

The zip file also contains a SIMPL project and a VT-Pro touchscreen design that you can use for testing. Two devices are configured, one using IP and the other using RS-232. You will need to adjust the configuration of these connections to suit your local configuration.



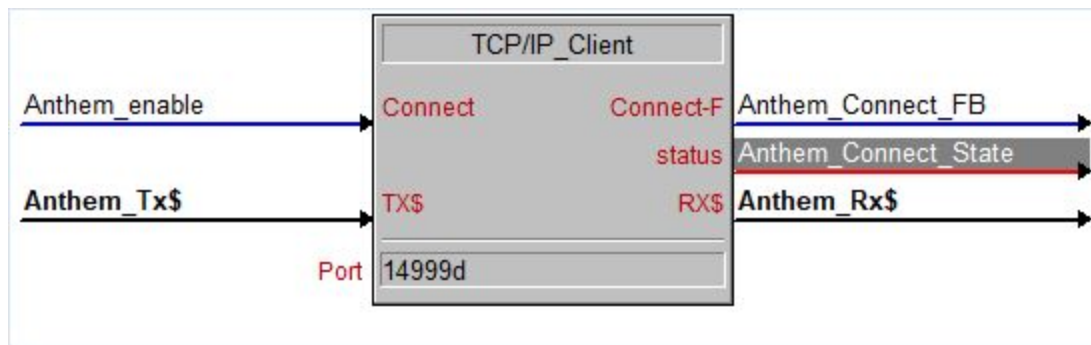
## Module

### Module Configuration

This module can be configured to communicate over IP or RS-232.

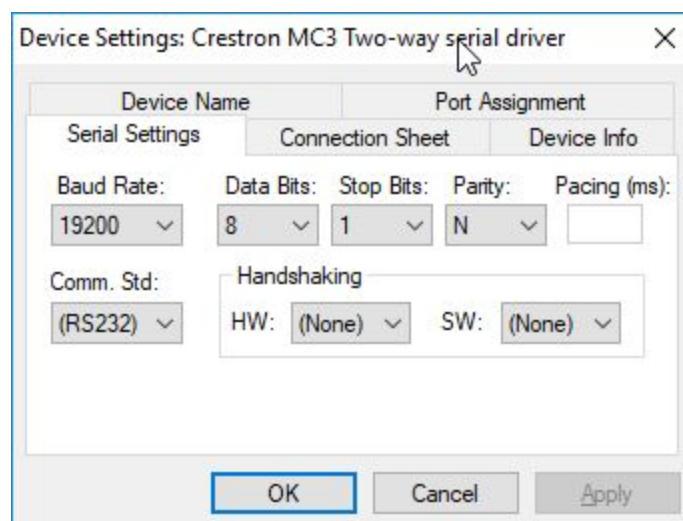
#### IP Connection

For IP communication you will need to include a TCP/Client. The default port is 14999.



#### RS-232 Connection

For RS-232 communication you will need to configure the serial settings for a baud rate of 19200, with 8 data bits, 1 stop bit and no parity. The connection cable needs to be a straight through type cable and can be either 3-wire or fully wired.





### Module

### Input Signals

#### Enable [digital]

When this signal is high the module will communicate with the anthem. When the signal goes low the module will not send out any data.

#### TCPConnected[digital]

This signal needs to be connected to the TCP/IP Client symbol on the Connect-F signal. The module will not send out any data until this signal goes high. NOTE: This signal only takes effect if the connection type is set to TCP.

#### GetStatus[digital]

This signal is used to refresh the current state of the MDX rather than wait for the next polling period.

#### ZonePower[1-8] [digital]

Raising this signal will power the matching zone on, lowering it will power the matching zone off. The signals from 5 - 8 are designed to be commented out if you are using the MDX-8.

#### ZoneMute[1-8] [digital]

Raising this signal will mute the volume of the matching zone, lowering it will un-mute the selected zone. The signals from 5 - 8 are designed to be commented out if you are using the MDX-8.



## Module

### ZoneSource[1-8] [analog]

This signal changes the current input for the selected zone. The possible values are as follows

Value	Input Format
0	No Input
1	Analog Input 1
2	Analog Input 2
3	Analog Input 3
4	Analog Input 4
5	Analog Input 5 (ignored on the MDX-8)
6	Analog Input 6 (ignored on the MDX-8)
7	Analog Input 7 (ignored on the MDX-8)
8	Analog Input 8 (ignored on the MDX-8)
9	Digital Input 1 (ignored on the MDX-8)
10	Digital Input 2 (ignored on the MDX-8)
11	Digital Input 3 (ignored on the MDX-8)
12	Digital Input 4 (ignored on the MDX-8)

### ZoneVolume[1-8] [analog]

This signal can be set from 0 to 100% to set the matching volume.

### Rx\$ [string]

The data from the IP or RS-232 connection to the amp should be connected here.



### Module

#### Feedback Signals

##### TCP\_Connect [digital]

This signal will go high when the enable is set high and TCP is the selected connection type. This signal is designed to be attached to the TCP/IP Client symbol on the Connect input.

##### PowerFB[1-8] [digital]

This signal will go high to indicate the matching zone is powered on and low when the matching zone is powered off. The signals from 5 - 8 are designed to be commented out if you are using the MDX-8.

##### MuteFB[1-8] [digital]

This signal will be high when the mute is active for the matching zone, low when the matching zone is inactive. The signals from 5 - 8 are designed to be commented out if you are using the MDX-8.

##### FanSpeed [analog]

This signal will provide the current fan speed in RPM.

##### DeviceName\$ [string]

This signal outputs the device name of the connected MDX device.

##### SerialNumber [string]

This signal indicates serial number of the connected MDX device.

##### BuildDate [string]

This signal indicates the current build date of the connected MDX device.

##### Model [string]

This signal indicates the date of the current model of the connected MDX device.

##### Version [string]

This signal indicates the firmware version of the connected MDX device..



### Module

#### Tx\$ [string]

This signal is for the MDX transmit data. It needs to be connected to the Tx\$ join on your IP Client or RS-232 symbol.

#### SourceFB[1-8] [analog]

This signal will provide current source of the matching zone (see the Source input for a list of possible values). The signals from 5 - 8 are designed to be commented out if you are using the MDX-8.

#### VolumeFB[1-8] [analog]

This signal will provide the current volume as a percentage (0% - 100%) for the matching zone. The signals from 5 - 8 are designed to be commented out if you are using the MDX-8.

#### VolumeFB\$ [string]

This signal provides the volume as a string (0.0 - 100.0) for the matching zone. The signals from 5 - 8 are designed to be commented out if you are using the MDX-8.

#### ZoneName\$ [string]

This signal provides the name set in the web interface for the matching zone. The signals from 5 - 8 are designed to be commented out if you are using the MDX-8.