

AudioControl CM-Series Crestron Driver

Release Notes

SimplWindows name: AudioControl_CM-Series

Category: Amplifier

Current version: 1.0.2

Crestron hardware required: Any ethernet-enabled series 3 or 4 processor

Vendor firmware: v2.1.38

Vendor setup: The amplifier should be installed, configured and tested according to AudioControl documentation prior to integration with this driver.

Introduction

This driver has been designed to provide control of the AudioControl CM-Series series of amplifiers via an IP connection.

Device Configuration

Configure your device as per the manufacturer's instructions. To find a copy of the user manual for your device, select your model from the manufacturer's website here:

<https://www.audiocontrol.com/home-audio/70-volt-amplifiers/>

It is recommended that you use a static IP address for the CM-Series.

Driver Installation and Configuration

In SIMPL Windows, click **File > Open** and navigate to your .smw program file. The module should appear in your **Program View**.

Select **Central Control Module** in the **Program View**, then click the **Configure** button in the toolbar to select the model of your Crestron processor.

To configure the drivers, edit the comms and zone logic driver symbols in the **Program View**.

Enter the IP of the CM-Series device in parameter of the main/comms driver. If there is a failure connecting, first ensure that your device and the Crestron processor are both connected to the same network. If this does not resolve the issue, consult the manual provided by AudioControl.

For each zone of the device, you will need a corresponding Zone driver to be installed. Connect the ZoneCommsRX and ZoneCommsTx signals to the main driver InterCommModule signals.

Mono inputs aren't selectable on the digital outputs (A & B) as these are stereo outputs, so only stereo sources can be selected.

Zones can be grouped when setting up the physical Device. Feedback signals GroupForZoneX (main driver) state the group for each zone. Connect a zone symbol to the InterCommModuleRX/TX_Group signals to control the group directly.

Driver Commands

The driver allows control of the CM-Series unit using a Crestron touch panel or equivalent device. Commands to set the zone, source, EQ and advanced audio options are available.

Driver Variables

Device Driver

The main (comms) driver tracks a number of variables in order to provide feedback from the CM-Series unit. These are as follows:

Control		
IntercommModuleRX_ZoneX	STRING	Command received from Zone X (See appendix A for zone mapping)
GetStatus	DIGITAL	Queries device status
MainPowerOn	DIGITAL	Turn on device
MainPowerOn	DIGITAL	Turn off device

Feedback		
isConnected	DIGITAL	Goes high when device is connected
ConnectionStatus	STRING	Connection status
IntercommModuleTX_ZoneX	STRING	Command to send to Zone X (See appendix A for zone mapping)
MainPowerIsOn	DIGITAL	High when device is on
ProtectionIsOn	DIGITAL	High when amplifier is in global protection
Voltage	ANALOG	Voltage as an integer
Voltage Status	STRING	high, normal, or low
Temperature	ANALOG	Temperature as an integer
Temperature Status	DIGITAL	high, normal or cool
ShortCircuitChannelX	DIGITAL	High when channel X is seeing a short
GroupForZoneX	ANALOG	Which group a zone is in 1-4 or 0 = (no group)

Parameters		
IP Address	STRING	Specify ip address of device
Port	ANALOG	Specify port of device

Zone Driver

Each zone driver tracks a number of variables in order to provide feedback from the CM-Series unit. These are as follows:

Control		
ZoneCommsRx	STRING	Command received from Main driver to this zone
LocalSourceInput	ANALOG	Select a local input from this device (See appendix A for list of values)
TakeLocalInput	DIGITAL	Pulse to set zone to local input source
ZoneOn	DIGITAL	Turn on zone
ZoneOff	DIGITAL	Turn off zone
Volume Up	DIGITAL	Pulse to increase zone volume by 1
Volume Down	DIGITAL	Pulse to decrease zone volume by 1
Volume Set	ANALOG	When changed, set zone volume to value (0-100)
Mute	DIGITAL	Mute the zone
Unmute	DIGITAL	Unmute the zone
MuteToggle	DIGITAL	Toggle mute status
BassUp	DIGITAL	Pulse to increase zone bass by 1
BassDown	DIGITAL	Pulse to decrease zone bass by 1
BassSet	ANALOG	When changed, set zone bass to value (-10 to 10)
TrebleUp	DIGITAL	Pulse to increase zone treble by 1
TrebleDown	DIGITAL	Pulse to decrease zone treble by 1
TrebleSet	ANALOG	When changed, set zone treble to value (-10 to 10)
LoudnessOn	DIGITAL	Turn on loudness (sets bass/treble to predefined values)
LoudnessOff	DIGITAL	Turn off loudness (sets bass/treble to predefined values)
LipSyncUp	DIGITAL	Increase LipSync by 1
LipSyncDown	DIGITAL	Decrease LipSync by 1
LipSyncSet	ANALOG	When changed, set zone LipSync to value (0 to 19)
ZoneEQSet	ANALOG	When changed, set zone EQ to value (1 to 6)

Feedback		
zoneCommsTx	STRING	Command to send to Main driver
CurrentSource	ANALOG	Current selected Local source (See appendix A for list of values)
ZoneIsOn	DIGITAL	High when the current zone is on
CurrentVolume	ANALOG	Current volume setting for zone (0-100)
IsMuted	DIGITAL	High when current zone is muted
CurrentBass	ANALOG	Current bass setting for zone (-10 to 10)
CurrentTreble	ANALOG	Current treble setting for zone (-10 to 10)
LoudnessIsOn	DIGITAL	High when Loudness set to on
CurrentLipSync	ANALOG	Current LipSync setting for zone (0 to 19)
CurrentZoneEQ	ANALOG	Current zone EQ value (1 to 6)

Troubleshooting

- Confirm the Ethernet switch used by the AudioControl unit is correctly uplinked to the same network as the Crestron processor.
- Confirm that the correct IP address is defined in the Crestron parameters for the CM-Series control interface.

Appendix A

Comms Driver Zone Mappings

Each zone on the CM-Series maps to the following signals on the comms driver:

CM Series Zone	Signals
Zone 1	IntercommModuleRX_Zone1 & IntercommModuleTX_Zone1
Zone 2	IntercommModuleRX_Zone2 & IntercommModuleTX_Zone2
Zone 3	IntercommModuleRX_Zone3 & IntercommModuleTX_Zone3
Zone 4	IntercommModuleRX_Zone4 & IntercommModuleTX_Zone4
Digital Out A	IntercommModuleRX_Zone5 & IntercommModuleTX_Zone5
Digital Out B	IntercommModuleRX_Zone6 & IntercommModuleTX_Zone6

Zone Driver LocalSourceInput Mappings

Each local input on the CM-Series maps to the following values for the LocalSourceInput and CurrentSource signals:

CM Series Zone	Analog Value
Analog Mono 1	1
Analog Mono 2	2
Analog Mono 3	3
Analog Mono 4	4
Analog Mono 5	5
Analog Mono 6	6
Analog Mono 7	7
Analog Mono 8	8
Digital Mono A1	9
Digital Mono A2	10
Digital Mono B1	11
Digital Mono B2	12
Analog Stereo 1-2	21
Analog Stereo 3-4	22
Analog Stereo 5-6	23
Analog Stereo 7-8	24
Digital Stereo A	25
Digital Stereo B	26