DIN-A08 DIN Rail Analog Output Module Installation & Operation Guide

Description

The Crestron® DIN-AO8 is a DIN rail-mounted automation control module that provides eight analog output ports for interfacing with third-party lighting and heating and cooling systems.

Additional Resources

Visit the product page on the Crestron website (www.crestron.com) for additional information and the latest firmware updates. Use a QR reader application on your mobile device to scan the QR image.



Installation

WARNING: To avoid fire, shock, or death, turn off the power at the circuit breaker or fuse and test that the power is off before wiring!

NOTES: Observe the following points:

- This product must be installed and used in accordance with appropriate electrical codes and regulations.
- This product must be installed by a qualified electrician.
- 1. Place the top of the DIN-AO8's rail mount over the top of the DIN rail.
- 2. Tilt the bottom of the DIN-AO8 toward the DIN rail until it snaps into place.

NOTE: When mounting DIN rail products, it may be necessary to use a flat-head screwdriver to pull the DIN rail release tab while snapping the device onto the DIN rail.

NOTE: Certain third-party DIN cabinets provide space for an informational label between each DIN rail row. Crestron's Engraver software (version 4.0 or later) can generate appropriate labels for all Crestron DIN rail products.



NOTE: To remove the DIN-AO8 from the DIN rail, use a small, flat object (i.e., a flat-head screwdriver) to pull the DIN rail release and tilt the bottom of the DIN-AO8 away from the DIN rail.

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Hardware Hookup

Make the necessary connections. Apply power after all connections have been made.

WARNING: Prior to connecting the device, turn off power at the circuit breaker. Failure to do so may result in serious personal injury or damage to the device. Restore power after all connections have been made.

CAUTION: Connecting this device to the wrong type of load or short-circuiting the load can cause severe product damage. Each load should be tested to identify a short-circuit condition prior to wiring the load to the module.

NOTE: Use copper wire only.

NOTE: Each switch leg of the DIN-AO8 may be fed from a separate circuit breaker.

When making OUTPUTS, NET, and OVERRIDE connections, strip the ends of the wires approximately 7/16 in (11 mm). Use care to avoid nicking the conductors. Tighten the connector to 5 in-lb (0.5 to 0.6 N-m). The wire gauge should be 14 to 26 AWG.

When making power connections to the DIN-AO8, use a Crestron power supply.

Hardware Connections for the DIN-AO8



Set the Net ID

The Net ID of the DIN-AO8 has been factory set to 88. The Net IDs of all devices in the same system must be unique. The Net ID can be changed from the front panel of the DIN-AO8 or from a personal computer via Crestron Toolbox™

Set the Net ID using the front panel.

- 1. Press the **SETUP** button to enter Setup mode. The SETUP LED illuminates.
- 2. Press the left and right buttons under the NET ID display to change the Net ID.

NOTE: The DIN-AO8 will leave Setup mode after 10 seconds of inactivity and revert to the previously set Net ID.

3. When the desired Net ID is displayed, press the SETUP button to exit the Setup mode. The SETUP LED extinguishes.

NOTE: If an invalid Net ID is set (i.e., 00, 02, FF), "Er" will be displayed on the NET ID display, and the DIN-AO8 will revert to the previously set Net ID.

A small Net ID label is provided on the DIN-AO8 to document the unit's Net ID in the case where power is not available. Apply a mark over the digits that correspond to the assigned Net ID.

NET ID Label ("3C" Shown)

0 1 2 3 4 5 6 7 8 9 A B C D E F 0 1 2 3 4 5 6 7 8 9 A B C D E F NET ID

Operation

The DIN-AO8 can be controlled via its front panel as well as from a control system. The following local controls are available.

NOTE: Before using the DIN-AO8, ensure the device is using the latest firmware. Check for the latest firmware for the DIN-AO8 at www.crestron.com/firmware. Firmware is loaded onto the device using Crestron Toolbox™.

Manual Load Control

The level of each of the analog outputs can be manually controlled from the front panel To toggle the output between off (0V) and the programmed upper limit (10V), tap an output button. The corresponding LED illuminates, and the output level is shown on the NET ID display ("oF" for off, "On" for on) for two seconds, after the button is released.

To ramp the voltage up or down (until it reaches a limit), press and hold the output button. To change the ramp direction, release the output button, and then press and hold it again. The corresponding LED illuminates, and the output level is shown on the NET ID display as a percentage (01-99) for two seconds, after the button is released.

NOTE: The control system program may change the settings if Override mode is not enabled.

Establish Override Mode Levels

Override mode disables the control system program and sets all of the output states to the stored override values. The state of each output can be saved as an override setting, which can be automatically recalled when the Override mode is enabled.

NOTE: The control system program has a setting that can prevent locally saving the override state. If this setting is enabled, the display shows "Er" when trying to save override states. For more information, refer to the SIMPL Windows help file.

To save the load level as an override setting, set all of the loads to either on or off, and then press and hold the OVR button for three seconds. The OVR LED blinks to indicate the new override setting has been stored.

Toggle Override Mode

The Override mode overrides the control system program and sets all of the output levels to the saved override values. For instructions on saving override levels, refer to "Establish Override Mode Levels

To enable the Override mode, press and release the **OVR** button. The OVR LED flashes slowly

NOTE: If the Override mode was enabled from an external device (i.e., a contact closure is present on the OVERRIDE terminals), the OVR LED flashes quickly. Pressing the OVR button has no effect.

To disable the Override mode, press the **OVR** button again. The OVR LED extinguishes and the output levels return to the values set by the control system program.

NOTE: The factory default override level is 100% if override levels have not been saved.

Reset

To reboot the DIN-AO8, press the RESET button. The output levels will be set to the level currently specified by the control system program. If the control system does not provide a value, the outputs will be set to the previously set levels.

Troubleshooting

The following table provides corrective action for possible trouble situations. If further assistance is required, please contact a Crestron customer service representative.

TROUBLE	POSSIBLE CAUSE(S)	CORRECTIVE ACTION
The DIN-AO8 does not function.	The device is not communicating with the network.	Use Crestron Toolbox to poll the network. Verify the network connection to the device.
	The device is not receiving power from a Crestron power source.	Use a Crestron power source. Verify the connections.
	The device is not receiving sufficient power.	Use the Crestron Power Calculator to help calculate how much power is needed for the system.
There is a loss of functionality due to an electrostatic discharge.	The device is not grounded properly.	Check that all of the ground connections have been made properly.

As of the date of manufacture, the DIN-AO8 has been tested and fough to comply with specifications for CE marking. CE

This product is Listed to applicable UL Standards and requirements by Underwriters Laboratories Inc. c(UL)us

Federal Communications Commission (FCC) Compliance Statement

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures

- Reorient or relocate the receiving antenna.
- · Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected
- · Consult the dealer or an experienced radio/TV technician for help.

The product warranty can be found at www.crestron.com/warranty.

The specific patents that cover Crestron products are listed at patents.crestron.com.

Certain Crestron products contain open source software. For specific information, please visit www.crestron.com/opensource.

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