

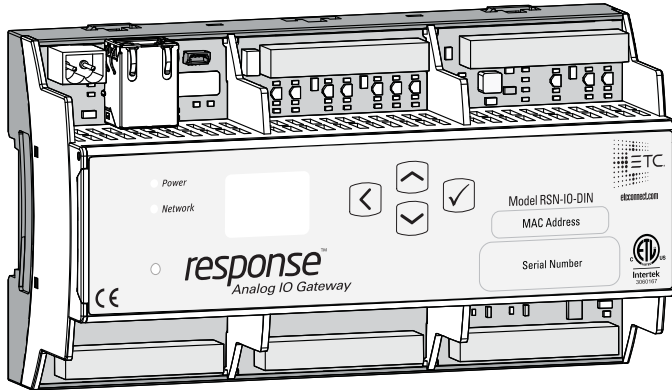
ETC Setup Guide

Response Analog IO Gateway

Overview

The Response Analog IO Gateway supports analog input of external contact closures and/or analog 0-10V sources and relay outputs. Using these analog inputs and outputs, you can communicate with and control different equipment in your lighting network.

The Analog IO Gateway can be mounted to a standard 35mm DIN rail or can be mounted in a standard 19" rack with the optional rack mounting kit. The gateway provides 12 analog inputs and 12 relay outputs for your integration options. Power can be provided by either 24VDC or Power over Ethernet (PoE).



Electrical Specifications

- Rated Input Voltage: 12-24VDC, 1A Max, Class 2, Polarity Independent
- Analog Inputs: 24VDC Max, can sense between 0-10V (10V, 100mA utility supply provided)
- Relay Outputs: 30VDC Max, 0.5A Max per contact resistive or contactor load

LED Indicators

- Power: solid blue indicates that power is supplied
- Ethernet: solid green indicates network connection and blinking indicates network activity

Navigation Buttons

- Up, Down, Back, Check Mark/Enter - The check mark allows you to advance to the next available menu or commit a modified selection. The back arrow allows you to return to the previous menu or option, and the up and down arrows navigate between lines in a menu.
- Reset - The reset button provides a physical reset button.

Installation

You can install the Response Analog Gateway on a DIN rail in a wall- or rack-mounted enclosure.



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Product information and specifications subject to change. ETC intends this document to be provided in its entirety.

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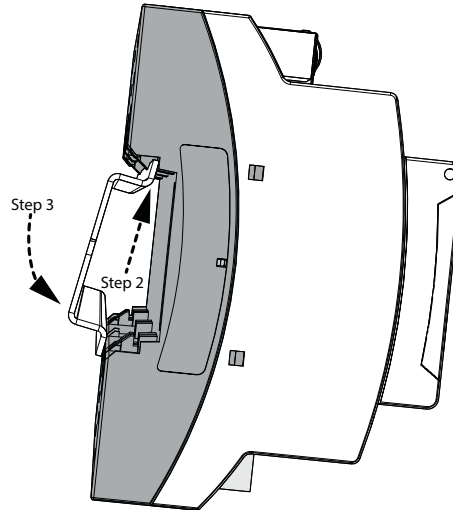
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DIN Rail

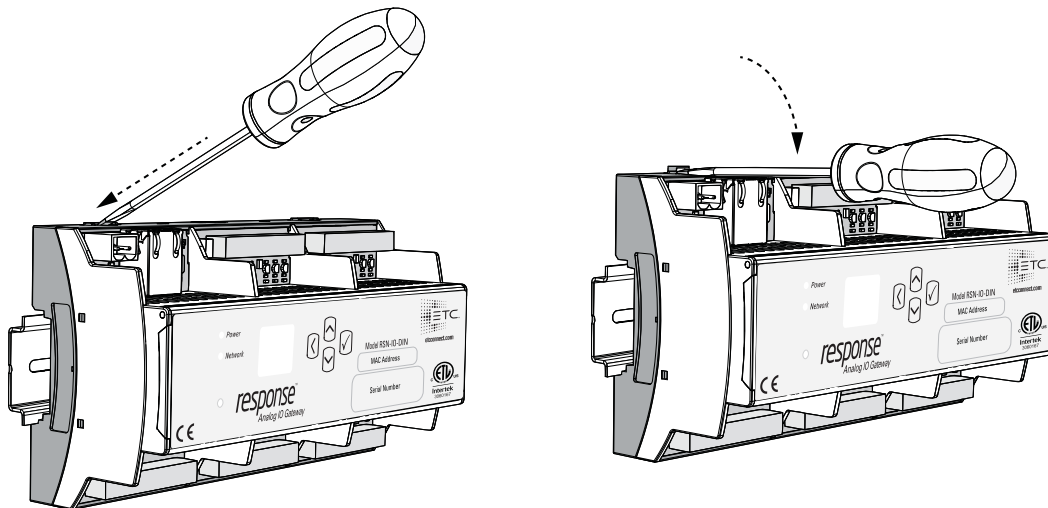
To install to the DIN rail, perform the following steps:

- 1: Ensure the section of DIN rail to be used is mounted securely according to the manufacturer's requirements.
- 2: Hook the top of the gateway over the upper DIN rail edge as shown.
- 3: Depress until the bottom clip on the gateway seats completely onto the DIN rail.



Remove from the DIN Rail

To remove the gateway from the DIN rail, insert a small screwdriver into the orange retaining clips on the top of the gateway and push the screwdriver down to open the clips. Insert the screwdriver into the bottom retaining clips and push up to fully release the gateway from the DIN rail.



Rack-Mounted Enclosure

If you are installing your Response Analog IO Gateway in a rack, refer to the *DIN Rail Rack Mount Kit Installation Guide* that is shipped with your DIN Rail Rack Mount Kit (4267A1015).

Wiring Terminations

Power

When you are not using PoE, wiring for power is on a 2 position screw clamp terminal block. Consider the following when connecting your wires:

- Strip length: 6 mm (.25")
- Torque: Maximum 0.5 Nm (4.4 lb-in)
- Wire size: 0.5mm²-4mm² (22-12 AWG)

You can also use the RJ45 port (10/100BaseT, PoE power class 2) to power your gateway.

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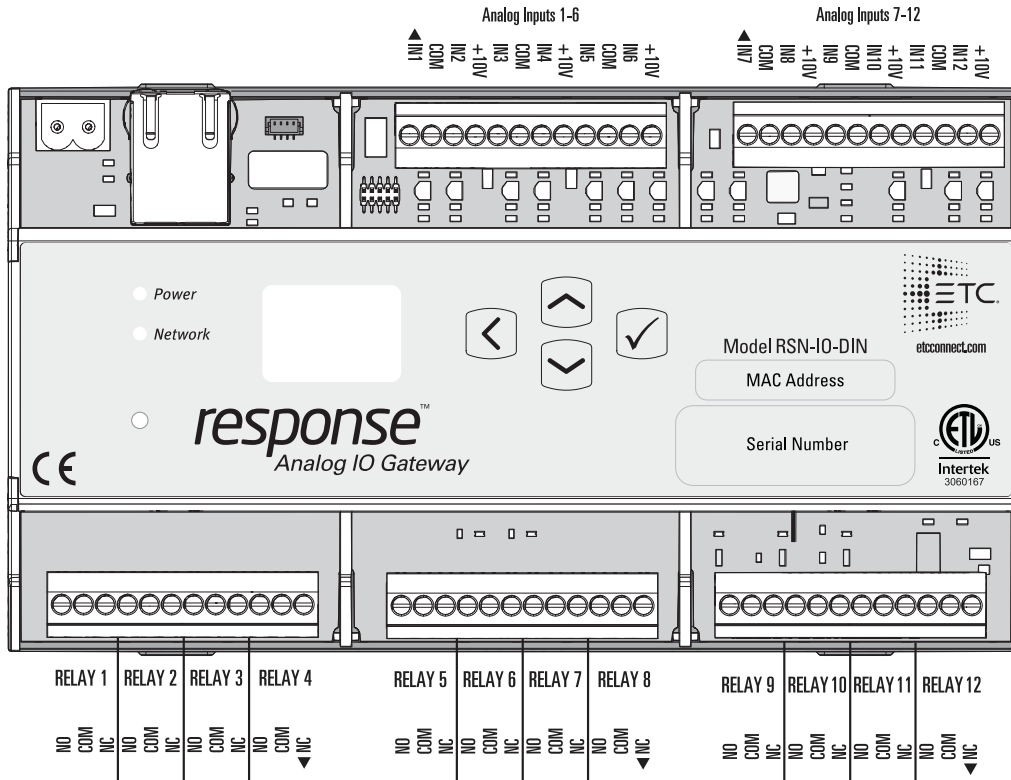
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Analog Inputs and Relay Outputs

Wiring for your inputs and outputs are both done on 12 position screw clamp terminal blocks. When connecting your wires, consider the following:

- Strip length: 6 mm (0.25")
- Torque: 0.5-0.6 Nm (4.4-5.3 lb-in)
- Wire size: 0.2mm²-4mm² (24-12AWG)

Reference the pinout diagram below for wiring details:



The NO and NC terminals on the relays represent **Normally Open** and **Normally Closed**, respectively

Once you have finished wiring, replace the connectors in their appropriate positions on the gateway.

Configuration

The following sections provide information on basic configuration directly from the device. Detailed configuration can be performed using the Net3 Concert application, available from etconnect.com.

View Device Information

To view information specific to your gateway, select the About menu from the home screen. From the About menu, you can select one of the following three options:

- Version - Provides the version of software running on the device
- Analog - Provides information for each of your 12 analog inputs, including level, sACN address, and whether the input is enabled for UDP
- Relay - Provides information for each of your 12 relay outputs, including whether the relay is on or off, the source type, and sACN address. For a relay with the On designation, the Normally Open (NO) contact is closed and Normally Closed (NC) contact is open. For an Off designation, NO is open and NC is closed.

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Configure Network Settings

To configure the network settings for your device, perform the following steps:

- 1: From the Home screen, select Setup > Network.
- 2: From the Mode screen, you can use the up and down buttons to select Manual, Link Local or Automatic.
 - Automatic will attempt to automatically configure the IP Address, IP Subnet, and IP Gateway for your device via DHCP.
 - If you select Manual, you must configure the IP Address, IP Subnet, and IP Gateway screens and then select OK from the Apply/Reboot? screen.
 - If you select Link Local, the gateway self-assigns an IP address that is valid for the local network in the link-local address range. Select OK from the Apply/Reboot? screen.

If your network settings are not valid after configuration, a warning appears for 3 seconds and then you are returned to the Mode screen and can try again.

Modify Device Settings

To restore the factory defaults or upgrade the software for your device, select the Operations menu from the Home screen. From the Operations menu, you can select one of the two options:

- Restore Defaults - Select OK? from the Restore Defaults screen to restore all default values to your device. This removes all network and master/backup information that is configured for your gateway but retains the gateway name.
- Update Software - Select OK? from the Update Software from server <#.#.#.> screen if you need to update the software directly from the gateway.



Note: *The recommended method of updating the Analog IO Gateway is through UpdaterAtor. Regardless of whether you update from UpdaterAtor or directly from the gateway, the device must be on the network to update.*

If you do choose to update directly from the gateway, the bootloader runs and the latest software is downloaded from the server indicated by the <#.#.#.> IP address on the Update Software screen. If you need to modify this IP address, you can configure it in the Net3 Concert application using the Update Server property.

Connect to the Eos Family Console

You can configure your events in the Eos family console from the Show Control Display tab.

- 1: Connect an Ethernet cable to the Ethernet port on your Analog IO Gateway and then connect the cable to a network switch on your Eos console's lighting network.
- 2: If the port on the switch is not PoE, you can use the two position terminal block to provide power.
- 3: To confirm that the gateway is connected to your Eos family console, navigate to the About screen and the gateway should appear in the list of network connected devices.
- 4: You can now integrate your gateway analog inputs or relay outputs into your Eos show file:
 - Analog Inputs can be programmed from the Show Control tab. Note that the Source field in your Analog event must be set to the same value as your gateway's Analog Group ID, which can be configured from the Net3 Concert application.
 - Relay Outputs can be programmed as External Links from the Cue List.



Note: *For additional information on programming analog inputs or relay outputs on your Eos family console, refer to the Eos Family Operations Manual.*
