IMPERA
INSTALLATION AND SET UP GUIDE

biamp.™

CONNECT-X MP6
EXTENSION DEVICE

INSTALLATION CONSIDERATIONS

- The Connect-X MP6 is an extension device that provides serial, IR, GPIO ports, as well as LAN control.

- The device may be installed in various locations using the built-in mounting system that allows the device to be securely fastened on or under desktops, on walls, equipment racks, or tied to cables, etc.

- PoE powered: use an IEEE 802.3 - compliant PoE power supply of switch. PoE injector is not included.
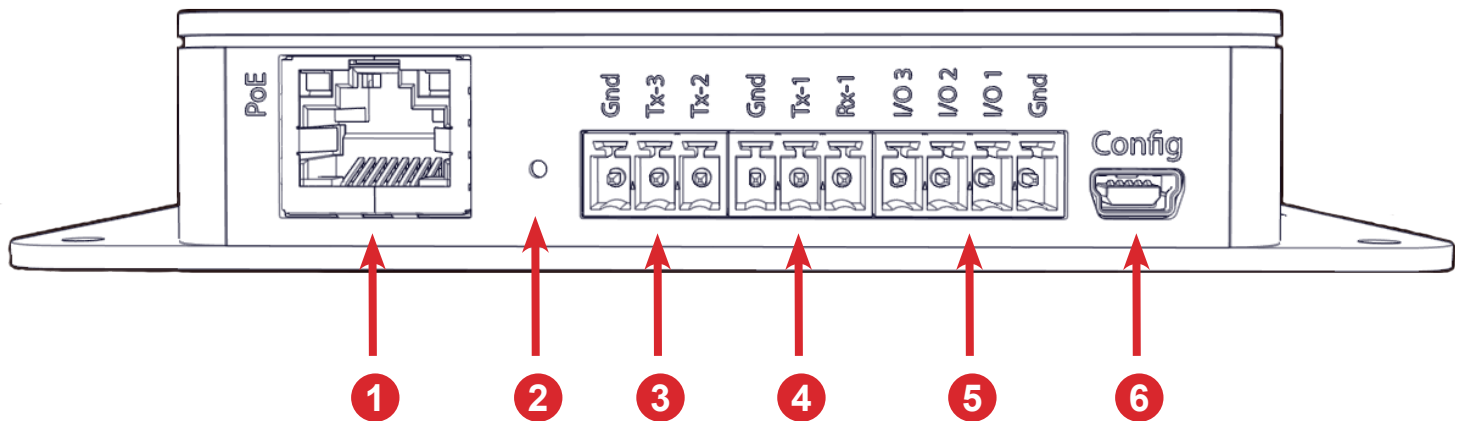
INCLUDED IN THE BOX

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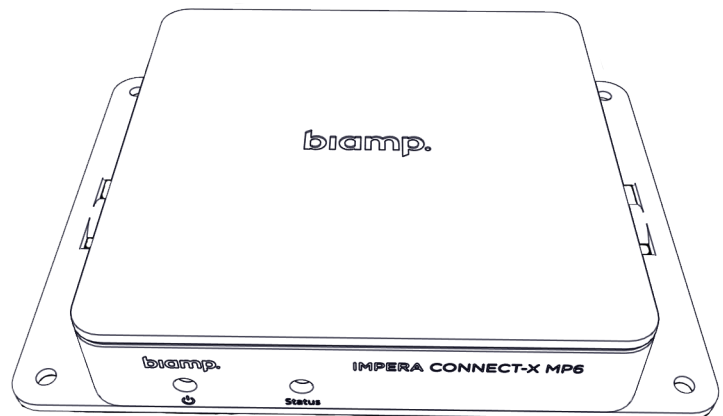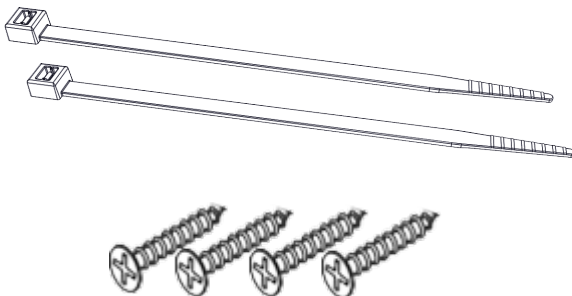
DEVICE LAYOUT

FRONT PANEL LAYOUT
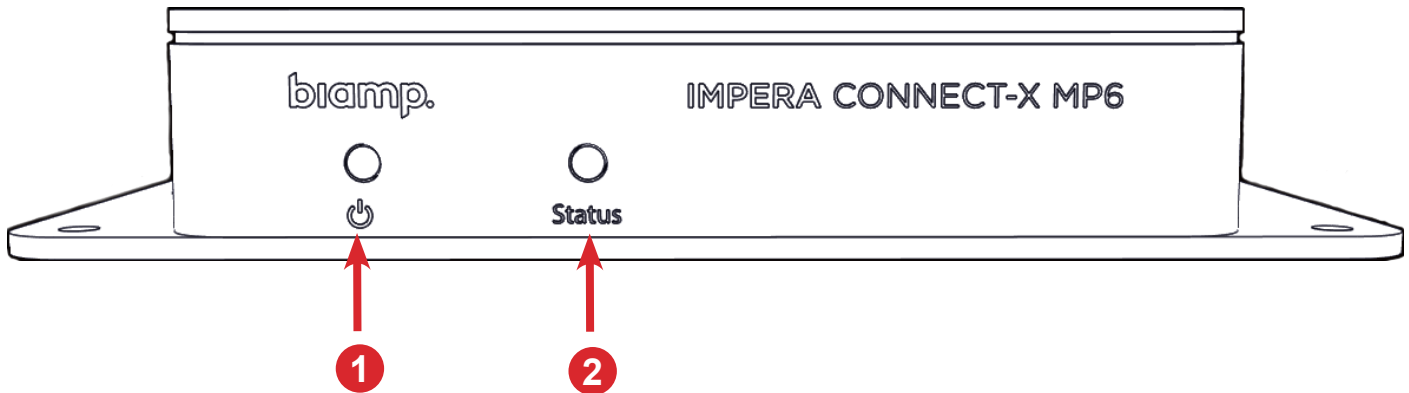
FRONT PANEL INDICATORS

1. 1 Power LED indicator
2. 1 Status LED indicator

REAR PANEL LAYOUT


REAR PANEL PORTS AND TERMINALS

1. 1 RJ-45 Network (LAN) port with PoE functionality
2. 1 Factory reset recessed pin-hole button
3. 2 RS-232 or IR terminal, unidirectional
4. 1 RS-232 terminal, bidirectional or IR unidirectional
5. 3 Digital Input / Output port
6. 1 mini USB configuration port

INSTALLATION

OPTION 1

Install on a flat surface using the screw hole mounts. These allow for the device to be mounted in a varity of locations such as under a table or on a wall.

1. Determine the location where the device will be located and verify the surface is flat enough for the device to be mounted.
2. Install the device in the desired location with the provided hardware.
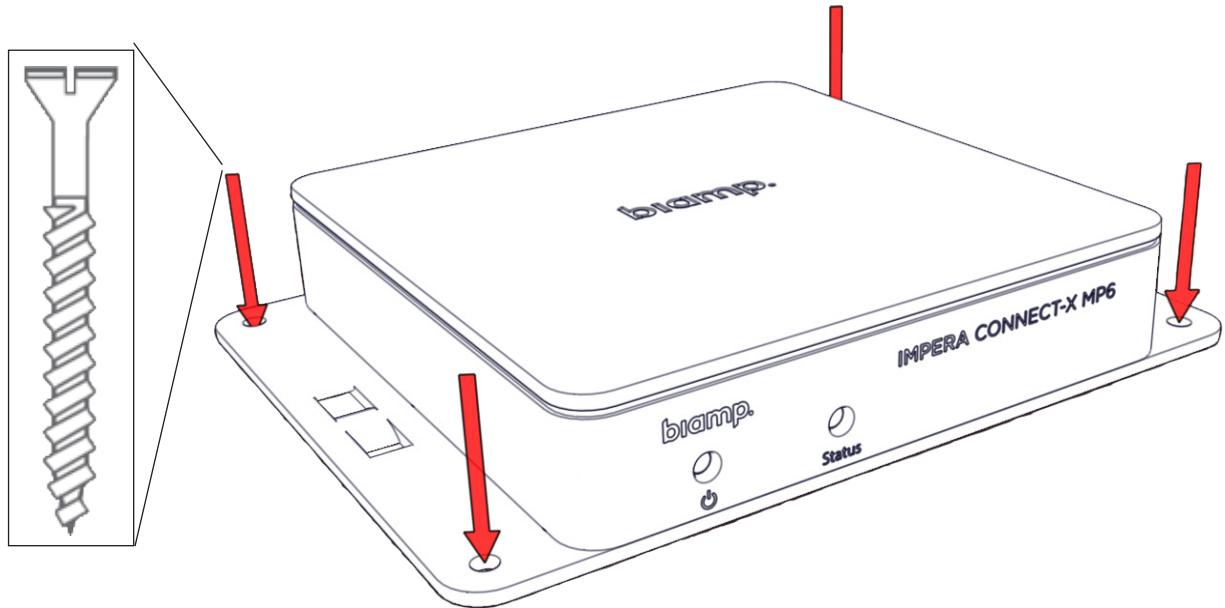

OPTION 2

Install in a location without a flat surface by using zip ties in the guide slots. These allow for the device to be secured to equipment racks, cables, cords, or in places where screws would not be an option.

1. Determine the location where the device will be located.
2. Thread a zip tie through a guide slot and keep the device against the object that it will be secured to.
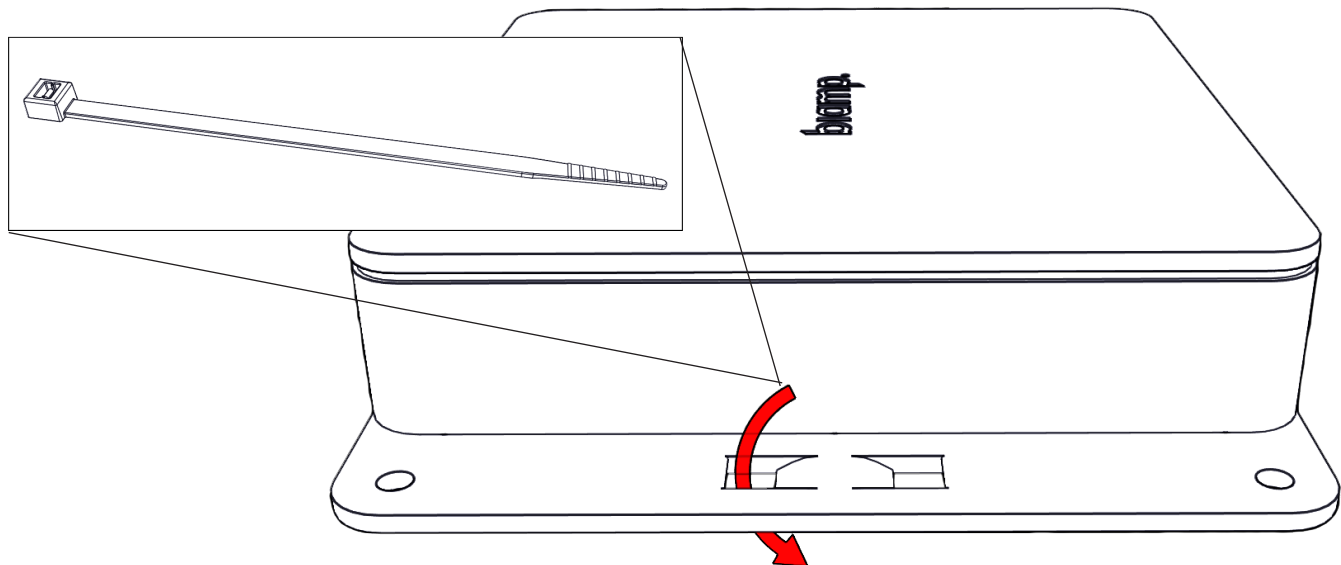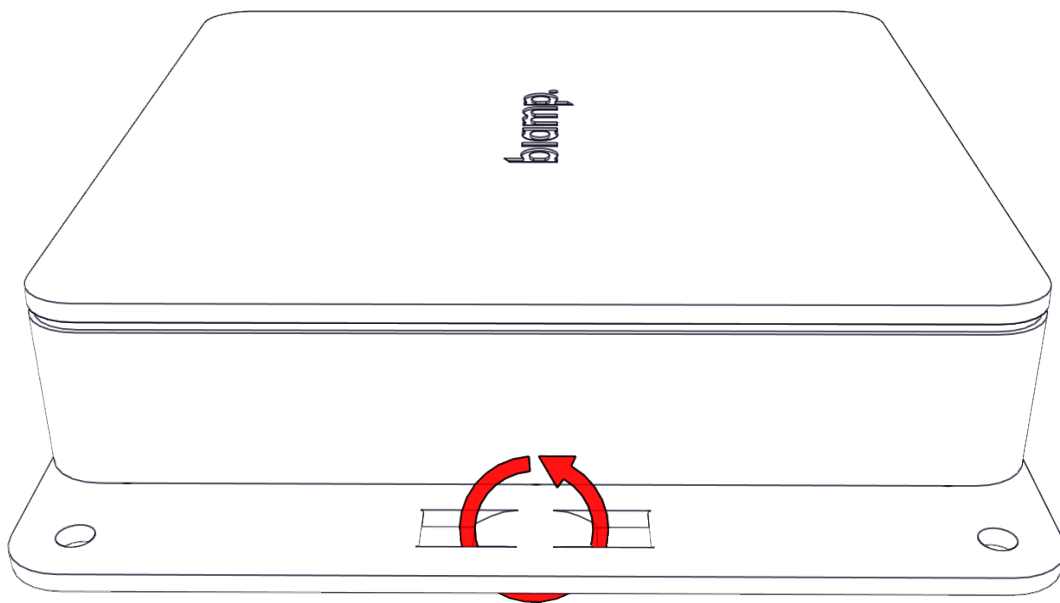
INSTALLATION

3. Loop the pointed end of the zip tie around what the device will be secured to and then back through the guide slot.
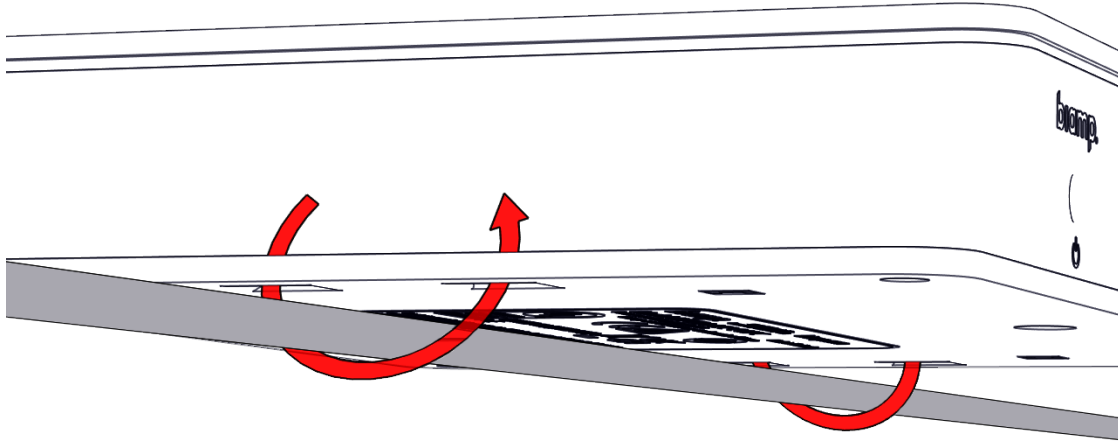
4. Insert the the pointed end of the zip tie into the locking mechanism until it clicks. Keeping the ties loose enough to adjust the postion of the device.

5. Repeat this process for the other guide slot.

6. Adjust the location of the device as needed before tightening the zip ties enough to secure the device in place.

POWER AND STATUS INDICATORS

POWER LED INDICATOR

Off:
The device is not powered

Green:
The device is powered

STATUS LED INDICATOR

Off:
The device is not powered

Flashing Green:
Device is powering up

Solid Green:
No errors

Flashing Amber:
Factory reset in progress

Solid Amber:
Firmware version different than host controller

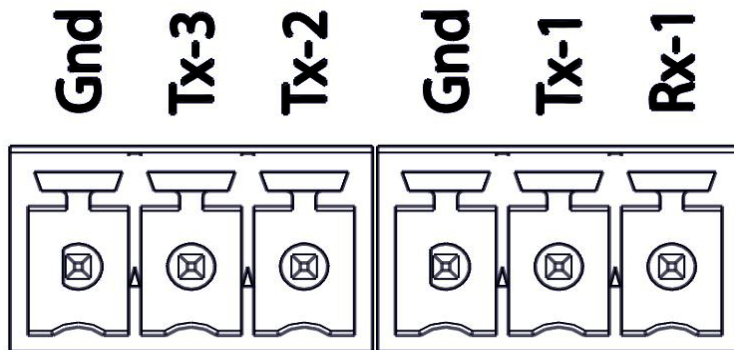**Flashing Red:**
Unable to connect to host controller

Solid Red:
An unexpected error has occured

CONNECTIONS

RS-232 / IR TERMINALS

The TX and RX termials can be configured as either RS-232 or IR emitter ports using the Biamp Project Designer software.

**One-Way Communicatons:** The TX-3 and TX-2 are unidriectional transmit terminals.

Two-Way Communications: The TX-1 and RX-1 terminals make up a bidirectional transmit and receive terminal. This can be connected to devices requiring a reply function such as projectors.
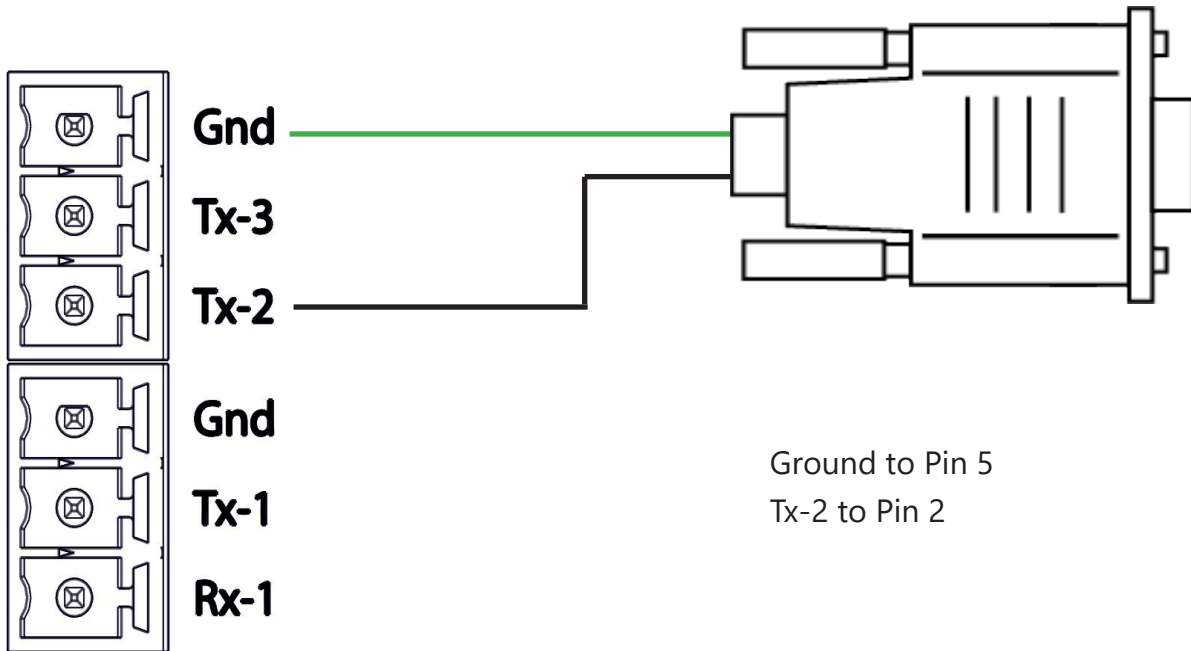
CONNECTION CONFIGURATIONS

Bidirectional RS-232 communications example.

Ground to Pin 5
Tx-1 to Pin 3
Rx-1 to Pin 2
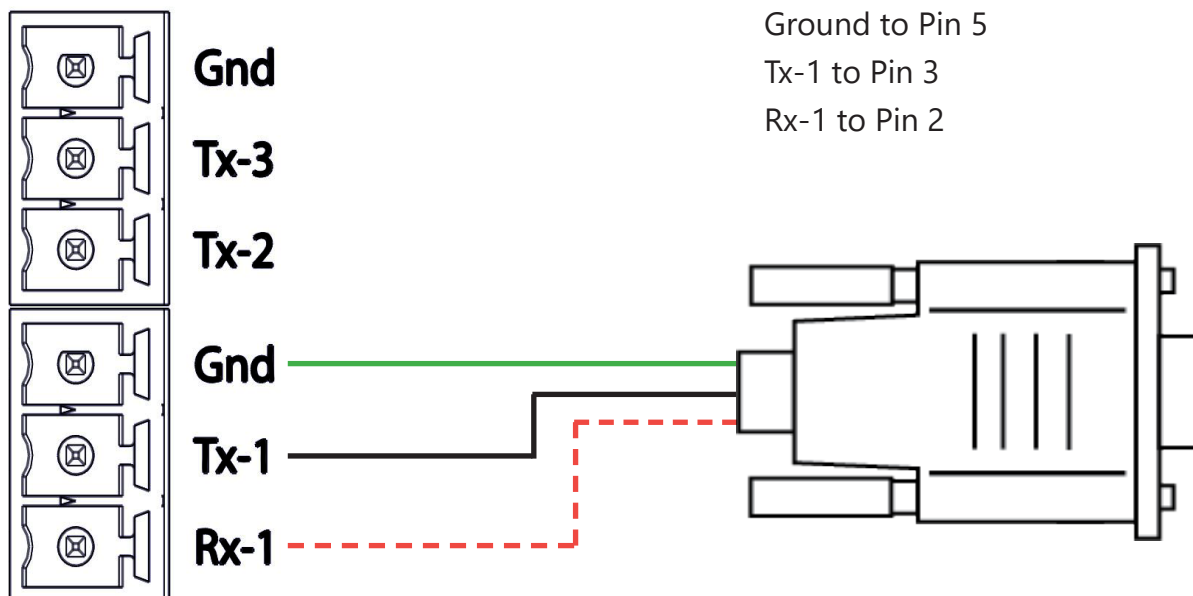
CONNECTIONS

RS-232 unidirectional transmit port example.

Gnd	
Tx-3	
Tx-2	
Gnd	
Tx-1	
Rx-1	

Ground to Pin 5
Tx-2 to Pin 2

Single IR port unidirectional transmit example.

Gnd	IR Emitter
Tx-3	
Tx-2	
Gnd	
Tx-1	
Rx-1	

Ground to IR Emitter
Tx-2 striped wire to IR Emitter
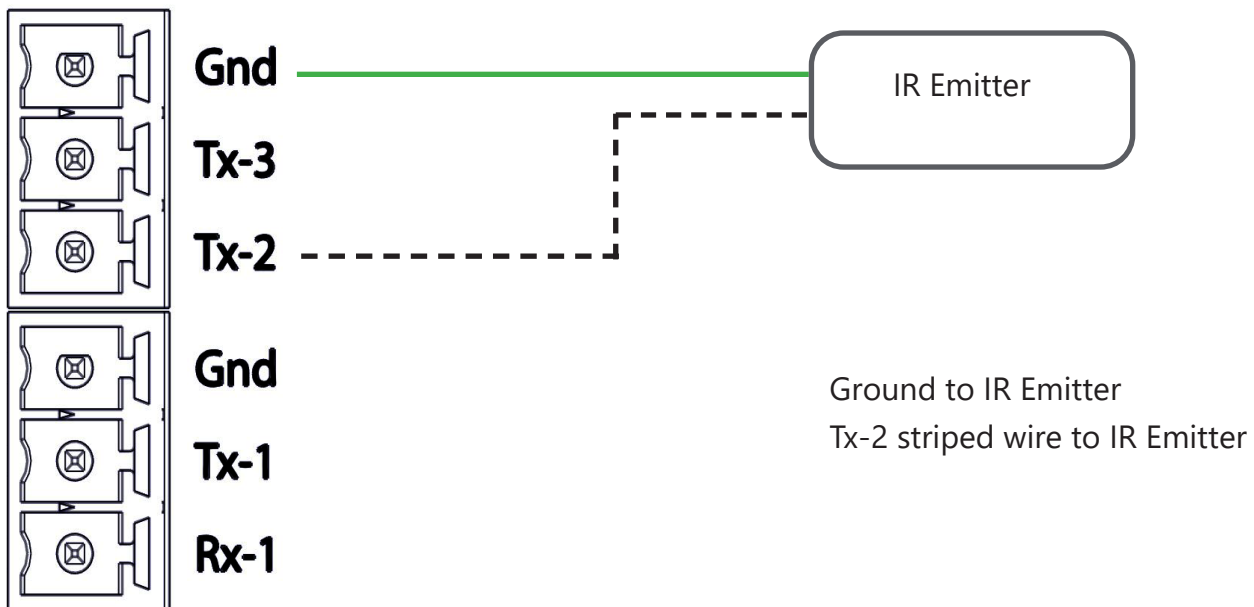
CONNECTIONS

Dual IR port example.

Gnd

Tx-3

Tx-2

Gnd

Tx-1

Rx-1

IR 2 Emitter

Junction

IR 1 Emitter

Ground to IR 2 Emitter
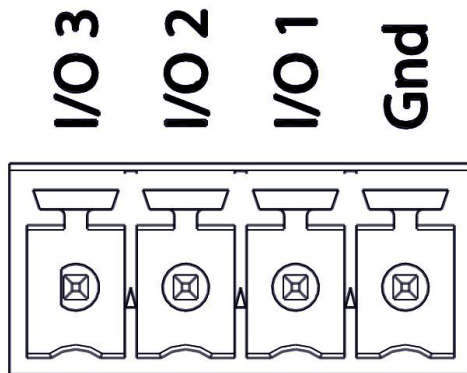TX-2 to IR 1 Emitter
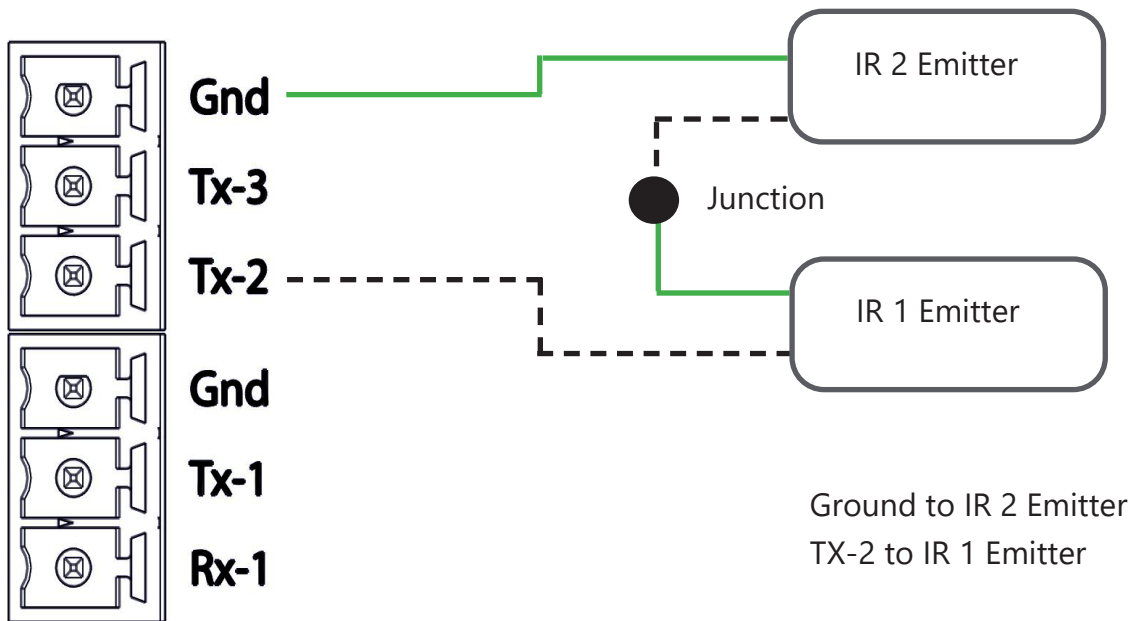
CONNECTIONS

INPUT / OUTPUT PORTS (I/O)

The controller has 3 general ports that are each configured as either output or input. Each of these I/O ports is available for connection to devices such as:

- A PIR movement sensor
- A keyboard lock
- Relays
- Other compatible uses

Potential: These ports are not potential-free. External relays may be needed to prevent ground loops depending on the application.

Outputs:
- When used as outputs, the I/O ports are active low.
- When activeted, the I/O ports are tied to GND through a FET transistor. Also known as an open drain or collector function.
- Each I/O can draw up to 24DC/500mA.

Inputs:
- When used as inputs, the applied voltage must be below 1 VDC to be accepted as LOW, and above 4 VDC (but below 24 VDC) to be accepted as HIGH.
- The inputs are default HIGH and must be connected to a ground to change state.

CONNECTIONS

ETHERNET PORT (LAN)

The RJ-45 Network (LAN) connector with PoE functionality is used for:

- Power over Ethernet
- Connecting to a host controller
- Configuring and controlling third-party devices over a network
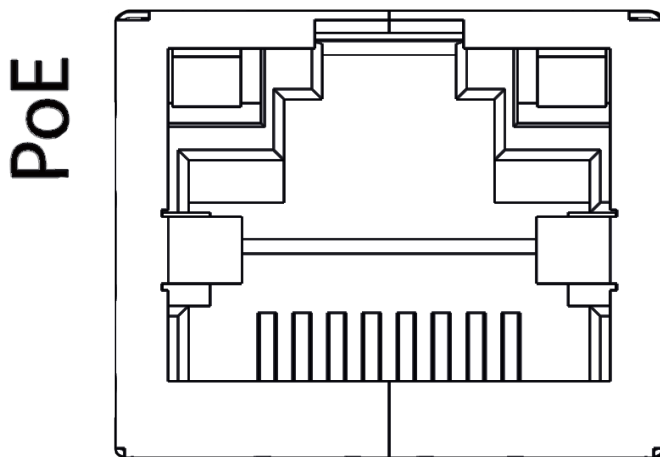
Port LED indicators: The yellow LED indicates the link status and the green LED indicates the link speed.

LED Color	Light Off	Light On	Light Blinking
Yellow	No Link	Link	Activity
Green	10 Mbit	100 Mbit	

Power over Ethernet (PoE)

This port provides power over Ethernet to the controller. Powering the controller requires one of the following:

- A PoE-enabled switch compliant with an IEEE 802.3
- A PoE power injector compliant with IEEE 802.3

CONNECTIONS

LAN Networking Features

- **DHCP client** - Obtain a network IP addresss from a DHCP server

- **HTTPS client** - Control third-party devices through HTTPS

- **IGMP v2** - Filter out unneeded multicast network traffic

- **NTP client** - Obtain a real-time from an NTP server

- **SMTP client** - Send emails through an SMTP server

- **Telnet client** - Controls third-party devices through Telnet

- **TCP server** - Filter out unneeded multicast network traffic

- **TCP client** - Filter out unneeded multicast network traffic

- **UDP server** - Controlled by third-party devices through UDP protocol

- **UDP client** - Control third-party devices using UDP protocol

MINI USB 5P

The mini USB port is used exclusively for device maintenance from Project Designer. It cannot be used to control any external devices.
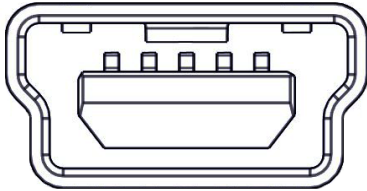
Power:
- The controller can be powered using this port while uploading a configuration file
- Uploads can be safely performed using this port while the controller is connected to a LAN ethernet cable that is supplying power.

FACTORY RESET

A factory reset will restore the device to the default factory state. Pressing and holding the recessed pin-hole reset button will wipe all user data from the device.

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Warranty: Biamp.com/legal/warranty-information

Safety & Compliance: biamp.com/compliance