

# LumaCAN Power Inserter

Cat. No. DRAD0-PIN



## WARNINGS:

- **TO AVOID FIRE, SHOCK OR DEATH: TURN OFF POWER AT CIRCUIT BREAKER OR FUSE AND TEST THAT THE POWER IS OFF BEFORE WIRING!**
- **TO AVOID PERSONAL INJURY OR PROPERTY DAMAGE, DO NOT** install to control a receptacle, or a load in excess of the specified rating.
- To be installed and/or used in accordance with electrical codes and regulations.
- If you are not sure about any part of these instructions, consult an electrician.
- For indoor application only.

## CAUTIONS:

- No user serviceable components. **DO NOT** attempt to service or repair.
- Use this device **WITH COPPER OR COPPER-CLAD WIRE ONLY**.
- **SAVE THESE INSTRUCTIONS.**

PK-A3494-10-00-0B-W

## INSTALLATION INSTRUCTIONS

ENGLISH

## Product Description

The LumaCAN™ power inserter card is a DIN rail mounted adapter which can be used for the following:

- Inject power into a LumaCAN network from an external 24V class 2 power supply.
- Provide LumaCAN 24VDC to a local sensor or device.

The dual RJ-45's can have power bridged between them, or segregated so that power is not. In all applications, power should be segregated so that you only have one power supply per network segment. Therefore, the default configuration is to apply power only to the "OUT" port of the power inserter. See wiring diagrams for additional information.

When used to insert power onto the LumaCAN network, a class 2 power supply should be used. LumaCAN is limited to 1.5A per power segment. As such over-current protection is integrated into the power inserter.

## Before Installation

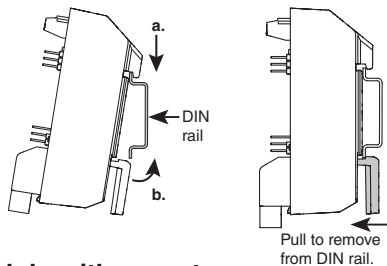
- The power inserter is intended to be used inside a DIN rail enclosure with adjacent power supply, however, surface mounting can be achieved using the provided wall mount adapter.
- Appropriate isolation shall be maintained between Line and Low Voltage cabling. This device is exclusively a low voltage device and all wiring should be in the low voltage compartments of its environment.
- Refer to system submittals for proper power segmenting to ensure you only have a single LumaCAN power supply per network segment. If submittals are not available, ensure compliance with this requirement or contact our support team if you need clarification.

**NOTE:** For more information on network wiring, see the Leviton GreenMAX® DRC installation guide and training videos on [www.leviton.com](http://www.leviton.com).

## Mounting Installation

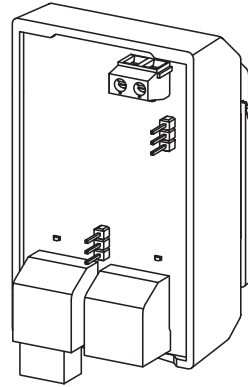
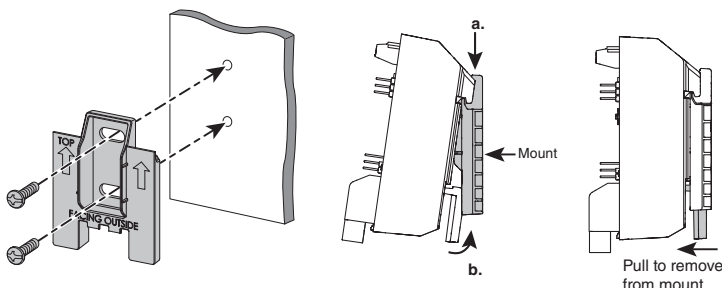
### Install module on DIN rail

1. Line the top of the module against the back of the cabinet and slide the module down onto the rail.
2. Push the module towards the rail until it snaps onto DIN rail.



### Install module with mount

1. Position mount and secure with two screws.
2. Position the top of the module with the top notch of the mount.
3. Push the module towards the mount until it snaps onto mount.



## Specifications

Input Voltage	+24-28VDC (+/- 0%)
Input Current	13 mA
LumaCAN Output Power	Same as Input
IP Rating	10
Terminal Torque Rating, Low Voltage	5 lb-in
Network Connections	<ul style="list-style-type: none"><li>• LumaCAN via (2) RJ-45 connections</li><li>• Termination provided via termination plug.</li></ul> <b>NOTE:</b> Feed-through RJ-45 plugs are not supported. Their use will void the product's warranty.
Operating Temperature	32°F to 104°F (0°C to 40°C)
Storage Temperature	14°F to 185°F (-10°C to 85°C)

## Wiring Installation

**WARNING: TO AVOID FIRE, SHOCK OR DEATH,** turn off power at circuit breaker or fuse and test that the power is off before wiring.

1. If necessary, adjust jumpers to control power flow. Factory default configuration covers inserting power to the output LumaCAN connector from the low voltage terminals and no power applied to the LumaCAN input connector. This is the most common configuration
2. Wire as per wiring diagram.
3. Connect the network wires.

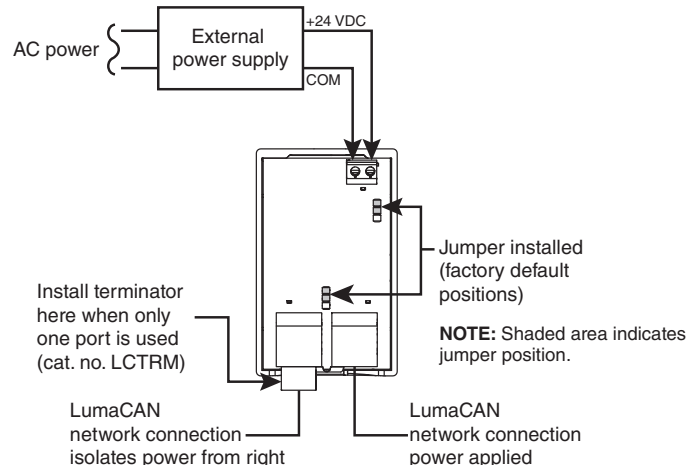
**NOTE:** A termination plug is connected to the RJ-45 labeled "input". DO NOT remove this plug unless you have a data connection to both LumaCAN connections. See "LumaCAN network Termination" below for more details.

4. Power ON the system and confirm proper operation.

## Wiring Diagrams

### Typical Power Inserter Configuration

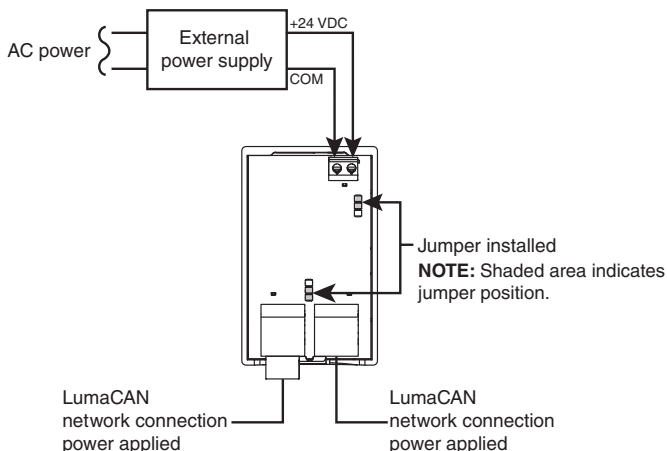
The configuration takes power from the external power supply and applies it to the "OUT" terminal of the LumaCAN network. Power is fully isolated between the IN/OUT RJ-45's so that no change to power on the "IN" side of the inserter is made. In the event that the power inserter is at the end of the network, a terminator should be installed into the "IN" terminal RJ-45.



WEB VERSION

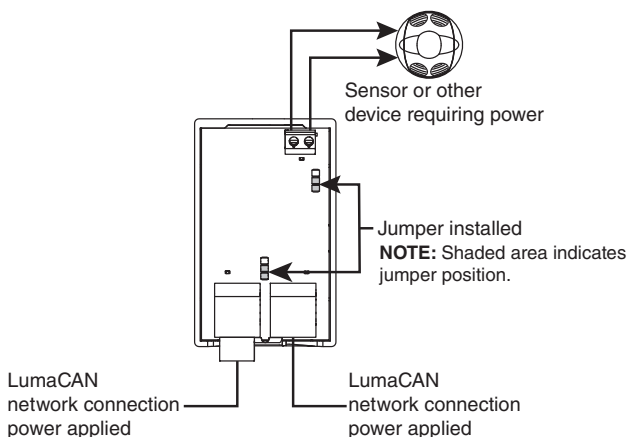
## Alternate Power Inserter Configuration

The configuration takes power from the external power supply and applies it to both the "IN" the "OUT" terminal of the LumaCAN network.



## Using LumaCAN Power

This is the least common configuration of the power inserter and used when you have a local sensor, switch, or the like that requires power and you want to use power from LumaCAN to power it. In this configuration power is taken from either the "OUT" or both the "IN" and "OUT" RJ-45's and provided to the 24V terminals.



### PATENT STATEMENT:

Patents covering this product, if any, can be found on [leviton.com/patents](http://leviton.com/patents).

### TRADEMARK DISCLAIMER:

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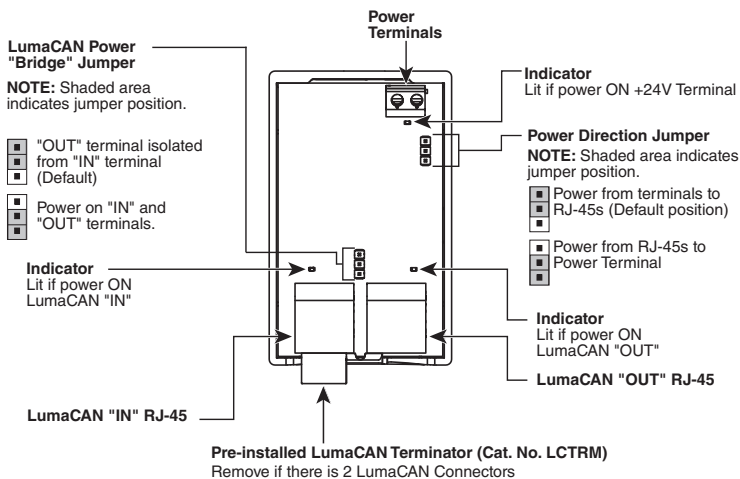
### FOR CANADA ONLY

For warranty information and/or product returns, residents of Canada should contact Leviton in writing at **Leviton Manufacturing of Canada ULC** to the attention of the **Quality Assurance Department, 165 Hymus Blvd, Pointe-Claire (Quebec), Canada H9R 1E9** or by telephone at **1-800-405-5320**.

### LIMITED 5 YEAR WARRANTY AND EXCLUSIONS

Leviton warrants to the original consumer purchaser and not for the benefit of anyone else that this product at the time of its sale by Leviton is free of defects in materials and workmanship under normal and proper use for five years from the purchase date. Leviton's only obligation is to correct such defects by repair or replacement, at its option. **For details visit [www.leviton.com](http://www.leviton.com) or call 1-800-824-3005.** This warranty excludes and there is disclaimed liability for labor for removal of this product or reinstallation. This warranty is void if this product is installed improperly or in an improper environment, overloaded, misused, opened, abused, or altered in any manner, or is not used under normal operating conditions or not in accordance with any labels or instructions. **There are no other or implied warranties of any kind, including merchantability and fitness for a particular purpose,** but if any implied warranty is required by the applicable jurisdiction, the duration of any such implied warranty, including merchantability and fitness for a particular purpose, is limited to five years. **Leviton is not liable for incidental, indirect, special, or consequential damages, including without limitation, damage to, or loss of use of, any equipment, lost sales or profits or delay or failure to perform this warranty obligation.** The remedies provided herein are the exclusive remedies under this warranty, whether based on contract, tort or otherwise.

## Operation



## LumaCAN Network Termination

The last Node in a LumaCAN network must have the termination jumper/plug installed. Your unit ships with a termination plug (cat. no. LCTRM) installed into one of the RJ-45's.

- If this device is at the end of the line, the jumper shall remain installed and the network cable shall be connected to the other plug.
- If this device will be in the middle of a network run, remove the plug and save for future use.
- If the plug was removed but is at the end of the line, the termination plug must be reinstalled.