

49-0121-10 AC/DC Power Supply Operator's Manual

Part Number: 71-0568

Revision: P1

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Product Warranty

RKI Instruments, Inc. warrants gas alarm equipment sold by us to be free from defects in materials, workmanship, and performance for a period of one year from date of shipment from RKI Instruments, Inc. Any parts found defective within that period will be repaired or replaced, at our option, free of charge. This warranty does not apply to those items which by their nature are subject to deterioration or consumption in normal service, and which must be cleaned, repaired, or replaced on a routine basis. Examples of such items are:

a) Absorbent cartridges

d) Batteries

b) Pump diaphragms and valves

e) Filter elements

c) Fuses

Warranty is voided by abuse including mechanical damage, alteration, rough handling, or repair procedures not in accordance with the operator's manual. This warranty indicates the full extent of our liability, and we are not responsible for removal or replacement costs, local repair costs, transportation costs, or contingent expenses incurred without our prior approval.

THIS WARRANTY IS EXPRESSLY IN LIEU OF ANY AND ALL OTHER WARRANTIES AND REPRESENTATIONS, EXPRESSED OR IMPLIED, AND ALL OTHER OBLIGATIONS OR LIABILITIES ON THE PART OF RKI INSTRUMENTS, INC., INCLUDING BUT NOT LIMITED TO, THE WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. IN NO EVENT SHALL RKI INSTRUMENTS, INC. BE LIABLE FOR INDIRECT, INCIDENTAL, OR CONSEQUENTIAL LOSS OR DAMAGE OF ANY KIND CONNECTED WITH THE USE OF ITS PRODUCTS OR FAILURE OF ITS PRODUCTS TO FUNCTION OR OPERATE PROPERLY.

This warranty covers instruments and parts sold to users by authorized distributors, dealers, and representatives as appointed by RKI Instruments, Inc.

We do not assume indemnification for any accident or damage caused by the operation of this gas monitor, and our warranty is limited to the replacement of parts or our complete goods.

Overview

This manual describes how to install and wire the 49-0121-10 power supply.

Specifications

Table 1 lists specifications for the power supply.

Table 1: Specifications

Construction (housing)	NEMA 4X
Power Input	100 - 240 VAC, 2.5 A
Power Output	24 VDC, 4.5 A
Operating Temperature	-4° F to 122° F (-20°C to 50°C)
Size	11.6" H x 5.6" W x 3.8" D (29.5 cm D x 14.2 cm W x 9.7 cm D)
Weight	3 lbs (1.4 kg)

Description

The 49-0121-10 is intended to power devices that require 24 VDC. It is normally used to power peripheral devices such as horns and strobes. The power supply assembly consists of a power supply in a NEMA 4X housing with a conduit hub on the bottom for wiring connections.

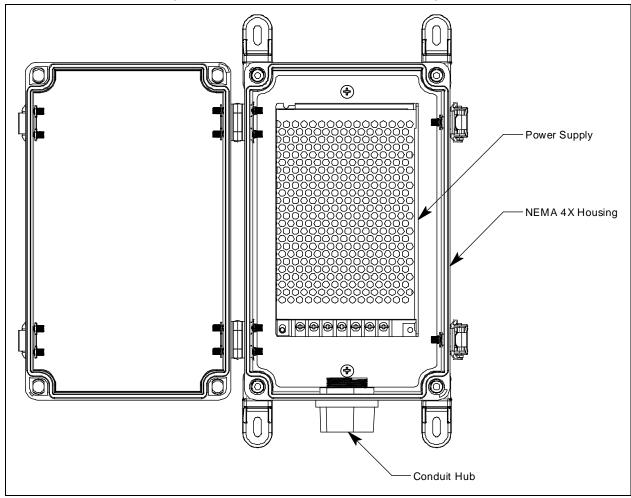


Figure 1: Power Supply Component Location

Installation

This section describes procedures to mount and wire the power supply.

Mounting the Power Supply

- 1. Select a mounting site close to the device requiring 24 VDC. Consider the following when you select the mounting site.
 - Select a site where the power supply is not likely to be bumped or disturbed. Make sure there is sufficient room to perform wiring procedures.
- 2. The mounting feet and hardware to install the mounting feet are shipped in a bag inside the housing. Install the mounting feet as shown below.

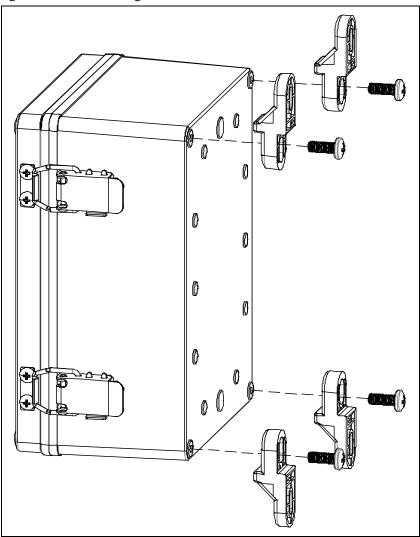


Figure 2: Installing the Mounting Feet

3. Insert 3/16 inch screws through the slots in the mounting feet at each corner of the housing to secure the housing to the mounting surface.

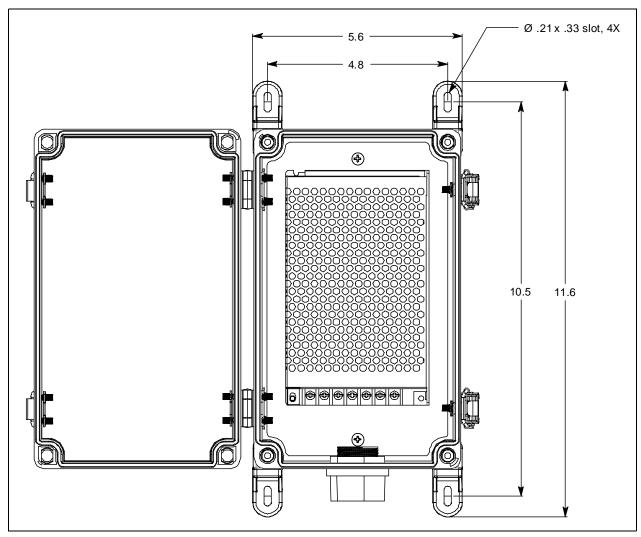


Figure 3: Outline & Mounting Dimensions

Wiring the Power Supply

- 1. Turn off or unplug power to the AC power source.
- 2. Open the power supply housing door.
- 3. Route three wires in conduit or a three wire cable with wires from the AC power source to the power supply's conduit hub.
- 4. Connect the three wires to the AC input terminals on the power supply as shown below using either plain wire or #6 lugs.

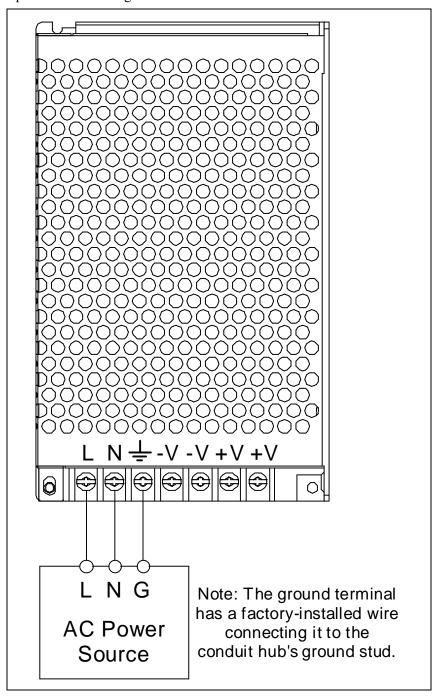


Figure 4: Wiring AC Power to the Power Supply

- 5. For each 24 VDC device that will be powered by the power supply, route two wires in conduit or a two wire cable with wires from the 24 VDC device to the power supply's conduit hub.
- 6. Connect the two wires to the DC output terminals on the power supply as shown below using either plain wire or #6 lugs.

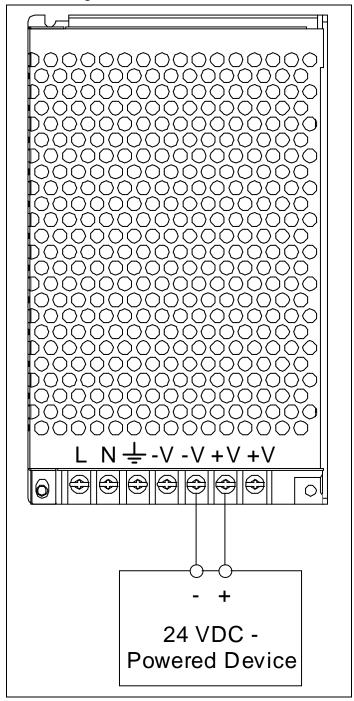


Figure 5: Wiring 24 VDC Devices to the Power Supply

- 7. Turn on the AC power source. 24 VDC starts being applied to the connected device(s) as soon as AC power is applied to the power supply.
- 8. Close the power supply housing door.