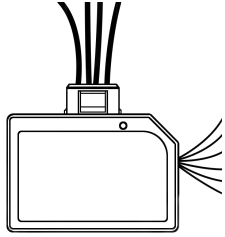


# INSTALLATION INSTRUCTIONS



## MPP-24 Power Pack

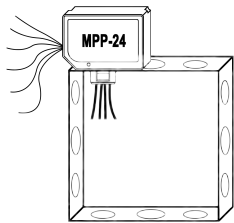


### SPECIFICATIONS

Volages .....	120/230/277VAC, 50/60Hz
Operating Temperature .....	32°-131°F (0-55°C)
Load Requirements	
Ballast.....	.20amp @120/277VAC
Incandescent.....	.20amp @120VAC
Motor .....	.1HP @120/240VAC
Output .....	150mA @24VDC (with relay connected)
Low Voltage Input:	
Control ON .....	12-24VDC
Hold ON .....	12-24VDC
Hold OFF.....	12-24VDC
Manual ON (momentary switch required).....	12-24VDC

### DESCRIPTION

The MPP-24 power pack is a power supply for low voltage lighting control systems, such as the MPC-50L, MDC-50L, and other low voltage Ceiling mounted occupancy sensor. The MPP-24 power pack has a connector that allows for easy installation onto the outside of any junction box with a 1/2" knockout. The MPP-24 comes with two sets of wires; line voltage wires for power source and lighting fixtures and 22 gauge low voltage wires for sensor and momentary switches. Each power pack can be connected with a maximum of six occupancy sensors.



### WARNING

#### Turn the POWER OFF at the circuit breaker before installing the Power Pack.

Read and understand these instructions before installing. This device is intended for installation in accordance with the National Electric Code and local regulations. It is recommended that a qualified electrician performs this installation. Make sure to turn off the circuit breaker or fuse(s) and make sure power is OFF before wiring the device. **Use copper wire only.**

### WIRING DIRECTIONS

Connect the low voltage:

- Test all High Voltage wires and label them before disconnecting or connecting any wires. Improper installation **VOIDS ALL WARRANTY** repair or replacement. Use only UL listed, 18-22 AWG, 3-conductor, Class 2 cable for low voltage wiring.
- Connect RED wire from power pack to the +24V terminal on the sensor.
- Connect BLACK wire from power pack to *Common* terminal on the sensor.
- Connect BLUE wire from power pack to *Control Out* terminal on sensor.

Connect the High Voltage Wires:

1. Connect one RED LOAD wire from the Power Pack to the LOAD wire.
2. Connect the WHITE NEUTRAL wire from the Power Pack to the NEUTRAL wire.
3. Connect the BLACK HOT and one RED LOAD wire from the Power Pack to the HOT wire.

To add a MANUAL SWITCH such as the Momentary Toggle Switch connect the following wires to the low voltage wires on the Power Pack:

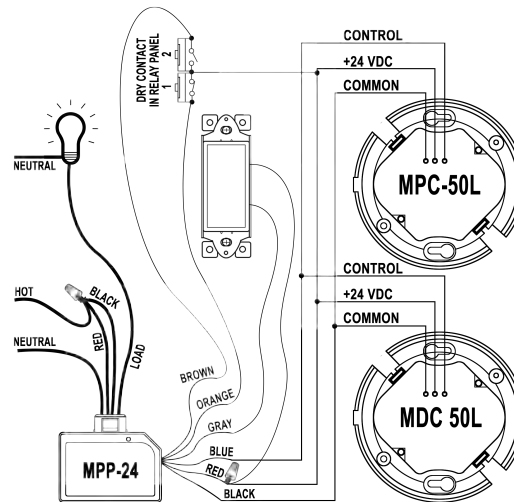
- Connect the Gray wire on Power pack to a terminal screw on the momentary switch.
- Connect a low voltage wire from the other terminal screw on the momentary switch to the RED +24 VDC wire on the Power Pack.

To add a "HOLD ON" DRY CONTACT SWITCH connect the following wires to the low voltage wires on the Power Pack:

- Connect the ORANGE wire on Power pack to a terminal screw on the dry contact switch.
- Connect a low voltage wire from the other terminal screw on the dry contact switch to the RED +24 VDC wire on the Power Pack.

To add a "HOLD OFF" DRY CONTACT SWITCH connect the following wires to the low voltage wires on the Power Pack:

- Connect the BROWN wire on Power pack to a terminal screw on the dry contact switch.
- Connect a low voltage wire from the other terminal screw on the dry contact switch to the RED +24 VDC wire on the Power Pack.



### OPERATION

The MPP-24 can be automatically operated by the use of low voltage ceiling sensors, manually with momentary switches, or on a schedule by the use of a relays.

**Automatic:** The MPC-50L or the MDC-50L may be installed with the MPP-24 to automatically turn ON/OFF the Load based on motion detection.

**Manual:** This feature **OVERRIDES ALL control functions**. The Load can be turned ON/OFF manually by installing a momentary switch. The momentary switch will effect the operation of the ceiling sensor. If the Load is turned OFF manually, the Load **WILL NOT** turn on again automatically until the time delay has expired on the ceiling sensor or the Load is manually turned ON again.

**Hold ON:** This feature overrides the Automatic control. The MPP-24 can be turned ON based on a schedule by connecting it to a relay such as a timer.

**Hold OFF:** This feature overrides the Automatic control. The MPP-24 can be turned OFF based on a schedule by connecting it to a relay such as a timer.

**Over Current Protection:** The MPP-24 has built-in short circuit and thermal protection. It prevents over current damage to the power pack when the output exceeds 200mA. Make sure the connected Load is under the specified ratings. Use additional MPP-24 power packs to distribute the Loads evenly.

**LED Indicator:**

- **LED is OFF:** There's no power coming to the power pack or the +24VDC is shorted.
- **LED BLINKS continuously:** The Load is ON.
- **LED is ON continuously:** The Load is OFF.

**Zero-Crossing:** The relay in the MPP-24 is built with Zero-Crossing Circuit. It's deviation of ±20% prolongs the life of the relay and increases the reliability of movement. In other words, if an ON signal is received while the AC output to the Load is not very close to zero voltage, the relay will "wait" to switch ON again until the output AC wave reaches its next close to zero point.

### TROUBLESHOOTING

**The Load does not automatically turn ON after using the manual OFF switch:**

- Wait for the time delay on the sensor to expire or press the Manual switch to turn back on and wait for the time delay on the sensor to expire.
- Increase the sensitivity on the sensor and reduce the time delay.

**The Load does not turn ON when motion is detected:** The "HOLD OFF" or the Manual switch may be overriding the control. Override the switch again by manually turning on the Load and waiting for the time delay to expire.

**The Load does not turn OFF when time delay has expired:** The "HOLD ON" or the Manual switch may be overriding the control. Override the switch again by manually turning the Load OFF and then back ON and then wait for the time delay to expire.

### WARRANTY INFORMATION

This device is warranted to be free of material and workmanship defects for 2 years from the date of purchase. Original receipt or proof of purchase from an authorized retailer must be presented upon warranty claim. ALL claims must be verified and approved by Enerlites, Inc. Warranties from other Enerlites products may vary. This warranty is nontransferable and does not cover normal wear and tear or any malfunction, failure, or defect resulting from misuse, abuse, neglect, alteration, modification, or improper installation. To the fullest extent permitted by the applicable state law, Enerlites shall not be liable to the purchaser or end user customer of Enerlites products for direct, indirect, incidental, or consequential damages even if Enerlites has been advised of the possibility of such damages. Enerlites' total liability under this or any other warranty, express or implied, is limited to repair, replacement or refund. Repair, replacement or refund are the sole and exclusive remedies for breach of warranty or any other legal theory.

