

Lutron PP-DV

Lutron PP-DV Occupancy Sensor Power Pack

Instruction Manual

1. INTRODUCTION

The Lutron PP-DV Occupancy Sensor Power Pack is designed to provide power and switching capabilities for Lutron occupancy and vacancy sensors. This device facilitates automatic control of lighting or other electrical loads based on occupancy detection, enhancing energy efficiency in various commercial and residential applications.

Key features include:

- High-impact UL94 5VA flammability-rated plastic case construction.
- Reliable Class B (130°C) insulating material relay with silver alloy contacts.
- Compatibility with 120V, 277V, or 347V AC power systems (60 Hz).
- Designed for durability and consistent performance.



Figure 1: The Lutron PP-DV Occupancy Sensor Power Pack. This image displays the compact, black housing of the power pack, typically featuring wiring terminals for electrical connections.

2. IMPORTANT SAFETY INFORMATION

WARNING: Risk of Electric Shock. May result in serious injury or death. Turn off power at circuit breaker or fuse before installing. This device must be installed by a qualified electrician in accordance with all national and local electrical codes.

- Do not use this device for purposes other than those specified by Lutron.
- Ensure all wiring connections are secure and properly insulated.
- Operate within specified voltage and current ratings.
- Keep away from moisture and extreme temperatures.

3. SETUP AND INSTALLATION

Installation of the Lutron PP-DV Power Pack requires knowledge of electrical systems. It is recommended that installation be performed by a licensed electrician.

3.1 Pre-Installation Steps

1. **Disconnect Power:** Before beginning any work, turn off power at the main circuit breaker or fuse panel to avoid electrical shock.
2. **Verify Compatibility:** Ensure the PP-DV is compatible with your existing electrical system and the Lutron occupancy sensors you intend to use (e.g., LOS C, LOS W).
3. **Review Wiring Diagram:** Consult the wiring diagram provided with the product packaging for specific connection details.

3.2 Mounting the Power Pack

- Mount the power pack in a suitable electrical enclosure or junction box, ensuring adequate ventilation.
- Secure the device using appropriate fasteners to prevent movement.

3.3 Wiring Connections

The PP-DV Power Pack typically features terminals for line voltage input, switched load output, and low-voltage connections to the occupancy sensor. Use appropriate wire gauges for all connections.

- **Line Voltage Input:** Connect the incoming AC power (120V, 277V, or 347V) to the designated input terminals.
- **Switched Load Output:** Connect the lighting or other electrical load to the switched output terminals.
- **Sensor Connections:** Connect the low-voltage wires from the compatible Lutron occupancy sensor (e.g., LOS C, LOS W) to the corresponding sensor terminals on the power pack.
- **Grounding:** Ensure the power pack is properly grounded according to local electrical codes.

After all connections are made, carefully secure the wiring and close the electrical enclosure.

4. OPERATING INSTRUCTIONS

The Lutron PP-DV Occupancy Sensor Power Pack operates automatically in conjunction with a connected occupancy or vacancy sensor.

4.1 Initial Power-Up

1. Once installation is complete and all connections are secure, restore power at the circuit breaker.
2. The power pack will energize and provide power to the connected sensor.
3. The sensor will typically undergo a brief warm-up period (refer to the sensor's manual for details).

4.2 Automatic Operation

- The connected occupancy sensor detects motion or presence in its coverage area.
- Upon detection, the sensor signals the PP-DV Power Pack to switch the connected load (e.g., lights) ON.
- When no occupancy is detected for a pre-set time (configured on the sensor), the sensor signals the power pack to switch the load OFF.
- The PP-DV acts as the interface, providing the necessary power and switching capacity for the sensor's control signals.

For specific settings and adjustments related to sensitivity, time delays, and operating modes, refer to the instruction manual of the connected Lutron occupancy sensor.

5. MAINTENANCE

The Lutron PP-DV Occupancy Sensor Power Pack is designed for maintenance-free operation. However, periodic checks can help ensure continued performance.

- **Cleaning:** The exterior of the power pack can be wiped with a soft, dry cloth if necessary. Do not use liquid cleaners or solvents.
- **Visual Inspection:** Periodically inspect the power pack and its wiring for any signs of damage, loose connections, or overheating.
- **Functionality Check:** Ensure the connected occupancy sensor and the controlled load are operating as expected. If issues arise, refer to the troubleshooting section.

Always disconnect power before performing any inspection or maintenance that involves opening the electrical enclosure.

6. TROUBLESHOOTING

If the Lutron PP-DV Power Pack or the connected system is not functioning correctly, review the following common issues and solutions:

Problem	Possible Cause	Solution
Load (e.g., lights) does not turn ON.	<ul style="list-style-type: none">• No power to the power pack.• Incorrect wiring.• Faulty connected sensor.• Load is faulty (e.g., burnt-out bulb).	<ul style="list-style-type: none">• Check circuit breaker and power supply.• Verify all wiring connections against the diagram (power off).• Test the sensor or replace if necessary.• Test the load independently.
Load does not turn OFF.	<ul style="list-style-type: none">• Sensor continuously detecting occupancy.• Sensor time delay set too long.• Faulty sensor or power pack relay.	<ul style="list-style-type: none">• Check sensor placement for false triggers.• Adjust sensor time delay settings.• Contact Lutron support if issue persists after checking sensor.
Intermittent operation.	<ul style="list-style-type: none">• Loose wiring connections.• Power fluctuations.• Sensor interference or malfunction.	<ul style="list-style-type: none">• Verify all wiring connections are tight (power off).• Consult an electrician to check power quality.• Check sensor for obstructions or damage.

If troubleshooting steps do not resolve the issue, contact Lutron technical support or a qualified electrician.

7. SPECIFICATIONS

- **Model:** PP-DV
- **Brand:** Lutron
- **Operating Voltage:** 120V, 277V, or 347V AC, 60 Hz
- **Current Rating (Control):** 1 Amp
- **Amperage Capacity (Switched Load):** 16 Amps
- **Relay Type:** Class B (130°C) insulating material; silver alloy contacts

- **Construction:** High-impact UL94 5VA flammability-rated plastic case
- **Control Type:** Automatic
- **Compatible Devices:** Lutron LOS C, LOS W Occupancy Sensors
- **Connectivity Protocol:** X-10
- **Finish:** Black
- **Item Weight:** Approximately 3.84 ounces (108.87 grams)
- **Product Dimensions:** Refer to product packaging for exact dimensions.
- **International Protection Rating:** IP02

8. WARRANTY AND SUPPORT

For warranty information, technical support, or service inquiries regarding the Lutron PP-DV Occupancy Sensor Power Pack, please contact Lutron Electronics Co., Inc. directly.

Visit the official Lutron website or refer to the contact information provided in the product packaging for the most current support details.

Lutron Customer Service: www.lutron.com/support

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