Lutron PD-10NXD-WH_K2

Lutron Caseta Pro In-Wall Dimmer User Manual

Model: PD-10NXD-WH

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1. Product Overview

The Lutron Caseta Wireless In-Wall Dimmer Pro (Model PD-10NXD-WH) is an advanced lighting control device designed for dimming various load types. It utilizes radio frequency (RF) technology for both direct and remote control, offering enhanced convenience and flexibility in your home or office lighting system.

This dimmer is compatible with a range of lighting, including dimmable screw-in LEDs, incandescent, halogen, and magnetic low-voltage (MLV) loads. For MLV loads, a neutral wire connection is required. It also supports dimmable ballasts. When integrated with a Lutron Smart Bridge or Smart Bridge Pro, the dimmer can be programmed via the Lutron app, enabling features like lighting scenes, scheduled events, and control from any location with an internet connection.

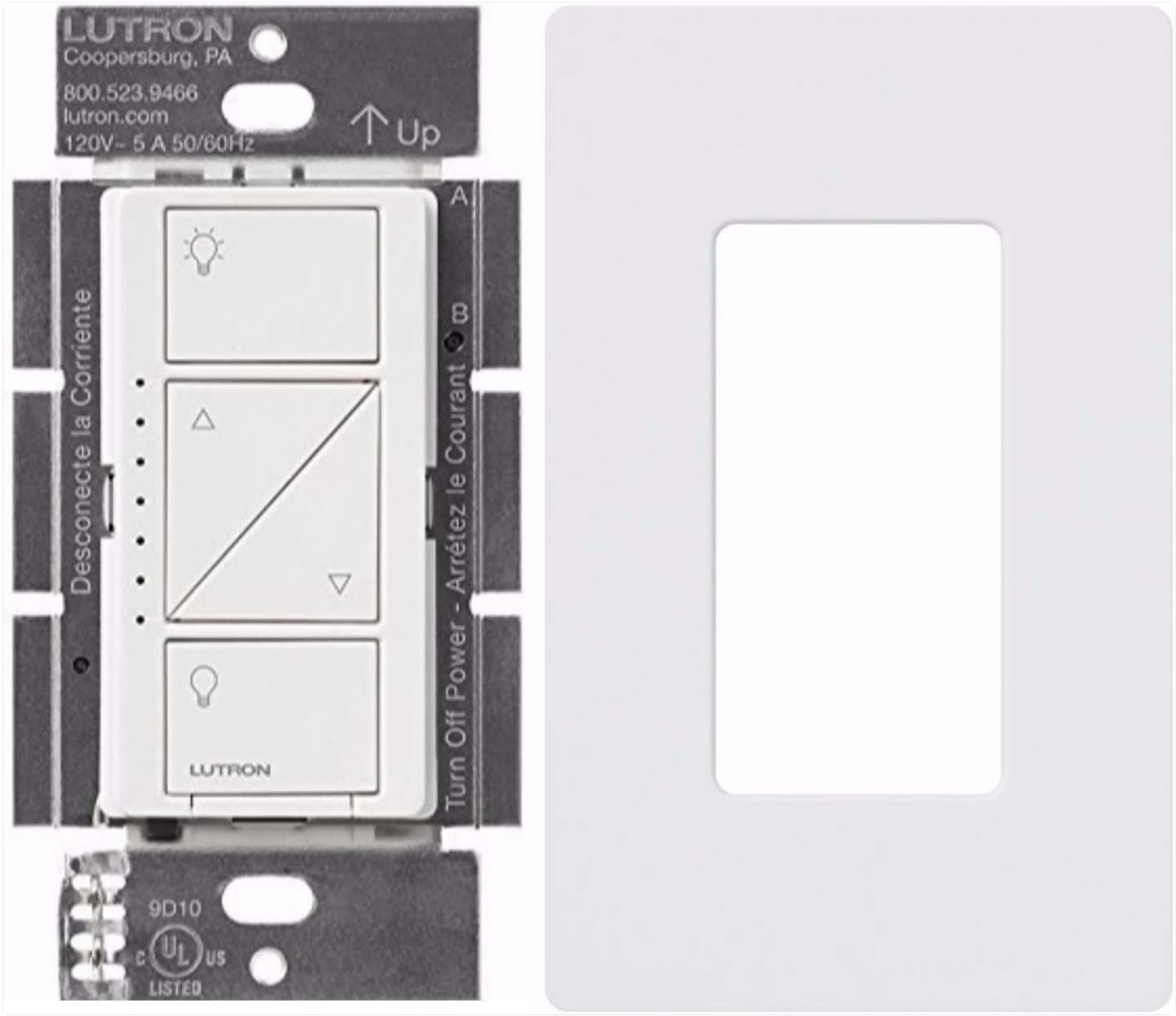


Figure 1.1: Lutron Caseta Pro In-Wall Dimmer (PD-10NXD-WH) shown with a screwless wall plate. The wall plate is sold separately.

2. Important Safety Information

Please read and understand all instructions before installing or operating this product. Improper installation or use can lead to serious injury, death, or property damage.

- **WARNING: SHOCK HAZARD.** To avoid serious injury or death, always turn off power at the circuit breaker or fuse box before wiring.
- Install in accordance with all national and local electrical codes.
- If you are unsure about any part of these instructions, consult a qualified electrician.
- Do not use this device with non-dimmable loads.
- For indoor use only.
- Operating temperature: 0 °C to 40 °C (32 °F to 104 °F).
- Clean only with a soft, damp cloth. Do not use any chemical cleaners.

3. Setup & Installation

3.1. What's in the Box

- Lutron Caseta Pro In-Wall Dimmer (PD-10NXD-WH)
- Wire connectors
- Mounting screws

Note: The screwless wall plate is sold separately and is not included with the dimmer.



Figure 3.1: Front view of the Lutron Caseta Pro In-Wall Dimmer.

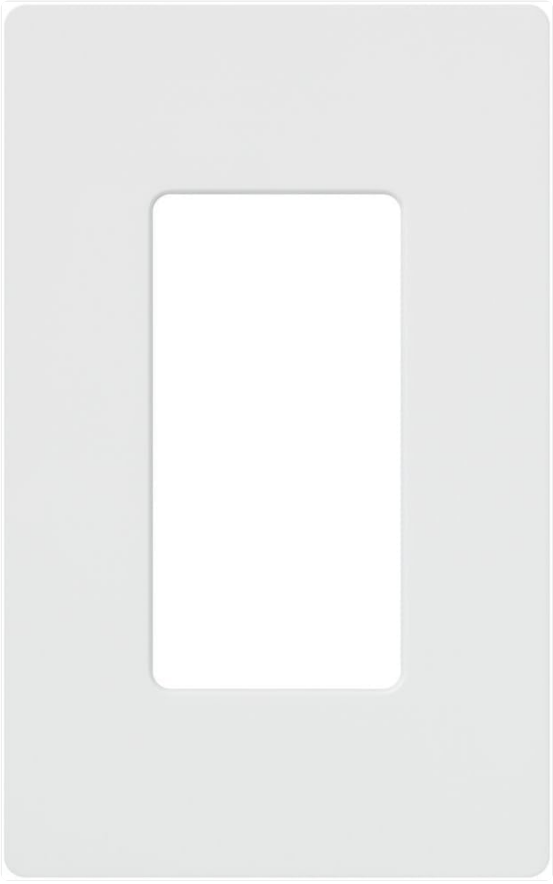


Figure 3.2: Example of a compatible screwless wall plate (sold separately).

3.2. Tools Required

- Flathead screwdriver
- Phillips head screwdriver
- Wire strippers
- Voltage tester

3.3. Installation Steps

1. **Turn Off Power:** Locate the circuit breaker or fuse box that controls the lighting circuit you will be working on. Turn off the power completely. Verify power is off using a voltage tester.
2. **Remove Existing Switch:** Carefully remove the wall plate and unscrew the existing switch from the wall box. Disconnect the wires from the old switch.
3. **Identify Wires:** Identify the following wires in the wall box:
    - **Line (Hot):** The wire carrying power from the circuit breaker.
    - **Load:** The wire going to the light fixture.
    - **Neutral:** (Required for MLV loads) Typically white.
    - **Ground:** Bare copper or green wire.
4. **Wire the Dimmer:** Connect the wires from the wall box to the dimmer using the provided wire connectors.
    - Connect the *Line* wire to the dimmer's Line terminal.
    - Connect the *Load* wire to the dimmer's Load terminal.
    - Connect the *Neutral* wire (if present and required) to the dimmer's Neutral terminal.
    - Connect the *Ground* wire to the dimmer's Ground terminal.

    Refer to the wiring diagram provided with your dimmer packaging for specific wire color coding and connection points. Ensure all connections are secure.
5. **Mount the Dimmer:** Carefully fold the wires into the wall box and secure the dimmer to the wall box using the mounting screws.
6. **Attach Wall Plate:** Install the screwless wall plate (sold separately) over the dimmer.
7. **Restore Power:** Turn the power back on at the circuit breaker.

3.4. Pairing and Configuration

The Caseta Pro In-Wall Dimmer can be controlled directly or integrated into a smart home system:

- **Direct Control:** Use the buttons on the dimmer itself for basic on/off and dimming functions.
- **Pico Remote Control:** Pair with a Lutron Pico remote control for wireless remote operation. Follow the instructions provided with your Pico remote for pairing.
- **Lutron Smart Bridge/Pro:** For advanced features like app control, scheduling, and scene creation, connect the dimmer to a Lutron Smart Bridge or Smart Bridge Pro. Download the Lutron app and follow the in-app instructions to add and configure your dimmer. This enables control from anywhere via your smartphone or tablet.

4. Operation

The Lutron Caseta Pro In-Wall Dimmer offers intuitive control for your lighting.

4.1. Basic Dimmer Functions

- **Turn On/Off:** Press the large top button (light bulb icon) to turn lights on to the last set level. Press the large bottom button (light bulb icon) to turn lights off.

- **Brighten:** Press the "Up" triangle button to increase light brightness.
- **Dim:** Press the "Down" triangle button to decrease light brightness.
- **Favorite Level:** The small circular button between the up/down triangles can be programmed to recall a favorite light level. Refer to the Lutron app or Smart Bridge instructions for programming this feature.

4.2. Advanced Control (with Lutron Smart Bridge/Pro)

- **Lutron App Control:** Control your lights from your smartphone or tablet from anywhere with an internet connection.
- **Lighting Scenes:** Create custom lighting scenes that set multiple lights to specific levels with a single command.
- **Scheduling:** Program lights to turn on/off or dim at specific times of day or based on sunrise/sunset.
- **Voice Control:** Integrate with popular voice assistants (e.g., Amazon Alexa, Google Assistant, Apple HomeKit) for hands-free control.

5. Maintenance

The Lutron Caseta Pro In-Wall Dimmer requires minimal maintenance.

- **Cleaning:** To clean the dimmer and wall plate, gently wipe with a soft, damp cloth. Do not use abrasive cleaners, solvents, or chemical sprays, as these can damage the finish or internal components.
- **No User-Serviceable Parts:** There are no user-serviceable parts inside the dimmer. Do not attempt to open or repair the unit. Refer all servicing to qualified service personnel.

6. Troubleshooting

If you experience issues with your Lutron Caseta Pro In-Wall Dimmer, refer to the following common problems and solutions:

Problem	Possible Cause	Solution
Lights do not turn on.	◦ Power is off at the breaker. ◦ Incorrect wiring. ◦ Bulb is burned out or incompatible.	◦ Check circuit breaker and ensure power is on. ◦ Verify wiring connections according to installation instructions. Consult an electrician if unsure. ◦ Replace bulb. Ensure bulbs are dimmable and compatible with the dimmer type (LED, incandescent, etc.).
Lights flicker or hum.	◦ Incompatible bulbs. ◦ Load is too low or too high.	◦ Ensure bulbs are high-quality dimmable LEDs or compatible incandescent/halogen. Try a different brand of bulb. ◦ Verify total wattage of connected lights is within the dimmer's specified range (e.g., 250W LED).
Dimmer does not respond to Pico remote or app.	◦ Pico remote not paired. ◦ Smart Bridge not connected or configured. ◦ Out of range.	◦ Re-pair the Pico remote with the dimmer. ◦ Ensure your Lutron Smart Bridge is powered on, connected to your network, and the dimmer is added in the Lutron app. ◦ Move closer to the dimmer or Smart Bridge.

For further assistance, please contact Lutron Customer Support.

7. Product Specifications

Feature	Detail
Model Number	PD-10NXD-WH_K2
Brand	Lutron
Operation Mode	Manual
Contact Type	Normally Open
Connector Type	Screw
Terminal	Screw
Item Dimensions (L x W x H)	8 x 6.2 x 4.6 inches
Circuit Type	1-way
Actuator Type	Dimmer Switch
Contact Material	Plastic
International Protection Rating	IP54
Number of Positions	1
Controller Type	Radio Frequency Remote Control
Control Method	Remote
Connectivity Protocol	Wi-Fi
Color	White
Wattage	250 watts
Unit Count	1 Count
Item Weight	7 ounces
UPC	657379041747
Date First Available	June 14, 2018

8. Warranty & Support

8.1. Limited Warranty

Lutron products are backed by a limited warranty. For detailed warranty information, including terms, conditions, and duration, please refer to the warranty statement included with your product packaging or visit the official Lutron website at www.lutron.com.

8.2. Customer Support

For technical assistance, troubleshooting, or product inquiries, please contact Lutron Customer Support:

- **Phone:** 1-800-523-9466 (Toll-Free in the US)
- **Website:** www.lutron.com

Please have your product model number (PD-10NXD-WH) and purchase date available when contacting support.

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Ask a question about this manual

Ask about setup, troubleshooting, compatibility, parts, safety, or missing instructions. Manuals+ will review the question and use this page's manual context to help answer it.

Name

Anonymous

Email

you@example.com

After a successful submission, we securely hash the supplied account or form email before sending it to Microsoft Advertising for conversion attribution. Privacy details.

Question

Example: How do I reset this device or fix this error?

Details

Model number, symptoms, what you tried, or the section of the manual you are using.

Submit question