

# Shelly B0824 Pro 2PM Two Channel Smart Dimmer User Guide

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Shelly B0824 Pro 2 PM Two-Channel Smart Dimmer



# Specifications:

• Product Name: Shelly Pro Dimmer 2PM

• Mounting: DIN-rail mountable

• Channels: Two-channel smart dimmer

• Wireless Connectivity: Wi-Fi

• Wired Connectivity: LAN

## **Product Description**

The Shelly Pro Dimmer 2 PM is a smart dimmer designed for DIN-rail mounting. It features two channels for controlling lighting levels and can be connected to your network wirelessly via Wi-Fi or through a wired LAN connection.

## **Installation Instructions**

- 1. Ensure the power is disconnected before installation.
- 2. Mount the Shelly Pro Dimmer 2PM on a DIN rail in a suitable location.
- 3. Connect the necessary wiring according to the provided wiring diagram.
- 4. Power up the device and follow the setup instructions for connecting to your network.

## **Usage Instructions:**

## a) Power and Connectivity:

The device requires a power supply and can connect to your network via Wi-Fi or LAN.

# b) Channel Configuration:

Channels SW1 and SW2 control Output 1 (O1), while channels SW3 and SW4 control Output 2 (O2).

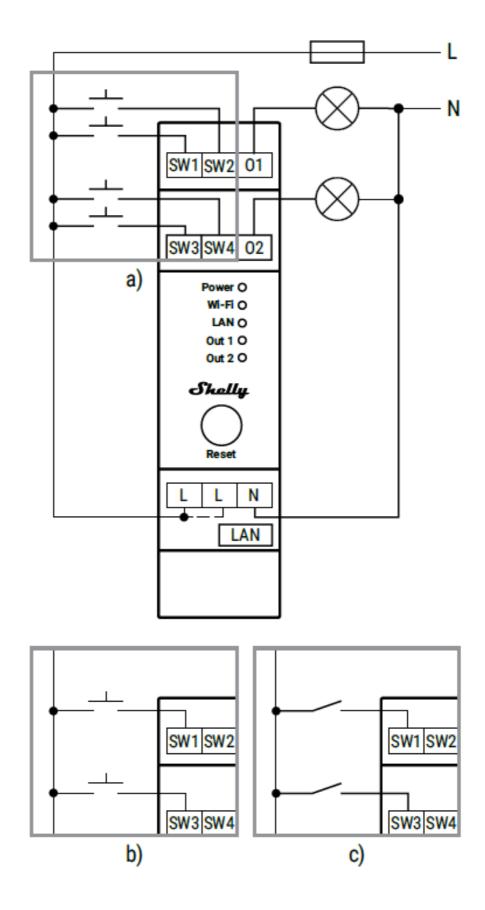
## c) Reset:

To reset the device, press the Reset button located on the unit.

## FAQ:

- Q: Where can I find troubleshooting help for the Shelly Pro Dimmer 2PM?
  - A: If you encounter any installation or operational issues, refer to the knowledge base page at:
     shelly.link/pro\_dimmer\_2PM

# Wiring diagram



# Legend

## Device terminals

- SW1 and SW2 Switch input terminals controlling O1
- SW3 and SW4 Switch input terminals controlling O2
- O1: Load circuit 1 output terminal
- O2: Load circuit 2 output terminal

- L: Live (110-240 V) terminals
- N: Neutral terminal
- LAN: Local Area Network RJ 45 connector
- Wires
- L: Live (110-240 V) wire
- N: Neutral wire

User and safety guide Shelly Pro Dimmer 2PM DIN-rail mountable, two-channel smart dimmer

### Safety information

For safe and proper use, read this guide, and any other documents accompanying this product. Keep them for future reference. Failure to follow the installation procedures can lead to malfunction, danger to health and life, violation of law, and/ or refusal of legal and commercial guarantees (if any). Shelly Europe Ltd. is not responsible for any loss or damage in case of incorrect installation or improper operation of this device due to failure to follow the user and safety instructions in this guide.

This sign indicates important note.

△WARNING! Risk of electric shock. Installation of the Device to the power grid must be performed carefully by a qualified electrician.

**△WARNING!** Before making any changes to the connections, ensure there is no voltage present at the Device terminals.

△CAUTION! Plug in or unplug the LAN cable only when the Device is powered off. The parts of the LAN cable that may be touched when plugging in or unplugging it, must not be metallic.

△CAUTION! Connect the Device only in the way shown in these instructions. Any other method could cause damage and/or injury.

△CAUTION! Connect the Device only to a power grid and appliances that comply with all applicable regulations. A short circuit in the power grid or any appliance connected to the Device can cause fire, property damage, and electric shock.

△CAUTION! The Device and the appliances connected to it, must be secured by a cable protection switch in accordance with (tripping characteristic B or C, max. 10A rated current, min. 6 kA interrupting rating, energy limiting class 3)

△CAUTION! Before installing the Device, turn the circuit breakers off. Use a suitable test device to make sure there is no voltage on the wires you want to connect. When you are sure that there is no voltage, proceed to the installation

**△CAUTION!** Do not use the Device if it shows any sign of damage or defect.

△CAUTION! The Device may be connected to and control only electric circuits and appliances that comply with the applicable standards and safety norms.

△CAUTION! Plug in or unplug the LAN cable only when the Device is powered off. The parts of the LAN cable that may be touched when plugging in or unplugging it, must not be metallic.

**△CAUTION!** The Device is intended only for indoor use.

**CAUTION!** Keep the Device away from dirt and moisture.

## **Product Description**

Shelly Pro Dimmer 2PM (the Device) is a DIN-rail mountable, two-channel smart dimmer.

The Device can be accessed, controlled, and monitored remotely from any place where the User has internet connectivity, as long as the device is connected to a Wi-Fi router and the Internet. The Device has an embedded web interface used to monitor, control, and adjust the Device. The web interface is accessible at http://192.168.33.1 when connected directly to the Device access point or at its IP address when you and the Device are connected to the same network.

The Device can access and interact with other smart devices or automation systems if they are in the same

network infrastructure. Shelly Europe Ltd. provides APIs for the devices, their integration, and cloud control. For more information, visit https://shelly-api-docs.shelly.cloud.

The Device comes with factory-installed firmware. To keep it updated and secure, Shelly Europe Ltd. provides the latest firmware updates free of charge. Access the updates through either the embedded web interface or the Shelly Smart Control mobile application. Installation of firmware updates is the user's responsibility. Shelly Europe Ltd. shall not be liable for any lack of conformity of the Device caused by the failure of the user to install the available updates in a timely manner.

#### Installation instructions

To connect the Device, we recommend using solid single-core wires or stranded wires with ferrules. The wires should have insulation with increased heat resistance, not less than PVC T105°C (221°F).

When connecting wires to the Device terminals, consider the specified conductor cross-section and stripped length. Do not connect multiple wires into a single terminal.

For security reasons, after you successfully connect the Device to the local Wi-Fi network, we recommend that you disable or password-protect the Device AP (Access Point).

To perform a factory reset of the Device, press and hold the Control button for 10 seconds.

To enable the access point and the Bluetooth connection of the Device, press and hold the Control button for 5 seconds. Connect the first load to the O1 terminal of the Device and the Neutral wire as shown in the wiring diagram. Connect the second load to the O2 terminal of the Device and the neutral wire as shown in the wiring diagram. Connect the Live wire to the L terminal. If you want to control the dimming with a single button (per channel), connect buttons to the SW1 and SW3 terminals and to the Live wire as shown in Fig. 1 b).

If you want to control the dimming with two buttons (per channel), connect buttons to the SW1, SW2, SW3, and SW4 terminals, and to the Live wire as shown in Fig. 1 a).

If you want to just turn the lights on or off, connect the switches the SW1 and SW3 terminals and the Live wire as shown in

Fig. 1 c).

#### **Specifications**

- Size (HxWxD): 94x19x69 mm / 3.70×0.75×2.71 in
- Weight: 75 g / 2.7 oz
- · Screw terminal's max torque
- Conductor cross-section:
- 0.5 to 2.5 mm<sup>2</sup> / 20 to 14 AWG (green connectors)
- 0.5 to 1.5 mm<sup>2</sup> / 20 to 16 AWG (blue connector) (solid, stranded, and bootlace ferrules)
- Conductor stripped length:
- 6 to 7 mm / 0.24 to 0.28 in (green connectors)
- 5 to 6 mm / 0.20 to 0.24 in (blue connector)
- Mounting: DIN-rail
- Shell material: Plastic
- Shell color: Lime
- Ambient working temperature: -20°C to 40°C / -5°F to 105°F
- Humidity: 30% to 70% RH
- Max. altitude: 2000 m / 6562 ft

**Power supply:** 110 – 240 VAC ~ 50/60 Hz

• Power consumption: < 2 W

• External protection: Max. 10 A, tripping characteristic B or C,

• 6 kA interrupting rating, energy limiting class 3

• Dimming type: Trailing edge

• Max. output power: 200 W per channel

Voltmeter (AC): YesAmmeter (AC): Yes

Power and energy meters: Yes
Internal-temperature sensor: Yes

Supported loads:

Incandescent

Dimmable LED

dimmable electronic transformers

• Iron-core transformers with low-voltage incandescent lamps

#### Wi-Fi

Protocol: 802.11 b/g/n
 RF band: 2400-2483 MHz
 Max. RF power: < 20 dBm</li>

• Range: Up to 30 m / 100 ft indoors and up to 50 m / 160 ft outdoors (depending on local conditions)

#### **Bluetooth**

• Protocol: 4.2

RF band: 2400-2483.5 MHzMax. RF power: < 4 dBm</li>

• Range: Up to 30 m / 100 ft outdoors, up to 10 m / 33 ft indoors (depending on local conditions)

• CPU: ESP32-D0WDQ6

Flash: 8MBSchedules: 20

• Webhooks (URL actions): 20 with 5 URLs per hook

Scripting: YesMQTT: Yes

## **Shelly Cloud inclusion**

The Device can be monitored, controlled, and set up through our Shelly Cloud home automation service. You can use the service through either our Android, iOS, or Harmony OS mobile application or through any internet browser at <a href="https://control.shelly.cloud/">https://control.shelly.cloud/</a>.

If you choose to use the Device with the application and Shelly Cloud service, you can find instructions on how to connect the Device to the Cloud and control it from the Shelly app in the application guide: <a href="https://shelly.link/app-guide.">https://shelly.link/app-guide.</a>

The Shelly mobile application and Shelly Cloud service are not conditions for the Device to function properly. This Device can be used standalone or with various other home automation platforms.

## **Troubleshooting**

In case you encounter problems with the installation or operation of the Device, check its knowledge base page:

## https://shelly.link/pro\_dimmer\_2PM

#### **Declaration of Conformity**

Hereby, Shelly Europe Ltd. declares that the radio equipment type Shelly Pro Dimmer 2PM is in compliance with Directive 2014/53/EU, 2014/35/EU, 2014/30/EU, 2011/65/EU. The full text of the EU declaration of conformity is available at the following internet address:

https://shelly.link/pro\_dimmer\_2PM\_DoC

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Changes in contact information are published by the Manufacturer on the official website.

All rights to the trademark Shelly® and other intellectual rights associated with this Device belong to Shelly Europe

Ltd.

#### **Documents / Resources**



Shelly B0824 Pro 2PM Two Channel Smart Dimmer [pdf] User Guide B0824 Pro 2PM Two Channel Smart Dimmer, B0824, Pro 2PM Two Channel Smart Dimmer, Two Channel Smart Dimmer, Channel Smart Dimmer, Smart Dimmer

#### References

- Shelly Control
- 5 Welcome to Shelly Technical Documentation | Shelly Technical Documentation
- Shelly Smart Control Guide
- User Manual

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